

# **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.)

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

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

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

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

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

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

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

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

25 In terms of that second part of the

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1 meeting, there is a sign-up sheet at the registration  
2 table. If you want to talk tonight during that formal  
3 comment period, please sign up. It's not absolutely  
4 necessary that you do so. You may hear something that  
5 will prompt you to want to make a comment or a  
6 statement during that time period, and that's fine.  
7 We just like to know how many people want to talk, so  
8 that we can sort of control our time constructively.  
9 And of course, when we go out to you after the NRC  
10 presentations for question and answer, you know,  
11 obviously you don't have to sign up to raise a  
12 question or to even comment on something during that  
13 - those particular time periods.

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

22 I would ask that only one person at a time  
23 talk, not only so that Melanie can get a clean  
24 transcript, but also, more importantly, so that we can  
25 give our full attention to whomever has the floor at

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1 the time. And please try to be concise. It's hard,  
2 I know, on these difficult issues, to - to be concise.  
3 But we want to make sure that everybody has a chance  
4 to talk tonight. So if you can - if you can try to be  
5 brief, that would be helpful in achieving that - that  
6 goal. When we get to the second part of the meeting  
7 where people are going to give us formal comment, I  
8 would ask you to limit that formal comment to five  
9 minutes.

10 Okay, in terms of agenda for tonight,  
11 we're going to start by giving you an overview of the  
12 NRC's environmental review process. And to do that  
13 for us, we have Mr. Tim Harris, who is right here.  
14 And Tim is the Project Manager for the environmental  
15 review on this proposed facility. He has that  
16 responsibility.

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

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1 Engineering.

2 After Tim's done, we'll go out to you to  
3 make sure that there's no ambiguities about - about  
4 what we're - what we're doing, to answer your  
5 questions. And then we're going to go to Mr. Dave  
6 Brown, who is going to - to talk about the potential  
7 implications for the NRC environmental review process  
8 that may result from changes in the national MOX  
9 program. And he's going to go over that for you.

10 He's with the Special Projects and  
11 Inspection Branch. Now, those are the people who  
12 evaluate safety aspects of the proposed MOX facility.  
13 And the safety evaluation, the environmental  
14 evaluation all come together as the basis for NRC's  
15 decision about whether to grant approval for  
16 construction of the facility. And they'll be talking  
17 more about that.

18 Dave is a health physicist. He's only  
19 been with the agency for - for two years. He was with  
20 the West Valley demonstration project for about five  
21 years before that. And he has a Master's in Health  
22 Physics from Clemson University, and a Bachelor's in  
23 - in Physics. After Dave is done, we'll again go out  
24 to you for question and answer.

25 And then Tim's going to come back up to

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1 pose the two questions that the NRC is specifically  
2 looking for comment on. And that really focuses on  
3 what should be in the scope of our environmental  
4 review based on these changes to the national MOX  
5 program that you'll be - you'll be hearing about.

6 A final word just on - on relevance.  
7 There may be questions that you have, or comments,  
8 that don't squarely fit in a particular agenda item  
9 we're talking about. I'll keep track of those up here  
10 on what's, you know, traditionally called a "parking  
11 lot," so that we can come back and make sure we answer  
12 those at the - the most opportune time.

13 The second point on relevance is that we  
14 are here to talk about the NRC's responsibilities.  
15 And we know that there's a lot of issues concerned  
16 with the broader MOX program. If we can provide you  
17 with any brief information on that or guide you to  
18 someone to talk to about those broader concerns, we'll  
19 do that. But we really are going to focus on the NRC  
20 responsibilities tonight.

21 And I would just thank you all for being  
22 here to help us with this important decision. And I  
23 just wanted to introduce one more person. We do have  
24 one of our NRC managers here. And this - this is  
25 Cheryl Trottier, right here. She's the Branch Chief

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1 for the Environmental and Performance Assessment  
2 Branch, and that's where Cheryl and her people, and  
3 specifically Tim, they're going to be doing the  
4 environmental review and - and looking at these  
5 environmental impacts. And Tim, let's get started  
6 with - with your presentation, and then we'll go back  
7 out to you for questions.

8 MR. HARRIS: Thanks, Chip. Can everybody  
9 hear me?

10 Good evening, and I'd like to welcome you  
11 to this meeting, as Chip said, on - on NRC's  
12 environmental review for the proposed mixed oxide or  
13 MOX fuel fabrication facility. And I'd like to  
14 personally thank you for taking your time to come out  
15 this evening and participate, and we look forward to  
16 hearing from your - your comments.

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

20 The presenters, as Chip said, will be Dave  
21 and myself. We've got our phone numbers and Email  
22 addresses on there, and I encourage you, if you have  
23 questions later, please feel free to call us or Email  
24 us. Next slide.

25 As Chip said, the purpose of tonight's

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1 meeting is to get your comments on how the changes in  
2 the surplus disposition program might affect NRC's  
3 environmental review for the proposed MOX project.  
4 And some of the agenda items I won't go over, since  
5 Chip has already discussed those.

6 Since this is a follow-on meeting, and we  
7 had scoping meetings here last year, some of the  
8 topics are only going to be discussed briefly. So if  
9 you have questions, please feel free to ask. And I  
10 think Betty gave you a copy of the feedback form.  
11 That's another important issue. We want to hear from  
12 you on how we're doing in the meetings. If there's  
13 something you like, tell us; if there's things that  
14 you didn't like, we want to hear those as well, so  
15 that we can hopefully do a better job next time.

16 Because of changes in the DOE program, we  
17 decided to delay issuance of our draft environmental  
18 impact statement, and we issued a *Federal Register*  
19 notice announcing that delay. And in that notice we  
20 asked two questions of the public. To start you  
21 thinking about the specific areas we're looking for  
22 comments on, I've included them early in the  
23 presentation. I also think that they're included on  
24 the agenda, if you want to refer to that there.

25 The questions are:

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1                   How should the NRC now  
2                   consider the immobilization of  
3                   plutonium as a no-action  
4                   alternative, since DOE has formally  
5                   canceled plans to construct that  
6                   facility?

7                   And whether or not there  
8                   are any other alternatives that  
9                   weren't identified during scoping  
10                  that we should consider at this  
11                  time?

12                 We - in the *Federal Register* notice, we  
13                 requested written comments by August 30<sup>th</sup>, and we're  
14                 in the process of formally extending the comment  
15                 period to September 30<sup>th</sup>. So if you get home and -  
16                 and you think about some things and - please feel free  
17                 to write in and share your comments readily, if you  
18                 don't express them here.

