

# **Official Transcript of Proceedings**

## **NUCLEAR REGULATORY COMMISSION**

Title: Environmental Review on Evaluating the  
Environmental Impacts from the Proposed  
MOX Fuel Fabrication Facility

Docket Number: (not applicable)

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING TO PROVIDE COMMENTS  
ON THE NRC EVALUATION OF ENVIRONMENTAL  
IMPACTS FROM THE PROPOSED MIXED OXIDE  
FUEL FABRICATION FACILITY

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TUESDAY, SEPTEMBER 17, 2002

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NORTH AUGUSTA, SOUTH CAROLINA

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The Public meeting was held at A1A2 Conference Room, North Augusta Community Center, North Augusta, South Carolina, at 7:05 p.m., Francis (Chip) Cameron, Facilitator, presiding.

PRESENT:

- FRANCIS (Chip) CAMERON, Facilitator
- TIM HARRIS
- DAVE BROWN
- JOHN HULL
- CHERYL TROTTIER

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P-R-O-C-E-E-D-I-N-G-S

(7:05 p.m.)

1  
2  
3 MR. CAMERON: Good evening, everyone. My  
4 name is Chip Cameron, and I'm the Special Counsel for  
5 Public Liaison at the Nuclear Regulatory Commission, and  
6 I'd like to welcome you to our meeting tonight.

7 The topic for tonight is the Nuclear  
8 Regulatory Commission's environmental review on  
9 evaluating the environmental impacts from the proposed  
10 mixed oxide fuel fabrication facility. And I'm pleased  
11 to serve as your facilitator tonight, and in that role,  
12 I'm going to try to assist all of you in having a  
13 productive meeting tonight.

14 I usually find it helpful to tell you a  
15 little bit about the meeting process before we get into  
16 the substantive discussions. And I'd like to briefly  
17 address three items: The objectives of the meeting  
18 tonight; in other words, why is the NRC here tonight.  
19 Secondly, I'd like to talk about the format and ground  
20 rules for tonight's meeting. And last, I'd like to just  
21 go over the agenda briefly with you, to give you an idea  
22 about what's going to be happening.

23 In terms of objectives for the meeting, the  
24 NRC wants to make sure that you understand our process  
25 for evaluating whether to grant approval for construction

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1 of a MOX, a mixed oxide facility. And we're going to  
2 specifically focus on the environmental review process  
3 that the NRC conducts to make its decision. And also  
4 we'll get some of the implications for the review process  
5 from some recent changes in the national MOX program.

6 The second objective is to listen to your  
7 comments and your advice on what the NRC should address  
8 in its environmental review process resulting from some  
9 of the changes you're going to hear about in the national  
10 MOX program. So that's - that's why we're here tonight.

11 And our format pretty much matches those two  
12 objectives. There is two parts to the meeting. In the  
13 first part, we're going to give you some information on  
14 our review process and give you the opportunity to ask  
15 some questions of the NRC staff on that process to make  
16 sure that you have the information and you know what -  
17 what we're doing.

18 The second part of the meeting is, we're  
19 going to ask those of you who - who wish to, to - to give  
20 us some more formal comments on the specific issues that  
21 the NRC staff will be presenting to you tonight.

22 In terms of that second part of the meeting,  
23 there is a sign-up sheet at the registration table. If  
24 you want to talk tonight during that formal comment  
25 period, please sign up. It's not absolutely necessary

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1 that you do so. You may hear something that will prompt  
2 you to want to make a comment or a statement during that  
3 time period, and that's fine. We just like to know how  
4 many people want to talk, so that we can sort of control  
5 our time constructively. And of course, when we go out  
6 to you after the NRC presentations for question and  
7 answer, you know, obviously you don't have to sign up to  
8 raise a question or to even comment on something during  
9 that - those particular time periods.

10 In terms of ground rules, if you want to say  
11 something, please signal me and I will bring you this  
12 talking stick. And give us your name and affiliation, if  
13 appropriate. We are taking a transcript. Melanie is our  
14 stenographer tonight, and we will have a record of your  
15 comments so we can use that record to evaluate everything  
16 that we hear tonight.

17 I would ask that only one person at a time  
18 talk, not only so that Melanie can get a clean  
19 transcript, but also, more importantly, so that we can  
20 give our full attention to whomever has the floor at the  
21 time. And please try to be concise. It's hard, I know,  
22 on these difficult issues, to - to be concise. But we  
23 want to make sure that everybody has a chance to talk  
24 tonight. So if you can - if you can try to be brief,  
25 that would be helpful in achieving that - that goal.

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1 When we get to the second part of the meeting where  
2 people are going to give us formal comment, I would ask  
3 you to limit that formal comment to five minutes.

4 Okay, in terms of agenda for tonight, we're  
5 going to start by giving you an overview of the NRC's  
6 environmental review process. And to do that for us, we  
7 have Mr. Tim Harris, who is right here. And Tim is the  
8 Project Manager for the environmental review on this  
9 proposed facility. He has that responsibility.

10 He's in the Environmental and Performance  
11 Assessment Branch at the NRC, and that branch is in our  
12 Office of Nuclear Materials Safety and Safeguards,  
13 usually called NMSS. You may hear that acronym. But  
14 that's what it stands for. And Tim's been with the NRC  
15 for nine years. He's been in various activities, uranium  
16 recovery, low level waste decommission, and now he's the  
17 Project Manager for the environmental review on this  
18 facility. He has a Bachelor's in Civil Engineering.

19 After Tim's done, we'll go out to you to  
20 make sure that there's no ambiguities about - about what  
21 we're - what we're doing, to answer your questions. And  
22 then we're going to go to Mr. Dave Brown, who is going to  
23 - to talk about the potential implications for the NRC  
24 environmental review process that may result from changes  
25 in the national MOX program. And he's going to go over

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1 that for you.

2 He's with the Special Projects and  
3 Inspection Branch. Now, those are the people who  
4 evaluate safety aspects of the proposed MOX facility.  
5 And the safety evaluation, the environmental evaluation  
6 all come together as the basis for NRC's decision about  
7 whether to grant approval for construction of the  
8 facility. And they'll be talking more about that.

9 Dave is a health physicist. He's only been  
10 with the agency for - for two years. He was with the  
11 West Valley demonstration project for about five years  
12 before that. And he has a Master's in Health Physics  
13 from Clemson University, and a Bachelor's in - in  
14 Physics. After Dave is done, we'll again go out to you  
15 for question and answer.

16 And then Tim's going to come back up to pose  
17 the two questions that the NRC is specifically looking  
18 for comment on. And that really focuses on what should  
19 be in the scope of our environmental review based on  
20 these changes to the national MOX program that you'll be  
21 - you'll be hearing about.

22 A final word just on - on relevance. There  
23 may be questions that you have, or comments, that don't  
24 squarely fit in a particular agenda item we're talking  
25 about. I'll keep track of those up here on what's, you

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1 know, traditionally called a "parking lot," so that we  
2 can come back and make sure we answer those at the - the  
3 most opportune time.

4 The second point on relevance is that we are  
5 here to talk about the NRC's responsibilities. And we  
6 know that there's a lot of issues concerned with the  
7 broader MOX program. If we can provide you with any  
8 brief information on that or guide you to someone to talk  
9 to about those broader concerns, we'll do that. But we  
10 really are going to focus on the NRC responsibilities  
11 tonight.

12 And I would just thank you all for being  
13 here to help us with this important decision. And I just  
14 wanted to introduce one more person. We do have one of  
15 our NRC managers here. And this - this is Cheryl  
16 Trottier, right here. She's the Branch Chief for the  
17 Environmental and Performance Assessment Branch, and  
18 that's where Cheryl and her people, and specifically Tim,  
19 they're going to be doing the environmental review and -  
20 and looking at these environmental impacts. And Tim,  
21 let's get started with - with your presentation, and then  
22 we'll go back out to you for questions.

23 MR. HARRIS: Thanks, Chip. Can everybody  
24 hear me?

25 Good evening, and I'd like to welcome you to

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1 this meeting, as Chip said, on - on NRC's environmental  
2 review for the proposed mixed oxide or MOX fuel  
3 fabrication facility. And I'd like to personally thank  
4 you for taking your time to come out this evening and  
5 participate, and we look forward to hearing from your -  
6 your comments.

7 This is one of a series of meetings that  
8 we've had on the environmental review, and - excuse me a  
9 second. Next slide.

10 The presenters, as Chip said, will be Dave  
11 and myself. We've got our phone numbers and Email  
12 addresses on there, and I encourage you, if you have  
13 questions later, please feel free to call us or Email us.  
14 Next slide.

15 As Chip said, the purpose of tonight's  
16 meeting is to get your comments on how the changes in the  
17 surplus disposition program might affect NRC's  
18 environmental review for the proposed MOX project. And  
19 some of the agenda items I won't go over, since Chip has  
20 already discussed those.

21 Since this is a follow-on meeting, and we  
22 had scoping meetings here last year, some of the topics  
23 are only going to be discussed briefly. So if you have  
24 questions, please feel free to ask. And I think Betty  
25 gave you a copy of the feedback form. That's another

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1 important issue. We want to hear from you on how we're  
2 doing in the meetings. If there's something you like,  
3 tell us; if there's things that you didn't like, we want  
4 to hear those as well, so that we can hopefully do a  
5 better job next time.

6 Because of changes in the DOE program, we  
7 decided to delay issuance of our draft environmental  
8 impact statement, and we issued a *Federal Register* notice  
9 announcing that delay. And in that notice we asked two  
10 questions of the public. To start you thinking about the  
11 specific areas we're looking for comments on, I've  
12 included them early in the presentation. I also think  
13 that they're included on the agenda, if you want to refer  
14 to that there.

15 The questions are:

16 How should the NRC now  
17 consider the immobilization of  
18 plutonium as a no-action alternative,  
19 since DOE has formally canceled plans  
20 to construct that facility?

21 And whether or not there  
22 are any other alternatives that  
23 weren't identified during scoping  
24 that we should consider at this time?

25 We - in the *Federal Register* notice, we

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1 requested written comments by August 30<sup>th</sup>, and we're in  
2 the process of formally extending the comment period to  
3 September 30<sup>th</sup>. So if you get home and - and you think  
4 about some things and - please feel free to write in and  
5 share your comments readily, if you don't express them  
6 here.

7 Congress, in the *Defense Authorization Act*  
8 *of 1999*, gave NRC a role in the proposed MOX project.  
9 Specifically, NRC has licensing authority over this  
10 facility. So our role in the project is to make a  
11 licensing decision regarding the proposed mixed oxide  
12 project.

13 The NRC is an independent government agency.  
14 And our mission is to protect the public health and  
15 safety, and the environment, in commercial uses of  
16 radioactive material. Our role is different from the  
17 Department of Energy's. The Department of Energy's role  
18 in this project relates to implementing nuclear non-  
19 proliferation policy, including the disposition of  
20 surplus weapons plutonium. DOE has made changes in that  
21 program, and later in the meeting Dave will describe  
22 those for you.

23 One comment we got from the meeting, I think  
24 it was here last year, was it wasn't really clear what  
25 the decisions were or now the safety and environmental

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1 pieces fit together. So we've - we've put together a  
2 slide to hopefully make it a little understandable. And  
3 I think you got copies of the slides with your handouts.

4 NRC has two decisions to make relative to  
5 the MOX projects. And those decisions are included in  
6 the middle of the slide. They are: First, whether to  
7 construct - authorize construction of the facility; and  
8 the second is whether to authorize operation or license  
9 the proposed facility.

10 DCS submitted an environmental report in  
11 December of 2002 and - I'm sorry, December 2000, and a  
12 construction authorization request in February of 2001.  
13 And, as I said, due to the changes in the DOE program,  
14 we've delayed our issuance. And following that, DCS has  
15 submitted a revised environmental report in July 2002.  
16 We are currently reviewing the revised environmental  
17 report and the construction authorization request, and  
18 will document those reviews in two documents. The NRC  
19 will prepare an environmental impact statement. And I'll  
20 go over that - that process in just a second.

21 NRC will also prepare a safety evaluation  
22 report for the construction authorization request. And  
23 we had a public meeting here in North Augusta last month  
24 on that topic. The safety evaluation report is different  
25 from the environmental review. The safety evaluation

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1 report focuses on a safety assessment of the proposed  
2 design basis to determine if it meets NRC's requirements.  
3 The EIS considers the environmental impacts of both  
4 constructing and operating the facility. Not only do we  
5 look at the proposed action, which is the proposed MOX  
6 facility, but we also look at alternatives to the  
7 proposed action.

8 NRC's final environmental impact statement  
9 and the safety evaluation report for the construction  
10 authorization request will be the basis for making the  
11 decision whether to construct the MOX facility, and we  
12 anticipate making that decision in September of 2003. I  
13 think that is where the - the top and the bottom come  
14 together. The safety review and the environmental review  
15 will serve as a basis for the construction authorization  
16 decision.

17 DCS plans to submit a license application to  
18 operate the proposed MOX facility in October of 2003. We  
19 will review the license application and prepare a second  
20 safety evaluation report. The safety evaluation report  
21 on the operating application and the final environmental  
22 impact statement, which is the same environmental impact  
23 statement that was used for the construction  
24 authorization request, would be the basis for making a  
25 decision on whether to allow DCS to operate the proposed

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1 facility.

2 There are also two opportunities for  
3 hearings. And John Hull, with our Office of General  
4 Counsel is here and can answer any questions you might  
5 have on the hearing process.

6 The purpose of the previous discussion was  
7 to put in context how the environmental report -  
8 environmental impact statement, excuse me, that we're  
9 talking about here tonight will be used in NRC's  
10 decision-making. To summarize, a single EIS will be  
11 used to support the decisions for both construction and  
12 licensing in the proposed MOX facility.

13 Now I'd like to briefly describe the  
14 environmental impact statement process. It's - the  
15 *National Environmental Policy Act* requires government  
16 agencies to prepare environmental impact statements for  
17 major federal projects such as the potential licensing of  
18 the proposed MOX facility. An EIS presents environmental  
19 impacts of a proposed action, along with reasonable  
20 alternatives to that proposed action. And one of the  
21 focuses of tonight's meeting is how the proposed action  
22 and alternatives have changed as a result of - of DOE's  
23 program changes. Note that the shaded areas are  
24 opportunities for public involvement, and we consider  
25 this a very important part of the NEPA process.

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1           To start at the beginning of the diagram  
2 now, we've received DCS's environmental report and issued  
3 a notice of intent to prepare an environmental impact  
4 statement. And that was published in the *Federal*  
5 *Register* in March of 2001. We have completed the scoping  
6 process. We had three meetings. And I'll describe that  
7 in just a minute. And we're in the process of completing  
8 our environmental review, which includes requests for  
9 additional information. And this is additional  
10 information that the staff deems necessary in order to  
11 complete our review. And those requests are made public.  
12 We plan to issue the draft environmental impact statement  
13 for public comment in February of 2003, and there'll be  
14 a 45 day comment period.

15           We will hold public meetings on the draft  
16 environmental impact statement, and we plan to do that in  
17 March of 2003. And if you provided your full mailing  
18 address to Betty when you signed in, or had done that in  
19 previous meetings, we will mail you a copy at the end of  
20 February. And lastly, after we consider your comments,  
21 we'll revise the environmental impact statement and  
22 publish it as a final.

23           The purpose of scoping is to gather  
24 stakeholder input on alternatives that should be  
25 considered in an environmental impact statement, and to

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1 get resource areas - information on resource areas that  
2 might be impacted. As I said, we had public meetings  
3 here in North Augusta. We also held meetings in Savannah  
4 and Charlotte. We received - in addition to the comments  
5 we received at those meetings, we received written and  
6 Email comments. We summarized that in a scoping summary  
7 report which was published in August of 2001. And Betty  
8 has a few copies back at the desk. If you don't have a  
9 copy and would like one, please see Betty.

10 I think the scoping process was very  
11 successful, and I think that can be largely attributed to  
12 the public's involvement. And I'd like to you thank you  
13 for staying involved. Of significance at tonight's  
14 meeting was the identification of a second no-action  
15 alternative by the public, and that was immobilization of  
16 surplus plutonium if the proposed MOX facility was not  
17 licensed. And specifically, we're here tonight to hear  
18 your views on how that - how and whether that no-action  
19 alternative should be considered in our draft  
20 environmental impact statement, and whether or not  
21 there's any changes to the scope that should be made.

22 The next step in the process, just to  
23 summarize, I would plan to issue our draft in February of  
24 2003; hold public meetings to get your input on the draft  
25 in March of 2003; consider your comments; finalize the

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1 document; and publish it in August of 2003.

2 And that concludes my presentation. Chip  
3 and I'd be happy to answer any questions people have on  
4 NRC's role, the NEPA process, environmental impact  
5 statement.

6 MR. CAMERON: Good. Thank you very much,  
7 Tim. You heard a lot of material there, and some of you  
8 who are familiar with this may - may understand the  
9 process. But those of you who are new may have questions  
10 about this.

11 I just wanted to say that Tim mentioned that  
12 we were going to be extending the comment period on these  
13 two questions. Any comments that you give us tonight,  
14 because we do have it on the transcript, will carry the  
15 same weight as a written comment. But if you do want to  
16 send in a written comment, you have till...

17 MR. HARRIS: September 30<sup>th</sup>.

18 MR. CAMERON: ...September 30<sup>th</sup>. And, Tim,  
19 can you tell people...

20 MR. HARRIS: And, actually...

21 MR. CAMERON: ...where to send those?

22 MR. HARRIS: ...it's in the *Federal*  
23 *Register*. It's Mike Lesar, NRC, Washington, D.C., 20555.  
24 And I'm sure there's a probably a little more to the  
25 address, but we'll...

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1 MR. CAMERON: I'm not sure everybody's -  
2 everybody's getting it.

3 MR. HARRIS: ...we'll get that for you.

4 MR. CAMERON: We'll put this up on the - the  
5 board, so that you know where to submit your written  
6 comment.

7 MR. HARRIS: And - and as always, Chip, if  
8 we get comments after September 30<sup>th</sup>, we'll use those to  
9 the extent that we can. Don't - I mean, if somebody gets  
10 - if you wait until October 1<sup>st</sup> and you haven't got your  
11 comment in, please send it in. We will use it.

12 MR. CAMERON: Okay, thank you, Tim.  
13 Questions for Tim about the - the process, NRC process?  
14 Okay, let's go then - give us your name, please.

15 MR. POE: I'm Lee Poe.

16 Tim, I have a question. It seems to me, as  
17 - as Duke and NRC are both preparing environmental  
18 documents, does the NRC document, when you - when you  
19 finish it and put it out as you describe on this chart,  
20 is that saying that the NRC is satisfied that the  
21 facility can be constructed safely and operated after the  
22 construction safely? Is that what that's really telling  
23 us?

24 MR. HARRIS: Well, it's...

25 MR. POE: What should we, as the public,

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1 understand you are telling us?

2 MR. HARRIS: ...it's a yes and no question.  
3 I think you made a good point that DCS prepares an  
4 environmental report, and that's providing data and  
5 information to the NRC. The NRC's environmental impact  
6 statement is NRC's document. We do confirmatory  
7 analysis, and we prepare a - an NRC document. We use  
8 data that - that DCS has provided, but it's - in many  
9 cases we do additional reviews.

10 Your question of does that  
11 determine if the facility is safe to operate, I think the  
12 answer to that is: No. As I tried to lay out in the  
13 decision-making process, although the EIS will address  
14 both operations and construction, there's two parts to  
15 the decision. One is the safety evaluation report, and  
16 one is the EIS. So there - the safety issue that you -  
17 that you specifically mentioned in your question is: No,  
18 that gets addressed by the safety evaluation report.  
19 What...

20 MR. POE: My - my safety was the  
21 environmental.

22 MR. HARRIS: Environment - it addresses -  
23 the EIS, environmental impact statement, addresses the...

24 MR. POE: Environmental.

25 MR. HARRIS: ...acceptability of the

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1 environmental impacts.

2 MR. CAMERON: Okay. Is that clear how that  
3 operates, Lee? Thank you.

4 MS. CARROLL: Tim, thanks for putting that  
5 slide up. I want to - I want to tell you all some stuff,  
6 now. And, by the way, I'm Glenn Carroll from Georgians  
7 Against Nuclear Energy, and we have legally opposed  
8 constructing the MOX factory. And so this gets into a  
9 big issue for us. And because you're here tonight, for  
10 instance, I want to embrace this, so that everybody knows  
11 what's going on, and so maybe we can get it changed.

