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Title:

SAN ONOFRE, UNIT 1

DECOMMISSIONING PUBLIC

MEETING

Case No.:

Work Order No.: ASB-300-680

LOCATION:

San Clemente, CA

DATE:

Thursday, February 25, 1999

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	SAN ONOFRE, UNIT 1
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8	e San Clement⊉ Community Center
9	Ole Hanson Room
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13	Thursday, February 25, 1999
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15	The above-entitled matter, came on as a public
16	meeting, pursuant to notice.
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18	APPEARANCES: MR. STUART Richards
19	MR. STUART KICKARDS DR. SEYMOUR H. WEISS, Director
20	DR. MICHAEL T. MASNIK, Section Chief
21	ETOY G. HYLTON, Licensing Assistant
22	DWIGHT CHAMBERLAIN, Division Director
23	BLAR SPITZBERG, Branch Chief
24	BRECK HENDERSON, Public Affairs Officer
25	LINDA SMITH, NRC Staff

PROCEEDINGS

MAYOR BERG: Welcome. I am Lois Berg, Mayor of San Clemente. It is my task tonight -- I've been invited and am happy to do the task of welcoming you to the Nuclear Regulatory Committee Meeting. It is a meeting, not really a hearing. All people who wish to respond in any way should have signed up in the back of the room so that we have a record of your name and who you are and your address. The court reporter has requested and it is mandatory that when you wish to speak you come to the lectern at the -- at my left -- your right -- and speak clearly into the microphone, stating your name, your address, and what else did you want to know Linda?

THE RECORDER: And just spelling their names.

MAYOR BERG: And spelling your name -- last name, so that she will have it into the tape.

Just a couple of housekeeping things before we begin. The restrooms are out to the left as you go down this little hall. We are in the Ole Hanson Room of our wonderful old Community Center Building here in San Clemente. For those of you who have never been here before, this is a very old building as you can tell, but a very much used building, every room of it. We're really rather proud of it, even though it is old. I was in the new building over in San Juan today, which is simply magnificent, but

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ours is older and we hope has a wonderful history with it.

Anyway, to go on, Ed Scherer from the Southern California Division will be the first presenter and he is ready. We will progress from this point on.

MR. SCHERER: Good evening. Can everybody hear me okay? I'll see if I can do some adjusting here. Can everybody hear me now? Can you hear me in the back of the room? Hello?

MAYOR BERG: He's going to use two mikes.

 $$\operatorname{MR}.$$ SCHERER: There are two mikes here. I'll see if I can get them to work.

Good evening. My name is Ed Scherer. I am the Manager of Nuclear Regulatory Affairs at Southern California Edison and I am -- my responsibilities include the licensing activities associated with the decommissioning of San Onofre Unit I.

It's a pleasure to be here tonight to briefly outline for you the plans that we have to decommission San Onofre Unit I in the future. Tonight we have representatives from both Southern California Edison, including Brian Katz, who is our Manager of Business and Financial Affairs and other representatives from San Diego Gas & Electric, our partner in the operation of the San Onofre Nuclear Generating Station.

The purpose of my presentation is to give you a

brief overview of the San Onofre Unit I decommissioning project. A summary description of the decommissioning project is contained in a report we filed with the U.S. Regulatory Commission known as the Post Shutdown Decommission Activity Report, or PSDAR and I understand copies are available on the table in the back of the room.

We submitted this document to the Nuclear
Regulatory Commission on December 15, 1998 to provide
information to them about the decommissioning of San Onofre
Unit 7. Following the NRC's presentation, after mine, we
will be glad to be here and answer any questions that you
may have, whether that's at the session or if you prefer,
after the session I'll be happy to stay around as well.
Brian and Ray Golden, who is our Manager of Communications
-- and both Ray and I are available to discuss any issues
that you want either at the meeting or afterwards. For the
record I will go so far as to give you Ray's telephone
number for those of you that want to contact us in the
future, feel free to contact Ray at (949) 368-9880. (949)
368-9880.

By way of background, since 1964 when we started construction of Unit 1, Southern California Edison and San Diego Gas & Electric have tried to make every effort to be a responsible member, not only of the local communities, but of Camp Pendleton and the surrounding environment. We

recognize this has been and will continue to be a long-term relationship which will extend not only through the decommissioning of Unit $\hat{\mathbf{I}}$, but through the decommissioning of Units II and III, as well.

In our efforts to efficiently and safely operate the unit at San Onofre well within regulatory requirements, we have been recognized as excellent performers by our peers in the nuclear industry. We also believe that over the years we have earned our positive reputation with the Nuclear Regulatory Commission.

My presentation tonight will follow the outline of the Table of Contents of the Post Shutdown Decommissioning Activity Report. That report will -- if you have a copy of that report -- you will note that its sections address in order an introduction, background, the decommissioning activities, the decommissioning schedule, the decommissioning cost, the environmental impacts and I intend to follow that -- right down that list tonight.

By way of introduction, this meeting is occurring partly because on December 15, 1999 (sic) as I said earlier, Southern California Edison and San Diego Gas & Electric submitted an updated Post Shutdown Decommissioning Activity Report to the NRC. That report informed the NRC that we had decided to proceed with decommissioning of San Onofre Unit

San Onofre Unit \$\overline{x}\$ has been part of this community since the 1960s, when construction of the plant began. The unit began commercial operation in 1968 and operated continuously through the years, until 1992 when we announced the permanent retirement of Unit \$\overline{t}\$. That decision to retire the plant was the result of an agreement between the Staff of the California Public Utilities Commission and Southern California Edison and San Diego Gas & Electric, and as a result on November 30, 1992, the unit was permanently retired.

Once that unit was retired, in March 1993 all of the used fuel was removed from the reactor and placed in a spent fuel pool. That's a part of the plant that's specifically designed to contain used fuel. Many of the other plant systems were de-energized, drained and removed from service, with the exception of the equipment required to cool the used nuclear fuel in its spent fuel pool has, and continues to remain operational.

When we first retired the unit, we planned to place the unit in something called SAFSTOR. SAFSTOR is a temporary storage condition and we then planned and announced that we had intended to decommission Unit # along with Units ## and ### following the retirement of those units from useful service.

SAFSTOR is a formal decommissioning alternative

allowed by the Nuclear Regulatory Commission in which the nuclear plant is placed in a dormant safe condition and decontaminated and dismantled at a later date.

It was after the unit was placed in SAFSTOR that we removed certain equipment which was no longer necessary. By regulation, Southern California Edison and San Diego Gas & Electric submitted a document called the Decommissioning Plan to the Nuclear Regulatory Commission back in 1994. That plan again described the -- placing the unit in a SAFSTOR condition and decommissioning when Units IF and IFI were retired. Since that time, since Unit F was retired, we had continuously, and continued to, safely maintain the plant and maintain the stored fuel in the spent fuel pool.

Well, why did we change our plans and why did we change our plans now? We based our decision to proceed now with decommissioning on several -- of Unit *Y on several factors. First, there is sufficient money in the decommissioning fund to proceed with decommissioning of Unit *Y.* By starting now, we believe we will not only reduce costs, but clearly reduce the uncertainty of our financial future and the future of our rate payers.

Second, we became confident that we can accomplish the decommissioning activity safely by using proven techniques. This is because a nuclear power plant in Colorado has already been recently decommissioned and

decommissioning is currently going on in nuclear plants in Oregon, Michigan, Maine, Massachusetts, Connecticut and even elsewhere here in California.

Finally, another key reason for proceeding with decommissioning now is that personnel with a strong Unit I knowledge base are still employed at San Onofre.

Dismantling Unit I with individuals who are familiar with the plant's equipment, systems and structures and its operating history is an important asset that we would clearly lose over time.

As a result of these factors, in 1998 we began planning for the decommissioning of Unit I. One requirement was to revise our 1994 decommissioning plan that we had submitted to the Nuclear Regulatory Commission. As a result, we produced a new Post Shutdown Decommissioning Activities Report and submitted that to the Nuclear Regulatory Commission on December 15, 1998. The report indicates that we are now looking at decommissioning of Unit I, which may begin around the year 2000.

There are some unique activities that will have to occur during a decommissioning project, but other than those unique activities, the decommissioning project will essentially be a large industrial construction, perhaps I better say a large industrial de-construction project.

Regardless of the scope, our goal is to carry out

the decommissioning in a carefully planned, thoughtful and safe manner. It is our intention to safely remove all of the radioactive equipment and structures from the site. The removal of large components, such as the reactor vessel, the steam generators and the pressurizer will be a significant part of that activity. The large components will be packaged either whole or in pieces and shipped ultimately to a licensed disposal facility. Other equipment, such as reactival system piping will be cut into pieces and, again, shipped to a licensed disposal facility.

To remove the large components from the containment building, it will be necessary to modify the large concrete containment shield building and the inner steel containment sphere. The removal of the large concrete containment shield will probably be the most noticeable activity to our neighbors. We currently plan to remove the concrete and then remove the steel containment sphere that is now inside it, but only after most, if not all, of the radioactive equipment inside the containment has been removed.

It is also our intention to use only proven technologies that have been used elsewhere for our decommissioning activities. These methods, both safe and proven, will be performed in a manner so that radiation exposure to our plant workers will be kept to a minimum.

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The relocation of used fuel from the pool, spent fuel pool, where it currently resides, to a concrete storage container system will be another significant milestone. The used fuel will be stored in the future in a steel canister that is, itself, inside another concrete container. Both of these are in preparation for the eventual shipment of the spent fuel off-site.

This type of system has been proven to be a safe technology for the storage of used fuel. There are various designs for this type of system; however, they all involve the same basic passive components. That is, the steel canister inside a concrete storage container. This configuration -- in this configuration, water will no longer be necessary to cool the fuel. That is because, over time, the heat of the fuel has now been reduced to the point where it is safe to place this fuel in the dry passive storage system.

The concrete outer container of our containment building -- excuse me -- the concrete outer container of our dry cast storage will also provide shielding to ensure that radiation of the fuel is below regulatory requirements.

These systems are also designed to allow for shipping of the used fuel in the same steel canisters when they eventually leave the San Onofre site.

After the fuel has been removed from the pool, the

pool building can, itself, be dismantled. In the long term, 1 2 3 4 5 6 7 8 9 10 11

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the Department of Energy has an obligation to provide permanent storage for this used fuel. At some point in the future the fuel will be removed from San Onofre site by shipment to a Government facility. The current Department of Energy's schedule is to begin the removal of used fuel some time in the future, our best guess now would be some time around 2010. Until DOE removes the fuel, it remains our responsibility to maintain the fuel in a safe condition and we intend to fulfill that obligation by using this proven passive storage approach.

