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10	PUBLIC MEETING	
11	ON	
12	DECOMMISSIONING THE YANKEE ROWE NUCLEAR PLANT	
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17	Buckland, Massachusetts	
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1 NRC Participants:

Brian K. Grimes, Director, Division of Operating Reactor 2 Support, Office of Nuclear Reactor Regulation (NRR), 3 Rockville, Maryland 4 5 Seymour H. Weiss, Chief, Non-Power Reactor and 6 Decommissioning Project Directorate, NRR 7 8 Richard F. Dudley, Jr., Chief, Decommissioning Section, NRR 9 10 Morton B. Fairtile, NRR Project Manager for Yankee Nuclear 12 Power Plant 13 Larry Bell, Section Leader, Division of Low-Level Waste 14 Management and Decommissioning, Office of Nuclear Material Safety and Safeguards, Rockville, Maryland 17 Edwin J. Reis, Office of the General Counsel, Rockville, 18 Maryland 19 20 Eugene M. Kelly, Section Chief, Division of Reactor 21 22 Projects, Region I, King of Prussia, PA 23 Paul W. Harris, Resident Inspector, Vermont Yankee Nuclear 24 Power Station. 25

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Joseph L. Nick, Radiation Specialist, Facilities Radiation Protection Section, Division of Radiation Safety and Safeguards, Region I Marie T. Miller, State Liaison Officer, Region I Jack Parrott, Project Manager, Office of Nuclear Material Safety and Safeguards 1.2

PROCEEDINGS

[7:10 p.m.]

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MR. FAIRTILE: Welcome to this meeting with the NRC and the local community. We're naving the meeting taped, we have a court reporter and it would be appreciated if you would speak up loudly so he can hear your questions, give your name, of course, so he'll know who the person is. If he has any problems he'll wave his hand or something to let you know that he doesn't hear you.

Before we begin, I want to thank the community for the hospitality in letting us use the school and in particular the Mohawk Trail Regional School Board, it was very nice of you. I'm going to turn this over to Mr. Bryan Grimes, He's the Director of the Division of Operating Reactor Support and he's going to be the chief NRC spokesman and point of contact with your questions and answers.

Brian.

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MR. GRIMES: This afternoon we met with the Yankee people and some of you I recognize as being at the meeting out near the plant. The purpose of our meeting this afternoon was to hear a presentation from Yankee and to ask them some questions about material they had previously submitted to us and also to get a plant tour to see the plant in its current state so we can get a better idea of what we're dealing with.

We held the meeting in the plant area, also, partly so that there would be an opportunity for the public to observe our review process and at least a dozen or so people did show up this afternoon to observe that meeting.

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Tonight the NRC staff rather than Yankee will give you a presentation on our general review process and have some dialogue perhaps to try to explain better what our role in this process is and how we're trying to make sure that decommissioning here as well as at several other places is being carried out safely.

We have a couple of presentations, these should take half an hour to 45 minutes total and then we'll have some question and answer comments. There's a comment sheet over there, it's primarily for those people that know they want to say something now. You don't have to get on the list to ask questions or comment later, but that will help us get an idea of how to allocate time and things.

In general I'll ask you to hold most of your questions until after the presentations, but i' you have a clarification question, please feel free to interrupt the speaker, raise your hand and get it clarified.

Mr. Dudley is going to be the first speaker and then talk about the regulatory process and then Mr. Bell, also, on the regulatory process for reviewing decommissioning, and then Mr. Kelly from Region I, Office in

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1 King of Prussia, Pennsylvania, will say a few words about 2 his inspection and oversight of the Yankee site over the 3 next few months, particularly with the large component 4 removal that's planned and then the following years of 5 decommissioning activities.

6 Before we introduce and let Mr. Dudley start, why 7 don't we go down the table and just have everybody introduce 8 themselves. Joe, do you want to start?

9 MR. NICK: Sure. My name is Joe Nick, I'm a 10 radiation specialist from Region I.

11 MR. HARRIS: I'm Paul Harris. I'm a residence 12 inspector at Vermont Yankee.

MR. KELLY: I'm Gene Kelly. I'm a supervisor in the regional office in King of Prussia.

MR. FAIRTILE: I'm Martin Fairtile, NRC project manager for Yankee Rowe.

MR. REIS: I'm Ed Reis, I'm a counsel with theNRC.

MR. WEISS: I'm Sey Weiss, I'm a project director for non-power reactors and decommissioning at headquarters.

21 MR. DUDLEY: I'm Richard Dudley. I'm the 22 decommissioning section chief in the Office of Nuclear 23 Reactor Regulation.

24 MR. BELL: I'm Larry Bell, I'm a section leader in 25 the Office of Nuclear Materials, Safety and Safeguards.

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MR. PARROTT: I'm Jack Parrott, I'm Project Manager, Office of Nuclear Material Safety and Safeguards.

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MR. GRIMES: As you see we have a variety of
 organizations represented. It takes a number of different
 organizations --

6 AUDIENCE PARTICIPANT: Is there a member of the 7 media that concerns scientists on this panel?

8 MR. GRIMES: No, this is just the NRC staff. If 9 there is anybody from --

10 AUDIENCE PARTICIPANT: Yankee people, too, is that 11 right?

MR. GRIMES: No. No, Yankee people here. There are Yankee people in the audience, but this is just the NRC staff tonight to give you an opportunity to ask questions of the Nuclear Regulatory Commission staff. Yes.

AUDIENCE PARTICIPANT: This is all men, in intelligent times, I find that very suspect.

MR. FAIRTILE: I like your comment.

MR. GRIMES: It's getting warm, we may --

[Applause.]

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21 MR. GRIMES: -- we may take the hint pretty soon. 22 We do have a couple more regional people in the office that 23 I'll ask to introduce themselves, please. Marie.

24 MS. MILLER: I'm Marie Miller, Regional Staff 25 Liaison. I choose to sit here with you so I don't have to

get asked a question directly. But if you have a question for me in the area of home physics I'll be happy to answer it for you. Thank you.

MS. SCRENCI: I'm Diane Screnci. I'm Public 5 Affairs Office for Region I.

6 MR. GRIMES: Also we have some people from the 7 state here tonight. I believe Mr. Muckerheide is here from 8 -- yes, why don't you do that?

9 MR. FAIRTILE: We have Jim Muckerheide, he's 10 involved in -- he's the state engineer, Massachusetts State 11 Engineer and he's the state liaison official and he's the 12 person I contact before we issue any license amendments to 13 see if the state has any comments.

14 Mr. Bob Halliset is here. He's in the 15 Massachusetts Department of Public Health and he's a 16 radiation specialist.

We have Mr. Paul Mayo here, he's the Deputy Director for the low-level radioactive waste authority management board for the State of Massachusetts. He's looking, I guess, for a site in the state where they may dispose of low-level radioactive waste.

Mr. Bill Sherman is here from the Vermont Department of Public Health. Mr. Sherman is involved more with Vermont Yankee, but since a great deal of the emergency planning zone for the Yankee plant overlaps the state of

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Vermont, the State of Vermont is quite interested also. I
 don't know if Mr. John Pappas is here, though.

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MR. GRIMES: No.

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MR. FAIRTILE: All right. Mr. Pappas represents the Emergency Management area for the State of Massachusetts and he was at the meeting we held at the plant and I don't see Laurel Williamson here either. She was an environmental engineer from the Massachusetts Department of Public Health and she attended the earlier meeting. So at the earlier meeting we had six state representatives and here we have four.

MR. GRIMES: Okay. With that, Dick Dudley will lead off with some words about our regulatory process. MR. DUDLEY: First I'd like to talk about the NRC 1.4 decommissioning regulations. Can everyone hear me? [No response.] 17 MR. DUDLEY: Okay. Fine. [Slide.] 18 19 MR. DUDLEY: First, the NRC regulations for --20 AUDIENCE PARTICIPANT: There's no amplifier. 21 MR. DUDLEY: The mike doesn't work. The mike is 22 not amplified. MR. FAIRTILE: It's just hooked up to the tape, 23 24 that's all. He needs to take a deep breath. [Laughter.]

MR. FAIRTILE: You could come up closer, sir. MR. DUDLEY: The NRC regulations for

decommissioning plans require that a decommissioning plan be 3 submitted two years after permanent shutdown of a facility 4 or not later than one year before the operating license expires. Decommissioning plans under our regulations must 6 7 include the choice of decommissioning alternatives, a description of controls that will be used during the process R to protect public health and safety, a description of the 9 final radiation survey, and updated decommissioning cost estimate and a comparison of those updated costs with the 11 12 funds available in the decommissioning trust fund, and finally, it must contain the technical specifications, the 13 quality assurance plan, and the physical security plan that 14 will be in place during decommissioning.

[Slide.]

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MR. DUDLEY: The NRC reviews licensees' 17 18 decommissioning plans. As part of that review the NRC will publish a notice of opportunity for public comments on the 19 decommissioning plan and after reviewing public comments and 20 completing our review of the plan, if we find the 21 22 decommissioning plan to be acceptable we will issue a decommissioning order to the licensee which approves the 23 decommissioning plan and allows the licensee to implement 24 the plan and to begin decommissioning. 25

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After the licensee has completed decommissioning of the facility the NRC will then terminate the facility license if the decommissioning was completed in accordance with the decommissioning plan and if the final radiation survey demonstrates the adequacy of the site to be released for unrestricted use.

[Slide.]

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8 MR. DUDLEY: Next, I'd like to talk a little bit 9 about decommissioning alternatives. When we issued our 10 decommissioning regulations we analyzed the environmental 11 impact of three different decommissioning alternatives in a generic environmental impact statement. And these alternatives were DECON, Safe Store and Entomb. In this 13 generic environmental impact statement we found the first 14 two decommissioning alternatives to be acceptable 15 alternatives, but the third alternative, Entomb, we found some problems with it in certain cases. I'll talk about all 17 of these in more detail in the next few slides. 18

[Slide.]

20 MR. DUDLEY: DECON is the immediate dismantlement 21 decommissioning alternative where radioactivity will be 22 promptly removed and disposed of at the facility to permit 23 release of the site for unrestricted access and fairly 24 prompt termination of the license. In the generic 25 environmental impact statement we looked at DECON to be

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completed in a period of less than six years after the facility shut down.

With the DECON alternative, however, you do have somewhat higher occupational radiation exposure to the workers who are doing the dismantlement. This is because radiation levels have not had time to decay as they will over time. So at the time you dismantle radiation levels are slightly higher. However, on the other hand the DECON alternative does allow more prompt use of the site for other purposes.

11 The Safestore decommissioning alternative is the 12 delayed dismantlement alternative where the reactor fuel, 13 radioactive fluids, and other rad wastes are moved from the 14 reactor containment facility and then the facility is 15 maintained until radioactive decay reduces the radiation 16 levels at the facility and then it's dismantled.

17 The NRC regulations allow this delay of 18 decommissioning of final dismantlement in decontamination to 19 take -- to be up to 60 years from permanent shutdown of the 20 facility. With the Safestore alternative there is lower 21 occupational radiation exposure since radiation levels have 22 decayed somewhat over time. However, the Safestore 23 alternative may delay the use of parts of the site for other 24 purposes.

[Slide.]

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MR. DUDLEY: The final alternative that we looked at was the Entomb alternative where radioactive material is encased in a long-lived structural material. Typically that would be concrete and the entombed structure is then maintained and surveilled until decay of the radioactivity permits release of the entombed structure for unrestricted use.

8 This alternative is generally impractical for 9 nuclear power reactors because due to the radiation levels 10 that have built up in certain reactor internal components 11 the radio nuclides will not decay in those components in the 12 60-year period required for decommissioning. So generally 13 in our environmental impact statement we found that entomb 14 was not a practical solution -- alternative for 15 decommissioning of power reactors.

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[Slide.]

MR. DUDLEY: Next, I'm going to talk just a little bit about prematurely shut down plants and I'd like to go through the typical regulatory process for prematurely shut down plants. A prematurely shut down plant is a plant that shuts down before the expiration of its operating license. Yankee Rowe was a prematurely shut down plant.

After a plant permanently shuts down, the first point I'd like to make is that continued compliance with the license and the NRC regulations continues to be required.

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Shutting down does not allow a licensee to stop following 1 NRC regulations. That is not the case. However, many of 2 the NRC regulations were designed looking particularly at 3 4 operating reactors, therefore, we find that in many cases these regulations are not -- it's not absolutely necessary 6 to comply with all of these regulations in order to insure public health and safety for a facility that is permanently 7 8 shut down and already defueled. Because of this, after a 9 permanent shut down each decommissioning licensee usually 10 submits a number of license amendments and requests for relief to the NRC. 11

One of the first such license amendments is usually a possession-only license. This amendment would 13 amend the facility license to say that the licensee may 14 possess, but not operate the facility. Yankee Rowe has a 15 16 possession-only license issued by the NRC in August of 1992. In addition, numerous other reliefs and exemptions are 17 usually submitted by licensees of decommissioning reactors. 18 19 Just some examples, and they're not all inclusive, of 20 typical reliefs that we would issue through this process are 21 from containment leak testing. If the fuel is no longer 22 within the containment, containment leak testing is not 23 required. We give relief from the requirement to have 24 licensed operators after licensed operators are replaced with individuals who are trained as certified fuel handlers. 25

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Off-site emergency preparedness programs are usually able to be reduced because of the reduced potential for off-site radiological consequences. Security plans can typically be reduced because of the reduced potential for radiological sabotage. And property damage liability insurance may also be reduced.

Yes.

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AUDIENCE PARTICIPANT: On that security plan reduction, are not the spent fuel rods still stored on site?

10 MR. DUDLEY: They are still stored on site in the 11 spent fuel pit.

AUDIENCE PARTICIPANT: Doesn't that suggest a maintenance of strong security in the presence of that material?

MR. DUDLEY: There is -- at the Yankee facility there is strong security, but it's been pulled back to just include the spent fuel pit where the spent fuel rods are stored. I said the program was reduced and it was not -- by all means not eliminated. There is significant security in the spent fuel pit protecting the spent fuel rods.

AUDIENCE PARTICIPANT: Can you tell me when the significant regulatory process was written? MR. DUDLEY: It's developed over time. It's not like --

AUDIENCE PARTICIPANT: Over how long a period of

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MR. DUDLEY: The last four or five years, I think, for a number of -- the four or five plants that we've decommissioned in the last four or five years. This is the process that we've used. Is that adequate?

AUDIENCE PARTICIPANT: That's all right.

MR. DUDLEY: And again, as I said before the decommissioning plan for a prematurely shut down plant is required to be submitted no later than two years after the plant is permanently shut down.

Now, in the case of Yankee on the reliefs and exemptions they have submitted to us about a dozen reliefs and exemptions including all of the reliefs that you've seen here in the examples. We review each and everyone of those relief; and exemptions very carefully and we have approved all but two of those reliefs that Yankee has submitted. The other two are currently still under NRC review.

[Slide.]