12 Now, we've got two parts to this. Duke  
13 Cogema Stone & Webster is asking for construction - I  
14 guess this is the construction authorization request, so  
15 it's this first piece. And then over here they're going  
16 to apply to handle plutonium.

17 And what we ran into is, we saw that there  
18 is absolutely no dealing at all with materials control  
19 and accounting. And we're talking plutonium. That's the  
20 whole mission here. We're going to safeguard plutonium.  
21 That's why they said with the MOX.

22 So we said, "Okay, how are you going to  
23 account for the plutonium?"

24 "Well, we don't have to tell you that until  
25 we apply for a license to possess plutonium." Right.

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1 Okay, now, why don't we go put your video camera up, and  
2 it's behind a pipe. What are you going to do then? You  
3 going to swim it into the pipe? Maybe the pipe's going  
4 to leak. We'll figure it out later.

5 So we have a problem with this. And the  
6 biggest problem we have is, look where they're finishing  
7 the environmental impact statement. Before the operating  
8 license is even submitted. So all the data---let's just  
9 use materials control and accounting as an example---  
10 that's contained in this, is not being considered in this  
11 EIS, and that doesn't serve the public.

12 Again, we raised this issue with the  
13 Commission. And, you know, I wish I could remember the  
14 language. It was very fine. But listen to what they  
15 said. "We're going to make up the rules as we go along."  
16 So, now, we plan to appeal this decision when the time is  
17 right, before they put a spade in the earth.

18 The deal is, is you've got your SER covering  
19 the whole thing. You've got a process here that will  
20 respond to this application. This is when they are going  
21 to put plutonium into the process. I mean, you know,  
22 cinder blocks and pipes, they don't threaten us so much.  
23 It's when you put the plutonium in there that you're  
24 threatened, and this gets created absent this  
25 information. But, since the NRC makes the rules up as

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1 they go, my question - my appeal is: Can you revise the  
2 rules in this way? Thanks, Chip.

3 MR. CAMERON: Okay, let me - let me see  
4 if...

5 MR. HARRIS: Can I - can I answer a  
6 different question, Chip?

7 MR. CAMERON: Well, I'm sure you'd like to,  
8 but...

9 MR. HARRIS: Well, I think I...

10 MR. CAMERON: Let me make sure that I  
11 understand, for everybody here, Glenn's question. And  
12 obviously there were some other things besides a question  
13 there. And also including Glenn's opinion that the NRC  
14 is making the rules up as it goes along. But I think...

15 MS. CARROLL: Well, he can read those  
16 three...

17 MR. CAMERON: ...the first...

18 MS. CARROLL: You're a lawyer. You know  
19 what...

20 MR. CAMERON: ...the first question, I  
21 think, is: How, if at all, will material control and  
22 accounting be considered in either the environmental  
23 impact statement or in the safety review on the - the  
24 SER?

25 MR. HARRIS: Well, let me answer that, and

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1 then I'll answer the question that I think...

2 MR. CAMERON: Okay.

3 MR. HARRIS: ...Glenn was asking, or at  
4 least the question I heard. And if it's different,  
5 please let me know.

6 Materials control and accountability is, in  
7 my mind, strictly a safety issue, and that's going to be  
8 addressed in the safety evaluation report for the license  
9 application. That's where that information is presented,  
10 and that's when the NRC will determine the safety of that  
11 information.

12 Now, I think the other point that you raised  
13 that affects me is your - DCS is providing other  
14 information after you've already issued your  
15 environmental impact statement. And the answer to that  
16 question is: No, we're not just going to go forth  
17 blindly. We're going to review that information, and to  
18 see if it matches what's in the environmental impact  
19 statement. And if it's not, then the document will get  
20 revised or supplemented.

21 MR. CAMERON: Okay. And let's - let's...

22 MR. HARRIS: Which I think was...

23 MS. CARROLL: That sounds like a judgement  
24 call.

25 MR. CAMERON: Let's - let's see if we can...

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1 MS. CARROLL: I mean, what is the...

2 MR. CAMERON: Glenn, we need to get this on  
3 the transcript. But let me see if we can get an answer  
4 to the other question, which is: How is material control  
5 and accounting considered, if at all, in the decision on  
6 the construction authorization. Because I think that was  
7 your point, is that you don't like the idea that it's not  
8 going to be considered until a decision on a potential  
9 operating license.

10 Dave, do you think you can talk to that for  
11 us? And then we're going to go over to...

12 MR. BROWN: Good evening. I'm Dave Brown.  
13 I think you've characterized it correctly. This - most  
14 of the NRC's review of material control and accounting  
15 would occur after we have received the license  
16 application. If there were, as Tim pointed out,  
17 environmental impacts associated with that, then we would  
18 have the opportunity to review that information, and  
19 supplement or revise our EIS at that time.

20 MR. CAMERON: And is there a reason why  
21 material control and accounting does not need to be  
22 looked at at the construction authorization stage? I  
23 think that's the point Glenn is trying to make.

24 MR. BROWN: Yes. The reason goes to our  
25 regulation, which at this stage, when we're looking at

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1 authorizing construction, we're evaluating those things  
2 which are what we call structure, systems, and components  
3 in the plant that protect against accidents or an act -  
4 you know, like earthquakes and floods, that sort of  
5 thing. That - those things are the focus of our review  
6 at the construction authorization stage, not material  
7 control and accounting.

8 MR. CAMERON: Okay. And, Glenn will be  
9 back.

10 MS. CARROLL: Well, just two more things to  
11 wrap this up.

12 MR. CAMERON: Pardon me?

13 MS. CARROLL: I'd like to have two quick  
14 things to wrap this up. First of all, we had a  
15 contention about materials control and accounting, so  
16 it's an open question that we have a chance to get  
17 incorporated.

18 But I'm concerned that, you know, your EIS  
19 period officially closes, and so it sounds like it's  
20 discretionary, subjective, if the NRC feels the need to  
21 include it in the EIS, I mean, if during the public  
22 mechanism, to compel you to do an EIS. But you can  
23 answer that later. I've had my time.

24 MR. CAMERON: Tim, do you want to say  
25 anything about that?

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1 MR. HARRIS: Well, I don't think there's a  
2 formal process. But, as always, we're open to public  
3 comment. So I - I don't think the NRC closes its ears  
4 after we publish the final environmental impact  
5 statement.

6 MR. CAMERON: Okay. And we may get you some  
7 more clarification on that later on tonight. But I think  
8 Tim has basically hit the bottom line.

9 Yes, sir?

10 MR. CHAPUT: My name is Ernie Chaput with  
11 the Economic Development Partnership in Aiken.

12 I hope this is not a redundant question, but  
13 maybe you just circle this thing. We're in an  
14 environmental impact statement process right now; is that  
15 correct?

16 MR. HARRIS: Correct.

17 MR. CHAPUT: The release of plutonium into  
18 the environment is an item that will be considered in the  
19 EIS process, in your consideration of the EIS; is that  
20 correct?

21 MR. HARRIS: Plutonium and other radio  
22 nuclides; yes, sir.

23 MR. CHAPUT: Okay. So to the extent that  
24 plutonium has the potential to be released into the  
25 environment, it will be considered as part of this EIS?

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1 MR. HARRIS: Correct.

2 MR. CHAPUT: And so that - that's the  
3 appropriate consideration for - under the *National*  
4 *Environmental Policy Act*, which I understand deals with  
5 impacts on the environment - to the environmental by  
6 federal actions?

7 MR. HARRIS: Correct.

8 MR. CHAPUT: Okay.

9 MR. HARRIS: I must have done a good job  
10 explaining that, Ernie.

11 MR. CHAPUT: Thank you very much.

12 MR. CAMERON: Thanks, Ernie.

13 And I think we're going to go back over  
14 here, and then over there, and then we'll come back up  
15 front. All right.

16 MR. ROGERS: You already might have answered  
17 it.

18 MR. CAMERON: Tell us your name.

19 MR. ROGERS: My name's Harry Rogers, and I'm  
20 with the Carolina Peace Resource Center, and also with  
21 the Alliance for Nuclear Accountability, and work at and  
22 operate a reactor at D.C. Summer. And I - I think Glenn  
23 - she answered my question. Is the access - access to  
24 the public to the information to provide a comment.  
25 There isn't a formal process, and a decision is the NRC's

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1 decision, is this important information to consider or  
2 not to consider. And we don't have - we don't have a  
3 mechanism to compel you to consider the information. And  
4 I hope that she's successful with the contingent.

5 MR. HARRIS: Chip, can I ask John to comment  
6 on that, because I think there - there may be a legal  
7 process, and I don't want to misspeak any legalities, if  
8 that's correct.

9 MR. CAMERON: Let's make sure that - let's  
10 make sure that we're asking John to - to comment on.  
11 And, John, is it clear what - what the question is?

12 MR. HULL: Sometimes it is a bit confusing.  
13 There is - there is - I always like to describe it as a  
14 parallel process. Right now we're talking about the  
15 technical, environmental, and safety reviews that the NRC  
16 is conducting in regard to the proposed facility.

17 But there's also a parallel legal process or  
18 legal hearing that's now going on, and Glenn Carroll is  
19 the representative of one of the parties in that legal  
20 proceeding. And she is - she's raising some issues which  
21 are now before the Licensing Board, which is considering  
22 these legal issues. And that process is far from  
23 finished. And it remains to be seen whether legally the  
24 board will determine whether or not these contentions are  
25 valid or not. But that still remains to be decided.

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1 MR. HARRIS: But - but isn't it true,  
2 though, John, that if there was - after the EIS is  
3 issued, if there were EIS contentions, that would be one  
4 means of formally submitting them to the NRC?

5 MR. HULL: Well, there - there are cases...

6 MR. CAMERON: John, I'm going to have to get  
7 you on the transcript, please.

8 MR. HULL: There are cases where agencies,  
9 including the NRC, has chosen to supplement an  
10 environmental impact statement. But that decision is way  
11 down the road at this point, and a lot remains to be  
12 determined whether that will be something the NRC will do  
13 or not.

14 MR. CAMERON: Okay, let me see if I can sort  
15 of summarize this. That's - that's fine. So that  
16 everybody understands what was said.

17 The normal NRC process is that there's an  
18 environmental review done, as Chip talked about. There's  
19 a safety review done. This is on the construction  
20 authorization request. Overlaying that normal two-part  
21 process is, in this case, what's called a hearing.  
22 That's an adjudicatory hearing where people can raise  
23 issues before an Atomic Safety and Licensing Board, as  
24 Glenn Carroll and her organization is doing.

25 Decisions in that adjudicatory process can

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1 affect the normal environmental and safety review that  
2 the NRC is doing, so that they can also - always  
3 influence that. That's playing out on a parallel course  
4 and we'll see what happens with that. Keep in mind that  
5 if the construction authorization request was granted by  
6 the NRC after the hearing and the safety and  
7 environmental review process, then there could be an  
8 application for operation of the facility, and you would  
9 have the same process going on; a safety evaluation,  
10 possibility of the adjudicatory hearing. But, as Tim  
11 pointed out, the NRC final environmental impact statement  
12 would be the impact statement that would also be used to  
13 guide the NRC's decision on the operation decision.

14 MR. HARRIS: Correct.

15 MR. CAMERON: Correct? Okay.

16 Yes, ma'am?

17 MS. GARCIA: Hi. My name is Karen Garcia,  
18 a resident of Aiken, South Carolina.

19 As the licensee of the MOX facility, is it  
20 true that you, not DOE, are the agency that will enforce  
21 federal safety and security requirements during  
22 construction and operation? Basically, is it correct  
23 that you insure the facility meets all federal  
24 regulations?

25 MR. CAMERON: And, Tim, I know you're going

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1 to correct the one - the one statement.

2 MR. HARRIS: Yeah, the - the - I think the  
3 statement was...

4 MR. CAMERON: NRC is the licensee.

5 MR. HARRIS: Licensee.

6 MR. CAMERON: Is that what you said?

7 MS. GARCIA: Right, is the licensee of the  
8 MOX facility.

9 MR. HARRIS: The - the licensee, or in this  
10 case the applicant is Duke Cogema Stone & Webster. We're  
11 the - we're the regulatory organization.

12 I think most of what you said is correct.  
13 I'm not sure if it's 100% of all federal laws. But the  
14 NRC has regulatory authority over this facility to insure  
15 safety, which I - which I think was the point you were  
16 trying to make.

17 MR. CAMERON: And, for example, Occupational  
18 Safety and Health regulations would not be...

19 MR. HARRIS: Right. I mean, I didn't - I  
20 didn't want to say that all federal regulations, but -  
21 but I think the point is that the NRC has responsibility  
22 for the safety of the facility.

23 MR. CAMERON: So does that - does that  
24 answer your question?

25 All right, I think, Lee, you had another -

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1 did you have a question?

2 MR. POE: Yeah, Lee Poe again. I'm used to  
3 seeing, following an EIS, a record of decision saying  
4 that the federal agency has adopted the following sort of  
5 thing. I see nothing like that up there. The rest of  
6 this parallel environmental and safety is - is typical of  
7 what goes on in - in all of the federal actions that I've  
8 seen take place. And I'm sure that - and I'm really  
9 aiding in a second question. I'm sure that if during the  
10 NRC review of the operating SER, the public raised  
11 significant emphasis, issues, I would suspect that you  
12 would respond to those issues.

13 But, you know, help me with both of those  
14 questions. The first one is the lack of an ROD, record  
15 of decision. And the second one - and the second part is  
16 opportunity of the public to have input into the final  
17 SER.

18 MR. HARRIS: As far as the record of  
19 decisions go, that's - you see that a lot in federal  
20 agencies, issuing records of decisions. For us it's more  
21 of issuing a license, or in this - in the prior case,  
22 issuing the letter that would authorize construction  
23 would be considered the ROD.

24 MR. CAMERON: So that that constitutes our  
25 approval.

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1 MR. HARRIS: Yeah. We just call it a  
2 different document.

3 MR. CAMERON: Okay. Thanks, Tim.  
4 The question - the last question.

5 MR. HARRIS: Oh, and the public - I'm sorry.

6 MR. CAMERON: Public input to the SER on the  
7 operation of the facility.

8 MR. HARRIS: And I'm going to let Dave  
9 answer that, because...

10 MR. CAMERON: And, Dave, you ready? All  
11 right.

12 MR. BROWN: The - if you may notice, of  
13 course, on the bottom of the slide here under "Safety  
14 Reviews," there's not a corresponding role for public  
15 input. But at any time during our licensing evaluation,  
16 we would welcome public comments. Especially if you see  
17 something that you feel are safety concerns you'd like to  
18 see addressed, we would welcome that. I guess it's just  
19 to point out that the formal scoping process, for  
20 example, in the safety review, like you do in the  
21 environmental review, we would certainly welcome your  
22 comments.

23 MR. CAMERON: Usually - and I'll just add  
24 this because we were just down here on the draft safety  
25 evaluation before. Usually the NRC does not, as they do

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1 for the environmental impact statement, they do not  
2 request general comments on the draft safety evaluation  
3 report. As we - we did, though, with this draft safety  
4 evaluation report. To be consistent, the NRC may do the  
5 same thing with that.

6 But typically, the public can attend  
7 meetings between the licensee - license applicant and the  
8 NRC staff on those safety issues. They can become a  
9 party in the adjudicatory proceeding. Or if there are  
10 public meetings, they can raise those - those comments  
11 then.

12 Yes, sir?

13 UNIDENTIFIED SPEAKER: How does (inaudible)?

14 MR. HARRIS: I didn't hear that, Chip.

15 COURT REPORTER: I can't hear you.

16 MR. CAMERON: Okay, the question is, is  
17 that, first of all, are there - will there be - are there  
18 relevant memorandum of understandings or interagency  
19 agreements between NRC and DOE on this issue; and if  
20 there are, will they be made public? Does that capture  
21 it?

22 UNIDENTIFIED SPEAKER: Sure.

23 MR. CAMERON: All right. Tim?

24 MR. HARRIS: The only MOU or memorandum of  
25 understanding that I'm aware of is one that relates to

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1 cultural - cultural artifacts. Basically with the SHPO,  
2 state-to-state and historic preservation officer of South  
3 Carolina. That's the only one I'm - I'm aware of.

4 MR. CAMERON: But that's not with the  
5 Department of Energy?

6 MR. HARRIS: It - it's a - don't quote me,  
7 but I think it's an agreement between NRC, DOE, and the  
8 State of South Carolina.

9 MR. CAMERON: Okay.

10 MR. HULL: Chip?

11 MR. CAMERON: Go ahead, John, for  
12 clarification on that.

13 MR. HULL: All of the MOUs are public  
14 documents. There are no secret MOUs.

15 MR. CAMERON: Thanks, John.

16 Let's go to this gentleman right here.

17 MR. RUDOLPH: Could you explain...

18 MR. CAMERON: Could you just give us your  
19 name.

20 MR. RUDOLPH: Oh, I'm Jerry Rudolph from  
21 Columbia.

22 Could you explain how you make the decision  
23 after you get the environmental impact statement. I know  
24 that whatever you do will increase the risk some. It's  
25 not a zero increase in the risk to the people here. Can

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1 you just determine - could you tell me how you decide how  
2 much risk you're willing to put the public - that you -  
3 that is acceptable for public risk? First question.

4 And the second one is: Could you tell me  
5 how you have incorporated - as people are already exposed  
6 to it, and I understand that Aiken has the highest cancer  
7 rate in South Carolina. Is the existing risk that people  
8 are exposed to taken into consideration when you add the  
9 additional risk with this - this facility?

10 MR. CAMERON: Okay, thank you. And I think  
11 that goes to the question of our existing regulations and  
12 what - what has to be shown to comply with those. And  
13 also - first question is: How will the findings of the  
14 environmental impact statement be used with the safety  
15 evaluation to get to the decision?

16 MR. HARRIS: Well, I think it's a multi-part  
17 question. And I'll answer part, and I'll ask Cheryl  
18 Trottier, the Branch Chief, to answer the other part.  
19 She's a health physicist and can certainly talk more  
20 about radiation risk more than I can.

21 One of your questions was: Are the  
22 environmental impact statements of what's already here at  
23 the SRS site considered? And yes, they are, in the  
24 cumulative impact section. Cumulative impacts looks at  
25 the current state and the increment---in this case, the

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1 proposed MOX facility---what that would do to different  
2 resource areas, like air quality, water quality, in  
3 addition, you know, as - as a plus with what's already  
4 being generated by SRS and other facilities. So the  
5 answer to that is: Yes, we do consider what's already  
6 here and being generated.

7 And I'll let Cheryl talk to the - the risk  
8 piece.

9 MR. CAMERON: Cheryl, I think that, you  
10 know, the question - one of the questions concerns  
11 compliance with existing regulations, that - that whole  
12 piece. And I think we're still expanding a little bit in  
13 terms of answering how the findings of the environmental  
14 impact statement are fed into the decision-making  
15 process. It may not be easy to answer that without the  
16 context of the specific findings. But, Cheryl, you want  
17 to talk to this?

18 MS. TROTTIER: I will speak to the issue of  
19 NRC's role in evaluating radiation risk.

20 From the perspective of how we license all  
21 activities, regardless of whether it's a doctor  
22 delivering a dose to a patient or whatever it is. We  
23 have standards in our regulations on public and  
24 occupational dose. We use those standards. The  
25 standards are set on the basis of recommendations that

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1 come from international and national authorities on what  
2 is considered acceptable levels.

3 The current values that we use---and we use  
4 these dose terms because they're the terms that are in  
5 our regulation---which is 100 millirem per year. Now,  
6 actually, no facility operates at those levels, because  
7 there are other factors that we require. We require a  
8 process which we call "as low as reasonably achievable,"  
9 so that their operations must be in - in a range of much  
10 lower than that value. We have specific source limits on  
11 air emissions that they must also meet.

12 So, in reality, there is almost no facility  
13 - possibly if you were exposed to a teletherapy source by  
14 standing on the wall on the other side of the unit all  
15 day long, you might approach the 100 millirem. But, in  
16 general, most of our operations are much lower.