Finally, as many of you know, the San Onofre site is located on property owned by the United States Navy and it's part of the United States Marine Corps base, Camp Pendleton. Our agreement with the Navy requires that we remove all structures associated with these units and we intend to do so.

As indicated in the PSDAR, the schedule is based on beginning decommissioning activities in the year 2000. Our best estimate of the time to complete this activity is approximately eight years.

The estimated cost to complete the decommissioning project, based on a recent review -- this is for Unit I -is approximately \$459,000,000 and that's calculated in 1998 Southern California Edison and San Diego Gas & dollars.

Electric customers have been contributing to the decommissioning trust fund established to cover just this cost of decommissioning and the money has been accumulated in a trust fund and is sufficient to complete the job of decommissioning Unit I.

I should also mention here that when Southern California Edison and San Diego Gas & Electric submitted the PSDAR to the Nuclear Regulatory Commission, we also submitted, in parallel, to the California Public Utility Commission a request to commence the decommissioning of San Onofre Unit I. This request is currently under review by the California Public Utility Commission and we presently anticipate receiving approval from the Commission as early as some time later this year.

We also looked at the environmental impacts of decommissioning Unit I. Although the environmental impacts have been addressed in our report to the Nuclear Regulatory Commission, we intend to continue to assess the environmental impacts throughout the decommissioning process. Areas that will be evaluated are potential radiation exposures to our workers; potential for public radiation exposure; disposal of radioactively contaminated materials, as well as non-radiological environment issues such as noise and traffic.

The radiation exposure to our workers will be kept

to a minimum, utilizing the existing programs which we have used in the past and currently use at San Onofre. We will conduct a decommissioning with the same formal, detailed radiation protection program that we used when the units were operating and that we use today. This program maintains radiation exposure of workers below the regulatory standards and then further reduces those doses with a practice known as low as reasonably achievable.

We will use these programs during decommissioning to provide as safe a working environment as possible for our workers. Radiation exposures to members of the public is also limited by very strict federal regulations to an extremely low level. We intend to conduct the decommissioning activities at San Onofre Unit I such that any radiation exposures to the members of the public should be only a small fraction of those regulatory limits. Again, assuring potential radiation exposure to the public is as low as reasonably achievable. We will use our existing programs for monitoring the release of radioactive materials from the site.

Our environmental monitoring program, in which we sample soil, crops, air and water, are obtained from areas surrounding the plant and we will continue throughout the entire decommissioning project to ensure that our activities have no detrimental effect on the areas surrounding San

Onofre.

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We intend to ship any radioactively contaminated material to a licensed disposal facility or to send them to a decontamination vendor who can remove radioactivity from metals or other materials. Our preliminary studies show that the amount of material we expect to be contaminated will be even less than those estimated by the Nuclear Regulatory Commission's generic environmental impact statement. The number of shipments of radioactive material will not be significant when spread over the several years we intend to conduct this project, and should certainly not have a significant impact on local roads or freeways.

Finally, we have evaluated the non-radiological impact, such as noise and traffic and determined that the decommissioning of Unit I will be similar to other large industrial construction projects in the area and can be accomplished without a significant impact on the local community. There should be no discernible negative impact on the environment around the plant.

In conclusion, we are required to decommission San Onofre I by federal regulation and by the terms of our grants of easement. Because funding is now available, decommissioning Unit I now may be completed at less cost and will help eliminate an uncertain financial future.

Finally, because the technology and a qualified

staff are available, we believe we can decommission Unit I safely and efficiently today.

In closing we appreciate your interest in this important project and we remain committed to conducting the Unit I decommissioning safely, cost effectively and with minimal impact on our plant, our neighbors or our environment. Thank you very much.

MAYOR BERG: I would like to introduce Mr. Ron
Burrows from the Nuclear Regulatory Agency who is out here
from Washington, D.C. and it was my pleasure to meet with
him yesterday and what a fine young man. May I present Ron?

MR. BURROWS: Thank you, Mayor Berg. Before I begin my presentation tonight I would like to take a few minutes so we could put out some additional chairs so that people in the back can sit. We also have six or seven open chairs here if you would like to take those. If we can get somebody from the NRC to help with the putting out of the chairs, possibly?

(Pause.)

 $$\operatorname{MR}.$$ BURROWS: We still have additional chairs up front if anyone wants to sit up here.

(Pause.)

MR. BURROWS: Good evening. I'm Ron Burrows, and I'm the Nuclear Regulatory Commission Decommissioning
Project Manager for San Onofre Nuclear Generating Station,

Unit I.

As project manager, I am the principal point of contact at the NRC for the decommissioning of San Onofre Unit I. I work at NRC headquarters which is in Rockville, The Maryland, which is just outside Washington, D.C. As Utility has pointed out, there are three units at the San Onofre site. Units II and III are still operating, so our discussion this evening pertains strictly to Unit I.

I would like to thank everyone for being here this evening. We appreciate that you have an interest in the decommissioning of San Onofre Unit I and have taken your time to be here with us tonight. A major portion of tonight's meeting will be devoted to responding to your questions and receiving your comments.

As the project manager, I'm only part of a team of NRC professionals who are involved in the over/sight of SAN Onofre's decommissioning. Joining me this evening are a few of the NRC Staff who have important tasks to perform as part of the team involved in ensuring that Southern California Edison's decommissioning activities are performed in accordance with our regulations. They are available to answer your questions that you may have this evening.

I would like to introduce them at this time. From our headquarters office, Mr. Stewart Richards. Mr. Richards will shortly be assuming the role of senior manager directly

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responsible for the decommissioning of power reactors. My immediate supervisor, Dr. Michael Masnik. Dr. Masnik is the section chief for decommissioning and supervises 14 project managers, such as myself, who are responsible for plant specific decommissioning licensing activities. Ms. Etoy Hilton -- she's in the back of the room. Etoy is our licensing assistant and is here to assist in many of the administrative aspects of our meeting. Ms. Sherry Wu. Sherry is here from our Division of Waste Management. She is part of the group responsible for reviewing the license termination plan that Southern California Edison will ultimately be required to submit to the NRC for review and approval before the license for Unit I is terminated.

We also have some representatives here this evening from our NRC regional office in Arlington, Texas.

TASKED

These are the people taxed to independently inspect and assess power plants undergoing decommissioning. They provide a reasonable level of assurance that activities are conducted safely and in accordance with regulations.

Mr. Dwight Chamberlain. Mr. Chamberlain is the Director for the Division of Nuclear Materials Safety. He is a senior manager involved with the over sight of power reactors undergoing decommissioning.

Dr. Blair Spitzberg. Dr. Spitzberg is a branch chief in the Fuel Cycles and Decommissioning Branch, and is

responsible for implementing the inspection program at San
Onofre Unit I.

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And, finally, we have Mr. Breck Henderson in the back of the room. Breck represents the Public Affairs

Office in Region 4.

Before going any further, I would like to point out the availability of certain documents in the back of the room that may be of interest to you relative to tonight's First of all, a book of NRC staff responses to meeting. frequently asked questions concerning the decommissioning of nuclear power reactors has been recently issued and copies are available for you to take home. There are also copies of Southern California Edison's December 15, 1998 update to the San Onofre Unit I Post Shutdown Decommissioning Activities Report. We will discuss this document later on this evening. We also have copies of the agenda for this evening's meeting, and as Mayor Berg mentioned, various sign In addition, we have copies of the slides for up lists. tonight's presentation. If there are not enough copies to go around, please see Etoy H¥lton, sign the list and we'll mail you one at a later date.

The purpose of this evening's meeting is to give you an overview of the decommissioning process from the NRC's perspective. I will first give you a little background on the decommissioning of nuclear power

facilities and then discuss the NRC regulations that apply to nuclear power plant decommissioning programs. We will end up with Dr. Spitzberg talking about the NRC inspection oversight program.

Decommissioning is the last phase in the life of a reactor facility, and its purpose is to remove the facility safely from service and reduce residual radioactivity at the facility and site to a level that permits the release of the site and termination of the NRC license.

The focus of the NRC is limited solely to the removal of the radiological hazards resulting from the operation of the facility. The fact that Utility may choose to spend additional funds to remove buildings from facility is of interest to us only if the material that is being disposed of is radioactive.

Once the residual levels of radioactive materials are reduced to below certain criteria, either by decontamination or disposal off-site, then the NRC license for the facility and site can be terminated. Before the license is terminated, the Utility is required to perform an extensive final radiological survey to prove to the NRC that the site is clean enough to terminate the license. The NRC may do a confirmatory survey to be certain that the site is within regulatory limits. Once the license is terminated, the NRC no longer has any regulatory oversight over the

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facility or the site. This is the ultimate goal of decommissioning, the termination of the license.

There is one other key element in the definition of decommissioning and that is, removing the facility safely from service. Once a facility permanently ceases power operations, there are a number of systems that are still required to protect public health and safety. primarily relate to the safe storage of the irradiated spent The spent fuel pool and its associated systems are the principal components that must be maintained operational.

The Utility's activities that result in the disposal of contaminated or activated materials must also be conducted in such a way as to safeguard public health and safety and protect the environment.

You may have noticed I have not said anything about the disposal of the spent fuel that was created during the operation of the facility. Initially, when the spent fuel was removed from the San Onofre Unit I it was both highly radioactive and it generated a lot of Over time, the radioactive material decayed and the fuel became less radioactive and the amount of heat generated decreased dramatically; however, even after many years of decay, radiation levels of the spent fuel are quite Shielding high and radiation chilling must be provided.

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What many utilities are doing, and what Southern California Edison has decided to do, is to construct an on-site facility for the storage of the spent fuel in a shielded dry condition in large casks. These dry storage facilities are thoroughly reviewed by the NRC prior to approval. Such storage facilities typically take up a relatively small amount of space and require minimal maintenance. The dry casks are constructed so there is no leakage of radioactive material to the environment. Current plans provide for spent fuel to be ultimately disposed of in a Department of Energy high level waste burial site; however, such a site is not currently available. Therefore, the fuel will remain on-site until a decision is made on its disposition.

When it comes time to decommission a nuclear power plant, a utility has several options. Our regulations allow utilities to begin dismantlement immediately, or if they prefer, to store the facility in a safe stable condition for some period of time before they begin dismantlement activities, or they may choose a combination of these two options.

Our regulations state that under normal (00 circumstances, the Utility has 10 years to complete decommissioning. The decision on how to proceed is a Utility decision. A few years ago, we performed a generic

environmental impact statement that looked at the decommissioning options and we determined that as long as a utility complied with our regulations, either option or a combination of the options, is acceptable.

