UNITED STATES

NUCLEAR WASTE TECHNICAL REVIEW BOARD

WINTER BOARD MEETING

Thursday, February 10, 2005

Caliente Youth Center
Highway 93, North #4
Caliente, Nevada 89008

BOARD MEMBERS PRESENT

Dr. Mark Abkowitz, Session Chair
Dr. William Howard Arnold
Dr. Daryle Busch
Dr. David Duquette
Dr. B. John Garrick, Chair, NWTRB
Dr. George Hornberger
Dr. Andrew Kadak
Dr. Ali Mosleh
Dr. Henry Petroski

SENIOR PROFESSIONAL STAFF

Dr. Carlos A.W. Di Bella
Dr. David Diodato
Dr. Daniel Fehringer
Dr. Dan Metlay
Dr. John Pye
Dr. Leon Reiter

NWTRB STAFF

Dr. William Barnard, Executive Director
Karyn Severson, Director, External Affairs
Joyce Dory, Director of Administration
Linda Coultry, Program Support Specialist
Alvina Hayes, Office Assistant

I N D E X

P R O C E E D I N G S

(10:00 a.m.)

GARRICK: Good morning. Well, welcome to the second day of our Winter Board Meeting. My name is John Garrick. I'm Chairman of the Nuclear Waste Technical Review Board.

We have a few reminders that we need to give you. They were posted on the door as we came in, but I think that it's important for us to acknowledge them here. Guests are permitted in the designated meeting room pretty much only. And, they want us to adhere to these. They discourage us from wandering around the facility. All guests should remain on walkway between meeting room and parking lot only. Smoking is permitted in the parking lot. Place all cigarettes in an appropriate receptacle. Please, place all trash also in an appropriate receptacle. There's a rule about cameras. They want you to not take any photos, to check in your camera at the admission building. The restrooms are located out this door and just beyond the gymnasium to the left and then to the right. I think they'll appreciate it if we try to follow those simple rules.

Before we get started, I want to acknowledge and thank a couple of people that set up this facility. It's not easy to get all of the electronics and all of the court reporting capability that's necessary for these meetings in place in such a short period of time. So, the advance team

of Linda Coultry and Billy Pierce, we want to recognize for having a lot to do with getting the stage successfully set.

Well, this is kind of a 60 year plus homecoming for me. As many of you know from our meeting in Vegas in September, I spent some of my early years in this part of the world. Most of my elementary school years between Panaca, Pioche, Iron County, the bordering county in Utah, and I think I've only been back here once in that time and this holds some important places in my history. The pasture about five miles from here was where I was first thrown off a horse. My first moving picture that I ever attended was here in Caliente in about 1938. My brother was a basketball and football star at Lincoln County High School in three of the four years he attended there. I was in the elementary years or third, fourth, fifth, sixth grade while I was here, mostly in Panaca, but some of it in Pioche. So, I'm delighted to be back. This is quite an experience. Sixty years is a long time.

Well, as most of you know, we met yesterday in Las Vegas to review a number of topics related to the possible development of a repository at Yucca Mountain. Today's meeting here in Caliente will focus on planning for a transportation system to support the Yucca Mountain Project if it is built. And, in a few moments, I'm going to turn over the chairmanship to Board Member Mark Abkowitz who will

chair the discussion. He is our transportation expert.

But, first, I'd like to make a few opening remarks. At the beginning of each Board meeting, it's become our practice to introduce the Board members. And, although we did that yesterday, it's been suggested that we repeat it today because of the many new people in the audience. And then, after I introduce the Board members, I'll summarize the agenda.

I think it's important also to remind the audience that the Board members are part-timers. They have other professional activities that they attend to and I think that it's very important for those of you who are first exposed to the Board to understand a little bit of how it works.

So, first, with the introductions. In my case, I'm a consultant in the risk and nuclear safety field. I served 10 years in the U.S. Nuclear Regulatory Commission's Advisory Committee on Nuclear Waste. And, I was a founder of an engineering firm that I worked in for many, many years and I retired from that firm as its president and chief executive officer and chairman in 1997.

I will now go to the other Board members, and as I mention their name, I would appreciate it if they would raise their hands. Mark Abkowitz. Mark is Professor of Civil Engineering and Management Technology at Vanderbilt University in Nashville, Tennesse. He's Director of the

Vanderbilt Center for Environmental Management Sciences. Mark has served on several national and international committees including chairman of the National Academy of Science Transportation Research Board Committee on Hazardous Materials Transport and as a member of the National Research Council Committee of Disposal of Transuranic Waste at the Waste Isolation Pilot Plant in New Mexico. His expertise is in the area of transportation, civil engineering, and risk. Dr. Abkowitz chairs the Board's Panel on the Waste Management System.

Howard Arnold. Howard is a consultant with 40 years of experience in the nuclear industry. During that period, he served in senior management positions including the vice-president of Westinghouse Hanford Company where he was responsible for engineering, development, and project management. Before his retirement in 1996, he was president of Louisiana Energy Services. This was an industrial partnership formed to build the first privately owned uranium enrichment facility in the United States. From 2001 to 2002, he was chairman of a National Academy Committee that assessed the scientific basis for disposal of special nuclear materials.

Daryle Busch. Daryle is the Roy A. Rogers Distinguished Professor of Chemistry at the University of Kansas in Lawrence. He also is deputy director of the

National Science Foundation Engineering and Research Center at the University having the title of Center for Environmentally Beneficial Catalysts. His research is presently focused on homogeneous catalysis, bio-inorganic chemistry, and orderly molecular entanglements. Daryle is a recent chair of the Chemistry Section of the American Association for the Advancement of Science.

Thure Cerling, he's not with us today, but is doing field studies in Africa and, therefore, I can't point him out. Thure is a Distinguished Professor of Geology and Geophysics and a Distinguished Professor of Biology at the University of Utah-Salt Lake City. Dr. Cerling was elected to membership in the National Academy of Sciences in 2001. He is a fellow of the American Association for the Advancement of Science and of the Geological Society of America. He has been a visiting professor at Scripps Institute of Oceanography, Yale University, the University of Lausanne in Switzerland, and the California Institute of Technology. He is a geochemist with particular expertise in applying geochemistry to a wide range of geological, climatological, and anthropological studies.

David Duquette. David is Department Head and Professor of Materials Engineering at Rensselaer Polytech Institute in Troy, New York. His expertise is in physical, chemical, and mechanical properties of metals and alloys with

special emphasis on environmental interactions. His current research interests include the physical, chemical, and mechanical properties of metals and alloys with specific reference to studies of cyclic deformation behavior as affected by environment and temperatures, basic corrosion studies, and stress-corrosion cracking.

George Hornberger. George is the Ernest H. Ern Professor of Environmental Sciences and Associate Dean for Sciences at the University of Virginia. His research interests include catchment hydrology, hydrochemistry, and the transportation of colloids in geological media. He has served as chair of a number of committees including the National Research Council's Board on Earth Sciences and Technology, the Commission on Geosciences, Environment, and Resources, and the Nuclear Regulatory Commission's Advisory Committee on nuclear waste. Dr. Hornberger chairs the Board's Panel on the Natural Systems.

Andrew Kadak. Andy is Professor of the Practice in the Nuclear Engineering Department of the Massachusetts Institute of Technology. His research interests include the development of advanced reactors, space nuclear power systems, improved technology-neutral licensing standards for advanced reactors, and operations and management issues of existing nuclear power plants. Andy was president of the American Nuclear Society for the year 1999 to 2000.

Ron Latanision who is not with us today, he had a calendar conflict and had to leave early. Ron recently retired from his position as Professor at MIT to pursue a senior position with an engineering and consulting firm known as Exponent. Ron retains a position as Emeritus Professor at MIT. His areas of expertise include materials processing and corrosion of metals and other materials in different aqueous environments. He chairs the Board's Panel on the Engineered System.

Ali Mosleh. Ali is Professor and Director of the Reliability Engineering Program in the Mechanical Engineering Department at the University of Maryland. He has performed risk and safety, reliability analyses, and decision analyses for the nuclear, chemical, and aerospace industries. He serves as chairman of the Engineering Division of the International Society of Risk Assessment and Management and is Director of the X-Ware Systems Reliability Laboratory focusing on the reliability of integrated hardware-software-human systems. Dr. Mosleh chairs the Board's Panel on Repository System Performance and Integration.

Henry Petroski. Henry is the Alexander S. Vesic Professor of Civil Engineering and Professor of History at Duke University. His current research interests are in the areas of failure analysis and design theory. Ongoing projects include the use of case histories to understand the

role of human error and failure in engineering design, as well as models for inventions and evolution in engineering design. Professor Petroski is the author of several books. The one I'm most familiar with is To Engineer is Human: The Role of Failure in Successful Design.

Now, at the beginning of the meeting, we usually read the following statement for the record so that everybody is clear about the conduct of our meeting, what you're hearing, and the significance of what you're hearing.

Board meetings are spontaneous by design. Those of you who have attended Board meetings before know that the Board members speak frankly and openly voice their personal opinions. But, it's important to stress that when the Board members speak extemporaneously, they are speaking on their own behalf and not on behalf of the Board. When a Board position is articulated, we'll try to make it known. Board positions are stated in Board letters and reports can be accessed from the Board's website at www.nwtrb.gov.

Now, as is our custom, I'll ask all of you to, please, take a few seconds to confirm that your cell phones and pagers are switched to the off position or the silent mode.

And, now, I'd like to get into our meeting. One thing I would like to say in advance, we're very delighted with the turnout we have here today and we expect to have a

very good session with respect to public comment. In order to note intrude on that which is one of the primary reasons we're here, we're going to really appeal very strongly to the presenters to stay within their time limits and to cooperate with the Board in keeping our schedule because we're going to try very hard to make sure that the public comment session starts when it's so stated.

Now, I'd like to introduce our first speaker. Kevin Phillips will be familiar to most of you as the Mayor of Caliente. We've already compared notes about past activities here. Mayor Phillips invited the Board to meet here in Caliente and we wish to thank him for that invitation. Mayor Phillips and his staff also were instrumental in obtaining use of this meeting facility and in completing several of the preparations for this meeting. We greatly appreciate that. And, we'd like to ask the Mayor to kick off the meeting with a few opening remarks.

MAYOR PHILLIPS: Thank you, Dr. Garrick, members of the Board. It's a pleasure for me to welcome you to Caliente. It would be impossible to name all of you, though I know most of you. I'd like to thank the NWTRB Board for considering coming here. It's a real opportunity for us to participate in these meetings and it means a lot to us. You have a gracious and wonderful staff and we're grateful to them for doing all the details relative to that.

A few acknowledgements and, please, forgive me, there's no way I can name everybody. We have with us today our local political leaders. Chairman Tom Row--if you gentlemen would raise your hand. Chairman Tom Row with the County Commission. Is Commissioner Hornbach (phonetic) here? Commissioner Keaton? Councilman Tom Aclin of the City, Councilman Ashley Moore, we appreciate your coming. It's a delight to have with us Dr. Margaret Chu, Director of OCWRM, Mr. Garrish, Mr. Lanthrum, from the Vegas office, Mr. Arthur, Dr. Dyer, Alan Benson, and all your staff, we're delighted. We have representatives from NEI, Steve Kraft is with us today, and many, many others. Forgive me that I've forgotten a whole host of you, but that's the best we can.

I thought in welcoming, we'd give a little historical welcome, if you will. Caliente began around the latter part of the 1800s and the community was called Culverwell because this whole little valley here was nothing, but a ranch. There were no gullies, no washes, and the Culverell family was ranching here. That's a picture of the very first post office that was located here.

Next. The name, Calientes, came because of the warm geothermal waters that exist here. And, taking the plural form as you see on this saloon, the place was called Calientes or, as we say it now, Calientes. At some point in time, the S was dropped.

Next slide. The railroad started coming to town. This is the old-fashioned way to build a railroad with horses four abreast and Fresno scrapers.

Next. Then came the train. This community really received birth, if you will, because it's been a railroad town forevermore.

Next. This is a picture of the old roundhouse that was here. And, to give you some orientation, we're sitting in approximately this location right here in this facility. But, this was a roundhouse with a platen. In the days of the steam engine, trains would come from the south to here, but in order to have sufficient energy to get over the lip of the Great Basin at Crestline, helper engines would hook on here and push the train over the hill on its way to Salt Lake City and come back and turn around and so this was a major switching point. Train crews changed here and some of those things.

Next. The community was laid out by and for the railroad, as you know, and it's interesting that this layout still exists today. This is coming down the canyon right here from Utah. All things for the Union Pacific go east and west, they don't go north and south. So, this is east coming into the town and we would be about right in this location right here. This is the Y that heads up the old Pioche Branch Line up to the mines at Castleton and Pioche. The

company used to come down in here. These are a number of tracks that existed in the roadway and then this heads south towards Las Vegas and Los Angeles.

Next. Just to show then what was built, looking from right out here, this is the Y coming out of the Pioche Branch Line into the community rail yard. This would be where it went past the stockyards and back up the canyon towards the east with the roundhouse and those facilities here. Notice this whole row of houses built by the railroad. We refer to that as Company Row, railroad housing. They still exist. They've been remodeled and redone, but that was the original Company Row. And, the depot, as you see it today, is sitting over in this location.

Next. We've always been a railroad town, lots of trackage. Eleven tracks as I remember as a kid and lots of crews, a lot of work being done by hand.

Next. The old crossing, this was the Smith Hotel. This is a wonderful nostalgic view of the old cars and things. I just want to show you that we've been a railroad town forever. We understand railroad things and that's our past and hopefully our present and our future.

Next. This just shows the same thing in a little bit different modern era now. This is the branch that goes up to the Pioche mines. This bride is still existent, and right out here, this is the highway bridge that you will see.

Next. This was just a great shot in the heyday of the steam engines, locomotives, the old depot, the shade trees. Dr. Garrick, you probably remember all the trees that used to exist down there at the depot and we'd go there, it would be a delight, and I remember gathering earthworms there to go fishing with on the grass that was there.

Next slide, please. This slide to me--it's the last one of my opening remark--sort of epitomizes why and where we are at today. This is the 4th of July. Caliente has always been a railroad town. We remain that today. We understand railroads. To us, it's fitting that perhaps the branch line heading out here is constructed and comes off of this point. We're glad about that. We appreciate that. We look forward to the economic opportunities that come because of that. When I was a boy being raised in Panaca, we had a farm that was right by the old Pioche Branch Line and you could set your clocks to the whistles that those trains would blow as they crossed the siding at the Y service. They'd come in the morning and that train would be heading to the mines with empty ore cars and you'd hear a whistle all over the valley and you knew it was going to pick up ore. Later on that afternoon about 4:00, it would whistle again and the ore cars were full and it was coming down to Caliente to ship them. That activity represented almost 100 percent of the economy of Lincoln County. Either our dads were either

working in the mines or working for the railroad. Obviously, there was some in agriculture, but that's what that train moving up and down really represented. And, the train is gone and we're desirous of the train moving again and the economy associated with that picking up steam, so to speak, one more time. So, we're a railroad town and we're patriotic and we always have been and we pride ourselves in that notion.

My role in the history of this program very briefly, I became Mayor 12 years ago and began studying this issue. It was a non-issue to me before that time. Now, I could see that there was some big questions to be had and so I searched. I listened to everybody. I listened to the State of Nevada, the Department of Energy. I went and learned and listened and formulated my own opinions. Based on our experience here, it's noteworthy to note that in our little community of Caliente we have 65 shipments per day of hazardous constituents of all kinds, many of which are much worse than the movement of spent nuclear fuel in terms of the possibility of risk and damage to life. So, we're used to that. We consider with the coming of this effort and the safety measures that come in risk management to accompany it, we actually envision that risks to our existing situation now are lessened by mitigating emergency response capabilities and those kinds of things. So, our approach has always been

positive relative to this.

We think this can be managed well and safely and look forward to participating in that opportunity. We're thankful that the route has been selected. We want to work constructively to make sure that some of the remaining questions are answered positively for our people. We're doing a lot of work to make sure we understand how they think and feel and how we can mitigate and ameliorate the impacts. We intend on maximizing the positive impacts and minimizing what negative impacts are due to this national effort.

The Department is working extremely hard to be cooperative and we're grateful for that. We're upbeat and positive about the current budget and the one that's proposed and look forward to putting transportation infrastructure in the ground, Mr. Lanthrum.

So, we thank you for coming. It's a delight to have you, we're honored to have you. I have a lot of confidence in gray-haired scientists such as Dr. Garrick and yourself. I'm glad that you gentlemen are advising the Department. And, it's particularly warming to us to know that the Chairman here has a real history in Lincoln County and with his credentials that are demonstrative of your credentials, I'm sure that this program will be guided well.

Thank you and welcome.

GARRICK: Thank you, Mayor. And, thank you for

acknowledging that I have hair.

I'd like to now turn over the chairmanship of the meeting to the Board's expert on transportation, Dr. Mark Abkowitz.

ABKOWITZ: Thank you, John, and thank you, Mayor Phillips. That was a much more interesting presentation than what might be following. I'd like to talk to that horse, John, if he's still around.

I want to thank the folks of Caliente for hosting our visit. This Board prides itself in getting out into the community and getting an opportunity to hear from the citizens that are impacted in one way or another by the repository program including the transportation system. I hope that the fact that we're here is an indication of how serious we are in terms of learning from you and hearing your opinion and I encourage any of you that want to share that opinion to participate in the public comment period.

As Chairman Garrick mentioned, today's meeting will focus on planning for a transportation system to support a potential Yucca Mountain Repository. The way the program is set up today, the morning will be devoted to two presentations made by the Department of Energy. The first one will be on planning for the national transportation program that would move radioactive materials to Nevada followed by a presentation on planning for the rail branch

line that would be used to move those materials to the Yucca Mountain site. That will bring us up to lunch. So, if we're late for lunch, you know who to blame.

Following lunch, we have invited the State of Nevada, the counties in which the proposed rail line would be located, and a representative of the Western Shoshone Nation to present their views on the development of the branch line.

As I mentioned a moment ago, at the conclusion of that part of the formal presentation process, we've reserved time to hear from members of the audience about any concerns that they may have both regarding the transportation program and the branch line, as well as any other subject that they may wish to bring to the attention of the Board. We have two very able folks with the Board, Alvina and Linda, sitting over here to my right. If you wish to participate in the public comment period, they have a signup sheet and at any time during the day just go on over there and sign up and we'll take you in the order in which you have put your name down.

At this point, I'd like to introduce Gary Lanthrum as our speaker for this morning. As I mentioned a moment ago, DOE has two presentations to give and Gary will actually be performing double duty. The first one that we'll hear about will be on the development of the national transportation system for moving spent nuclear fuel and other

materials to Nevada. Following that presentation, we'll go through the normal question and answer period that involves Board members and Board staff. Gary will then move into his second presentation which will be the plans for developing the rail branch line from Caliente to Yucca Mountain.

In terms of Gary's background and experience, as most of you know, he's currently the Director of the Office of National Transportation Program for DOE. Having formerly served as the Director of the Environmental Management or EM National Transportation Program based in Albuquerque. In this capacity, Gary was responsible for managing EM's field transportation programs. These included nuclear materials packaging, research, shipping, and certification, operation of the TRANSCOM system for WIPP shipping, managing the Automated Transportation Management System for tracking all of DOE's nuclear and non-nuclear shipments, and running EM's National Transportation stakeholder outreach program.

At this point, I'd like to ask Gary to come on up and do his thing.

LANTHRUM: Thank you, Dr. Abkowitz and Dr. Garrick and members of the Board, members of the public, and everybody else that came out to participate here.

As Dr. Abkowitz indicated, prior to coming to Washington, D.C. and serving in my capacity with the Office of Radioactive Waste Management, I spent the previous decade

in Albuquerque and working in transportation issues. And so, it was a particular pleasure for me to make the drive from Las Vegas up to here because in Washington, D.C., you never have the luxury of seeing a broad horizon like you do out here in the desert. And, in fact, in my more distant past, I spent a lot of time crossing big oceans in small boats. I did a passage from down around the northern part of Baja to Hawaii single-handed and then came from Hawaii back single-handed on a 31-foot sailboat and you get the same perspective on a small boat in a big ocean that you do driving across the desert. There's pretty much an unlimited horizon that's usually out in front of you. You are constrained to a tunnel vision that's bounded by trees.

As I was driving up here and enjoying the return to this broader view of the landscape, it reminded me that that's really the goal that we have in transportation planning is to take a very broad view of how we roll out the transportation infrastructure. One of the purposes of having the meetings yesterday and again today was to talk about integration issues and so I'll try and fold in how each piece of the transportation planning is being connected to other parts of RW planning process and to the bigger picture of transportation.

I've got a little bit of an apology to make. I am one of those technology geeks that likes to push my own

buttons on Power Point presentation and so the presentation is animated with bullets coming in and I'll just tell you just to spin through them and get the whole slide up, if we can.

I'm ready for the next slide. This is an eye chart and I think there are handouts available. I'm not putting this up to talk in any detail, but in the last TRB meeting I was asked to address how the individual elements of transportation planning are connected to each other. I'm not going to go through this in any great detail, but since this is an update from the last presentation we did--I believe it was in October in Salt Lake City--there are a couple of lines here.

The top line is what we're doing in the arena of acquiring casks to safely transport the spent nuclear fuel and high-level waste. The second line is what we're doing to acquire rolling stock, the rail cars, the specialty rail cars, and to the extent that we would have some truck shipments with trailers for truck shipments. The third line is on support facilities for transportation which Mayor Kevin pointed out he's anxious to see some work being done on. The next line is on the actual construction of a rail line, a line for institutional activities, a line for our operational planning, and finally a line for management decision making. And, I only put this up because the rest of the slides

follow this format and I'll be doing an update in each one of the areas and talking about the integration of each as we go through.

Next slide. There are some challenges this year. This is a plot and again it's the kind of thing that people in my line of business do a lot. We take data and analyze it and our life is built around graphs a lot of the time. This shows where the funding was for transportation in the late '90s and early 2000s. Actually, it a little bit worse that it looks here because the funding at the $2 million level and the $3 million level is not exclusively for transportation planning. It was a combined transportation and waste acceptance planning. So, the piece of that that was available for transportation planning was essentially negligible.

In late 2003, when I came on board into this office, the funding had increased a little bit. We were able to do more direct planning. We got a significant increase last year and actually accomplished quite a bit in moving the planning process forward last year. The anticipated funding for this year if the program had gotten all the funding it requested was that transportation would have had $187 million to begin serious acquisitions of some hard assets. The program as a whole did not get the funding it was requesting and so the transportation piece this year now is $25 million

in new fiscal year '05 funding. We knew there was going to be a problem towards the end of 2004. We scaled way back on the activities that we were pursuing in our spend rate and so we provided as much carryover between 2004 and 2005 as we could without jeopardizing the key activities that we hoped to complete in 2004. As a result, we have adequate funding in 2005 with the new year money and the carryover money to do the things that are necessary to keep the transportation system moving forward.

Next slide. And, I think you can hit the button down five times to get all the bullets. Great. The funding process in the Federal Government you never really know what you're going to get until you have it. So, we always maintain a running list of what are priorities are so when there are changes in funding which can happen both before the start of the year and during the year we know what we want to focus on. The number one priority for transportation planning in 2005 is to complete the Environmental Impact Statement that we're conducting where to possibly locate the track within the Caliente corridor. That's our number one priority is support of the rail alignment EIS.

Secondly, I realize again based on that broad view of our transportation planning that we can't do this alone. So, the second priority in transportation effort is our outreach process working with States, working with the

Tribes--there's lands we could have a potential of crossing as routing determinations are made--and working with the locals along the transportation corridor here to make sure that as many of the issues that we can flush out as early as possible are addressed and included in our long-range planning activities.

Third is to move forward with acquisitions to the extent that we can and conceptual design space. With the funding we have this year, we're not going to be buying any hardware, but we can do an awful lot in terms of conceptual designs so that when the money comes for fabrication of casks or for actual construction of rail cars, we'll have a very good idea of what those casks and rail cars should look like.

The thing on facility work, again focusing on conceptual design, unfortunately, Mayor Kevin, construction isn't in the cards right away, but we are at least moving the process forward looking at conceptual designs. And then, through all the activities that we end up conducting, we're making sure that the right project management tools are in place so we track the funds and make sure that we're getting good value for the money that is spent.