17 Those are the values that we use in making  
18 all licensing decisions. We always consider the  
19 recommendations of these authorities in setting our  
20 limits, and those are the limits that we have in our  
21 regulations today.

22 MR. CAMERON: Okay. Basically, you have -  
23 we'll get - get to your follow-up, and we'll go to you.  
24 And, basically, the NRC has a set of regulations to  
25 protect public health and safety that are based on

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1 research findings. And the - any license applicant,  
2 including the applicant for this construction  
3 authorization, has to meet those regulations in order for  
4 construction authorization to be granted.

5 Tim, do you want to say anything more about  
6 how the environmental impact statement ties in?

7 MR. HARRIS: Well, I think part - part of  
8 your question was: How is that used in decision-making?  
9 And the environmental impact statement presents the  
10 analyses - staff's analyses of the environmental impact  
11 statements of the proposed action, and alternatives to  
12 proposed action. And that's provided to an NRC decision-  
13 maker, in addition to the safety evaluation report. And  
14 we, at the NRC, make a decision. I don't - I think part  
15 of your question was - was what's - if there is  
16 thresholds or things like that, and I don't think I can  
17 quantify that.

18 MR. CAMERON: Okay, let's give you a follow-  
19 up.

20 MR. RUDOLPH: He's talking about standards.  
21 I have a couple of questions on follow-up. The - these  
22 standards that you're following are based on the EIS that  
23 was done before the changes that were made by the - the  
24 elimination of the immobilization. How will those - how  
25 will the differences be considered? That was one

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1 question. The differences in the risk that's imposed by  
2 - by bringing in the - the trash plutonium that they're  
3 bringing from - that was not included in the original  
4 plan, how is that being considered in these standards,  
5 whether they'll be in the standards that you mentioned?

6 And the second one is: Are the - are - when  
7 you consider the radiation that people are being exposed  
8 to, are you considering the release of some radioactivity  
9 into the air, into the - into the groundwater, that it's  
10 - that it's possible? And are you using the history of  
11 the Department of Energy in other places where they have  
12 exposed the public to polluted groundwater  
13 unintentionally. Is that history being used in the  
14 evaluation of - of the licensing in this case?

15 MR. CAMERON: Okay, there's a...

16 MR. HARRIS: Well, that's...

17 MR. CAMERON: ...there is a whole lot of  
18 questions there. The first one is - and I think "the  
19 standards" might be the wrong term to be using in the  
20 context of the - what we look at in terms of  
21 environmental impacts. But the basis for being here  
22 tonight, you know, when we get to Dave Brown, we're going  
23 to look at the implications for the environmental impact  
24 statement from changes to the DOE program. And those  
25 will be evaluated.

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1 MR. HARRIS: But he asked a different -  
2 slightly different question. He - I think what he asked  
3 was: Are you going to consider what they presented  
4 before as one option, and what they presented now as a  
5 second option? And I think the answer to that question  
6 is: No. It would be our belief that they - they've  
7 revised their application and submitted a new  
8 environmental report that we have to consider on its own  
9 merits.

10 MR. RUDOLPH: But the other question, about  
11 the history of...

12 MR. HARRIS: The history, we do - we do look  
13 at DOE data. I'm not sure if we look at the specific  
14 examples that you gave, but we do look at impacts to  
15 groundwater, air.

16 MR. RUDOLPH: But what is...

17 MR. CAMERON: We need to - we need to -  
18 please, if you could just - if you do want to say  
19 something, let's use the mic so we can get it on the  
20 transcript. And let's - we've got to close this out so  
21 that we can go to Dave Brown. And I know there's a  
22 number of questions; okay? So we're going to get to five  
23 or six of you. But let's - let's try to close this out.

24 MR. RUDOLPH: The main thing I was pointing  
25 out on the history was here we actually have something in

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1 the groundwater, and it's from the water of the liquid  
2 waste. And I just - I understand MOX also has liquid  
3 waste.

4 MR. HARRIS: Correct.

5 MR. RUDOLPH: The history that the  
6 Department of Energy has in the safety of the  
7 groundwater, is that history being - are the other  
8 locations, the other sites, is that history being  
9 considered in this application?

10 MR. HARRIS: Yes, we are - we are looking at  
11 the existing groundwater contamination at the SRS and  
12 what potential impacts the MOX facility might have on the  
13 groundwater.

14 MR. CAMERON: Does that answer your  
15 question? I don't - I - we're not - if - I think the  
16 question is, is that if - if the Department of Energy had  
17 a bad track record somewhere else in terms of monitoring  
18 or releases, does that have any relevance to the decision  
19 that we're making here. That's the question; okay? And  
20 that we...

21 MR. HARRIS: And I think the answer is that  
22 that's outside the scope of what we're doing here  
23 relative to the proposed facility.

24 MR. CAMERON: All right, thank you.

25 MR. RUDOLPH: So the answer is: No, you're

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1 not considering that?

2 MR. CAMERON: No. That's - that's correct.

3 Yes, sir?

4 MR. TURNIPSEED: My name is Tom Turnipseed,  
5 and I'm from Columbia.

6 You know, I'm very naive about this, and I  
7 think it's kind of new turf that we're getting into. It  
8 appears, from what you guys are saying, and when I went  
9 to the meeting earlier two or three weeks ago, whatever  
10 it was, and then I read in the paper about how this  
11 experimental situation with the MOX process is going to  
12 be conducted over in Belgium, and I'm just wondering how  
13 much the NRC will be monitoring the process where the  
14 experiment in Belgium, which I understand has great  
15 opposition over there, and then they're going to bring  
16 stuff back so we can try it out up at Duke's reactors up  
17 in Catawba and McGuire.

18 Do you guys - do you follow what's going on  
19 over there? Do you have - I know you don't have  
20 jurisdiction. It's not in the scope of the little  
21 bureaucratic thing you're doing here. But I keep reading  
22 about this in the papers, and I'm just wondering are you  
23 guys following that? Are you - are you looking at the  
24 European experience? This is an international thing, if  
25 you read about it. It was conceived as an international

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1 program. Are you involved - the NRC involved with what's  
2 going to happen in Belgium? Could you tell us about  
3 that?

4 MR. HARRIS: Yes, sir. I think you're  
5 asking - the things that they're proposing to do in  
6 Belgium are construct what they call lead test  
7 assemblies.

8 MR. TURNIPSEED: What is that?

9 MR. HARRIS: These are fuel rods that are  
10 made of the mixed oxide and uranium blend, which would be  
11 similar to that that would be produced by the proposed  
12 MOX oxide fuel fabrication facility. They're going to  
13 construct those in Belgium and then put them in the  
14 reactor, burn them in a Catawba reactor. And then  
15 they're going to take those and analyze it to see the  
16 fuel behavior. And yes, the NRC is - is involved in  
17 tracking all this. We would - or the office of...

18 MR. CAMERON: Thank you. We'll come right  
19 back up to the front row here. Someone has been waiting  
20 to ask a question back here, so we'll go back.

21 MS. FRAZIER: Tina Frazier, Citizens for  
22 Nuclear Technology Awareness.

23 MR. CAMERON: Can everybody...

24 MR. HARRIS: No, we can't hear her, Chip.

25 MS. FRAZIER: I'm sorry. Tina Frazier of

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1 Citizens for Nuclear Technology Awareness. Forgive me.  
2 I'm not sure this is a question as it is more a  
3 clarification of a statement that's been made now at a  
4 couple of hearings, that Aiken County has the highest  
5 cancer rate in the state. I do have DHEC reports. We  
6 did look into this. And on a scale of 1 to 47, of the 47  
7 counties, 1 being the highest incidents and 47 being the  
8 lowest, we are #41. We are among the lowest on a cancer  
9 rate.

10 MR. CAMERON: If you'd just clarify for  
11 people who DHEC is. DHEC is...

12 MS. FRAZIER: DHEC is environmental - I'm  
13 sorry. (Inaudible) environmental health.

14 MR. HARRIS: Environmental Control?

15 MS. FRAZIER: It's Health and Environmental  
16 Control. And I take it out of...

17 MR. CAMERON: Okay, the state - the State of  
18 South Carolina?

19 MS. FRAZIER: State of South Carolina; yes.

20 MR. CAMERON: And when you talk about "this  
21 county," you're talking about Aiken County?

22 MS. FRAZIER: Aiken County. Yes, Aiken  
23 County.

24 MR. CAMERON: All right. All right, thank  
25 you. Let's...

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1 MR. HARRIS: You know, Chip, there's -  
2 there's some questions, and we'll be here after the  
3 meeting if people have more questions, if we don't have  
4 time to answer it now.

5 MR. CAMERON: Yeah, we'll definitely do  
6 that. Let's see if we can clear up some of these  
7 outstanding, and then we'll go to Dave.

8 Yes?

9 MS. PAUL: Bobbie Paul of Atlanta, Georgia.

10 I had a question about the approval for what  
11 you call the "end process" here, the NRC decision. I'm  
12 unaware. Are we - is there a vote taken by this NRC  
13 panel? How many people are we talking about? I have no  
14 idea if we're talking about a roomful of five people.  
15 And how do you interact with people from the DOE? Are we  
16 talking about 20 people and people from Duke Cogema? If  
17 you could help visualize this for me, I'd appreciate it.  
18 Thank you.

19 MR. HARRIS: I'll try. I think there's  
20 actually a poster in the back that shows the five  
21 commissioners. And it is...

22 MS. PAUL: Of the NRC?

23 MR. HARRIS: Of the NRC.

24 MR. CAMERON: Yes, five NRC commissioners.

25 MR. HARRIS: And then they're appointed by

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1 the President, confirmed by the Senate. So ultimately  
2 the decision is made by the Commission, five  
3 commissioners. And, as we've talked about tonight,  
4 there's the - the environmental portion of the decision-  
5 making; the safety portion; and also the adjudicatory  
6 hearing portion that feed into that decision by the  
7 Commission.

8 As far as numbers of people at DOE and  
9 others, I'm - I'm not sure how to answer that. You know,  
10 we interface with several people, ten, 20 people at DCS.  
11 I personally interface with two people at DOE, but Dave  
12 probably interfaces with ten or 20. I don't know how  
13 to...

14 MR. CAMERON: Maybe - maybe it's not the  
15 numbers, but the relationship between DCS and - and DOE,  
16 and how that relates to the NRC. I mean, that should be  
17 cleared up. Is that - is that what you're trying to  
18 envision?

19 MS. PAUL: Uh-huh. And at the end there's  
20 a final - there's a final vote taken by this panel of  
21 five, and that's the ultimate decision-maker; is that  
22 right?

23 MR. HARRIS: The Commission.

24 MS. PAUL: The Commission.

25 MR. HARRIS: Yeah. I guess, if there's a

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1 hierarchy, we're - NRC's a regulatory agency; Duke Cogema  
2 Stone & Webster is the applicant to the Nuclear  
3 Regulatory Commission. They are a contractor of the  
4 Department of Energy, so that's how the Department of  
5 Energy - but we - what we do, I think it's a straight  
6 line. Typically we interface through Duke Cogema Stone  
7 & Webster. They are the applicant.

8 MR. CAMERON: And the most important thing  
9 is that it's not - we're an independent regulatory  
10 agency; okay? Even though DCS is a contractor to the  
11 Department of Energy, another agency of the federal  
12 government, we're an independent regulatory body. There  
13 is no connection because of the federal government.  
14 We're both agencies of the federal government.

15 MR. HARRIS: Yeah. The interactions are  
16 more information, you know.

17 MS. PAUL: But the money for all of it comes  
18 from us? The money to support these efforts comes from  
19 the federal government; correct?

20 MR. HARRIS: Correct.

21 MR. CAMERON: Okay, how many - let's see,  
22 how many people have a question that have not talked  
23 already? Okay. Let's do - we're going to do three  
24 people who haven't had a chance to speak, and if we have  
25 time, we'll circle back for - for other questions. But

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1 let's get Dave on. You may have less questions on his.  
2 And let's go over here to this gentleman. So we're going  
3 to take three more questions, we're going to put Dave  
4 Brown on and open it up for questions.

5 Yes, sir? Your name?

6 MR. WILLOUGHBY: William Willoughby from  
7 Columbia, South Carolina. It's more - it's more a  
8 comment than a question. And that is, I think that it  
9 would have been clearer, from some of the questions I  
10 have heard tonight, if you had included in this chart, in  
11 particular, the operation and the interfacing with the -  
12 with the NRC Licensing Board, to show how they fit into  
13 the process. I mean, that would have helped on some of  
14 the decision-making questions. Thank you.

15 MR. HARRIS: Thank you.

16 MR. CAMERON: Thank you for that.

17 MR. HARRIS: We'll take that as feedback for  
18 - for next time.

19 MR. CAMERON: Okay, we're going to go over  
20 here.

21 UNIDENTIFIED SPEAKER: What if Duke Cogema  
22 Stone & Webster and the Department of Energy don't reach  
23 agreement on the Option A of the MOX fuel contract for  
24 construction? What happens if there's no contract?  
25 There's no contract right now beyond design and

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1 licensing. Do you - will you authorize construction if,  
2 by some chance or some reason, DCS and DOE do not reach  
3 agreement?

4 MR. HARRIS: I'm not sure that's a - that's  
5 a question that's within the scope of...

6 MR. CAMERON: You're saying that there may  
7 not be - you're raising a question about whether there  
8 would be a legal entity to be a license applicant?

9 UNIDENTIFIED SPEAKER: Yes. Because Duke  
10 Power has an exit clause in their contract and they can  
11 withdraw any time - all their reactors at any time from  
12 the program, which would leave no reactors, at least  
13 temporarily. So that's one reason why it might not - the  
14 contract may not be renewed, and no - might be they  
15 decide to use this plant for metal preparation as part of  
16 their production complex.

17 MR. CAMERON: Let me ask John - John Hull.  
18 I think this is a - this is definitely a legal question  
19 that goes to the viability of whoever holds, for example,  
20 the construction authorization. Do you get the drift of  
21 this long question?

22 MR. HULL: Well, yeah, there are a number of  
23 contingencies that have to occur before any MOX  
24 fabrication facility would either be built or operated.  
25 The Department of Energy, as evidenced by their recent

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1 change in plans, can have an impact on what we're doing.  
2 If Duke or - I guess Duke is the only part - NRC licensee  
3 right now that's in the program, in theory. But if they  
4 pulled out, then obviously that would have a big impact  
5 on things. But, you know, we're speculating at this  
6 point. As far as I know, Duke has no plans to pull out  
7 of their agreement to eventually burn MOX fuel. And  
8 again, that would only happen if the NRC licenses the -  
9 the operation of the facility. So, you know, any number  
10 of things could happen in the future, but right now we  
11 have to plan as if things are going to go according to  
12 the current plan.

13 MR. CAMERON: Thank you.

14 And let's go to our final question with this  
15 gentleman right here. Final question for this particular  
16 part of the meeting.

17 Yes, sir?

18 MR. BLANCETT: I'm Allen Blancett, recently  
19 retired, a resident of Aiken. I hear in these meetings  
20 lots of concerns about dose to the public and so forth.  
21 I've got a couple of grandchildren in the area, and it's  
22 important to me.

23 The revised environmental report says that  
24 it goes to the - the maximum dose to the offsite  
25 individual would be no more than two microrems. That's

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1 0.000002 rems. And that's 1/50,000 of the federal limit.  
2 Now, if that number is valid, I'm not concerned. That's  
3 no impact to the public.

4 My question is: Will NRC verify that number  
5 that goes into the final documents?

6 MR. HARRIS: Yes. We will do our separate  
7 analysis.

8 MR. CAMERON: Thank you, sir.

9 I know there were several other questions,  
10 and let's see if we can pick those up after we're done  
11 with this next presentation. Because we want to make  
12 sure we get all of this material on to you.

13 Dave Brown, NRC staff, is going to talk  
14 about the changes to the DOE program, and potential  
15 implications for the NRC environmental review. Dave, go  
16 ahead. And then we'll go - we'll go back out to you for  
17 questions.

18 MR. BROWN: Thanks, Chip. Can everyone hear  
19 me okay? Good.

20 Thank you all. I'd like to summarize the  
21 changes that DOE and DCS have made to the surplus  
22 plutonium disposition program and to the MOX facility.  
23 I'll also discuss the environmental impacts associated  
24 with these changes that DCS presented in their  
25 environmental report in July, their revised environmental

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1 report.

2 The first change I'll discuss is the  
3 cancellation of the plutonium immobilization plant. The  
4 PIP, or the plutonium immobilization plant, had been part  
5 of a hybrid disposition approach to immobilize some of  
6 the plutonium, and then turn the rest into MOX fuel. DOE  
7 canceled the plutonium immobilization plant due to  
8 budgetary constraints. And I'll describe the impacts in  
9 just a moment.

10 On the previous slide, the - the second item  
11 is the proposal to build a waste solidification building.  
12 And this would be a new building that would process  
13 liquid waste from the MOX facility and the MOX project,  
14 in general. And I'll also describe this building and its  
15 impacts in a few minutes.

16 The direct result of canceling the plutonium  
17 immobilization plant is that there were 8.4 metric tons  
18 of plutonium that would have gone to that plant, that now  
19 need to be dispositioned differently. And what I want to  
20 make clear here is the current proposal is that, of that  
21 8.4, 6.4 metric tons would come to the MOX facility.  
22 That leaves two metric tons that would have to have  
23 another disposition pathway. The NRC at this point  
24 doesn't know what that is. That's a decision for the  
25 DOE.

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1           To accommodate the 6.4 metric tons of what  
2 we call alternate feedstock now, material that would have  
3 gone to immobilization, but now coming - proposed to go  
4 to the MOX facility, that DCS would have to make changes  
5 to the plant to accommodate this material. And I've also  
6 noted that previously the amount of material that DCS had  
7 proposed to process was 33 metric tons, and that total is  
8 now 34 metric tons. Next slide.

9           DCS has also informed the NRC that DOE plans  
10 to build a waste solidification building. This DOE  
11 intent here is that it would address public concerns  
12 about using the high level waste storage tanks on the  
13 Savannah River Site to manage liquid waste from the MOX  
14 facility and from the pit disassembly and conversion  
15 facility. The new waste solidification building would be  
16 sited on the pit disassembly and conversion facility  
17 site. We've included in the handout a map of that  
18 general area that shows the location of the - the MOX  
19 facility, the pit disassembly and conversion facility,  
20 and the new proposed waste solidification building.

21           The waste solidification building would have  
22 the capacity to store liquid waste from both MOX and the  
23 pit disassembly and conversion facility. High alpha  
24 activity waste, which was waste associated - that's  
25 generated in the MOX facility, would go to the waste

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1 solidification plant, and laboratory concentrated liquids  
2 from the pit disassembly and conversion facility, those  
3 would come and be handled as transuranic waste,  
4 solidified, and the proposal is to ship that waste to the  
5 waste isolation pilot plant in New Mexico. The MOX  
6 facility also would produce a stripped uranium waste,  
7 which is another waste associated with preparing the  
8 plutonium for mixed oxide fuel fabrication.

9 The pit disassembly and conversion facility  
10 would also generate laboratory liquids. Those two waste  
11 streams would be handled as low level waste. The low  
12 level waste would - it's proposed to be disposed of at  
13 the Savannah River Site B Area or another permanent, low  
14 level waste site.

15 The - the changes to the environmental  
16 impacts associated with those facility changes include an  
17 increase of about 10% in the floor area of the aqueous  
18 polishing process in order to accommodate the material,  
19 the alternate feedstock that would have previously gone  
20 to the plutonium immobilization plant. The alternate  
21 feedstock would - some of it would contain chlorides, and  
22 so a potential new air emission from the MOX facility  
23 would be chlorine. And there would also be some changes  
24 in the waste volumes and the characteristics of waste  
25 produced by the MOX facility.

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1           The - for example, in the waste category,  
2           the volume of liquid low level waste generated by the MOX  
3           facility would increase about 60%. The - this waste  
4           would also include the impurities associated with the  
5           alternate feed; again, impurities that were part of the  
6           plutonium that would have gone to the immobilization  
7           plant.

8           The - the liquid high alpha activity waste,  
9           which would have - again, which would have gone to -  
10          previously gone to the Savannah River Site high level  
11          waste tanks, would now go to the waste solidification  
12          building. The volume of this waste would increase by  
13          about 10%, and would contain higher levels of impurities  
14          like silver, for example.