One of the principal reasons for arriving at this conclusion is because the risk to public health and the environment associated with decommissioning activities is AT significantly less than in an operating plant. The risk continues to decrease over time, due to radioactive decay which reduces both the radiation levels and the heat generated by the spent fuel. This reduction of risk after a period of time is so significant that many of the regulatory requirements associated with plant operations are no longer needed. An example includes many of the technical requirements applicable only to an operating facility.

. Another example of our response to significant In reduction risk is the elimination of full-time resident response at San Onofre Unit I and relies instead on inspections conducted by NRC specialists in the field of decommissioning.

Having briefly described what decommissioning is, I would like to now talk about the decommissioning process under the NRC's regulations.

In August of 1996, the decommissioning regulations were amended and the process by which the NRC oversees

decommissioning changed significantly. These changes were based on the experience we had gained in decommissioning of power reactors since the original decommissioning rule went into effect in 1988.

A change in the regulations that pertain to San Onofre Unit I is the requirement for plants entering decommissioning to submit to the NRC a document called a post shutdown decommissioning activities report or PSDAR within two years of permanently ceasing operations. This document, the PSDAR, is required by regulations and includes several things. These include a description of the planned decommissioning activities; a schedule for their accomplishment; an estimate of the expected costs; and, lastly, a discussion that provides the reasons for concluding that the environmental impacts associated with decommissioning will be bounded by relevant previously issued environmental impact statements.

Southern California Edison provided this information to the NRC on December 15, 1998 as indicated. The PSDAR serves many purposes. One of these is to inform the public of the Utility's plans for the facility. Another is to notify the NRC Staff in sufficient time to conduct any necessary safety inspections prior to the initiation of any major decommissioning activities. In addition, the PSDAR helps ensure that the decommissioning plans will not result

in any environmental impacts that have not been previously considered.

I would like to point out that the regulations do not require NRC's review and approval of the PSDAR. The regulations recognize that some plants, such as San Onofre Unit I, have already been shut down for more than two years and specifically state that if such a plant has submitted a decommissioning plan for approval, as is the case here, the decommissioning plan is considered to be the PSDAR. The NRC received Southern California Edison's decommissioning plan in November of 1994, so by the provisions of the 1996 changes to the regulations, Southern California Edison did not have to submit a new PSDAR.

Southern California Edison has submitted a recent update to the PSDAR and the NRC Staff decided that because we did not hold a public meeting on the decommissioning plan, an NRC sponsored public meeting is appropriate and that's why we are here this evening.

The regulations also impose some additional restrictions on utilities with decommissioning facilities. The utility is prohibited from performing any decommissioning activity that would foreclose the release of the site for possible unrestricted use; result in significant environmental impacts not previously reviewed or result and there no longer being reasonable assurance that

adequate funds will be available for decommissioning.

The NRC Staff will be looking to ensure that these three additional requirements are part of the Utility's screening criteria whenever they plan to make changes to the plant. In fact, we had previously personally verified that Southern California Edison incorporates these requirements into their screening criteria during our last headquarters' inspection at the San Onofre site.

As I mentioned earlier, the Utility can place the facility in long term storage or immediately begin dismantling and decommissioning activities or choose a combination of these two options. At some time prior to the end of the 60-year limit on decommissioning, the Utility will be nearing the completion of the radiological clean-up of the facility.

Two years prior to the planned termination of the San Onofre Unit I license, Southern California Edison is required to submit a license termination plan to the NRC.

As you can see on this slide the plan addresses many issues. I will comment on a couple of terms used here that you may not be familiar with.

What is meant by site characterization is a process that the Utility will use to identify the specific locations at the site where decontamination efforts need to be focused. Site remediation consists of those activities

necessary to reduce the radiological hazards to safe levels. Also notice that the termination plan requires the Utility to report any new environmental information associated with the proposed termination activities.

The NRC will notice the receipt of the license termination plan in the federal register, make the plan available for public comment and offer an opportunity for a public hearing on the plan. The NRC Staff will also hold a public meeting in the vicinity of the site to allow the Utility to explain the plan to the public and give the NRC Staff an opportunity to discuss the remaining NRC regulatory activities associated with license activities. This meeting will also allow the public to ask questions.

NRC approval of the license termination plan will be by license amendment, which would authorize implementation of a plan. The license amendment process would offer the opportunity for a public hearing. The Utility then continues to clean up the site and perform the final radiation survey. The NRC Staff will continue to provide over/sight during this process.

The Commission will terminate the license if it determines that the remaining activities have been performed in accordance with the approved termination plan, and the final radiation survey demonstrates that the facility and site are suitable for release.

With that as a background, I would like to comment for a moment on our experience with the actual decommissioning of other power reactors around the United States. The NRC has had 20 nuclear power reactors.

permanently cease operations and begin decommission since the early 1960s. These plants and their status are given on the slide. As you can see, we have a fair amount of experience in our regulatory oversight of decommissioning activities at power reactors. Although you have heard this evening that risks are reduced at a decommissioning plant and certain regulatory requirements are no longer needed, we want to assure you that there remains the constant emphasis on inspecting the Utility's performance during the decommissioning process.

To highlight this emphasis, Dr. Spitzberg, who as noted earlier, is responsible for the NRC's on-site inspection activities at San Onofre Unit I has been invited to briefly describe our inspection program, immediately following my remarks.

Before I turn it over to Dr. Spitzberg, I would like to conclude by saying that I hope this has improved your understanding of the decommissioning process. Your questions and comments are always welcome. For your information I have provided my mailing address, phone number

and electronic mail address on the slide. Please note that the NRC maintains a local public document room at the University of California Irvine. Ms. Hilton visited our public document room today and it appeared to be in good shape. That concludes my presentation. I will now be followed by Dr. Spitzberg. Thank you for your attention.

DR. SPITZBERG: I'll make some adjustments here. I'm not quite as tall as Ron.

(Pause.)

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DR. SPITZBERG: Good evening. My name is Blair Spitzberg and I'm here representing the Region 4 office in Arlington, Texas. I work as the Chief of the Fuel Cycle and Decommissioning Branch in Arlington and we have the responsibility for inspection of decommissioning reactors within our region.

Over the next few minutes I will describe the Region's inspection program for permanently shut down reactors and a decommissioning status by San Onofre Unit I, but first I would like to point out a couple of the differences between what we do in the Region and what headquarters does. Mr. Burrows described the role of NRC headquarters in the regulation of decommissioning to include such activities as developing regulations and technical guidance; performance technical reviews and licensing facilities; and developing regulatory over-sight programs.

In contrast, the Regions have only two major responsibilities. The first is inspection of licensed activities and the second is an emergency response role. Because of that, the Regions serve as the eyes and ears of the NRC and the first responders, if something were to go wrong.

Region 4 is located in Arlington, Texas. It's not depicted on this slide, but it's between Dallas and Ft.

Worth and it's one of four regional NRC offices. The Regions are depicted in this slide and as you can see, the Region 4 is the one basically west of the Mississippi and it's the largest geographical region in the NRC. The NRC headquarters' office is located in Rockville, Maryland, just outside of Washington, D.C.

The Region 4 office has the responsibility of inspection of San Onofre and this slide also depicts some of the other permanently shut down reactor sites within Region 4. This slide shows a simplified organizational chart of the Region 4 office. There are approximately 180 employees in the Region 4 office. We have four divisions under the region administrator, including three technical divisions. In fact, my division director, Dwight Chamberlain is here. He's the director of the Division of Nuclear Materials Safety.

This slide shows the break-out of the Division of

Nuclear Materials Safety of which I am the chief of the free field cycle decommissioning branch over to the left. Not only does my branch have responsibility for inspection of decommissioning reactor sites, but we also inspect all types of decommissioning at non-reactor sites and I also have some other responsibilities, not related to decommissioning.

As I mentioned previously, Region 4 has had considerable experience in effecting the decommission of reactors. We currently have five shutdown reactors in our Region, which are in various stages of decommissioning. One reactor site, the site in Colorado has been completely decommissioned and the NRC recently terminated its license.

The major objectives of the NRC's inspection program for decommissioning reactors includes the verification that decommissioning and other site activities are conducted safely and in accordance with the regulations and license requirements. It's also to determine that licensees administrative controls are adequate and also, finally, to identify any significant declining trends in licensee performance.

The NRC inspection program can be divided into three categories. There's the core inspection program defined in manual chapter 2561. These are the areas of inspection that are performed at all permanently shut down reactors. A second type of inspection is the discretionary

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inspection procedures that are detailed reviews of particular functional areas. These procedures are implemented based upon a licensee's specific activities.

The third type of inspections are temporary instruction inspections which are generally performed once to investigate specific generic problems that may have been identified at another site and we inspect that at the other sites to determine whether they may be present at those sites.

This line depicts the major areas of focus for the core inspection program. Within each one of these areas there may be several inspection -- individual inspection procedures that we implement. The inspection procedures for facility management and control includes the inspection of the licensee's organization, the staffing, the qualifications and training of the staff and the quality assurance programs.

The decommissioning inspection procedures look at specific procedures and processes used during the decommissioning of the site, in the functional areas such as emergency preparedness, security and safety reviews.

The spent fuel safety inspection procedures are concerned with the licensee's facilities procedures and processes for continued site storage of the spent fuel.

The radiological safety inspection procedures are

concerned with occupational exposures, contamination control, radioactive waste management and environment and effluent monitoring.

I should point out that San Onofre is different than the other decommissioning reactor sites within Region 4, in that San Onofre will continue to have two operating reactors during the entire decommissioning process for Unit I. This means that the resident inspectors who are principally assigned to the operating units will be available, if needed, to observe and inspect activities at Unit I. In addition, these resident inspectors will be able to keep my inspectors informed of ongoing activities at Unit I that we can then factor into our inspection planning.

I have included a couple of slides that are in your hand-out and I've also identified the individual inspection procedure numbers, and I'm not going to go into these slides in detail, but these are core inspection procedures and I wanted to list them. For those who are interested, they are available on the NRC Web site and I'll give you the address how to access those, if you would like to go in and take a look at these in more detail.

These are just some more of the core inspection procedures. Let me tell you a little something about the inspection process. Our inspections may be announced or unannounced and the inspection frequency for a

decommissioning reactor is adjusted, according to the level of licensee activities. For example, because Unit I has been in a SAFSTOR status since its shutdown and because there has been a relative lack of activity at the site, our inspection frequency had been extended; however, once Unit I enters into active decommissioning or decontamination and dismantlement activities are ongoing, our inspection presence will increase accordingly. In addition, we will perform targeted inspections to coincide with higher risk activities during the decommissioning process. Once our inspections are complete, we issue formal inspection reports which will be available at the public document room located

at the University of California Irvine.