Next slide. I think you can run down six times. On casks, at the last meeting, I had indicated that the transportation office had gone out with a procurement of cask capability reports from the vendors. We invited all of the

cask vendors that had a certified Type B package from the Nuclear Regulatory Commission to provide input about the extent to which they have designs that could ship spent nuclear fuel and high-level waste currently, the extent to which those designs could take more content without changing the hardware just by changing the license they have with the Nuclear Regulatory Commission, and then to also propose what they could do in addition with new designs, how they might address the gap between their current capability and what we know is going to be available to ship when the repository opens. We got the reports back and they were very encouraging. They indicated that existing hardware and existing certificates, if you mix and match from the variety of vendors out there, could cover about 60 plus percent of what we needed to ship. Unfortunately, when we looked at the vendor side, we also did data collection with the actual shippers, the utilities, we asked them to fill out some facility updated sheets on what are their crane capacities, how much l lead-on space do they have, what are the ingress and egress routes look like to the utility, how can we get the transportation network, whether it's trains or trucks, into their sites, how much space do they have in their spent fuel pools for actually putting a cask in the pool and loading it, and when we looked at the constraints on the facilities, that reduced the applicability of existing cask

designs. So, even though the hardware might have supported moving material out of the utility sites, the utilities themselves couldn't in all cases handle the hardware. And so, although we were encouraged from the initial cask vendor reports that we would be able to bound our shipments with existing designs, looking at limitations on the utility side, it's very likely that we're going to have to design some smaller casks to accommodate limitations at the utilities.

We're also doing a fair amount of work on integration between transportation and the shippers and the receiver and we'll talk a little bit more about that specifically as I go through the slides, but I know that's an area that was talked about yesterday. As Chris Kouts presented, we have what is called a total system model that helps look at the waste acceptance agreements and the contractual space with the utilities is about what they expect to ship and what the Department's accommodation of those expectations is, how that work load is translated into the transportation infrastructure, and then making sure the transportation infrastructure mates very well with the receipt capability at the Yucca Mountain Repository.

We're also having ongoing meetings with the Nuclear Regulatory Commission. Under the Nuclear Waste Policy Act, all of the casks that we use to move spent fuel and high-level waste have to be certified by the NRC and we meet

regularly with the Spent Fuel Project Office at the NRC to make sure they understand where we are in our cask acquisition so that when we actually start proceeding with certificate requirements for them, they'll have the right manning in place to be able to deal with them.

Next slide. On rail cars, we've gone through a similar process with the rail car acquisition that we went through with the cask acquisition. Rather than just sitting behind closed doors and assuming that we knew how the world worked, we invited the rail car vendors in to talk to us. We explained that we're going to need rail cars that meet a new Association of American Railroad standard that they've established for mechanical performance for cars to move these contents, explained what our general idea was about moving forward, and asked for their feedback. There are three types of rail cars we have to procure. We have to buy a car that actually holds the spent fuel and high-level waste. We have to procure an escort car because all of our shipments will have armed escorts with them as part of the NRC requirement. And, we're also going to have a buffer car that provides some space between the load-bearing car and the escort car, in between the load-bearing car and the tractor engines that are pulling these trains.

Since the escort car has got people in it, the rail car designs for passenger cars are very different than the

rail car designs or freight cars. The buffer car and the load-bearing car are, we thought, more aligned with what the freight companies would like to deal with; whereas, the escort car, we thought, would be something that the passenger car designers would be more comfortable in dealing with. And so, we invited people from both parts of the rail industry to come and talk to us.

In the discussions, since the new standard, the American Association--the AAR Standard 2043 for the requirements for rail cars to move these contents required dynamic testing and they don't require just dynamic testing of each car that's designed, but they require dynamic testing of the consist and the consist is the whole train. So, when we get a train that is approved by the AAR for these shipments, that approval will have to have been of a train that has the buffer car, the escort car, and the load-bearing car all in dynamic testing at the same time. Based on that requirement, the industry said, you know, you really shouldn't go out for a separate procurement for the escort car and another procurement for the load-bearing car and the buffer cars, you ought to have one vendor manage the procurement of the consist, the whole train, and then they will buy the expertise they need. If it's a freight company that gets the overall contract, they would bring in the expertise from the passenger train side to make sure that the

consist works, but you don't want to separate it because you want the consist to work well during the dynamic testing. So, we got a lot of good feedback. We're hopeful that we'll be able to pursue a conceptual design contest among the vendors for how they would proceed with the detailed design of the consist. And, again, that's just a paperwork exercise. It's less expensive than actually buying the hardware or paying for testing. But, that's a step that we hope to take this year.

Next slide. On the facilities update, unfortunately, we've had to defer the transportation facility work in total this year again because of funding constraints. What we are doing is looking at ways that we can make sure the transportation system is able to be employed as soon as the repository opens even if we have constraints on our ability to build facilities.

A couple of the main facilities that we're looking at is we need a fleet management facility and that's a place where these large casks that are used to move the spent fuel and high-level waste are maintained and serviced to keep their certificates of compliance up to speed with the Nuclear Regulatory Commission requirements. We'd also do some very light maintenance on the rail cars at that facility. If, in fact, we can't have a facility designed and in place when repository starts operation, that is a service that we can

procure from the private sector. There are casks of this type that are being used currently. They are being maintained currently. And, all of that can be done through the private sector through a service purchase rather than building a facility. So, during this year, we are looking at options for buying services during initial years of operation if we can't buy the facilities that we'd like to have in place in the long-term. That's simplified somewhat by the basic approach to developing the repository. It's anticipated that the initial years of operation would go through a gradual ramp-up, that you wouldn't try and operate the facility at max capacity in Year 1. So, buying services to maintain the casks in Year 1 when there would be a smaller throughput would be much easier than trying to buy that service when we're at the maximum throughput of 3,000 metric tons a year that we're targeting currently.

Next slide. On the institutional front, we've got a significant focus with the States. There are four State Regional Groups. You really can't do transportation planning. Again, getting back to that idea of having a broad view of the horizon and the landscape that you're working within, you can't do transportation planning on an individual state by state basis because the transit has to connect from state to state. So, the egress from one state have to connect with the ingress to the next state. And, it's

fortunate that the states already join together for a lot of their cross-state energy planning and other transportation planning activities independent of what the Office of Radioactive Waste Management needs to do. They've joined into regional planning groups that deal with a variety of issues that the states have across their boundaries.

In working within those groups, we have four of them. They are the Southern States Energy Board, we have a Midwest and a Northeast Council of the Conference of State Governments, and we've got the Western Interstate Energy Board, and each of them have representatives from their individual states. We have individual meetings with the regional groups and twice a year we have a meeting where all of the regional groups and industry come together. We're continuing with the planning of those groups and it's good to have both the large group where all of the State Regional Groups come together for the broader planning of issues like we have a responsibility for providing funding for emergency preparedness training and for some technical assistance.

What's an equitable way of distributing those funds? It's not a question that we can answer on our own. Back in 1998 when a draft policy approach for distributing those funds was published, the approach back then was on "needs based" distribution of the funds. But, it's really hard to come up with a uniform description of need so that

there would be equity in the distribution because one state may define its needs very differently than another state. What we're working on now with the states themselves are these Regional Groups and through the Transportation External Coordinator's Working Group is an approach that's based on a formula that includes a lot of the criteria that would affect needs, but it makes it much more uniform in its application across the states. So, we're very encouraged that the work that's continuing on the criteria for route selection and for implementing is one of the funding responsibilities that's being done collaboratively with the States and with the Tribes.

I'll mention a little bit about the Transportation External Coordinating Working Group. We've been adding additional members to some of the topical groups that are addressing these issues. We have a topical group that was added about a year ago on security because that was one of the issues that our stakeholders-at-large had expressed a significant amount of concern about. We've got additional members that have been added to that. That group is moving forward. As I indicated, these TEC meetings take place twice a year, but there are conference calls with the members of these topical groups in between. And, what we've pushed for is to try and get a more projectized approach where there's a defined scope of work that these topical groups will be

focusing on and that they accomplish a significant amount of work on these topical issues between the TEC meetings. Then, the meetings are used to present results of those studies and those discussions for the membership-at-large and have a broader discussion moving us towards final decisions that the Department has to make. And, I'm encouraged that we're getting very good participation, lots of good feedback both through the State Regional Groups and through TEC.

One of the other things that we've done on the issue of routing which is also a considerable concern both nationally and in the State of Nevada is there are a number of planning tools available out there that are good for doing transportation planning and looking at the risks associated with transportation. Two of the tools that the Department has used for quite a while are called RADTRAN which is a radiological risk assessment model tool and TRAGIS which is a geographic information system that looks at routing issues in a more spacial arena. Working with the two tools together, you can do route selection based on criteria that you input into TRAGIS and then RADTRAN can give you the radiological risk assessment associated with using those routes. The tools can be complicated and so we invited representatives from the State Regional Groups to come to a meeting that we held down in Oak Ridge where the tools are maintained to give them a training session, let them ask questions, and we're

going to continue to provide support for their application of the tools in their own planning so that they can participate productively in these topical groups we have through TEC.

Next slide, please. As the transportation system's path forward evolves and as decisions get made by the Department, some of the old transportation materials have been passed out. We had a transportation manual that described how transportation works in general terms and a few specifics about the transportation of our materials in specific. Those materials are being updated. We're working very closely with John Arthur's folks out here at the Office of Repository Development because the transportation system again affects all aspects of OCRWM. We're hopeful to have a new transportation manual that provides a broader overview of these things out sometime this year. We've made a lot of progress on updating the material. The challenge is each time you're about ready to print something you're always on the cusp of having something new to add. It's a balance of when you have enough information to go ahead and push a new document out the door even though you know that the program is in constant flux and you're always adding new information and new background that could be helpful in the future. We're also trying to update the transportation web page on the OCRWM website that provides more of those interim updates in between the formal updates for our transportation

brochures.

The other thing that we're working on again with our broader stakeholders is the Department of Energy has what it calls transportation protocols. It's more of the implementation requirements and expectations for transportation at a fairly high level. Those protocols are going to need a lot of work to be applicable to the OCWRM shipments. Right now, they don't cover rail shipments and so we're starting to engage in the planning necessary to update the protocols so that we do have a full suite of applicable and accurate protocols in place by the time we start our shipments.

Next slide. On the topic of security and operations, we've got a number of things going on with the Office of Security in a collaborative effort within DOE. One of the things is launching a classification guide. And, it's interesting, you would think that that would be a fairly straightforward matter, but the number of different agencies involved in classifying transportation data frequently have a different view of what the classification level of detailed information ought to be. So, we're working very closely on a multi-agency approach to making sure that we have a classification guide for our transportation activities that all the affected agencies can agree with and we're making progress on that front.

I think I mentioned once before that the Secretary last summer, I believe it was, down in Oak Ridge made a presentation on a security for the 21st century initiative that the Department was pursuing. The responsibility for that activity lies in the Office of Security & Safety Assurance within the Department. There are a number of elements. One of the elements was physical security, one was cyber security which is largely information exchange, there were a number of other areas, but there was a technical piece, and I've forgotten the fourth piece off the top of my head. It's important though that there is a different group within DOE that has the overall responsibility for developing security approaches and we're working with them particularly on the technical security side if there are technologies that could be developed in the broader sense of DOE's efforts in that area that could be applied to our shipments. We are working with the right people to make sure that we incorporate that technology and those ideas and those technologies when we actually start shipping in the future.

We're continuing to look at threat analyses. The Board had talked to us previously about the difference between a design basis threat approach and a full spectrum approach that combined both accident and other threat analyses into a combined hazards approach and we've taken that to heart. What we're looking at now is a full spectrum

of threat risks, and rather than focusing specifically on a design basis threat that all of our efforts are focused on, we're looking at the range of threats that could be presented in making sure that we have an appropriate response for each of the threats that the Department is looking at through its security apparatus.

And, last on here, I have the indication that we're continuing to look at the other aspects of physical information security and that will be reflected in ongoing documents that the Department makes available. There will be ongoing discussions about how much the detailed routing will be discussed and I think one of the things that's been talked about in the topical group on routing is the idea of selecting a suite of acceptable routes that could be used, but not talking about the exact route that would be used in a particular shipment except with the people that we have to notify in the states.

Next slide. Also, on the operations and securities side, burn-up credit is a complicated area, but basically when you have spent nuclear fuel, the process of fissioning this fuel on the reactor, you're actually splitting atoms and making different items in the fuel, different constituent materials from what were there originally. Some of those materials you get through the fission process actually help you conceivably in precluding a criticality challenge for the

materials. Presently, we can't take credit for any of the beneficial materials that exist. They call them poisons in the burned up fuel because we don't have a good correlation between analytical data and actual benchmark data from actual spent fuel assemblies. The French had an awful lot of data and, in fact, they used burn-up credit in their transportation activities and it lets them get more content in a package and still show that they've got the safety margins that are necessary. We've been working very closely with the Nuclear Regulatory Commission and EPRI to buy the French data. OCRWM has actually purchased the raw data, the NRC is contributing to the funding for analyzing the data, and we're hopeful that that analysis can be passed on to the vendors in adequate time so when they got for their certificate of compliance for the packages that we'll be using, they'll be able to take burn-up credit to the extent practicable and that will help in the efficiency of the overall transportation system. Again, that's a long-term project that we're doing. It's a transportation R&D effort that we're hoping will bear some significant fruit in our ability to maximize the capacity of the packages that we use, rather than have to derate the package for some high burn-up fuels.

We're also looking at optimization of shipments. I talked a little bit yesterday to the Board so this is not

news to them, but not all the audience was at the meetings yesterday. It's fairly straightforward to look at transportation where you've got a network of shippers and receivers. And, in this case, we've only got one receiver, but we've got a network of shippers. What is the best way to take limited resources, move them out to your shipper sites, and then move them back to the receiver's side again so that you get the most material moved with the least number of shipments? If that's your only constraint, that's a fairly straightforward problem. And, linear algebra and other tools can do a very good job of optimizing that network. Unfortunately, transportation is not in the driver's seat for saying how all that's going to be done. The utilities have to agree about what they want shipped. They have a fairly significant say about what gets shipped when under the Nuclear Waste Policy Act. The repository may, in fact, have its own constraints about what it can receive when. There's a dynamic that involves a lot more than just transportation planning.

Yesterday, one of the things that was discussed in fairly extensive detail was a total system model that looks at the big picture. I'm doing optimization modeling from the transportation perspective as if I were in the driver's seat. The output from that modeling effort that says what the most efficient approach would be purely from a transportation

perspective is a feed to the total system model to see how what I would like to do works in the larger picture. And, Chris Kouts, the gentleman that's responsible for the total system modeling, talked a bit yesterday about how that model works. So, there is a process for me looking at what would be ideal from the transportation perspective and then taking that view into the larger picture, again that broader horizon and making sure that it is tied into an overall systems approach and what will work for this system. I have no illusions about the purely transportation perspective being what winds up controlling the day, but at least there's an interaction where I can say what would be ideal for a transportation perspective. I get feedback from the total system model about constraints that are placed either because of repository limitations or because of constraints in the contract space with the utilities. And, what will come out of it is a systems approach that optimizes to the extent that the system is amenable to that.

We're also continuing to collaborate with our international partners on transportation sabotage testing. There is a significant effort that we're involved in in working with the U.S. with the NRC and internationally with the French, the Germans, and the British on what would the consequences be of a terrorist attack on a cask with spent fuel? There's a lot of speculation about what various weapon

systems could do. What we have proposed is a series of tests. Again, the conduct of the tests and the specific results will be classified, but the output of that is going to be a significant input to our information on how we position ourselves to mitigate those risks through our transportation planning.

The last thing I have on this slide is looking at the federal agency regulations as they evolve to make sure that the transportation is set up to acquire best practices within the envelope of regulations that we're required to comply with. And, interestingly enough, there is an effort looking at best practices in transportation the General Services Administration started a couple of months ago. I'm participating in that working group with the Department of State and with the Department of Defense, with Department of Transportation, again with GSA, and a number of other federal agencies looking at overarching transportation issues that may--there may be a more uniform approach that the Federal Government as a whole could take that would be beneficial overall.

Next slide. I'm not going to spend a lot of time on this slide because I get to do this in detail in the next presentation, but where we are with Nevada Rail in general terms is that our Alignment EIS, the Environmental Impact Statement, was started and we made the announcement in the

intent to start an EIS last April, April 8th I believe it was, 2004. We held scoping meetings and we started work on the EIS in earnest in about parallel with the scoping meetings that we had with--there were five scoping meetings held in Nevada. Originally, we had planned to hold three, one in each of the counties along the corridor, and then we added additional scoping meetings based on input from the state, one in Las Vegas and one in Reno. Through that scoping meeting process, we've gotten over 4,000 comments and we're working diligently. In fact, Robin Sweeney, the Nevada Rail Project Manager, is with me today and I think she's quivering a little bit because she sees the volume of work that's before her to move this EIS forward and there's never enough hours in the day to address all the concerns and issues that come up, but there is a dedicated team working and addressing the issues as we move forward with analysis of the alignment options that we've got on the table.

We've got contracts in place to collect the technical data that's necessary to feed the EIS process. We've been conducting meetings with the landowners and land users out in rural Nevada that could be affected by the rail line. One of the things that we were advised to do early-on was to get a range land expert. Since a lot of the land use in this area is with ranching and with cattlemen, we wanted to get somebody that understood their perspectives a little

better than we, the Department of Energy, did. A number of maps that overlay the grazing allotments with the alignment options that we are looking at currently have been provided to the ranchers and we're getting feedback. I think that's a process that is working fairly well. There's always more that can be done and we're always looking at ways that we can increase additional feedback. I'm seeing Mr. Fallini in the back of the room and I know that Vic Trebula (phonetic) spent a day driving around the grazing allotments that you've got in your pickup truck and looking at things that you have a concern and we've tried to reach out and get as much feedback as we could from a number of people out here. There's always more to do and we'll be looking for additional feedback and I'm sure we'll get some more of that today.

We're proceeding with the conceptual design of the railroad which is part of the EIS process. To understand the environmental impacts, you have to understand what you're going to be building and how many bridges are likely to be built, what kind of culverting, what kind of drainage issues you're going to have to deal with. And so, there's a conceptual design effort that's going on in parallel with the environmental analysis that we're conducting as part of this EIS. Our draft EIS is expected to be issued in the spring/summer of this year.

Next slide. On the transportation update with the

shippers, again I mentioned earlier in the context of our cask development that we sent a data request update to the shipping sites, to the utilities, and asked them are there any changes to your crane capacities, are there changes to the ingress and egress ability at your site, what kind of lay-down areas do you have, has it changed from previous editions of this facility infrastructure data sheet that we have on all the utilities. About 80 percent of the utilities we sent the request to responded to us. We got good data back. Again, that's informing our plans for development of casks. We were hopeful that we wouldn't have as many new cask designs to pursue, but based on the utility feedback, we're going to be focusing a little bit more on some intermediate weight range casks in the 75 to 100 ton range, whereas before we were hoping to use more 125 ton casks. So, that process is working well.

The other thing that we've done is that it's very difficult to interface between the Department and the utilities right now because I think most of you are aware we are being sued by the utilities. During litigation, forthright communication on purely engineering issues are sometimes difficult. Within the constraints that we've got, we have been able to actually visit the utilities with the waste acceptance group. Last year, we visited three utilities during refueling, we watched their refueling

operations and their loading of fuel into their dry storage casks. In those interactions, the last we visited I think it was Peach Bottom, Dwayne Arnold (phonetic), and Palo Verde. We will be visiting additional plants this year. We will be pushing to try and visit some of the plants that did not give us feedback on those facility infrastructure sheets that we asked for, but again that's another effort that we've got in place to try and close the gap between our current knowledge and what the changes at the individual utilities might have been. And, again, those visits are not just the waste acceptance people, but it's waste acceptance and transportation. So, again, it's an integrated view of what the requirements and expectations are.

Next slide. On the receiver end, we continue to have meetings on a regular basis with the Office of Repository Development, particularly the people that are doing the facility design. We want to make very sure that the way the casks are designed will be compatible with the handling equipment at the facilities where they receive the casks and at the turnover of the casks to the repository after they take the fuel out of our transportation casks to turn over those casks back to the transportation system, all of that works smoothly. And, there's an ongoing iteration of design activity as we provided some bounding criteria to the surface facility design people on the overall size, weight,

dimensions, basic approach to cask design that's been part of their facility considerations.

The facility also has some of its own cask requirements. You all understand, I believe, that at some point the fuel has to be taken out of the transportation casks. Ultimately, it goes into a disposal package that gets put underground. There's also a need because not all of the fuel is in a condition temperature-wise, heat load-wise where it can come straight from the utility and be disposed of immediately. There is going to be an accommodation of an aging facility at the repository. That aging facility will store things temporarily until the fuel is in a condition where it can be mixed and matched to go underground. Casks will be needed for that, as well. One of the significant areas of integration between the repository and transportation is the transportation cask and the aging cask issue. Are there ways to do a procurement that would cover both and we believe there is. And, based on our belief there's some significant potential overlap between transportation casks and aging casks, the procurement for both now has been assigned to transportation. We still have the discussions with the repository. We keep them informed of where we are going with the cask design and our interface with the vendors, but there is a good effort to integrate there.

Next slide. And, there's five buttons here. We continue looking at both intra and interagency. Within the Department of Energy, there are a number of different programs and many of those other programs also ship spent nuclear fuel. The Environment Management Program ships spent fuel from research reactors. They have a foreign research reactor program where they get fuel from overseas, they bring it into one of the ports, and then they ship it from the port either to Savannah River or to Idaho. The Naval Reactors Program, even though the Navy is a bit of a will under themselves, they do have shipments and they are a part of the Department of Energy. They are currently shipping spent fuel from the Naval shipyards to storage in Idaho. So, there is a lot of integration that has to be done just within the Department. And, as we work on transportation protocols for our shipments, we'll be doing that in close cooperation with both the Environmental Management Program and the Naval Reactors Program.

We participated in the Naval Reactors Program. They had a very good exercise in Kansas City last summer where they went through an accident scenario. They involved the states and local emergency responders. I think, it was a very successful exercise and we have every intention of conducting similar exercises to make sure that the transportation system for our shipments is ready to go before

we actually conduct loaded shipments. So, our continued interface with the Office of Naval Reactors is important.

We're also looking at the foreign experience because the French and the British are currently doing shipments and I believe members of the Board and certainly Kevin Crowley and members of the National Academy went to England last year, looked at the transportation network there, and some of the things that they do. We are looking at that same experience to try and inform our decision on things like emergency response and what we can do to make sure that our system is ready for transport before we actually send loaded shipments to the repository.

We're continuing to work on the routing criteria. Again, I mentioned that's part of the work that we're doing with this Transportation External Coordinating Working Group to make sure we get a very broad view of the path forward both from the affected States and Tribes, as well as from the industry. And, we're working with the Department of Homeland Security on critical infrastructure protection issues and transportation is part of that discussion, as well.

Next slide. And, that gets us to our summary and will lead into questions. The first thing is that I believe that despite the funding shortfall we have this year, I believe that there are adequate planning activities that we can do with our current funding level that will allow

transportation to make significant progress so that when funding is available for major acquisitions, a lot of the decisions that are required to inform those acquisitions will have been made.

I believe that by focusing on the Nevada Rail Alignment Environmental Impact Statement that we're putting the money that we do have in the most important activity to accomplish in the near-term and we're making good progress with that. We're going to work with our States and Tribes and other stakeholders on the development of both the transportation protocols and the decisions on how we're going to distribute the emergency preparedness funding and the technical assistance in that front.

And, I believe that the development efforts we have underway now position us, even with the funding shortfall, to be ready for transportation when the repository opens and to have a robust system.

With that, I will open it to questions.

ABKOWITZ: Thank you, Gary. We'll open the floor up for questions from Board members? John?

GARRICK: Gary, under rail car activities, one of your bullets had to do with the development of rail car prototypes for testing.

LANTHRUM: Right.

GARRICK: The question I'm really interested in is to--

and I also noted that that activity is delayed as a result of funding. What I'd like to know a little bit more about is how is DOE going to impact the actual technical design of the rail car prototypes? For example, are the accident analysis information that you get from RADTRAN and TRAGIS studies, does this play a role in deciding what kind of design criteria that the Department would like to see in the development of the prototypes? What I'm getting at is, as you know, this Board is primarily interested in the technical issues.

LANTHRUM: Absolutely.

GARRICK: One of the things I was impressed by when we were at the Salt Lake transportation meeting was the presentations made by the private storage facilities people on the technical work going on at Pueblo and other places with respect to rail car development. And, they got into considerable detail about couplings design, derail mitigation, and truck design and a lot of rather detailed and meaty issues having to do with the rail car itself. And, I'm just curious how DOE is going to deal with these kind of issues?