19                 Congress, in the *Defense Authorization Act*  
20                 of 1999, gave NRC a role in the proposed MOX project.  
21                 Specifically, NRC has licensing authority over this  
22                 facility. So our role in the project is to make a  
23                 licensing decision regarding the proposed mixed oxide  
24                 project.

25                 The NRC is an independent government

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1 agency. And our mission is to protect the public  
2 health and safety, and the environment, in commercial  
3 uses of radioactive material. Our role is different  
4 from the Department of Energy's. The Department of  
5 Energy's role in this project relates to implementing  
6 nuclear non-proliferation policy, including the  
7 disposition of surplus weapons plutonium. DOE has  
8 made changes in that program, and later in the meeting  
9 Dave will describe those for you.

10 One comment we got from the meeting, I  
11 think it was here last year, was it wasn't really  
12 clear what the decisions were or now the safety and  
13 environmental pieces fit together. So we've - we've  
14 put together a slide to hopefully make it a little  
15 understandable. And I think you got copies of the  
16 slides with your handouts.

17 NRC has two decisions to make relative to  
18 the MOX projects. And those decisions are included in  
19 the middle of the slide. They are: First, whether to  
20 construct - authorize construction of the facility;  
21 and the second is whether to authorize operation or  
22 license the proposed facility.

23 DCS submitted an environmental report in  
24 December of 2002 and - I'm sorry, December 2000, and  
25 a construction authorization request in February of

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1 2001. And, as I said, due to the changes in the DOE  
2 program, we've delayed our issuance. And following  
3 that, DCS has submitted a revised environmental report  
4 in July 2002. We are currently reviewing the revised  
5 environmental report and the construction  
6 authorization request, and will document those reviews  
7 in two documents. The NRC will prepare an  
8 environmental impact statement. And I'll go over that  
9 - that process in just a second.

10 NRC will also prepare a safety evaluation  
11 report for the construction authorization request.  
12 And we had a public meeting here in North Augusta last  
13 month on that topic. The safety evaluation report is  
14 different from the environmental review. The safety  
15 evaluation report focuses on a safety assessment of  
16 the proposed design basis to determine if it meets  
17 NRC's requirements. The EIS considers the  
18 environmental impacts of both constructing and  
19 operating the facility. Not only do we look at the  
20 proposed action, which is the proposed MOX facility,  
21 but we also look at alternatives to the proposed  
22 action.

23 NRC's final environmental impact statement  
24 and the safety evaluation report for the construction  
25 authorization request will be the basis for making the

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1 decision whether to construct the MOX facility, and we  
2 anticipate making that decision in September of 2003.  
3 I think that is where the - the top and the bottom  
4 come together. The safety review and the  
5 environmental review will serve as a basis for the  
6 construction authorization decision.

7 DCS plans to submit a license application  
8 to operate the proposed MOX facility in October of  
9 2003. We will review the license application and  
10 prepare a second safety evaluation report. The safety  
11 evaluation report on the operating application and the  
12 final environmental impact statement, which is the  
13 same environmental impact statement that was used for  
14 the construction authorization request, would be the  
15 basis for making a decision on whether to allow DCS to  
16 operate the proposed facility.

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

21 The purpose of the previous discussion was  
22 to put in context how the environmental report -  
23 environmental impact statement, excuse me, that we're  
24 talking about here tonight will be used in NRC's  
25 decision-making. To summarize, a single EIS will be

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1 used to support the decisions for both construction  
2 and licensing in the proposed MOX facility.

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

17 To start at the beginning of the diagram  
18 now, we've received DCS's environmental report and  
19 issued a notice of intent to prepare an environmental  
20 impact statement. And that was published in the  
21 *Federal Register* in March of 2001. We have completed  
22 the scoping process. We had three meetings. And I'll  
23 describe that in just a minute. And we're in the  
24 process of completing our environmental review, which  
25 includes requests for additional information. And

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1 this is additional information that the staff deems  
2 necessary in order to complete our review. And those  
3 requests are made public. We plan to issue the draft  
4 environmental impact statement for public comment in  
5 February of 2003, and there'll be a 45 day comment  
6 period.

7 We will hold public meetings on the draft  
8 environmental impact statement, and we plan to do that  
9 in March of 2003. And if you provided your full  
10 mailing address to Betty when you signed in, or had  
11 done that in previous meetings, we will mail you a  
12 copy at the end of February. And lastly, after we  
13 consider your comments, we'll revise the environmental  
14 impact statement and publish it as a final.

15 The purpose of scoping is to gather  
16 stakeholder input on alternatives that should be  
17 considered in an environmental impact statement, and  
18 to get resource areas - information on resource areas  
19 that might be impacted. As I said, we had public  
20 meetings here in North Augusta. We also held meetings  
21 in Savannah and Charlotte. We received - in addition  
22 to the comments we received at those meetings, we  
23 received written and Email comments. We summarized  
24 that in a scoping summary report which was published  
25 in August of 2001. And Betty has a few copies back at

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1 the desk. If you don't have a copy and would like  
2 one, please see Betty.

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

16 The next step in the process, just to  
17 summarize, I would plan to issue our draft in February  
18 of 2003; hold public meetings to get your input on the  
19 draft in March of 2003; consider your comments;  
20 finalize the document; and publish it in August of  
21 2003.

22 And that concludes my presentation. Chip  
23 and I'd be happy to answer any questions people have  
24 on NRC's role, the NEPA process, environmental impact  
25 statement.

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1 MR. CAMERON: Good. Thank you very much,  
2 Tim. You heard a lot of material there, and some of  
3 you who are familiar with this may - may understand  
4 the process. But those of you who are new may have  
5 questions about this.

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

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

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

16 MR. HARRIS: And, actually...

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

18 MR. HARRIS: ...it's in the *Federal*  
19 *Register*. It's Mike Lesar, NRC, Washington, D.C.,  
20 20555. And I'm sure there's a probably a little more  
21 to the address, but we'll...

22 MR. CAMERON: I'm not sure everybody's -  
23 everybody's getting it.

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

25 MR. CAMERON: We'll put this up on the -

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1 the board, so that you know where to submit your  
2 written comment.

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

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

13 MR. POE: I'm Lee Poe.

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

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

23 MR. POE: What should we, as the public,  
24 understand you are telling us?

25 MR. HARRIS: ...it's a yes and no

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1 question. I think you made a good point that DCS  
2 prepares an environmental report, and that's providing  
3 data and information to the NRC. The NRC's  
4 environmental impact statement is NRC's document. We  
5 do confirmatory analysis, and we prepare a - an NRC  
6 document. We use data that - that DCS has provided,  
7 but it's - in many cases we do additional reviews.