This slide was a last minute addition, it's not in the hand-out, but I wanted to put it in there in case any of you are interested in looking at our inspection procedures and manual chapter in more detail. It is available through the NRC Web site. I would encourage any of you to visit the NRC Web site. You just -- once you get onto the home page you go into the reference library and not only will you find our inspection manual chapters and inspection procedures in there, but you will also find a lot of other good technical documents and reference sources.

In providing an overview of the NRC's decommissioning inspection program, I must say something

about the NRC inspectors that we have on our Staff. very proud of the high level of qualification and professionalism of the NRC inspecting Staff. Most of the inspectors come to the agency with considerable technical training and experience. Many have advanced degrees in nuclear related fields of expertise, but before we allow them to conduct inspections, they have to go through an extensive certification process internally, and this process includes formal instructor training processes; on the job training where the inspectors accompany already certified inspectors and two oral qualification boards.

One more map here before I conclude my presentation. I want to show that my branch also has responsibility for inspecting the dry cask storage of spent fuel which is being studied for Unit I. We currently have four independent spent fuel storage installations within our Region which are either in operation or where the operation is near term. I appreciate the opportunity to meet with you tonight and I'll turn the discussion back over to Mayor Berg.

MAYOR BERG: Now, we come to the public question and answer period, and I'll just remind you once again, that when you are going to ask a question and/or talk you come to the mike over here on the left and give your name and spell your last name. We would then ask anybody -- Etoy, do you

have the list and do you call them up?

Guess who? Mayor Ruby Netzley, Dana Point.

 $\ensuremath{\mathsf{MAYOR}}$ NETZLEY: I had a feeling you were going to do that to me.

MAYOR BERG: You were first on the list.

MAYOR NETZLEY: Oh, I was lucky. As the Mayor of Dana Point, my name is Ruby Netzley. Address -- do you need that? Okay.

I'm the Mayor of Dana Point and speaking as the Mayor of Dana Point, I want to say that we are very pleased with the San Onofre people, that we think they've been a very good neighbor and I would like the record to show they have been concerned for our residents and they've been concerned for our safety.

Now, I'll take off that hat and tell you that I also a former employee of Southern California Edison Company for many, many years. As a matter of fact, I was there when they built San Onofre I. I escorted people through San Onofre I and I explained the whole operation and the safety methods and so on and so forth. I told them that we not only had redundant back-up systems, but we had redundant back-up systems to redundant back-up systems. I also told them that there was no such thing as a risk-free society; that we didn't claim to be perfect, but then I told them about all the advantages of nuclear power and what it did,

wherever it was in our nation and I'm very grateful and I hate to see Unit I go. I mean it's a history maker. It was there first and it's kind of dear to my heart, but it put out a lot of good power. Its been a very safe operation and I can testify to you personally of the integrity of the employees of Southern California Edison, including their engineers, their operators, because I knew most of them through the years. I can tell you the integrity of the operation of that company and that the NRC knows their record shows that those are the kind of people there.

I also worked with San Diego Gas & Electric who has an interest in this plant and I can also testify of the integrity of their employees. I just want to leave that for the record today. Thank you.

MAYOR BERG: Thank you. Roger Leclerc.

MR. LECLERC: Good evening, my name is Roger Leclerc, L-E-C-L-E-R-C, and firstly, I would like to speak for myself and thank the gentlemen from Edison on what looks like an inspired plan to decommission this facility and thank the gentlemen from the Nuclear Regulatory Commission who are going to be our watchdog and I trust in them completely.

My concern is for the nuclear pill and the availability of the potassium iodine tablets for the citizens of San Clemente; however, they have been dispersed,

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they haven't filtered down to the people and I would like, if someone could tell me, whether this is a compound of potassium iodine or whether it's a combination of potassium iodine, because I'm having trouble with the chemists.

Secondly, if the state or the municipalities are withholding the pill from the public, is there somewhere the public can go and get them on their own, either from the Regulatory Commission or from a pharmacist or through a doctor's prescription, but a tablet that is not on the shelf and available if one has to go to City Hall to get it it must just be too late. That's my individual and personal concern.

Now, as a member of the San Clemente Human Affairs Committee, it just so happens that during the sinco de Mayo celebrations which begin on May 1st, May Day, the Human Affairs Committee is going to put on a Maypole dance and we lack a lovely little power pole that I could borrow for the day. What I am concerned is, as we don't have a budget, if there was someone from San Diego Gas & Electric or from Southern California Edison Company that could help me to borrow a pole for the day May 1st, something short, clean --

MAYOR BERG: Roger, I'm sure we'll take care of

MR. LECLERC: Okay.

MAYOR BERG: Bernardo Garcia.

1 MR. GARCIA: My name is Bernardo Garcia. Region 5 Director for the Utility Workers Union. I have 2 3 some questions for both the Commission and the Edison spokesperson. 5 First, for the Commission. Will there be any 6 additional hearings or meetings on this issue? To answer your question, regarding MR. BURROWS: specifically for the decommissioning, there will be no -8 hearings until it comes time for the license termination 9 10 plan. At that point, there will be an opportunity for a 11 public hearing. 12 MR. GARCIA: I was trying to listen pretty 13 intently when you were making your presentation, but I 14 didn't get a sense of time frame for that filing of the 15 license termination plan. 16 MR. BURROWS: I think it's two years. 17 MR. GARCIA: With the decommissioning and after 18 it's almost completed? MR. BURROWS: Well, it's two years before they 19 20 plan to finish the decommissioning. 21 MR. GARCIA: Before the completion of the 22 decommissioning? Will there be additional hearings at that 23 time? 24 MR. BURROWS: That is the point where the public

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hearing will be available.

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MR. GARCIA: One year or multiple hearings?

MR. BURROWS: Well, it will be a chance for a hearing. I'm not exactly sure of the process.

DR. MASNIK: There is no hearing associated with what you heard tonight about the PSDAR and the update in the back of the room; however, during the decommissioning process which Ed mentioned I think would take approximately eight years there will be a number of license amendments that the licensee will submit to the NRC. Whenever there is an amendment to the license, there is an opportunity for a hearing. Also, as Ron mentioned, approximately two years prior to the termination of the license, there will be an opportunity to request a hearing related to what is called the license termination plan and he talked about that So there is one definitely scheduled and -- that tonight. we have a good idea approximately when it's going to occur and then several opportunities between now and then related to license amendments.

Additionally, under our regulations, any member of the public at any time can petition the Commission for a hearing if they raise a substantial safety concern, so there is that opportunity, too.

MR. GARCIA: And the inspection reports associated with the decommissioning activities, will those be available on the Commission's Web site?

DR. SPITZBERG: I think they will be. I can't state for certain whether they currently are. We are in the process of loading more and more of our inspection reports on the Web site. They will definitely be available through the public document room.

MR. GARCIA: Well, we -- I think that the members of the public and even the employees of the facility would appreciate it if the Commission would make every effort to make those available on the Web site.

DR. SPITZBERG: We'll take that comment back and suggestion back. I believe most of them will be, if not today, they will be soon.

MR. GARCIA: Thank you. I have a couple of questions for the Edison spokesman.

I didn't describe, I guess, in my introduction -I guess I was little too hasty. I didn't think I would be
the first, second or third person up here.

I'm a former Edison employee. Technically, I'm on a leave of absence. I work full-time for a labor organization. I'm the director of the nine western states and I was an employee at Southern California Edison on Unit I for over 10 years. Now, I can personally attest to the qualification, the professionalism of the Edison work force presently at the facility and in the past and I think that -- you know -- the activities are in good hands; however, I

am a little concerned, because in your description of the decommissioning activities, you talked about the knowledge base of the Unit I personnel or former Unit I personnel who may be working elsewhere in the company; however, you didn't tell us who actually is going to perform the work. Edison employees, contractors, employees brought in by a contractor from out of state, existing Edison employees, Edison employees potentially who will be displaced as the result of deregulation of the electric utility industry in the state of California, not that it's just going on in California, but --

MR. SCHERER: Certainly we're early in the process, but to the extent that we can utilize Edison employees or any working at San Onofre, it is our intention to fully utilize those people. That is part of the reason that we're undertaking this effort at this time.

MR. GARCIA: And the employees still in the Edison work force who may be former employees of San Onofre, but no longer based at San Onofre and may be potentially displaced as a result of electric deregulation, will those opportunities be provided to those employees as well?

MR. SCHERER: Again, to the extent that the skills match up to the needs and the requirements and to the extent that work is available, but it is our intention to utilize the Southern California Edison work force that exists at San

Onofre to the extent we can meet our obligations on the existing work that we have and utilize those resources for Unit I decommissioning work, that's certainly our intent.

MR. GARCIA: Also -- well, I have a couple more questions for you. You can't get away that easy.

I don't -- I know the plans may not be at a point where it's completely finalized, but do you have -- so I don't expect you to have an accurate figure -- but do you have even a ballpark figure of how many employees or workers do you expect to be engaged at the -- in the decommissioning activities at any given point -- the beginning, mid, end, a hundred, two hundred, three hundred thousand?

MR. SCHERER: That is, in fact, what we're trying to do over the period of time that we're planning the effort before we'll start the actual decommissioning work. We don't have those numbers at this time.

MR. GARCIA: Do you have any estimates?

MR. SCHERER: No. Not detailed enough that I would be prepared to give you even as ballpark estimates.

MR. GARCIA: Do you have any idea from discussions with other utilities or the regulatory agencies on what decommissioning activities of a similar size or comparable size facility, how many workers it took?

MR. SCHERER: To give you an example, the problem we have is we have to pick the techniques before I can give

you realistic numbers. We could -- and there are technologies available where one worker using automated equipment can do an awful lot of work in terms of decommissioning, resulting in more capital expense, smaller work force. You could also do that work by hand, more work for us, less capital investment. Those issues have not been resolved. Until we know what techniques we are going to use to do the decommissioning, I can't give you a realistic estimate because I can't tell you now whether we're going to do the work by hand or automate it and it's too early to respond. We would be happy to share that with you as soon as we know the techniques we're going to use, that requires us to study the process, what's best for our workers and for the plant.

MR. GARCIA: I notice in the Post Shutdown Decommissioning Activities Reports you do have a monetary amount budgeted for staffing.

MR. SCHERER: Yeah.

MR. GARCIA: How did you come up with that number -- best estimate?