LANTHRUM: Actually, the work that the private fuel storage was doing was the first effort to develop a car that meets the AAR 2043 standard. The specifications for truck design, the specifications for coupling, all of those

requirements were derived from the 2043 design criteria. That was developed by the industry. It's an industry standard, not a regulatory standard. What the industry has done really is to look at their best equipment in the truck area--which in the trucks, for those of you that aren't familiar with rail car design, it's basically the wheels and suspension for a rail car. It's called a truck. And, if you ever watch a train go by, sometimes it looks like the rail car itself is wiggling back and forth. It's more likely that as there are imperfections in the track, the wheels and suspension system are moving back and forth. That's called truck hunting. And, the truck designs that they've come up with are able to take more truck hunting without disturbing the stability of the car than some other designs. And so, what the industry has done is look at the best design elements for each aspect of a rail car design and has combined the best of each into this specification. And so, what AAR was doing--or the private fuel storage, they are not developing truck designs themselves. What they are doing is hiring people to develop things that meet the AAR standard. We will certainly pick up where they left off because they never got an approved rail car. That work has been deferred for them. We will be picking up where they left off as we do our development. Or if they continue their development and get an approved car before we get going, we will certainly

learn from that experience. We don't pretend to be rail experts and so we will be hiring--that's what the purpose of the procurement would be to hire rail car production organizations who specialty is rail car design and to have them figure out how best to meet the AAR standard.

There are a couple of missing pieces on the AAR standard right now. It's a mechanical standard at this point. They haven't developed the operation standard that goes with the mechanical standard and that's very important to us. We've been talking to the AAR, Bob Fronczack, the head of the AAR. He's getting a working group together to address things like operating standards that would work in concert with the mechanical design standard to make sure again that the system works well, that you don't have operational expectations that are not supported by the hardware or vice-versa. But, we are going to be going down essentially the same path that the private fuel storage is going, but it will be done through the vendor community as they try to meet the AAR standard.

GARRICK: Thank you.

ABKOWITZ: David?

DUQUETTE: Duquette. Gary, a couple questions on the cask. I notice you've changed the order of the priority which you're going to do. When do you think the first cask will be constructed?

LANTHRUM: That's going to be heavily dependent on money because casks--when you start buying hardware, the price goes up. The dollar figure we had originally requested two years ago at the Federal budget cycle, the $187 million, reflected a number of actual cask procurements. We're expecting our casks to cost somewhere in the range of $5 million each for fabrication. We've got a fair amount of design work that we can do for quite a bit less. I'm hopeful that we'll have procurements this year for conceptual design work to address the gap between existing capability and combining the limitations of the utilities themselves, but that will be a fairly small procurement. The hardware design, probably when the money is available for that. It's also tied a little bit to the progress on where Yucca Mountain is going. Now, there will be some procurements that we'll do of hardware loan advance because my intention is to use actual casks for the dynamic testing of the trains that we use, the consist. When that dynamic testing is done, I'd like to have a real cask rather than a box on top of there with a bunch of lead weights in it to simulate the shape in all the casks. So, I'd like to pursue some procurements in parallel with the development of the prototype rail cars for testing.

DUQUETTE: Duquette. Let me follow up on that a little bit. How many casks--different kinds of casks do you think you'll end up designing and/or building and would that

include some multipurpose casks?

LANTHRUM: We're leaving all options open right now. And, as we go out with the requests for the proposals for the conceptual design work, we're going to be trying to the incentivize the cask community to come up with designs that would be as broadly applicable as possible. Our discussions with the Nuclear Regulatory Commission is that we will try and procure casks that serve as broad a range of contents as possible so that the number of certifications that have to be pursued is limited. And, the number of fabrications that we have to go through different contracts would also be limited. And, until we get the conceptual design proposals back from the vendors, I won't know what the suite number would be. Right now, we're thinking it would be in the range of 10, 12 different designs to accommodate the various fuel shapes. It may be a little bit more, it may be a little bit less. And, some of the designs may be derivatives of each other. We may take a design that--the vendors may propose a design that's a derivative of something that we currently have certified. If they've got 125 ton casks and there are limitations at the utility that can only take 100 ton casks, they may just scale down in the existing design. That would be a different procurement, but it would be a related family and the certification would be easier for the NRC because the technology, all the design factors would be familiar to them.

To the extent that they come up with brand new designs with innovative proposals, the certification process would be a little bit longer, but they might, in fact, buy us the ability to serve more fuel content types with fewer physical design differences. That would be something we know after the conceptual design reports come back in. I would expect to see those probably some time around the middle of 2006.

ABKOWITZ: Andy?

KADAK: Kadak. I guess, I'd like to follow up on Dr. Garrick's question about building on what private spent fuel storage has been able to do. In that presentation, you talked about actually building a railroad car, a train, locomotive, and I think they may have even built one, didn't they?

LANTHRUM: Yes, they have a prototype at the testing facility in Pueblo, Colorado.

KADAK: Right.

LANTHRUM: They stopped testing on it, but they have a prototype.

KADAK: I'm just wondering about reinventing, if you'll pardon the expression, the same old wheel. If they have a technology that's gone through all these standards and you have a limited budget, why don't you apply some of that limited budget if their testing program has stopped to do the same thing they're doing?

LANTHRUM: We would expect as we go out for proposals from the rail car community the company that designed and built their rail car will be one of the bidders and that would basically build on what they have.

KADAK: Yeah, I understand that. But, if you need to get a job done, there are other ways to do things. And, as opposed to starting from scratch and going through a whole very complicated, very time consuming bid process, where you have a rail car and you apparently need some funds to test, why don't you just build on their program? But, just a thought.

LANTHRUM: I appreciate the thought.

KADAK: The other comment is what the utilities are capable of doing. Having been a former utility person, I know if you came to me and said I have a cask that's a 100 ton cask and my crane isn't capable of lifting a 100 ton cask, would spend a few dollars in upgrading my crane to lift that cask. So, I think if your expectation is that you have to design casks for every type of reactor, every type of facility, I don't think that's a good assumption. And, I understand you can't talk to utilities to discuss this in any kind of serious way, but I think you should because it will affect the scope of the program, it will affect the whole magnitude of the effort that you're undertaking, and obviously the cost.

So, the other comment is have you had a chance to talk to railroads? I understand you're also in litigation or something in litigation with railroads. So, have you talked to the railroad people?

LANTHRUM: I'll try and answer your questions one by one. The idea of utilities possibly upgrading their infrastructure, there's a full spectrum here. In fact, the reports we got back, some utilities had very, very small crane capacities. And, where you've got a utility that has a 50 ton crane capacity, the thought that they may upgrade to 125 ton capacity is probably less likely, but a utility that has a 100 ton crane capacity, the upgrade to 125 ton may not be a big deal. And, it's going to be an interaction. When we get to the point of doing our delivery commitment schedules--I think Chris Kouts had talked about that previously--the delivery commitment schedule is the formal interchange between the Department and the utilities on the contracts and the expectations. Part of that, the utilities say what they would like in terms of casks. And, there's a bit of a tradeoff. As the casks get smaller, it means the utility is going to have to go through more loading operations and that sometimes is more of a burden possibly than an upgrade of their capacities would allow them to do fewer loading operations. And so, there will be tradeoffs and the utilities will have a significant say in what they're

willing to do because it affects their operations and the number of loadings they'd have to go through. We will develop a suite of casks because I think there won't be one answer that applies to all the utilities. There will undoubtedly be some that have limited capacities that will not upgrade. I think that we will likely have to have some smaller casks, but the actual number of casks since it's going to be a ramp-up, an overall operational throughput capacity, I will try to have a suite of casks that will address a variety of needs initially. As the number of casks grows, it will grow in concert with more definitive agreements with utilities about what they expect to receive and what they're willing to do in terms of facility upgrades. And so, the ultimate infrastructure we have in place as we get to full throughput may be very different than what we think we're going to need when we start operations when the repository opens.

ABKOWITZ: Abkowitz, Board. Gary, the focus of your discussions today are with mostly rail scenario in mind. I was struck by the fact that the word "truck" never appeared in your 16 slides. The corollary to the mostly rail scenario is some truck and there are people who believe that if the rail spur construction does not happen or is delayed that could become more truck or mostly truck.

I'd like to explore with you a little bit about

what percentage of the overall operation will be trucking under the mostly rail scenario including what percentage of those would be in an overweight type of shipment and then also if the rail spur is not built concurrent with the opening of the repository whether you have intermodal shipments where you'd transfer from rail to truck for the last segment of the trip and what kind of implications that has on cask design and so forth?

LANTHRUM: You're right. I did not talk about truck shipments largely because the infrastructure for truck shipments is currently in place. There's nothing new that we have to construct. The highways are there. The role of the states in specifying alternative routes for truck shipments, highway shipments is clearly understood. If we have to do truck shipments tomorrow, we have the infrastructure in place we could lease casks that currently exist, we could hire drivers and vehicles, we could do truck shipments tomorrow. So, there's not an infrastructure development effort. There are improvements that could be made through a development effort, but the infrastructure is in place currently.

In the repository FEIS, I believe the split between conceptually--and that's again just looking at some expectations about what the future might hold--the split between the rail part and the truck part for the mostly rail scenario is 90 percent rail, 10 percent truck. We won't know

for sure until the utilities give us their direct feedback.

I've done some analysis of the cost per metric ton to do throughput by truck as opposed to by rail and it's on an order of magnitude of something like 50 to 1 more expensive per metric ton to deliver material by truck as compared to rail. We had overwhelming response during the repository EIS process on the mode question to prefer rail largely because you reduce the number of shipments significantly. There has been a number tossed around on the order of 50,000 plus shipments if they were all done by truck, whereas if they were all done by rail, it would be on the order of 3500 shipments. So, there's a significant reduction in overall number of shipments.

The emphasis is going to be clearly on doing the absolute maximum possible by rail. There will always be the potential for truck shipments, but being a good steward of the taxpayers' money, I need to be focusing on rail as much as possible. I'll still maintain the viability of some truck shipments, but it's clearly not going to be a focus for us.

ABKOWITZ: Abkowitz, Board. So, can I interpret from your comments that there's no plans to consider a rail to truck intermodal facility?

LANTHRUM: We have lots of contingency plans and alternative scenarios that are looked at and that's certainly one of the scenarios that's been looked at. I'm not sure

that it provides any net benefit in throughput if you do truck casks on rail cars and then transfer to a legal or overweight truck in an intermodal facility. I'm not sure that provides any real benefit in either cost per metric ton per throughput or any other operational advantage. We'll continue to look at that and we've got that as an option on the table right now. I'm not sure how it would play out when we actually start shipments.

ABKOWITZ: So, if the rail spur is not built, it would become a 100 percent truck scenario for the nation?

LANTHRUM: It would be a 100 percent truck cask scenario. There may be things that we could do to reduce the impacts, but we're certainly not focusing on that.

ABKOWITZ: And, I imagine that would also have implications on testing of truck casks that are traveling on rail cars.

LANTHRUM: All the casks we buy will be certified to meet the NRC criteria for performance. And so, whether it's a truck cask or a rail cask, the performance criteria the NRC has set is the same. It would go through the same certification process.

ABKOWITZ: Okay, thank you.

Ali?

MOSLEH: Mosleh. So, the related question, the EIS would be neutral with respect to the truck/rail mix?

LANTHRUM: Actually, the EIS that we're currently doing does not look at the truck issue, at all. The EIS we're currently doing is only to look at the alignment options within the Caliente corridor for constructing a rail line. That's the scope of this EIS. The mode decision and the pluses and minuses, the benefits and the costs associated with truck versus rail was in the repository EIS and that was concluded in final form some time ago in 2002. This current EIS is just well-within the selected Caliente corridor. It was part of our decision where would we study the potential for constructing a rail line within that corridor.

ABKOWITZ: Okay. One last one from Andy.

KADAK: I guess I had a couple of questions there that I don't think you addressed. One was have you met with the railroads directly?

LANTHRUM: Yes, we have. We met with Union Pacific about two or three weeks ago and we will continue to meet with the railroads. The initial discussion with them, the Caliente corridor was our selected corridor . Union Pacific has the line that comes by Caliente. The initial discussions with them was focused on what's the process for doing a tie to their main line track and do they have views about how that relationship should work out. It was relatively easy to speak with Union Pacific because, as you indicated, there's a lawsuit that's outstanding, a series of lawsuits, the

Department has had with the railroads over the cost of doing spent fuel shipments. We've reached settlement with Union Pacific and so that lawsuit is behind us. There's an agreement on the cost for both regular train shipments and for dedicated train shipments and a number of other issues that were a part of that suit. So, we have had discussions with Union Pacific. We will continue to have an ongoing relationship with them as the additional--these lawsuits are proceeding railroad by railroad. And, as additional lawsuits are settled, we will open discussions with the other railroads one by one. I believe, Burlington Northern Sante Fe is the next railroad that they're trying to reach settlement with.

KADAK: In your discussions, you talk about dedicated versus whatever you call it--

LANTHRUM: Key or regular trains.

KADAK: Regular trains?

LANTHRUM: We see that as largely a policy decision the Department has to make. And, again, for the audience, the jingo here, a regular train is just a train with a whole bunch of cars of various cargos heading down the track. The railroads have some special requirements for hazardous material moves and those go in key trains, but you can mix and match cargos in key trains, but again there's an expectation that key trains will travel on higher quality

track. They stay as much as possible on Class 1 track and there's some other expectations for key train operations. A dedicated train only has one cargo being pulled by the engine. And so, if we chose to use as a policy decision dedicated trains, that train would only be moving spent nuclear fuel or high-level waste. We haven't made that decision yet. It's an ongoing discussion about what the pros and cons are.

The Federal Railroad Administration has studied the issue and I believe they have a report that's about ready to come out on their views. We've gotten lots of input from our stakeholders that they prefer dedicated trains and we're taking that into consideration. There are some operational advantages for us when they use the dedicated trains, particularly in terms of the escort. The way regular trains and key trains work is that cargo gets put behind an engine, it moves down the track in the general direction that you want your cargo to go. Not all that cargo on that train is destined for the same site. So, as you get to the switching yard, some cars get separated out and staged there until an engine going in the right direction comes along. But, the dedicated train, you don't have to go through that switching process. You start at your shipping site and that one consist goes all the way from the shipper to the receiver. Operationally, there's clearly some advantages associated

with that and we're considering that as we try and frame the policy decision.

KADAK: Let me just close it with one brief story. It's not a question. When Yankee shipped its reactor vessel from Rowe, Massachusetts to Barnwell, South Carolina, we didn't have access to a rail line. We had to heavy haul the vessel over 100 times to a rail line which was live loaded onto a rail car and shipped to Barnwell. We had to deal with, I think it was, three railroads, eight states, all agreements, all emergency planning, all that. People believed that the reactor vessel was spent fuel or reactor core, but obviously it wasn't. But, the utility can, without having access to a rail line to their facility and without having the capability to--can use heavy haul trucks to get wherever you tell them to go to ship this spent fuel. And, this is, I think, something you need to factor into your planning and talk to the utilities to see how they would do this and how they would recommend doing it because you can't just assume that, well, they don't have the capacity, therefore we've got to design a special cask, we have to go by truck, or who knows what. It would be a very serious mistake, I think.

LANTHRUM: Actually, that is a part of our planning process. We're looking at both heavy haul from utilities that don't have rail access to a rail head and barge from some utilities that don't have rail access to a rail head

because some utilities are located on waterways that are navigable. So, we are looking at the possibility of taking rail casks out of utilities that don't have rail access. That is on the planning horizon.

KADAK: And, while Margaret Chu is in the room, I think it's really a bad decision to reduce the monies for this program to 25 million because I think there are a lot of concerns out there about where this is going to go and how is this going to get settled. That maybe 25 million isn't sufficient to make those decisions so the people become informed.

LANTHRUM: Well, in defense of the decision, I'd like to say that, as I indicated earlier, that large $187 million figure was largely based on us actually buying hardware this year. And, we've recently announced that there's going to be delays to opening the program. If I bought casks this year--

KADAK: I'm not suggesting doing--I'm just suggesting 25 million, I think, is a little bit on the low side.

LANTHRUM: Okay.

KADAK: And, you need to be sure that you're able to make some intelligent decisions about the path forward.

LANTHRUM: I will never complain about getting more money. I think the money that we have is adequate for our planning process right now. I appreciate the input.

ABKOWITZ: Okay. We also have a shortage of time. So,

we need to press on to your second presentation.

There is one message that has been given to me to read out. Apparently, there's a car out in the parking lot, Nevada tag 406 RYR. It's a silver-gray four-door Chrysler Sedan. I'm told that your trunk is open. So, whoever was in there got out and forgot to close the trunk.

LANTHRUM: I think it's mine. It's a rental car with an automated opening and it opens by itself. I've come out of a number of restaurants after having closed it and it opens itself just because it wants attention, I guess.

ABKOWITZ: Okay. I thought maybe this was a ploy so you could walk out of here and not come back.

LANTHRUM: I'd like to. It usually doesn't work. I am going to grab a glass of water here though.

(Pause.)

LANTHRUM: Okay. You can jump into the first slide. In this presentation, I'm going to talk about a number of things and this will go a little bit faster than the last presentation just to give an overall view of where we are with this Rail Alignment Environmental Impact Statement and give you some information on the key elements of our Record of Decision and our Notice of Intent, to talk about the general overview of where we are in developing the EIS, and the next steps in the process.

Next slide. I already talked a little bit about

the fact that we issued a preference statement for mostly rail and for the Caliente corridor in December of 2003. We followed up in April of 2004 with an actual Record of Decision that we will be using the mostly rail scenario for transportation and a Record of Decision saying that we were selecting the Caliente corridor to study additional alignment options for construction of a railroad. At the same time as issuing the Records of Decision, we published a notice of intent to start an environmental impact statement about where within the Caliente corridor we might align a track for actual construction.

Next slide. We published our Notice of Intent on April 8 of 2004. We also scheduled scoping meetings in the State of Nevada to talk about what we should consider with development of this EIS. We held scoping meetings here in Caliente. We held them in Goldfield, we held them in Pahrump, we held them in Reno, and we held them in Las Vegas. We got lots of input. As I indicated in my previous presentation, there were over 4,000 comments that we got as part of that process. There was really good public participation. We got a range of comments, positive and negative, and we're wading through all of that right now. As I indicated, Robin, maybe she's the one that wanted to reach escape velocity to get that trunk hatch closed, but she's working diligently to make sure that the Draft EIS that comes

out in the late spring/early summer is going to address all the comments that we got. The proposed action that we have is to determine a rail alignment for the construction and operation of a rail line for our shipments of spent nuclear fuel and high-level waste from Caliente to a site near Yucca Mountain.

Next slide. The Notice of Intent identified in this gives a little bit of a jargon. The alternatives that we're looking at, there are common segments and there are alternatives. For those of you who are really interested, I've got a pretty good sized map up here and you can talk to me during the breaks. The red lines that draw the possible alignments of a railroad track from Caliente to Yucca Mountain, there are some places where there's only one line. That's called a common segment where we hadn't looked at alternatives. And, there's some places where the lines diverge into a couple of different tracks that come back together again. Those are the alternative. These are the alternatives that were proposed during the Draft and Final Repository Environmental Impact Statement. There were a number of other alternatives that were introduced during scoping. Those are being considered. We're still assessing which of the additional alternatives that were proposed are viable and feasible for carrying further for detailed analysis. I'd be happy to talk about the common segments and

the alternatives for anybody that's really interested.

We're doing field investigations of all of them and those field investigations include--there was an unfortunate discussion, I think, early-on about doing survey work out in the field. And, a lot of people thought what's all this talk about having an open mind about where the rail line is going to be if you're already surveying where you're going to lay the track. That's not what we're doing. We're putting survey markers out so that the planes can fly overhead, collect aero-photography information that would feed the analysis of the common segments and alternatives so good decisions can be made. So, the surveying that we're doing right now is to help the data collection process, not to lay the track. But, we've got survey markers being put out in all the areas from Caliente to the repository.

We're doing geochemical out in the field looking at what the ground is actually made of, what kind of rock, what kind of soils, sediments. The geotechnical people are looking at a lot of issues and just the constructability of the rail line out in rural Nevada. We're doing hydrology work and I think, as all of you know, hydrology is a significant concern, the flooding that happened out here in January. We're paying very close attention to water flows. The good thing is that with the flooding in January, where the stream beds are is clearly evident right now. So, our

hydrology team is actually able to get a very good view of what is out there. Whereas, you go through a couple years of drought and with the wind erosion out there in the flats, things that are titled stream beds don't look like stream beds when you're walking around. They look like stream beds now. You can see the water erosion. So, it's been helpful for the hydrology team. I don't know if they scheduled the bad weather, but it's been helpful for them.

Next slide. This is a map of Nevada and again it's an overview of the whole state. The red lines right here are the outline of the common segments of the Caliente corridor. The pink pieces in here show where they have alternatives that are being considered or at least were defined as alternatives in the repository Environmental Impact Statement. Again, we got numerous additional comments on other alternatives that we should consider as part of our scoping. We're still assessing the viability of those additional alternatives. And, what we wind up pursuing in more detailed analysis will come out in the Draft EIS that will begin in late spring/early summer.

Next slide. This is the same chart you see here and again it just shows the general flow. As has been indicated a number of times, Nevada is basin and range country. John McPhee's book, Basin and Range, is a really good description of this landscape where you've got a series

of mountain ranges and in Nevada they run north-south with valleys between them. That's the environment that we're working in. A lot has been said about the challenge of constructing a railroad through basin and range country.

Next slide. We listened to the comments and again this is a bit of a busy chart, but let me just say that on the left hand side here, we're plotting elevation. This is distance from origin to conclusion of a number of rail lines with the black line here being the Caliente corridor as it's described in the repository FEIS. And, it shows how much up and down we've got with the Caliente corridor. These other lines are existing Class 1 track that has been built and are operational in the country today. The green line is the UP track coming out of Denver and you've got a huge variation in topography on that line even though it's shorter. Dealing with major peaks like that, there was significant tunneling that was required and a number of these lines have significant tunnels going through them. The orange line here is Donner Pass coming out of Reno and again you've got very significant elevation changes all along that line. It's very rugged terrain. A number of trestles have to be built, bridges and a number of tunnels have to be built for that line. The blue track here is the (inaudible) Pacific Line out of Calgary, Alberta. Again, you've got some very significant terrain variations as the track goes from

Calgary, Alberta, out. And, in comparison, the terrain variation that we're dealing with in Caliente corridor is very manageable, very constructible.

Next slide. I already mentioned a couple of these. I talked about the fact that we're doing geotechnical surveys out in rural Nevada. That's the looking at the soils, the rock formations, the kind of surface that we have to deal with in the constructablity of the railroad.

The aerial mapping, I described, and that's the survey work that's currently going on. It's placing survey markers for the aircraft to target to as they do their site scanning and multi-spectral analysis. They've got some pretty sophisticated equipment for doing a variety of data collection from airplanes.

The hydrology is again studying the water flows out in the area that we were looking at as possible alternatives. We're also looking at sensitive species both for plants and animals. The good thing again with all the rainfall that we've gotten this spring, we're expecting a very significant blooming season and so there should be lots of evidence of the plants that are out there on that corridor. So, I'm very encouraged that the threatened and endangered plants and animal surveys that are going to be going on will again have lots of data to work with. During a drought year, there are a lot of plants that just may not bloom and so there could be

still some mystery. But, with the rains we've had this winter, I'm expecting the spring surveys to be very productive.

And, again, cultural surveys, and we've gotten a lot of input from some of the people that live and work out in rural Nevada about some of the cultural features. And, in fact, it was interesting. There was a Tribal writer's working group that did a tour of the corridor with ORD, and based on some input we had from some of the other people that live and work out here, we were able to point out to some of the Tribes cultural sites that they were unaware of. And so, we're paying very close attention to collecting the right cultural data to inform the decisions about the ultimate location of the railroad.

Next slide. I already talked largely about the major intent of doing this survey work and this data collection is to feed the EIS process. In an EIS process, one of the key challenges is to significant and adequately address the alternatives that are being studied. This data is being collected so that we can do a true, rigorous exploration of these alternatives and do a real comparison of them before a decision is made.

We're also looking at the possibility of sites providing some construction materials that could be used. We got a question about ballast. Ballast is a real rough rock.