MR. DUDLEY: Now, I'd like to talk about predecommissioning activities. These would be activities undertaken that are related to decommissioning, but they take place after permanent shutdown of the facility, but before approval of a decommissioning plan.

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[Slide.]

MR. DUDLEY: Recently, the Nuclear Regulatory

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1 Commission or the five commissioners have issued guidance to 2 the staff that indicates that licensee pre-decommissioning 3 activities may be allowed after the facility is permanently 4 shut down, but before the decommissioning plan is approved 5 if certain conditions are met. And those conditions are 6 shown on this slide.

First, the authorization to operate the facility must have been legally removed by the issuance of a possession-only license or perhaps a shut-down order. And more importantly item number 2, the planned predecommissioning activities must not foreclose the possible

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release of the site for unrestricted use. These activities, second, must not significantly increase decommissioning costs. They must not cause any environmental impact that has not already been reviewed and they may not violate the terms of the existing facility license or 10 CFR 5059.

17 Now, this 5059 is an NRC regulation that allows 18 licensees to undertake certain activities as long as they 19 complete a review that indicates that those activities don't involve any unreviewed safety questions. So the licensee 20 21 would have to first meet the four criteria shown here, plus 22 they would have to show that these pre-decommissioning activities do not involve unreviewed safety questions before 23 24 -- and if that were the case, then the licensee could undertake these activities. 25

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And finally, in the guidance we received from the Commission the Commission informed the staff that the NRC may permit licensees to use decommissioning funds, funds from the decommissioning trust fund to pay for these activities -- these pre-decommissioning activities.

[Slide.]

7 MR. DUDLEY: In the case of Yankee Atomic they 8 have informed the NRC of their plans to undertake certain 9 pre-decommissioning activities, namely the early removal of 10 four steam generators, the pressure vessel -- excuse me --11 the pressurizer, not the pressure vessel -- and the reactor 12 vessel internals. These proposed activities would take 13 place over a period of August 1993 until May 1994.

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Yes, sir.

AUDIENCE PARTICIPANT: Isn't these procedures here really the issue that we're coming to talk about that these 16 17 activities are the removal and sectioning of perhaps the 18 most highly active components of the plant, and aren't they 19 part of the DECON alternative? If it was going to be a safestore alternative, these would not be removed so that, 20 21 in fact, if you are to give permission for these components 22 to be removed it would be, in effect, approving the DECON 23 plan before a decommissioning plan has been submitted or 24 submitted for public review. That's the problem.

MR. GRIMES: Yes, that's the interesting policy

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question that was raised to the Commission last fall in which they gave us some guidance on. You're right that this is a question which required some thinking on their part with appropriate legal advice. What they decided was there are some activities like these steam generator removals that can be allowed because they are the sort of things that would happer in operation anyway.

AUDIENCE PARTICIPANT: That's really the question because what the problem is, is that the reactor is claiming that these procedures have been done when, in fact, they haven't been done before. This is the largest reactor that's ever been undergoing decommissioning.

MR. GRIMES: That's not correct, but --

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AUDIENCE PARTICIPANT: Well, I mean of this kind of operating reactor in this state. In this state of operation.

MR. GRIMES: No, I don't think it's still correct. AUDIENCE PARTICIPANT: This isn't new and the whole world isn't watching? This isn't going to be the precedence for Hadden Neck and Pilgrim and Vernon? Is this not going to be the way you're going to operate?

MR. GRIMES: This is new in that this is the first time we've had a plant which has asked to remove some large components after they shut down, but before they have their plant approved.

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AUDIENCE PARTICIPANT: So what's being asked for is a variance of a decommissioning plan which hasn't yet been submitted?

MR. GRIMES: Right. Essentially.

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AUDIENCE PARTICIPANT: That's a big problem. MR. REIS: Can I --

MR. GRIMES: We have a lawyer that can --

8 MR. REIS: In the Commission's study on saying 9 what is DECON and safestore, in those studies -- the NUREG 10 which Mr. Dudley referred to -- it definitely says that when 11 you go to safestore you do certain actions ahead of time --12 you can do certain actions ahead of time to remove the 13 radioactive components. That is before you go into 14 safestore before you button up the plant and go to 15 safestore, that study recognized that you can't remove 16 radioactive material --

AUDIENCE PARTICIPANT: You're talking about the Betell study.

MR. REIS: That's right.

AUDIENCE PARTICIPANT: I read that study, 600 pages, and I never saw anything referred to in terms of removing the steam generators, the pressurizer, or vessel internals before a decommissioning plan has been submitted. I'm very sorry, what they talked about was decontamination which is the application of chelated chemical to the vessel

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in terms to protect workers who were going to go in
 eventually. But we have to have 50 years before safestore
 can be considered. Well, you can't call it safestore and do
 immediate decommissioning.

5 MR. DUDLEY: In the generic environmental impact 6 statement safestore was analyzed for varying time periods 7 ranging from 10 years to 30 years to even 100 years to get 8 sort of a parametric analysis. So safestore is not --

9 AUDIENCE PARTICIPANT: We'd prefer 100 years. But .0 we'll settle for 50.

MR. DUDLEY: Safestore in our generic environmental impact statement is not linked to any particular decay period. It was analyzed for varying periods. And, in fact, there's hardly any difference between a DECON decommissioning alternative that takes six or so years and a safestore decommissioning that only has a 10-year decay period.

AUDIENCE PARTICIPANT: There were very, very large differences in the amount of exposure that workers and the public would endure and a very significant reduction in the amount of ruble and waste that would have to be buried, there's a very significant difference, that isn't true. I would like to give me those figures because when I saw those figures, I was really surprised.

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MR. WEISS: There was very little difference in

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1 dose to the public between DECON and safestore.

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AUDIENCE PARTICIPANT: Well, see, the problem we have is that there is very little difference even if you double it according to the way you look at it because from your point of view there are no ill effects from the operation of nuclear power plants, so if you double or nothing, you get nothing. But that's not our --

MR. WEISS: The Betell study showed it was negligible dose to the public whether you chose either one of those two options. The numbers that Dick was talking about is occupational exposure. Occupational exposure is the dose to the workers at the facility. And although there was an increase in dose it was within what one might expect for a radiation worker.

Now, in addition, your question is saying that plants have not removed steam generators and that's not true. We have operating reactors that very recently replaced steam generators and have gotten rid of the old generators. So this is an operation that has been carried out any number of times. The difference here is they are not putting in a new putting in a new steam generator.

AUDIENCE PARTICIPANT: The issue with that is since the reason you do it in an operating reactor is because you want to keep the reactor going. But while it's a shutdown reactor and the conflict in terms of this is why

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not leave it in safestore for 50 years when the issue of decontamination has been settled and it has been allowed to sit so that workers are exposed to much less radiation. And the minimal dose that we as the public are exposed to are exposed to even less. See, we are really confused about why this has to happen so quickly.

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7 I mean, I understand the conflict between the 8 issues of the problem and the issues of safety, but in a certain way part of the issue of the NRC is to protect us. And we are really concerned about safety. I understand that Yankee in making the choice to want to do it guickly is trying to save us money. I realize that. But we are really 13 concerned about the workers being exposed to doses of radiation that if that reactor sits there for 50 years they 14 won't be exposed to in the same way. And there are more studies and more controversy about these issues and the 16 health effects of low level radiation and somewhere I don't think this is really being taken into consideration and 18 that's somehow the conflict and I don't know if the NRC is 19 taking it into consideration because this is all happening so quickly, you know, in a certain way. And it's sort of 21 22 shocking.

[Applause.]

24 MR. GRIMES: Let me just say that we are taking 25 that into consideration in a general way but not evaluating

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the very lowest dose that could be achieved. When we set up the regulations and bid the generic environmental impact statement, we drew an envelope and said if people say within this envelope, they can make choices and have economic tradeoffs as long as they stay within this box.

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Yankee is clearly going to be within that box although there are some ways in which they could reduce the exposure of workers even further by putting this activity off more years.

10 Now in terms of approving the decommissioning plan 11 first or not, that is not a very long time in terms of 12 radiation decay. That won't make too much difference if it 13 is two years from now that they do these --

AUDIENCE PARTICIPANT: I'm sorry. I don't think you've got the document. The Bechtel document shows that after 50 years there was a very sharp drop in the amount of exposure -- very sharp.

MR. GRIMES: Right. That wasn't the point I was making. The point I was making was we would allow immediate dismantlement after the decommissioning plan is approved. That's only a couple of years off, so you have to look at today's exposures versus a couple of years from now exposures. Those exposures aren't very big.

AUDIENCE PARTICIPANT: From your point of view there are no ill effects from the power production -- so

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1 that in fact it's tomorrow or 50 years it won't make any 2 difference but we don't see it that way.

MR. GRIMES: I think if we thought there were no potential ill effects from nuclear power production, there's wouldn't be an agency of 3000 people worrying about this.

AUDIENCE PARTICIPANT: The last time I spoke to the NRC was two years ago in Rowe at the school and I asked very directly the people who were there whether in fact -what the position of the NRC was in terms of the amount of pathology that was noted by nuclear power production and the answer was given unequivocally -- there are no health effects.

This is the official position and he was telling 14 me the truth. That is the official position and that official position is what basically underlies all the 15 regulations. This is the official position that determines the assumption that everybody is exposed to the same degree 18 of risk as anybody else and all you have to do is draw a 19 circle around it, everybody, because there are no effluent 20 pathway increases in risk. If there are no risks, there are certainly no risks if you live one mile away or along the 21 22 river. There are just no risks so you can't decrease the 23 risk by being closer or being further away or being in the 24 effluent pathway.

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It's a wonderful assumption but it doesn't make

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sense. That's the problem -- very low doses that are meaningless.

3 MR. GRIMES: I agree that there are very low doses 4 but the regulations are also based on the assumption that 5 any dose can cause some damage --

> AUDIENCE PARTICIPANT: Really? MR. GRIMES: Really.

AUDIENCE PARTICIPANT: This is something that's
 very new. I have never heard this.

MR. GRIMES: The assumption that all the international, ICRP, NCRP dose limits and all the EPA dose limits and guidelines are based on the assumption that no matter how far down you go that the effects are linear in terms of radiation damage, so that there is some small damage proportional to the dose, no matter how small the dose is, so that is -- the damage is indeed very small, but it is not zero.

18 AUDIENCE PARTICIPANT: Really? There is no 19 threshold?

20 MR. GRIMES: Is there another question? There is 21 no threshold.

22 MR. DUDLEY: Yes, ma'am?

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AUDIENCE PARTICIPANT: I'm picking up on the time question. I would like information -- if you could explain to us how these decisions are tradeoffs, if you have one

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versus the other. What are the tradeoffs of doing these pre-decommissioning activities like moving those things and shipping them to South Carolina or wherever they are going sooner rather than three years later?

5 There must be some thinking behind its closing or 6 whatever?

7 MR. DUDLEY: Yes. I think one of the reasons that 8 Yankee Atomic has chosen to go for early component removal 9 is that they have access to low level waste storage in 10 Barnwell, South Carolina that closes in summer of 1994 so 11 they can't wait three years. They don't have that option. 12 If they waited three years they wouldn't have access to a 13 low level waste facility and it's really not known at what 14 time in the future they would get new access.

5 PARTICIPANT: Thank you.

16 MR. DUDLEY: Again, Yankee has provided the NRC 17 with an analysis of how they meet the criteria that were 18 established by the Commission for allowing them to go ahead 19 with pre-decommissioning activities.

As Brian said, we had a public meeting to discuss these issues in more detail earlier today. The NRC review of pre-decommissioning activities at Yankee is still ongoing.

[Slide.]

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MR. DUDLEY: The final slide, I wanted just to

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give you a little idea of NRC and nuclear industry
 decommissioning experience. Sixty-three research and test
 reactors have been decommissioned and their licenses have
 been terminated. Eleven research and test reactors are now
 in the process of being dismantled.

For power reactors there are 15 power reactors currently in the decommissioning process. One power reactor, Pathfinder, has just completed the decommissioning process. This facility is about one-third the size of Yankee Rowe.

11 There are two power reactors that are much larger 12 than Yankee that are currently now being dismantled under 13 the DCON decommissioning alternative. That would be Fort 14 St. Vrain facility in Colorado and the Shoreham plant in New 15 York.

16 There are six power reactors that are currently in 17 safe store with approved safe store decommissioning plans.

18There are three power reactors with19decommissioning plans that are under review by the NRC Staff20and three power reactors -- Yankee is one of them -- are21preparing decommissioning plans to submit to the NRC.22Are there any other questions or clarifications on

issues that I have discussed? Yes?

23

AUDIENCE PARTICIPANT: You mentioned 10 CFR 25 50.59 --

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MR. DUDLEY: 50.59? Yes.

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AUDIENCE PARTICIPANT: -- but I was curious as to how many, what range of number of federal regulations are we dealing with in this process, and are they all lumped together in the federal regulations --

6 MR. REIS: I can address that. There is a volume 7 of regulations known as the Code of Federal Regulations. 8 Title 10, which deals with energy generally, the first 200 9 numbers are Nuclear Regulatory Commission regulations and 10 they generally govern not only nuclear plants -- utility 11 facilities -- but other nuclear operations throughout the 12 United States that we regulate.

Particularly in the NRC regulations if you were to look at it, it would be 10 CFR, Part 50 is the particular part that deals with the licensing of nuclear plants and what we are concerned with here.

There are also other regulations that we have. For instance, 10 CFR, Part 20 deals with exposures and how much a worker could be exposed and how long. That's in Part 20 20.

It is a big, complicated system of regulations that was promulgated after Congress passed the Atomic Energy Act and said in essence that there shall be a federal agency that shall give licenses to private utilities and Government agencies to build nuclear power plants if the agency finds

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1 that the public health and safety will not be jeopardized by 2 this action.

3 AUDIENCE PARTICIPANT: So the entire 4 decommissioning to the extent that there are some are under 5 the licensing sections of the Federal regulations?

6 MR. REIS: That's right, and there is one 7 particularly that talks about decommissioning and that's 10 8 CFR 50.82, but there are others that talk about other phases 9 of decommissioning and other things that come in there.

10AUDIENCE PARTICIPANT: But in that range -- that11is, we're not shifting to another title or something?

MR. DUDLEY: No, it's all in Title 10.

AUDIENCE PARTICIPANT: Some of the policies that have made or some of the alternatives that are laid out in the impact analyses, are those incorporated into the regulations or are those available from one of the departments?

MR. REIS: There is -- as a basis of publishing the regulation 50.82, the Commission published an environmental impact statement which is known as NUREG-0654, am I right? Oh, -0586. I had the wrong number, remembering these things, and that is available from the -it's this document.