15          In their revised environmental report that  
16          DCS submitted to the NRC in July, they also described the  
17          impact associated with the waste solidification building.  
18          The waste that this building would generate would have an  
19          impact on the waste management system at the Savannah  
20          River Site, as it would produce transuranic waste and low  
21          level waste that would have to be handled.

22          There would be construction-related impacts  
23          for building a new facility, and operation-related  
24          impacts, like air and liquid effluents, and radiation  
25          exposures to workers. These are the kinds of impacts DCS

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1 presented in their environmental report. The  
2 environmental report also considers accidents that could  
3 occur at the waste solidification building, and their  
4 environmental impacts.

5 I've given you a summary of the information  
6 they've provided. I'd be happy to take any questions.

7 MR. CAMERON: Okay, the purpose of this  
8 presentation was to try and give you an idea of the  
9 potential new impacts that the NRC would have to evaluate  
10 based on these changes to the program. And we'll be glad  
11 to try to answer questions on those potential  
12 environmental impacts.

13 Yes, sir?

14 MR. CHAPUT: Yeah, Ernie Chaput, Economic  
15 Development Partnership.

16 Your - I think it's the previous slide said  
17 60% more volume of low level radioactive waste, 10% more  
18 volume of high alpha activity waste. Are - what are  
19 those percentages in relation to that which the MOX  
20 facility was proposed to generate before, the combined  
21 MOX PDCF, that of the total SRS site? I mean, is it - is  
22 it 10% of a small number or 10% of a large number? Or,  
23 specifically, what are the gallons or cubic feet  
24 involved?

25 MR. BROWN: I don't recall exactly the

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1 volumes or cubic feet. I think we're in the neighborhood  
2 of - neighborhood of 100,000 gallons per year, that, I'll  
3 say, order of magnitude, that type of number. And when  
4 I say an increase, yes, it's referring to what was  
5 proposed in their first environmental report as compared  
6 to their revised report in July.

7 And with low level waste, we're specifically  
8 looking at waste produced by the MOX facility. Not, for  
9 example, by the pit disassembly and conversion facility.

10 MR. CHAPUT: So a percentage increase of a  
11 relatively low number, not of the total site?

12 MR. CAMERON: Okay, Ernie, did that answer  
13 your...

14 MR. CHAPUT: Close enough to get started.

15 MR. CAMERON: All right. Thank you. Glenn,  
16 we'll be back up to you, and then back down this side.

17 MR. WILLOUGHBY: William Willoughby,  
18 Columbia, South Carolina. Two questions, really. One  
19 is: Who constructs and operates the waste solidification  
20 building? And at what point is the waste that comes out  
21 of that building passed on to DOE's Savannah River Site?

22 MR. CAMERON: Dave?

23 MR. BROWN: The - the waste solidification  
24 building is a Department of Energy project. As I  
25 understand, they've gone through conceptual design of

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1 that plant. A contractor to - to build and operate the  
2 plant has not been identified at this point.

3 The waste - again, this is another detail  
4 that hasn't been finalized. But more likely than not,  
5 the custody of the waste would be transferred from the  
6 applicant, Duke Cogema Stone & Webster to DOE between the  
7 MOX facility and the waste solidification building.

8 MR. CAMERON: I'm sure that everybody  
9 understands that the waste solidification building  
10 doesn't require an approval from NRC, but it's still  
11 something that we will evaluate in the environmental  
12 impact statement, so that we could take a look at all the  
13 environmental impacts.

14 MR. BROWN: That's correct.

15 MR. CAMERON: Okay.

16 MR. BROWN: Yeah.

17 MR. CAMERON: Okay, and then we'll go back  
18 to Don, and then we'll be back up to you two gentlemen.

19 MS. CARROLL: I actually had a question  
20 about that waste, and it ties in a little bit to your  
21 question. And I, too, expected a 10% increase in volume  
22 from, you know, increased processing of the impure  
23 plutonium. And we actually had a waste contention which  
24 was, "You make our waste plant, and that's not okay." So  
25 now we have a waste plant, so we salvaged our contention

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1 by critiquing the waste plant, which then I really had to  
2 pay attention.

3 And imagine my surprise when the figures in  
4 the current ER are less than what they were a year ago.  
5 But in no way would I consider them trivial, because  
6 we're talking 70,000 gallons a year, and we've got 35  
7 million gallons that have been plaguing us as long as  
8 I've been involved, since 1988. There's been no change.  
9 So that's not a trivial amount over 20 years. But the  
10 chairman of the board thinks that's no big deal. That's  
11 all.

12 MR. CAMERON: All right, thanks, Glenn.

13 MS. CARROLL: Oh, oh, oh, oh, oh. Wait a  
14 minute. I didn't finish.

15 (Laughter.)

16 MS. CARROLL: I didn't finish. There's a  
17 point.

18 MR. CAMERON: There is a point?

19 MS. CARROLL: And without the point, it's  
20 pointless.

21 MR. CAMERON: Okay.

22 MS. CARROLL: The point is will you check  
23 their math on these waste figures really carefully in  
24 your EIS?

25 MR. BROWN: We will do so.

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1 MR. CAMERON: Thank you.

2 Don, you could a...

3 MR. MONIAK: I'm Don Moniak. I live in  
4 Aiken County.

5 AUDIENCE: We can't hear you.

6 MR. MONIAK: Regarding the plutonium numbers  
7 you've presented here, you say there's 8.4 tons that's  
8 been moved out of the immobilization program. There's  
9 another 4.6 tons that was removed from the immobilization  
10 back in November 2000 from unirradiated fuel at Hanford,  
11 and so that gives you a total of 13 tons. Immobilization  
12 was supposed to handle 17 tons, so there's four tons out  
13 there at Hanford and Los Alamos and Savannah River Site  
14 that's unaccounted for, that wasn't in the immobilization  
15 plan.

16 Now, this program's already been set back by  
17 a year-and-a-half or so because DOE changed the design  
18 criteria well into the design, like it often does. And  
19 this - apparently this is going to happen again. And are  
20 they going to - is this facility being designed to handle  
21 all the other plutonium that wasn't in the immobilization  
22 plan, including some fuel grade junk?

23 MR. CAMERON: And before you answer that,  
24 Dave, I just want to make sure that we're careful with  
25 the use of the term "unaccounted for." I think that you

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1 understand what Don is - is saying about that; that it's  
2 not unaccounted in the sense that it's - it's lost or  
3 missing.

4 MR. MONIAK: No, only 2.8 tons is  
5 unaccounted for.

6 (Laughter.)

7 MR. CAMERON: Okay.

8 MR. MONIAK: It's quite less.

9 MR. CAMERON: All right. Dave, any comment  
10 on that?

11 MR. BROWN: Yeah. I think I understand the  
12 thrust of your concern, which is, as we evaluate impacts  
13 and we go forward with the EIS, we do want to be sure we  
14 understand, you know, what quantities does DCS propose to  
15 use, of what type, and what - what kinds of impurities,  
16 for example, will be in those different types of  
17 plutonium that would come to the MOX facility. And we  
18 will do that.

19 MR. MONIAK: As it - as it happens or prior  
20 to it happening, so that it's a wider design?

21 MR. CAMERON: Don, we're going to have to  
22 get you on the - on the transcript.

23 MR. MONIAK: (Inaudible) that's good.

24 MR. CAMERON: Okay. All right.

25 Yes, sir? And then we'll go to this

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1 gentleman.

2 UNIDENTIFIED SPEAKER: I had a couple of  
3 questions. I understand that - that DHEC can approve or  
4 disapprove the use of the concrete in - in the water. Is  
5 that correct? Department of Human - DHEC in South  
6 Carolina. I understand that they have some approval  
7 authority, as well, over the use of the - the use of  
8 concrete in the - in the water in the liquid waste. Is  
9 that true?

10 MR. BROWN: I'm not sure that I understand  
11 your question. There are...

12 UNIDENTIFIED SPEAKER: Are you proposing to  
13 use concrete in the - in the liquid waste, to get rid of  
14 that, to - as a way of getting the liquid waste to...

15 MR. BROWN: To - okay, I'm - to solidify the  
16 - the waste.

17 UNIDENTIFIED SPEAKER: Yes.

18 MR. BROWN: Specifically - well, including  
19 the...

20 UNIDENTIFIED SPEAKER: I understood someone  
21 said that DHEC had some regulatory authority over that,  
22 as well. Is that right?

23 MR. BROWN: I'm not aware that they do.  
24 That's...

25 UNIDENTIFIED SPEAKER: So then there is a

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1 possibility that if DHEC refused that, then they would  
2 actually be providing for better safety for the public  
3 than - than your agency.

4 The other question was: Doesn't NRC have  
5 the authority to require the Department of Energy to do  
6 a full environmental impact statement?

7 MR. BROWN: Yeah, I - I may refer to Tim.  
8 But no, we don't have the authority to direct the actions  
9 of the Department of Energy on the *National Environmental*  
10 *Policy Act*.

11 UNIDENTIFIED SPEAKER: Even if - even if you  
12 consider their existing environmental impact statement  
13 insufficient. I'm not - I'm not clear on the process, I  
14 guess.

15 And the other question---I'll give you the  
16 mic back or I'll pass it on---is how do we get the names  
17 and the history of what industry the - the five people  
18 who are making the decisions came from? Is that on the  
19 website somewhere?

20 MR. CAMERON: Could - if I may borrow that  
21 back for a minute. There was a similar question. If  
22 someone wants the biographies of the sitting  
23 commissioners, is it easy to get it just off the website,  
24 NRC website? I think it is, which is...

25 MR. BROWN: I think there are short

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1 biographies, yes, available.

2 MR. CAMERON: [www.nrc.gov](http://www.nrc.gov). And if anybody  
3 wants those biographies, please give your name to Betty  
4 Garrett back at the registration table, and we'll send  
5 you a hard copy.

6 I think, in order to avoid any  
7 misunderstandings because of the last question, can you  
8 just - Tim, can you just talk about - what do we expect  
9 from the license applicant, either - on a construction  
10 authorization request? What are our requirements for them  
11 to submit in terms of environmental data and what-have-  
12 you?

13 MR. HARRIS: The regulations - can you hear  
14 me? The regulations have a specific section in 10 CFR  
15 Part 51, which outlines specifically what the  
16 applications submit. And they have submitted that. We  
17 reviewed that for administrative acceptability; that is,  
18 were there any holes in the environmental report. And we  
19 concluded: No, that all the issues were addressed.

20 We're currently in the process of reviewing  
21 the validity of the data, which included some information  
22 that we submitted to the Department of Energy. So we  
23 don't accept that data blindly; we review that, as well.

24 MR. CAMERON: Okay, thank you.

25 Let's go to this gentleman right here. Yes,

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1 sir?

2 MR. TURNIPSEED: Yeah, my name is Tom  
3 Turnipseed from Columbia.

4 And I just want to know, Dave, how closely  
5 the NRC will be monitoring this experimental MOX deal  
6 over in Belgium. Do you have people there? Do you send  
7 someone with - along with DCS folks to follow this, since  
8 it's the first real test of how we're going to do the MOX  
9 thing? Will you all be involved in any way with that?

10 MR. BROWN: I may not be the best person to  
11 answer that. We are definitely involved in the  
12 requirement for lead test assembly, and that it be - that  
13 these test assemblies be made. It's not certain at this  
14 point - the DOE has not decided where they're going to  
15 make those. Belgium is - is one option.

16 MR. TURNIPSEED: You know Belgium; right?  
17 I mean, you...

18 MR. BROWN: Yeah, we know...

19 MR. TURNIPSEED: ...you know that you've...

20 MR. BROWN: ...we're aware that that's...

21 MR. TURNIPSEED: What type - where'd you  
22 find it out from, Dave, about Belgium?

23 MR. BROWN: That's something that's being  
24 looked at more closely in our Office of Nuclear Reactor  
25 Regulation. Those folks would receive any license

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1 amendments to burn MOX fuel at the Catawba and McGuire  
2 Nuclear Stations. So there's really another part of the  
3 NRC that's doing that work, different than the office  
4 that Tim and I work for.

5 MR. TURNIPSEED: The process in Belgium,  
6 though, is going to be similar to what you're going to be  
7 doing here on a much larger scale; right?

8 MR. BROWN: Yes, the process would be very  
9 much similar to what we would do here in the United  
10 States.

11 MR. TURNIPSEED: Let me just add - let me  
12 just say this. People in Columbia are just absolutely  
13 terrified from this terrorist war. I mean, it's just -  
14 you turn on the TV and they're everywhere. They're in  
15 Georgia, New York, all over the world. And what about  
16 the environmental impact and the safety of sending this  
17 plutonium over to Belgium so DCS - they can do this  
18 experiment. And I understand you guys are going to be  
19 somewhat involved in it; right? You're going to keep up  
20 with it?

21 MR. BROWN: We're going to keep up with it.

22 MR. TURNIPSEED: Okay. And it's going to  
23 come back to the Duke reactor up near Charlotte; right?

24 MR. BROWN: That's the plan.

25 MR. TURNIPSEED: Isn't that the plan?

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1 MR. BROWN: That's the plan.

2 MR. TURNIPSEED: Do you - do you have any  
3 concern about this terrorism, this - every time I turn on  
4 the TV, and I'm - I'm frightened, and people are. Do you  
5 have any concern about it?

6 MR. BROWN: Certainly. Certainly. I think  
7 at this point what I'm - what remains to be seen is  
8 whether - if your concern is the shipment of this  
9 material overseas...

10 MR. TURNIPSEED: Absolutely.

11 MR. BROWN: ...whether that would even  
12 occur. Because the - the question of whether lead test  
13 assemblies would be built in Belgium is still not  
14 decided. So...

15 MR. TURNIPSEED: All I know is what I read  
16 in the papers.

17 MR. CAMERON: Yeah, and I...

18 MR. TURNIPSEED: I don't know all of your  
19 inside bureaucratic lingo and stuff like that. I just  
20 read it in the papers.

21 MR. CAMERON: Yeah, and let's...

22 MR. TURNIPSEED: But tell us if you know  
23 about it. Please tell us.

24 MR. CAMERON: ...let's try and avoid the  
25 bureaucratic lingo. In order to give you as much

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1 information on this as possible, I think we have two  
2 perhaps follow-on pieces of information for you. And if  
3 that doesn't do it, could we have the NRC staff and  
4 anybody else who has information for Mr. Turnipseed...

5 MR. TURNIPSEED: Turnipseed.

6 MR. CAMERON: ...and his concern, we'll do  
7 that.

8 We will first of all go back - go back here,  
9 and if you could just give us your name for the record.

10

11 MS. FRAZIER: Tina Frazier. And I - I just  
12 want to understand - well, my understanding, that the MOX  
13 concept is not a new concept. That there were tons of  
14 MOX actually made in the '60s and '70s in the United  
15 States. And, in fact, was used with - made with weapons  
16 grade plutonium because that's all that was available.  
17 Is that true and...

18 MR. BROWN: There - back, oh, more than 30  
19 years ago now the U.S. Atomic Energy Commission at that  
20 time, which was the commission that existed before the  
21 DOE and the NRC, did license mixed oxide fuel plants.  
22 Several of them. So, no, it's - the concept of licensing  
23 a mixed oxide fuel plant in the U.S. is not new in that  
24 regard. The use of weapons grade plutonium is new. In  
25 the past, the plutonium that we had envisioned using in

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1 these mixed oxide fuel plants was recycled from  
2 commercial nuclear fuel, not from nuclear weapons.

3 Does that answer your question? Yeah.

4 MR. CAMERON: Okay, thanks. Thanks, Dave.

5 Let's see if Glenn can just briefly give some information  
6 that Mr. Turnipseed might find useful. Glenn Carroll.

7 MS. CARROLL: Tom, on the lead test  
8 assembly, I don't know if the NRC has any authority over  
9 high - you know, shipments on the high seas and Belgium.  
10 But before they can load it in Catawba and McGuire---and  
11 John Hull will tell me if I'm wrong---I believe that that  
12 requires a license amendment, and I believe at that  
13 juncture, when they announce that, within 30 days the  
14 citizenry could intervene and engage the Atomic Safety  
15 and Licensing Board to, you know, be party to that.

16 MR. CAMERON: Thanks, Glenn.

17 MS. CARROLL: Is that right?

18 MR. CAMERON: All right, other questions for  
19 - for Dave? And any lingering questions from Tim  
20 Harris's presentation, as well?

21 MR. WILLOUGHBY: William Willoughby. You  
22 say from this slide that the DCS environmental report  
23 will have to evaluate disposal impacts, TRU waste and low  
24 level waste from the waste solidification facility. Does  
25 this mean that they have to get that information from the

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1 DOE and be able to supply it to you?

2 MR. BROWN: Yes, in - in many cases, because  
3 there is an interface between Duke Cogema Stone &  
4 Webster's plant and the Savannah River Site, DCS gets  
5 their information about the sites' capabilities, for  
6 example, for waste management, from the Department of  
7 Energy. We typically ask questions, for example, of DCS.  
8 If they don't know the answer or they know that DOE does,  
9 they'll ask DOE so that we can get an answer to our  
10 question.

11 Does that address your question?

12 MR. CAMERON: Okay, we have two questions  
13 right here.

14 Yes, sir?

15 MR. HOOKER: I'm - my name's William Hooker,  
16 and I want to address a question to the lady...

17 MR. CAMERON: Cheryl Trottier?

18 MR. HOOKER: ...that said something - said  
19 something about in the long run. And I was trying to  
20 figure out if that was tritium in the surface water. Is  
21 it 25 - I believe it was 25,000 pounds of intoxicins coming  
22 out of the stack. And I wanted to know if that was part  
23 of a long run that the NRC would...

24 MR. CAMERON: Cheryl?

25 MS. TROTTIER: Again, as part of their

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1 application, they would have to indicate all of the  
2 environmental potential impacts. And then, in our  
3 evaluation, we would look at all the existing  
4 contamination and - in order to make a determination that  
5 they would be in compliance with the limits, which are  
6 all pathways. In other words, air, water, standing in  
7 the midst of radiation, whatever pathway the human body  
8 is going to come into contact with radiation is evaluated  
9 in meeting that - those standards. So it would have to  
10 be all pathways.

11 MR. CAMERON: Okay, thank you, Cheryl.

12 Harry?

13 MR. ROGERS: Harry Rogers, Carolina Peace  
14 Resource Center. Just a quick question for Tim. I  
15 talked with you, you said - could - the NRC has a unique  
16 funding relationship, different than the other regulatory  
17 agencies. And I wonder if you could explain that for us.

18 MR. HARRIS: Yeah, thanks, Harry. You're  
19 right, I didn't - but the answer was "yes," but it wasn't  
20 - wasn't the whole answer.

21 NRC receives its funds through licensing  
22 fees and fees to applicants, such as DCS. We also  
23 receive appropriations from Congress, and I think that  
24 was - Harry wanted to make that clear, that we are funded  
25 both by appropriations and by - by license fees.

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1 MR. CAMERON: Maybe you want to - maybe you  
2 want to clarify that. We - we do get license fees from  
3 licenses. We don't get - there are license fees  
4 charged...

5 MR. HARRIS: But, you're right, Chip.

6 MR. CAMERON: ...the licensees. The NRC  
7 doesn't get those directly. The Treasury gets those, and  
8 we still have to go through the regular appropriations  
9 process; correct?

10 MR. HARRIS: Right.

11 MR. CAMERON: Okay. We're going to - why  
12 don't you just stay up there so that you can set up these  
13 two questions. And I want to ask you to try to maybe  
14 explain them as in plain English as - as possible. Let's  
15 see if there's any - any other questions out here.

16 Let's go to - let's go to this lady right  
17 here.

18 MS. KELLY: We're talking about the NRC  
19 commissioners. Do they have to be approved by Congress  
20 if they're appointed by the President?

21 MR. HARRIS: Yeah, appointed by the  
22 President and approved by the Senate.

23 MS. KELLY: And after...

24 MR. HARRIS: Confirmed by the Senate.

25 MS. KELLY: Oh, the other thing is, that I

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1 - I would assume that no shipments have yet gone to  
2 Belgium, simply because Belgium hasn't agreed to process  
3 them; is that correct?