For any of you that have hung around railroad tracks, there's a really sharp edged, rough rock that's very different from river stone that's used to form the stability base for laying the track and the ties. We're looking at sources of ballast while we're out there and fill. We're also working with the local landowners and land users about development of the rail line as we look at collection of materials or design features or the things that we could do that would be helpful as opposed to hurtful. That's part of our consideration as we collect the data both from the individuals and the technical data collection.

We're also working on the conceptual design criteria. There could still be significant changes between the design that's done to support the EIS and the final design that's done when we actually get into construction. That's going to be an ongoing process, but certainly you have to have a fairly good feel for the design and the kind of impacts in terms of numbers of bridges and drainage systems that you'd have to include to do an adequate environment assessment. So, there's a conceptual design piece that goes along with this.

We're looking at the engineering requirements during construction services and again constantly trying to factor in the comments that we got during scoping meetings. And, we continue to get comments to this day. The comments

didn't stop with scoping. We continue to get comments coming in. It's encouraging to me that the scoping process was well-enough attended and we got adequate enough participation, but the additional comments that we're getting in are largely reflected by the comments that we got initially during the formal scoping period. But, we're continuing to look at the comments that come in. We're accommodating those that are different to the extent that we can and we're folding that into the operations as we push our technical teams out into the field.

Next slide. We don't have a final decision about which of the additional comments that advised changes in scope from what was proposed or at least outlined in the repository Final EIS. We're still looking at the feasibility of some of the suggestions that were made during the scoping and trying to fold the ones that we can into the EIS process. We're continuing the field work in parallel with that. We believe strongly that we can have a very good technical basis for issuing a Draft Environmental Impact Statement in the spring/summer of this year. We believe that the Final Rail Alignment EIS could be done early in fiscal year 2006 and we believe that a Record of Decision could be issued early in fiscal year 2006. What we do after that is going to be dependent on funding and where the program is overall.

Next slide. Questions? I told you it would be

faster.

ABKOWITZ: Okay. We're opening it up for questions. Andy, followed by Henry.

KADAK: Kadak. I was looking at that map that you pointed out and I also have a copy here of the EIS. I think it was for the Yucca Mountain Project completely. And, George and I were sort of--if we had a choice, which direction would we choose to go from Caliente? Our route was a little different than the one you suggested. And, where were you during scoping?

LANTHRUM: Well, I guess, I wasn't around.

KADAK: But, the bottom line seems to be and the real question is you worked really hard to avoid the Nevada Testing and Training Range which apparently--

LANTHRUM: There's no question about that.

KADAK: --is the reason for the circuitous route to get to the test site. Could you explain to me whey it is not possible to take a more direct route given that this is already Federally controlled land and these are "Federal shipments" which if properly done, namely invite somebody from the test site, trained driver, to drive in a more direct route to the site, why was that not considered?

LANTHRUM: It was considered.

KADAK: And, what happened?

LANTHRUM: It was considered thoroughly. In the

repository FEIS, there were five possible corridors that we looked at. One of the corridors was called Caliente Chalk Mountain and it basically started at the same place, came around, but drove down through the test site from this point, through the test and training range to the repository. The Department of Defense and the Air Force vehemently objected to that corridor. There was no shortage of outcry about how that would affect the national security mission. And, I think, you're aware of the fact that this was one time called the Nellis Range. There are live bombing exercises that go on out here. That's just part of the national security environment that they operate in and they felt and argued persuasively that those national security missions that go out there were incompatible with the construction of a rail line, construction and operation of a rail line, through the test and training range.

KADAK: All right. But, that was one route that you did look at and you also had one that went kind of across. The real question is were they thinking in a way that says, well, how can we help you solve this problem or were they in this just saying, no, no?

LANTHRUM: They were thinking how to help us solve this problem, but they were thinking about how to solve it without impacting their activities. They truly believed that construction of a railroad through the test and training

range would have had irreparable harm to the national security activities on the range. I can't tell you more than that, but it was a clear and unequivocable approach taken by the Department of Defense and the Air Force. It's not just an Air Force range. There are multi-force training exercises that go on out there. I'm not privy to information about all the exercises, but they felt clearly that that activity out there was incompatible with construction and operation of a railroad.

ABKOWITZ: Henry?

PETROSKI: Petroski. You indicated in your earlier talk that you would conduct a design competition of sorts to select a cask design obviously benefitting from the experience of those who do that kind of thing. And, yet, here in this talk, you indicated that you, which I took to mean DOE, would make decisions about the layout of the rail path and you would design it conceptually and in detail. Did I misunderstand that?

LANTHRUM: Well, yes and no. The decisions will be made by the Department of Energy, but the conceptual design work is being done by a subcontractor. And, we had a competition to get the subcontractor on board. The subcontractor doing the design work is a combination of Parsons Engineering and HDR. HDR is a very large railroad design company. Parsons is a large engineering company. They also have PTSI involved

in the contract, the ones that run the test facility out at Pueblo, Colorado. So, there are people involved that have operational experience, railroad design experience, and construction experience that are doing that conceptual design work. That was a competition to see which of the proposers could put the best idea forward and seem to have the best team for providing conceptual design feeds for us to make decisions on.

PETROSKI: Could you elaborate a little bit on how you conduct competition?

LANTHRUM: Actually, I can't and the reason is that we have a maintenance and operating contractor for a large portion of the OCRWM work. It's BSC, Bechtel and Science Applications International. So, BSC is the M&O contractor. DOE did the procurement of the EIS contractor to actually write the EIS. The technical data collection on geotechnical, hydrology, photogrammetry, conceptual design, those detailed technical efforts, were subcontracts under Bechtel. So, the Bechtel SAIC, BSC did those subcontracts. They were not DOE subcontracts. So, I can't give you the particulars. We did provide the input to BSC about what our expectations as DOE were, but they ran the competition and those were BSC contracts.

ABKOWITZ: Abkowitz, Board. I have a couple questions for you, Gary. The first one is let's suppose that as this

process moves forward, one identifies a different valley as being a preferred place to build the railroad than the corridor that's been defined, so far. My understanding is the corridor that's being analyzed right now is defined, I guess, by the Bureau of Land Management's reserve or annex or whatever terminology it is. Is there an opportunity in the process to realign the track to take advantage of land that is not in that corridor that you're able to look at right now?

LANTHRUM: Everything is possible. If we see significant advantages to some other alignment other than what was in the repository FEIS, we would be sure to look at it. There are discussions ongoing constantly about to what extent can you meander within this corridor and still call it part of this corridor. That's part of our ongoing internal discussions about what we can include. We will continue to have those discussions, and if other alternatives come up and are proposed to us or presented to us, we'll certainly take a look at them. We're not precluded from considering anything at this point.

ABKOWITZ: Okay. So, in a specific case, I was reading, I guess, in the "New York Times" magazine about the City--I believe that's what it's called--

LANTHRUM: Just City.

ABKOWITZ: City, okay, thank you. There may be

opportunities to work through that issue?

LANTHRUM: As we got comments during scoping and the Art Foundation and Michael Heizer, the artist that's doing the sculpture called City, they participated very significantly in our scoping period, and they provided additional input to us since scoping and they are actively involved in trying to make sure that their interests are protected as this project moves forward. One of the things that we're obligated to do during an environmental impact statement is we have to look at impacts associated with the action and to consider ways to mitigate those impacts. We'll be looking at a range of mitigation actions anywhere from--the request was to avoid Garden Valley altogether, but there may be other things that can be done. We'll be looking at all of that as part of the EIS process. You know, it will be part of our alternatives analysis.

ABKOWITZ: Okay, thank you. My other question has to do with the recent flooding which you presented as the glass half full, I believe.

LANTHRUM: Absolutely, half full.

ABKOWITZ: And, it kind of brought to my mind some of the things that we've been learning recently in places where, you know, there have been four 100-year floods in the last 20 years type of thing. How significant was this flood relative to historical data and how much, you know, variation in the

historical data are you allowing your hydrology people to think about so that the design can accommodate, you know, a wider distribution of what might happen? I know washouts are a very prevalent problem in this area of the country.

LANTHRUM: Absolutely. Getting back to one of the points that you've always made, we're taking a systems approach to his. So, my view was not that we would design a railroad that will be immune to weather forever, but that we will design a system that can accommodate all kinds of things that could impact our transportation operations. One of the things we're building into it, since we have escort cars with each of our trains and we will have escorts with each of our truck shipments, we have constant communications between the operations center and the conveyance. And so, in the case of the rail car, there is a communication module with the escort car. We're expecting to have a situation awareness capability as the transportation operations are ongoing so that a variety of things that are coming up ahead of the shipment are--the transporter is aware of, whether it's a rail car or whether it's a truck, whether it's just one of those things. There could be other accidents completely unrelated to our activities that would be of concern up ahead. There could be some security issues that we would become aware of through out contacts. There are a whole bunch of things that we need to be aware of as our shipments

are getting ready to go and as they're on the road. If anything comes up, whether it's weather related, security related, other transportation related that raises a question about the viability of continuing with the shipment, we have the ability to divert to a safe haven and hold the shipment until whatever that situation is is resolved whether it's weather or something else. And so, I think, it's more appropriate to do a good job of design, but not to expect a design to be able to preclude any impacts from weather or future activities from ever affecting the railroad. Again, it's a systems approach.

ABKOWITZ: Andy?

KADAK: A quick question, Kadak. At our last meeting in October, we sort of talked about who is actually going to run the railroad. Have you thought about who is going to be the contractor or how are you going to implement the transportation strategy?

LANTHRUM: We've thought about a lot. We clearly haven't made any decisions yet. I think we've got ample time to move forward. There were a series of first steps that were taken in the past. There were regional servicing centers that we had talked about. There was a transportation integration contractor at TIC that was talked about a couple of years ago. I'd love to be on the first train and be able to pull the whistle at a couple of the crossings, but it will

be somebody else operating it. We're not sure exactly what that construct is going to be. I think we have a fair amount of time to talk about whether one of the large railroads might like to operate this particular branch line or we have a separate branch operator. A lot of discussions will go on between now and the time we actually start operations and I think it's premature to have any decisions on that, but it is something that we will continue to consider.

ABKOWITZ: Any other questions from the Board, Board staff?

(No audible response.)

ABKOWITZ: Okay. Well, I think you for putting us back on schedule, in fact, exactly on schedule. We will recess for lunch now and reconvene at 1:15 p.m.

Thank you.

(Whereupon, a luncheon recess was taken.)

A F T E R N O O N S E S S I O N

ABKOWITZ: Back to our afternoon session where we'll be continuing to focus on the Nevada Rail Branch Line. As you recall this morning, we heard from Gary Lanthrum at DOE about their agency's activities with regard to planning the Nevada Rail Branch Line. And, the program this afternoon is devoted to hearing from other stakeholders or shareholders, depending upon your terminology, that are also heavily involved in the planning or will be affected by the planning of this branch line.

The order of presentations this afternoon will start with listening to a presentation from the State of Nevada. That will be followed by viewpoints expressed by the City of Caliente and Nye County. Then, we'll hear from the Western Shoshone Nation.

As you can see from the schedule this afternoon, we've got a pretty tight set of time slots organized and that is not to try to diminish the importance of hearing from each of those presenters, but I do ask the presenters to be mindful of that schedule because we do have a public comment period scheduled to start at 3:15 and we want to come as close as possible to meeting that schedule. I'm told that the number of people who are signing up for the public comment period are quite a significant number of folks and I

want to sure you that the Board will stay here as long as we need to in order to hear from everybody. Now, that doesn't mean filibusters are allowed, but we do want to encourage and emphasize that everyone's voice has a seat at the table today.

Our first speaker this afternoon and I think he was strategically placed there because it's hard to fall asleep after lunch when he's speaking is Bob Halstead. Bob is with the State of Nevada. He serves as a consultant to the state. Many of you know him and know that he's been involved for a number of years involved with transportation projects including the Yucca Mountain Repository. I've had an opportunity to know Bob even before he got involved in that. So, we go back quite a ways and I've always felt that he has some interest and perspectives on the subject and has never been afraid to express them. So, today, he'll give us the views on the development of the rail branch line to Yucca Mountain from the Nevada perspective.

Bob?

Also, one other quick note, if you'll take a moment to put your cell phones and beepers on sleep mode.

HALSTEAD: Thank you, Mark, for that kind introduction. On behalf of the State of Nevada, I want to express our gratitude to the Board for bringing the full Board to Caliente and also express appreciation of the large number of

DOE and industry and other people, as well as people who are residents of the State of Nevada and are the people who are going to be most heavily affected by the Department's proposed program. In order to keep my presentation down and make sure that I don't cut into the time to get to take public comment, I'm going to try to move quickly through some slides and linger on some others.

I want to start by very quickly telling you where Nevada disagrees with five key statements that Gary Lanthrum made in his presentation. First, maybe most importantly, we believe that DOE cannot keep putting off key system design and operation decisions to say, well, we haven't made that decision yet and so we can't tell you how that affects transportation. That's a wrong-headed way. We've been saying that since 1986 on many key decisions.

Two, the rail line will not be easy to build and will likely cost between a billion and a billion and a half dollars to build.

Three, truck shipments could not begin tomorrow. There aren't enough current designed casks. None of the new high-capacity casks have been built yet.

Four, DOE is indeed proposing legal weight truck intermodal as a contingency plan in their Record of Decision that would involve making 12,000 cask shipments over the first six years in Lincoln, Nye, and possibly Clark County.

Five, the projected numbers of shipments based on DOE's numbers for the first 24 years are 53,000 truck and 11,000 truck and rail cask shipments. For 38 years, it's 109,000 truck and 22,000 rail and truck cask shipments. Now, in order to get to a small number like Gary was talking about, train shipments, DOE will have to commit to use dedicated trains which they have not. Otherwise, they must evaluate a scenario in which each cask car and its buffer cars are carried in general freight service on separate train.

Next slide, please, and let me acknowledge my colleague, Fred Dilger, who is responsible for much of the analyses and all of the pretty maps in this presentation. The State of Nevada over the last 10 years has made 10 key recommendations to DOE on how a risk-based, risk management should be designed. Unfortunately, the only one that they've paid significant attention to are concerns about terrorism and sabotage where they acknowledged in their EIS that the casks are vulnerable to attacks using military and commercial explosives.

On a number of other key issues; defining mostly rail, committing to use dual-purpose casks which includes the multipurpose canister system, use of dedicated trains, full-scale cask testing, and a proper NEPA process for selection of the rail spur, they have unfortunately rejected our

recommendations. Let us note that the Association of American Railroads has the same position on full-scale cask testing. They are not tested now. There is no regulation to test them to regulatory standards and indeed the railroads have eloquently written about the need to test them to determine the failure thresholds.

Let's go to the next slide, please? I'm going to summarize the four points today. I don't want to talk too much about the standard radiological risk issues which I've talked about frequently, but I'll be happy to entertain your questions. Issue one, the UP mainline through Caliente is just absolutely a poor choice for the origination of a branch rail line to Yucca Mountain.

Two, DOE has consistently ignored the recommendations that we made almost 10 years ago when they started scoping for the EIS on how they should put their rail spur.

Three, the Caliente rail corridor is unacceptable. It's difficult terrain, poses severe impacts, and it has a strong potential for major adverse impacts on Las Vegas.

Point four, after 10 years of saying, please, give up on this route, we stopped saying, please, give up on this route and we have filed a lawsuit challenging both their authority to make these decisions to begin preparation of an EIS. We have challenged their use of the intermodal

composite transportation system without a supplemental EIS. And, most importantly, we've challenged their failure to identify and properly study the corridor in that EIS and particularly their failure to consider properly under NEPA standards the impact on the current users of the land.

Next slide, please. Let's make sure we know where we are here in Caliente, Las Vegas, Yucca Mountain, the corridor. We don't have the feeder routes to the corridor.

Next slide, please. The existing line, if we looked at its history, could be summarized thus. Because of lawsuits and political shenanigans, it took 25 years to build the line from Utah to California that Caliente is situated on. As soon as it was built and it opened, ironically just about 100 years and one month ago, flooding started to being a factor. It was flooded three times in its first five years of operation. The UP decided finally to move the tracks to a new alignment. And, for the last 80 years or so, they've been constantly upgrading this line and constantly fighting recurring track washouts.

Next slide, please. So, a month ago, this is what the UP line south of Caliente looked like at Meadow Valley Wash.

Next slide, please. And, the road you came in here today, this part of Meadow Valley Wash, was also under water. The water had gone down enough to pass when this picture was

taken.

Next slide, please. If we were to summarize the route characteristics, it's rugged terrain. The UP does a good job keeping it open. It's still rugged terrain and a poor choice. There are a number of characteristics you would seek to avoid especially steep grades and tight curves that require speed restrictions on westbound trains, numerous tunnels, bridges, culverts, rockfall areas, flood areas, and an updated accident study is needed. The stretch of track between Utah and Caliente has had a number of severe accidents. The stretch between Caliente and Moapa had a lot of minor derailments. There isn't really now a good statistical basis for comparing that with the rest of the UP. It's one of our projects. I certainly hope DOE will be taking a look at it.

Next slide, please. We've been great critics of probabilistic risk analysis. We've supported some damage prediction modeling in our State universities. And, in 1991, an assessment of this graph that was prepared for us made a peculiarly precise prediction about where flooding might occur at Mile Post 431.

Next slide, please. Sometimes, the people doing the disaster predictions are right on cue. This is what that bridge looked like a month ago.

The question I want you to consider is this. What

happens to the overall transportation system with either because of the inherent drainage patterns here or because of short-term or long-term climate cycles, we have this type of flooding occurring two times every five years, three or four times every 10 years? We think for that reason alone, but there are also other reasons, this is a poor portion of the Union Pacific to design your origination from.

Next slide, please. I won't go through these recommendations in detail except to say that DOE has generally ignored the advice we gave them on how they should go about picking the rail spur. We will not pick the rail spur for them, but we have told them which rail spurs are unacceptable and we've told them to process the selection criteria, tried to encourage them to do an objective multi-attribute utility analysis ranking of the available corridors. None of these things have been done.

Next slide, please. You'll remember Gary's slide showing terrain. Let me start by showing you the--depending on how you count them--eight, nine, 10, 11, or 12 north-south mountain ranges that this route would go across. And, interestingly, it was the only route we studied that went east-west against the north-south mountains and it is the one that they selected.

Next slide, please. This has profound implications. If I'm not wrong about this, Gary showed you

profiles on a different scale, but it also showed as built grade. This is what the terrain along the corridor looks like and it shows that enormous earth works, enormous cups and fills, and enormous number of long bridges are going to be necessary to build this ramp. And, that means that the environmental impacts of construction are going to be especially severe. It also means ironically when you couple length with terrain and you keep in mind the 12-hour operating rule for train crews under the FRA regulations, since DOE took out the midpoint crew change station which was supposed to be here, every train that follows this route will be operating under breakneck, threatening conditions. The speeds will be so slow up and down, but particularly down the slopes, they'll have to run at a maximum speed of close to 60 miles an hour in the valley bottoms in order to cover that distance within the 12-hour operating period that's allowed under the work rules which, of course, are designed to reduce accidents caused by worker fatigue. This is one of many, many operational details that DOE has simply sloughed off and not addressed. The operations must be coordinated with the site-specific work. It hasn't been and it's a critical failure in this program.

Next slide, please. Again, let's look at the way the route goes through Las Vegas. Next slide, please. I won't belabor the point. I'll be happy to answer questions

about this. In 1996, we did a worst case analysis of potential rail routing to Caliente. Now, DOE's base case shows the shipments coming across Nebraska through Ogden, Salt Lake, and down this way. They could indeed go that way, but only, we believe, if DOE requires them by contract to go that way. We think there's a high likelihood that this is the way the shipments will go and up to 90 percent of the shipments to Caliente could go through downtown Las Vegas.

Next slide, please. Here is the rail line, the Union Pacific mainline through Las Vegas. This is the Rio Hotel and you'll notice that this side of the Strip is all within the half evacuation zone.

Next slide, please. And, standing where I just showed you at the parking lot of the Rio, this is what we can see, the proximity. We've done population analysis. Any hour of the day, we might have to evacuate 80,000 people within a half mile of the Union Pacific. It is absolutely unacceptable to the State of Nevada that DOE plan a rail spur that puts these impacts, even if it were only the six percent of shipments that DOE has said would go through downtown, when we know when we analyze market conditions and the way that the UP routes its business the way that up to 90 percent of the shipments could go through downtown Las Vegas.

Next slide, please. Gary did a good job of outlining the process, the chronology that DOE used in making

their choices. I won't repeat it.

Next slide, please. This is the chronology of actual interactions via the Federal Register and other documents.

Next slide, please. Here, importantly, are the decisions that come out of what DOE has said. They took mostly rail. They also clearly identified this intermodal legal weight truck as their fallback position. At any rate, there would be a considerable number of legal weight truck shipments under mostly rail. And, they assumed the lead role preparing the EIS for themselves at the same time they selected the Caliente corridor.

Next slide, please. This is a land use map.

Next slide, please. DOE made two problems in evaluating land use. One, they confused land use with land ownership. That's not the way it works in the west. There's a number of ranchers that are here to tell you later. Number two, they defined land use impacts as occurring in a very narrow region of influence; basically, a one-quarter mile corridor. I hope to show you in a second why that's an incorrect way to assess land use impacts.

We've raised three major issues. We've challenged DOE's assumption of lead authority. If it turns out that the DOE is not regulated by the Surface Transportation Board, they will most assuredly then be liable to be regulated by,

at least, four agencies of the State of Nevada. We certainly look forward to that in the event that we lose that legal challenge.

Secondly, the failure to prepare a supplemental EIS on intermodal, it's downright crazy. Have you ever seen an agency that does an EIS and says we rule out this particular mix for safety and cost reasons and then they come back a year later and say we were wrong, we were premature, we'd actually like to have that option back.

But, most importantly, we're concerned about the way that they filed to properly evaluate the Caliente corridor.

Next slide, please. I'm going to have to cut through because I don't want to take time away from citizens who are here. I want you to pay attention to this paragraph, please, and the language that DOE actually used. They admitted that Caliente was not the best route, not the cheapest route. They said in their Record of Decision they picked it because they thought it would generate the least lawsuits. Now, if that isn't waving a red flag in front of a lot of people who are lining up to sue them, I don't know what is. But, it's a very peculiar Record of Decision.

Next slide, please. Land use. Okay. Suppose we're standing here in Timber Mountain Pass and this is Coe Valley. I want to do two things with this one slide. One, I

want to show you where the next picture was taken facing this direction. Also, I want to show you an example of where building a rail corridor across the valley limits the north-south use of this valley by the ranchers who now need to move their animals around, as Gracian Uhalde can tell you, about where they have to be grazed at different times of the year.

Next slide, please. This is the view looking to the west through Coe Valley into Garden Valley. Garden Valley is where there are severe land use impacts.

Next slide, please. In this valley, now we're looking from the west towards the east, this is where Heizer's City sculpture is located, somewhere within 10 miles of this location. Somewhere also in this location, there are two major historic sites and, of course, there are conflicts with grazing allotments.

Next slide, please. If we move to the south, there is a possibility of avoiding this. I was hoping Gary was going to tell us he had picked an alternate route. We believe there will be another major lawsuit if DOE doesn't avoid Garden Valley. They've been looking at doing this by making a 20 mile dogleg through Murphy Gap. It costs about $60 million additional.

Next slide, please. And, because of the susceptibility to massive flooding in this gap, this is also a difficult crossing.

Next slide, please. Reveille Valley shows another pattern of land use impact. In this case, the railroad goes north-south bisecting the length of a major valley. This is the valley where the Fallini family has been ranching for more than 100 years. It's a very unusual operation. It's probably the largest single-family operated ranch in the United States. To give you a sense of scale, the land area they ranch is about the size of the State of Rhode Island, just a little under 1,000 square miles. They use an open range, run of the valley approach in which the railroad will separate their primary grazing areas from their water sources.

Next slide, please. And, this is Joe Fallini at Cal Canyon (phonetic). Not coincidentally, there are difficult terrain features. We estimate a 700 foot bridge, 50 foot high, one of somewhere between 20 and 30 bridges greater than 200 feet that we think will have to be constructed on this route.

Next slide, please. Schematic of a rail bed. Without getting into the details, let's quickly look at three pictures of railroads for those who don't see a lot of railroads.

Next slide, please. Meadow Valley, here, you see a rail bed that's about eight feet above the surrounding ground.

Next slide, please. Here near Elgin, you see a rail bed that's about two and a half to three feet above the surrounding land.