It is available from -- I should be able to give you, it's available from the Government Printing Office but

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1 I was looking for the Department of Commerce --MR. DUDLEY: NTIS? 2 MR. REIS: NTIS and I am looking for the address where you send for this. 4 MR. FAIRTILE: If you can come up with copies ----MR. REIS: We'll give it to you and we'll give you 6 7 the address. Anybody else? 8 AUDIENCE PARTICIPANT: I wanted to turn to safe 10 store. You mentioned that there were a half a dozen other reactors --MR. DUDLEY: There are six. AUDIENCE PARTICIPANT: -- that are turning into 14 safe store? MR. DUDLEY: No, that are in approved safe store 16 decommissioning programs right now. AUDIENCE PARTICIPANT: They are in approved safe 17 store decommissioning programs. These are power reactors? 18 19 MR. DUDLEY: Yes, those are all six power reactors. AUDIENCE PARTICIPANT: What distinguishes them 21 from Yankee Rowe, which you mentioned did not lend itself to 22 safe store? MR. DUDLEY: Well, many of those power reactors in 24 safe store are on multiple unit sites. What licensees

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typically find if they have multiple units, if the first unit shuts down they will put it in safe store while the other units operate and then wait and decommission the whole facility at one time in an economy of scale at the end of life of the later units, which would save money and reduce radiation exposure.

AUDIENCE PARTICIPANT: So you are saying that it is economic constraints that have most to do with whether safe store is employed or not?

MR. DUDLEY: Right, we think so.

AUDIENCE PARTICIPANT: This is part of the problem that we have that we pointed out, that economic constraints are going to expose workers to higher levels of radiation and it is our position that that is not justifiable.

MR. FAIRTILE: There is another aspect, too. A lot of the plants that are in lengthy safe store, as Dick said, are multiple unit sites and it would be disruptive to the operating units also if they started to dismantle or do any work on the shut down site, and it could actually be an unsafe practice.

Also, in many instances the reactor that's shut down has certain systems in it that are common to its sister units so they have reasons to keep it in safe store above and beyond any economic reasons.

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MR. GRIMES: But I think the gentleman's point was

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why not wait on all of these for some period of time and there the generic environmental impact statement -- that thick blue book -- really came to the conclusion that the various options including immediate dismantlement were all low enough so that the Commission didn't want to say you must store these for 50 years and get the absolute lowest dose.

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8 There was a judgment made that the impact was low 9 enough so that we could let people make economic choices 0 within this boundary. That is I guess a disagreement in 1 philosophy but that is the decision that was made on the 2 regulation that was written.

AUDIENCE PARTICIPANT: I understand what you're saying. I don't understand what that envelope is.

MR. GRIMES: The envelope --

6 AUDIENCE PARTICIPANT: -- and I don't particularly 7 feel reassured because I am a close resident.

MR. DUDLEY: Yes?

AUDIENCE PARTICIPANT: I don't quite understand or I don't understand at all the tradeoff that you talked about. You said if there's a let short -- you know, if they give the reactor a longer time there is less dinger to the workers and possibly to the public and on the other hand you said if we decommission it quickly there will be the more immediate use of the site.

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I Is that something to benefit the workers and the local population or is that something which benefits the operators of the reactor?

I mean it's apples and oranges. What is it that we people who live there -- I live very close to that reactor. What do we get in terms of its being decommissioned immediately?

MR. DUDLEY: There is an economic savings. AUDIENCE PARTICIPANT: Pardon?

MR. DUDLEY: There is an economic savings that would be at --

12 AUDIENCE PARTICIPANT: To the people or to the 13 reactor?

14 MR. DUDLEY: I think it would probably ultimately15 be passed on to the ratepayers.

AUDIENCE PARTICIPANT: So in other words we are being asked to trade off possible danger to ourselves with possible economic gain, is that correct? Really the tradeoff isn't to us.

20 MR. DUDLEY: Are you a worker?

8

AUDIENCE PARTICIPANT: No. I live right near the plant though -- well, you disagree about that, but let's talk about the workers.

24 So a larger dose of radiation to the workers is 25 traded off for the possibility until they think of -- until

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1 they move something on that site, is that correct? Is that 2 the use of the site --

MR. DUDLEY: That's a generic advantage. In the case of Yankee I don't believe they plan -- what is your, you are going to decommission to Greenfield.

M7. MELLOR: Right.

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7 MR. DUDLEY: You don't have plans, you might use 8 it for future power generation but you don't have plans to 9 do that right now, is that correct?

MR. MELLOR: There are no plans to do that right now.

AUDIENCE PARTICIPANT: So that they could put a power plant there sooner and that is the advantage to the people at Rowe, to decommission it rapidly so that you could put a new generation nuke there?

> MR. DUDLEY: No. They said they have no plans. AUDIENCE PARTICIPANT: What is this?

18 MR. REIS: Let me say this. There is another 19 advantage that you might think about but I don't know 20 whether it is a strong advantage. I'm not advocating it 21 one way or another.

Another advantage is you get certainty. The more radiation that gets off the site, the more contaminated things that get off the site, you get certainty.

The Commission rejected entomb for one reason: We

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1	are never	sure of what is going to	happen in societal	
2	controls i	n the long-rur.		
3		AUDIENCE PARTI(:IPANT: S	ocietal controls?	
4		MR. REIS: Societal cont:	rols. This country is 200)
5	years old.			
6		AUDIENCE PARTICIPANT: S	o you were thinking of th	le
7	long-term	possibilities.		
8		AUDIENCE PARTICIPANT: G	ood time to do that, a	
9	real good	time.		
10		MR. REIS: Bill was ment:	ioning before about the	
11	availabili	ty of South Carolina and	the low level waste site	2
1.2	in South C	arolina.		
13		AUDIENCE PARTICIPANT: BU	it that's not your	
1.4	concern.			
15		MR. REIS: No, it is not	our concern.	
16		AUDIENCE PARTICIPANT: So	let's not even talk	
17	about it.	We are interested in saf	fety. That's why we are	
18	here.			
19		I see the building inspec	ctors from the town.	
20	We're all 1	here and he's here becaus	se he's interested in	
21	safety. H	e's not interested in whe	ther Yankee is going to	
22	make more o	or less money or not.		
23	. 1	AUDIENCE PARTICIPANT: TH	at's right.	
24	1	AUDIENCE PARTICIPANT: Le	et's talk about safety.	
25		AUDIENCE PARTICIPANT: Th	ne only concern we have i	s

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that they have the money to decommission and that is our
 only concern as far as I can tell.

3 MR. REIS: Well, we are going to pay for it one 4 way or another, you know, so that whether there will be 5 enough money or not is not really a concern either because 6 we'll have it one way or another -- whichever way it is 7 done, we'll pay for it.

MR. DUNCAN: Yes, sir?

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9 AUDIENCE PARTICIPANT: You showed us five 10 exemptions that you say were part of the program that Yankee 11 Rowe had applied for all five of those. You said there are 12 a number of others too, which you haven't yet approved.

14 AUDIENCE PARTICIPANT: But you have approved a 15 bunch of others.

MR. DUNCAN: That's correct.

16 Could you tell us what those are?
 17 MR. DUNCAN: The two that have not been approved?
 18 AUDIENCE PARTICIPANT: No, all of them.

19 [Pause.]
20 MR. DUNCAN: Possession-only license amendment
21 that I mentioned; an exemption to Appendix J on containment
22 leak testing; the tech spec change on elimination of
23 licensed operators; the approval of a certified fuel

24 handler program; an exemption for an emergency preparedness 25 exercise that was not done because the emergency plan was

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going to be changed very shortly after that; a tech spec 1 amendment to take the fire protection tech specs out of the 2 license and just place them in another document; an 3 exemption to the requirement for them to update their final 4 safety analysis report; an exemption for the reduction in their emergency preparedness requirements -- there was a 6 tech spec change on administrative controls in their 7 technical specifications; there was approval of their R reduced defuelled security plan; there was a license amendment that transferred the radiological effluent 10 technical specifications out of the license but into another control document called the Offsite Dose Calculation Manual; there was technical specification change on water chemistry requirements inside the plant; there was a proposed 14 amendment to the Price-Anderson offsite liability financial 15 protection requirements -- that is one of the items that is 16 still under review.

AUDIENCE PARTICIPANT: What would that be to? The Price-Anderson, the insurance for the nuclear accident at the nuclear power plant, what was the amendment on that that they brought?

MR. DUNCAN: They asked to reduce the amount of Price-Anderson financial protection that is required for the facility. That has not been approved. It's currently under review by the NRC.

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site for up to \$63 million. They would like to be relieved of that liability since they are no longer going to be the beneficiary of the \$6 billion that could be raised in the event that they had an accident because they can't have an accident anymore of that magnitude, so those things are being considered by the Commission as a policy matter as to whether that can be reduced.

AUDIENCE PARTICIPANT: So notwithstanding that 8 9 last category, it seems to me the plant is asking for a 10 reduction in insurance at the same time that they are asking for removal of components. If I understand the risk 11 involved in moving these components, a lot of this radiation 12 13 exposure will be given up at the time of the moving, both to the workers who are doing the moving and to the community 14 through which these components are being moved. 15

16 It doesn't make sense to me that the insurance 17 should be removed at that point. If it were a normal 18 business, they would pick up more insurance at that time.

[Applause.]

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20 MR. GRIMES: I think we have to look at it in the 21 context that they have been moving radioactive materials, 22 low level radioactive materials periodically throughout the 23 plant lifetime, so this is not, first, an increase and I 24 don't think in the transportation aspect of the problem; 25 second, the insurance --

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AUDIENCE PARTICIPANT: They moved them on a hairpin turn a few years and they only lost the brakes going down the hill.

MR. GRIMES: -- and the insurance generally is most concerned for local contamination. If there is a truck accident, what does it take to clean up any spill that's occurred or recover something that has fallen off the road or whatever it happens to be.

It's not for the low-level transport that's allowed. That sort of thing can't cause a general hazard to people around other than the really immediate accident that happened.

MR. DUNCAN: Let me finish the list here.

There was also an exemption to reduce the required amount of onsite property damage liability insurance; the defuelled quality assurance plan was submitted and approved by Region I; and the licensee submitted their complete set of defuel technical specifications and their defuel tech specs are still under review.

20 Yes

AUDIENCE PARTICIPANT: You mentioned that you moved fire safety out of an existing location to a new document. Which new document did you move it to and why in the world would you move fire safety out?

25 MR. DUNCAN: It's in the fire protection program

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plan I believe is the proper name of the document.

The NRC made a generic policy decision some years ago that fire protection tech specs were cluttering up the general tech specs and it was a generic decision to move them and tech specs that are of somewhat less safety significance out of those documents and into separate documents just for what was thought then to be ease of use for the operators.

9 MR. FAIRTILE: These documents are fully.0 inspectable and enforceable by the NRC.

MR. DUNCAN: There is no reduced protection afforded by moving these requirements from one document to another.

Yes, ma'am?

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AUDIENCE PARTICIPANT: Are you saying that the insurance would be reduced before the spent fuel rods are removed?

18MR. DUNCAN: Which insurance?19MR. GRIMES: The Price-Waterhouse she's talking20about.

MR. DUNCAN: That is the request that is before
us.
AUDIENCE PARTICIPANT: So you are saying there is
no chance of an accident with the spent fuel pool?
MR. DUNCAN: I didn't say that. I said that we

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have been asked to reduce or eliminate Price-Anderson
 insurance requirements and we have not made a decision on
 that.

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AUDIENCE PARTICIPANT: See that you don't.

MR. GRIMES: In general -- let me speak to the spent fuel pool question first.

7 After some period of time, the gases that are in 8 the fuel elements no longer can present a hazard if they are 9 released because they have decayed. The radioactivity has 10 decayed. Then there is mainly the solid activity which, if 11 you for example lost the water for about a year or so could 12 cause fuel melting.

In the Yankee case, the elements are in what we call a low density configuration. After about a year that is not really a problem anymore. That is one of the reasons the emergency preparedness requirements were relaxed somewhat after a year.

We are looking at generally what the right time period should be for this insurance reduction and the Commission as I say now has this question as a policy item and we'll have to figure out whether we need to go through formal rulemaking or whether there are some interim grants of exemptions as have been requested by several organizations.

AUDIENCE PARTICIPANT: So are you saying there is

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1 absolutely no danger or a reduced danger?

MR. GRIMES: A very much reduced danger. 2 AUDIENCE PARTICIPANT: So your spent fuel is not 3 connected to the borated water supply now? 4 MR. DUNCAN: Well, the spent fuel is in a separate pool now, in a safe configuration. It can't go critical. 6 It has ---7 AUDIENCE PARTICIPANT: But you said if you lost 8 the water --9 MR. DUNCAN: If you lost the water it would be even less likely to go critical. It can't -- low enriched fuel can't go critical without water so the hazard there is 12 from the decay heat that remains from the past reactor 13 14 operations. But the decay heat at Yankee at this point is so low that if you lost the water you wouldn't have a problem. 16 Yes, sir? 17 AUDIENCE PARTICIPANT: I believe you said that 18 that would happen in a year and you're saying that happens 19 to both? 20 MR. DUNCAN: No, after a year after being shut 21 down -- they have been shut down for a year and a half --22 AUDIENCE PARTICIPANT: After a year after 23 termination of operation? 24 MR. DUNCAN: Yes. That's correct. 25

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MR. GRIMES: It depends on the density of the storage. In Yankee's case it looks like it is about a year but we are not finished with the analysis yet.

4 AUDIENCE PARTICIPANT: I have a question about the 5 spent fuel pool in plans that have been decommissioned. 6 What is the final destination of the spent fuel rods in 7 plants that are decommissioned?

8 MR. GRIMES: The final destination is the 9 Department of Energy facility to store and permanent 10 repository. Right now the Yucca Mountain facility in Nevada 11 is very controversial but it is being looked at as to 12 whether it is a suitable site, so the Department of Energy 13 eventually takes the fuel, the Government takes the fuel and 14 puts it in a high level repository so at some point it would 15 be transported off-site and away.

In the meantime, some facilities are, after about five years, are putting the fuel into a dry storage configuration. The decay heat is low enough that you don't have to worry about overheating the fuel or losing geometry at all at that point and our regulations allow dry cask storage at that point.

What we were talking about earlier is how much sooner than five years is okay for different configurations of fuel.

AUDIENCE PARTICIPANT: What I am thinking about,

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sir, is the hottest components, the ones that are the most hazardous and the most radioactive. What did the case of the plants that have already been decommissioned -- where have they been sent?

5 MR. GRIMES: Well, for the most part, they are on-6 site awaiting the Department of Energy taking those. The 7 Department of Energy has said they hope to be able to do 8 that by 1998. They've had some recent statements to that 9 effect. We will have to see. They haven't been very 10 successful in meeting their dates so far but at some point 11 the Commission is confident that that indeed will happen. 12 MR. DUNCAN: We need to go to someone else first 13 that hasn't spoken.

Yes, ma'am?

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AUDIENCE PARTICIPANT: I have a question about destination of the components and things that are going to be removed.

18 The Barnwell facility is an NRC-licensed facility?19 MR. DUNCAN: Yes.

AUDIENCE PARTICIPANT: And I understand that --MR. DUNCAN: South Carolina has an Agreement State arrangement with us and they do the licensing.