4 MR. CAMERON: Can someone give us a clear...

5 MR. HARRIS: I believe that's correct.

6 MR. CAMERON: Okay, that's correct.

7 And let's go to you, sir, for a final  
8 question, and then we'll go to public comment. Yes, sir?  
9 Have your name and...

10 MR. RUDOLPH: My name is Jerry Rudolph from  
11 Columbia.

12 The stated limits of the MOX program is to  
13 render plutonium unavailable for weapons. And I  
14 understand that part of the MOX production includes  
15 reprocessing or cleaning of plutonium. What - what is  
16 being done to assure this reprocessing will not result in  
17 plutonium that's more usable for nuclear weapons than the  
18 waste that they're - they're trying to remove? And is  
19 there anything that would keep the - keep the Department  
20 of Energy from using the reprocessing facilities,  
21 designed for MOX, from being used in nuclear weapons?

22 And - and I have one other question. Oh,  
23 the other question is: One of the objectives of NEPA is  
24 to provide relevant information about the project that's  
25 to be available to the public, to enable them to be a

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1 part. And I just want to know what documents outline the  
2 respective roles of NRC and Department of Energy, and how  
3 do the responsibilities relate to each other? I just  
4 want to - where would I find that documentation?

5 MR. CAMERON: Okay. Tim or Dave on the -  
6 the first two - first two questions.

7 MR. HARRIS: I'm sorry, Chip, I was writing  
8 and - and listening, and could - could you summarize them  
9 real quick, Jerry?

10 MR. CAMERON: Okay. Well, let's...

11 MR. HARRIS: And I'm sorry.

12 MR. CAMERON: Let's - let's go to the -  
13 let's go to the last question first, which is  
14 documentation on the NRC's environmental review process  
15 and relationship to the Department of Energy and - and  
16 DCS. Now, I think you're trying to explain a few minutes  
17 ago that - that the license applicant, okay, DCS in this  
18 case, first of all has to provide the environmental data  
19 to the NRC. Those regulations are in Part 51 of our  
20 regulations.

21 MR. HARRIS: Part 51.

22 MR. CAMERON: And is there something that we  
23 can - that we can get to this gentleman that perhaps lays  
24 that out?

25 MR. HARRIS: I think maybe if Betty can save

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1 a copy of the scoping summary report, that might shed  
2 some light on the different roles of the different  
3 bodies. And certainly, Jerry, if you - if you want to  
4 send me an Email or call me, I'll try to do better. You  
5 asked - you asked some pretty in-depth questions that -  
6 that don't have a two minute response to respond to.

7 MR. CAMERON: Okay, the other questions had  
8 to do with the reprocessing or cleaning of plutonium.

9 MR. HARRIS: Yeah. Maybe it's a semantical  
10 point on my part, but I don't think the MOX facility is  
11 reprocessing. I - at least from my point of view,  
12 reprocessing is taking spent nuclear fuel and  
13 reprocessing it to - to gather fissile material. I think  
14 what the MOX facility is doing is taking weapons grade  
15 plutonium provided by the Department of Energy, and  
16 purifying it, cleaning it, and producing fuel.

17 MR. CAMERON: And there's...

18 MR. RUDOLPH: Purification is what I'm  
19 talking about. Creating a designer-based plutonium that  
20 could be used in weapons, too.

21 MR. HARRIS: It is weapons grade plutonium.

22 MR. RUDOLPH: Yeah, but you're cleaning it.  
23 It's cleaning it into a state that...

24 MR. HARRIS: Yeah. Because - because  
25 there's impurities in it, you can't put it directly into

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1 a fuel element. It has to be processed, it has to be  
2 homogenized. There's a - there's a...

3 MR. RUDOLPH: Well, I understand once you  
4 build new weapons, you need to do the same thing with the  
5 existing...

6 MR. CAMERON: Can I - I'm going to ask  
7 several people from the audience who might be able to  
8 clarify this for Mr. Rudolph, to - to deal with this -  
9 this offline, so we can get the answer to your question.

10 MR. HARRIS: I think one - one other  
11 question was whether it could be used for future  
12 reprocessing. And the environmental impact statement is  
13 considering the environmental impacts of 34 metric tons  
14 of plutonium. That's a fixed limit that the EIS is  
15 considering. So any quantity greater than that or for a  
16 different purpose would be beyond the scope of the  
17 environmental impact statement and would need to be  
18 looked at again.

19 MR. CAMERON: Okay, thanks, Tim. Tim, can  
20 you talk about the two questions, and trying to explain  
21 those - those clearly. And then we're going to ask  
22 people to come up and give us some public comment. And  
23 I'll find out who Betty has on the list. Tim?

24 MR. HARRIS: Thanks, Chip. And again, if  
25 you have questions of Dave and I, we've provided our

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1 phone numbers and Email addresses. And please feel free  
2 to contact us.

3 One of the objectives of the - of NEPA is to  
4 provide relevant information about the project to the  
5 public, and enable them to be a part of it and provide  
6 input. Specifically, we're asking for questions tonight  
7 that relate to how the changes made by DOE and DCS could  
8 affect or how they should be interpreted in an  
9 environmental review or an environmental impact  
10 statement.

11 What we'll do is, we'll take your comments  
12 here tonight, the comments we've received in writing,  
13 Email, and those comments will help us determine whether  
14 our views that were presented in the scoping summary  
15 report should be changed.

16 MR. CAMERON: Let me just check in to see if  
17 people understand those two questions. Lee, can you  
18 describe the uncertainty that you have about these two  
19 questions?

20 MR. POE: As I read the first question, and  
21 I - and from what I know about the NEPA regulations, the  
22 NEPA says there will be a - an analysis of a no-action  
23 alternative.

24 MR. HARRIS: Correct.

25 MR. POE: Now, I don't understand what

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1 you're asking us to provide for you in that first  
2 paragraph, and I think that is relative to the no-action  
3 alternative.

4 MR. HARRIS: Yeah, let me...

5 MR. POE: Now, kind of help me a little bit.  
6 What do you - what are you expecting the public to tell  
7 you on the no-action alternative?

8 MR. HARRIS: Okay, when we did the scoping,  
9 we had the proposed action, which was to construct the  
10 proposed MOX facility. And the second no-action was not  
11 to do that. And we looked at that as continued storage  
12 of material at sites that DOE already has. That is, if  
13 we don't license the MOX facility, what will happen to  
14 this? One possible alternative was that it's just going  
15 to stay where it is.

16 The public identified a second no-action  
17 alternative. That is, if you didn't build MOX, if you  
18 didn't authorize construction, the plutonium could be  
19 immobilized. And at the time DOE was planning a hybrid  
20 approach, and we considered that to be a viable  
21 alternative. And as reflected in the scoping summary  
22 report, we were going to consider that as a viable  
23 alternative.

24 The question here tonight is: DOE has  
25 canceled those plans to build the facility. And the

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1 specific question is: Should we still consider that in  
2 our environmental impact statement? And if so, how - has  
3 any of the scope associated with that alternative changed  
4 as a result of the program changes?

5 MR. CAMERON: Okay. And I think that -  
6 thank you.

7 MR. HARRIS: Is that in more plain English,  
8 Chip?

9 MR. CAMERON: Yeah, that - that does it.

10 Let's go to the people who wanted to give us  
11 comments. And I guess I would ask you, if you wouldn't  
12 mind, to - to come up here. And - and please keep it to  
13 five minutes. I'll remind you if you're - if you're  
14 going over. But Harry - Harry Rogers. We're going to  
15 start with - with Harry. And if you don't mind,  
16 please...

17 MR. ROGERS: I don't mind.

18 MR. CAMERON: All right, thanks, Harry.

19 MR. ROGERS: I'm Harry Rogers. As I  
20 mentioned, I work in and operate a reactor at D.C. Summer  
21 at Jenkinsville, South Carolina, SCEG. And too often  
22 people in my industry have had a public acceptance of  
23 projects by the DOE that - that we just accept and we  
24 don't question. And I'm here to question, and I have  
25 been questioning MOX. I questioned tritium.

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1 I want to - one of the comments I want to  
2 make is a response to - I think it's just ingenuous and  
3 completely irresponsible when we talk about the 00002,  
4 because what it doesn't mention is that that's not the  
5 only danger to the public. And - and it doesn't take  
6 into account accident.

7 And too often economic development people  
8 have not taken consideration into the risk to the  
9 workers, in the interest of short-term profits, and at  
10 the expense of public interest. And that's - and that's  
11 how I feel about the question of MOX, in general.

12 The - got a T-shirt from Rocky Flats. It  
13 was produced by the workers. And I think that we  
14 shouldn't make - we probably shouldn't cite isolated  
15 statistics, and maybe we shouldn't - it's said that -  
16 talk about the cancer risks. But what we can talk about  
17 is the Department of Energy, in 1999, admitted to 22  
18 different contaminants and diseases at 14 DOE sites, SRS  
19 included. And for somebody to imply that there are no  
20 health consequences to what they're doing at SRS doesn't  
21 serve us, doesn't serve debate, and doesn't serve an  
22 honest evaluation of what kind of projects should be done  
23 and what kind of projects shouldn't be done.

24 The other, as someone that works in a  
25 reactor, is that the recent news and data, especially,

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1 where the allegation is that the NRC was cooperative.  
2 And certainly Northeast Utilities and - and Millstone,  
3 the proof is that the NRC was cooperative. And the  
4 history of the Atomic Energy Commission and the  
5 Department of Energy is that they've had to change the  
6 name because of the egregious conduct of the Atomic  
7 Energy Commission.

8 And I worry that that's the trend for the  
9 NRC now. Is it less in the safety of the public, less in  
10 the safety of the workers, and more in the advocacy of -  
11 of privates, like tritium, and privates, like MOX, and  
12 privates, like running 454 days without - without  
13 shutting down, which is - which is one of the problems  
14 with - at Davis-Besse. What's been admitted by utility  
15 is that we put production - we put production ahead of  
16 both the safety of - of the workers and the safety of the  
17 - of the public.

18 I guess, in closing, I just want to tell the  
19 economic development people is that I think that's what  
20 you're interested in, is money. And I don't think that  
21 you're interested in the long-term public good, and I  
22 don't think that you're interested, and I don't think  
23 that this is a patriotic adventure. I think this is all  
24 about Duke, which is being - Duke Energy, which is being  
25 investigated on both states for questionable business

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1 practices; Cogema, which is - which I think should be  
2 part of the - you know, part of the investigation process  
3 as to what - what is the track record of Cogema in - in  
4 France.

5 And how can we expect that they'll do  
6 business here - and I think that is a - something for the  
7 NRC to be considering. And I'm probably finished with my  
8 five minutes, and I could go another ten. Thank you.

9 MR. CAMERON: Okay, thank you, Harry.

10 Okay, again, Mr. Hooker. Is Mr. Hooker  
11 here? Oh, there's Mr. Hooker. All right.

12 MR. HOOKER: Hello. My name's William  
13 Hooker. I'm the owner of Georgia Builder and Supply  
14 Company. I worked for the U.S. Forestry Service from  
15 February 10<sup>th</sup>, 1992, through December 1999. Work  
16 consisted of beaver traffic and wild hog control, road  
17 building, mowing of roads, the secondary roads, culvert  
18 cleaning.

19 I was also an employee of Westinghouse,  
20 Savannah River Plant; at Savannah River Plant, M. K.  
21 Ferguson, B. F. Shaw Company for 24 years as a draftsman,  
22 construction discipline engineer, work control planner.

23 Second, I'd like to thank NRC for coming  
24 down tonight. And I'd like to see more meetings like  
25 this so citizens could make comments.

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1 My major job was to remove beavers from  
2 these surface water streams, Carolina bays, swamps,  
3 canals, reactor canals. We removed approximately -  
4 between the beavers and hogs, we removed 9,544 animals  
5 over this period of time. All my contracts stated a  
6 normal environment except for snakes and uncertain  
7 footing.

8 I worked in these streams that are - where  
9 the plumes have reached - the plumes from contaminants  
10 like tritium from F Area, the old burial ground, H Area  
11 tank form had - had thousands of curies of tritium  
12 dumping into these streams. We worked in these streams  
13 where the DOE had allowed the dumping of thousands of  
14 curies on 1-25, some of the streams as high as 30,000  
15 curies, without notifying us that they was dumping these  
16 - anything on us.

17 I went back and I checked each one of these  
18 streams, and where they've got pipes piped into the  
19 streams or the canals or these unnamed tributaries. And  
20 it's - it's just not a good situation. I've talked to  
21 the EPA. They've sent me a print, GCO, 1999, that lists  
22 281 of these waste sites that are active.

23 And I've also had some tests run of  
24 chemicals like antimony. They had a reference point of  
25 .00 - .030. What I have in me is .212. Arsenic, they

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1 got a .100. I've got .109. Bismuth, I'm over the limit  
2 on that. Lead, I'm nine times over the limit on that  
3 one. Mercury, I'm over the limit on that one. Nickel,  
4 uranium. On some of these chemicals, the antimony is  
5 worse than arsenic. And I'm sitting here reading this.  
6 This is from ATSDR. It says the EP allowance, .006 parts  
7 of antimony per million parts of drinking water. EPA  
8 requires a discharge of spills in the environment of  
9 5,000 pounds or more of antimony be reported.

10 We need to have more people looking at what  
11 these people are actually dumping on the people that are  
12 working in these streams, or the sportsmen that are out  
13 there taking home the deer or the hogs or the turkeys  
14 that's being transported off - offsite to other parts of  
15 the United States. SRL is not testing these animals, far  
16 as - they take - they take small parts of cuts off of the  
17 meat or the muscle tissue and they check them for what  
18 they want to.

19 Now, I've got right here where I was tested,  
20 and my family's sick. Just watch them. Far as trust, I  
21 don't - I don't - I don't trust them. And I personally  
22 feel I'm dealing with the devil. And I - and you make  
23 sure you get it on record, because I ain't - I ain't  
24 playing with them. And it's just sickening.

25 And - and now I've found out that you all -

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1 you all get paid by the government, too. And I know that  
2 NIOSH gets paid by the government, and they told me  
3 they'd give me a independent (sic) investigation, and  
4 that - that wasn't right, either. They left me hanging  
5 with all these men.

6 I had 15 employees. I got some of them  
7 that's got lung problems, thyroid problems. None of our  
8 equipment was ever checked, none of our clothing was  
9 checked. And you - you don't go out dealing with animals  
10 that live in the mud or the creeks or the swamps and not  
11 get muddy. Waders, far as leaks in the - we'd be wet.  
12 And I got the - I got the reputation on my back. And I'm  
13 telling you, I ain't happy with them at all. So...

14 MR. CAMERON: Thank you.

15 MR. HOOKER: ...all I can say is watch them.

16 MR. CAMERON: Thank you, sir.

17 (Applause.)

18 MR. CAMERON: Mary Kelly? Mary's with the  
19 League of Women Voters of South Carolina.

20 MS. KELLY: I'm Mary Kelly with the League  
21 of Women Voters of South Carolina. The League has a  
22 rather unique niche among non-profit organizations  
23 because of our dedication to both the governmental  
24 process that is at the heart of our American democracy,  
25 and we also work to insure that all citizens get to enjoy

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1 their rights of participate - participating in that  
2 process.

3 We also recognize that to participate  
4 effectively, citizens must have a base of knowledge on  
5 both the issues and the process. So, with that in mind,  
6 I would like to call the attention of the NRC to the  
7 following. We urge you to comply with the *National*  
8 *Environmental Policy Act* to the fullest extent of the  
9 law. We see what is going on throughout the plutonium  
10 disposition, spent fuel disposition process, MOX process,  
11 and the reinstatement of a new plutonium "trigger"  
12 program. We see all of that as a shortchanging of this  
13 process. There are constant changes, some so fundamental  
14 they should, in many cases, go back and prepare a new  
15 EIS.

16 We would like to see a real clarification of  
17 the role of the EPA, the NRC, DOE, and DOD in all aspects  
18 of the proposed programs. Where does the justification  
19 of each begin and end; how do they interact; and so  
20 forth?

21 It is certainly being glossed over that  
22 there are areas where you cannot proceed if you do not  
23 get permits from the South Carolina Department of Health  
24 and Environmental Control. We wonder how, when, and if  
25 the manufacturing process for MOX gets underway, the role

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1 of the Nuclear Regulatory Commission and the Departments  
2 of Energy and Defense will be defined and respected.

3 We find it a matter of great concern that  
4 the commercial and civilian aspects of nuclear material  
5 manufacturing and use are being mingled with the  
6 military. This has been a time-honored separation that  
7 has served this nation well, even though in some cases it  
8 had an aspect of unreality. It was this separation that  
9 permitted public acceptance of nuclear power for the  
10 generation of electricity, and the commercialization of  
11 the taxpayer paid weapons research of World War II.

12 People in an earlier era had a well-founded  
13 and health respect for the dangers of nuclear operations.  
14 And, despite the fact that there are many people in this  
15 area who think everything is perfectly safe, I assure  
16 you, as a chemist, and with the knowledge of the chemical  
17 industry, that both the heavy chemical operations and the  
18 radioactive materials handling is not perfectly safe. We  
19 have to believe that the people who are doing these  
20 things are doing them as safely as possible, but we have  
21 evidence to show that that is not always true.

22 Other matters that trouble us are the  
23 accelerated cleanup plan. This is supposed to save  
24 money; but will it? And it is justifiable to save money  
25 by doing that? The history of SRS is full of projects

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1 that had to be aborted. Cleanup at SRS still has a long  
2 way to go. We don't want to see this neglected or  
3 shortchanged. This state in some ways has been a  
4 sacrificial state for the nuclear - military nuclear and  
5 the commercial nuclear industries. We - I think we  
6 really do deserve better. The new plans for handling the  
7 high level liquid waste have been drastically changed.  
8 We are now - they are now planning to mix the bulk of the  
9 liquid waste with cement, and then leave it at SRS. That  
10 really isn't going to fly in South Carolina. It has  
11 already elicited a very negative response from major  
12 environmental groups, and South Carolina and Georgia  
13 officials. Cement isn't forever. It is leachable, and  
14 becomes easily broken up on aging in a relatively short  
15 time. We have enough bridges and highways around to show  
16 that it just is not a very good option.

17           The last speaker was talking about the  
18 health impacts. We have had a study going on through the  
19 Center for Disease Control that came to a halt because  
20 the money wasn't appropriated to carry it forth. And I'm  
21 referring to the study that was initiated by Dr. John  
22 Till. Dr. Till went back into the beginnings of the  
23 Savannah River Site. He collected all kinds of material.

24

25

And fortunately, at that time, more

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1 information was declassified, so that he really was able  
2 to get together a database. The database does exist.  
3 But the final analysis of that effort has never been  
4 done, and it should be done. That's something that the  
5 people of South Carolina should demand. We've had a  
6 number of studies that were short-term. They did not  
7 have access to that kind of information. So we really  
8 have never had a truly valid study on the health effects  
9 of the Savannah River Site dating back to its first early  
10 days. We need it.

11 But the Nuclear Regulatory Commission is the  
12 independent oversight agency. And the public is really  
13 extremely dependent on it. We urge you to do a thorough,  
14 conscientious, and truly independent job using the best  
15 science available. And I thank you for the opportunity  
16 to come here and say those things. Thank you.

17 MR. CAMERON: Thank you, Mary.

18 Let's go to - next to - is it Allen  
19 Blancett? Allen?

20 MR. BLANCETT: My question was answered.

21 MR. CAMERON: All right. Thank you, Allen.  
22 Bobbie Paul?

23 MS. PAUL: First of all, I want to thank  
24 Mary for her comments. Greatly appreciated.

25 My name is Bobbie Paul, and I'm the

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1 President of Atlanta WAND. WAND stands for Women's  
2 Action for New Directions. Historically it was known as  
3 Women's Action for Nuclear Disarmament.

4 I represent about 550 women and men in the  
5 Atlanta area, and about 40 partner organizations which  
6 joined with WAND. Our mission is to empower women and  
7 men to act politically, reduce militarism, and redirect  
8 excessive military spending---"excessive" being the  
9 operative word---towards unmet environmental and human  
10 needs.