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

18 MR. POE: My - my safety was the  
19 environmental.

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

23 MR. POE: Environmental.

24 MR. HARRIS: ...acceptability of the  
25 environmental impacts.

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

3 MS. CARROLL: Tim, thanks for putting that  
4 slide up. I want to - I want to tell you all some  
5 stuff, now. And, by the way, I'm Glenn Carroll from  
6 Georgians Against Nuclear Energy, and we have legally  
7 opposed constructing the MOX factory. And so this  
8 gets into a big issue for us. And because you're here  
9 tonight, for instance, I want to embrace this, so that  
10 everybody knows what's going on, and so maybe we can  
11 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,  
15 so it's this first piece. And then over here they're  
16 going 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  
20 the whole mission here. We're going to safeguard  
21 plutonium. 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  
25 until we apply for a license to possess plutonium."

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

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

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

21 The deal is, is you've got your SER  
22 covering the whole thing. You've got a process here  
23 that will respond to this application. This is when  
24 they are going to put plutonium into the process. I  
25 mean, you know, cinder blocks and pipes, they don't

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1 threaten us so much. It's when you put the plutonium  
2 in there that you're threatened, and this gets created  
3 absent this information. But, since the NRC makes the  
4 rules up as they go, my question - my appeal is: Can  
5 you revise the rules in this way? Thanks, Chip.

6 MR. CAMERON: Okay, let me - let me see  
7 if...

8 MR. HARRIS: Can I - can I answer a  
9 different question, Chip?

10 MR. CAMERON: Well, I'm sure you'd like  
11 to, but...

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

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

19 MS. CARROLL: Well, he can read those  
20 three...

21 MR. CAMERON: ...the first...

22 MS. CARROLL: You're a lawyer. You know  
23 what...

24 MR. CAMERON: ...the first question, I  
25 think, is: How, if at all, will material control and

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1 accounting be considered in either the environmental  
2 impact statement or in the safety review on the - the  
3 SER?

4 MR. HARRIS: Well, let me answer that, and  
5 then I'll answer the question that I think...

6 MR. CAMERON: Okay.

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

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

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

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

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

2 MS. CARROLL: That sounds like a judgement  
3 call.

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

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

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

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

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

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

5                   MR. BROWN: Yes. The reason goes to our  
6 regulation, which at this stage, when we're looking at  
7 authorizing construction, we're evaluating those  
8 things which are what we call structure, systems, and  
9 components in the plant that protect against accidents  
10 or an act - you know, like earthquakes and floods,  
11 that sort of thing. That - those things are the focus  
12 of our review at the construction authorization stage,  
13 not material control and accounting.

14                  MR. CAMERON: Okay. And, Glenn will be  
15 back.

16                  MS. CARROLL: Well, just two more things  
17 to wrap this up.

18                  MR. CAMERON: Pardon me?

19                  MS. CARROLL: I'd like to have two quick  
20 things to wrap this up. First of all, we had a  
21 contention about materials control and accounting, so  
22 it's an open question that we have a chance to get  
23 incorporated.

24                  But I'm concerned that, you know, your EIS  
25 period officially closes, and so it sounds like it's

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1 discretionary, subjective, if the NRC feels the need  
2 to include it in the EIS, I mean, if during the public  
3 mechanism, to compel you to do an EIS. But you can  
4 answer that later. I've had my time.

5 MR. CAMERON: Tim, do you want to say  
6 anything about that?

7 MR. HARRIS: Well, I don't think there's  
8 a formal process. But, as always, we're open to  
9 public comment. So I - I don't think the NRC closes  
10 its ears after we publish the final environmental  
11 impact statement.

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

15 Yes, sir?

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

18 I hope this is not a redundant question,  
19 but maybe you just circle this thing. We're in an  
20 environmental impact statement process right now; is  
21 that correct?

22 MR. HARRIS: Correct.

23 MR. CHAPUT: The release of plutonium into  
24 the environment is an item that will be considered in  
25 the EIS process, in your consideration of the EIS; is

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1       that correct?

2                   MR. HARRIS:   Plutonium and other radio  
3       nuclides; yes, sir.

4                   MR. CHAPUT:   Okay.  So to the extent that  
5       plutonium has the potential to be released into the  
6       environment, it will be considered as part of this  
7       EIS?

8                   MR. HARRIS:   Correct.

9                   MR. CHAPUT:   And so that - that's the  
10      appropriate consideration for - under the *National*  
11      *Environmental Policy Act*, which I understand deals  
12      with impacts on the environment - to the environmental  
13      by federal actions?

14                  MR. HARRIS:   Correct.

15                  MR. CHAPUT:   Okay.

16                  MR. HARRIS:   I must have done a good job  
17      explaining that, Ernie.

18                  MR. CHAPUT:   Thank you very much.

19                  MR. CAMERON:   Thanks, Ernie.

20                         And I think we're going to go back over  
21      here, and then over there, and then we'll come back up  
22      front.  All right.

23                  MR. ROGERS:    You already might have  
24      answered it.

25                  MR. CAMERON:   Tell us your name.

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1                   MR. ROGERS: My name's Harry Rogers, and  
2 I'm with the Carolina Peace Resource Center, and also  
3 with the Alliance for Nuclear Accountability, and work  
4 at and operate a reactor at D.C. Summer. And I - I  
5 think Glenn - she answered my question. Is the access  
6 - access to the public to the information to provide  
7 a comment. There isn't a formal process, and a  
8 decision is the NRC's decision, is this important  
9 information to consider or not to consider. And we  
10 don't have - we don't have a mechanism to compel you  
11 to consider the information. And I hope that she's  
12 successful with the contingent.

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

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

20                  MR. HULL: Sometimes it is a bit  
21 confusing. There is - there is - I always like to  
22 describe it as a parallel process. Right now we're  
23 talking about the technical, environmental, and safety  
24 reviews that the NRC is conducting in regard to the  
25 proposed facility.

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1 But there's also a parallel legal process  
2 or legal hearing that's now going on, and Glenn  
3 Carroll is the representative of one of the parties in  
4 that legal proceeding. And she is - she's raising  
5 some issues which are now before the Licensing Board,  
6 which is considering these legal issues. And that  
7 process is far from finished. And it remains to be  
8 seen whether legally the board will determine whether  
9 or not these contentions are valid or not. But that  
10 still remains to be decided.