Next slide, please. Here near Crestline, you see how underpasses are normally built where bridges and culverts exist. Imagine trying to make 2,000 head of sheet go through this hole under the railroad.

Next slide, please. My conclusion, think about the railroad not as a railroad, but a proposal to construct a 300 mile long wall of crushed stone, 10 feet thick at its narrowest, 30 feet thick at its broadest. It can be a foot high, it can be eight feet high. It's probably going to average about three feet high. Some cases, it may be fenced. Despite the overpasses, underpasses, and at grade crossings, it will be a significant barrier to the users of land. It will adversely affect all the current users of land and, most importantly, the region of influence, the area in which those adverse impacts exist, will extend out in some cases five, 10 or more miles from the rail line itself.

Thank you very much. I realize I've gone a couple minutes over my allotted time and again I appreciate all of you coming to Nevada to hear from us on our home turf.

ABKOWITZ: Thank you, Bob. I think you did a terrific job in compressing a lot of information into a short amount of time. I know this is one time where I'm going to pay

attention to the transcripts in order to go back and try to hear everything that was said.

We do have time for some questions of Board members and we'll start with John Garrick.

GARRICK: Bob, I'm must kind of curious. I'm impressed with your passion about the branch rail line and the issues of safety and so forth with respect to the shipment of radioactive waste. Does this same level of passion apply for other hazardous material transportation issues?

HALSTEAD: It's a mixed bag. It generally is--

GARRICK: --these corridors you pointed out, the amount of hazardous materials that are flowing through those is unbelievable and I'm just curious as to the consistency of the state with respect to its philosophy and attitude towards the transport of hazardous materials in general. And, especially I'm interested in that given the safety record of the shipment of radioactive materials versus the safety record of the rail and truck shipment of other hazardous materials. I'm seeing a manifestation of considerable inconsistency.

HALSTEAD: Well, first of all, before we get into the risk assessment, let's remember I chose today to speak about non-radiological impacts because the ranchers always--and even in my presentation--they get left to the end and don't get full--so, let's not forget that a major issue here has

nothing to do with radiological risks or HAZMAT transportation risk. It has to do with the impact of this railroad.

Secondly, you will remember that the State of Nevada was the first party to pick a preference for rail and we said rail properly construed is the least bad way to ship the waste across country and to ship it in Nevada.

Three, we've asked for these extra regulatory enhancements party because we're not impressed with the statistical record. It's true that there haven't been any releases or deaths during the nuclear waste transportation since the 1960s, about the '71 time frame. But, their statistical accident record is really only average and we believe that once you have this enormous increase in the number of shipments, it's a good idea to take these extra risks.

I can't argue with you on a strict cost benefit analysis that we can justify the cost of every regulatory enhancement we've asked for. And, by the way, the State of Nevada did attempt to regulate shipments of explosives in the same way that we're talking about doing this back in the '80s and, in fact, it took many years before we were preempted.

GARRICK: I'm also thinking of things like the huge quantities of ammonia perclorate that are right in the neighborhood of Las Vegas.

HALSTEAD: I think that that's another good argument. My personal opinion is that through speed controls and other administrative controls, the risk of accidents for all HAZMAT shipments through urban areas can be greatly reduced. However, the possibility that those might be the locations of terrorist attacks is an entirely different matter. Beyond that the literature that we've done, some of which I agree with and some of which I have questions about, on perception of risk and the way that that has direct economic impact--

GARRICK: I'm not talking about perception.

HALSTEAD: --also comes into play.

GARRICK: Yeah. But, I'm not talking about perception. I'm talking about real evidence, real information, real materials, real material transport--

HALSTEAD: Well, let me give you an example.

GARRICK: --and the experience associated with that.

HALSTEAD: We just finished a very complex modeling effort that was carried out by Miles Griner, a respected fire engineer at UNR (phonetic), is the only person I know who is concurrently funded both by DOE and Nevada to do technical research on cask performance and fires. His new research shows that the temperature failure thresholds for key components of a truck cask reach their critical temperatures when the regulatory fire is run for two hours instead of 30 minutes. That's not a great margin of safety and

particularly when the Department is proposing to send truck casks into rail environments. I believe that there are a large number of safety issues, but I would be the first person to agree that other hazardous materials should be more strictly controlled and I would be the first person to agree that the nuclear industry, relatively speaking, has a good safety record in avoiding catastrophic events. That isn't really the issue. The issue is whether people in Nevada are entitled to the additional protection that we believe we need because of uncertainties in the calculation of risk and because of the extent to which the state's economy is dependent on that core area in Nevada, all of which is located within two to three miles of the mainline. But, your point is well-taken, sir.

ABKOWITZ: Howard Arnold?

ARNOLD: Arnold. Do I recall at a previous meeting hearing about your recommendation of a route in from the north to Yucca? Could I hear that again?

HALSTEAD: Well, off the record at various times over the last 10 years, people who work for Nevada have talked candidly with members of this Board, representatives of DOE about a number of alternatives that we feel DOE did a good job of identifying. I was thinking someone would ask this question. In 1990, DOE did a pretty good job of identifying all the useful options and we had extensive interaction with

DOE between 1990 and 1992. I must tell you that since 1992, I have not once been invited to have a meaningful off the record discussion with anyone at DOE who was doing rail planning in a way that--whatever allowed us to express the state's knowledge about these alternatives. But, we're not going to pick an alternative route now for two reasons. One, because we don't feel it's our responsibility, but secondly, what we're asking the Court to do is overturn DOE's selection of Caliente, make them go back and do an EIS that considers these routes and other routes, and anything that I might say today on the record would unfortunately bias that honest process. But, yes, it's true; I have talked off the record about alternative routes and at some future time I hope it will be appropriate to do that again. This route is the worst possible route from a safety standpoint, land use standpoint, predictability standpoint that DOE could have picked with the possible exception of one of the routes in Clark County where because they failed to secure their right-of-ways, the BLM released that land for other development. So, that technically fell off. And, we certainly had the discussion about the Air Force concerns at Chalk Mountain. The Air Force has said the same thing to us that they've said to other people, that they just aren't going to yield.

ARNOLD: Without you having to be specific, are there other routes where these other impacts are acceptable?

HALSTEAD: The key things in building a rail route, anyone, is keep it short, keep it level, keep it straight, and there are a number of options that are much better on those regards than Caliente. Unfortunately, some of them impact the State of California and it is our thinking that DOE did not want to politically tackle the State of California. But, there are organizations in California and organizations in Nevada that we hope the Court will direct DOE to study when they strike down the selection of Caliente.

ABKOWITZ: Andy?

KADAK: Kadak. You've confused me again. California, give me a hint as to what you're talking about?

HALSTEAD: Well, I'm going to leave this as an exhibit for the Board. All the routes that DOE should have considered in its EIS in my opinion are in this report. For reasons I do not understand, they found convenient ways to eliminate routes that would have had great potential.

KADAK: Because I was listening to your criteria; shortest, straightest, and what was the third one, level.

HALSTEAD: Yeah.

KADAK: Minimize grade. By the way, you know, that's a really big issue from a railroader's standpoint, not from a HAZMAT standpoint. But, you know, you run on traction. So, the grades are real important.

KADAK: I understand. Okay. We'll take a look at that.

The question I have is now relative to the ranching question and the farming question. Are you suggesting that there's no way to make a railroad such that cattle or farmers or animals can cross railroads? Is that the implication because you called it a wall and I've seen a lot of animals crossing railroad tracks.

HALSTEAD: Well, the ranchers are very concerned, as they'll tell you, about whether they can make sheep and cattle cross where the top of the railroad above the surrounding land may even be two or three feet. The problem with the underpasses which is what you would use is that their frequency is a big issue. Also, you have situations like Reveille Valley where the Fallinis work where they'll tell you on a daily basis they crisscross the valley inspecting their pipelines and their water sources. There are some places where there is an absolute irreconcilable land use conflict between the railroad and the ranching operation. In other places, it is a matter of inconvenience and compensation, but it will disrupt the operation. So, it's not the same degree of conflict in each case. But, my argument is the Department should have gone out and identified these things 10 years ago. If they had properly identified these land use conflicts, they could not possibly have selected the Caliente route. That, frankly, will be one of the key issues in our law case. There's the timing at

which one needs to acquire this information.

Now, that said, the original route for the Caliente rail spur whip along the highways, the highway you drove in on today. It required a tunnel at Hancock Summit. I'm not sure that the Fallini family would feel better about having the railroad go in front of their ranch house as opposed to through their grazing areas, but in fact, the original Caliente proposal did not have these impacts and the only reason I ever heard for DOE abandoning it was cost. In the end, it was a $3 million wrangle over building tunnels which may end up looking cheap compared to the delays that are going to result.

As a general premise in siting noxious facilities or perceived to be noxious facilities, you are better off picking an area where you understand the impacts and where you work on land that has previously been disturbed by humans. In this case, DOE took the original Caliente route which went through a corridor already degraded by humans where we knew where the environmentally sensitive areas were and kicked it 40 miles to the north through areas that are not so well-known, where the terrain is more difficult, where human footprint is much less heavy. I think there are some very key issues here as to how DOE made their decisions. And, I will argue that the fact that the City of Caliente in Lincoln County encouraged and lobbied for this rail line

probably had some impact on the Department's ignoring certain evidence and deciding it would be better to pick a route where there were some people who were allies proposing it. There were no significant bodies of population anywhere else in Nevada who wanted the rail spur to come from their area. At least, I'm not aware of them.

ABKOWITZ: Okay. Thank you, Bob.

We're going to move on now to our next set of speakers representing County governments. If a rail branch line is built to Yucca Mountain, it will pass through Lincoln, Nye, and Esmerelda Counties. Today, we have two speakers who will present their views on those counties in terms of development of a rail branch line. One of those discussions will be Mayor Phillips who we had an opportunity to hear from this morning and I also wanted to thank him for the tour that he gave the Board members and staff at lunch. He will be joined by Candice Trummell who is the chair of the Nye County Board of Commissioners. I don't know whether this is a tag team thing or whatever, but I will leave that up to the two of you.

TRUMMELL: I'd like to thank the Nuclear Waste Technical Review Board for giving us this opportunity to speak before you and specifically thanking Mr. Fehringer for setting this up. We always appreciate an opportunity to have our views expressed. We'll go ahead and start.

What we plan on accomplishing today with our presentation is to describe our needs and concerns of all our jurisdictions since Lincoln County, Esmerelda County, the City of Caliente, and of course, Nye County as the site county are absolutely the most impacted counties and jurisdictions in the nation. We welcome and encourage any assistance and advice you all might have as far as how we can accomplish our goals and meet our needs and objectives.

In the past, I know that Nye County specifically and also some of the other jurisdictions have gone into great detail regarding our affected status and just how affected we are. I believe you all already know that Nye County is the site county and you already have been in Caliente and Lincoln County to see that the proposed rail corridor will be going right through here. So, we already have covered that, I think.

Next slide. The jurisdiction belonging to Caliente corridor, the City of Caliente, Esmerelda County, Lincoln County, and Nye County have in recent months achieved an unprecedented level of cooperation. We certainly have some different needs, some different concerns, some different program goals and objectives, but ultimately we feel that the most successful project will be one where we're all working together to make sure that the needs of all of our citizens are addressed and we're working cooperatively with DOE.

Next slide, please. We define success not as putting up procedural roadblocks or making DOE do this guessing game as to what our needs are and what we're going to be accepting and what we're going to be rejecting. Rather, we think success is maximizing the positive impacts and minimizing the negative impacts of the Yucca Mountain Project. We feel to do this we need to be in a constructive dialogue with DOE at all points during the policy making rather than just saying, no, that's not acceptable, try again, and we'll tell you whether or not that's acceptable.

Next slide, please. DOE continues to make the transition from the site characterization phase into a phase that we call the transportation policy phase. This is a crucial phase for all of the corridor communities because many of the key decisions that affect our future will be made in the next few years. As you heard from Gary Lanthrum earlier, there's still many policy decisions that are left to be made and those are going to greatly impact our citizens.

The transition has created many challenges for the affected units of government. Already, we have citizens that are feeling impacts. In Nye County, we have the largest area in the State of Nevada that provides 40 percent of the milk for the State of Nevada and it was trying to get funding for a bottling plant and some other projects and some of the lenders were a little apprehensive due to its location right

next to Yucca Mountain. So, we're already experiencing impacts and I wanted Mayor Phillips to share a story about some of the impacts some of the ranchers in Lincoln County are feeling.

MAYOR PHILLIPS: Thank you. As the branch line takes off at approximately Highway 93 heading for Bennet's Pass, we had one rancher that is in the process of withdrawing public lands to complete a full circle for his pivot and this withdrawal immediately affected that process that had been ongoing and put a halt to it. That has been cleared up quite a bit now because BLM went to work on that and we've kind of ameliorated that. You gentleman need to know that there have been immediate impacts with the withdrawal and with this process.

TRUMMELL: So, with that, we're also facing challenges in our oversight program due to the change in what we need to really be overseeing and the increasing strictness, I guess, of the application of the Nuclear Waste Policy Act with regard to how we can spend our oversight funding. There are impacts that we feel we need to assess and activities that we feel we need to engage in that are disallowed due to the current environment at DOE with all of the IG audits and other things like that. So, while DOE is working very hard on developing constructive relationships and I certainly am appreciative of John Arthur and of Ted Garrish and of all of

the people who work with them and of Margaret Chu for all of the work that they have done to develop a constructive relationship, we think that the attorneys at DOE might be part of the problem. We think that they might be interpreting the law a little bit too strictly and so we're trying to figure out how to address that concern.

Next slide, please. Addressing the waste management transportation needs and concerns of those most impacted requires success in bringing the technical and policy world together and giving the transportation corridor communities the latitude and authority to be fully engaged in the policy process. There are again so many decisions that need to be made and we don't feel that we are quite at the level that we think we should be at with having the resources necessary, to gather the information necessary, to give the appropriate feedback to DOE, nor do we feel that we have as many opportunities as we would like to be fully engaged in that process. We'd like to be at the table to make sure that our citizens' needs are being addressed and we're not quite there yet.

Next slide, please. How do we approach Yucca? Our approach is actually very much like the State of Nevada's original approach to this project. However, when the urban economy transitioned from dependency on Federal jobs in Las Vegas and such, it became politically correct to oppose the

project and that's been the stance of the state ever since.

Next slide, please. Here, we have an assembly joint resolution passed in 1975 that I'd like to read some key points from. "Whereas, the people of southern Nevada have confidence in the safety record of the Nevada Test Site and in the ability of the staff of the site to maintain safety in the handling of nuclear materials and, whereas, the existing facility and the years of expertise in nuclear material handling at the Nevada Test Site are a tremendous existing resource, be it resolved by the assembly and the Senate of the State of Nevada, jointly, that the legislature of the State of Nevada strongly urges the Energy, Research, and Development Administration to choose the Nevada Test Site for the disposal of nuclear waste."

Next slide, please. Clark County, this is a resolution from Clark County passed in 1974. The City of Las Vegas, Lincoln County, and Nye County also passed similar resolutions. The key point is highlighted, "The Board supports the designation of the Nevada Test Site as the primary storage site for radioactive waste."

Next slide, please. So, our approach since 1974 and here in 2005 is largely the same. While our past shapes are a vision of the future, Esmerelda and Nye County have economies that still remain largely dependent on the federal sector and, of course, Lincoln County has a long history of

hazardous material rail transport. All of our jurisdictions are committed to a successful project, but maximizes economic opportunities, but primarily makes sure that the health and safety of our citizens is protected.

And, now, I'm going to turn it over Mayor Phillips so he can discuss our future and our future approach to the project.

MAYOR PHILLIPS: Thank you, Commissioner Trummell. It's always a pleasure to stand with her because she's bright and articulate and very capable.

It seems to me that based on Mr. Halstead's suggestion, the best route to go to rail with Yucca Mountain would go right along parallel to 95 right out of the middle of Las Vegas. It's the shortest, it's the flattest, and it's the most direct. Well, we know that won't work. It highlights the State's approach. Without being judgmental as to the correctness or the incorrectness of that approach, we all know and it doesn't take too much intelligence to recognize the obstructionist approach to this thing. If it's not one thing, it's another. It almost seems that here in cow country we say, "one would complain if they were hung with a new rope." We think from a local perspective, it's regrettable and time to quit blowing on the State of Nevada approach. We're have a realistic focus and need to focus on the future.

Our nation needs nuclear technology. There's no reason why an analyst can't really realize and see that, the things that face this nation. There will be a central storage facility, no way we can really protect the public to being actively engaged in this process. We don't wish to demean anyone, neither the State's position nor those that choose to oppose the project. We have some safety concerns of our own, but we just don't believe it's beneficial to attempt to tangle everything up in the process. Not this, now this, not this, now that. We must take a substantive approach to properly addressing questions of safety.

So, our agenda from the inter-jurisdiction here along the Caliente corridor approach is to stay focused on substance and encourage others to take the focus off merely intervention. To be involved in a wide range of decisions by overcoming bureaucratic hurdles. Now, that's the hardest task we have. Building a railroad is simple compared to overcoming bureaucratic hurdles. To continue intergovernmental cooperation so that corridor jurisdictions can maximize repository and transportation system opportunities so we can get high quality jobs and business opportunities created in rural Nevada. We want to safeguard property rights along the Caliente corridor.

It's our agenda to develop transportation contingency plans, develop emergency management capabilities.

As I've mentioned before, we do that, frankly, as a plus. If emergency management capacity comes with these shipments, it enhances our ability to meet our existing need. We want to be involved in transportation systems, operational procedure decisions, in developing high quality communication systems, and improving emergency health services. Anyone who has driven around the north end of the Nevada Test Site knows we could show you some decent communication equipment out there that would be a blessing to the ranchers.

Now, the corridor communities, those jurisdictions, the city and the three counties, they're working closely together and to really analyze the effect local citizens have due to this whole effort, in a cooperative agreement with the Department of Energy and the city for the group has been the agency that's been conducting the study referred to as the Caliente lower corridor, people and places. Our local folks are going out and visiting one on one with those that either are owners or users of the land, far from public meeting, to hear what they really feel and think and what their real impacts are. They're doing great work and it's because we love and respect those people and want to make sure their voices are heard in ways that perhaps wouldn't be heard.

We're developing input on local economic development opportunities associated with the rail corridor here in this area. Our goal is a rail alignment that

addresses local property owner concerns to the maximum extent possible and an alignment that (inaudible) as necessary to maximize economic benefits. We continue to meet directly with the affected individuals to understand their views concerning mitigation and compensation in the event that the final alignment doesn't solve the problems. We must be realistic.

Our approach is to work constructively with all parties involved with the goal of bringing reasonable people together to identify safe and economically viable approaches to transporting spent fuel and high-level waste to Yucca Mountain. Obviously, we think that's the best way to go.

Thank you. Commissioner? She'd be happy to entertain any questions you might have.

ABKOWITZ: Abkowitz, Board. I'll start off with a question. In the slide show, you made reference to the desire for your organizations to be fully engaged in the process. So, I took that to mean that you're supportive of what's going on here, but you don't feel that your points of view are being completely heard. I guess, my question is my understanding is that DOE has sort of a stakeholder group called TEC, I believe, it is and that's kind of looking at representatives from industry and government and emergency response and so forth around the country. But then, they also have contractual relationships with four regional

government bodies, the Western Governors Association being one of them. Are you finding that you're not having a communication channel through the regional group or directly to DOE and that's the problem or how--I guess, enlighten me a little more as to exactly what you're looking for that you're not getting?

TRUMMELL: Actually, I don't think that the issue is that when we voice our opinions that they're not being heard. Certainly, we don't get everything that we want or we wouldn't, you know, have as many budget problems as we all have here in rural Nevada. But, I think the main issue is that because we are rural and because we don't have a tremendous amount of resources like the State or Clark County might have above and beyond oversight money to participate in the process and because our oversight capability and scope of oversight has been narrowed so greatly that we don't have, number one, the notice that we feel we need as far as what decisions are coming up because DOE obviously has an internal process that they have to follow and there's always internal things going on that we may not be aware of because we aren't a part of that process in any way officially. And, number two is that even if we do have enough notice, we don't necessarily have the resources to hire individuals to go and do the appropriate assessment of whatever the particular issue is so that we can give actually valuable input to DOE.

So, I don't think personally that DOE is just not listening to us or is not willing. I think it's a matter of lack of resources and lack of being a formal part of their process.

MAYOR PHILLIPS: May I just add part of that there might be the fact that the individuals at the Department of Energy are very willing to listen, but the Department is a very huge institution and this is a very complicated and complex process. And, sometimes really seriously being heard by the institution and having that institution able to respond promptly is a difficult thing.

ABKOWITZ: Okay, thank you.

George?

HORNBERGER: Bob mentioned some potential technical difficulties such as building the wall and not having people or animals being able to move expeditiously. Have you any studies of your own or do you have confidence that the Department of Energy will resolve these issues?

TRUMMELL: Go ahead?

MAYOR PHILLIPS: We've done a number of studies relative to the rail portion of the corridor and they're on file in our local office here in terms of the risks associated with rail, etcetera, and so forth. I was raised as a cowboy. I'd do that now if you could make a little money at it, I guess. It is an issue to try to move cattle over certain obstacles and things. Their creatures of habit and they have to be

trained to do certain things and it does present some difficulty.

I'd like to comment a little about the local flooding. I'm one who was standing knee deep in the water as we battled this thing. There's been a lot of mention about the flooding and whatnot. Now, this is not the largest high water event that we've seen around here. And, furthermore, this would have been a non-issue and a non-incident had the U.S. Army Corps of Engineers kept this channel that's original and should have been restored back. We wouldn't be having this discussion. So, it's a management issue. It's nothing more, nor less.

And, that's really the way we ought to look at this railroad. It's a management issue. Built intelligently, provide for these contingencies, and keep that up, and it's doable. It's not big deal.

ABKOWITZ: Okay. Anyone else?

(No audible response.)

ABKOWITZ: Okay. Thank you very much.

MAYOR PHILLIPS: Thank you.

ABKOWITZ: Not only did you put us back on schedule, you put us ahead of schedule.

Our next scheduled speaker and I just wanted to confirm that he's here is Ian Zabarte. Is Ian in the audience?

(No audible response.)

ABKOWITZ: Okay. I got a heads up just a couple minutes ago that he might not be with us today.

Is Calvin Myers here? Calvin Myers, are you here?

MYERS: Yeah.

ABKOWITZ: Okay. I know that you signed up for the public comment period, but it was suggested to me that you might want some extra time to talk about some of the Native American perspectives on this subject. So, we'd like to invite you to come up and address us now if you're willing.

MYERS: Good afternoon. My name is Calvin Myers. I'm a member of the (inaudible) of Paiutes. I'm 4/4 Paiute. My current position with the Tribe is I'm the general assistant program coordinator for the Environmental Protection Agency, Region 9. I am also a council member elected last December, about a month or so ago. I think I'm the only one in this room that really has a right to welcome you to this land because this land is not the City of Caliente, the county of Lincoln, or the State of Nevada. This land is my land. This is where my people have been for many, many years. We've gotten kicked out. You talk about cattle; we've been treated worse than a cow. That's just kind of a summary of my background.

What really brings me here today is the State of Nevada was gracious enough to give to the Tribe a little bit

of funding and it stopped quite a while ago. When there was enough funding, I was one of the people that worked for the Tribe following the Yucca Mountain Project. And, I'm grateful that they gave us the opportunity to be able to speak and to be able to be a little bit knowledge--have a little bit of knowledge about the Yucca Mountain Project and nuclear waste, in general. I'm one of those people that formed the sub-writers group that you heard about earlier. When we did take a tour, we only got so much of the route. Maybe in three days of 600 miles of travel, we might have been a half mile of the whole route and they wanted us to write on our views of the route. I'm not sure if the Board knows about this. This is kind of like the way we're treated. There were things that really opened my eyes this afternoon or this morning--well, this afternoon, yeah. When Bob had talked about the southern route of the rail coming up to Caliente, if that's a possibility it's going to go about a mile from my house on my reservation. You know what? I'm not an affected party. I'm just another person out there. In fact, I'm not even a person because we're not--the Yucca Mountain Project does not see us an affected, not a unit of government, but affected people because that's what we really are. And, we're affected not just by the rail route, in fact, there's a truck route. We're affected by the whole global issue of the nuclear waste coming to Yucca Mountain.