AUDIENCE PARTICIPANT: Well, I understand it has no liner and I personally would just as soon wait with this stuff until we have a better site to put it in because that

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1 could be us in South Carolina and I don't think that is a 2 good place to put it.

3 MR. GRIMES: About all I can say to that is we 4 found that the South Carolina program is good enough to 5 store low level waste. We are not talking about the fuel 6 now. We are talking about these low level components.

AUDIENCE PARTICIPANT: Right, but even our garbage dumps have liners.

9 MR. GRIMES: Some do. Depends on what you call a 10 liner. Different types of liners --

AUDIENCE PARTICIPANT: I can't imagine a low level radioactive waste dump that doesn't need to have a liner.

MR. GRIMES: Depends on the environs and the type of soil, all kinds of things.

AUDIENCE PARTICIPANT: You would have a better picture of this than I, that is why I asked this question. It is my understanding that there are something like 110 or 18 111 plants that are coming up serially for relicensing before the NRC; is that not correct?

MR. DUDLEY: Over 100.

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AUDIENCE PARTICIPANT: Of that number of plants, I have no idea how many may fail to meet your specifications, your safety specifications, but perhaps we could project that some sizable proportion of them will be facing similar problems that we are looking at today vis-a-vis Yankee Rowe.

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1 In view of the fact that the Yucca Mountain facility is not in existence, it is controversial; in view 2 of the fact that the Federal government has no capability of 3 4 absorbing high level nuclear waste materials; I believe that there is good reason for great concern here tonight for all 5 of us sitting here looking at the future picture of what 6 will become of this huge volume of radioactive material, and 7 I believe that what is decided as an outcome of this, and I 8 am sure other meetings, will set the tone for the direction 9 of this entire industry for which no new licenses are being granted. 11

It only makes sense for the most prudent course to be taken, in my view, my humble view, as a resident, and that course not be the one that is driven by economic considerations on the part of an industry, and on the part of a government that has systematically tilted toward that industry in making it easier for it to operate, case in point, the fire safety regulations.

MR. GRIMES: I am not sure I got a question out of that, but we have to be careful to separate the spent fuel which would be going to Yucca Mountain from the large component removal that is proposed in the short-term that it would be going to low level burial sites in South Carolina. So I am not sure that the low-level business --AUDIENCE PARTICIPANT: Just looking at the South

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Carolina site, picking up on this young lady's point, where 1 is the responsibility on the part of the Federal government in allowing a State to accept materials of that nature to a 3 4 facility that, indeed, may be really incapable of housing 5 and storing that properly, which may present a new risk and a new danger to the residents in that area, where is the 6 7 responsibility on the part of the Federal government in, for instance, perhaps allowing Yankee to send this stuff down 8 there which will come back to haunt us all in another form? 9

MR. GRIMES: We have essentially made a decision in another context to allow this burial site to operate because we have agreed that South Carolina has the right 12 13 kinds of standards to regulate the disposal of this material. So we have looked at the situation for burial, 14 and now we have a situation where somebody wants to bury. So we don't look at each burial decision, we try to look at 16 the bounding parameters, in this case the requirements for 18 the burial site itself, rather than trying to judge each separate decision to transport and bury. So we try to keep the government out of regulating everybody's every move. 20

AUDIENCE PARTICIPANT: That is precisely the problem because we do have a long-term picture that needs to be addressed. In a sense, if it is a les affaire approach to dealing with the removal and the storage of these materials, then we have no program, then we have no national

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1 plan for dealing with these wastes.

MR. GRIMES: I guess I don't agree because Congress has recently, within the last few years, passed a law requiring local regions to develop these low level burial sites, which will meet very strict standards. So I think there is a congressional program mandated now to develop these sites.

8 AUDIENCE PARTICIPANT: Wouldn't the safest position for workers, for people who live in communities 9 where there are reactors to just keep all the waste there for 50 years. If we look at safety and not look at economics, would somebody be willing to say that the safest thing to do is let it sit there for 50 years and not do a 13 14 damn thing to it until it decayed, and then deal with it. 15 Wouldn't it even be safest in terms of the problems of highlevel waste and low-level waste and the conflict and the 16 controversy that is going on in terms of where they will be sited, if they will be sited? 18

All of this is taking place in an atmosphere in which all this is in flux, basically, and Massachusetts is not clear whether a site is going to be set up, and there is the Federal government that may come in and take a different position, the Supreme Court has ruled that people don't have to move waste because the Federal gove can't find a place to put it. There is no clear policy on this at this

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2 It seems that the most reasonable and conservative 3 approach is to let reactors keep this until we work it out. 4 We have been in the position where you guys have said, "We are going to work it out, " and you tell us again and again 5 that you are going to work it out, and we are coming here 6 today, and you are going to tell us, "We are going to work 7 it out in ten years, or 15 years, or 20 years," and I don't 8 9 know if we are every going to work this out, and this reactor is our responsibility.

11 I am not happy with it. I live in Rowe, but I don't want the people in South Carolina getting our garbage. There are a lot of people down there who don't want it, who want that dump closed at this point. There are a lot of 14 15 people at Yucca Mountain that don't want our high-level waste. In a certain way, we have accepted this reactor, and 16 17 maybe we have to accept this reactor for 20,000 years, and that may be what every site has to do in this country, in 18 the world, in terms of dealing with the problem of it. 19

But wouldn't it really be safest to just let it sit there and not move it on highways until we figure out what we are doing sensibly and conservatively?

23 MR. GRIMES: I think there are two points. I will 24 agree that there will be less worker exposure if we let it 25 sit there. That is lentifically provable. The question

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that you have raised is a policy question, do we require the absolute lowest worker exposure or do we say, within these bounds, the utility companies can make economic decisions? AUDIENCE PARTICIPANT: What if the worker was your son, sir?

6 MR. GRIMES: I would have no problem because there 7 are limits on the amount each worker can receive. In other 8 words, even though the total exposure to have it done may be 9 higher in the case of letting it sit longer, it may be that 10 fewer workers are exposed to the same amount or a similar 11 amount of radiation.

AUDIENCE PARTICIPANT: For example, what if there is no known limit as to safe levels?

MR. GRIMES: I don't think they proved that, but I think I accept that.

AUDIENCE PARTICIPANT: If there are no safe limit that is known, then how would it be conscionable to allow anyone to absorb the radiation they would have to in doing this.

MR. GRIMES: Again, that is what the regulatory process is all about, it is to set levels which, particularly for occupational exposed workers with knowledge of the hazards of radiation, can be accepted in this industry, and that is a very elaborate regulation in our Code of Federal Regulations as to what are the constraints

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1 on those doses.

AUDIENCE PARTICIPANT: Your statement about allowable exposures notwithstanding, my anecdotal information about certain specialties, for instance, pipe welders who are itinerants travelling from facility to facility, are that they are paid more as piece workers and are willing to take large risks upon themselves and, thereby, falsify their paperwork to enable them to do so. So I know that this is being done while we speak.

MR. GRIMES: I think we have fairly good controls on that sort of thing because we require background checks for workers at the power plants.

MR. REIS: If you know of such persons, I would appreciate, we have an 800 number, please call us and you can give information of that kind. Please give the name and the identity of those people, it is very important that we know of those people.

18 AUDIENCE PARTICIPANT: Those workers are known as 19 sponges.

20 MR. REIS: Who are they, give me the names.

21 AUDIENCE PARTICIPANT: There are doctors out here 22 who falsified --

23 MR. REIS: If you have the names of such workers, 24 why don't you have a collection of the data from all the 25 plants and put it on a computer, and you can you get that

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1 data very easily.

MR. GRIMES: We require each plant to check the last occupations of the workers. We don't keep the database. We aren't the big brother that keeps all the names and doses. What we require is that facilities, before they allow people to work in their plant, do background checks, security checks to establish where people have worked, and they can then find out what kind of exposures they have had at those locations.

AUDIENCE PARTICIPANT: So that, in fact, it is feasible, in fact, the lack of exposure data on all workers who work at nuclear power plants, but for some reason it isn't done.

14 MR. GRIMES: We have decided not to be the 15 database ourselves.

AUDIENCE PARTICIPANT: You have let it be the responsibility of the industry. Has the industry been willing to give up this information to anybody?

MR. GRIMES: To other people, no. The privacy of individuals are involved, whether it is government information or utility information, and they are not required to give out particular individual's information.

AUDIENCE PARTICIPANT: If the industry is responsible for doing this, this is paramount to putting the fox in the henhouse because it is in the industry's interest

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1 to get this work done, period.

2 MR. GRIMES: That is why we have a Nuclear 3 Regulatory Commission which is given the responsibility of 4 periodically checking this sort of thing, and we do spot 5 checks.

6 AUDIENCE PARTICIPANT: The industry has 7 consistently refused to allow public scrutiny of that data. 8 MR. GRIMES: I guess as the NRC, we feel that we 9 are public representatives, whether you feel that tonight or 10 not, but we feel a responsibility to check whether the 11 utilities are following the proper processes, and to look 12 into their programs fairly closely, and we have inspectors 13 who do, indeed, do that.

AUDIENCE PARTICIPANT: If you are my representative, and I certainly hope you of the taxpayers, tell me why you are even considering a quick dismantling, is there any reason at all not simply to just --

MR. GRIMES: I guess you have to go back to, do we want nuclear power to operate in this country, and Congress has --

AUDIENCE PARTICIPANT: No.

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22 MR. GRIMES: We, as a nation, and our 23 congressional representatives, have passed an Atomic Energy 24 Act that essentially has said, under certain conditions, 25 under certain regulations, there can be a nuclear power

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1 industry in the country, and we are responsible for setting 2 up those regulations. Those regulations --

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MR. GRIMES: Because a few years ago we went through a public making process to decide just this, and asked for public comments on this big blue book, the Environmental Impact Statement, and decided not to require the absolute lowest occupational exposure.

AUDIENCE PARTICIPANT: But that doesn't take my health into con geration.

MR. GRIMES: We also required that transportation, for example, be within the current limits for low-level transportation. That happens a lot. There are a lot of radioactive low-level waste transported every day throughout the country. These transports of these large components will meet those same standards and not present any significant risk at all, very low risk, even if you were up and touched the transport vehicle.

AUDIENCE PARTICIPANT: But you are compromising my

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health, and I don't do that, and I would rather not pay you to do that.

MR. GRIMES: I guess we don't agree that we are compromising the public's health by doing this, so there is a disagreement.

AUDIENCE PARTICIPANT: I would just like to backup for a minute so that I can understand. Yankee Rowe is planning right now a quick dismantling, and they want to ship all the low-level components to South Carolina?

MR. GRIMES: Some of them.

11 AUDIENCE PARTICIPANT: And then the remaining 12 high-level will stay on-site until --

MR. GRIMES: Until the Department of Energy takes it.

AUDIENCE PARTICIPANT: 1998?

MR. GRIMES: Or later.

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17 AUDIENCE PARTICIPANT: Whenever Yucca will be18 ready.

In the meantime, these transportations of these relatively low-level radioactive wastes, will there be any public notification of when these are taken from there, what route they will take, if they are going by truck, if they are going by train, how will we as a community know when this waste is being moved through our town or community? MR. GRIMES: This afternoon we heard from Yankee a

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transportation route and how they are going to do it, 1. initially by truck down through and across the dam at the plant, and down to the Hoosac Tunnel, and then to go on a 3 railcar to South Carolina, and we were also given an 4 approximate timing for when these things would be cut apart in the plant, and about when they would be moved. 6

AUDIENCE PARTICIPANT: And then will the public be notified of these shipments?

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MR. GRIMES: I don't know that there is a requirement to notify them specifically, but I think you can talk to the licensee about it. It is going to be pretty obvious when this stuff goes down the road.

AUDIENCE PARTICIPANT: There is no plan for it 14 necessarily to be shipped like by tractor-trailer truck through Shelbourne, Route 291, and that type of thing, they basically just plan to ship from the plant to Hoosac Tunnel and then by rail. 17

MR. MELLOR: And then by rail. On any radioactive material shipment, we are required to notify the State, and give them the routes, and they, in turn, through whatever 20 process they have for notification of the local community through the State police, so there is an awareness, and that 22 is done on a routine basis, and this shipment will be a 23 routine shipment no different in that respect. 24 25

AUDIENCE PARTICIPANT: Then what about when the

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high-level waste is being shipped, will that be shipped the same way, and how do you know where it is going?

3 MR. MELLOR: I can't really comment on that 4 because that is a DOE responsibility and the plans for that 5 haven't really been laid out here. I honestly don't know.

MR. GRIMES: Can I make a suggestion. We have one more presentation to get through, and then we can take some more questions -- two more, I am sorry, and I promise they will be shorter than Dick's.

AUDIENCE PARTICIPANT: I have a couple of questions, and I haven't spoken, maybe I could just get these in. What happens if a licensee does not or cannot fulfill their decon plan as written and approved?

MR. GRIMES: The NRC is continuously still in a regulatory posture. In other words, during the operation, if the utility did not fulfill their obligations, we have the authority to levy fines, for example, on the utility for non-compliance. So that process and that oversight continues. So the utility could be forced to comply with our regulations.

I guess the other part is, if they, for example, go bankrupt, then there is a decommissioning trust fund which has been set aside to do that, and even though the Yankee organization disappeared, there would have to be some organization formed to administer those trust funds, and to

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1 finish the dismantlement of the plant.

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MR. DUDLEY: And the trust fund is set up separate from the licensee's funds so that if a utility went bankrupt, they would not have access to those funds.

AUDIENCE PARTICIPANT: The other part of that question is, what happens if they way they have written their decommissioning plan, for some reason, at some point, doesn't work?

9 MR. GRIMES: Then they can come in and ask us 10 again for a change to their decommissioning plan, and we go 11 through the review process.

AUDIENCE PARTICIPANT: One more, when the Barnwell Ferry dumpsite was approved, what year was that?

MR. REIS: I think 20 years, I would imagine.
AUDIENCE PARTICIPANT: During the last 20 years,
has anything been learned about safer ways of storing lowlevel waste?

18 MR. GRIMES: I am more of a reactor expert than an 19 a low-level waste expert.

20 MR. PARROTT: What they have learned in a couple 21 of cases, a site called the West Valley and another one 22 called Shepfield, was that if you bury the stuff in a clay, 23 eventually the trenches fill up with water and overflow. So 24 they have rewritten the low-level waste regulations to a 25 technical specifications to avoid that situation in the

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1 future.

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AUDIENCE PARTICIPANT: The other question is, does Barnwell Ferry now -- are they in a state of the art facility, or are they in the state of the art 20 years ago? MR. PARROTT: They fully comply with our regulations now.

AUDIENCE PARTICIPANT: So as you upgrade your regulations, they are required to upgrade what they do, or won't their license carry them until they terminate operating?

MR. PARROTT: When we upgrade our regulations, South Carolina is required to adhere to our regulations, so it is up to them, but their siting and facility is basically okay and has been over these years. They haven't had the problems that these other sites have had.