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

15 MR. HULL: Well, there - there are  
16 cases...

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

19 MR. HULL: There are cases where agencies,  
20 including the NRC, has chosen to supplement an  
21 environmental impact statement. But that decision is  
22 way down the road at this point, and a lot remains to  
23 be determined whether that will be something the NRC  
24 will do or not.

25 MR. CAMERON: Okay, let me see if I can

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1 sort of summarize this. That's - that's fine. So  
2 that everybody understands what was said.

3 The normal NRC process is that there's an  
4 environmental review done, as Chip talked about.  
5 There's a safety review done. This is on the  
6 construction authorization request. Overlaying that  
7 normal two-part process is, in this case, what's  
8 called a hearing. That's an adjudicatory hearing  
9 where people can raise issues before an Atomic Safety  
10 and Licensing Board, as Glenn Carroll and her  
11 organization is doing.

12 Decisions in that adjudicatory process can  
13 affect the normal environmental and safety review that  
14 the NRC is doing, so that they can also - always  
15 influence that. That's playing out on a parallel  
16 course and we'll see what happens with that. Keep in  
17 mind that if the construction authorization request  
18 was granted by the NRC after the hearing and the  
19 safety and environmental review process, then there  
20 could be an application for operation of the facility,  
21 and you would have the same process going on; a safety  
22 evaluation, possibility of the adjudicatory hearing.  
23 But, as Tim pointed out, the NRC final environmental  
24 impact statement would be the impact statement that  
25 would also be used to guide the NRC's decision on the

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1 operation decision.

2 MR. HARRIS: Correct.

3 MR. CAMERON: Correct? Okay.

4 Yes, ma'am?

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

7 As the licensee of the MOX facility, is it  
8 true that you, not DOE, are the agency that will  
9 enforce federal safety and security requirements  
10 during construction and operation? Basically, is it  
11 correct that you insure the facility meets all federal  
12 regulations?

13 MR. CAMERON: And, Tim, I know you're  
14 going to correct the one - the one statement.

15 MR. HARRIS: Yeah, the - the - I think the  
16 statement was...

17 MR. CAMERON: NRC is the licensee.

18 MR. HARRIS: Licensee.

19 MR. CAMERON: Is that what you said?

20 MS. GARCIA: Right, is the licensee of the  
21 MOX facility.

22 MR. HARRIS: The - the licensee, or in  
23 this case the applicant is Duke Cogema Stone &  
24 Webster. We're the - we're the regulatory  
25 organization.

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

6 MR. CAMERON: And, for example,  
7 Occupational Safety and Health regulations would not  
8 be...

9 MR. HARRIS: Right. I mean, I didn't - I  
10 didn't want to say that all federal regulations, but  
11 - but I think the point is that the NRC has  
12 responsibility for the safety of the facility.

13 MR. CAMERON: So does that - does that  
14 answer your question?

15 All right, I think, Lee, you had another  
16 - did you have a question?

17 MR. POE: Yeah, Lee Poe again. I'm used  
18 to seeing, following an EIS, a record of decision  
19 saying that the federal agency has adopted the  
20 following sort of thing. I see nothing like that up  
21 there. The rest of this parallel environmental and  
22 safety is - is typical of what goes on in - in all of  
23 the federal actions that I've seen take place. And  
24 I'm sure that - and I'm really aiding in a second  
25 question. I'm sure that if during the NRC review of

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1 the operating SER, the public raised significant  
2 emphasis, issues, I would suspect that you would  
3 respond to those issues.

4 But, you know, help me with both of those  
5 questions. The first one is the lack of an ROD,  
6 record of decision. And the second one - and the  
7 second part is opportunity of the public to have input  
8 into the final SER.

9 MR. HARRIS: As far as the record of  
10 decisions go, that's - you see that a lot in federal  
11 agencies, issuing records of decisions. For us it's  
12 more of issuing a license, or in this - in the prior  
13 case, issuing the letter that would authorize  
14 construction would be considered the ROD.

15 MR. CAMERON: So that that constitutes our  
16 approval.

17 MR. HARRIS: Yeah. We just call it a  
18 different document.

19 MR. CAMERON: Okay. Thanks, Tim.

20 The question - the last question.

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

23 MR. CAMERON: Public input to the SER on  
24 the operation of the facility.

25 MR. HARRIS: And I'm going to let Dave

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1 answer that, because...

2 MR. CAMERON: And, Dave, you ready? All  
3 right.

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

15 MR. CAMERON: Usually - and I'll just add  
16 this because we were just down here on the draft  
17 safety evaluation before. Usually the NRC does not,  
18 as they do for the environmental impact statement,  
19 they do not request general comments on the draft  
20 safety evaluation report. As we - we did, though,  
21 with this draft safety evaluation report. To be  
22 consistent, the NRC may do the same thing with that.

23 But typically, the public can attend  
24 meetings between the licensee - license applicant and  
25 the NRC staff on those safety issues. They can become

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1 a party in the adjudicatory proceeding. Or if there  
2 are public meetings, they can raise those - those  
3 comments then.

4 Yes, sir?

5 UNIDENTIFIED SPEAKER: How does  
6 (inaudible)?

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

8 COURT REPORTER: I can't hear you.

9 MR. CAMERON: Okay, the question is, is  
10 that, first of all, are there - will there be - are  
11 there relevant memorandum of understandings or  
12 interagency agreements between NRC and DOE on this  
13 issue; and if there are, will they be made public?  
14 Does that capture it?

15 UNIDENTIFIED SPEAKER: Sure.

16 MR. CAMERON: All right. Tim?

17 MR. HARRIS: The only MOU or memorandum of  
18 understanding that I'm aware of is one that relates to  
19 cultural - cultural artifacts. Basically with the  
20 SHPO, state-to-state and historic preservation officer  
21 of South Carolina. That's the only one I'm - I'm  
22 aware of.

23 MR. CAMERON: But that's not with the  
24 Department of Energy?

25 MR. HARRIS: It - it's a - don't quote me,

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1 but I think it's an agreement between NRC, DOE, and  
2 the State of South Carolina.

3 MR. CAMERON: Okay.

4 MR. HULL: Chip?

5 MR. CAMERON: Go ahead, John, for  
6 clarification on that.

7 MR. HULL: All of the MOUs are public  
8 documents. There are no secret MOUs.

9 MR. CAMERON: Thanks, John.

10 Let's go to this gentleman right here.

11 MR. RUDOLPH: Could you explain...

12 MR. CAMERON: Could you just give us your  
13 name.

14 MR. RUDOLPH: Oh, I'm Jerry Rudolph from  
15 Columbia.

16 Could you explain how you make the  
17 decision after you get the environmental impact  
18 statement. I know that whatever you do will increase  
19 the risk some. It's not a zero increase in the risk  
20 to the people here. Can you just determine - could  
21 you tell me how you decide how much risk you're  
22 willing to put the public - that you - that is  
23 acceptable for public risk? First question.