MR. SCHERER: That's -- yeah. Industry standards. Again, those numbers seemed reasonable based on the scope of work that we needed to do and the time necessary to do it.

MR. GARCIA: Now, in a project of this magnitude which based on my 10 plus years of experience working on

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Unit I, I think it would take a good number of workers to perform those activities with or without advance technologies, with varying levels of skill. Some technicians, some skilled tradesmen, some laborers.

Does Edison intend to provide any of those jobs to members of the local community here in San Clemente?

MR. SCHERER: I'll try to get you an answer to that question. I don't know that our plans are that Again, our intention certainly is to try to offer advanced. the work to the extent we can to our own employees, but -and use the talents that exist at San Onofre to try to accomplish this in addition to the other tests that we have. To the extent that we need to bring in other resources, or other talents that are locally available, versus bringing people in from outside, it would certainly seem preferable, but at this point we don't have a detailed plan that we can give you in terms of how we plan to staff this job. can't do that until after we figure out how we're going to accomplish the job.

MR. GARCIA: I understand. Now, I have a comment for you. I would encourage the licensee to utilize the existing work force to its fullest potential because they are the employees with the experience. I would also encourage the licensee to utilize other Edison employees, potentially employees who may be displaced right around the

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year 2000 who may have former experience here at the facility for those activities. They may have other related power plant experience that may not be specific to the nuclear facility, but may directly translate to the activities being performed in the decommissioning activities.

Finally, I would encourage the licensee for those jobs that maybe don't require that specific technical expertise or skill levels that may not be readily available in the community, you know, entry level jobs or lower skilled jobs, that you make an effort to provide some of those jobs to people right here in the local community in San Clemente.

MR. SCHERER: If I didn't cover that in my prepared remarks, I agree with you.

MR. GARCIA: We'll be -- rely on that.

The other question I have -- maybe I missed it. I was trying to follow as best I could. Your estimate is \$459,000,000. Now, it's probably in public records, but I don't have it in front of me. What's the present funding level of the decommissioning fund, I believe it's called?

MR. SCHERER: We have the money available now.

MR. GARCIA: That wasn't my question. What is the -- or maybe I need to be more specific. How much money is in the decommissioning fund at this point in time?

\$459,000,000, \$460,000,000, \$800,000,000?

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MR. SCHERER: I don't have the exact number, but it is -- it is \$459,000,000 -- is in the fund. They are in segregated funds, some are qualified funds. I'll be happy to go into a discussion, but I would have to get the people that are monitoring these funds. There's significant federal legal requirements on how these funds have to be They get into a lot of esoteric terms in terms segregated. of their taxability and certain -- because the rate payer has paid these monies into these funds. These funds must be very carefully segregated. They can only be used for one purpose. That purpose is the decommissioning of San Onofre Any monies that are excess to the decommissioning of San Onofre Unit I must be returned to the rate payer. So there -- and there were changes in the law in terms of the tax treatment allowed to some of these funds so the funds are in different accounts with different tax impacts on whether the money was pre-tax or post-tax and how those get The best way I can simplify the answer is that the money necessary to fund the decommissioning of San Onofre Unit I is on hand now. Not in the future, it's on hand now.

MR. GARCIA: And the segregation of those funds, would that information be available to the public --

MR. SCHERER: In fact --

MR. GARCIA: -- if I were to ask that question

could I get that information?

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MR. SCHERER: In fact, we will be making a report to the Nuclear Regulatory Commission in accordance with their new regulations by March 31st and it will be part of the public record. March 31, 1999 is the first time we're going to have to file a new reporting requirement which the U.S. Nuclear Regulatory Commission has established and we will be providing the status of our funding on the public record to be publicly available.

MR. GARCIA: The final comment or, actually, request I have, is that one of the Locals in the region that I'm the director of is the Local Union that represents existing employees at San Onofre, the operations and maintenance personnel. I would like to make a request that those reports -- the decommissioning -- you know -- reports to the Commission that a copy of those be provided to the -- to the Local Union leadership without them having to go and hunt them down. We would appreciate that.

MR: SCHERER: Thank you.

MR. GARCIA: Thank you.

MS. BERG: Dena Naylor.

MS. NAYLOR: My name is Dena Naylor, N-A-Y-L-O-R. My address is 307 Avenida Cabria, which is just a couple of blocks away here in San Clemente. Actually, half a block away. I appreciate the opportunity to get up and talk in

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front of the group, meaning my neighbors and my friends.

am a resident of San Clemente and I've been a resident for
the past 18 years. Not only am I a resident of San
Clemente, but I'm also an employee of San Onofre and have
also been employed at San Onofre for 18 years.

I've worked there in various positions from nuclear training instructor, to engineering, to a supervisory position and would just like to go on the record to say that I have the utmost confidence in San Onofre and the quality of the work that goes on there, and the interest of San Onofre in the public health and in their ability to -- to meet all of the needs that are out there as far as public safety and public health.

I know it may sound kind of easy for me to say that because, hey, I'm kind of biased because I'm an employee of San Onofre but I would like to offer something else. My career at San Onofre is really a second career. On about 1980, I was employed in the health physics -- I'm sorry, in public health in the University of Missouri Columbia. I worked and taught at the University of Missouri and by working on my Ph.D. there, I ran across a couple of classes that I had the opportunity of taking which dealt with health physics, radiation protection, and seeing as my husband had been a career employee in the Navy -- in the nuclear Navy -- and also worked at the research reactor

there, I was not totally convinced that this was something that I would like my family to pursue for the rest of -- at least for the rest of my husband's life, and took it upon myself to take some of these classes to make an educated decision on my -- by myself as to hey, is this something Is working near a power plant, are they a good neighbor and secondly, is it also good to work in a power plant. Needless to say that after taking a few classes, not only was I convinced that nuclear power and -- was a safe --they were safe neighbors and also a safe industry to work I changed careers and consequently ended up at San Onofre in 1981. I pursued a master's degree in health physics and have been working at San Onofre since then.

Now, I come from the background of having health, safety and wellness, you know, as my number one priority. As I say, I was not always an enthusiast and a supporter of nuclear power, but because of what I have learned about it, you know, I again, have the -- feel that I've got the qualifications to be able to make an educated evaluation of what goes on and I offer that as -- you know -- as one of my reasons for saying that what I see going on within the San Onofre power plant definitely supports safety.

I think even more important than that, I would offer this -- that may be my belief, but I back up my belief with the fact that I am a resident of San Clemente and have

been so for 18 years. I've raised a family here and my son has gone through school here all the way up through high school, graduated. My husband has worked at San Onofre off and on and as a matter of fact, my son's very first real job he ever had when he graduated from high school was at San Onofre.

Now, people who know me here -- people that I work with and my friends in the community, they can attest to the fact that my family is very important to me. I mean there is nothing in this life that is more important to me than my family and if I did not believe that San Onofre was a good neighbor and also a good place to work, I wouldn't be living here and I would not have allowed my family to work there.

The confidence that I've had in San Onofre as an operating plant -- I mean I believe that they -- Units II and III they operate that very well. They -- you know -- definitely meet and probably exceeds all of the requirements that NRC puts out there and they keep public health and safety and the safety of the workers foremost. Again, I would just like to go on record as supporting them and having the utmost confidence in whatever they do as far as decommissioning and the plans that are going into it and the work and the quality of the work that will go into it, that it will be the same as what has happened and what I have seen over the past 18 years. Thank you.

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MAYOR BERG: Sheila Benecke.

MS. BENECKE: Good evening. I'm Sheila Benecke, B-E-N-E-C-K-E. I am the vice president of the school board of Capistrano Unified School District and I came down tonight just to give a brief comment. Our school district educates over 42,000 students. Geographically, we are about 200 square miles in South County. We are the largest employer in South County, with 41 schools and about eight more schools on the drawing board.

I have talked with our Director of Safety who serves on the Interjurisdictional Planning Committee with San Onofre and he has assured me that all relationships and all communications have been more than thorough.

I am here to ask you to continue to work well in communicating with all agencies as you go into decommissioning. I have every faith that you will and I am wanting to comment also, just as an individual, how impressed I have been in the good neighbor that SONGS has been with us.

We have many employees at SONGS who come into our schools and participate in the education of our students and we consider them a wealth of resources for us. We know them to be dedicated and intelligent and capable employees. In fact, I was pleased to hear tonight that you're accommodating the utilization of employees who understand

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Unit I, have worked on Unit I, will be most familiar with Unit I in your decommissioning.

With that, I would like to thank you for this opportunity and wish you well with your project.

MAYOR BERG: Marion Pack.

MS. PACK: My name is Marion Pack, P-A-C-K and it seems like there's really been more questions raised than answers, and I'm wondering why if this so early in the process and it's been a lot of the way that the decommissioning is going to take place, why there couldn't be more public hearings to update the public as the process does take place, things like how many shipments will it take to remove all of what is there as far as the decommissioning process? Does anybody have any ideas how many shipments it's going to take? Also when this material is moved, some of it is very highly radioactive, has a reactive vessel this size ever been decommissioned and moved before and what kind of shielding will be placed around it when it is removed, to protect the public nearby?

DR. MASNIK: Mike Masnik. It might be best if you ask the questions and then we can -- instead of just keep going back and forth --

MS. PACK: Okay. Okay.

DR. MASNIK: -- and I'll keep track of them here and we'll answer them.

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MS. PACK: Also on the line of the shipments. When shipments are moved, I believe the transportation routes pretty much from here are north along the 5 Freeway, be it by rail which runs very close to the 5 Freeway or by the 5 Freeway itself. Will there be emergency response teams that will be traveling with the waste as it moves up through some of the most densely populated areas in our nation? Last year there was an accident right at the Orange Crush and a barrel of radioactive waste became dislodged from a truck and it took them five hours to get a response team there. If this was highly radioactive, or more radioactive than what it was, it could have been a real disaster. So I would like to know about emergency response teams traveling along with the waste. And where is it going The only two places I know of right at this time is Enviro Care in Utah and all the way to Barnwell, South Carolina.

What type of waste is this and which place will it go to because both of them necessitate traveling a long distance and what about the communities that it passes through?

Will there be any public hearings held to make the public aware and -- you know -- have their comments as this process takes place, because really it's -- it kind of sounds like we're in almost a -- a new phase here as

decommissioning starts, more like a -- you know -- kind of an early experiment in that many times you've said we don't know the processes that are going to be used.

Oh, and liquid waste. How will liquid waste be handled? The coolants that is inside the reactor vessel, that also is very highly radioactive and how will liquid waste be handled and where will that go to? I think all of these questions are concerns that the public really need to have answers to and this process is going to take eight years and I would certainly hope there will be more updates.