11 My concern right now - oh, the national  
12 office is in Arlington, Massachusetts, near Boston, and  
13 we also have a women's legislative lobby who - it's  
14 bipartisan, and we work educating women legislators  
15 across the country about issues such as MOX. We also  
16 look at spending priorities and the budget, and how our  
17 - especially our discretionary spending, which is 34% of  
18 all of our total budget, is spent. Right now 53% of our  
19 discretionary spending is spent on military and the  
20 Pentagon, not that all this money comes from there. We  
21 also have 10,000 members nationwide, and 20 chapters  
22 across the country.

23 I'm here in response. I feel like I should  
24 speak to the question which is immobilization. I don't  
25 really have a prepared speech. It is WAND's position

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1 that, with the current technology, immobilization is the  
2 way to go, and the safest way to go. We feel that it's  
3 cheaper, that it's absolutely less - less dangerous, it's  
4 not as transportation intensive, and that in some ways  
5 our studies show that it will provide more jobs for  
6 people.

7 But, to be brief and let other people speak,  
8 I wanted to quote a couple of things that we feel about  
9 - about MOX, and why we think MOX is really quite a bad  
10 idea. We feel that the MOX infrastructure supplies all  
11 the pieces needed for making plutonium a desire - a  
12 desirable commodity. While it claims to dispose of it,  
13 it legitimizes the production of plutonium by foreign  
14 countries, and creates a market for something that could  
15 be used in weapons of mass destruction, which seem to be  
16 in the news a lot these days.

17 Plutonium is dangerous and should be kept  
18 out of our economy and out of our commercial reactors.  
19 And I would say that our studies and our experts, whether  
20 it's Argin (phonetic) in Washington, IER and other  
21 people, shows that MOX produces more waste than the  
22 alternative of immobilization. That we are creating more  
23 waste. And it's a lie to say that we're trying to rend  
24 it useless and - or safe. It requires this plutonium  
25 polishing and which, as far as I understand---and I am

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1 not a scientist---produces more high level radioactive  
2 liquid waste.

3 I could make some more points, but I just  
4 want to close by saying our - that the nuclear power  
5 technology seems to me a first step towards nuclear  
6 weapons technology. And for years, as Mary said, the  
7 U.S. has maintained a clear line between nuclear weapons  
8 and nuclear power by keeping plutonium out of the  
9 utilities. I feel like MOX is a step backwards,  
10 reversing at least 20 years of non-proliferation policy.  
11 And I feel it's unlawful. Thank you.

12 MR. CAMERON: And, Bobbie, just let me ask  
13 you one clarification. I would take it the implications  
14 of what you said is that, in terms of the NRC's question  
15 that immobilization should be treated as an additional  
16 no-action alternative, you would...

17 MS. PAUL: All those no - double-negatives  
18 in there, I wasn't here for the scoping, so I don't know  
19 what really you're asking. But I certainly would  
20 consider immobilization.

21 MR. CAMERON: Okay.

22 MS. PAUL: I mean, I basically think we  
23 should stop making the stuff.

24 MR. CAMERON: Okay. I think that that's -  
25 that's clear to us. Thank you very much.

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1 MS. PAUL: Thank you.

2 MR. CAMERON: Tim, did you have a question  
3 or did you want to get your five minutes up here?

4 MR. HARRIS: Tim Harris, NRC. No, I don't  
5 have a comment. I just wanted to clarify something,  
6 because I think it was a point that was made by Dr. Kelly  
7 and Bobbie, also, is that the MOX facility does not  
8 generate high level waste. It's high alpha waste, which  
9 - which is a distinction that needs to be made. It is  
10 not high level waste.

11 AUDIENCE: What is the distinction? What's  
12 the difference in the radioactivity and the half life?

13 MR. CAMERON: Thank you. Thanks for that  
14 clarification and...

15 MS. PAUL: What does that mean?

16 MR. CAMERON: ...I think this gentleman has  
17 a question now, Tim. What's your question, sir? We'll  
18 try to get it answered.

19 UNIDENTIFIED SPEAKER: My question is: What  
20 does that mean in practical terms? What does that mean  
21 in terms of the half life of the - the substance? Is it  
22 radioactive? How radioactive is it? How long will it  
23 last compared to high level radioactive waste?

24 MR. CAMERON: And, very similarly, what are  
25 the implications - where is that? What are the

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1 implications of the fact that it is not high level waste?

2 MR. HARRIS: Well, I think as Dave tried to  
3 point out, high level waste - the current plan for the  
4 disposal of that material is to - to go to a proposed  
5 geologic repository, potentially Yucca Mountain. This  
6 high alpha waste we would actually - actually be  
7 classified as transuranic waste. And what it means is,  
8 basically, it's - it's got its high end - it's got that  
9 lot of americium, which is an - and it's - it's alpha,  
10 which is a form of radiation. You have alpha, beta,  
11 gamma. And we could go into discussions on health  
12 physics.

13 But the distinction is, it's - it's - high  
14 level waste is generated by reactors. The MOX waste  
15 would end - ultimately end up being high level waste.  
16 But the waste that we're talking about coming out of the  
17 waste solidification or the MOX facility is high alpha  
18 waste.

19 MR. CAMERON: Let me - let me just try and  
20 see if...

21 UNIDENTIFIED SPEAKER: Isn't that plutonium?

22 MR. CAMERON: Let me - let me just try and  
23 speak to this...

24 MR. HARRIS: No, americium.

25 MR. CAMERON: Let me just try to short-

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1 circuit this, and people can talk in detail afterwards.  
2 I think the question - the implications of what Tim said  
3 was that because it's not high level waste, that somehow  
4 it wouldn't be something hazardous. And I think that's  
5 not what you're trying to say.

6 MR. HARRIS: No, no. It's just that it - it  
7 has a different disposal pathway. It would go  
8 potentially to the waste isolation pilot plant rather  
9 than going to the high level waste - and I think it -  
10 it's confusing, and it's I guess understandable that -  
11 that you all are confused, because before they were going  
12 to send the high alpha waste and mix it with high level  
13 waste and dispose of it at Yucca Mountain. But now  
14 they're not doing it. They're taking high alpha waste,  
15 solidifying it, and potentially it will go to the waste  
16 isolation pilot.

17 MR. CAMERON: Okay.

18 MR. TURNIPSEED: Just a minute.

19 MR. CAMERON: We're going to go on with...

20 MR. TURNIPSEED: I didn't mean to create  
21 questions. I just wanted to clarify a minor point.

22 MR. CAMERON: Tim, can you just...

23 MR. TURNIPSEED: Thank you.

24 MR. CAMERON: ...let's sit down. We're  
25 going to go on with the rest of the...

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1 MR. TURNIPSEED: What's the health risks  
2 comparatively of the alpha waste and the high level...

3 MR. CAMERON: Right.

4 MR. TURNIPSEED: Just do that. Just tell  
5 us.

6 MR. CAMERON: We're going to be...

7 MR. TURNIPSEED: Can you do that?

8 MR. CAMERON: Yeah, we will. But we're  
9 going to go through the rest of the people who want to  
10 comment now, and then, Tim, you're going to have the  
11 floor to explain that to people; okay?

12 MS. CARROLL: Don't forget it. Make a note.

13 MR. CAMERON: All right. I will, Glenn.  
14 Okay, Karen Garcia.

15 MS. GARCIA: My question's been answered.  
16 Thank you.

17 MR. CAMERON: Okay, great.

18 Glenn Carroll.

19 UNIDENTIFIED SPEAKER: Bring your guitar?

20 MS. CARROLL: I don't have time. If there's  
21 time at the end, we can all sing, "The Times, They Are A-  
22 Changing" together.

23 MR. CAMERON: Do you know any lyrics with  
24 "high alpha" in them?

25 MS. CARROLL: That's a song I don't want to

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1 sing. I do know the answer to that question, but I'll  
2 let them - I'm not spending my five minutes on it.

3 Well, you all, I brought my ER. I get one  
4 because we're intervening. And I understand this is  
5 available on Adams, you know. So maybe if you have,  
6 like, a wide band and a little time, you could download  
7 one. And I had to read it, too.

8 So I want to thank you guys for coming out,  
9 and I really want to thank you for your responsiveness  
10 when we ask that you record the meeting. And that's  
11 great. And extend the comment period. I like that. And  
12 I think there's quite a few people from Columbia here  
13 tonight, and I hope you have noted that. Columbia is the  
14 capital of South Carolina. It's the - where many  
15 organizations have their headquarters, that certainly we  
16 could maybe been spending time with the governor tonight  
17 if we had gone to Columbia. So it's an important  
18 perspective in South Carolina. There's a lot of  
19 stakeholders there that don't enjoy the economic benefits  
20 of this community that make it harder possibly to be  
21 critical.

22 Yes, yes, we should be looking at  
23 immobilization in the EIS, definitely. And I'm really  
24 excited about this, because immobilization - you know, if  
25 there is a down side, you got to tell me what it is. So

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1 this is your opportunity. Because immobilization would  
2 be jobs for everybody for a long time. It's got more  
3 jobs than MOX. Did you hear that? More jobs than MOX.  
4 And, instead of making waste, it would actually use the  
5 waste that has defied management for the last 20 years.  
6 Good plus.

7 It would take care - you know, our goal is  
8 to keep plutonium from being used as weapons. It's a  
9 direct path. You don't create any waste. You don't  
10 create fresh fuel which contains weapons grade plutonium.  
11 And I'll get into that deeper into my comments, the many  
12 places on the MOX path where fresh fuel is potentially an  
13 environmental risk.

14 One of the environmental risks of plutonium  
15 that we have to examine is that if it is made into a  
16 weapon, the weapon is a weapon of mass environmental  
17 destruction. So it's a very important environmental  
18 impact to avoid plutonium being used as a weapon.

19 And this is at the heart of the contention  
20 that we've had accepted, and something we've been going  
21 around and around through every piece of the process we  
22 can find, is we need to look at materials control and  
23 accounting before the EIS process is complete.

24 And I'm very concerned that the formal  
25 process would end before significant - I mean, look how

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1 long the operating license - DCS is deliberating under  
2 this. It's going to be full of information, and it needs  
3 a process in which the public input is protected. So  
4 it's great that the NRC, you know, will take care of  
5 business. But when we lose our mechanism to follow that  
6 process and help form that process, that is a loss to  
7 public rights. And actually we think it's illegal. And  
8 so we will continue our legal challenge on that point.

9 Let's see. The immobilization issue. Let  
10 me see, did I cover that? Yes.

11 Okay, now we've got the problem of orphaned  
12 material, which you mentioned tonight, as well. That's  
13 what we call it, "orphaned material." In the sweeping  
14 change that was made to put the junk plutonium into the  
15 MOX program, DOE, itself, said that some of the plutonium  
16 is not desirable for MOX, and so it ends up not  
17 dispositioned. Now, DOE needs to do an EIS on this.  
18 There needs to be an EIS on this.

19 Now, I wanted to comment on Mr. Hull's  
20 remark that memorandums of understanding are public  
21 documents. And that's all well and fine. But there  
22 aren't any on the MOX program, and that is not fine. And  
23 the only one that I know about is one that would deal  
24 with security, which is supposed to come down later and  
25 might help GANE get a security clearance. Nobody even

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1 knows where we should go for one yet.

2 Now, this is a problem. And you said  
3 something tonight that just stopped me in my tracks.  
4 That you're getting your - your interface with DOE is  
5 through DCS. And the only thing that comes to mind for  
6 me is, "Mommy, Daddy said I could go on the ski trip with  
7 the college guy." Well, unfortunately, mommy and daddy  
8 talked, you know, so that didn't work that well. And  
9 that is just not appropriate. It's just not appropriate.  
10 DCS is not even a licensed nuclear entity yet, so we  
11 cannot be taking their word for it on what DOE said.  
12 Which is the way I'll segue into the waste solidification  
13 building.

14 We have a few problems with this, besides  
15 our desire of what would happen, which would basically be  
16 that it not be treated in concrete which we think will  
17 not hold up. But there's some basic problems. First one  
18 is, DCS said DOE is going to do this. Now, we haven't  
19 seen an EIS from DOE, we haven't seen an item in their  
20 budget. This needs to be way firm before we start  
21 producing MOX fuel. We got to know for sure about that.

22 And then there's some issues beyond even  
23 DOE's commitment at SRS to deal with the waste, which  
24 would be will WIPP (phonetic) accept the waste. And  
25 that's a genuine issue. It's regulated by EPA. Its

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1 criteria was set before there was any talk of MOX.  
2 Certainly this whole MOX waste thing is just a couple of  
3 months old, and there's a lot of process, too, even if  
4 basically - well, we don't know for sure if it's  
5 classified as defense waste since it's a commercial  
6 venture. And there's a RCRA process, *Resource*  
7 *Conservation and Recovery Act*, that is a public process  
8 to decide whether MOX waste would be certified for WIPP.  
9 That's an appealable process. I mean, this whole WIPP  
10 angle is very, very - so you got to take into  
11 consideration the possibility of MOX waste not getting  
12 processed, or MOX waste getting processed and never  
13 leaving the site.

14 We got some reactor problems that you should  
15 look at, and one is the need - well, there's conflicting  
16 reports on whether we need two new reactors or three new  
17 reactors. There's no reactors that have been named for  
18 this. So there are questions. What happens if rushed  
19 MOX fuel containing weapons grade plutonium is backing up  
20 on the site, going nowhere, because reactors didn't get  
21 licensed, because reactors were never named?

22 I think there's questions about - from other  
23 facilities, the PDCF. You can't be preparing plutonium  
24 pits for processing in a MOX facility faster than the MOX  
25 facility can process it. You've got to watch out for

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1 your scrap backing up. In France they generated so much  
2 scrap that they - that it swamped the system. They have  
3 got scrap plutonium, essentially weapons grade, backed  
4 up, trying to put it back into the hopper to make MOX  
5 pellets. There's a problem, coordination with the pit  
6 disassembly, coordination with the reactors. All that  
7 has to be laid out.

8           Because the beauty of NEPA, and this is my  
9 main benefit, I would say, as - for doing this legal  
10 process, is our legal advisor is a NEPA expert. And NEPA  
11 is fabulous. It's new. It's just out since the '70s.  
12 It protects the public. It protects us against policies  
13 from agencies that haven't considered the environmental  
14 impacts. It makes us look at alternatives, like  
15 immobilization, that might be better down the road, even  
16 to the socioeconomic benefits of more jobs.

17           And it protects us from agencies not - you  
18 know, from gaps between agency interface that doesn't  
19 work, or even overlapping, where the right hand thinks  
20 the left hand is doing it, and also from gaps in steps in  
21 an elaborate process, like plutonium. And I think it's  
22 fair to say that it's really hard to overstate the  
23 complexity of processing plutonium, and the hazards in  
24 processing plutonium. And where it was said tonight that  
25 the NRC has experience in licensing plutonium facilities,

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1 it's not that much, and it was a long time ago. And one  
2 of the facilities that got licensed never operated at  
3 Barnwell, South Carolina. The other one was associated  
4 with Silkwood, and I think that probably says a mouthful.

5 MR. CAMERON: Glenn, can I get you to - to  
6 wrap up.

7 MS. CARROLL: Wrap it up?

8 MR. CAMERON: Your comments are right on to  
9 those two questions. So I think you could - if you could  
10 just wrap it up.

11 MS. CARROLL: Okay, yes. So there's one  
12 other thing I haven't covered yet which is also  
13 associated with the waste facility, and that is the  
14 hazards of red oil buildup. And the - Duke Cogema Stone  
15 & Webster pretty much laid out that they have all these  
16 bases covered, but the fact is, is because they assume  
17 the bases are covered, they haven't analyzed an accident,  
18 which is a potential. And the NRC staff is also on that  
19 job.

20 So we have to look at environmental  
21 consequences from red oil explosions, hydrogen  
22 explosions, how to mitigate them, how to respond. And  
23 also we need to look at Cogema's environmental record.  
24 We're looking at their - way they do, you know. We're  
25 borrowing from their processes. We need to look at the

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1 environmental results from using those processes. And  
2 I'll write a letter if there's anything I forgot.

3 MR. CAMERON: All right. Thank you very  
4 much, Glenn.

5 Mr. Ed Arnold?

6 MR. ARNOLD: Good evening. My name is Ed  
7 Arnold. I'm the Executive Director of the Atlanta  
8 Chapter of Physicians for Social Responsibility. We have  
9 a national organization of Physicians for Social  
10 Responsibility, about 20,000 members of physicians,  
11 professional health care providers, and supporters across  
12 the country. And we're the U.S. affiliate of the  
13 International Physicians for the Prevention of Nuclear  
14 War.

15 Our - one of our missions is to eliminate  
16 weapons of mass destruction. So I think you can  
17 understand that we're delighted that we're dealing with  
18 plutonium and doing our best to get it out of  
19 circulation.

20 Another mission we have is the achieve a  
21 sustainable environment. On that score, I think we have  
22 - I'm really pleased that this EIS is being undertaken so  
23 that we can find out - one thing I'd like to do is  
24 compare it to something that happens to all of us as we  
25 go to our physicians. I'm not a physician myself, I'm a

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1 health educator and - and administrator. But I recently  
2 went to the doctor and said, "Can you tell me whether I'm  
3 in good health?" I didn't go in and say, "Tell me I'm in  
4 good health."

5 I heard the question asked there - there  
6 isn't a record of decision on the chart. What happens,  
7 what's the outcome. And the answer I heard was that the  
8 outcome would be that there would be a license issued.  
9 I mean, is that really true? Is there - isn't - doesn't  
10 the NRC have the option of saying, "No, we're not going  
11 to do this MOX thing"?

12 MR. CAMERON: Yeah, and I - that's an  
13 important enough issue that we should just state it  
14 clearly on the record. The record of decision is the  
15 NRC's decision on whether to grant the license. So the  
16 record of decision could be a denial of the request for  
17 construction authorization. So we should not have any  
18 ambiguities on that. In other words, we do not have to  
19 grant the construction authorization. If the regulations  
20 are not met, then there will not be a grant of a  
21 construction authorization. Okay?

22 MR. ARNOLD: Okay, good. My physician in a  
23 previous physical said, "You're in typical health," or  
24 something like that.

25 And I said, "Wait a minute. I mean, you

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1 know, I'm okay or not okay? I mean, what - what is it,  
2 and compared to what?"

3 Now, it seems to me in this EIS process:  
4 Compared to what? What are - what - MOX compared to  
5 what? If you're not including a comparison to something,  
6 such as immobilization which was on the docket before and  
7 has been taken - how about subjecting that question about  
8 immobilization to a second opinion. You know, if - if my  
9 doctor said, "Oh, I don't know whether you're in such  
10 good shape," I'd say,

11 "I feel fine. I think I'll go ask another  
12 doctor," you know. How about a second opinion on that  
13 discounting immobilization as an alternative? And is MOX  
14 okay compared to what? What other options? I mean,  
15 doesn't the NEPA process require that other options be  
16 evaluated fully? So let's evaluate the other options.

17 PSR has a brief on plutonium resolution  
18 which I'd like - is there an opportunity to enter  
19 something into the record here? I think we'll...

20 MR. CAMERON: Yes. Yes, if you'd like to...

21 MR. ARNOLD: ...we'll write subsequent  
22 comments, but...

23 MR. CAMERON: ...we'll attach that.

24 MR. ARNOLD: ...I'll leave this with you,  
25 then.

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1 MR. CAMERON: Great. Thank you very much.

2 MR. ARNOLD: Thank you.

3 And in the public health perspective, it  
4 just seems to me that if - if this is considered as if  
5 you're going to the doctor and asking the question, "Is  
6 this a good plan and is it healthful for the community?"  
7 perhaps there's some additional questions that'll come  
8 out, if that process is undergone.

9 Once again, thank you for the opportunity in  
10 coming down to North Augusta for this.

11 MR. CAMERON: And thank you for being here  
12 tonight.

13 We're going to go next to - is it Mr. - Mr.  
14 Chaput?

15 MR. CHAPUT: Yeah.

16 MR. CAMERON: Ernest?

17 MR. CHAPUT: Ernie, here.

18 MR. CAMERON: Oh, it's Ernie. Ernie. All  
19 right. Are you going to give us some comments?

20 MR. CHAPUT: I have a few comments, yeah.

21 MR. CAMERON: All right.

22 MR. CHAPUT: And I'll - I'll clean these  
23 comments up and formally submit them. I've just got some  
24 notes here.