24 And the second one is: Could you tell me  
25 how you have incorporated - as people are already

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1 exposed to it, and I understand that Aiken has the  
2 highest cancer rate in South Carolina. Is the  
3 existing risk that people are exposed to taken into  
4 consideration when you add the additional risk with  
5 this - this facility?

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

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

18 One of your questions was: Are the  
19 environmental impact statements of what's already here  
20 at the SRS site considered? And yes, they are, in the  
21 cumulative impact section. Cumulative impacts looks  
22 at the current state and the increment---in this case,  
23 the proposed MOX facility---what that would do to  
24 different resource areas, like air quality, water  
25 quality, in addition, you know, as - as a plus with

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1       what's already being generated by SRS and other  
2       facilities. So the answer to that is: Yes, we do  
3       consider what's already here and being generated.

4               And I'll let Cheryl talk to the - the risk  
5       piece.

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

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

17              From the perspective of how we license all  
18      activities, regardless of whether it's a doctor  
19      delivering a dose to a patient or whatever it is. We  
20      have standards in our regulations on public and  
21      occupational dose. We use those standards. The  
22      standards are set on the basis of recommendations that  
23      come from international and national authorities on  
24      what is considered acceptable levels.

25              The current values that we use---and we

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

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

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

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

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1 including the applicant for this construction  
2 authorization, has to meet those regulations in order  
3 for construction authorization to be granted.

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

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

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

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

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

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

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

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

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

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1 environmental impact statement from changes to the DOE  
2 program. And those will be evaluated.

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

12 MR. RUDOLPH: But the other question,  
13 about the history of...

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

18 MR. RUDOLPH: But what is...

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

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1 this out.

2 MR. RUDOLPH: The main thing I was  
3 pointing out on the history was here we actually have  
4 something in the groundwater, and it's from the water  
5 of the liquid waste. And I just - I understand MOX  
6 also has liquid waste.

7 MR. HARRIS: Correct.

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

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

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

24 MR. HARRIS: And I think the answer is  
25 that that's outside the scope of what we're doing here

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1 relative to the proposed facility.

2 MR. CAMERON: All right, thank you.

3 MR. RUDOLPH: So the answer is: No,  
4 you're not considering that?

5 MR. CAMERON: No. That's - that's  
6 correct.

7 Yes, sir?

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

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

22 Do you guys - do you follow what's going  
23 on over there? Do you have - I know you don't have  
24 jurisdiction. It's not in the scope of the little  
25 bureaucratic thing you're doing here. But I keep

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1 reading about this in the papers, and I'm just  
2 wondering are you guys following that? Are you - are  
3 you looking at the European experience? This is an  
4 international thing, if you read about it. It was  
5 conceived as an international program. Are you  
6 involved - the NRC involved with what's going to  
7 happen in Belgium? Could you tell us about that?

8 MR. HARRIS: Yes, sir. I think you're  
9 asking - the things that they're proposing to do in  
10 Belgium are construct what they call lead test  
11 assemblies.

12 MR. TURNIPSEED: What is that?

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

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

25 MS. FRAZIER: Tina Frazier, Citizens for

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1 Nuclear Technology Awareness.

2 MR. CAMERON: Can everybody...

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

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

14 MR. CAMERON: If you'd just clarify for  
15 people who DHEC is. DHEC is...

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

18 MR. HARRIS: Environmental Control?

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

21 MR. CAMERON: Okay, the state - the State  
22 of South Carolina?

23 MS. FRAZIER: State of South Carolina;  
24 yes.

25 MR. CAMERON: And when you talk about

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1 "this county," you're talking about Aiken County?

2 MS. FRAZIER: Aiken County. Yes, Aiken  
3 County.

4 MR. CAMERON: All right. All right, thank  
5 you. Let's...

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

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

13 Yes?

14 MS. PAUL: Bobbie Paul of Atlanta,  
15 Georgia.

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

25 MR. HARRIS: I'll try. I think there's

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1 actually a poster in the back that shows the five  
2 commissioners. And it is...

3 MS. PAUL: Of the NRC?

4 MR. HARRIS: Of the NRC.

5 MR. CAMERON: Yes, five NRC commissioners.

6 MR. HARRIS: And then they're appointed by  
7 the President, confirmed by the Senate. So ultimately  
8 the decision is made by the Commission, five  
9 commissioners. And, as we've talked about tonight,  
10 there's the - the environmental portion of the  
11 decision-making; the safety portion; and also the  
12 adjudicatory hearing portion that feed into that  
13 decision by the Commission.

14 As far as numbers of people at DOE and  
15 others, I'm - I'm not sure how to answer that. You  
16 know, we interface with several people, ten, 20 people  
17 at DCS. I personally interface with two people at  
18 DOE, but Dave probably interfaces with ten or 20. I  
19 don't know how to...

20 MR. CAMERON: Maybe - maybe it's not the  
21 numbers, but the relationship between DCS and - and  
22 DOE, and how that relates to the NRC. I mean, that  
23 should be cleared up. Is that - is that what you're  
24 trying to envision?

25 MS. PAUL: Uh-huh. And at the end there's

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1 a final - there's a final vote taken by this panel of  
2 five, and that's the ultimate decision-maker; is that  
3 right?

4 MR. HARRIS: The Commission.

5 MS. PAUL: The Commission.

6 MR. HARRIS: Yeah. I guess, if there's a  
7 hierarchy, we're - NRC's a regulatory agency; Duke  
8 Cogema Stone & Webster is the applicant to the Nuclear  
9 Regulatory Commission. They are a contractor of the  
10 Department of Energy, so that's how the Department of  
11 Energy - but we - what we do, I think it's a straight  
12 line. Typically we interface through Duke Cogema  
13 Stone & Webster. They are the applicant.

14 MR. CAMERON: And the most important thing  
15 is that it's not - we're an independent regulatory  
16 agency; okay? Even though DCS is a contractor to the  
17 Department of Energy, another agency of the federal  
18 government, we're an independent regulatory body.  
19 There is no connection because of the federal  
20 government. We're both agencies of the federal  
21 government.