Some of those issues are that if a cousin of mine dies, my cousin just doesn't live on my reservation. We live all over the country. What we do is we will (inaudible) the funerals for our people. It may take us a week or so to get the funeral together because we have to get our people out, get back home to pay our respects and give those people their rightful right to go to the next plain after they're dead. That could be impacted by a lot of these shipments if there's road closures. I mean, if there's a road closure up the rail line, it's just something so we can't get across it. There's a lot of those issues that I bring up, but always said, well, we don't want to hear those things. We want to know just what the technical issues are. Those things really bother me. The spirituality of my people--they're not just my people, but the people across the United States that are from the land that--they don't own the land, they're from the land. The land owns us. Their spirituality is going to be impacted. Mine will be, too, also even if it's built up here in Caliente because of things--of the route of the transportation.

Also, if that rail line comes across my reservation, something happens there, we're what they call SOL. Most of you guys might know what that means. Because we have two policemen, we have no fire, we have no emergency management, we have no ambulance. There's, at least, 12 to

15 miles of rail on the reservation. We've tried to work with DOE, but they won't allow us to. We hold meetings every once in a while, but that concerns cultural issues. Cultural issues in my mind is only a piece of the pie.

The other piece of the pie is my reservation's only economic base is through a store that's just off the freeway, off the interstate which is within a quarter of a mile of the rail lines. I have concerns about that because if that closes or if anything impacts that, then that actually impacts us as a Tribe financially. DOE doesn't give us a penny. I want you to know that. DOE has never given us a penny this whole time they've been looking at Yucca Mountain. The only time we ever got any funding was through the State. Clark County, they've given us some, too, which is small, but it helps put gas in the car. My time is never compensated for, not any more, not for the Yucca Mountain stuff.

The Tribe has to allow me to use a vehicle because we don't have one. You talk about not having people to get out to places. Well, you've got a heck of a lot more people here in this little town here than we do as a whole reservation. I'm a council member which is like your County Commission except I have a legal right to speak straight to the government, but the government will not speak to me concerning DOE. They won't come out to our reservation.

They don't ask to come out to the reservation. They tell us, you have to ask us to come out to your reservation to speak to you, and if I was somebody off the street and I knew nothing about the Yucca Mountain Project, nothing about nuclear waste, they could come out to my reservation and I could say, hey, well, you've done a great job. You know what? I don't know a damn thing that he said. So, how do I know that that's going to impact me or not?

And, that's one of the biggest things that I've always tried to tell the DOE, the Yucca Mountain Project, that you (inaudible) informs the government because the government--we can't do anything if we don't know what we're doing. And, that's one thing we don't know about. I know about it, but not the rest of my council, they don't know about it. There's a lot of stuff that I know because I've been working on this thing since '92. A lot of the issues that they would bring up, they're like tossed aside. When they did the EIS scoping meetings, I didn't attend. I came up here to Pioche and gave a letter to Robin. In the letter, the Tribe asked to be a cooperating agency and we were rejected. We asked many years ago twice, I think, to be an affected Tribe and we were rejected. I don't see anybody in this room that's more affected by the shipment of spent nuclear fuel than the Tribal people. Because we don't live here doesn't mean that we're not affected. We're affected a

heck of a lot more. We're affected by our culture.

I've been up here a lot in the mountains up here near this town. When I was a boy, I used to come up to pick pine nuts. Picking pine nuts, well, this is not bumping your car against a tree and hoping some falls down. Picking pine nuts for us is we take a whole week out of our lives to come up here. And, it's not just something to eat. It's not just something to take home. What it was is there's a way we do it. We pray to the ground, we pray to the sky, we pray that the trees will provide for us for the next year. We tell stories. That's how we pass on history. If something happens to this, part of my culture is gone. It cannot be brought back.

The animals that live here, I think of the animals that live around here; the birds, the mountain lions, deer, snakes, the fish in the water. They're my people. They're my people because that's what my culture taught me. My culture taught me that if I don't protect them, then I've lost something that I can't use. They were put here on this earth for us to use. That's what my culture told me, that's what I've been taught. And, if can't protect them, many years to come they won't be here for us. We see that now. In fact, one of the things that I see right now is the pine nut issue. Commercial people go out and bump the trees, like I stated earlier. So, we haven't been able to protect them

because when we go to a governmental agency, they won't listen to us. They would listen to somebody else because there's more of you. I mean, it's simple, there's one me, there's a lot of you guys. So, the people that have the most people there, they get whatever they want. And, I've seen this happen many times in the government. Not just with DOE, but the rest of the arms of the government. Now, the pine nuts are not as much as there used to be and I believe that because we can't protect them like we're supposed to that they're showing us, hey, you can't protect us, we're not going to be around. So, that's part of my culture and other Tribal people around the state and around the country. Their culture is being impacted.

The issue that I bring forward to DOE is also that if there's a truck route and the truck is along I-15 where me and the rest of the council drive, if there was accident--I've seen a lot of them--if one of those trucks were to hit one of our vans that we're driving, our whole government is gone. And, I know my constitution. There's no way to restart my government. So, that's the other impact that you can't scientifically prove, you can't put numbers to. The only thing you can put to it is that it's gone, what do you do next?

Those are some of the issues that I see that impact me and my Tribe and other Tribal people around. I've tried

to talk to DOE. I've tried to tell them these are things that really happened to us, these are things that could happen. Another for instance is that if a person were to be killed by, say, a transportation accident in the City of Las Vegas or Clark County, that's one person in over a million. If one person like that was to--if that was to happen to one person from the reservation, that's one out of 300. Which is the bigger percentage? And, what happens even more than that is that one person from the County would be gone, but they could import thousands a day. When one person from the reservation is gone, that person is gone. We can't import any more. We don't do that. The only way you can be a member of my Tribe is to be born into that Tribe. You can't just be imported. And, to me, that's much more serious impact than how much money are you going to lose because you can't bring that person back. You've not only lost that person--not only does it impact that person's family, but it impacts the whole Paiute Nation as a whole because in one way or another we are almost related to almost everybody else that is Paiute. So, we're not talking about just one person like in Clark County. We're talking about--it's much greater.

And, I've always been told by DOE that in my mind we will never be affected because the rail line is not going to go over my reservation that they're talking about. If it

comes through the south, it doesn't matter. I'm still not affected because they're not building--the Caliente railroad is not through my reservation. But, if the shipment comes through, that doesn't make any difference, I'm still unaffected according to DOE.

When I first started on following the Yucca Mountain Project, my reservation wasn't even on the map. Now, that's before you started talking about Caliente route. They were still talking about I-15 and my reservation wasn't even there. And, to me, that's a slap in the face by the U.S. Government. The U.S. Government has a trust responsibility to Tribes and it is arms of the United States Government, those who work for the government, have trust responsibility to the Tribe. And, if you don't know what that means, go and ask your attorney. And, if they don't know what they means, let them ask us, we'll tell them. We're not ashamed to because that's the only way we get anything done. We don't have--we don't have a one on one. We've never been invited by some of these transportation groups that meet across the country. And, the only reason why we're not invited is because they said, well, you don't represent a greater number. Well, I don't know who is greater, the country or a county. I will be representing a country, not a county or not a state and not a city. To me that's greater. The U.S. Government has, like I said, trust

responsibilities of those countries, not necessarily so much to the states or the counties, but they do have in its law that they have that for the Tribes. But, yet, I don't see that happening.

When you talk about how much--where I could spend my money like the lady from the county said, that's great that she has the money to spend, I come up here and I don't have a penny to come up here. I get my funding through my program because this is part of my job, too. It doesn't come from DOE. We don't--the only thing we get from DOE is lip service, in my opinion. The only reason I say that is because I've been working on this project for a while and I've been through a lot of meetings. I've sat her for many, many hours. I've been through a lot. I've listened, I've learned, and I've learned because I've been there. I've learned because I've listened to you people, you people that are scientists, you people that have done the studies. I take all that and I think about what does that mean for me in my reservation? What does that mean to me as looking for the best interests of my Tribe; not just my Tribe today, but my Tribe in 100 years? That means a lot. That means that my shoulders have more weight on them than I can really actually bear.

But, I stand up today and do that because if I don't, then I've let my people down. But, not only have I

let my people down, I've let myself down. I was elected this past December. They elected me because they want somebody that wants to get out there and do something. And, I tried my best. I even--in fact, I was up at 4:00 o'clock just to get up here. I'll get home at 6:00 or 7:00 o'clock tonight and I'll be at work tomorrow at 8:00 o'clock. This is what we have to do because we don't have funding, we don't have the manpower to have somebody coming and sitting for us or take notes for us or read those big boring studies that I have to read. But, I kind of enjoy it because reading that gives me more power. Power to me is knowledge and I have a lot. I go back and tell my Tribe what went on today and they're glad to here that I've been there because I understand what goes on and I understand how Bob could be passionate about how the State feels. I feel the same way about the Tribe except for I wouldn't want to try to be Bob because he's got more years of experience. And, Bob is vocal and I get that way sometimes. The only reason I do that is because these are the only times we have a chance to speak. A lot of Tribes don't have that chance. They don't have that ability because they don't have anybody that can come here to speak to you to let you know what we think about and to let you know what impacts us or what affects us and the way we feel about the broader things, the broader issue of are we still going to be here tomorrow. Those types of issues are

issues that we deal with also and this is just one tiny piece of that puzzle that we have to deal with every day.

And, I think that's about what I have on mine.

ABKOWITZ: Okay. Calvin, thank you. Would you be willing to take questions?

MYERS: Yeah, but I might not answer them.

ABKOWITZ: Okay. That's no different than what we're used to.

I'll start off. Abkowitz, Board. I was curious if you could give me your perspective on the extent to which the other Tribes that are located in Nevada are experiencing the same things that you are or whether there seems to be some disparity in that? And, also, could you help me learn a little bit better whether there are certain regional or national Tribal councils that you interact with that may or may not have a seat at the table in terms of dialogue with DOE?

MYERS: I would say that not only the Tribes in the State of Nevada, but Paiute Tribes, in general, are not just within the State of Nevada. We're within the State of Arizona, Utah, and some into California. The Western Shoshones are in the state and area around the Yucca Mountain area. So, it's not just within the state, but we all do share the same problem, the same frustration. There's no interaction between the Department of Energy and the Tribes.

We've asked for somebody to be like a liaison between the Department and the Tribes so that anything that goes on in the Department, we can find out within a couple of days compared to the couple of months, couple of years other things that we--that I've seen has happened with the Tribes.

And, what else was it?

ABKOWITZ: Whether there was a regional or national council of some kind that does have a seat at the table or that you could work through to get your voice heard perhaps more often and at a higher volume?

MYERS: I couldn't tell you because we're not invited to those. And, we should not have to be associated with an organization; we should be able to be invited as a Tribal government individually, not as a group, not as one person representing--and that's why I talk about my Tribe. I don't talk about the Paiute Indian Tribe in Utah, (inaudible) in Las Vegas, or Western Shoshones or any other Tribe. I can only speak about my Tribe. And, that's how we should be thought of as individual Tribes, not as groups.

ABKOWITZ: Andy?

KADAK: Kadak. I was confused by your answer. Is your reservation going to be affected by any of the options for transport or is it not? I didn't totally understand whether it was or wasn't.

MYERS: I don't know because we've never been told those

options. Not with the rail siting that you're doing right now.

KADAK: Okay.

MYERS: But, if it comes from the south, the Union Pacific comes through my reservation.

KADAK: Okay.

MYERS: So, if it comes from the south, it doesn't matter. To me, today, this is what happens and I see this happening. If this were the project right here, this is all that they would look at. What I look at is how does that thing get to the project because, like I said, when I first started, my reservation wasn't even on the map. It had to get from Point A to Point B somehow and it just doesn't magically appear. And, that's why we ask and we're always told, well, we don't know. So, that would have to be my answer for your question.

ABKOWITZ: Okay. Thank you very much. We very much appreciate your willingness to get up on short notice and share with us your viewpoints.

MYERS: Okay, thank you.

ABKOWITZ: This bring us to the part of our meeting that is reserved for public comment and it's my pleasure to return the gavel to our Board chairman, John Garrick, to preside over that event.

GARRICK: Thank you very much, Mark.

This is, as I mentioned in my opening remarks, the highlight of our visit and we have received signups from 11 different people who want to make a public comment and it's our intent to listen to every one of them. The only advice we might offer is, as a courtesy to the ones that are at the bottom of the list, you might want to manage your time in such a way that they don't get discouraged and go home. So, with that, I think we'll just jump right into it.

The first person on the list that I have is Joe Fallini.

A. FALLINI: I'm not Joe. I'm his daughter.

GARRICK: Okay. No, we don't mind. Ladies first.

A. FALLINI: I don't have anything prepared today. All I have right now is what I have to go off of my notes. My name is Anna Fallini. I'm from the Twin Springs Ranch. It's a ranch that Bob Halstead had mentioned earlier and during his slide show had included some pictures of. To give you a quick background of me, I've got an engineering degree from Cal Poly, as well as a biological resource degree. So, I want to talk to you guys. It's been a long time since I've been in the room with this many engineers. It's like back in college. But, I know this is a technical scoping meeting. I'm going to try to keep some of the issues to the technical stuff.

I also had the opportunity for a couple of years to

work security for DOE out at the Tonopah Test Range and that's going to be relevant in some of my comments today, too, because I have a pretty good idea of security, as well as operations out there. Some of the things I'm going to talk about today, I can't give you my sources for. I'm up against the wall that way. I'm going to be doing more research to get the information out with a good source name behind it in other ways. So, let me get through my notes here.

The first thing I wanted to touch on was cattle crossing over railroads because, first and foremost, I'm a cattle rancher. I'm the fourth generation on a ranch that's been out there for 130 years. So, first and foremost, I know cattle. And, no, they're not going to cross a railroad. There's a reason that those cattle guards work. You can get your couple of cows, maybe other exceptions are going to get across, but we have a difficult time even getting cattle across a highway. A lot of times the method we have to use is to shovel dirt over the white fog lines to get our cows to step over it. That's how resistant our cows are to some sort of barrier. So, the barrier that Bob Halstead is presenting to you, not only is it a raised barrier, but then you've got your railroad tracks and then an image of spacing between your railroad ties and the cattle are not going to cross that. You're not going to--I mean, you would have to rope

every single one of our cows and drag them over that railroad to get them across there. I cannot describe to you the impact of that. So, anyway, I hope that answers--

KADAK: Anna, could I just follow up? Kadak. There are railroads now going around here.

A. FALLINI: I understand that.

KADAK: What happens there? Are they sort of like literally fenced in at this point?

A. FALLINI: I'm unfamiliar with any of the railroad systems around here. What I am familiar with is our operation and the impact it would have on our operation.

KADAK: Okay.

A. FALLINI: You know, I'm not going to speak for any ranchers that have railroads that come through their place, but I know just from our experience of just roads, even sometimes on a dirt road, you'll have a difficult time getting an animal across.

KADAK: Okay.

A. FALLINI: And so, that whole thing is kind of irrelevant of the whole impact of it, but you had a question on it earlier.

To kind of follow up on this also, the underpasses would have to be in such great frequency to be beneficial in that matter. I mean, the economic impact of just the frequency of the underpasses in order to not have an impact

on cattle crossing, their access to water, would be unbelievable. So, just kind of an idea of that.

The Mayor and the Congresswoman--or Commissioner, sorry. You know, you guys said that you guys did studies regarding private property rights along the corridor. Well, my family was never notified. I want to make that clear to everybody because if you were doing studies of impacts on private property, we dang sure should have been notified. There's 13 private property water rights that you guys--this Caliente corridor would go right over. There's deeded land, there's grazing rights. And so, I kind of take offense to you saying that you represent the rural people in this community when we haven't even been notified by you. In your little book, I'm pretty sure we're not in there. And, I know we're not the only ones that you guys didn't notify. So, if you have the studies, I sure would like to see them.

Let's see. As far as the Indian Tribe goes, I'm shocked to hear that you guys weren't notified more because before the first EIS was even out, they eliminated a route from Hawthorne on an existing rail bed on the basis that the Paiute Reservation sure didn't want it. That was enough for them. And, it's not included in the EIS no longer. It comes down from Hawthorne, there's a bed already there. The poverty is unreal. Everything is there already and it was eliminated totally. And so, my point in that is that the

scoping done at the very beginning of this process was so selective to support this Caliente route that it excluded people, in my opinion, intentionally so that they could have reason to neglect certain routes and then have a stronger point to select others. That kind of goes with DOD, as well, which I'm going to touch on, too, because the whole reasoning in the EIS, there's very few land use conflicts. I'm shaking now because I'm nervous, I'm getting angry. You'll see my father will do the same thing. There are several land use conflicts that are along this route. Several.

I like coming better prepared. Okay. Somebody said today, I believe it was Gary Lanthrum that said DOD said there would be irreparable damage done had this railroad gone through the Chalk Mountain, the one through the test range. The irreparable damage done to our operation--again, I'll remind you it's 130 years, I'm the fourth generation, I gave up a career in engineering that I would have liked to have followed because this was a bigger dream to me because I'm doing this not only for myself, hopefully someday for my children, as well as my nieces and nephews because right now there's a fifth generation out there working. If you want to talk about irreparable damage, that's it. You cannot put a money value on that. And, I know that because I didn't follow a path of money. I came out here to make pennies to live this lifestyle and that's irreparable. I can't even

tell you how much.

The economic impact of it is also irreparable because it would put us completely out of business. The reason this is is because we are a water based allotment and this railroad goes over 13 of our waters. In order for us to maintain a grazing permit out there, we have to have control of that water. Without it, we don't have anything. So, the impact on us would be catastrophic. We would not be able to maintain our operation, at all. That hits home pretty hard after everything my family has gone through to build that place up and given up to come back out there into the lifestyle out there.

Not to mention the fact that the NEPA process was not followed, but we're going to be having to pursue that through legal routes.

I want to talk a second about the test range route and I talked to you a little bit after lunch about that. DOD said no, right? Gary got up here and said they absolutely said no. I told you before I have sources that I cannot say and I'm going to get this information in another way. DOD was gravely misinformed on not only where that rail line would go through, but the frequency at which trains would be coming through there. DOD, the way that it was presented to them, at first, was presented completely inaccurate and in a way, of course, they weren't going to accept it. They were

informed that there was going to be a rail train, a train coming through every hour. Of course, they're not going to be able to work around their operations in that. In looking at that map, they were never given specifically a route that that would go through. If the route came down in the southern part of that range, you know, you can see the green range there, if it came down there, it would be farther away from actual bombing than it does by the Cedar Ranch where it just--just north of that first green part. It would be farther away from bombing going through that test range in the southern area where the topography is perfect for it than it is right now in its current location. So, as far as the bombing goes, I wish I could get over--actually, I have a-- the bombing that occurs at the Tonopah Test Range--

GARRICK: Wait, wait.

(Pause.)

A. FALLINI: Okay. Well, the area in this Tonopah Test Range, bombing range where bombing activities occur, are right here in this area, right here in this Kawich Valley which, by the way, was taken from my family to imminent domain. So, this is not the first time DOE and DOD have come and taken stuff from us. The route that would be the most logical route through here, secure, would come down through the southern part of the range. I assure you that in the southern part of the range, no bombing occurs because it

would interfere with the other testing that goes on there. So, that would not even be an issue. However, when it was presented to DOD, they never specified where and so DOD, under the impression that it would go through their bombing range at one train per hour, of course, said no. So, I don't know how to get anybody to look back at that and reevaluate it, but it needs to be done because it wasn't done correctly to begin with.

BUSCH: While you're up there, could you show us where your ranch is?

A. FALLINI: Yes. --Reveille allotment and it begins right here (inaudible) right here. It begins right here and travels all the way up Reveille allotment cutting our Reveille Valley right in half right through all of our waters and right up through the Spring Summit. All this right here is our grazing allotment. And, like I said before, it goes through our private property, it goes through deed of land, it goes through many private property rights.

So, my point in this is that all of the feasible possibilities were--many of the feasible possibilities were overlooked because of misinformation given to the people at the beginning of the scoping of this whole railroad. Mark--I can't remember your last name--you had brought up this question earlier, as well, about legal haul trucks. I did some real basic math just taking the tonnage into

consideration and not--I don't know anything about the construction of the casks or the fabrication or anything like that, but I do know that there was a scenario written in the first EIS that said that there could be casks removed from a train in Caliente, put onto legal haul trucks, and hauled via Tonopah, about approximately a 300 mile passageway, during the construction and put on those trucks and hauled the rest of the way to Caliente. Now that, to me, implies that those casks may even be in existence already. I don't know. But, in my math and with the tonnage of nuclear material that you guys are planning on passing through here, if you were to continue doing that method--and I'm not talking about a legal haul all the way across the country, I'm just talking about from Caliente to Yucca Mountain, a legal haul scenario where obviously you're going to have the capabilities already if it's a plan during construction to take those casks off the rail and put them on legal haul trucks and drive them, you would have to exceed $16,000 per load to make up for the cost of that rail route that travels the Caliente route. Now, that, too, is I think--I don't remember exactly, but maybe $2001. So, now, in my head, I'm guessing that that would be even closer to $20,000 per load for a 300 mile trip on existing highways. You wouldn't have--I mean, we're not talking heavy haul trucks, you know, we're keeping everything under 80,000 pounds. The capability and the idea is

obviously already there because it's been included in the EIS before. So, why that hasn't been looked at, I don't know. It kind of boggles me. And, sure, the frequency would be more than a railroad, but then again in the event of a catastrophic accident, you would be hauling less in one load than you would on a railroad.

The safety issues of going through the Tonopah Test Range, you've got--your air space is restricted and so is the ground space already. I mean, the security there would be incomparable to any security anywhere else. If you go up north where you guys are planning to go through Caliente, all you've done is you've provided them and it's going to put a scenario in front of you, a terrorist group who wants to get together and plan some kind of an event against this railroad. You've given them the opportunity to go in the most rural area and conjugate and get their stuff together without being in the eye, whatsoever, of the public for any suspicion or anything else. So, what you've done in security out in these rural areas is tough, I've done it. And, regarding nuclear material, even being out there on the test range where you have, you know, restricted air space and everybody has got a clearance and everybody has got a badge, it's still difficult because of the rural setting. Now, you're taking it out of that secured area, still putting it in a rural setting, your security is going to be unbelievably

minimal. And, it scares me.

You know, we had a guy that was on the loose a couple months ago who evaded the police, one guy. He evaded the police out there in that same area for months before they caught him. He stole from everybody in four valleys and he ran around. I can't imagine what some organized group could do in the same setting especially, like I said, without any public eye looking at them, nobody to drive by like in a more urban setting and say, geez, there's something funny going on here, maybe I should call this in.

But, you go through that test range and you go down where there's no bombing. It's the shortest route. It's logical. It's secure. And, DOD denied it because they were misinformed. So, I don't know. I urge you guys to look back on that possibility.

And, I think I'm just about done here. Oh, by the way, when you guys were introduced, you guys were all referred to as part-timers. I'm here as a part-timer, too, but what I have to lose is everything if this goes through. So, while I would rather be out there working on the ranch right now and getting some stuff done that needs to be done, I'm here fighting for my livelihood. If that fight goes into Court, then it goes into Court. We wish it wouldn't, but we're willing to go that route because we have a lot, a whole lot, to fight for.

And, let's see, my dad is going to come up with a whole lot more comments, more issues regarding allotment directly. I guess, the only other thing--two points actually. Gary Lanthrum gave this chart here to you to show you, sure, this is a comparison to Reno, to the Rockies. Where's the comparison of the routes that are already being looked at? Because if you put the route, the topography, alluvial fans, the flooding areas, everything, if you compared those things between the routes that are still, you know, the Chalk Mountain and everything else, then you would have something to compare. This, to me, is a biased comparison with the sole intent of making Caliente corridor look good when, yeah, it's constructable, you're right. We construct railroads over mountains, over passes. I mean, that's not a question. What is the cheapest? What is the most logical? That's what you should be looking at, a comparison of the corridors in question, not of a comparison of a railroad that goes over Denver. You know, the Caliente corridor is the most expensive. It's going to take the longest to construct. It's going to take the most maintenance. You know, to somebody just looking out of the logical point, it's illogical. It's just an illogical route, not to mention the engineering disasters you're going to run into just in Reveille Valley alone with the flood, the alluvial fans, and then there's these issues of wilderness

study areas, there's the issues of archeological site, and things that my family for years have had to hold to and been regulated against. All of sudden, now that DOE wants to go through there, it doesn't matter anymore. You know, never mind the cost and the effort we incurred because of them.