16 AUDIENCE PARTICIPANT: Didn't they have a leak of 17 iridium there at one point?

18 MR. DUDLEY: No. That had nothing to do with 19 Barnwell.

20 AUDIENCE PARTICIPANT: It didn't have anything to 21 do with it?

MR. DUDLEY: No. A nuclear production reactor,the Savannah River site.

24AUDIENCE PARTICIPANT: Thank you.25MR. GRIMES: Let's take ten minutes.

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[Recess.]

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2 MR. FAIRTILE: Back on the record. 3 We will get started again. We have one 4 clarification on an answer we gave earlier. This is the 5 aspect of how good a facility is the Barnwell, South 6 Carolina, facility, is it up to our current regulations or 7 not?

MS. MILLER: Just as a little background, the 8 Barnwell site is in South Carolina, and at that time the 9 regulations were not on the book. Since that time, South Carolina has adopted NRC regulations to their own regulations. The NRC's Agreement States requires all of the NRC regulations to be adopted by the State, some have to be identical, on some there is latitude given to the State. 14 So, at the current time, the South Carolina regulations are not completely identical to the NRC regulations, but South 16 Carolina has made the decision that it is adequate, and it 17 is facility reasons for closing, it is not because of safety 1.8 reasons, it is for other reasons. 1.9

20 MR. GRIMES: Larry Bell is going to tell you a 21 little bit about the stage after any predecommissioning plan 22 activities. Larry is in the office that reviews the 23 decommissioning plan, which Yankee has scheduled to be 24 submitted this October, and that review takes about a year. 25 Larry is going to describe what that review consists of for

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1 the rest of the plant, which is the pressure vessel and all 2 the activity and the structures which is the majority of the 3 activities that we have to worry about.

[Slide.]

MR. BELL: The Office of Nuclear Material Safety 5 and Safequard, we get involved in the process really well in 6 advance of us taking on any of the responsibilities for doing any of the formal reviews. We get involved at this 8 early stage so that we can understand what the Office of Nuclear Reactor Regulation is doing and what the licensee is 10 proposing to make ourselves known so that if there are questions related to what should be in the decommissioning 12 13 plan, the licensee knows who to talk to and, if you will, by getting involved real early in the process, we don't have to 14 go through a learning process all over again.

In effect, I guess we can just look at it as, the second thing we do, we are just here to respond to inquiries from the licensee in regard to what is supposed to be -what we are requiring to be in the decommissioning plan. We review that plan when it is submitted, and we try and get all the information that we feel is adequate to do an adequate review. When we review the plan, and if everything is not there to our satisfaction, we hold the options open to go back and ask the licensee questions.

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It is our function to resolve the questions that

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1 may come up in our review, and the end product of our review 2 is that we sit down and we write the staff's safety 3 evaluation report associated with the decommissioning, and 4 we write and prepared the Environmental Assessment that may 5 be required as a part of the review.

[Slide.]

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MR. BELL: Our primary objective in doing the 7 review of the decommissioning plan is really to assure 8 ourselves that the licensee meets all of the requirements 9 for a plant that is going to be decommissioned. We, in effect, make sure that all the 10 CFR Parts that are applicable to the decommissioning are adhered to, and I have given a list here of some of the more important parts of the regulations that we look at. We look at the radiation 14 protection plan associated with the decommissioning plan. We look at all Part 50 related issues. We look at the Part 51, which are requirements which are the requirements for 17 the land disposal of radioactive waste. We look at Part 71, 18 19 which has to do with the packaging and transportation of the materials, and we look at the physical protection of the plant materials that are in place at the time of 21 22 decommissioning.

[Slide.]

24 MR. BELL: The primary focus of the things that we 25 look at during the decommissioning process is really the

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1 major activities and tasks that will be taking place during 2 the decommissioning. What we are looking for is a complete 3 description of what the licensee is proposing to do during that decommissioning. 4

We want to know and we want to understand what will be the major activities that will be conducted during 6 7 the decommissioning process, and how these activities could have an impact on workers and on the public. 8

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We review health and safety issues related to workers and the public. In effect, what we are looking for is, we take a look at the plant's whole operational history to try and identify, if you will, the areas or the radioactive inventory in the facility, the contamination 14 levels in the facility, what the licensee's commitments are toward keeping doses to workers as low as reasonably achievable, and we look at the licensee's training program to assure that those people who are responsible or 17 supervising radiation protection kinds of things are adhered 18 19 to.

We look at the cost estimates and for the selected 20 decommissioning alternative that the licensee is proposing, 21 and a couple of other things that I didn't list here, we 22 look also at the potential accidents that could occur. We 23 look at the final survey. In other words, depending on the 24 particular decommissioning alternative that a licensee will

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select, we will look at how he is proposing to survey the facility, and we are looking basically at what he has to include in his decommissioning plan, and that is a function of what alternative the licensee selects.

If he selects the safe store alternative, all that 6 is required is really a plan that he says he will implement 7 with a commitment to really follow what will be in place at the time that the facility is taken apart. If the licensee 8 9 is proposing to do a decon decommissioning alternative, we are interested in his decommissioning plan, how he proposes 11 to go out and assure that -- I am sorry, his final survey plan in great detail, how he proposes to take the measurements, the methodologies that he used to characterize everything from buildings to components, to areas within the 14 facilities, to areas outside the facility, we look at the whole package, and we review the data, and we independent of the licensee use our people to go out and do confirmatory surveys to assure us that the radiation levels are at levels 18 that meet our criteria for release. 19

20 We also look at the technical specifications that 21 will be in place at the time the facility is in the 22 decommissioning process, the quality assurance program that 23 is in place, and the radioactive waste systems that will be 24 used to process any waste that is generated during the 25 process, both liquid and, if you will, gases -- we call the

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gases treatment systems, but in all probability most of the 1 gases have decayed away, and we are looking to see what the 2 possibilities of releasing particular materials are. We are 3 concerned as to whether or not there are potential release 4 points that may be unmonitored, and we evaluate what the 5 6 licensee is doing in regards to assuring that he knows if, in fact, there are any potential releases from his site, and 27 what the releases will be. 8

After the decommissioning plan is approved, the 9 10 NMSS, that is the office that I work in, after the plan is approved, we take on, if you will, the total project 12 management responsibilities for the facility. Those responsibilities include acting on any license amendment 14 that comes in from the licensee. We continually review cost data to assure that costs are reasonable for the particular 15 16 piece of the decommissioning process that is ongoing at the time, and we, if necessary, again, depending on the 17 licensee's selected decommissioning alternative, we review, in great detail, the programs that are all related to the final survey, and whatever is necessary for us to terminate 20 the licensee's license, Part 50 license.

That is really all I wanted to talk about, as far as the process is concerned.

AUDIENCE PARTICIPANT: You say you review the licensee's projections for radiation releases?

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1 MR. BELL: What I said we do is, we do more than that. What we try and do is, if you will, if you look at 2 the whole Yankee facility as this one entity that has 3 radioactive material at various pieces of it, what we do is 4 review data that will tell us the quantity of radiation that 5 6 is left in that facility, where it is located, how much of it is there. We look for specific radionuclide information. 7 8 We look for contamination, for areas of contamination, the type of contamination that is there, and by that I mean removable or contamination that cannot be removed by wiping it away. We look at the total facility to see what is there 11 12 so that we can see if what, in effect, the licensee is telling us, as far as off-site doses, is reasonable. 13

AUDIENCE PARTICIPANT: You said something that the licensee would submit information to you for your approval in the case of radiation release that would need to take place?

MR. BELL: What we do as far as radiation releases are concerned is no different, we view it as no different from normal operations. The licensee has approved release mechanisms already in place. We review what he is proposing to do in relation to that. If they make a commitment to us that they will use what was in place during the operations, we will, in general, take a look at that and look to see if there would be any deviations from that.

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AUDIENCE PARTICIPANT: We asked the plant operators for the amounts of radiation that would be released, and including each component.

MR. BELL: Have they done that?

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5 AUDIENCE PARTICIPANT: Yes. Do they submit 6 something as to what their estimate is going to be for 7 release of radiation from these components?

8 MR. BELL: I haven't seen it. This is before our 9 review gets to take place. When that information becomes 0 available, I will take a look at it so that we will know 1 what is going on.

MR. GRIMES: I think we are just talking about two different organizations reviewing the process. Larry's organization takes it over at a little later period of time. The process we are talking about is --

AUDIENCE PARTICIPANT: What I am trying to find out is, does the operator have a projection for the amount of radiation that would be released that was made at the same time as their proposal to have these low-level components moved?

21 MR. GRIMES: What they have said is that they will 22 continue to be within their operational limits, and the way 23 we have viewed these particular activities is being very 24 similar to activities that are carried out at other 25 operating power plants so that we can use those operational

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1 limits without much problem.

We don't expect really any significant liquid 2 releases, for example. In fact, we don't expect, by these activities, much of any actual releases to the atmosphere, 4 or anything, because that will all be enclosed before the 5 components are -- the pipes will be cut, the pipes will be 6 capped. The steam generators, for example, will be taken out, further prepared for shipment, and the internals will 8 not be exposed to the outside. They will be sealed up. So 9 there will be essentially no release from that particular 10 path.

AUDIENCE PARTICIPANT: Why store all this up? This whole thing is like a disease stinking corpse. We're talking about it moving it one piece at a time and sending it all over the country. What is wrong with leaving the body there? As this gentleman said, we're going to pay for it regardless of what they do.

MR. GRIMES: By our Environmental Impact Statement, we've said there's nothing wrong with leaving it there, but we have said also that the impacts of taking it out sooner are small enough to be left as an economic decision. That is what the rulemaking was about with that big blue book, to decide those kinds of questions.

We've gone through the public process. We came out with a certain answer. It's not saying that answer

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couldn't be changed by another such process, but right now those are the rules that we're working within.

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AUDIENCE PARTICIPANT: It seems to me that another point with the safe-store option is that you would avoid the potential situation where you shook off the parts away and you have created this unrestricted use site. But you've still got the fuel pool. Where are you going to ship that high level waste? What are you going to do with the unrestricted use site if the fuel pool is still there? That takes at least six or seven years.

That's another reason why you don't just leave the stuff sitting there until you get rid of your highly radioactive waste. Then you can build your church right next to it.

MR. GRIMES: That is correct. It's not just the fuel pool in this case. There are also things like the pressure vessel itself. The main thing that held the reactor fuel is highly radioactive. That's not going to be taken out at this point and shipped off, only the less radioactive components.

So there would be other things that in this particular case will prevent any one from using that site for anything else for some time. But I guess it goes back to the point of whether we allow economic choices to dictate within a certain envelope of exposures to occupational

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1 workers.

We clearly are getting from you that we should optimize on the lowest possible exposure. The way the Commission has come out is to set some bounds and say people can work within those. I think we're probably not going to settle that tonight. But I'm pleased that maybe we understand each other's positions a little bitter.

AUDIENCE PARTICIPANT: Several times you have referred to setting levels and working within levels of setting the radioactivity that are now existing. But what I find difficult as a non-scientist is why scientists don't allow for what they don't know. Why is it said that we don't know you?

I watched on television last night or the night before where this mystery disease that has been afflicting the Gulf War Veterans. Now they have discovered that it comes probably from their having used some spent uranium wind blowing up some tents.

Here we have an opportunity to say that we don't really know. More and more information is coming in about what our safe levels and exposure to low level radiation is. One thing now, they are going to be saying something else probably five years from now, 10 years from now, 20 years from now. Why not say: We don't know? We have an opportunity to admit that and to hold off for at least 50

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1 years and find out what we do know then.

MR. GRIMES: As we heard, that option is being forcefully claimed from the audience here, but I can't go much further than to say we considered that kind of thing, decided that we have enough knowledge.

6 Clearly, radiation levels are set not only for 7 these processes, but for operating nuclear power plants, for 8 medical uses, for a lot of industrial uses.

9 Essentially there are boundaries that allow 10 processes to go on, which the Congress and I agree benefits 11 society a very great deal to have these options available.

AUDIENCE PARTICIPANT: The thing about that is that from one position you could argue that generating electricity through nuclear power was worth the sacrifice of the people who we sacrificed that get diseases from it in the form of cancers or whatever they get.

But in the decommissioning process, there's no argument along those lines. There's no benefit to society for exposing people to radiation. It don't benefit anyone except for someone that has an economic interest in the piece of land that your talking about.

AUDIENCE PARTICIPANT: I would just like verification of what we are doing here tonight of whether this dialogue we're engaged in will have an impact on decisions that you will make and what happens to this

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community, or is it just an exercise in each of us saying
 what we think? We're looking to you to reflect our concerns
 are in the decision-making process.

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MR. GRIMES: In certain ways, it can affect the kinds of questions we ask and the kinds of decisions we make. But when you get down to the really fundamental issues that were raised tonight about whether we philosophically require the lowest achievable dose or not, I think in the short-term that question is probably not going to be settled in your favor.

I think in the short-term we will continue to follow our regulations until those regulations are somehow changed. That could be a petition for rulemaking or some other factors that cause the Commissioners to change the regulations.

16 AUDIENCE PARTICIPANT: So what is the purpose of 17 this hearing?

MR. GRIMES: The purpose tonight is to explain what is going on so you have a good understanding of what is going on at the Yankee site and also what our role in overseeing that is so that you can better understand what oversight is done, how we make our decisions, and the context in which we make those decisions, and also to get your comments and questions so we hear from you what your perspective is. In some cases that can change what we do.

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In some cases it can't because of the constraints on us.

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AUDIENCE PARTICIPANT: That leads into the question I had. Even if the Commission is granted permission to go ahead with this decommissioning, let's say that once a decommissioning plan is approved, Mr. Bell, your group has the responsibility to the oversight, how tough are you on these guys?

8 Will you have the staff, do you have the 9 personnel, to maintain someone on site? Do you maintain a 0 presence there everyday and watch everything that goes on? 1 Do your inspectors go around with a chip on your shoulder 2 looking for a reason?

MR. GRIMES: That's an excellent introduction to MR. GRIMES: That's an excellent introduction to Mr Kelly from our Regional Office. The short answer is we don't have someone there everyday in decommissioning, but let Mr. Kelly answer and explain what the process is for inspections and what presence we do have.

MR. BELL: Let me add a little bit to that before you go. I think if you were to go ask the guys at Shoreham if we were nice guys, I don't think they would say we are. They are a plant that only operated for two days. I think you can look at it in that kind of context.

I think the people in our group take very seriously what we are about, operating within the parameters that we have to operate within. When a particular licensee

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1 does not follow what they say we will follow, we might not 2 catch them today, but sooner or later we do. We are not 3 particularly nice guys with them.

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MR. KELLY: Good evening. My name is Gene Kelley. I'm from the Regional Office in King of Prussia. I'm responsible for the Residents of the Inspection Program at Pilgrim, Vermont Yankee, and at Yankee Rowe. I supervise those inspectors, some of whom have chips on their shoulders and some are tougher than others.