25 I just want to go back and - and ask

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1 everyone to refocus on why we're here. The issue is, as  
2 was pointed out by several people, and, I mean, we're in  
3 violent agreement, except we're not in agreement with  
4 this thing. What are we going to do with the surplus  
5 weapons grade plutonium that is now coming available with  
6 the United States and Russia? That is the question.  
7 This question's been studied by people certainly smarter  
8 than me, probably smarter than many of the people in this  
9 room. And a national consensus, evolved around the  
10 *National Academy of Science* report, says the safest way  
11 to make sure that that material is the least likely, the  
12 least capable for use in a weapon of mass destruction is  
13 something called the spent fuel standard. In other  
14 words, you take that material, you irradiate it, you make  
15 the - you get the plutonium as reactor grade, not weapons  
16 grade, not near as capable. You put it in spent nuclear  
17 fuel. Material is very, very hard to work with, and it  
18 cannot be worked with - it has to be worked with behind  
19 six-foot shields, concrete shields. And that is a safer  
20 - that's the safest, most responsible way for - for  
21 trying to lock up this material. It's not - not good to  
22 babysit it. At some point you got to do something with  
23 it.

24 MOX is okay if you can't burn it in the  
25 reactor. But MOX you can extract the plutonium back out

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1 of it, and you don't need six-foot thick concrete shields  
2 to do that. You can do that in a relatively benign kind  
3 of a way that - that is not transparent. It's something  
4 that is a lot simpler, technically, than try to reclaim  
5 plutonium from spent nuclear fuel.

6 So there's been a consensus by a lot of  
7 people that says the right thing to do is take that  
8 surplus plutonium, fabricate it into MOX fuel, burn it in  
9 reactors. That's how you render it least attractive to  
10 somebody to use, by either another nation, or from a  
11 subgroup, or for - or for malevolent purposes.

12 The cancellation of the plutonium  
13 immobilization project in my mind makes the MOX project  
14 that much more important. There is no alternative to  
15 MOX. And by that, I mean in an NRC environment, if I  
16 come in to license a nuclear reactor, does that mean that  
17 NRC should say, "Why don't you build a coal plant  
18 instead?" No, that's not what it means.

19 The options that are available are MOX or no  
20 action. DOE and the national - you know, and the - and  
21 the national strategic decision-making process says we're  
22 not going to do a plutonium immobilization. I mean, that  
23 causes a little bit of problems to some of the people in  
24 South Carolina on those two metric tons. That'll get  
25 resolved. That will get resolved.

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1           But to - to force a plutonium immobilization  
2 back on the table, an option which is less attractive and  
3 less - less purposeful than MOX, is not the right answer.  
4 It's not on the table; should not be on the table. My  
5 answer to that is: No, that is not a - is not part of a  
6 - of the alternatives.

7           Thirdly, this is not a jobs program. This  
8 is a program to try to make this nation and this world  
9 safer. I don't care if this stuff goes at Pantex, I  
10 don't care if it goes to Rocky Flats, I don't care if it  
11 goes to Aiken, South Carolina. It just needs to go  
12 someplace.

13           Those reviews have been done. And I've  
14 argued long and hard that Aiken, South Carolina, is the  
15 right place to do it. It's got the right facilities, the  
16 right people, and the right infrastructure. But if some  
17 other site has said that's the right place to do it,  
18 that's fine. The important thing is let's do it.

19           I guess to - the environmental report that's  
20 been submitted, as I understand it, says you got very  
21 minimal environmental and safety impacts in normal  
22 operations. It's difficult to measure the impact of the  
23 site in an accident environment. The - the consequences  
24 are well within applicable - well within applicable  
25 standards. The - the waste that's been talked about is

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1 a very small amount of waste when you look at what's been  
2 going on.

3 The thing I don't understand is they're  
4 talking a lot of deal about the 70,000 gallons---take  
5 your word for it---that goes into the waste - the new  
6 waste facility. How much liquid waste does not go into  
7 the liquid tanks, behind the liquid tanks? There's an  
8 offset somewhere. It needs to be dealt with like that.  
9 But the important thing is that waste, by the analysis  
10 that's been done, can be handled safely with no  
11 environmental impacts.

12 I guess I would just end up by - by a couple  
13 of things. Number one, I think we're all in violent  
14 agreement that something needs to be done with surplus  
15 plutonium. And I would agree with what Mary said  
16 earlier, is what we want to have happen is for NRC to do  
17 a thorough review during - using the best science. And  
18 I think those were your words, Mary, and I - I totally  
19 agree with that. The - the Duke Cogema people that  
20 submit the environmental report, use your best review and  
21 your best science to make sure they've done the proper  
22 analysis and done - you know, run the numbers correctly.

23  
24 Play that against the - the applicable  
25 regulations and standards that you use in the protection

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1 of the public health and safety and the environment, and  
2 let the chips fall where they may. I think you will find  
3 it meets the requirements. Thank you.

4 MR. CAMERON: Thank you, Ernie.

5 Let me go to Mr. Don Moniak now. Don?

6 MR. MONIAK: You said I have 20 minutes;  
7 right, Chip? Twenty-five (25)?

8 MR. CAMERON: No, actually...

9 MR. MONIAK: Okay.

10 MR. CAMERON: ...I think it was...

11 MR. MONIAK: Five. Yes. I understand.

12 Okay, my name is Don Moniak. I live in  
13 Aiken County. I moved here two years ago to work for the  
14 Blue Ridge Environmental Defense League. Prior to that,  
15 I spent four years in Texas near - in the Amarillo area,  
16 working for a group called STAND that monitored the  
17 Pantex Nuclear Weapons Plant.

18 So, when I started seeing, you know, in  
19 1998, four years ago and a month, there were two other  
20 hearings - actually there were four hearings those two  
21 weeks in August. And one of them was in Amarillo. And  
22 there was one in the afternoon, there was one in the  
23 evening. And one of them was in North Augusta, I  
24 believe. And there was one in the afternoon and one in  
25 the evening. And they were very crowded. They had 300,

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1 400 people in Amarillo showed up; I understand 6- or 700  
2 were at each one of these meetings. And they were loud  
3 and boisterous. But that's because it involved the  
4 competition for new federal pork. Call it MOX,  
5 immobilization, what-have-you. You know, it was just  
6 strictly an economic discussion, and a highly emotional  
7 one at that. At Pantex they'd bash SRS; at SRS they'd  
8 bash Pantex, even though without one or the other there  
9 would have been no victory in the Cold War. I get rather  
10 tired of hearing there here, how SRS was instrumental in  
11 winning the Cold War. Because everybody who worked there  
12 should know that it was a team effort. It involved  
13 numerous facilities. So it's really kind of a - I guess  
14 it must be a rationalization or something. But - but  
15 those meetings degenerated, so these ones have been a  
16 little more - more interesting because there's no  
17 controversy over who gets what. And a year ago today  
18 almost I was in this room going through the hearing  
19 process with the NRC's Atomic Safety Licensing Board. I  
20 submitted something like 30 contentions. Two of them  
21 were accepted, barely. And I was whupped at the end of  
22 it. It's a very rigid process, and I really admire the  
23 licensing board, especially when they chew out the NRC  
24 staff and bring them around in circles and twist them,  
25 and it's - it's just fun to watch. Because they're very

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1 sharp people. It's just - I can only sit there and be  
2 subservient, which is uncommon for me.

3 (Laughter.)

4 MR. MONIAK: So I point that out because the  
5 hearing process is a very, very instrumental part of this  
6 - of this review, NRC review. And if anybody wants all  
7 the information for that process, I'll give it to you in  
8 a CD-ROM at cost.

9 So the goal for this project, according to  
10 the environmental report, the purpose is to - almost the  
11 sole purpose is to - need for the facility to propose  
12 action issuing a license to possess and use special  
13 nuclear material in a MOX plant is essential to  
14 successful implementation of a joint U.S.-Russian nuclear  
15 disarmament policy.

16 And it's funny, because this is the sole  
17 purpose and need for the program. If the NRC refuses to  
18 evaluate the situation over in Russia and to see whether  
19 Russia is anywhere near as far along as this project is,  
20 in terms of meeting that agreement, and that has to be  
21 done in this project.

22 And I also argued a year ago, during the  
23 scoping meetings, that you have to - it's time to tell us  
24 just what the risk is from some - of somebody stealing  
25 plutonium that's stored in hardened facilities surrounded

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1 by well trained paramilitary forces like Wackenhut,  
2 stealing that plutonium and then waltzing off with it  
3 somewhere and - and successfully building a nuclear  
4 weapon. I mean, what is the risk? What's the  
5 probability? We know what the consequence of that could  
6 be, but what's the probability?

7 This is supposed to be a risk-informed  
8 process. Otherwise, the entire basis for this program is  
9 emotional in nature. It is a fear of somebody stealing  
10 plutonium, making a weapon. And that's a legitimate  
11 fear. But taking care of 34 tons here isn't going to -  
12 isn't barely going to make a dent when you have - Cogema  
13 has almost 100 tons, and British Nuclear Fuels has almost  
14 100 tons of so-called reactor grade plutonium which is  
15 perfectly suitable for nuclear weapons, it's just that  
16 weapon states prefer to use military grade, which is  
17 mistakenly, I think, called weapon grade. Everything's  
18 weapon grade.

19 So I want to submit a report, because that  
20 - the purpose is to meet the Russian schedule. And so  
21 I've written this report under contract with Blue Ridge  
22 Environmental Defense League, because I - I quit my  
23 salaried position, because I was fed up with the Nuclear  
24 Regulatory Commission's process. It just - I was - I was  
25 just like completely tied up in knots. You had to argue

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1 these almost undefinable distinctions in the law. The  
2 regulations are - they even admitted at the hearing last  
3 year that the regulations are confusing. And then you  
4 have to simultaneously argue technical issues. And I  
5 quite frankly couldn't take it anymore, so I left and  
6 said, "The hell with this. I'll research it."

7 And in the past several months we've got  
8 some information through the *Freedom of Information Act*.  
9 And specifically we're issuing a report that discusses  
10 the high consequence, high probability risks that have  
11 been identified by Duke Cogema Stone & Webster since  
12 1999-2000 for this program, many of which have come to  
13 pass; specifically, the massive change in the baseline  
14 for the feedstock.

15 Just three, four quick points on that. One,  
16 Oconee Nuclear Power Plant has been under consideration  
17 for MOX as an alternative or a backup since 19 - since  
18 2000, April 2000. It's almost - DCS considers the  
19 probability to be almost certain that there will be  
20 delays in this program that will cause fuel disruptions.

21  
22 These are before the MOX plant starts. In  
23 which case, they already have proposed European MOX fuel  
24 fabrication for the initial batch. Or after the MOX  
25 plant starts, that the PDCF might not come on line. In

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1 which case, they will have to possibly procure emergency  
2 supplies of high - I mean, low irradiation induced  
3 (phonetic) uranium fuel, which is really not a very good  
4 business strategy. And it surprises me that Duke  
5 remained in the Duke Power remained in the program, in  
6 spite of this high risk, when Virginia Power pulled out.  
7 And Duke Power does have an exit strategy, and there is  
8 a high certainty that one of those reactors will be  
9 withdrawn.

10 There's 25 open risk items as of December  
11 2000, many of which were long-term risks. They took care  
12 of the - the low level risk, moderate level, for the most  
13 part. And now it's just the high level risk, such as  
14 DOE changing its mind again and forcing the engineers to  
15 redesign the facility. Because it's going to be built.

16  
17 I do know one thing. I don't agree -  
18 putting ideology aside, with Cogema and the other  
19 industry forces, Cogema is a very disciplined  
20 organization that never would have allowed that kind of  
21 thing to happen or would have been far less likely to  
22 have allowed it. Department of Energy does this on a  
23 routine basis. They just screw up. And whether it's by  
24 policy or design is irrelevant. It's costing us millions  
25 - hundreds of millions of dollars.

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1           So, I want to finish. In regard to  
2 alternatives, the no-action alternative is just what it  
3 says. It remains in storage, which DOE's evaluated that  
4 option and established that it's a very viable  
5 alternative. It just doesn't meet the U.S.-Russian  
6 agreement. But then, of course, Russia's not meeting the  
7 U.S.-Russian agreement, either, so what's the point of  
8 it.

9           It's important to note, too, that ten years  
10 ago, when the *National Academy of Science* came out with  
11 this report, Russia was even - its materials were far  
12 less secure. And there have been tremendous upgrades in  
13 that country. Whether or not they've been sufficient is  
14 unlikely. But it's not the same situation as 1994. They  
15 built a huge new allegedly state-of-the-art, for that  
16 country, plutonium storage facility that will hold  
17 something like 20,000 plutonium items at Mayak.

18           So, and most people in Russia - on the one  
19 hand many of them says that they really don't see an  
20 encourage for MOX, although in 1990 they began pursuing  
21 the process in cooperation with Cogema and Siemens,  
22 France and Germany, long before the U.S.-Russian  
23 cooperative efforts started. So this - this statement  
24 that MOX - Russia won't do MOX unless we do is - is just  
25 purely wrong. Because they'll do MOX if somebody gives

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1       them the money, whether or not the U.S. does anything or  
2       not. They've got 100 more tons than we do. What do they  
3       care.

4               So the other alternative that should be  
5       evaluated is not a return to the immobilization program  
6       that the Department of Energy managed to sabotage either  
7       through - by intent or by incompetence. The evaluation  
8       should be to make plutonium MOX fuel pellets, make MOX  
9       fuel that does not meet commercial requirements for re-  
10      irradiation in reactors, as advocated by Frank von Hippel  
11      a year ago in the *Bulletin of the Atomic Scientists*.

12              Several years back, in the SBDEIS process,  
13      I advocated that, based on an article written by Les  
14      Jardine at Livermore. And I was about half-joking when  
15      I said that Los Alamos had a proven ability to make bad  
16      MOX fuel. They had - for like a year all their batches  
17      failed. You couldn't even make a test batch. So I said  
18      Los Alamos has proven that it's technically feasible to  
19      make bad MOX fuel that you can then store, and perhaps  
20      later meet the spent fuel standard, but that remains -  
21      some other process has to be found.

22              The only difference between diluting it in  
23      a matrix, whether it's MOX or immobilization, it's a  
24      ceramic matrix. And spent fuel standard is one security  
25      class. DOE has a graded approach to safeguards, and

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1 Level D is that diluted stuff that's suitable for being  
2 dumped in WIPP, which, incidentally, the *National Academy*  
3 *of Science* says that was a fine idea, too. Or at least  
4 one that should be pursued.

5 MR. CAMERON: Don, do you...

6 MR. MONIAK: So that's a process you need to  
7 evaluate, is making bad MOX fuel.

8 MR. CAMERON: Don, can you get to your...

9 MR. MONIAK: Either storing it here, or  
10 sending it to WIPP. And if you don't make that  
11 evaluation, then you haven't - you've done the same thing  
12 DOE did, which is gone with the one alternative.

13 MR. CAMERON: Thank you. Thank you very  
14 much.

15 MR. MONIAK: One more thing. That PDCF and  
16 waste plant, how can they run that when the PDCF's going  
17 to be three years later than the MOX plant? Thank you.

18 MR. CAMERON: We have three final speakers,  
19 and then I'm going to ask the three NRC staff---I don't  
20 know who's going to take it on---but to try to give  
21 people a clear idea about what the distinctions are  
22 between high alpha waste and high level waste.

23 We're going to go to Jack Uhrich right now,  
24 and then Lee Poe, and then finally Laura Bagwell.

25 MR. UHRICH: Good evening. My name's Jack

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1 Uhrich. I live in Aiken. I'm new to South Carolina. I  
2 moved here last November to be with my daughter and son-  
3 in-law and three grandchildren, from New Mexico. And I  
4 want to tell you all, if you're planning on sending that  
5 to WIPP, if you think that your time table's a little  
6 backed up now, they were going to open WIPP in 1980. It  
7 opened in 1999.

8           And when I mentioned today, talking to some  
9 friends of mine back in New Mexico, that they're planning  
10 to ship MOX waste to WIPP, they were not only very  
11 surprised, they were very pissed off. And I can tell you  
12 that it's not going to go there easily. And I can say  
13 that based on five years of my own life spent fighting  
14 WIPP and watching others spend many more years doing  
15 that. And they're still at it, and they still plan to go  
16 on.

17           I would hope that people in South Carolina  
18 would take some lessons in that, because if you look at  
19 a - a map of the United States color-coded by levels of  
20 radioactivity, I assure you South Carolina is a sacrifice  
21 zone, but New Mexico takes the prize. There's - the  
22 highest level of radioactivity is two black dots; one  
23 where Oak Ridge is, and the other where Rocky Flats was,  
24 and still is, in reality, and will be for the next  
25 500,000 years in terms of heat.

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1           The other color is a dark blue, and that  
2 takes up almost the entire state of New Mexico. And  
3 that's due to our actions out there. And Jimmy Carter  
4 actually came out and thanked us for being a national  
5 sacrifice zone in 1979, so we know that we're official.  
6 And you are, too, and so are my grandchildren. Because  
7 we live, I understand, in the county that has the highest  
8 cancer rate in South Carolina. And that's not going to  
9 change easily. Certainly not in our lifetime. Perhaps  
10 if we start to take some actions on these issues, it  
11 might change for our children and our grandchildren.

12           But what's being discussed tonight doesn't  
13 hold out much hope for me on that. Some gentleman said  
14 there's a national consensus about this, and I ask a  
15 national consensus of who? Of which scientists, and  
16 whose payroll are those scientists on? I would like to  
17 take a survey of scientists that really know what they're  
18 talking about that are not being paid by DOE, the NRC,  
19 Duke Power, Westinghouse, so that we could have a really  
20 objective evaluation of these alternatives.

21           My experience, when I talk to scientists  
22 that are not on these kind of payrolls, is they come to  
23 very different conclusions than those that are on  
24 government payrolls or on Westinghouse's payroll. And,  
25 by the way, we share Westinghouse at WIPP just as you do,

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1 and they've been just as nice to their workers as they  
2 have been here. I've been reading for about ten years  
3 about how nice they are to the workers out here.

4 He also said this is not a jobs program.  
5 What people in their right mind would put up with this  
6 insanity if they weren't desperate for jobs. That's what  
7 this is all about. And, as been pointed out, it's - it's  
8 not even the best way to get jobs, but that's because  
9 it's also about power. And because they want to start up  
10 the nuclear reactor program again. They want to keep  
11 commercial nuclear power going, and this is another way  
12 of doing it. That's my opinion, anyhow.

13 We've known, according to Ralph Nader, since  
14 1953 that if we pursued alternative sources, non-  
15 dangerous alternative sources---wind, solar, et cetera,  
16 hydrogen---that in about 25 years we would have stopped  
17 our dependence on foreign oil. But instead, two years  
18 after the government was told that, they started Atoms  
19 for Peace. And 25 years later we still were not - in  
20 fact, 50-some years later we still are not free of our  
21 dependence on foreign oil, and we have about a \$2  
22 trillion debt that we didn't have in 53 because we've  
23 poured about that much money into - into military and  
24 commercial nuclear energy, and what do we have to show  
25 for it except a big pile of manure, only its very hot

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1 manure and won't go away for the next half million years.

2 I want to just address technically one of  
3 the questions here I understand in terms of  
4 transportation. And just to give you a little idea of  
5 how seriously the DOE takes its transportation  
6 responsibilities, because you're going to be shipping  
7 this stuff from all over the country to Savannah River,  
8 some of which I understand is plutonium in dust form.  
9 And at least from what I've read, it takes about 3/15  
10 millionth of a gram in your lungs to do you in eventually  
11 with plutonium. That's the size of a - one grain of salt  
12 cut in about 100 pieces, if you can imagine that. And we  
13 were told in New Mexico that there was going to be about  
14 70 accidents for 25,000 shipments, and that there was  
15 going to be one release, one accident where there was  
16 releases. Except then it turned out that the government  
17 accounting office revealed that the Department of  
18 Transportation figures on which those figures were based  
19 were off by a factor of ten, so actually it's possibly  
20 700 accidents and more like ten releases of  
21 radioactivity.

22 In fact, since 1999, there - they have not  
23 been doing very good on their - their track record in  
24 terms of shipping. They've had 89 safety violations just  
25 in New Mexico alone, and the New Mexico nuclear groups

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1 are suing to get the figures for the other states that  
2 they're coming through. Because they're coming from  
3 Rocky Flats, they're coming from Idaho, they're coming  
4 from Los Alamos, they're coming from---what is it?---  
5 Washington. So eventually they're going to be coming  
6 through 22 states, coming to a town near you.