DR. MASNIK: Mike Masnik, NRC. Your first comment was on updating the public. The licensee is required by our regulations to periodically update their plans for decommissioning this PSDAR, if there's any substantial changes. For example, one of the things they gave us was a schedule in the PSDAR and if you take a look in the back of the room there, there are several copies. If that schedule changes significantly -- you know -- in the order of months or years, they are required to notify us. That information is available to the public.

We don't normally have any -- any additional public meetings associated with decommissioning until we get quite a ways down the road towards the license termination phase. Once we get into the license termination phase, which is approximately two years prior to the end of the

termination or if they, indeed, complete the job in eight years, it would be at approximately the six year mark. We would also have another public meeting at that time.

We normally make available all of the documents that are communicated between the NRC and the licensee. Those are placed in the docket. Additionally, as you saw, we put up our project manager's name, E-mail address and phone number and if you have questions he's a good resource to ask about what's happening there and when it's happening.

You asked about shipments in a vessel of this size. We saize. We have not shipped a vessel of this size. We shipped one slightly smaller about two months ago. In fact, it went right by my office in Rockville at about 2:30 in the morning. In approximately six months we will be shipping a vessel much larger than the vessel here up at the Trojan site. They are in the process of readying it and it will be shipped to the Hanford site.

You asked about freeway transportation and response teams. You were correct in that most of the shipments will either be by rail or by interstate. The licensee chooses that. Typically we encourage and the transportation routes normally follow the interstates. We don't -- we're not comfortable with moving this kind of waste through small communities on secondary or tertiary roads. We do not require -- in fact, it's not the NRC's

 responsibility, but the Department of Transportation that regulates transportation over the highways. But in any case, there is no requirement for response teams to travel with this waste. There are incident response teams in all states and they do come out periodically when there are problems like this to respond. They are the first responders.

As far as the amount of waste, I would encourage you to get the little blue book in the back that talks about frequently asked questions.

MS. PACK: They're all gone.

DR. MASNIK: We will get you one before you get -leave tonight. I have several copies of my own that I will
give you.

MR. SCHERER: We do have some more left.

DR. MASNIK: We do have some more? Okay. There is a section in there on transportation of waste and one of the things it talks about is that over the last number of years there has been an -- over a thousand shipments of high level waste which is significantly more dangerous than the low level waste. We haven't had any serious accidents or fatalities associated with it. Waste is transported over the highways in this country on a daily basis and I think the industry has a pretty good record in that area.

You asked about whether or not -- where the waste

will go and you were correct, Barnwell, I believe, unless -is the only facility that's open to the licensee as well as
the Enviro Care at this time. Communities are not normally
notified of the transport of waste through their community.
It's just -- has not been done.

You mentioned that it was an early experiment. We have quite a experience base in decommissioning and I -- we had one slide tonight that talked about the facilities. I personally have inspected waste shipments leaving the Trojan site. I've also inspected with the state of Washington shipments of large components arriving at the Hanford site. We do have a lot of experience in this area.

Finally, you asked about liquid waste. The waste disposal sites in this country do not accept liquid waste from commercial plants. The liquid wastes are processed on site and the liquid portion is -- the liquid part is separated from the solid part and the solid part is what's disposed of. Any liquids are cleaned up through a series of processes and then that liquid is disposed of, typically, through the Riteways Disposal System and in the case of Southern California Edison it would be discharged through the ocean once they remove or reduce the amount of radioactivity to levels that were below the federal limits. I believe that was all of your questions. Do you have anything to add, Ed, or --

MR. SCHERER: Only to add -- an implied part of one of your questions is that there is a -- appears to be some highly radioactive liquid waste at Unit I, and that's not the case. The reactor vessel, for example, has long since been drained and safely done. It is in a dry condition. The highly radioactive materials are the ones we outlined in our presentation, are the fuel and the greater than classy waste that we talked about here in terms of disposing.

MS. PACK: Could I just ask then, in the cooling ponds, where the fuel rods are stored right now, that water does become -- that's a mixture of water and boron -- and it does become highly radioactive when the fuel rods are stored in it and it sounds to me that you will be dry cast storing the rods, so what does happen to -- is there -- that is liquid and that is radioactive water. Where does it go?

MR. SCHERER: It's liquid and it's radioactive, but it's slightly radioactive. It is not highly radioactive water.

DR. MASNIK: To answer your question -- Mike

Masnik -- is that water is treated before it's discharged,

and it's also monitored to make sure that before it's

discharged from the facility it's below the federal limits.

MR. SCHERER: Yeah.

MS. PARK: Just recently, in fact last June, there

was a shipment of foreign fuel that came in through the Bay Area and the communities were notified in advance and there were emergency response teams that were traveling with them and there was a tracking system, so I would consider that on the higher radioactive parts that that be considered. Thanks.

DR. SPITZBERG: My -- that's true for high level waste shipments. The Governor's office is notified in advance and the local emergency responders are also notified by the Governor's office.

DR . SPITEBERG

MR. BURROWS: Mike, I think that was fuel that came in from overseas.

DR. MASNIK: Yes. Yes, that was the overseas fuel.

MAYOR BERG: Jeff Wright.

MR. WRIGHT: My name is Jeff Wright, P.O. Box 2341, San Bernardino 92406.

MAYOR BERG: Please spell your name.

MR. WRIGHT: W-R-I-G-H-T. As you can tell, I don't live in this area; however, I have surfed and I have swam in the ocean here. I travel through here. I visit and I'm very concerned about what may come out of here and go through my community, because that's the appearance of what's going to happen.

I'm very concerned about what I heard just now

about accident response being the responsibility of the Nuclear Regulatory Commission, the NRC. In my investigation of this overall issue, I have found that the first responder is, in fact, the California Highway Patrol, CHP, and then the Nuclear Regulatory Commission, and our public safety officers in the form of CHP do not really have adequate training to deal with emergency on the level of a high level nuclear accident or a low level nuclear accident. Who responds to the train accidents? Is that also the CHP, or is that the NRC at that point, or does the railroad self-regulate?

The Department of Energy out of Nevada, Las Vegas, Nevada, has just proposed a plan that would go through the San Bernardino County area and in that plan they do, in fact, go through small communities. That's the reason that they're going through San Bernardino County, to avoid a large community, that being Las Vegas. Currently, from the east, they go through Kingman, then on up over the Hoover Dam, which is comforting, I'm sure, to everybody here. Then they go through Las Vegas on up to the Nevada Test Site. Las Vegas doesn't want it. A gambling town does not want the shipments by rail or by truck inter-mobile transfers happening in their community.

It's interesting a gambling town doesn't like the odds on this, but yet they'll ship through California 150

miles further and increase the odds, in fact, of an accident occurring so that they can bypass Las Vegas, but yet go through smaller communities. I believe, unless I was incorrectly hearing, that is contradictory to what was stated by you folks a few minutes ago, that that is not the intent, to go through small communities. I believe that it is, in fact, part of the agenda to go through allegedly smaller communities; however, on this inter-mobile plan that's occurring out there, the connection is that they bring it through Needles, either by truck or train, up to Barstow and transfer it at Barstow from the rail to the truck and go from there to Baker, the back way to the Nevada Test Site. So two hours of exposure, if you're driving next to a truck and you don't even realize maybe that there's a compromised container in there -- spilled container -- which they, in fact, did have happen. Two hours of potential exposure on that road. That's the same road that would be taken in an easterly direction from here and if there's not already established DOE nuclear transportation corridor that makes it just that much easier, even if it's allegedly low level to bring high level through there, doesn't it? Doesn't it?

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I'm very concerned about the incremental aspect of the programmatic waste management plan which is overall a big picture of hazardous, high level, low level so-called,

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radioactive material and toxic materials, mixed waste, liquid waste, et cetera, et al., ad infinitum, ad nauseam and on and on that's going to be through our communities.

This evening I was watching the news -- in fact, it was this afternoon. There was a truck accident on the I-5 where there was a fatality. The cab went off one side, the trailer went off the other. Let's say that shipment wasn't radioactive, let's say it was eggs. What if, for instance, on the freeway below there was a nuclear shipment going up the I-5 and they got egg in their face, literally and figuratively from a truck from above. Just because the NRC and Edison claim to have a wonderful safety record, when you go out on that freeway you can encounter everything from eggs to road rage to -- you know -- you can't tell what. We've had signs fall down from winds, on trucks. There's no way and it wouldn't necessarily be quote "Your fault", but even with no fault aspects, it would then become everybody's liability because we know that there's not enough insurance anywhere to cover all of these type of potential incidents and they occur every single day. They are in the newspapers, they are on TV all of the time and I'm just not comfortable with the potential of moving the stuff around in this manner.

Just a couple of weeks ago, due to human error at

this facility, I believe it was Reactor I, was shut down for something like 23 minutes or so due to human error -- a power shutdown. We didn't get much news about that, that's not surprising. I would like to hear a little bit more news since you people probably do know a lot about that, you should be forthcoming with this concerned gathering here tonight as to what actually happened there and explain how that fits into your safety record.

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Human error happens. On the way in on the freeway tonight, the big Edison building up here, Edison's own sign, it said Edison Internatal. The I-O-N was burned out. Interesting that Edison can't even keep its own sign lit. And that puts it in perspective. I found that frightenly ironic that Edison International sign was half burned out, but you claim to have a wonderful safety record, no problems, no flaws, nothing will ever happen, everything's safe. High level versus low level radioactive waste. There is no clear definition, in fact, there is no such definition. There is so much crossover between what is allegedly high level and what is purportedly low level that there are no clear lines, it's all a big blur. What is sometimes high level, depending on the source at the DOE, if it was industry, it would be considered low level just because of the source, not the radioactive content, the source itself, industrial versus Governmental. I would like

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to know about the plutonium broad issue -- you know -- the reactor is one thing, the concrete and all is allegedly low level. The water from the pools is purportedly below concern, but when you have the plutonium rods themselves, where do they go? Do they go up to the Nevada test site? Are they enroute to Yakima on our freeways?