10 Rowe has had an inspector program. They still 11 have a program, but it's different today than it was two 12 years ago. Today the activities at Rowe are different. So, 13 our inspection focuses are very different. Several years 14 ago we had inspectors like Paul Harris over here, who's a 15 Resident at Vermont Yankee. We also had inspectors like Joe 16 Nick, who's a specialist, a health physicist from the 17 Regional Office.

That combination of inspecting is what we use at power reactors. In fact, it's what we still intend to use at Yankee Rowe. Paul will be visiting Rowe periodically. He is not there permanently. He's not like the Resident Inspector that this plant used to have that was there everyday. The reasons are obvious because the activities are less.

Nonetheless, Paul and his boss, Harold, who work

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for me over at Vermont Yankee, will keep in touch with Rowe, and visit the site roughly once a month. They are more like generalists. Sometime we don't feed Paul -- keep him mean -- and he goes over there with the chip on his shoulder.

But he's pretty tough. He looks at the general things. He's in the control room. He looks at fire protection. The gentleman mentioned earlier about fire protection. I would agree. That's still a very important aspect of a plant site like Rowe.

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10 There's a lot of activity that's going to be going 11 on there -- things like welding, you know, "hot work" as 12 they call it in the plant. There are certain requirements 13 that the licensee has to maintain for fire watches, for 14 permits, administrative controls, and precautions. Paul 15 Harris looks for those kinds of things to make sure that 16 Yankee is following their license with respect to those 17 requirements.

The same thing is true for some of the equipment over there. They look at spent fuel pool analysis. That is really the only thing that is being operated, per se. There is radiation monitoring equipment for liquid effluence, processing monitoring that is required to be operable. It is required to be tested. It is required to be maintained, just like the cooling systems for the spent fuel pool. So Paul focuses on those kinds of activities.

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We balance this kind of inspection, just like we do at other power reactors. We're specialists, like Joe Nick. Joe is a health physicist. Now, in the last year or so with the reduced activities, we don't look broadly at things like EP and security very frequently anymore.

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We had a look at security several months ago when they reduced the security requirements. We talked earlier about less guards, less areas, less requirements, but there's still nuclear security for the spent fuel pool.

Our inspections, by and large, now are looking at things like health physics. Mr. Nick goes up there once every month or so. His future visits over the next six months are going to be keyed into a lot of the major activities that the licensees hasn't planned.

15 If these things begin and dismantlement begins, 16 and they start to cut major components, Mr. Nick is going to 17 be there to take a look at those activities and make sure 18 that they are performed safely.

There's still a very large radiation protection program at that site. That program is still required to be followed. They had to use rad work permits. They have to follow procedures. They have to have surveys. They have to have health physics coverage. In short, it has to be done safely. In fact, Joe Nick is up at the site this week inspecting. He will be up there in the future.

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We will also probably send specialists up in the area of environmental monitoring, transportation and rad waste, whenever those activities come to play.

That's basically the kind of things that we look at. Paul, because of his proximity at Vermont -- in fact, Paul lives in the area, along with Hal, and is very able to respond if something happens here.

8 I would say that in the future we will probably 9 spend some time looking at engineering and design work with 10 the Yankee organization. Mr. Fairtile and I were talking 11 earlier about the fact that this regulation that you 12 mentioned earlier -- 50.59 -- is a pretty important 13 regulation.

What it basically says is that utilities can make changes to these plants, but they have to go through a formal process. They have to do it in writing, and they have to make sure that the change is safe, basically.

18 So we trust them to do that, but we do 19 independently review those safety evaluations. That is the 20 kind of thing we will probably be doing in the near future 21 on some of these major changes to the plant as they plan to 22 dismantle the large components.

There are other important things that go on, too. This reactor may not be making power, but there's still a lot of important facets to safety that we like to confirm by

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1 our inspections. There is a QA program. It still produces 2 quality audits. We're very interested in looking at those 3 because that's a measure of the ability of this licensee to 4 make sure that they are following their own requirements. 5 When they sense they're not, they get it back on track.

They have safety review committees -- off-site and on-site -- that review some of these major activities, including the changes in the modifications. We, in turn, go in and look at those committees and make sure those committees are making good decisions, that they are following their charters and they are making good safety decisions.

13 So, we still have plans to conduct many of those 14 types of inspections in the near future. We think they are 15 important. That's basically it.

16 Paul, or Joe, did you want to add anything? Any 17 questions about inspections?

18AUDIENCE PARTICIPANT: Has the plan been approved19yet? It sounds as though it is an accomplished fact?

20 MR. KELLY: I'm not talking about inspecting 21 decommissioning activities in the sense of these plans. I'm 22 talking about today. Today there is a reactor site. There 23 is activities removing asbestos and things of that nature. 24 There's work that goes on. There are tech spec. They are a 25 reduced set now. There are technical specifications. The

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plant is still required to follow those. The spent fuel
 pool has fuel in it.

3 AUDIENCE PARTICIPANT: That has nothing to do with 4 the decommissioning?

5 MR. KELLY: No, that's a long-term issue. That's 6 a longer-term issue.

MR. GRIMES: I think Gene mentioned that as these large components activities, assuming they go forward, take place, then his inspector activities are key to whatever goes on at the site. The more important the activity, the more often people will be here.

12 So, as the Regional Office, he's responsible to 13 keep an eye on what is going on, what's approved by 14 headquarters, and whatever that is, to make sure it's done 15 properly.

AUDIENCE PARTICIPANT: I just have a feeling that it has already been concreted in a model.

MR. GRIMES: Well, I think we could say that we've got a lot of information from the utility. It looks very likely to me that we will say go ahead with these things. But the final decision hasn't been made yet. But I would say just based on my review of the documents and things, it looks like to me it's on a success path as far as the licensee is concerned.

AUDIENCE PARTICIPANT: Why will the licensee save

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1 money by this? I don't understand that. Will there be less 2 necessity for inspections after the low-level material is 3 removed?

MR. GRIMES: No.

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5 AUDIENCE PARTICIPANT: Will there be lesser 6 requirements for insurance or security

7 MR. GRIMES: I think what the economic judgement 8 is, is based on the certainty of certain costs of disposal 9 of these components now and the uncertainty as to what those 0 costs will be later.

11 So, they believe it is of benefit to them to 12 accept the certain costs right now rather than to have to 13 pay those possibly very much increased costs at a later 14 time. That's just their judgement.

AUDIENCE PARTICIPANT: The cost to the workers and do the work, and the cost to the community in which the work is done? The Hell with that.

MR. GRIMES: No, I don't think that is quite the case because we have said they have certain bounds to work within which are very low exposures to individuals. The cumulative exposures have to be kept also within certain bounds.

AUDIENCE PARTICIPANT: As long as they are kept within those expected bounds, the Commission feels it is okay to go ahead?

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1 MR. GRIMES: That's what our rules say. We are obliged to follow our own regulations. We've gone through a 2 process to set up those regulations. If they stay within 3 those bounds, we're pretty much obliged to go along with it. 4 Who hasn't had a turn yet? AUDIENCE PARTICIPANT: Will your inspectors be 7 conducting separate monitoring systems of radioactive 8 releases other than what the plant submits? MR. GRIMES: Yes. MR. KFLY: There are some independent measurements that are done separate of what the utility AUDIENCE PARTICIPANT: How often is this done? 14 MR. KELLY: That would be t sically ---AUDIENCE PARTICIPANT: Or would it be done in the decommissioning process? 17 MR. KELLY: I can't answer in the long-term. The short-term is once every three years. Marie? When a power reactor runs, it's basically once every year and a half or three years. 20 21 MR. GRIMES: Those are independent samples. Now, 22 there is environmental monitoring which Marie maybe will MS. MILLER: In another position, I have been the 24 Chief of the Section, so in my past job I can speak to that.

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For an operating facility, our plan is through independent inspection, the current licensees is taking measurements all the time.

AUDIENCE PARTICIPANT: For a non-operating level? MS. MILLER: For non-operating facility, apparently we still have the inspection program. Basically it depends on the work that is going on. So, the plan that we had used is different because it depends on what is expected to happen.

So, if there is going to be activities of removal, there will be more sampling taken. Also, the State has an on-going program for sampling the environment. That continued during operation and it will continue.

14 AUDIENCE PARTICIPANT: How frequently would that 15 be?

MS. MILLER: We also had the TLD system which is out there all the time. The NRC has a measurement system that takes down the radiation off-site.

MR. HALLISET: All of the safe-store system is off-site as opposed to monitoring on-site. The off-site includes not only the TLD system, but it does include at least one sampling station that has been operating.

23 AUDIENCE PARTICIPANT: So it is separate 24 monitoring?

MR. HALLISET: Yes, off-site.

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AUDIENCE PARTICIPANT: One of the things that I heard today and what I understood was that during the safestore period that dismantling would take place of other components besides the three as the opportunity presented. MR. GRIMES: That's an option.

6 AUDIENCE PARTICIPANT: So in other words in view 7 of what the purpose of this meeting is, is to have us gain 8 an understanding of what you do, which it seems to me very 9 little. In fact, it seems that the Company could do 10 whatever it wants to as long as it submits the proper 11 paperwork?

12 MR. GRIMES: No, not the proper pape As long as 13 they go through a detail process --

AUDIENCE PARTICIPANT: The issue is that you are allowing the utility to call it "skre-store." Now, if safestore is a designation, I believe it comes from the investigations that were commissioned by the Nuclear Regulatory Commission.

Now, safe-store I don't believe is a process of not doing anything until an opportunity presents itself to do it.

MR. GRIMES: What we would be doing is combining the options of the dismantlement which we have said is okay and safe to store. Some combination of those things is okay as long as we review it and they stay within the

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1 requirements.

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MR. KELLY: I would like to add one thing, I'm not aware of any near-term plans for independent monitoring up there, but if you will give me your name and how I can contact you, I will find out and get back to you. Would that be all right?

7 AUDIENCE PARTICIPANT: Okay. I just don't trust 8 them to say, "Oh, well, gee whiz."

MR. KELLY: I understand.

AUDIENCE PARTICIPANT: If there are going to be components moved, and the shipments made is going to be generators cut out, I can't imagine that there wouldn't be some type of release.

MR. GRIMES: Let me just try to clarify. There are several different things we do. You heard about the off-site monitoring by the State and the NRC and the independent samples that are taken to make sure the equipment of the licensee is okay.

But most importantly, Mr. Nick and people of his discipline show up there and go through their procedures, watch them do activities, make sure that their activities are consistent with the records, and gets a feeling of the creditability of the operation.

24AUDIENCE PARTICIPANT: That's once a month?25MR. GRIMES: I don't know if it is once a month.

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During this time it sometimes may be more frequent or less frequent, depending on what is going on in terms of major activities.

4 MR. KELLY: Mr. Harris would be once a month, and 5 Mr. Nick may be once ever several months, depending on 6 activities.

MR. GRIMES: But if they start doing a lot of activities, he's going to be up here a lot more.

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9 MR. KELLY: There was two other quick points that 10 I wanted to make on the inspection, and then I will take 11 your question.

One is that you reminded me that part of our inspection process includes the State's involvement -people like Jim Muckerheide from Massachusetts, and Bill Sherman from Vermont who do have a Memorandum of Understanding with our Agency and accompany us on our inspections.

They are very much involved in these things. So, the State also is involved in our inspections in an observation mode. They also make comments. That is an aspect that will continue to occur.

The second point I wanted to make is that one of the types of things -- you had a concern earlier about radiation exposure to workers and implying that there are people that work this industry who perhaps falsify their

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1 records.

2	2	I would second Mr. Reis' point that if you know of
	3	anything like that we would certainly like to know those
4	ł.	instances. But I wanted to assure you that one of the
	5	activities do, at least for this site, people like Joe Nick
E	5	come up. They look at work exposure records. They look at
1	7	dosimetry history. They look to see that they are meeting
8	3	both the licensee's administrative limits and our Federal
5	a	limits as well. So that is something that we do provide an
1.0)	oversight on. We are looking at those data.
11	L.	MR. FAIRTILE: You had a question?
12		AUDIENCE PARTICIPANT: There's a local citizen's
13		group that has existed almost two years. It has been a
1.4	Į.	source of a lot of information to the community. I was
15	5	wondering if you could put this organization on your service
16		list.
17	7	MR. GRIMES: I think we already have it.
1.6	3	AUDIENCE PARTICIPANT: We were told that. It has
19	2	never happened. Are citizens aware of this?
20		MR. FAIRTILE: They have been on our service list
21		for the longest time. We are mailing everything to CAN.
22		AUDIENCE PARTICIPANT: I'm the one with the key to
23		the mailbox. I don't get any of this stuff.
24	-	MR. FAIRTILE: We mail everything.
25		MR. GRIMES: If somebody will call Mr. Fairtile

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1 when he is back in the office, he will take a look at what 2 he thinks has been mailed. You can see what you have 3 received.

MR. FAIRTILE: I'll send you a list of every 4 document we have on our record that we have sent you. Okay? 6 AUDIENCE PARTICIPANT: We need all the documents. We need to have, in order to be assured that we will know on 7 a day that there is going to be sectioning and 8 9 transportation of one of these units and one of the 10 compartments that may or may not be dismantled in the safestore period, that if the wind is blowing, we have to know. Some people might want to duck out of the way of the particulates that are going to be distributed in the 14 pathways.

MR. GRIMES: I guess we disagree that there will be tickets distributed. But I understand your desire for information.

AUDIENCE PARTICIPANT: Well, the information has to be in the documents that are exchanged between the utility and the NRC relevant to the decommissioning process.

21 MR. GRIMES: As far as the utility documents go, I 22 think we wrote a letter that said we will put those in the 23 local public document room.

AUDIENCE PARTICIPANT: It will take months before that will happen.

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MR. GRIMES: It should not take months. AUDIENCE PARTICIPANT: One month.

MR. GRIMES: It should not take one month.

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AUDIENCE PARTICIPANT: It would take a computer expert to access these documents. We don't have the capacity to do this. We need the documents sent to us, just as the town of Rowe should be on the service list.

8 MR. GRIMES: Well, I hear your desires. We 9 considered this once already and tried to make sure that the 10 information went to the public document room in an expedited 11 way.

I think I can that Mr. Fairtile, if he gets any significant documents from the licensee over the next, say, six months, will give somebody from CAN a call and tell you that it's --

16 AUDIENCE PARTICIPANT: Can't we be the judge of 17 what is significant to us?

18 MR. GRIMES: You can call up once a month and find 19 out what has come in. How about that?

20 AUDIENCE PARTICIPANT: Why can't you send us all 21 the documents?

MR. GRIMES: Well, it's just setting precedent for taxpayers money to distribute documents. We can do that for our own documents, but the --

MR. REIS: NRC regulations may prohibit sending

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1 you all the documents.

2 AUDIENCE PARTICIPANT: If the public can't receive 3 the information --

4 MR. REIS: We didn't ask for that section into our 5 Appropriation Act. It was put in there by the --

6 AUDIENCE PARTICIPANT: We are not going to be 7 protected by the NRC in this, so why can't we get the 8 information to protect ourselves?