22 MR. HARRIS: Yeah. The interactions are  
23 more information, you know.

24 MS. PAUL: But the money for all of it  
25 comes from us? The money to support these efforts

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1 comes from the federal government; correct?

2 MR. HARRIS: Correct.

3 MR. CAMERON: Okay, how many - let's see,  
4 how many people have a question that have not talked  
5 already? Okay. Let's do - we're going to do three  
6 people who haven't had a chance to speak, and if we  
7 have time, we'll circle back for - for other  
8 questions. But let's get Dave on. You may have less  
9 questions on his. And let's go over here to this  
10 gentleman. So we're going to take three more  
11 questions, we're going to put Dave Brown on and open  
12 it up for questions.

13 Yes, sir? Your name?

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

23 MR. HARRIS: Thank you.

24 MR. CAMERON: Thank you for that.

25 MR. HARRIS: We'll take that as feedback

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1 for - for next time.

2 MR. CAMERON: Okay, we're going to go over  
3 here.

4 UNIDENTIFIED SPEAKER: What if Duke Cogema  
5 Stone & Webster and the Department of Energy don't  
6 reach agreement on the Option A of the MOX fuel  
7 contract for construction? What happens if there's no  
8 contract? There's no contract right now beyond design  
9 and licensing. Do you - will you authorize  
10 construction if, by some chance or some reason, DCS  
11 and DOE do not reach agreement?

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

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

17 UNIDENTIFIED SPEAKER: Yes. Because Duke  
18 Power has an exit clause in their contract and they  
19 can withdraw any time - all their reactors at any time  
20 from the program, which would leave no reactors, at  
21 least temporarily. So that's one reason why it might  
22 not - the contract may not be renewed, and no - might  
23 be they decide to use this plant for metal preparation  
24 as part of their production complex.

25 MR. CAMERON: Let me ask John - John Hull.

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1 I think this is a - this is definitely a legal  
2 question that goes to the viability of whoever holds,  
3 for example, the construction authorization. Do you  
4 get the drift of this long question?

5 MR. HULL: Well, yeah, there are a number  
6 of contingencies that have to occur before any MOX  
7 fabrication facility would either be built or  
8 operated. The Department of Energy, as evidenced by  
9 their recent change in plans, can have an impact on  
10 what we're doing. If Duke or - I guess Duke is the  
11 only part - NRC licensee right now that's in the  
12 program, in theory. But if they pulled out, then  
13 obviously that would have a big impact on things.  
14 But, you know, we're speculating at this point. As  
15 far as I know, Duke has no plans to pull out of their  
16 agreement to eventually burn MOX fuel. And again,  
17 that would only happen if the NRC licenses the - the  
18 operation of the facility. So, you know, any number  
19 of things could happen in the future, but right now we  
20 have to plan as if things are going to go according to  
21 the current plan.

22 MR. CAMERON: Thank you.

23 And let's go to our final question with  
24 this gentleman right here. Final question for this  
25 particular part of the meeting.

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1 Yes, sir?

2 MR. BLANCETT: I'm Allen Blancett,  
3 recently retired, a resident of Aiken. I hear in  
4 these meetings lots of concerns about dose to the  
5 public and so forth. I've got a couple of  
6 grandchildren in the area, and it's important to me.

7 The revised environmental report says that  
8 it goes to the - the maximum dose to the offsite  
9 individual would be no more than two microrems.  
10 That's 0.000002 rems. And that's 1/50,000 of the  
11 federal limit. Now, if that number is valid, I'm not  
12 concerned. That's no impact to the public.

13 My question is: Will NRC verify that  
14 number that goes into the final documents?

15 MR. HARRIS: Yes. We will do our separate  
16 analysis.

17 MR. CAMERON: Thank you, sir.

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

22 Dave Brown, NRC staff, is going to talk  
23 about the changes to the DOE program, and potential  
24 implications for the NRC environmental review. Dave,  
25 go ahead. And then we'll go - we'll go back out to

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1       you for questions.

2                   MR. BROWN:   Thanks, Chip.   Can everyone  
3       hear me okay?   Good.

4                   Thank you all.   I'd like to summarize the  
5       changes that DOE and DCS have made to the surplus  
6       plutonium disposition program and to the MOX facility.  
7       I'll also discuss the environmental impacts associated  
8       with these changes that DCS presented in their  
9       environmental report in July, their revised  
10      environmental report.

11                  The first change I'll discuss is the  
12      cancellation of the plutonium immobilization plant.  
13      The PIP, or the plutonium immobilization plant, had  
14      been part of a hybrid disposition approach to  
15      immobilize some of the plutonium, and then turn the  
16      rest into MOX fuel.   DOE canceled the plutonium  
17      immobilization plant due to budgetary constraints.  
18      And I'll describe the impacts in just a moment.

19                  On the previous slide, the - the second  
20      item is the proposal to build a waste solidification  
21      building.   And this would be a new building that would  
22      process liquid waste from the MOX facility and the MOX  
23      project, in general.   And I'll also describe this  
24      building and its impacts in a few minutes.

25                  The direct result of canceling the

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1 plutonium immobilization plant is that there were 8.4  
2 metric tons of plutonium that would have gone to that  
3 plant, that now need to be dispositioned differently.  
4 And what I want to make clear here is the current  
5 proposal is that, of that 8.4, 6.4 metric tons would  
6 come to the MOX facility. That leaves two metric tons  
7 that would have to have another disposition pathway.  
8 The NRC at this point doesn't know what that is.  
9 That's a decision for the DOE.

10 To accommodate the 6.4 metric tons of what  
11 we call alternate feedstock now, material that would  
12 have gone to immobilization, but now coming - proposed  
13 to go to the MOX facility, that DCS would have to make  
14 changes to the plant to accommodate this material.  
15 And I've also noted that previously the amount of  
16 material that DCS had proposed to process was 33  
17 metric tons, and that total is now 34 metric tons.  
18 Next slide.

19 DCS has also informed the NRC that DOE  
20 plans to build a waste solidification building. This  
21 DOE intent here is that it would address public  
22 concerns about using the high level waste storage  
23 tanks on the Savannah River Site to manage liquid  
24 waste from the MOX facility and from the pit  
25 disassembly and conversion facility. The new waste

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1 solidification building would be sited on the pit  
2 disassembly and conversion facility site. We've  
3 included in the handout a map of that general area  
4 that shows the location of the - the MOX facility, the  
5 pit disassembly and conversion facility, and the new  
6 proposed waste solidification building.