7           And what are they going to be doing? What  
8 are they going to be spreading? Well, one situation, a  
9 drunk - it wasn't any fault of theirs, it was human  
10 error. A drunk driver ran into a WIPP truck. And he did  
11 it hard enough that the internal part of the cask was  
12 broken. It didn't breach the outside, but it was bad  
13 enough that they sent it back to source, rather than  
14 continue their journey.

15           In another situation, the driver fell asleep  
16 at the wheel, crossed over the median strip and started  
17 going towards oncoming traffic before the other driver,  
18 who was sleeping - supposed to be sleeping, came awake  
19 and realized what was happening and pulled it to safety.

20           In another situation which has not been  
21 reported, but drivers were seen in a populated area  
22 standing by the truck where kids and family - we have  
23 this on video - or friends of mine have this on video  
24 tape, smoking a cigarette, where clearly it's against the  
25 rules to be smoking a cigarette within 25 feet of the

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1 truck. And there are all kinds of radiations emitting  
2 from the truck, so it shouldn't be standing for a long  
3 period of time around a population.

4 This is just some examples that I've heard  
5 just talking to friends over the last few days about  
6 what's going on in New Mexico, that that they've done  
7 just in a few years. So this is a long-term project.  
8 This is supposed to go to - to 2019; is that right?  
9 Seventeen (17) years? Is that the length of the project?  
10 So, and that's with a fairly heavy group of watchdogs out  
11 in New Mexico. And I'm glad to see that there's quite a  
12 few watchdogs here, and I hope you keep it up, because  
13 obviously it's going to be needed.

14 Just one other thing, is that you might want  
15 to be checking out what are your first responders in the  
16 state. Are they based on volunteer fire departments?  
17 Have they been informed of what will happen if there's a  
18 breach of a plutonium shipment? And, by the way, TRU  
19 waste is very dangerous. And so don't cover it up with  
20 changing the language. Thank you.

21 MR. CAMERON: Thank you. Lee? Lee Poe?

22 MR. POE: When I came here tonight I didn't  
23 plan to - to make a comment, but I do feel that - that I  
24 need to comment. I need to comment first on - on these  
25 over here, and I will do that. But I would like to thank

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1 you for providing us the opportunity to come here and to  
2 listen and to learn and to have an opportunity to come.  
3 And I'll have to say, I've listened a whole lot and my  
4 ears are tired, so I hope to be short.

5 I would like to ask you or suggest to you  
6 that there be a public input early in 2005 on -  
7 before the decision is reached, so that all of us have  
8 the opportunity to have looked at not only the design,  
9 but also the plans for this activity.

10 Now, I've heard a lot of discussion here  
11 tonight, and much of it centers around the Department of  
12 Energy. And I think that the Department of Energy should  
13 be part of that particular 2005 event, as well as the  
14 Duke Cogema team, so that everybody's here at one time  
15 and available to talk and to answer questions.

16 The other thing I'd like to ask is that  
17 rather than have the 45 day comment period when the draft  
18 EIS is issued, that you extend it at least to - to twice  
19 that, a longer time, because what you've got to do is,  
20 you've got to take these documents that you're going to  
21 issue to us, in terms of a draft EIS, you got to look at  
22 them and understand them, and - and then it's got to soak  
23 in a while, or at least it does in my - for me. I can't  
24 make, by looking, a decision that everything is - is  
25 hunky-dory.

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1           Now, the comment relative to these two  
2 questions over here, in my opinion, the no-action, there  
3 is only one no-action, and that is to continue to store  
4 the material at the location that it is for some long  
5 period of time, centuries. 10,000 years is what WIPP -  
6 I mean, what Yucca Mountain used in their no-action  
7 alternative. Something similar to that, that's similar  
8 to the life of this plutonium, which is even longer than  
9 that, needs to be considered. And there needs to be some  
10 consideration given to how long will we do a good job of  
11 managing these plutoniums during that no-action time  
12 period.

13           So, in my mind, there is no value in doing  
14 a vitrification process no-alternative when the  
15 government has said we're not going to do that, unless  
16 somebody out there has got deep pockets and is willing to  
17 fund it, and I doubt that. I doubt that any of us have  
18 that capability, other than our U.S. government.

19           And the other comment that I - I read this  
20 - this bottom thing here. And - and I don't really know  
21 what that's asking me to do. So the thing I thought  
22 about was kind of similar to what Don Moniak said. It  
23 would seem to me that somewhere in here somebody ought to  
24 evaluate the theft and use of these plutoniums either  
25 from the MOX or from the no-action, either case, because

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1 that's the driving force for this EIS.

2 The last comment also on that - that bottom  
3 part there, it seems to me that one alternative might be  
4 to look at what happens if the Russian government doesn't  
5 do this or - or some payoff of that. I know again I  
6 wanted to thank you guys for being here, offering us the  
7 opportunity to come and listen and learn and - and speak  
8 our piece. Thank you.

9 MR. CAMERON: Okay, thank you very much,  
10 Lee, for addressing those - those questions, also.

11 Laura, would you like to give us some  
12 comments, and then we're going to have Mr. Willoughby.  
13 And we need to be out - we need to be done by - not out,  
14 but done by 10:30, so...

15 MS. BAGWELL: All right.

16 MR. CAMERON: ...go ahead, Laura.

17 MS. BAGWELL: Like Mr. Poe, I didn't plan to  
18 speak tonight, so I'm going to keep these extemporaneous  
19 remarks real brief. It's late. I want to get home, too.

20 First of all, I really want to commend all  
21 of us for this dialogue. I mean, despite the fact that  
22 public participation is - is required, I think it's very  
23 beneficial. I think it lends a lot of credibility to  
24 this process, and I know I've learned a lot tonight.

25 I point to, for example, GANE's involvement

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1 in this process as an example of a very positive  
2 involvement. I don't think anything that we've talked  
3 about tonight is a foregone conclusion. And - and I  
4 think I'm going to open my comments with that remark and  
5 I'm going to close with that remark.

6 Secondly, despite the fact that I work at  
7 the Savannah River Site and I'm very proud of my efforts  
8 out there to help clean up that place, I'm not here to  
9 cheerlead for the Savannah River Site or for MOX in any  
10 way. I'm just here to be an interested participant.

11 Thirdly, you know, no matter what our  
12 environmental or political standpoints are, I find that  
13 when a bunch of diverse people, such as people who are  
14 represented here tonight, get around the table to address  
15 complex issues, two things happen. The first thing that  
16 happens is that we find out that we have more in common  
17 than separates us. And the second thing we find out is  
18 that, you know, the problems are difficult. That's why  
19 they're problems.

20 In regard to those problems, and especially  
21 in regard to the complexity of the plutonium disposition  
22 issues, again, maybe just to echo Mr. Chaput's remarks,  
23 you know, all of these issues that we've raised here  
24 tonight are very complex. For example, is immobilization  
25 the way to go? Is MOX facility treatment the way to go?

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1 That's a complex issue. There are opponents and  
2 proponents for each of those. But again, I think the one  
3 thing that we in this room, all of us can agree on, is  
4 that something needs to be done to manage this plutonium.  
5 This is a very important international issue. It doesn't  
6 just affect the people in this room.

7 And finally, or maybe penultimately, with  
8 all due respect for the positions of organizations like  
9 GANE and - and other groups here tonight, and no matter  
10 what our respective positions are on nuclear energy and  
11 nuclear energy use, I think it's important for us not to  
12 function in a vacuum. It is a fact that when we turn on  
13 the lights in South Carolina, that a significant  
14 percentage of those photons come from nuclear energy,  
15 nuclear energy plants. And in an era when energy  
16 shortages such as were seen last year on the West Coast  
17 and such as may continue in the Northeast plague us, you  
18 know, that's a point that we need to deal with,  
19 regardless of what our positions are on those issues.

20 And - and lastly, again, just to close where  
21 I started, I don't think any - any of these issues that  
22 we've discussed tonight is a foregone - or are a foregone  
23 conclusion. I think this process is very beneficial, and  
24 I thank you for - for letting us be a part of this.

25 MR. CAMERON: Okay, thank you very much,

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1 Laura.

2 Our final speaker is Mr. Willoughby. Mr.  
3 Willoughby?

4 MR. WILLOUGHBY: I would preface my remarks  
5 with two comments. One, I have been one way or the other  
6 in nuclear energy business for 45 years, everywhere from  
7 chasing bombs to commercial power reactors. The other is  
8 that it's my personal belief---that's what it is, a  
9 personal belief---that the MOX fuel is the best way to  
10 make the plutonium so that it cannot be used by anybody  
11 else for purposes of mass destruction.

12 The - with those said, and to address the  
13 questions that you have, one, I agree with Mr. Poe that  
14 a no - though he may be surprised, that the no-alternate  
15 - no-action alternate is in fact a storage of plutonium  
16 at the present sites. And this has to look at the long-  
17 range problems, it has to look at not just what is good  
18 for South Carolina, it has to look at what's good for the  
19 United States. And that is what this EIS should address.  
20 Is not a parochial concern, but, in fact, a national  
21 concern.

22 As a - a reasonable alternate to be  
23 evaluated, in this case I disagree with Mr. Poe, and I  
24 think that the EIS should consider that the  
25 immobilization be considered as an alternate. If that

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1 comes out as the proposed solution from your EIS, then  
2 the federal government is going to have to find the money  
3 and some agency to do that, whether it is DOE or some  
4 commercial facility under the auspices of the NRC. So  
5 then the - in all cases, what in addition would be  
6 considered, the national viewpoint, it also what is  
7 looked at (sic) and evaluated as part of any of the  
8 process has to be the international situation. Thank  
9 you.

10 MR. CAMERON: Thank you very much, Mr.  
11 Willoughby.

12 We have a few minutes left, and I know there  
13 were a lot of questions raised by the high alpha versus  
14 high level waste issue. And could we have one of the NRC  
15 staff come up and just try to give us a few minutes  
16 explanation, if we could all just listen patiently to the  
17 explanation. And then we'll go on to you for questions  
18 to make sure that it's - if it's understood.

19 Tim?

20 MR. HARRIS: Well, I'll try to keep it  
21 simple. And if - if we've got to get into processes and  
22 isotopic compositions, I may turn it over to Dave.

23 If your looking at simply - I mean, it's  
24 maybe a - a case of, one, where the waste comes from.  
25 Spent high level waste is spent nuclear fuel, and where

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1 that comes from a reactor after the fuel has been used to  
2 make electricity. Highly radioactive material.

3 In this case, the high alpha waste stream  
4 comes as part of the MOX process where some of the  
5 impurities that are now with the plutonium are being  
6 removed, and that generates a waste that we're terming  
7 high alpha waste, which is not high level waste.

8 As far as the - the differences in - in  
9 danger, hazard, you know, with - with material, you know,  
10 all high level waste isn't - isn't the same hazard. All  
11 high alpha waste or TRU waste isn't the same hazards. I  
12 can't really - excuse me, give you a price - you know,  
13 I'm sure there's some overlaps there. But they are  
14 hazardous materials. Maybe that's a simple explanation  
15 that - that hopefully won't pose too many questions.

16 MR. CAMERON: And so, difference in how they  
17 originate, and there may be a difference in...

18 MR. HARRIS: There's - there's differences  
19 in...

20 MR. CAMERON: ...the type of hazard, but  
21 they're both hazardous.

22 MR. HARRIS: They're both hazardous -  
23 hazardous stuff.

24 MR. CAMERON: Okay, let's - let's go out,  
25 then, and see if anybody has any questions about that.

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1 Don? Or a comment.

2 MR. MONIAK: High alpha activity waste is  
3 defined as - you know, it's kind of like in the middle;  
4 right? But...

5 MR. HARRIS: In the middle of...

6 MR. MONIAK: In other words, it'd show up -  
7 like up to 80,000 curies a year of americium 241 in that,  
8 24 kilograms a year of americium 241, so in a few years  
9 it ought to be enough to make a bomb, if you separate the  
10 americium 241. Because you get - make the critical mass  
11 about 60 kilos, according to Los Alamos. But that -  
12 that's important, is that that's a lot of americium.  
13 That - you know, you're not going to be able to like  
14 create a - a market for smoke detectors, are you? That's  
15 a little too much.

16 (Laughter.)

17 MR. HARRIS: Was there - was there a  
18 question in there, Chip, or...

19 MR. MONIAK: No, I'm just commenting.  
20 There's no way of explaining it.

21 MR. CAMERON: Okay, that's - that's a  
22 comment. Okay, we have your other, Mr. Uhrich?

23 MR. UHRICH: well, when - when you use the  
24 term "transuranic," I get a little confused. Because the  
25 transuranic waste that was being shipped to WIPP consists

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1 of plutonium contaminated waste, basically. And there  
2 were all kinds of problems that would come out of that.  
3 For example, there's explosiveness in the canisters  
4 because you've got plastics mixing with the plutonium,  
5 all kinds of different materials mixing, molding  
6 together, creating - generating gases. There's been  
7 documented a number of explosions - explosions in  
8 transportation of some of those canisters.

9 What type of problems are you going to  
10 encounter with high alpha waste that would differentiate  
11 the kind of problems you would imagine with high level  
12 nuclear waste?

13 MR. HARRIS: Yeah, I...

14 MR. CAMERON: Can anybody...

15 MR. HARRIS: ...I'll attend to the - the  
16 last question which is - I don't have an answer to that  
17 here tonight. We haven't done our analysis. So I can't  
18 tell you the answer to the analysis that we haven't done  
19 yet. Hold - hold that question until March and we'll  
20 have the answer, hopefully.

21 The second question was - was the definition  
22 of "transuranic waste," and I think that's elements with  
23 C numbers over uranium 83. 92. Sorry. And - and with  
24 greater than 100 nanocuries.

25 MR. CAMERON: I'm not sure how much that

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1 means to people.

2 MR. HARRIS: Yeah, it - people.

3 MR. CAMERON: But I guess one thing is, are  
4 - is a component of high alpha waste TRU, T-R-U? Is that  
5 - is TRU a high alpha waste?

6 MR. HARRIS: I think it could be.

7 MR. CAMERON: Okay. And - and, Dave or Tim,  
8 we - I think that the concern is what types of hazards -  
9 forget about the high level waste comparison. Can  
10 anybody tell us just briefly what types of hazards there  
11 are from high alpha waste?

12 MR. HARRIS: Well, Dave is a certified  
13 health physicist, so I'll step down.

14 MR. BROWN: Just like with the mixed oxide  
15 fuel plant, the most important thing with handling the  
16 high alpha activity waste will be making sure that it's  
17 confined so that there's not a breathing hazard for  
18 workers in the plant, or for anyone else, for that  
19 matter.

20 There is also a direct radiation hazard, the  
21 fact that there are gamma rays coming from the waste. So  
22 the processes that handle that waste will have to be  
23 shielded to insure protection of workers working in the  
24 plant. So there's protection to make sure that the  
25 workers can't inhale any of that, and protection to make

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1 sure that they're shielded from direct radiation.

2 MR. CAMERON: Okay. We're going to go to  
3 other - other people now. Mary, do you have a question?

4 MS. KELLY: Well, I have a comment. I think  
5 the - the confusion comes because early on high level  
6 waste was arbitrarily defined as spent nuclear fuel rods  
7 or the high level waste - liquid waste from reprocessing.  
8 One of the problems in South Carolina is that the nuclear  
9 reactor parts, which are highly radioactive, are defined  
10 as low level waste simply because of that arbitrary  
11 distinction, and they go down into the Barnwell low level  
12 waste site.

13 MR. CAMERON: Okay, thanks, Mary.

14 MR. ROGERS: Just quickly, for the - for the  
15 record, my comments. I'm Harry Rogers from Carolina  
16 Peace Resource Center. The 450-day run was anecdotal.  
17 And the fact that Davis-Besse admitted that they placed  
18 production before safety is a matter of record. So...

19 And the question I have is that the - the  
20 volume - the volume of waste, MOX versus immobilization,  
21 do you know - do you know those numbers?

22 MR. HARRIS: No, I can't quote those to you,  
23 Harry. They were in the old environmental report, the  
24 December 2000 environmental report, and I - I can't speak  
25 to that.

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1 MR. ROGERS: Because you haven't processed  
2 the other...

3 MR. HARRIS: I - I don't have a...

4 MR. ROGERS: ...you're processing - the  
5 processing of...

6 The other part - the other thing I needed to  
7 say, when you create additional waste, you have to  
8 process more, and you have to do something with that -  
9 you know, you have to do something with that waste. It's  
10 not just a - it's just a - it's not just a  
11 characterization of the waste, it's how do you - what are  
12 you going to do with it.

13 MR. CAMERON: Okay, that's another point.  
14 Not only where it originates but, I guess, where it's  
15 going to go.

16 We got a couple minutes left. Anything - I  
17 don't know if Mr. Uhrich had another question on this  
18 high alpha-high level waste. Glenn, did you have  
19 anything you wanted to say on this?

20 MS. CARROLL: Since you handed me the mic...

21 MR. CAMERON: Right.

22 MS. CARROLL: ...I would just say - and I  
23 think Jack probably knows this, but I think he wants to  
24 bring this out. I would say that the distinctions on  
25 waste classifications are largely legal distinctions,

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1 don't always, but loosely have something to do with the  
2 character of the waste. And that MOX waste is  
3 uncategorical. I mean, it's a new - or it's a new beast.  
4 And so it's a legitimate question, and it's something  
5 that potential host site may really take issue with, how  
6 we have tried to define MOX waste, and whether they think  
7 it should come there. Okay.

8 MR. CAMERON: Thank you, Glenn.

9 Mr. Turnipseed, you're fine? All right.

10 Mr. Uhrich, one last...

11 MR. UHRICH: Just the way I heard - what I  
12 heard you say was that high alpha waste, you have to  
13 protect both from inhalation and from the exposure; is  
14 that correct? So - so, in a sense, it's more - actually  
15 more dangerous than plutonium, because with plutonium  
16 you're shielded by - you could shield from plutonium  
17 radiation simply by something like a sheet of paper or a  
18 cloth; isn't that correct?

19 MR. BROWN: The - Jack, the risks are about  
20 the same. But you're right, the americium in the high  
21 alpha activity waste does have a higher direct radiation  
22 hazard than the weapons grade plutonium that would be  
23 handled at the MOX facility.

24 MR. CAMERON: Okay. I'm going to thank all  
25 of you for being such an engaging audience tonight.

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1 Thank you.

2 MR. HARRIS: Can we put in another plug,  
3 Chip, for people to fill out the feedback forms? We  
4 really want to get your feedbacks.

5 MR. CAMERON: We'll - we'll get that, Tim.

6 MR. HARRIS: Okay. I'll - I'll sit down.

7 MR. CAMERON: Thank you.

8 Thank you all. And thanks to - thanks, Tim  
9 Harris, Dave Brown, for their excellent presentations.  
10 Betty Garrett for doing all the administrative work.  
11 Melanie, our stenographer tonight. And thank all of you.

12 I'm just going to turn it over to our senior  
13 NRC official here for just a word of - of goodnight to  
14 all of you. And don't forget we do have those feedback  
15 evaluation forms will - that will help us to learn what  
16 we're doing here.

17 MS. TROTTIER: Thank you, Chip. And I will  
18 warn you first, I'm a morning person, so, you know, no  
19 one ever sees me at 10:30. But, you know, I'll give it  
20 my best shot.

21 First, I want to thank you all for taking  
22 out your whole evening to come here. It is important to  
23 us. We do need to hear your feedback.

24 I also want to tell you we're early in this  
25 process. Remember that we haven't yet prepared the EIS.

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1 You know, we will be back, we will be looking for your  
2 comment. I did appreciate the comment about extending  
3 the comment period. I personally have spent many years  
4 writing regulations, understand that certain time periods  
5 create problems for people. And we will look into that.

6 But I encourage you to keep being engaged.  
7 It is important to us to have your feedback. And, again,  
8 I want to thank you for coming out tonight.

9 MR. CAMERON: Great. Well, goodnight.

10 (Whereupon, the hearing was concluded at  
11 10:35 p.m.)

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