And then, I want to leave you guys as engineers and scientists, no matter how much momentum is behind something, especially in the engineering field, a design or a project, if at any point you stop and realize that it's wrong, that there are fundamental flaws in it, you've got to stop and go back. You don't just keep going forward to save face. You know that the damage done is going to be so much more severe than saving face could ever justify. And, I've got to tell you the process that has been followed by DOE to get to this point, even though there's all this momentum behind it, is flawed. It's completely flawed. And, I implore you guys to look at that and be willing to go back. And, like you guys are asking questions, these different scenarios, these different methods, these different routes, all of them need to be looked at again because they were not done right to begin with.

That's all I have to say. If you guys have questions, I'll stay up here.

GARRICK: Okay, thank you. Do we have any questions?

DUQUETTE: I have a quick one. Maybe you can help an

ignorant easterner and this isn't meant to be pejorative. I just would like to know. Comments have been tossed out about private property, property use, property ownership, and private property rights. Can you give me some definitions?

A. FALLINI: I will tell you my dad is going to be a lot better at doing that. But, let's put it this way. They're all private property rights. Okay? Ownership, if you own your car, you have ownership, you have a private property right. Okay. So, what you are looking at are all private property rights. Taxable, that always comes into play. Many people will argue that grazing allotment isn't a taxable right. Well, after paying a million dollars in inheritance tax after my grandparents passed away, I think our family would beg to differ that that's not taxable. It's been taxed. It's been severely taxed. So, the specifics of the rights, my dad, he's much better at that kind of stuff. We can ask him. He'll give you a much better--

GARRICK: Okay. All right. Well, thank you. Thank you very much.

Is your father available?

J. FALLINI: My name is Joe Fallini. My daughter just spoke to you. You know, it's real interesting to me that we're sitting here completely ignoring the State of Nevada and the Constitution of the United States. Number one, the Constitution of the United States in Article 1, Section 8,

Paragraph 17, says that when anybody wants anything in whatever state, it's their duty to go before the state legislature and get permission to do that. Now, I'll guarantee you in this process the bombing and gunnery range was taken up that way, post offices were taken up in Nevada, just about everything that was ever taken up in Nevada went to the legislature so that it would be constitutional. This was completely circumvented.

And, another thing, the State of Nevada has denied Yucca Mountain water rights down there and I'm sure all you people know it. They denied you. They told you you cannot have the water and you're going around them. You're saying the heck with the State of Nevada. They have no control. This really bothers me. When we get into a position like this when something could be built up with such momentum that you just completely annihilate the Constitution and the state's rights.

And, another thing that I'd like to say is on this rail route, it is stupid to go that way. It's a waste of taxpayers' money when you have a route that's 200 miles shorter and that route that's 200 miles shorter can be in about four or five different positions. It was never even considered.

And, like my daughter said, the Air Force got duped on it. They was told the wrong information. Now, I'll tell

you where we got duped. We was reading the Tonopah paper and find out about the rail route. This here really bothered me when I read in the Tonopah paper there was 21 public meetings held and there was 1900--or 1290 comments and why everybody that I know that owns property rights along that railroad never got notified by you people. Now, I think that is not an oversight. That's damn near a guess.

And, I'll tell you another thing. You know, you're supposed to go through the NEPA process. The NEPA process is supposed to come out and involve the people. Well, I'll tell you what I think happened. I think DOE went to the Commissioners, picked you people, gave you Pep money, bought you off so you wouldn't tell us what the hell was going on. I believe that right down in my heart because if you're my County Commissioner, why didn't you come out and tell us what was going on? Wouldn't this be the NEPA process? Wouldn't this be the way it's supposed to be for the Environmental Impact Statement? No, they didn't want to do that because they knew there was property rights out there. There's a bundle of property rights out there. There's water developments. Under our water base allotment, we have to own that water. We own that water. It's our water and that's what gives us our compensability for our grazing. And then, we looked at it a little deeper and we said, well, my word, the State Water Engineer won't give them any water. So, we

get to reading in the Tonopah paper and, all of sudden, Commissioners are going to pick up water according to the paper for the Yucca Mountain Project. And, Mitch was supposed to send me an explanation of that. I haven't received that. Now, I want to know how come you want to buy water and use it? Is this a process where you can't get water? I'll talk to you any time you want on it. But, if you're going to get water, we used to own Kawich Valley. We was bought out of there with the power of imminent domain. And, we still hold some water developments in that Air Force bombing and gunnery range because we would no way let them go. And, we have the power today to go in there and maintain those water rights. Now, when I look at it and the State Water Engineer isn't going to give you any water and, all of a sudden, you're going over--my daughter said 13, it's actually 17--right over the top of a bunch of them, right over the top, and if you guys get the power of imminent domain and force us to sell that, then you'll have the water for Yucca Mountain, won't you?

I'd like to know these questions. How come these weren't addressed? And, I would like to see what kind of a NEPA process would have taken place on this thing if there wasn't Pep money to start with?

Now, I'll ask you, Mr. Lanthrum, have you got an explanation for that?

(No audible response.)

J. FALLINI: Well, you know, I kind of got the feeling you and I are good buddies if you was talking about the Fallini Ranch. We're on opposite sides of the street. You know, if you're going to use our ranch to get your water rights to go to Yucca--and I don't know whether this is true or not--but, boy, you put everything into perspective from what we read in the Tonopah paper and the Commissioner is completely going around us on our property rights, why weren't we notified? Anybody, if they was going to go out there and do something, would go to the property owners. Why wouldn't you go to the property owners?

LANTHRUM: Lanthrum, DOE. We have been talking to you. In fact, I--

J. FALLINI: You talked to me--the first go-around, we wasn't notified, at all. You went through your NEPA process and you had 21 meetings and you had 12,900 comments and you never notified one person on our side. The Covins, the Hagens, the Cliffords, you get down to Ben Covin, and none of them was notified.

LANTHRUM: That 21 meetings and all the comments that you're talking about, those were for the repository EIS. That was before we had selected a corridor to analyze. The EIS process that we've done on just this corridor where we actually knew who the affected property owners were going to

be, we've done as good a job as we thought we could reaching out to people, identifying the folks that would be affected and we've made a really good effort to try and make sure that all the people that came forward during the scoping process have been kept informed of the things we've been doing since then.

J. FALLINI: Since then.

LANTHRUM: Once we selected the Caliente corridor, we've been working really hard to make sure that the owners along the Caliente corridor, both the landowners and the land users, have been informed of what we're doing.

J. FALLINI: Okay. Well, I'm going to ask you why was the only withdrawal made by the Bureau of Land Management, when there's seven other corridors, the only one that was withdrawn through the Bureau was the Caliente one. How come the Chalk Mountain, how come the Jean route, how come all of them weren't--if you was doing this legally, you would have withdrew every damn one of them. But, no, you up and withdrew that, and then a couple days later, you select it. That's momentum, I'll tell you that. That's a real momentum.

LANTHRUM: Maybe we need to have more discussions, but we--

J. FALLINI: Well, we sure should. You talked about all the stuff back and forth between us. We went out to hear people and drove around once and we had them come into the

house once and, hell, you didn't even know how water developments were.

LANTHRUM: That's why we came out there was to find that information.

J. FALLINI: (Inaudible) Victor was very surprised when he seen how much private investment was out there.

LANTHRUM: You bet.

J. FALLINI: He should have known that before he came out.

LANTHRUM: I will say that the withdrawal that we did was for the corridor that we selected through the NEPA process. We didn't go about withdrawing a corridor until we knew which corridor we were going to select.

J. FALLINI: Well, when did you select--how come a few days later, you selected the Caliente corridor and withdrew the (inaudible). Why didn't you withdraw the (inaudible) for the rest of them?

LANTHRUM: Because we weren't selecting the rest of them.

J. FALLINI: So, in other words, you're saying this is a predestined thing right now. That we was going to build the Caliente route and we didn't need to withdraw any other ones.

LANTHRUM: We're going to have to keep talking, but we believe--

J. FALLINI: No, we're not talking (inaudible) different

place because I think you've overstepped your bounds in the NEPA process. And, we're used to big fights. We've done a pretty good job in our history. We haven't been around for 130 years to lay down and let people run over the top of us. And, I want the NEPA process and I want to know how come County Commissioners didn't notify us of what the hell was going on. Why did we have to get it out of the paper?

LANTHRUM: We think we're following a pretty good NEPA process and we'll just make sure we contact you more and more as the process moves forward.

J. FALLINI: You bet. We'll probably contact you a little on it because--

LANTHRUM: Okay. We'll look forward to it.

J. FALLINI: Okay. Thank you.

KADAK: Mr. Chairman?

J. FALLINI: There's a much better route and it's a hell of a lot more terrain friendly and everything else and, my word, people, you shouldn't be spending the taxpayers' money by running a 200 extra mile railroad. We don't have that kind of money now. I think it's your obligation to take care of the taxpayers and I don't think a 200 extra mile route is right.

Thank you.

GARRICK: Thank you.

J. FALLINI: Any questions?

GARRICK: One question, yes.

KADAK: I'm just trying to get educated now. Property rights--do you own that land or do you have rights to water on that land?

J. FALLINI: No, what we have is we have water rights which are commensurate which is no different than any person's water rights on their well or anything else.

KADAK: Even if you don't own the land, you have water rights, is that correct?

J. FALLINI: We have the ownership of the water rights and we have a grazing right and we have right-of-ways for those pipelines, those wells. And, it's just like--you know, to give you a good example, I went down to the legislature when the Bureau was trying to say, well, anything that's out there on that public land, we need half of it, and they was trying to steal the state's water rights. And, I asked the legislature up there, I said how many of you people drive your car out there on that ground? That's your private property right. And, when that Bureau of Land Management official would come to you and say, hey, your car is out there on that grazing land or that Federal land, that we need half of it because it's out there, that makes a hell of a bunch of difference. There's--

GARRICK: Okay. I just want to make sure that Andy's question is understood. You have water rights, but you don't

have ownership of the water?

J. FALLINI: We own the water. The ownership under a water base is private property. It's no different than a house down here in Caliente that the people own. It's a private property right. It's guaranteed by the State and, before 1905, it was a vested right which meant that it was all the water, not a certificated right, and it wasn't subject to the five year lease. So, in other words, any vested right that is out there that belongs to any of these ranchers around here, they own that. It's a private property right even though it's on Federal land and we stopped the Bureau from drilling wells for wild horses because we owned those rights.

KADAK: All right. Now, if the Bureau of Land Management takes the land out of--I don't know what the official term is, but somehow takes the land out of--what did you say it was, out of service or--

J. FALLINI: Well, if they take the land--

KADAK: Yeah, what happens to the water rights is what I'm trying to find out?

J. FALLINI: Well, what happens to the water rights, somebody has to pay for those water rights. We owned Kawich Valley, and when the Air Force come in and took Kawich Valley, they took some of our water rights, but we drew the line of anything that we could use above that that had water

rights to it and we are guaranteed that right, we have that right-of-way coming right out of the Nellis Air Force--

KADAK: In this case where they withdrew the land for this corridor, do you still have the water rights on that withdrawn land?

J. FALLINI: We do.

KADAK: Okay. So, that issue is not--that's not the question then, right?

J. FALLINI: Well, it's a big issue because you're going to put a railroad right over the top of five places which goes exactly over the top of our water sources, it--

KADAK: Over the wells or--

J. FALLINI: Well, yeah.

KADAK: Okay.

J. FALLINI: We actually have 17 of them. I can give you them. They've got--

KADAK: No, that's okay. I wouldn't know that.

J. FALLINI: Okay.

KADAK: But, let me ask you, what is your alternate route that you would propose?

J. FALLINI: The alternate route that I would like to see happen would be go right--the tunnel right through--okay. We're sitting here in Caliente, okay? You're going through here. You've got Route 93 that comes right through here, goes through here. Here's where you would have to put the

tunnel. Okay. From this point, you can go down right through here, right through where they set off all the bombs, and right to Yucca Mountain. It's a very short route. It's elevation friendly, it's secure from this point on, and it's not 200 extra miles. You can actually sit right here and see the top of this peak and you're going an extra 200 miles around it when you can look down there and see that peak. It's amazing to me.

GARRICK: Thank you. Okay. I think we appreciate your comments and thank you for trying to--

J. FALLINI: Are there any others?

GARRICK: No, I think we're done. Thank you.

The next name on the list is David Blee.

BLEE: I'm here today representing the U.S. Transport Council, but when I signed up this morning to speak, there were only two people signed up. There's now 11. Frankly, we're strong supporters of hearing from local stakeholders and in that interest I will yield the balance of my time.

We do comment you for being out here and taking issue to be here. We just completed a three day tour of the Caliente corridor, and I think when you get outside of Vegas, you'll find people are very willing to work constructively towards a solution.

GARRICK: Well, please, feel free to make a few comments if you'd like?

BLEE: I really want to yield the balance to--

GARRICK: Andy, question?

KADAK: What is your recommended corridor?

BLEE: Well, we support the decision that was made by the Department. We think it is warranted. We think it is achievable. We think it could be done in the time frame specified by the Department whether it's 2010 or 2012. You know, we come from the perspective of companies that have moved more fuel, spent fuel, and nuclear materials than is planned to be currently sent to Yucca Mountain. So, we know it's achievable. We, in fact, advocated and accelerated transportation implementation because that drives a lot of things. It drives stakeholder involvement, the public education which we think is necessary, and it also brings the jobs and benefits that I think you'll find people along this Caliente corridor are very thirsty to have. Obviously, there are concerns that need to be heard here and again that's why we think it's important you're here and we hope you'll be back here.

GARRICK: Okay. Thank you very much. And, thank you for yielding time.

BLEE: And, I will submit a statement for the record.

GARRICK: Thank you.

The next name on the list is Bill Vasconi.

VASCONI: Bill Vasconi. I'm from Las Vegas, Nevada. I

haven't lived in Nevada all my life because I'm not done yet. For those of you that are from out of state, I'd like to welcome you to Nevada, in particular Lincoln County.

I notice that some of you were reflecting on the openness of the countryside here. It's only fair to tell you that as you approached Lincoln County, there were desert Big Horn Sheep in the mountains. As you come over the grade up here at Spring Summit, there's an ample supply of mule deer. And, as you proceed north from here, it's some of the prime elk country in the nation and we do have antelope.

Now, let's talk a little bit of trivia. I notice that Kevin got onto that. I like to see you in that suit once in a while. That looks good with that tie on, too. I noticed yesterday when we was at the meeting, I really listened to both your speeches. You know, the guy over here with the two first names and Margaret Chu and I enjoyed that. But, everybody in the audience had suits on. It looked real strange. I don't know if they were dressing up or dressing down when they got here, but it's nice to see our Mayor with a suit on.

You're in the State of Nevada. In some perspectives, people say Nevada, etcetera, etcetera, etcetera. And, to put that in the proper perspective, what we have in relationship to those states back east, well, you could take Rhode Island, Connecticut, Delaware, New Jersey,

New Hampshire, Massachusetts, Maryland, Virginia, and South Carolina, and they'd all fit inside the State of Nevada. We're about the same land mass as the country of Italy to just sort of put it in proper perspective.

You know, there's a good many Nevadans that appreciate your efforts on this Board. We know that some of you are new to this area and new to the problems of Nevada, but there are a good many Nevadans that realize that those things are nuclear and research into hydrogen, those are ongoing. We've left Yucca Mountain to the point where we're going to say it's going to be open and retrievable for 300 years, monitored. That works for us. There's a lot of folks in Nevada that works for. Number one, because we give our educational system more credit. We think in 300 years we might have some better answers. We'd maybe have some better answers on what to work with. We also realize there's 103 nuclear power houses in the United States generating some 22 percent of the electricity through its silver oxides, carbon dioxides. No greenhouse effect out of nuclear, it's clean.

I noticed in a paper just a while back that Mississippi is looking to build a nuclear power house. They're asking for permission. You know, I can't believe when we use this 10,000 year figure, I can't believe any way in the world that there's going to be coal or oil around in 10,000 years. Dr. Crowley tells me it's only going to be

around maybe a couple hundred. We've got to look for new energy sources, nuclear being one of them.

I'm in favor, I'm in favor of centralized storage. Some folks were talking about those who would be affected by the site or by rail, but where it sits now, you've got 60 million people that are affected by where it sits now. Someone else talked about those things nuclear. They talked about the fact that the waste is accumulating. Most of it wouldn't be waste if it was a renewable energy resource. It wouldn't be any waste. That's where our technology should head.

The reactors we have, folks, we're not the only ones that have reactors. There's 440 reactors in the world. They're putting reactors--as an example, India is building eight of them. Japan, Formosa, China are building nuclear reactors. Japan has 53, France has 59, the United Kingdom has 45. Those folks would love to have an opportunity like we have here in Nevada. Now, this is the first geological repository for the United States and also for DOE, also NRC, also EPA. Yeah, there's going to be some stumbling blocks, but that's why it's so veritable. We've got a chance to work with it. We can work our way through this.

Now, not all the citizens of Nevada feel there's a concern about those things nuclear. They don't feel involved in the issues. But, they only have to reflect on the fact

that our Navy, some 70 atomic submarines, 10 nuclear powered aircraft carriers not only protect this country, but has fought the last two wars in the bowels of those atomic submarines, in the decks of those aircraft carriers. The Navy right now has some 84 vessels, some 105 reactors. They have spent fuel lives. Yes, they're shipped to Idaho, INEL, but they come into ports like Burlington (phonetic), Washington, Kidney, Maine, Newport (inaudible), Portsmouth. That's how they're getting there. A lot of shipments, a lot of rail, a lot of safety. And, Pearl Harbor goes into southern California, by rail to (inaudible) Idaho. It's safety.

You know, you come up with this issue in a lot of different ways. Now, the State of Nevada, well, we've had our problems, as you well know. This is a national issue. This isn't a state's rights issue. It's a national issue. Our State Motto is "All for Our Country." I guess, we're going to have to change that. Battle Horn, I don't know of a Nevadan that fought in the Civil War unless he walked over there all by himself. When Nevada became a state, there was 16,000 people here. And, those of you back east, you were losing 16,000 people in Gettysburg, Fredricksburg, Bull Run in one day. It's a national issue.

I'll summarize by saying, you know, Nevada's politicians, those Nevadans, ought to reconsider their views

on Yucca Mountain. They're not realistic, they're not responsible. Some of them are politically motivated, politically based. That doesn't work well for the scientific program. You need to reassess your approach to Yucca Mountain and make the best of this situation in a national interest--that's history also. We need to broaden our economic base, diversify our economy, and we can do that with Yucca Mountain just like we did in Carlsbad with the WIPP project. Thirty-nine percent of the procurement of that project come out of the State of New Mexico, 39 percent.

You know, we have 50 years of expertise, scientific and technologic expertise developed at the Nevada Test Site. I worked there 17 years, the first four years as a radiation technician monitor and the other years I worked as a construction worker. I've always been just a construction worker. We've had 928 nuclear devices detonated in the Nevada Test Site. One hundred of them was atmospherics, 828 were underground, 24 of them was with (inaudible) before they went to Australia. But, there was 828 underground, a full third of them were in the water table. That's a closed water aquifer. But, you do have high-level nuclear waste stored at the Nevada Test Site already. Well, maybe I'm one of the guys that prefer to come down from the north. If this will work, then we continue the process.

I think you've got your homework cut out for you.

There's a need to notify more people, get more involved with the community. You're in rural Nevada, not Las Vegas. You know, in Las Vegas, they buy a pickup truck and put stickers on it and take it to the car wash once a week. In Lincoln County, they buy a pickup truck because they need it and they use it. You ask folks up here what they're worried about it and they're worried about the range condition, the drought. You ask people in Las Vegas what they're worried about and they start off by telling you traffic, schools, taxes, crime. What's more dangerous, living in Las Vegas or right alongside Yucca Mountain? I don't know. There's a murder every other day. There's a rape every nine hours. There's a car stolen every 30 minutes. There's a different breed of folks out here. I like talking to them.

Now, to summarize and finish this up, let me say there's an opportunity here to maximize the benefits, the contributions that can be made to the State of Nevada, to the counties, to the people. And, I can give you one good example right now. If that railroad is going to start right here in Caliente, why shouldn't the residents of Lincoln County get involved and build the railroad ties for that 319 miles of track? Union Pacific has built railroad ties out of concrete and rebar for many years. Why don't you make that one of your entitlements, your equity issues? Why don't you push for that? You want aggregate, Lincoln County can give

you aggregate. Where do you want it hauled to? You can help with this railroad system. Nye County, I appreciate your efforts. I appreciate what you said and I don't know why you can't build railroads ties on the other end.

With that, I want to say thank you very much for being here. I know there was a lot more that needed to be said, and when I get out in the truck and head for the house, I'll probably remember what it was.

Now, I am open for questions or comments?

GARRICK: Thank you very much. And, we'll give you that opportunity in the future, for sure.

The next name on the list is Brian Elkins.

ELKINS: I appreciate you finding your way to this out of the way community. My name is Brian Elkins. I'm the Director for Community Development of the City of Caliente. However, I need to let you know I'm also a retired Navy officer and my entire career was spent as a medical contingency planner. My responsibilities on Camp Pendleton and in other locations was to plan for nuclear accidents, what would happen at San Onofre if they had a minor incident and how would we plan for it for the entire 40,000 military people on Camp Pendleton and the surrounding areas. That was my job.

I'd like to laud Mayor Phillips' comments and concur with them. I think those of us out here in the

hinterland are desirous of being involved in the policy making process. And, although we number few, Lincoln County is larger than Massachusetts with our 4500 people. Ninety-eight percent of our county is owned or, at least, controlled by the Federal government. So, the joke around here is you stick out your hands, turn around, and touch Federal land in all directions. And, it really significantly hampers our ability to have economic development because we literally had to buy 50 acres back from the Federal government to put in an industrial park on the west side of our town for $150,000 which is a significant amount of money for a small community to come up with so that they can have a chance to keep their children in the area as opposed to shipping them off to larger urban areas.

I've submitted my comments in writing. I'll let it be at that with this emphasis. I'd like you to seriously consider establishing the construction base, the supply base, and the support bases for this Caliente corridor railroad if it happens and if Yucca Mountain happens and establish it within Lincoln County. The logical place is right here where you're going to be taking your railroad off, especially for the supplies to come in and to continue on for your construction of your railroad.

And, a matter which hasn't been addressed, I'm sure the Fallinis are aware of this. If a railroad goes across

high desert land, there is a swath it cuts. Just the factor of a Michigan loader backing up and moving a load of gravel into a position for the railroad to be established destroys desert vegetation. And, I just envision maybe a quarter mile swath along this path where all the vegetation has literally been destroyed. And, there will be nothing there to take its place. It would probably take 150 years for the vegetation to recover back to the rail site. And, in the meantime, invasive weeds which we fight constantly out here, some of which are dangerous for animals, would invade because they propagate and regenerate much more quickly than sagebrush and other feeds that are appropriate for animals.

So, as you consider this corridor, consider having those type of mitigation measures where you can restore the land back to, at least, an approximation of what it was before. I seriously doubt that you're going to be planting sagebrush next to the railroad, but you might consider other vegetation to be planted. I'm sure Mr. Fallini and his family would be excellent people to tell you how to revegetate that construction site if that has to happen.

I have been involved in the safety issues, I'm sure as everyone at the table has, for many, many years. I'm familiar with the redundant safety systems in virtually all levels of handling this material. I'm especially knowledgeable of the redundant safety issues in the Navy and

how they handle their nuclear reactors and I am confident that this project can be conducted safely and that it can be of benefit to all concerned. Even those significant reservations of the Fallini family and other ranchers along the way might be mitigated to the point where impact is, at least, minimized and that they will be able to continue their livelihood and continue providing this country with the raw materials for food that they have so aptly done in the past.

I'll relinquish the rest of my time.

GARRICK: Thank you. Thank you very much.

Our next commenter is Hal Keaton.

KEATON: Good afternoon. I'm Hal Keaton. I'm a member of the Lincoln County Board of Commissioners and I'd like to welcome all of you here. I do appreciate the good work that you do.

I'm here to talk about the nuclear issues, waste issues in Nevada, and particularly in the transportation issues that directly or indirectly affect Lincoln County. I'm not going to get technical, believe me.

Contrary to what is continually stated in the various publications, not all of the members of the County government support this program. I'm one elected member who is opposed to this program in its entirety. First, I want to talk about the mixed messages sent by the Federal government which has caused a great deal of concern to the public.