7 The waste solidification building would  
8 have the capacity to store liquid waste from both MOX  
9 and the pit disassembly and conversion facility. High  
10 alpha activity waste, which was waste associated -  
11 that's generated in the MOX facility, would go to the  
12 waste solidification plant, and laboratory  
13 concentrated liquids from the pit disassembly and  
14 conversion facility, those would come and be handled  
15 as transuranic waste, solidified, and the proposal is  
16 to ship that waste to the waste isolation pilot plant  
17 in New Mexico. The MOX facility also would produce a  
18 stripped uranium waste, which is another waste  
19 associated with preparing the plutonium for mixed  
20 oxide fuel fabrication.

21 The pit disassembly and conversion  
22 facility would also generate laboratory liquids.  
23 Those two waste streams would be handled as low level  
24 waste. The low level waste would - it's proposed to  
25 be disposed of at the Savannah River Site B Area or

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1 another permanent, low level waste site.

2 The - the changes to the environmental  
3 impacts associated with those facility changes include  
4 an increase of about 10% in the floor area of the  
5 aqueous polishing process in order to accommodate the  
6 material, the alternate feedstock that would have  
7 previously gone to the plutonium immobilization plant.  
8 The alternate feedstock would - some of it would  
9 contain chlorides, and so a potential new air emission  
10 from the MOX facility would be chlorine. And there  
11 would also be some changes in the waste volumes and  
12 the characteristics of waste produced by the MOX  
13 facility.

14 The - for example, in the waste category,  
15 the volume of liquid low level waste generated by the  
16 MOX facility would increase about 60%. The - this  
17 waste would also include the impurities associated  
18 with the alternate feed; again, impurities that were  
19 part of the plutonium that would have gone to the  
20 immobilization plant.

21 The - the liquid high alpha activity  
22 waste, which would have - again, which would have gone  
23 to - previously gone to the Savannah River Site high  
24 level waste tanks, would now go to the waste  
25 solidification building. The volume of this waste

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1 would increase by about 10%, and would contain higher  
2 levels of impurities like silver, for example.

3 In their revised environmental report that  
4 DCS submitted to the NRC in July, they also described  
5 the impact associated with the waste solidification  
6 building. The waste that this building would generate  
7 would have an impact on the waste management system at  
8 the Savannah River Site, as it would produce  
9 transuranic waste and low level waste that would have  
10 to be handled.

11 There would be construction-related  
12 impacts for building a new facility, and operation-  
13 related impacts, like air and liquid effluents, and  
14 radiation exposures to workers. These are the kinds  
15 of impacts DCS presented in their environmental  
16 report. The environmental report also considers  
17 accidents that could occur at the waste solidification  
18 building, and their environmental impacts.

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

22 MR. CAMERON: Okay, the purpose of this  
23 presentation was to try and give you an idea of the  
24 potential new impacts that the NRC would have to  
25 evaluate based on these changes to the program. And

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1 we'll be glad to try to answer questions on those  
2 potential environmental impacts.

3 Yes, sir?

4 MR. CHAPUT: Yeah, Ernie Chaput, Economic  
5 Development Partnership.

6 Your - I think it's the previous slide  
7 said 60% more volume of low level radioactive waste,  
8 10% more volume of high alpha activity waste. Are -  
9 what are those percentages in relation to that which  
10 the MOX facility was proposed to generate before, the  
11 combined MOX PDCF, that of the total SRS site? I  
12 mean, is it - is it 10% of a small number or 10% of a  
13 large number? Or, specifically, what are the gallons  
14 or cubic feet involved?

15 MR. BROWN: I don't recall exactly the  
16 volumes or cubic feet. I think we're in the  
17 neighborhood of - neighborhood of 100,000 gallons per  
18 year, that, I'll say, order of magnitude, that type of  
19 number. And when I say an increase, yes, it's  
20 referring to what was proposed in their first  
21 environmental report as compared to their revised  
22 report in July.

23 And with low level waste, we're  
24 specifically looking at waste produced by the MOX  
25 facility. Not, for example, by the pit disassembly

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1 and conversion facility.

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

4 MR. CAMERON: Okay, Ernie, did that answer  
5 your...

6 MR. CHAPUT: Close enough to get started.

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

10 MR. WILLOUGHBY: William Willoughby,  
11 Columbia, South Carolina. Two questions, really. One  
12 is: Who constructs and operates the waste  
13 solidification building? And at what point is the  
14 waste that comes out of that building passed on to  
15 DOE's Savannah River Site?

16 MR. CAMERON: Dave?

17 MR. BROWN: The - the waste solidification  
18 building is a Department of Energy project. As I  
19 understand, they've gone through conceptual design of  
20 that plant. A contractor to - to build and operate  
21 the plant has not been identified at this point.

22 The waste - again, this is another detail  
23 that hasn't been finalized. But more likely than not,  
24 the custody of the waste would be transferred from the  
25 applicant, Duke Cogema Stone & Webster to DOE between

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1 the MOX facility and the waste solidification  
2 building.

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

9 MR. BROWN: That's correct.

10 MR. CAMERON: Okay.

11 MR. BROWN: Yeah.

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

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

24 And imagine my surprise when the figures  
25 in the current ER are less than what they were a year

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1       ago. But in no way would I consider them trivial,  
2       because we're talking 70,000 gallons a year, and we've  
3       got 35 million gallons that have been plaguing us as  
4       long as I've been involved, since 1988. There's been  
5       no change. So that's not a trivial amount over 20  
6       years. But the chairman of the board thinks that's no  
7       big deal. That's all.

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

9               MS. CARROLL: Oh, oh, oh, oh, oh. Wait a  
10       minute. I didn't finish.

11              (Laughter.)

12             MS. CARROLL: I didn't finish. There's a  
13       point.

14             MR. CAMERON: There is a point?

15             MS. CARROLL: And without the point, it's  
16       pointless.

17             MR. CAMERON: Okay.

18             MS. CARROLL: The point is will you check  
19       their math on these waste figures really carefully in  
20       your EIS?

21             MR. BROWN: We will do so.

22             MR. CAMERON: Thank you.

23             Don, you could a...

24             MR. MONIAK: I'm Don Moniak. I live in  
25       Aiken County.

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1 AUDIENCE: We can't hear you.

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

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

21 MR. CAMERON: And before you answer that,  
22 Dave, I just want to make sure that we're careful with  
23 the use of the term "unaccounted for." I think that  
24 you understand what Don is - is saying about that;  
25 that it's not unaccounted in the sense that it's -

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1 it's lost or missing.

2 MR. MONIAK: No, only 2.8 tons is  
3 unaccounted for.

4 (Laughter.)