9 MR. REIS: I would suggest you write to your
 10 Congressman.

MR. GRIMES: We'll probably have to answer it. I like that suggestion.

13 [Laughter.]

AUDIENCE PARTICIPANT: We don't like that kind of answer. This is our lives we are talking about. This stuff is going to poison us.

MR. REIS: We live under a system of laws in the United States. The laws are made by the Congress. I can't change them.

AUDIENCE PARTICIPANT: The laws made by the Congress enacted certain regulations that were to be enacted by you which were to have hearings with any change in procedures or specifications.

We are having unsafe and illegal again. Just as Bud Howard said two years ago, it's going on, and you are

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doing it in a much smoother way. You guys are really slick.
 But you seem to be working hand-in-hand in an unsafe and
 illegal process with the utility.

4 It's not their fault. Their job is to make money. 5 Your job is to protect us. They are doing their job, but 6 you are not doing yours.

[Applause.]

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8 AUDIENCE PARTICIPANT: You are agents of 9 government. Your pay is paid by us, the taxpayers. You do 10 not have the right to deny us the information that we 11 require, clear and simple. You are responsible directly to 12 us, and if you don't think you are, we are going to make 13 sure that you know it.

So I think that the suggestion that we get a hold of our representatives is appropriate. It's not only appropriate, but I think we are mandated to do so, so that you will know very directly that when you pick up your check, your requirement is to talk to us.

MR. GRIMES: I don't think there is ever any hesitation of talking to you. Now, the question is --

AUDIENCE PARTICIPANT: That means send us all the documents that we require and that you not make the judgment and clean up what it is that you decide to send to us. MR. DUDLEY: The issue here is only when you get the documents. All the documents are sent to the local

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public document room. The only issue we are talking about

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AUDIENCE PARTICIPANT: The public document room is not accessible. It requires a computer to access it. We don't have a computer. Do you know that the Greenfield Community College does not have the required computer?

7 MR. DUDLEY: In one of our letters, I believe we 8 included an 800 number which you could call if you were 9 having trouble accessing those documents.

10 AUDIENCE PARTICIPANT: Yes. I call Theresa all 11 the time.

MR. DUDLEY: What does she say?

AUDIENCE PARTICIPANT: Sometimes she gives me information and sometimes she doesn't, depending on whether somebody there decides whether I should have it or not.

Now, the Congress enacted this public document facility so that we would have the information available to us, not the information that you think we should have available to us, but all of the information.

20 MR. DUDLEY: All the information is available in 21 the PDR. But what you are telling us, I think, is new 22 information, that that information is not accessible to you. 23 In other words, putting it in the local PDR apparently is 24 not working. It is not accessible due to lack of a computer 25 I believe is what you are saying. We will look into that.

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MR. KELLY: If you give us your name afterwards, I can get Paul to work with you and go over to the community college, check it out, see what the scoop is. If there is a problem with this NUDOCs or access --

5 AUDIENCE PARTICIPANT: I don't have the time. 6 Just check it out. You will see that they don't have a 7 computer. As a matter of fact, they are supposed to have a 8 computer and they don't have one, and maybe you can supply 9 them with one.

MR. KELLY: Is this the computer that accessed the documents, which is called NUDOCs?

AUDIENCE PARTICIPANT: That's how it works. MR. KELLY: NUDOCs? Is that what you're referring to? It is? All right. Whether you come or not, I just need to understand the problem and difficulty you have with the room. We will get over and look at it and get some action moving on it.

MR. FAIRTILE: We're going to investigate it. We are going to look into the local public document room and see. I had looked into this about eight months ago, and I had them get back to me with a report, and they told me that it was all in working condition and it was accessible to the public.

AUDIENCE PARTICIPANT: It is in working condition only if you call the 800 number or you have a computer

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system to access it. There is no computer there. In the public documents room up there, which I have gone to in the past, there isn't a computer there either. So it is well nigh impossible, except by being dependent on calling Theresa Lindon, to get information from you.

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This is not how it was set up to be and basically it is set up so it is really difficult to get information. To go through this process is really frustrating and I think we have a kind of persistence to do it, but most people couldn't even figure out how to get through it. That is not set up to make it possible for ordinary citizens to get this information.

MS. MILLER: Since I am a state liaison, I deal with the state's information. I have looked into -- not all of the public document rooms have a computerized system for all documents available being in a computer, and that could be the case here, but they should have a microfiche copy of the record that you want to see. So although it shouldn't be there by computer, it should be there, you know, through another media. And then in addition --

AUDIENCE PARTICIPANT: Yes, but to get the microfiche number, you have to go through a whole process, and without the computer, it is much, much harder. I mean, I have worked on a computer and people in our group have in terms of accessing information. But, you know, if you call

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1 up certain feeds, if you are looking for Rowe or whatever 2 you look for, you will get that off of a computer, but if 3 you have to go through those paper files in the microfiche, 4 you will be there for months.

5 MS. MILLER: That's one problem. Then we have --6 as Mort said, we are going to check the addresses for the 7 NRC documents. So at this point, it is the problem of 8 getting the accession number for the documents.

9 MR. KELLY: Yes. If you would get together with 10 Paul.

MR. GRIMES: I was going to say that if that doesn't work out, then I will be in the position of having a justification probably for sending you stuff directly. But we will try to make the system work first, okay?

15 AUDIENCE PARTICIPANT: Can we have a timeframe on 16 that?

MR. KELLY: Tomorrow?

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MR. GRIMES: We will look into it within a week, right, and then Mark will have some information. Is that feasible, Paul? Is within a week feasible?

21 MR. KELLY: What I would prefer is, you know, if 22 you could be available when Paul is here so he can see the 23 difficulty of real time, you know, is it old documents, new 24 stuff, is it getting an accession number, you know, what it 25 is it so we can understand the problem and then be better

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1 able to deal with it.

AUDIENCE PARTICIPANT: I think your representative over here understands there is no computer, that the issue is if there is no computer, it's a much narder system to crack.

6 MR. KELLY: I understand that. I had the same 7 problem when I --

MS. MILLER: But it should be not that difficult
 to -- if we work with the librarian there, we can fix it.
 MR. GRIMES: Okay. We will find one way or
 another to get the information made available.

AUDIENCE PARTICIPANT: I hope you are more on top of things when you are overseeing Yankee's decommissioning. [Applause.]

MR. GRIMES: All right. A couple more questions, and then I think I need to go and see if there are any particular statements that people that signed up want to make separately or whether we have covered it all already. But two more questions, and then we will go to that list and make sure that everybody that signed up gets at least a chance to say whether they want to say something. We have two hands here. Go ahead.

AUDIENCE PARTICIPANT: This actually might tie into the problem of accessing the documents, but if we were able to wave a wand tonight and somehow or another there

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would be no radioactive material in this plant, we still
 have some issues of public safety.

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Now, I am wondering if there is anyone in this myriad of regulation here whose responsibility it is to see that local health and building permits are taken out, that the information supplied in order to receive those permits is provided, and with regard to this particular project, number one, who is going to be given that responsibility, and, two, when are they going to be approaching the local regulatory people, and if the answer is what I think it is, why not?

MR. GRIMES: Local permits? He is asking a question about what the legal status of the local permits versus what they have to do for us is, and I --

5 MR. REIS: I would have to know particularly what 6 permits you are talking about and whether --

MR. GRIMES: There are certain state permits. MR. REIS: What permits specifically are you --AUDIENCE PARTICIPANT: Well, you are taking apart a building, for one thing. That requires a demolition permit. You are taking apart a boiler. There are permits that go along with that. You are removing materials that are asbestos. There are permits above and beyond the fact that this is a nuclear power plant. If this were a treehouse, you would --

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1 MR. REIS: I would think that would be of particular interest to the state's attorney, and I think 2 3 it's on the state's attorney enforce state laws.

AUDIENCE PARTICIPANT: I didn't hear your last 4 part.

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MR. REIS: It's on the state's attorney to enforce 7 state laws. Who is your county attorney for the local county?

AUDIENCE PARTICIPANT: No, no, no. There are local authorities whose responsibility it is to enforce these laws. Each of the 351 cities and towns in Massachusetts is required to have a health commission, to have a building commission, et cetera, and the towns who are involved here, Rowe more immediately and the towns 14 surrounding, have those personnel.

This is ofcentimes the office which is the repository for the "what's going on" kinds of documents that 17 frequently citizens groups would like to access, but so far 19 as I have been able to determine, I haven't seen any activity in systematically informing the local regulatory 21 force as to what is going to be done and when.

22 MR. DUDLEY: In part of our regulations, in Part 51, in the licensee's environmental report supplement that they will need to submit with their decommissioning plan, I 24 believe they are required to give us the status of all 25

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1 required local and other government permits. So they will 2 have to submit that permit status information to us as part 3 of their decommissiong --

4 AUDIENCE PARTICIPANT: And whose responsibility is 5 it to submit it? The power plant operators?

MR. MELLOR: And we take that responsibility very seriously and we comply with all of the local codes and asbestos monitoring requirements, notification of the state. We are doing all of that and will continue to do that through the course of having a license.

AUDIENCE PARTICIPANT: Do have a person who has that responsibility, someone that I can contact?

MR. MELLOR: Why don't you contact me as project manager.

AUDIENCE PARTICIPANT: Sure.

AUDIENCE PARTICIPANT: Do you have state approval for the asbestos job that's going on?

18 MR. MELLOR: Yes, we do. The question was do we 19 have state approval for the asbestos abatement that is going 20 on now, and the answer is yes, we do.

21 MR. GRIMES: Okay. One more.

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AUDIENCE PARTICIPANT: I have a couple of rather technical questions. We haven't heard very much tonight about decontamination activities and I wanted to know whether there will be any pre-decommissioning, I guess what

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1 you would call activities that involve releases into the 2 river?

MR. GRIMES: There may be continued releases under their current license which are allowed, and Joe, perhaps you can say what the routine releases are.

6 MR. NICK: I actually can't speak to the -- I 7 think maybe Marie would be a --

8 MR. GRIMES: Marie? Well, Marie is not familiar 9 with the plant, so I thought maybe you --

MR. NICK: All I can say, there is a part of our inspection team that does look at that. I'm unfortunately not on that team. But they do have routine discharges, that's true, and that is monitored through another part of --

AUDIENCE PARTICIPANT: I am familiar with the routine discharges. I wondered whether there would be any unroutine discharges allowed under the pre-decommissioning? MR. GRIMES: As long as these activities stay within those same limits for routine releases, they don't have to have any special permission to do that.

AUDIENCE PARTICIPANT: Someone had mentioned earlier when we were talking about exemptions that -- I picked up something about that the effluent monitoring had been taken out of the license procedures and been put into some other --

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MR. GRIMES: Another controlled document, ves. AUDIENCE PARTICIPANT: What is the name of that document?

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MR. GRIMES: The Radiological -- the Offsite Dose 4 5 Calculation Manual is the name of the document.

MS. MILLER: But then within that is the radiological environmental tech specs. That has the specific limits and surveillances and so forth. And then the Offsite Dose Calculation Manual is then what's used to calculate these specs. Sometimes it is in one document.

MR. GRIMES: Marie, can you -- Marie Miller. MS. MILLER: Excuse me. My name is Marie Miller. I am answering these questions because up until August, I 13 had been the effluent section chief under the new position. 14 If I had been in that other position, I would be over there.

MS. MILLER: It's Dr. Robert Bores, B-o-r-e-s, and 17 he is the chief of the effluent section, effluent radiation 18 1.9 protection section now in Region I.

AUDIENCE PARTICIPANT: Who is the new person?

20 AUDIENCE PARTICIPANT: Everyone has a piece of the 21 pie. It's really unbelievable. This is so anti-people and 22 so anti-this locality and so pro-money and so proadministration of their own, so obvious, so disgusting. 23 24 MR. GRIMES: I am sorry you feel that way because we feel very seriously that we have spent our careers trying 25

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1 to make sure that the public is protected from --

2 AUDIENCE PARTICIPANT: You are the nuclear 3 enabling commission, and you always have been, and that's a 4 pity.

5 MR. GRIMES: Let me now just go through this list 6 and see if anybody -- and then we'll come back to questions 7 if we have time here.

8 Mr. Katz, did you want to say anything further? 9 MR. KATZ: Actually, I just wanted to ask a 10 question which is rather abstract. I really want to know 11 whether in fact the Nuclear Regulatory Commission was under 12 the assumption that the risks and benefits of the nuclear 13 power production are distributed uniformly throughout the 14 population.

MR. GRIMES: No, we don't.

MR. KATZ: So why is it that there are no -- there is no particular focus in any of the studies that you base your risk assessment on of people who live in the effluent pathways, that there are always studies that are based on state-wide or county-wide data?

See, my problem is that if you take a relatively pristine environment and you have a few people that live in the effluent pathway who are suffering rather greatly, that they are statistically obliterated by the kinds of studies that you go by to calculate your risk assessments, you see?

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1 So, in fact, although you say that you don't assume that the 2 risks are uniformly distributed, you act as though they 3 were, and we are the people that live in the effluent 4 pathway.

MR. GRIMES: Right. I guess I disagree that we do that, because the limits are based on considerations of the effects of radiation and then those are set as individual limits, the maximum an individual is allowed to receive. So it's the most affected individual that controls the allowed effluence from the plant, not the general populous in the area.

12 AUDIENCE PARTICIPANT: What about the NCRP 13 studies?

MR. GRIMES: The NCRP and ICRP studies, those form the basis for deciding what the effluent limit should be, but then those limits are applied to the most affected person near the site. So it's not distributed.

Mr. Streeter?

19 AUDIENCE PARTICIPANT: He left.

20 MR. GRIMES: Okay.

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Jean Claude Van Itallie?

MR. VAN ITALLIE: There have been many words said tonight and I'm not going to add many more. But please take very seriously the emotional tone that you hear from us. You mentioned your career, that you spend your

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1 career perhaps trying to be fair. I would like you to 2 think, when you retire, that you won't be sorry. You know. what do people say to the people with cancer near the 3 Hanford Clinic in the State of Washington except "I'm 4 sorry"? What can people say? What can people say, what can people who are in charge of putting regulations in place say 6 7 to the veterans who have now contracted this disease, which probably is connected to radioactivity, because of the 8 9 uranium fuel that I mentioned before that they were using during the Gulf War? I mean, what is left to say except "I'm sorry"?

It is not a great thing to come to the end of your career or the end of your lives and say, you know, had we had that information, if the limits that we know now that are dangerous, if we had known it then, we would have acted differently.

We have a situation here in which you can act differently, where the NRC does seem to have some discretionary approval of whether there will be some predecommissioning things that will happen and which decommissioning plan will take place.

Please hear us very, very seriously when we say we want safety, safety, safety above everything. We don't care whether the reactor makes money, doesn't make money, loses money, doesn't. We want safety and we want to err on the

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most conservative possible side of safety. Please hear us.