U.S. Enrichment Corporation, how much of a holding has the United States Enrichment Corporation brought forth by Public Law 102-486. As the Bush administration was winding down, approximately October 23, 1994, Public Law 102-486 brought forth the U.S. Enrichment Corporation to deal with enriched uranium. Plutonium futures, let's call Their main mission is to make as much money as possible it. for the United States Treasury. They are a source of uranium and plutonium. About fifth on the list of their purposes is to market and sell enriched uranium to persons domestic and foreign. There you have it, folks, that's what fuels this whole plutonium nightmare world-wide. That's why we have things going on in India, in Pakistan, because we're handing out the game pieces to all of these countries internationally to make power plants when it's really oftentimes used for nuclear weapons and whatever terrorism . If you're dead, you're dead. Is it not in fact terrorism if there's a nuclear accident because Edison is shipping it by rail or by truck on the freeway and they do

not inform the public where this stuff is going so the public can avoid it. What happened to the umbrella of national security that's supposed to protect the public, the citizens of this country, of this state, of this county, of Southern California? Why is it that this umbrella of national security is folded under the guise of, "We can't let this information out, because of terrorism potential". Well, isn't it, in fact, terrorism to be next to a leaking container in a truck or a train that's nearby where you may Is that not, in fact, terrorism if you're cross the tracks? just as dead as if the terrorists blew you off? What's the Is it okay because a corporation does it? difference? it okay because the U.S. Enrichment Corporation under the cover of the United States Department of Energy allow this to occur and that that's their charge now, they have taken a portion of the U.S. Government's responsibility and until that company is 100 percent public, we will have to deal with any decision that the U.S. Government decides. want to go private, allegedly, but if they don't go private, if there's .000001 percent, a penny owned by the Government, the shareholders don't get to make any determinations.

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The I-5 goes into the Alameda Corridor. These are pathways, migratory corridors for human beings, if you may, from here to Northern California, from back east to here, for shipments of goods and services. One disruption could

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ruin your whole afternoon of this traffic nightmare that would occur, plus you would have to figure out how to bypass that, purchase new property, and do you have any insurance to do that, to buy any roads? Maybe we could use a new toll road through Irvine, so that it could actually become a freeway again. The public paid for it, after all.

When I hear that public hearings will be quite a ways down the road, the innuendo in and of itself has frightening implications. This needs to be dealt with before there's a problem. Keep it on-site. You've opened the Pandora's box and let the Genie out. At least keep it on-site and double or triple or quadruple the transport of the stuff.

I read in an article about this hearing tonight, Ward Valley, if it opens, is going to be the final destination of Edison's radioactive trash. The nuclear power plant, concrete, the bolts, portions of whatever residual material it may have contacted and wiped onto this structure that's around there.

Now, I am very, very concerned about our future and hearing about a 2:30 a.m. shipment through Rockville, was that a high level shipment, was that a low level shipment? How do you define the plutonium? Where do you send it? Is the U.S. Department of Enrichment responsible for it? Whose charge is that? Does Edison hand it off to

the Government when they're done with it, or does Edison give it to the U.S. Enrichment Corporation when they're done with it? I'm very, very concerned and not really comfortable with what I've heard tonight. In honor of all the people who have fought this issue and done this out of concern and lost their lives over this, God bless Karen . Silkwood. Thank you very much.

MAYOR BERG: Marjorie Michaels.

MR. WRIGHT: Isn't anyone going to answer my questions?

DR. SPITZBERG: I can try and answer some of your questions. I'm not sure I got them all. Let me cite a few things about the transportation of radioactive waste.

First of all, California is an agreement state, which means that they've entered into an agreement with the NRC to regulate certain activities involving licensed material, and because of that the state of California does have a role in responding to emergencies that may occur within the state involving transported radioactive materials. The Department of Transportation also has a role and we have a role.

In general, the design of packages for transporting radioactive waste, as the hazard of the package increases, the rigor in which the package is constructed, tested and certified increases. In other words, as the

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hazard of the package increases, the package is designed and tested and certified by the NRC and the Department of Transportation to withstand accident conditions. Many of these packages are tested to exceed the accident conditions which may occur in normal transit -- transport and particularly with regard to the high level waste, these packages are certified by the NRC and we inspect the design, the fabrication, the testing and the actual placement of the radioactive material in the packages and these packages do withstand severe accident conditions.

I'm not aware of any highways that have had to be replaced or repaired as a result of transport of radioactive materials. I'm not aware of any accidents that have caused highways to have to be taken up and rebuilt.

Linda, did you want to address the question concerning the shutdown?

MS. SMITH: Yeah, I can discuss that.

DR. SPITZBERG: Linda Smith is representing one of our project branches from the Region. She may have some information related to that.

MS. SMITH: Yeah. I am the supervisor over the resident inspectors in Unit II and Unit III at San Onofre and I've just recently taken this position.

But just to clear up what you were talking about --

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UNIDENTIFIED SPEAKER: Cannot hear you.

MS. SMITH: Can you hear me now?

UNIDENTIFIED SPEAKER: Yes.

MS. SMITH: Okay. Hi. My name is Linda Smith and I'm the supervisor of the resident inspectors for the Unit II and Unit III at San Onofre and I just wanted to give you a little bit of clarifying information about the event that you talked about that happened with the 23 minutes.

What that was, was fairly recently there was an error, a human error made out at the Utility and what happened was the operators thought a breaker was going to work one way and it actually worked a different way. As a result of that they closed in on a ground and all of the equipment worked as designed, but it had the effect of losing power to the shutdown cooling system. This was for the unit that was in an outage and for 23 minutes they did not have power in the shutdown cooling system.

Now, because there's a lot of barriers to safety
-- I mean we do a lot of different things to make sure that
things are safe and the condition that they were doing this
work in, there was a lot of water on top of the fuel that
was in the core and the actual temperature rise was like two
degrees or three degrees. I don't remember exactly, but it
went from like 71 degrees to 74 degrees. So there was an
error and we -- we put a special inspection team in place

and we're still, really investigating the full implications of that. The licensee has completed their root cause analysis and the inspection is in progress and I think it will be probably another week before we exit on it. But as far as actual safety consequences to the public, you know, I just think that it's important that everybody understands that the cooling water was always there and it did -- it did increase like two or three degrees in temperature from like 71 to 74 degrees. But the operators within that 23 minutes were able to get the power back and the shutdown cooling restored to the unit that was in power.

I just wanted to help you put that a little bit in context. Thank you.

DR. SPITZBERG: Let me also just say one thing.

I'm not acutely familiar with what the situation is with the U.S. Enrichment, but U.S. Enrichment, my understanding is they have no connection to any spent fuel radioactive waste or plutonium at any site. U.S. Enrichment is -- was an effort by the Administration to privatize what used to be the Department of Energy's facility for the gaseous defusion plants which are a key part of the uranium fuel cycle for enriching the uranium isotopes to a form that can be used to generate electricity and commercial nuclear reactors.

So I'm not sure what your question specifically was, related to that, but the U.S. Enrichment Corporation is

	<u> </u>
1	merely a privatized former DOE facility that has been
2	operating for many, many years enriching uranium for
3	commercial nuclear power.
4	MR. WRIGHT: The question was concerning ownership
5	for shareholding by U.S. Enrichment Corporation and also on
6	page 55
7	MAYOR BERG: You have to come up to the
8	microphone.
9	MR. WRIGHT: the third from the bottom you
10	have
11	DR. SPITZBERG: I'm sorry.
12	MR. WRIGHT: for transporting spent fuel and
13	MAYOR BERG: This isn't on the record.
14	DR. SPITZBERG: We need to could you come up
15	MR. WRIGHT: you need to address that.
16	MAYOR BERG: You need to come up to use the
17	microphone because this is all on tape and we can't get it
18	on tape
19	MR. WRIGHT: Can I do that very quickly, then?
20	MAYOR BERG: Yes.
21	MR. WRIGHT: Because I just have a real quick
22	question
23	MAYOR BERG: We'll give you three minutes, Jeff.
24	MR. WRIGHT: Three minutes?
25	Very quickly can I use this one since she's
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over there -- real quickly, because I'm not even going to be three minutes.

The question was concerning the U.S. Enrichment Corporation's ownership or shareholding within Edison and also on page 55 of your blue document, I don't have the name in front of me, but it talks about -- third from the bottom --

MAYOR BERG: Speak into the mike.

MR. WRIGHT: -- third from the bottom it has a number 111, and it talks about severe highway and railway accidents from 1987. So somebody knows something about this type of situation from a while back. I would like to know what -- if there's any updates on that and if you could address that particular document and any of its implications to assure us that you can transport this stuff safely without having those severe accidents that are mentioned. It's in your own reference material. Thank you.

DR. SPITZBERG: Yes, sir. If you would give us your address, we will send you a copy of that new reg. What that new reg does is explain the safety features of the transport packages for radioactive materials.

MR. WRIGHT: Thank you. And the ownership issue.

DR. SPITZBERG: I really can't address the ownership issue. I think U.S. Enrichment Corporation having been privatized, I think is open to investors.

MAYOR BERG: Marjorie Mikels.

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MS. MIKELS: Yes. It's Mikels. M-I-K-E-L-S, and I'm -- my office is at 201 North First Avenue in Upland, California. Can you hear me okay?

The first question I have is whether the radiation from San Onofre will get into the ocean and kill all of our sea life if you leave the plant right where it is and don't chop it up in pieces and move it all over the country. hope someone will address the question as to whether it is leaking now into the Pacific Ocean or whether you expect it to and whether the radiation is getting out, emitting into the air or the soil or the neighborhoods around this plant and if it's not, and if you don't expect it to in the future, then why do we not just encase it right where it is? We could use vitrification, encase it in glass. We could use lead-lined concrete blocks and build a big monument over We could call it the Monument to the Human Folly of our it. age, because we really didn't know when we started building these reactors that they wouldn't last forever, that they would only be good for 15, 16, 20 years and then they would get so hot they would have to be dismantled. We didn't have experience with Shernobyl or Three Mile Island back then when we thought that this was atoms for peace and the secret to this wonderful energy that we could centralize and even though it cost us billions of dollars to create it all over

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the country, it was going to be quote "Clean energy". did not know the impacts of radiation. We didn't know that it would cause leukemia in our children and cancer, and breast cancer in our women, and prostate cancer in our men. We didn't know. So now we know and now you want it out of your communities, but is it going to help? Tell me? it all in pieces and put it on trains and on trucks and to ship it all through our neighborhoods and to send it all the way across the country, or at a minimum, to the Nevada Test Site or to Ward Valley to dump it in shallow burial in the sand and throw dirt over it, right over the largest ground water aquifer in the entire desert, with five connecting links to the Colorado River in which 20,000,000 of us get our water, via the NWD aqueduct that brings the water to Southern California?

Okay, so that's the first question. Is this thing going to leak and if not why not leave it there? Okay?