When the Federal government first made this a public issue, they were not certain where they were going to dispose of the poisonous material. That was some 20 plus years ago. Then, they decided they would bury it, but they didn't know where and they decided to nail Nevada and bury it here. After several years of uncertainty, a decision was made to ship the material "mostly rail". However, due to some time constraints, it may have to be shipped by truck until the rail is built. They're going to bend the rules and ignore their own procedures to try and beat the race against time.

Let's take a look at the locations selected for burial. In 1982, Congress passed a law requiring "geologic isolation" for a waste repository to protect the future generations. As shown by DOE's own studies, Yucca Mountain cannot geologically isolate the waste. Water flows much faster from the surface through the mountain to the water table than had been expected. Yucca is formed from volcanic ash and the material is brittle and contains fractures and voids. Instead of selecting another location for this program, DOE just changed the rules. Instead of relying on the earth to protect our future generations, they're going to build a container of miracle metal called Alloy 22. DOE claims the containers made from Alloy 22 will confine the waste for, at least, 10,000 years. However, you folks, the

Nuclear Waste Technical Review Board, concluded there's no scientific basis to believe a container made from Alloy 22 is capable of providing the protection claimed by the DOE. I'm happy the Court ruled that the 10,000 year container is not acceptable.

I wondered how the dairy farmers in Amargosa Valley feel about this. That's where the contaminated water would flow. In January of 1909 (sic), DOE informed the Nuclear Waste Technical Review Board that the storage containers alone made up 99.7 percent of the containment at Yucca Mountain. The remaining containment consists of .008 Yucca Mountain geology, .09 percent Yucca Mountain overburden, and .2 percent fuel cladding. Yucca Mountain contributes only about .1 percent of the containment. Looking at it from this point of view, the mountain is basically a non-entity in the program.

I wonder why DOE hasn't considered placing the contaminated materials in the miracle metal containers that provide 99.7 percent containment and leaving the material at the location where it was produced. This would completely eliminate the hazards and safety concerns associated with transporting 77,000 plus metric tons of this material to cost our nation.

I want to focus now on the adverse effects that this program will have on Lincoln County. It was recently

announced that DOE would use mostly rail to transport nuclear waste to Yucca Mountain. Legal descriptions of the corridor indicate the line would connect in one of three points along the existing Union Pacific Railroad. One of these points being considered is in the City of Caliente. This is currently the largest population base in the county. I seriously question the rationale behind that idea. I'm sure the government will build the best railroad in the world. They have the money to do it.

However, the problem lies getting the waste from the producer to their rail line. In January of this year, the Union Pacific Railroad mainline suffered a major damage as a result of flooding. This occurred right here in this canyon where we are meeting. You saw a small portion of the results driving into the facility this morning. The rail line was washed away in over a dozen locations. Rail service completely ceased for the better part of two weeks. The railroad is now operating on temporary tracks. This condition will exist for several more months with very low speed limits on various sections of the rail line. Thanks to Robin and Russ, I had an opportunity to fly over the damaged areas on January 20th. One of the major damage areas is called Cottonwood Canyon which you saw a slide of in Bob's presentation. And, the input that was very obvious to me and others with me was the tremendous amount of materials. To

me, it looked like thousands of tons of material up in Cottonwood Canyon that will come over the railroad tracks in the next flood. Believe me, these floods occur quite often. Is this a safe place to transport nuclear waste? I don't think so.

The proposed rail corridor will go through Meadow Valley which is the little valley just north of here. This is one of the few areas in the county with private property that produces tax revenue. I believe that if this is going to happen, every effort should be made to keep the poisonous material as far away from the populated area as possible. Is it prudent to take more private property from the county and convert it to public non-revenue producing land? Let's remember that only 1.8 percent of this county is private taxable land. We don't need to take any more away because we can't afford it.

What about the private landowners? Did anyone ask them before the decision was made to identify this rail corridor? What about the cattle and sheep ranchers? Were they asked if this would be disruptive to their operations? That's rhetorical because, no, they weren't. Mr. Whipple, a cattleman, the Fallini family, ranchers, Mr. Uhalde, a sheepman, Mr. Heizer, an artist, Mr. and Mrs. Ward, owners of 25 acres in the pathway of the proposed rail route in Meadow Valley, no, none of them were asked before this rail was

identified. And, no one asked me.

This proposed rail line is going to literally cut our county in two. This means changing how the private citizens do business. I would venture to say that this will be done with very little assistance from the Federal government, monetary assistance. It will be very difficult to move livestock east to west or north to south with a rail line cutting through the county. This is going to have a tremendous negative impact on those folks and that's just to name a few of the individuals. As time goes on, this will become more and more of a problem for them and others. The various local government bodies here are promoting the transportation of high-level nuclear waste through Lincoln County and are being led down the proverbial primrose path. I have asked several individuals, both in consulting capacities and associated with the DOE, about benefits. With the exception of the railroad construction which in the long-run is temporary, they are unable to tell me of any other benefit to this county, economic or otherwise, associated with this project.

I strongly urge each member of the public to attend local government meetings such as the Lincoln County Commission, Caliente City Council, Joint City Council Impact Alleviation Committee meetings, and other government meetings and make them aware of your concerns. All of these

members work for you, the public, and you need to let them know how you feel about this project. This nuclear waste transportation project is a bad idea and it will never be a good idea.

Thank you.

GARRICK: Thank you. Thank you very much.

Our next speaker is Louis Benezet.

BENEZET: My name is Louie Benezet. I live near Pioche at the old Prince Mine. Just to give you a brief idea of who I am, the railroad from Caliente to the Prince Mine, the railroad spur runs up about 30 odd miles around the town of Pioche and ended up at the Prince Mine. It was abandoned by the Union Pacific back in 1985. But, the year that railroad was constructed about 1912 or so was the year that my family came out to this country. They were involved in the mining of the Prince Mine operation. The railroad grade, as I say, from Caliente follows the Meadow Valley Wash north past Panaca and the old milling camp of Boullionville and there it enters Condor Canyon and swings around and comes right south of the town of Pioche and then around the Pioche Hills ending at the Prince Mine. As I say, now it's gone.

One of the proposals for transporting high-level radioactive waste by rail spur from Caliente would involve using the old grade that is described there. The other alternatives, of course, one would come up off the rail line

about five miles further east near Eckles and cut across, I presume, near the Beaver Dam Road and out through Bennet Pass and then, of course, there's a line that cuts off further north out at Crestline. Can I walk over by this map?

(Pause.)

BENEZET: Here is Caliente. This is the basic Meadow Valley area north of Caliente. The town of Pioche is here. You can't see the old railroad grade. Of course, it's gone now, but it went out from Panaca up this canyon and then swung back towards Pioche, around the hill, and over to the Prince Mine. That was what I was driving at earlier. Okay?

The Union Pacific route comes from a point east of Caliente. It actually swings quite a ways south before it comes north again and west towards Caliente. The points where the railroad potentially could cut off would be at Caliente itself going up the Meadow Valley Wash. That goes a little further up the railroad track cutting across some hills. (Inaudible) fairly steeply out of the canyon at the point and then come down into Meadow Valley near Panaca and again joining the other route, head west through Bennet Pass.

The third route is the Crestline route. So, that originates pretty must due east and cuts around, doesn't come down the canyon, Clover Creek Canyon, but cuts straight across pretty much.

As far as the rail routes are concerned, these are

the ones that are of most concern to me as somebody who lives right in this area. It's interesting that if you live out near Reveille, for example, you have a different perspective, as the Fallinis do. And, it's important that everybody from different areas of the county or different areas that are going to be affected here have an opportunity to inform you about their special concerns. For example, according to the their comments, it seemed a good idea once they got it out across this point to cross down through the Nellis Range. Of course, from my point of view, once it's gotten past here, I've already been exposed to it. Okay?

Now, one of the other things that I noticed in there, I was interested in the presentation that was given by the fellow from the Department of Energy, Gary Lanthrum, and some of the comments of the Board members here who asked questions about the alternate forms of transportation, whether truck or intermodal. And, it's pretty clear as far as I've read the documentation, the Record of Decision, is that the intermodal thing is very much still a part of the transportation scheme to Yucca Mountain. It could very likely be the way in which this waste first gets carried. In reading those documents, however, and I've asked people from the DOE and I've gotten different answers, it's not clear that the designation of the intermodal is specified where it would be. In other words, there's the idea that there would

be an intermodal facility somewhere where stuff would be taken off of the train and put on trucks, but it doesn't specifically say that that would be in Caliente. Maybe somebody can illuminate me about that. I don't know. But, from my perspective, this becomes the one other option that is very important to me, not just the three possible rail routes in this part of the county, but also the potential intermodal facility.

Now, going back to about 1995, the Mayor of Caliente and various other people who worked with him on the Federally funded oversight program that the Department of Energy funded for Lincoln County actually recommended that the intermodal facility at Caliente be developed. And, there's been quite a bit of, I think, back and forth between the DOE and Congress and everybody else to try to promote this idea. My concern is that in a way the people that were trying to promote this for economic development purposes sort of put the cart before the horse because, as we've seen today, there are a lot of questions that the people want answered about the issues here. The time to do a decision to advocate a particular type of routing or whatever would seem to me to be after the public and everybody concerned has been involved and we have a chance to hear what some of the concerns would be. Mayor Phillips mentioned, for example, that some studies had been done in answer to one of your

questions about the flooding problems in this area. And, I know from having studied through the documents that have been produced by our local nuclear waste program which has to date, I think, received about $10 million from the Department of Energy going back to the mid-80s, there's very little work that really has been done on the level that would be needed to assess the kind of damage that's indicated by the recent events. Okay?

(Pause.)

BENEZET: I guess I can do that from here. I can go through this fairly briefly. Do you all have a copy of my little map? Your map may not have the color coding that mine has.

On my map, I guess I have to turn it around this way. The railroad line is indicated here. If you can orient the map so it is more vertical. The railroad line is basically here. It comes into Caliente which you see here. This just shows just the Caliente environment. And then, it goes through the town of Caliente and continues on down Rainbow Canyon. So, this is Clover Canyon coming down here, Meadow Valley Wash comes down here, the two join and flow into the Meadow Valley Wash or Rainbow Canyon. Okay? Highway 93 is coming down here. It also joins parallel to the railroad just briefly through Caliente and heads out west up Highway 93 up to what's called Newman Canyon. Okay?

The blue on my map show some of the local flood channels. This is Antelope Canyon which flows into the Meadow Valley Wash just north of Caliente. This is the Meadow Valley Wash coming down from Panaca and areas north. This is Newman Canyon which flows down Highway 93. So, as you leave Caliente going towards Las Vegas, you'll go up right by that water course until you get to the top of the ridge about 15 miles out of town or whatever it is. Then, of course, this is the continuing channel of the Meadow Valley Wash going south. And, this little spur on the side shows a small canyon we call Kershaw Canyon where the State Park is located.

If you look on my map here, X marks the spot. I have it in red of the proposed intermodal facility which is a little less than a mile south of Caliente across on the west side of the tracks near the site of the Caliente Sewer Ponds. The reason I drew all this was that we do have plenty events, but we don't always have them all at once.

So, the flood that just now happened came down Clover Creek to Caliente and went south crossing under the railroad just past the town of Caliente, making a curve there, and managing to get under the railroad without washing out the bridge, thank God. However, about a year ago, not a very big flood compared to ones in the past, came down the Meadow Valley Wash and washed out part of Highway 93 up here.

And, of course, the water continued down into Caliente. It wasn't near as big as this recent flood. And then, a year ago--more than a year ago, a year and a half ago back in August of summer before last, a flood came down Newman Canyon, and in their excitement over developing the intermodal facility some of the City fathers had already built a little railroad leading from Highway 93 across the gulch here and down to the potential intermodal site only to have it washed out by that flood that came down Newman Canyon in the summer of 2003.

So, my point here is recently the region was covered with about a foot of snow. It warmed up the next week, we had rain. Fortunately, all the rain pretty much came down Clover Canyon, but it could have been general. Going back to many years in the past, famous winters would have been like the winter of 1948 or so where this area was covered with three to four feet of snow. And, there was a threat that there might be a thaw and they had the Army Corps of Engineers out here in force sandbagging the town of Caliente trying to protect this place.

Now, there really is going to be transportation hazards. I know that the Mayor believes that the transportation of nuclear waste is maybe not as great an issue as chlorine or ammonium perchloride or certain other things. But, nuclear waste transportation does involve

particular problems and the question of risk combined with perceived risk, even though you may think that's not important, I think is very important. When you're talking about the economy of the small town in Nevada, just the fact that an accident or even an event has occurred near Caliente could be really disastrous as far as the future of the community is concerned. The problem would perhaps be somewhat acceptable if we felt that this transportation was passing through. In other words, just knowing that there might be a storm event or some major problem, the trains could be held for a short period of time until that was corrected. But, if you actually had a station here where you were off-loading casks preparatory to transporting them further west, but you had a number of casks already off-loaded from trains and more trains coming in perhaps to stack up on a weekend when they aren't moving and then combined with a weather event such as we've had recently, I think you could see that there would be very serious concerns about having that sort of facility located in a place like Caliente.

There are other things I could say on the issue. I'm very interested in it. But, I don't want to take up any more time. So, thank you very much.

GARRICK: Thank you. Thank you very much.

Our next commenters, we have two people that slid

in the same box, Judy Treichel and Peggy Maze Johnson.

TREICHEL: I'm Judy Treichel. I'm with the Nevada Nuclear Waste Task Force. Just very briefly, I want to say that yesterday in the TRB meeting I talked about there being a kind of a dishonesty with word games that get played. And, I think I saw one here today when Gary Lanthrum was up at that microphone and Joe Fallini was over here and talking about decisions being made on the basis of the EIS. And, back at the time of the original EIS in Las Vegas, we were involved because we were making decisions that were a long way away from us. You were not involved. And, other people weren't involved when a lot of these decisions were being justified by an EIS that did not have the involvement of the people that are actually affected. And, this comes down to when you say that, well, you get involved now, but the important decision has already been made. And, Federal agencies have talked for a long time about something that they needed to avoid. They needed to learn to avoid what they called DAD, D-A-D, decide, announce, and defend. And, that's what's happened. Caliente route got decided. It there on the picture. It got announced. And, now, they're out here to defend it. And, that's not the way the NEPA process works and it shouldn't work that way. So, that was the only comment I had. I think this is a meeting where the rural people should be speaking.

And, the reason that I brought this in was that Peggy Maze Johnson from Citizen Alert was not able to be here. She prepared a written comment which I will give you and you can make copies of. What this is is it's especially important because there was talk about the Department of Energy going out and doing interviews with people. And, this has the notes of someone that was interviewed and what their opinion was of that and they weren't particularly impressed. So, I think you can see when you read this--I'll give it to the staff to make copies and you can see what's actually going on out here.

Thank you.

GARRICK: Okay. Thanks, Judy.

Our next speaker is Bud Sanders.

SANDERS: Good afternoon. My name is Bud Sanders. I'm a Caliente resident and a Caliente businessman. My issue is very simple, the solution to it also could be very simple. Most of your route is pretty well dedicated where you want it to go. A major loose end is where you're going to, as Gary referred to it, tie in at Caliente. The term "tied in" is not very accurate for the way railroads join. Where the spur joins a mainline, the rails are not always connected to the mainline. It's what we call a switch. Unless there's trains passing through there to actually switch it over, then the rails of the spur are actually several inches from the rails

of the mainline.

Historically, at switches and crossings and sidings have been a major accidents of railroads. In the 200 years that railroads have been active in this country, there has not been much improvement made on the method used to switch. Historically, there were people that manually did it and now we have electric motors that do it. Maybe in the next 100 years, they'll find a better way to do this. I don't foresee that happening in the scope of the near future in Caliente.

My issue is this. You have three proposed alternatives. You have two north of here where there are no local population to them and you have Caliente. Caliente, within a quarter to three-eighths of a mile of where this intersection of these trains would be, has the entire population and the businesses of our town. I would just like to ask you to remove the Las Vegas downtown site as one of your alternatives and select one of the northern routes.

Thank you.

GARRICK: Thank you.

KADAK: Mr. Sanders, just a quick question. I thought you were going to talk about the three routes that affect Caliente.

SANDERS: I'm talking about where, as Gary says, your spur that ties in to the UP mainline.

KADAK: Okay. You didn't mean--so which one of the

three do you recommend?

SANDERS: Either one of the two north of us do not have any kind of a local population with them. If there was a train wreck and we had within the last few years a major head-on collision just north of here. If that had occurred in downtown Caliente, it would have annihilated many of our businesses and killed a lot of people. This higher risk intersection, putting it in our little town, is not justified by any increase in the cost or difficulty of putting it in a more remote location.

KADAK: So, you don't recommend the Pioche route?

SANDERS: Either there is Pioche--the alternatives is making this intersection in downtown Caliente or about five miles north of here there's a location called Eckles and then about 15 miles north of there is one called Crestline. Crestline or Eckles, neither one, are near an occupied area. Those both in my opinion would be better choices than endangering the people of Caliente.

KADAK: Thank you.

GARRICK: Our next speaker is Calvin Myers. Oh, I'm sorry, I'm sorry. Larry Lital?

SPEAKER: (Inaudible).

GARRICK: Oh, well, that's what happens. How about Laurel Marshall?

MARSHALL: There's been some confusion today and it's

certainly justified regarding private property right and private property ownership as far as what we're talking about on these maps. And, it really is really justified because what this map shows you is, indeed, the Caliente corridor. That's a very true statement. What it also shows you is the jurisdictional boundaries of the land management agencies for this area, be it military, the Forest Service, or in white you have private property ownership of people which is in this case private land. Private land is a component of private property, but it's only one component. What you see here is the jurisdictional boundaries of the dirt.

What we're discussing as far as private property rights, if you were to overlay on this map over the Caliente corridor, an overlay showing the private property rights of this corridor, which you can't because neither county has ever done this, what you would see are private property rights that stretch from here to here. There is no place out here that is not covered by a private property right.

Water in--and I can only speak for Nevada and I'm sure every state's are similar. Private property ownership in Nevada, water rights can be owned without owning the dirt that they come from. It's no different than the ownership of a house and the ownership of your yard. It's a private property taxable right that's on your tax bill from the county. You own the water. It's not something that someone

can come and take without a taking, it's not something that someone can come and borrow or use. It is your private property. It's the same with mineral rights in the State of Nevada. Other states, I can't speak for. It's the same with grazing rights.

Grazing rights cover--blankets the state. There are areas where they no longer exist, that's true. The Quinn, one of them--the Quinn Wilderness Area was declared wilderness. The private property rights to graze the Quinn Wilderness were taken from the ranch and it was a taking, a governmental taking, which has been established in a Court case, but this is a taking. They were private property. When you have these ranches that are passed from generation to generation, the Internal Revenue Service taxes you on your animal unit month on your grazing value that you have on these rights.

If you look at this map, this says land use and ownership. Now, what this shows you is jurisdictional boundaries of major land management agencies. It only shows you private ownership of certain land, dirt, yes, it does. But what you desperately need to see is the overlying private property rights that exist within the Caliente corridor. I cannot possibly stress to you how essential it is to see because if you look at this map, this map says there is no use out there. What does this tell you about how that land

is used? You see a road, you see a railroad, you see military. This map tells you nothing about the use of that land. It tells you nothing about the private property rights that exist and have existed for over 100 years on this corridor.

It's the same with this map. This map says Caliente corridor land use. This tells you nothing, whatsoever, about the use of the land. This tells you where the Caliente corridor lies and it tells you--and if you read the small print, it says "the jurisdiction information based on land ownership." What you see here is jurisdictional boundaries of Federal land management agencies and also included the jurisdictional boundaries of the private property ownership as far as land. You desperately need to see an overlay of the private property which exists on this Caliente corridor.

Does that help?

SPEAKER: That's clear. That helps.

GARRICK: Thank you.

Our next speaker is Connie Simpkins?

SIMPKINS: Thank you, Board members, for making the effort to be here and to listen to the people that will be most directly affected.

I have two letters to submit as part of the formal record of this meeting that were written by the In Four State

Grazing Board. The In Four State Grazing Board is an elected board under the Nevada revised statutes. It's a political subdivision of the State of Nevada and it's comprised of ranchers that ranch in White Pine County and Lincoln County. And, the land uses that Laurel was talking about a minute ago across the Caliente rail corridor just in Lincoln County, Nevada, there are 39 ranches that are directly crossed by this proposed rail corridor. There are, at least, another dozen ranchers in Nye County and Esmerelda County that are directly affected and crossed by this proposed rail corridor.

A couple of the points I want to make, I won't read all of these questions on these letters, but there are 24 questions that my Grazing Board--I work for the Grazing Board. I am not a part of the Grazing Board, I am not an elected member, I'm an employee. There are 24 questions in this letter that were posed by my Grazing Board a year ago to the Department of Energy and they deal with things like access and water and continued uses and recreational uses, historic uses, and the of fragility of the soils, and how in the world is an operation going to continue when a railroad comes right through the middle of it. Just think about it. I know you're all from different backgrounds and all from different business acumens, but if your physical business was literally cut in half with a railroad, how would you function?

Now, I will submit these questions in written form and that's the end of my comments for the In Four Grazing Board. We have serious comments and serious concerns about how those businesses can continue.

Now, I want to say just a couple of things about my own business. I run a little newspaper that covers this county and it doesn't matter which one of the three alternatives you use from the Union Pacific mainline, you're going to cut my business absolutely in half and I'm not kidding. We are located, if I--that piece of white on that map is the 1100 acres that belongs to my boss. We are literally--it doesn't matter if you come up the mainline and you leave Caliente on the old rail line that Louie talked about or it doesn't matter if you go up here five miles to Eckles and then come out around the back side and up through private property that goes along this Y or it doesn't matter if you go clear up to Crestline and then come down across and through Panaca or through the edge of Panaca and across, you're going to cross my business. You're going to cut my office right in half. And, there's no way for you to make me whole. I'm relying on your integrity to be honest enough to take a scientific look at this and leave the politics behind.

GARRICK: Thank you.

Now, that's all of the people that I have on the list. Of course, if anybody is inspired to want to make a

few comments, we'd be delighted to hear from you.

Yes?

DITRAZ: My name is Marge Ditraz. I was born in Caliente on August 22nd, 1926. I've lived here most of my life, same as Connie Simpkins and many people that have spoken here today. As you can see my shirt, it says "Nevadans Say Nuclear Waste, No Way." On the back, it says, "Don't Waste America."

You know, folks, why do you think the Nevada delegation fights this Yucca Mountain Project? Because they're all native Nevadans also. And, I'm so thrilled when I hear you say something about your budgets, cutting your budgets. Goody, great for Senator Reid and every one of our Congressmen and Senators. I don't know what we'd do without them.

If you and I came up with a plan like this to drag this stuff across 43 states for 30 years, they'd put us in the booby hatch and they should. This is the nuttiest idea that's ever happened in this whole world. And, why should these people that have owned this land for 130 years? It's where they make their living. And, you keep it back there. We know you can do it in dry cask storage for 100 years. I don't know how many times Harry Reid has told you that. I don't know how many times I've told the JCCIAC and the Lincoln County Commission. Hal Keaton was absolutely right.

In Lincoln County, the problem is people don't go to the meetings. Well, Louie Benezet and I have gone to every JCCIAC meeting and the same with the Lincoln County Commission and it's--

(Pause.)

DITRAZ: Is it there now?

SPEAKER: There.

DITRAZ: Okay. But this is absolutely politics. Mayor Phillips isn't the Mayor of Lincoln County, but that's the way it works in Lincoln County. And, I don't care what anybody says, this is a crazy idea and I hope it stops right where it is because that's what should happen to it.

GARRICK: That's what I like, somebody that speaks clearly.

Well, this concludes our comment period and, as a matter of fact, our meeting.

I want to before we close though thank a few people. I want to thank Mayor Phillips and I want to thank Patrice Lydell (phonetic) of his staff and I want to thank the staff of the Youth Center, Jamie Killian especially. And, of course, we want to thank a couple of people on the staff of the Nuclear Waste Technical Review Board who made these arrangements which were excellent and that's Linda Coultry and Alvina Hayes.

But, mostly, what I want to do is thank the

audience and the people who spoke today. You did yourself very proud. I've probably over 50 years of nuclear safety related work attended maybe 100 forums where the public had an opportunity to speak in this manner and I can't remember one that was any better than today in terms of the interest, the enthusiasm, and in the sense that we were really in one public forum and getting access to the public. So, we very much appreciate the comments we received and we look forward to having the opportunity to do this again.

Thank you very much.

(Whereupon, the meeting was adjourned.)