MR. GRIMES: Thank you.

Mr. Rosenthal.

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MR. ROSENTHAL: There isn't a great deal I can add to the comments of the participants except the impression that I alluded to earlier that it seems that the NRC has over the past consistently relaxed its regulations in favor of the easier operation of an aging nuclear industry that has been having greater and greater difficulty complying with the rules.

In the present situation, we see Yankee Rowe struggling to lower its level of liability by attempting to pull out more and more quickly and to turn its back on the entire issue of the assurance of absolute safety, the greatest safety possible for us, the public.

We are here because we are the residents, we are the neighbors, and we are the recipients of all the effluence, all the releases, whether they be regulated or accidental or whatever, and we are frankly in terror of the present lack of willingness of the NRC to look at our needs.

I would say the keynote of that terror has been your complete misunderstanding of the blackout of information that you think that you are providing to the public that we the public find impossible to access. Just that, to me, is an indicator of the tremendous gulf between

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yourselves and ourselves, and I think that must be bridged and overcome immediately, and the rest of the style of the operation of the NRC must adjust itself to the needs of the public.

> That's all I would say. MR. GRIMES: Thank you.

> > Mr. Crawford?

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MR. CRAWFORD: Yes. I have a more specific 8 9 question. Putting aside the terror and the fear of a 10 nuclear accident, it seems that we have a power plant that 11 has been shut down for safety reasons, the way I understand 12 it, and the cost of decommissioning now is, of course, in 13 our hands. Are all of the expenses, virtually all of the expenses of the nuclear industry in the hands of the 14 15 ratepayer, including a fine that they might incur as a result of non-compliance with regulation? Are we also 16 17 paying the fine?

MR. GRIMES: The answer is no. It would depend in a specific case on the state rate commission, but usually the state rate commission will make the utility take that out of profits, out of their money rather than out of the rate base.

23 MR. CRAWFORD: Where does the profit come from? 24 Doesn't that come from --

25 MR. GRIMES: There is a certain rate of return on

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their money, and they are not allowed to charge the fine as an expense which they can recover.

3 MR. CRAWFORD: So that comes out of somebody's 4 paycheck?

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5 MR. GRIMES: It comes out of stockholders, I guess 6 you can say, stockholders and investors.

MR. CRAWFORD: The only other question I had was what -- you say that eventually the land will be released for unrestricted use. I didn't hear any specifics on that, and I heard some jokes about building a church. But what does that mean? Are we going to be able to grow organic tomatoes on that?

MR. GRIMES: Yes. The levels that are approved for release -- it's more likely in many cases that if it's an industrial site, that it might be used for industrial purposes, with those buildings used for other purposes.

In Yankee's case, I understand they intend to remove the buildings as well, so it could indeed be used for a church or other purposes, although Yankee owns the land, so they would be the determinate of what purposes that is. But unrestricted use means that we don't regulate it anymore and that means that other activities, other normal daily activities can take place on that site.

24 Before that happens, we have independent surveys 25 to make sure that the licensee surveys and statements are

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1 correct by laboratories, and once we are satisfied that the 2 limits are satisfied, then it's released from our licensed 3 authority.

AUDIENCE PARTICIPANT: Has that ever occurred? MR. GRIMES: Yes. And if you recall Mr. Dudley's slide with the 63 test reactors, those have all been released for unrestricted use as classrooms or whatever else.

9 AUDIENCE PARTICIPANT: Never gone commercial? 10 MR. GRIMES: Mostly not commercial. The 11 pathfinder site has been released for unrestricted purposes. 12 That's a power reactor.

AUDIENCE PARTICIPANT: How many commercial nuclear power plants have you overseen decommissioning, the NRC? MR. GRIMES: We're in the process of -- only one has gone through the entire process and had --

17AUDIENCE PARTICIPANT: This is the second to ever18do it?

MR. GRIMES: No. This is the first -- when I say gone through the process, I mean all the way through any storage or dismantlement activities, final survey.

AUDIENCE PARTICIPANT: I am talking about to green pastures and organic tomatoes. How many times have you gone through that procedure with commercial nuclear power plants? MR. GRIMES: Okay. We have approved six

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decommissioning plans to date, so we have gone through - Larry Bell described the decommissioning plan review
 process. We have approved six of those to date. We have
 got three, including Yankee, under review, so that will be -

AUDIENCE PARTICIPANT: So the complete process is one? In your experience, you have only gone from --

8 MR. GRIMES: I'm sorry, we don't have Yankee yet. 9 Three under review and three others, including Yankee, that .0 are preparing their decommissioning plans.

AUDIENCE PARTICIPANT: Yes, but not under review and not under approval, but having gone through the process, how many have you overseen?

14 MR. GRIMES: The whole process, one.

AUDIENCE PARTICIPANT: You haven't had a lot of experience with this.

MR. GRIMES: Well, we think we have had quite a
 bit of experience in the front-end of the process.

AUDIENCE PARTICIPANT: I know, but the back-end. MR. GRIMES: Well, the back-end for power reactors, you are correct, for power reactors. For other sites, material sites, research and test reactors, we have

23 had a lot of experience.

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AUDIENCE PARTICIPANT: I understand, but in a certain way we feel that we are part of this experiment and

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that we are really helpless, and that we don't feel a lot of 1 assurance -- or I should say I don't feel a lot of assurance 2 that you're protecting from what we feel may be dangerous to 3 us or dangerous to workers. I don't think we're L.cessarily 4 in so much danger from this decommissioning, although what I 5 wondered was that there was this question of is there 6 radioactivity being released into the river at this point? I mean, you talk about standard operating procedures and 8 9 what went on, and there were releases that are released every month from a pressurized reactor vessel. But at this 11 point, are there radioactive releases into the Deerfield River? Is that happening?

MR. GRIMES: I suspect there are but I don't have the immediate knowledge.

AUDIENCE PARTICIPANT: So there is still radioactivity --

17MR. GRLThere may be some routine releases18going on under the operational limits.

AUDIENCE PARTICIPANT: And this is for what? This is for the fuel pool, to cool it? Why would they still be releasing --

MR. GRIMES: Various clean-up activity within the plant, things they largely -- well, that isn't current. That's -- in '92, the doses came way down. But there will be continued small doses off site.

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AUDIENCE PARTICIPANT: You know the crud steam within the steam generators you said you are going to clear up?

MR. GRIMES: Yes.

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AUDIENCE PARTICIPANT: Crud is inside.

6 MR. GRIMES: Inside. They will cap them, and some 7 of them, they were filled with concrete to make sure the 8 things don't move around any further.

9 AUDIENCE PARTICIPANT: Do they get encased in any 10 way?

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 MR. GRIMES: No. They will be their own -- they

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 are several inch thick steel, so they are essentially -

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 AUDIENCE PARTICIPANT: They are self-supporting.

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 MR. GRIMES: They will be self-supporting.

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 AUDIENCE PARTICIPANT: And they will be exposed to

16 the atmosphere.

MR. GRIMES: Until they get to Barnwell, yes.
 Until they get to South Carolina and buried, yes.

AUDIENCE PARTICIPANT: So when they are going down these railroad tracks at 50, 60, 80 miles an hour, they --

21 MR. GRIMES: They have to be able to meet 22 transportation cask requirements of impacts and accidents 23 and not coming apart.

AUDIENCE PARTICIPANT: And they are out there spreading this whatever, radioactivity that is being

1 released, and it is some, isn't it?

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MR. GRIMES: No.

3 AUDIENCE PARTICIPANT: It is not neutral. This is 4 not regular -- there is an absence of radiation in these 5 things?

MR. FAIRTILE: No. There is a minute amount of radiation, but as you get any distance away from these packages, it drops essentially to zero very quickly. You couldn't even sense it say at 20, 30 feet.

10 AUDIENCE PARTICIPANT: Whatever is being released 11 is being released.

MR. FAIRTILE: No, there is nothing beingreleased.

MR. GRIMES: There are gamma rays coming out of the inside through the steel and going out into the environment at a very low level, but there is not material going out that you would breath and inhale or something like that.

MR. FAIRTILE: There is no liquid particulate.20 There is no gas.

21 AUDIENCE PARTICIPANT: You are planning to send 22 these materials by rail. What --

23 MR. GRIMES: Yankee is planning to send it under 24 our regulations.

25 AUDIENCE PARTICIPANT: What measures have been

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taken to check the railroad safety? We're in a country where the railroads or the track systems go through many areas. What assurance does the public have that these materials aren't eroding railbeds, for instance? I think this is a pretty reasonable question.

6 AUDIENCE PARTICIPANT: We had a derailment right 7 here.

8 MR. GRIMES: I guess I am not familiar with the 9 transportation regulations, but certainly transportation 10 statistics show rail is a very safe way.

MR. FAIRTILE: The shipment is being done under the Department of Transportation regulations, and the licensee has been getting all the necessary permits, and they have been hiring people that are experienced in this sort of work, and a route is being selected on the basis you are discussing. It is not a haphazard --

AUDIENCE PARTICIPANT: Once again, we would like to see the documentation that deals with this.

9 MR. GRIMES: Do we have a Department of 0 Transportation contact? We don't have the information.

21 MR. FAIRTILE: I have a DOT contact. 22 AUDIENCE PARTICIPANT: This stuff would appear in 23 the files, wouldn't they? Eventually they would wind up, 24 the communications in regard to the inspections.

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MR. FAIRTILE: The licensee has filed a safety

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analysis report with the NRC on the transportation of these
 machines, and that was quite some time ago. It was in
 April, early April. And that should be in the public
 document room now. That should answer your questions.

5 MR. GRIMES: A couple more people were on the list 6 here. Debbie Katz?

MS. KATZ: Well, that's me, and I think I have said enough.

MR. GRIMES: Okay. Thank you.

Joe McEvoy?

11 MR. McEVOY: I only put my name down because I 12 thought you needed to do that to ask questions at some point 13 regarding the procedure.

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MR. GRIMES: Okay.

MR. McEVOY: But I would like to actually mention just one thing in passing just for the audience. Having been in the regulatory business for going on three decades and having been in seats hotter than the ones that you are in tonight, believe it or not, I am always pleased to be a part of this human comedy we might call controlling ourselves.

I am sort of excited to have anything to do with this project because I think it is a first, some precedence notwithstanding, but it is kind of a first, and I think you've got some talented citizenry around here that might be

frustrated at the moment, but a number of very intelligent. 1 very interesting people here who would like to make this project a blueprint for doing this thing safely other places in the world in the future.

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I do empathize, though, with the fact that people 6 have felt themselves cut off from information in this process and even as somebody who is something of an insider in the regulatory business, I have had that feeling somewhat myself. So I would urge you to, with all deliberate speed, open up the floodgates of information to the citizenry, and it is not going to do you any harm and just might do this project good.

MR. GRIMES: I think we are perfectly -- we are 14 very interested, in fact, in making the process work or substituting a different process.

MR. FAIRTILE: We have a big investment in the 17 public document rooms. We have over 100 of them and they 18 were set up and we financed them and we contribute to them constantly and we oversee them and we have a staff at headquarters that monitor them, and it's a bit of a 21 disappointment to hear that you are having these problems in retrieving documents. We will look into it. We will 22 23 definitely look into it.

MR. GRIMES: I saw another hand. 24 25 MR. STAR: This is in regard to the meeting you

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held earlier. Russ in answer to a question about the Deerfield River and drinking water coming from the Deerfield River stated explicitly that there was none. Yet, there are wells, shallow wells within 75 feet of the Deerfield River that I have looked into, one in particular that I have looked into, and the water level at the time I looked was exactly what the Deerfield River was.

8 If you know anything about the Deerfield River, 9 there is quite a level of gravel that goes out underneath 10 the Deerfield River and the place that I just moved from was 11 one of those places. I know you go down this far, and you 12 hit riverbed, and my well was a shallow well and it sat 13 right there.

14 So, you know, I just want to clear up that fact. 15 I think that was kind of blatantly -- I think you know that 16 there is water --

MR. MELLOR: The statement was that water from the Deerfield itself as a drinking water supply for a community, and that's the way I intended it. You know as well as I do that there has been testing of those wells, of some wells by the state, and there has been information transmitted back and forth.

MR. STAR: Nobody has given me that information.My well was one of those wells.

25 MR. GRIMES: I don't want to host a dialogue

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between Yankee and the public here, but correction noted, or the information is noted.

I think I remember also that the statement was even if it were drinking water, that the limits are still met for drinking water. But the information is useful.

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6 MR. STAR: I am not terribly clear about this. 7 It's sort of something I heard on the side, but what it had 8 to do with was the fact that the levels of acceptable 9 radiation in the water or in wells when it came to tritium 10 was much higher than what it was for other radioactive 11 elements, and I am wondering why that is. Is that because 12 you can't get tritium down lower than that?

MR. GRIMES: No. Each radioactive element has a different impact on a person, and so the limits are adjusted to take into account the different impact, how strong the radioactivity is from a disintegration. In tritium's case, it isn't very strong. It's a beta ray, primary, rather than strong gamma radiation.

MR. STAR: Okay. This is just for my own information. I have tried to put together information on nuclear power, and Yankee in particular. But your statement about all these different plants that have been in various stages of storage and decommissioning, is it possible to get a list of those?

MR. GRIMES: Yes.

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MR. STAR: How do I go about getting one.

MS. SCRENCI: I can provide you with a list. If you give me your name and address, I will mail it to you. MN. STAR: Okay, thank you.

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5 MR. GRIMES: Okay. We're going to have to wrap up 6 here.

AUDIENCE PARTICIPANT: This is also in response to the earlier meetings. There was a statement made that went unchallenged by the NRC people that were there that the Yankee plant could not have had an impact on public health, which is a pretty strong statement. I wonder if you, in fact, are in agreement with that stance.

MR. GRIMES: I personally thought it was a little
 overstatement. I didn't say anything. I noted it myself.
 AUDIENCE PARTICIPANT: Okay. There was

16 opportunity for someone to have challenged that statement.

MR. GRIMES: It was somewhat of an overstatement. We think any impacts were very, very small and probably not detectable, but we wouldn't agree that there is no impact. Statistically there may indeed impacts.

AUDIENCE PARTICIPANT: Why don't you ask Mr. Halliset what the information of other sections of his department have found. This was a matter of investigation into this matter.

MR. HALLISET: There are epidemological studies

being proposed and taking place in the Department in that
 area. I also through that was rather strong.

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AUDIENCE PARTICIPANT: Thank you.

MR. GRIMES: Okay. We will take this opportunity thank everybody very much for sticking with us this long. I think, from our point of view, it has been very useful. As I said before, we're probably not going to satisfy you on all the points. I think we can't satisfy you on some of this information flow things. Some of your information also helps us put some of the things into context.

Thank you very much. We will close the meeting. (Whereupon, at 10:09 p.m., the public hearing concluded.)

2/10/94 UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555 Theores: Jost the original of this from most Fairtale, Pm fa Yanke Rove - Duck Donovan 016 asked that I send a copij for nudos.

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