The second question is I know that this is the largest core that you've ever had to cut up. They say it's 750 tons. You have some experience, I guess, at Hanford, cutting up one, but it was a lot smaller and I know you can't move that core without cutting it up into a lot of little pieces and loading it on trucks and trains and shipping it out of there. So I guess I'd like to know if you could share with us a little more vividly, because you

didn't show any pictures or anything of what it's like to cut up a core of a reactor, especially one this size. You know I was hoping to get some graphics here -- you know -- please share with us what it's like to cut this up. How big was the one in Hanford; what it took; how many shipments it took to get it out of there; how many people; what you did to protect citizens, the workers, everyone, while you're cutting this thing up.

Now, we have some experience with the -- for instance, the fallout from the Nevada Test Site and so forth. There's a great book, this guy's -- Radkin, I think it is -- just wrote this book called Fallout that traces all of the leukemia and the cancers of all the downwind people from the Nevada Test Site and we know how those were covered up. We know how in the name of defense and protection of the freedom of our country how important it was to cover up how deadly nuclear radioactivity is and we saw what our Government, to protect our freedom, has done in those instances. Okay?

Are you going to tell the people about what they're being exposed to? I remember reading about some cases involving San Onofre where employees actually did sue for their cancers and I remember reading the court decisions. Oh, no, nothing -- you know -- no connection, no proximate cause. Now that's a very important issue, because

if you leave it there and it starts getting in the ground, in the air, and it starts emitting, then we're going to get 2 a lot of clusters, aren't we, and the problem of 3 establishing liability, which is proximate cause, will 4 disappear and people of this country will start holding you, 5 the power brokers and the United States of America, liable 6 for unleashing weapons of mass destruction in our communities. But if you can get it out on the road so it's 8 9 going through everybody's neighborhoods across this country, 10 the rails, the truck routes, then it's spread isn't it, and 11 you don't know if the truck next to you has within it 12 containers which have been compromised. You're going to Las 13 Vegas for a nice weekend and it's in the lane next to you, 14 but you will never know where that cancer came from, because 15 it's on the road and you can't tell, and they aren't marking. 16 them with placards and they aren't traveling with little 17 Highway Patrol groups going around.

Now, I just have a few more things, Mayor, I'll try to speed this up.

I would like to know how --

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MAYOR BERG: Our time really for the meeting, we had set 9:00 o'clock as the time, so if you could speed it up, we would appreciate it.

MS. MIKELS: I sure will. Thank you so much.

I would like to know how densely radiated is the

core and all of the parts and I would like to know what 1 you're going to do about the -- to prevent the lives in 2 danger when you do start chopping it up in little pieces and 3 I want to be -- know why the reason the plants can't be used 4 as storage for other nuclear waste. Why can't -- you know 5 -- I mean somebody has said, "You make it, you keep it". 6 7 Okay? You've been licensed to make it there, presumably whoever licensed you thought it was safe for you to have 8 Alpha and Beta and Gamma emissions at this place. Okay? In the name of centralized power, it was much more economical 10 11 than solar energy. Much more economical than the wind or 12 the waves. Okay? For you to build these billion dollar monuments to our great knowledge, okay, and centralize the 13 14 power and keep your hands on the money, okay. But why don't you store nuclear waste there? Why don't you cover it up, 15 encase it, okay?

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Now, there's 22,500 licensed radioactive spots around the country. We're going to move them all around and make more and proliferate it. Is that what we're going to Is that the policy in this country, and I understand there are 103 operating plants, still needing to be dismantled. I just recommend and ask that you and our Government consider storing the waste from these plants -- I have to say one more thing. High and low level is a fraud on the American people and I can show you the part of the

Congressional record where they acknowledge that a lot of the high -- of the low level waste, which is the same 2 radionuclides in your plant. You've got uranium 238. You've got plutonium 239. The most deadly, lethal, long lasting wastes and poisons ever created by man, and they're 5 6 called low level because they come from Edison's plant and 7 not from the weapons plants. Okay? That's how our 8 Congress, with the lobbyist from you, have classified it, 9 but that is a misclassification and that is a fraud, and 10 when I get rid of my garbage each week, I have a place for 11 my paper, and I've got the place for my glass, and I've got 12 the place for my cans, but they are not requiring you, you who are to be our wisest scientists and so forth, to make 13 the classifications based on the radionuclide, based on the 14 isotope, the longevity of it and how poison it is to us, how 15 quickly it will cause us cancers and mutations and will --16 17 to medically alter our children.

Now those are the issues that I would like addressed and I didn't hear them addressed tonight. I heard people talk about how they worked for the plant and they thought you've done such a wonderful job. Well, why do they want it out of there? Okay? Why do they want it on our roads, in our communities, going through Orange County and San Bernardino County and all across this country unless you can get Ward Valley and throw it right over our water

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resource in sandy trenches and say that that is isolated from the environment. It's not isolating it from any of us. Encase it where it is and let's stop creating this in our next millennium. Let's get solar. You're Edison. You can do it. Go out to Barstow, see those solar panels. It's possible. We have so much wind in our desert we could power the whole state and you've got ways -- they will move a will. Thank you very much.

DR. MASNIK

MR. SCHERER: First I would like to lead off, Ms. Mikels, in that you were referencing or referring to us. We do not -- we're not the Utility, we're the regulators, so --

MS. MIKELS: Oh, good. You can even do more. You take this message to Washington, D.C.?

DR. MASNIK

MR: SCHERER: Next, I would like to talk real quick about radiation from San Onofre, why not leave it where it is?

First of all, when these plants were designed they were not designed for the permanent storage of radioactive waste.

MS. MIKELS: Were they designed to be cut up in little pieces and put on our freeways -- DR. MASWIK

MR. SCHERER: The Commission --

MS. MIKELS: -- fifteen or twenty years later?

MAYOR BERG: She has to come to the microphone if you want this on the record.

DR. MASNIK

MR.—SCHERER: The Commission has made it a matter of policy that the facilities are required to clean up their sites such that ultimately the property and the facilities can be free released. As a matter of policy, we are required to clean up the sites.

MS. MIKELS: Does that mean remove it, and put a golf course there?

DR. SPITZBERG: Now, the next question that you asked had to do with the size of the cores that could be cut up, and you mentioned 750 tons. To my recollection, the Shoreham Plant, which was a plant up on Long Island, had its reactor vessel cut up. I think what you meant when you said largest core, you meant the reactor vessel itself. The core of the reactor has been removed and placed in the spent fuel pool, or at least the fuel that's in the reactor core.

The next plant that was disassembled was Maine Yankee, which is up in -- I'm sorry, Yankee Row which is up in Massachusetts and in that case they actually removed the reactor vessel internals and removed the vessel and shipped that which is a vessel I believe that's also smaller than San Onofre. The one that I mentioned the last time I was up here are the Saxton Plant, which was the one that went by my office, was also smaller than the vessel here. The one that I mentioned that is in the process of being readied for shipment is the Trojan plant and that's significantly larger

than this reactor vessel. It's been filled with high density concrete -- low density concrete. It has not had its reactor vessel internals removed and it will be shipped, as I mentioned, some time this year.

You talked about exposure to the public for transportation. There have been several studies done that looked at what the potential exposure associated with decommissioning is. The most recent and the one that we put the most reliance on is the generic environmental impact statement for decommissioning that was published in 1988, and it estimated between three and 21 person ramm for -- for the actual decommissioning of approximately a thousand megawatt plant which is significantly larger than this plant.

The primary source of that exposure had to do with transportation. We have some more recent numbers and the fem Trojan plant estimated approximately 4.8 person ramm, and her when I say person ramm, you have to understand that that exposure is spread over the entire population and as you mentioned it's related to the actual shipment.

To my knowledge all shipments of radioactive waste are on placarded trucks and as a result -- I mean you do know if there's a vehicle next to you that is radioactive, or carrying radioactive waste.

You asked how densely irradiated the core of San

Onofre was. I guess that's a question that the licensee either knows the answer or will probably typically -- during this process they do characterize the core. Are we aware of the reactor vessel --

MR. SCHERER: The internals will be greater than $\boldsymbol{\zeta}$ Class \boldsymbol{Z} .

DR. SPITZBERG: Okay, that's only in --

Classification of waste, do you want to -- the waste, it's not -- the classification of waste is not unique to DOE. In fact, high level waste are generated by commercial nuclear power plants. It is the waste associated with the spent nuclear fuel and the transuranic isotopes that are created within that spent nuclear fuel.

Now, you're correct that if a fuel rod, for example, leaks and some of --

UNIDENTIFIED SPEAKER: Excuse me. Would you speak in a microphone. I can't hear you.

DR. SPITZBERG: The difference between high level and low level radioactive waste stems back to the origin. Spent nuclear fuel which is contained in fuel rods with cladding is high level waste, as are certain transuranic wastes which are the heavy isotopes caused by the interaction of neutrons with the uranium and plutonium within the nuclear fuel.

If a nuclear fuel road were to develop a leak,

some of the contamination within the rod could then enter 1 the reactor coolant system and then could be captured in the 2 systems, the clean up resins of the facility and that can be 3 classified as low level waste; however, the vast majority of 4 the high level waste is contained within the fuel rods 5 themselves and the difference between the high level waste 6 and the low level waste is where you can dispose of them. 7 Right now we do not have a disposal site that is accepting 8 9 high level waste for disposal. We do have a number of disposal sites that are approved for shallow land burial of 10 low level waste. So that is the distinction between the 11 two, it's not related to whether it comes from the 12 Department of Energy or commercial nuclear power plants. 13 14 What was the other question? 15 MR. WRIGHT:

That was the last one I had.

DR. SPITZBERG: Okav.

MAYOR BERG: Did you get your question answered?

MR. WRIGHT: I suppose maybe they will do it

later.

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DR. MASNIK: Mike Masnik. Your question on the potassium iodide, we'll get back to you on that. since we're in the decommissioning aspect of this, it's not an issue that we confront on a daily basis, but we will provide you with a response. Talk to me after the meeting and we'll get your name and address.

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MAYOR BERG: We have run out of time. it's been a very great learning experience for all of us. We thank the people who have presented. We thank the people who have asked the questions and most of all, we thank you for being here tonight. I have always said that San Clemente is just the greatest and the people are the greatest, and you are interested, and you have learned with So thank you very much for coming tonight and if you have any questions you have been given places to write, people to E-mail to and hopefully your questions will be answered. Thank you very much.

(Whereupon, the meeting was concluded.)

REPORTER'S CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

NAME OF PROCEEDING:

SAN ONOFRE, UNIT 1

DECOMMISSIONING PUBLIC

MEETING

CASE NUMBER:

PLACE OF PROCEEDING:

San Clemente, CA

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.

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Official Reporter

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