5 MR. CAMERON: Okay.

6 MR. MONIAK: It's quite less.

7 MR. CAMERON: All right. Dave, any  
8 comment on that?

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

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

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

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

22 MR. CAMERON: Okay. All right.

23 Yes, sir? And then we'll go to this  
24 gentleman.

25 UNIDENTIFIED SPEAKER: I had a couple of

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

8 MR. BROWN: I'm not sure that I understand  
9 your question. There are...

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

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

16 UNIDENTIFIED SPEAKER: Yes.

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

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

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

24 UNIDENTIFIED SPEAKER: So then there is a  
25 possibility that if DHEC refused that, then they would

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1 actually be providing for better safety for the public  
2 than - than your agency.

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

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

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

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

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

24 MR. BROWN: I think there are short  
25 biographies, yes, available.

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1 MR. CAMERON: Www.nrc.gov. And if anybody  
2 wants those biographies, please give your name to  
3 Betty Garrett back at the registration table, and  
4 we'll send you a hard copy.

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

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

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

25 MR. CAMERON: Okay, thank you.

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1                   Let's go to this gentleman right here.

2           Yes, sir?

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

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

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

18                  MR. TURNIPSEED: You know Belgium; right?  
19          I mean, you...

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

21                  MR. TURNIPSEED:       ...you know that  
22          you've...

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

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

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1                   MR. BROWN: That's something that's being  
2                   looked at more closely in our Office of Nuclear  
3                   Reactor Regulation. Those folks would receive any  
4                   license amendments to burn MOX fuel at the Catawba and  
5                   McGuire Nuclear Stations. So there's really another  
6                   part of the NRC that's doing that work, different than  
7                   the office that Tim and I work for.

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

11                  MR. BROWN: Yes, the process would be very  
12                  much similar to what we would do here in the United  
13                  States.

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

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

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

4 MR. BROWN: That's the plan.

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

6 MR. BROWN: That's the plan.

7 MR. TURNIPSEED: Do you - do you have any  
8 concern about this terrorism, this - every time I turn  
9 on the TV, and I'm - I'm frightened, and people are.  
10 Do you have any concern about it?

11 MR. BROWN: Certainly. Certainly. I  
12 think at this point what I'm - what remains to be seen  
13 is whether - if your concern is the shipment of this  
14 material overseas...

15 MR. TURNIPSEED: Absolutely.

16 MR. BROWN: ...whether that would even  
17 occur. Because the - the question of whether lead  
18 test assemblies would be built in Belgium is still not  
19 decided. So...

20 MR. TURNIPSEED: All I know is what I read  
21 in the papers.

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

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

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

2 MR. TURNIPSEED: But tell us if you know  
3 about it. Please tell us.

4 MR. CAMERON: ...let's try and avoid the  
5 bureaucratic lingo. In order to give you as much  
6 information on this as possible, I think we have two  
7 perhaps follow-on pieces of information for you. And  
8 if that doesn't do it, could we have the NRC staff and  
9 anybody else who has information for Mr. Turnipseed...

10 MR. TURNIPSEED: Turnipseed.

11 MR. CAMERON: ...and his concern, we'll do  
12 that.

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

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

23 MR. BROWN: There - back, oh, more than 30  
24 years ago now the U.S. Atomic Energy Commission at  
25 that time, which was the commission that existed

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1 before the DOE and the NRC, did license mixed oxide  
2 fuel plants. Several of them. So, no, it's - the  
3 concept of licensing a mixed oxide fuel plant in the  
4 U.S. is not new in that regard. The use of weapons  
5 grade plutonium is new. In the past, the plutonium  
6 that we had envisioned using in these mixed oxide fuel  
7 plants was recycled from commercial nuclear fuel, not  
8 from nuclear weapons.

9 Does that answer your question? Yeah.

10 MR. CAMERON: Okay, thanks. Thanks, Dave.  
11 Let's see if Glenn can just briefly give some  
12 information that Mr. Turnipseed might find useful.  
13 Glenn Carroll.

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

24 MR. CAMERON: Thanks, Glenn.

25 MS. CARROLL: Is that right?

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

4 MR. WILLOUGHBY: William Willoughby. You  
5 say from this slide that the DCS environmental report  
6 will have to evaluate disposal impacts, TRU waste and  
7 low level waste from the waste solidification  
8 facility. Does this mean that they have to get that  
9 information from the DOE and be able to supply it to  
10 you?

11 MR. BROWN: Yes, in - in many cases,  
12 because there is an interface between Duke Cogema  
13 Stone & Webster's plant and the Savannah River Site,  
14 DCS gets their information about the sites'  
15 capabilities, for example, for waste management, from  
16 the Department of Energy. We typically ask questions,  
17 for example, of DCS. If they don't know the answer or  
18 they know that DOE does, they'll ask DOE so that we  
19 can get an answer to our question.

20 Does that address your question?

21 MR. CAMERON: Okay, we have two questions  
22 right here.

23 Yes, sir?

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

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1 lady...

2 MR. CAMERON: Cheryl Trottier?

3 MR. HOOKER: ...that said something - said  
4 something about in the long run. And I was trying to  
5 figure out if that was tritium in the surface water.  
6 Is it 25 - I believe it was 25,000 pounds of intoxicins  
7 coming out of the stack. And I wanted to know if that  
8 was part of a long run that the NRC would...

9 MR. CAMERON: Cheryl?

10 MS. TROTTIER: Again, as part of their  
11 application, they would have to indicate all of the  
12 environmental potential impacts. And then, in our  
13 evaluation, we would look at all the existing  
14 contamination and - in order to make a determination  
15 that they would be in compliance with the limits,  
16 which are all pathways. In other words, air, water,  
17 standing in the midst of radiation, whatever pathway  
18 the human body is going to come into contact with  
19 radiation is evaluated in meeting that - those  
20 standards. So it would have to be all pathways.

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

22 Harry?

23 MR. ROGERS: Harry Rogers, Carolina Peace  
24 Resource Center. Just a quick question for Tim. I  
25 talked with you, you said - could - the NRC has a

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1 unique funding relationship, different than the other  
2 regulatory agencies. And I wonder if you could  
3 explain that for us.

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

7 NRC receives its funds through licensing  
8 fees and fees to applicants, such as DCS. We also  
9 receive appropriations from Congress, and I think that  
10 was - Harry wanted to make that clear, that we are  
11 funded both by appropriations and by - by license  
12 fees.

13 MR. CAMERON: Maybe you want to - maybe  
14 you want to clarify that. We - we do get license fees  
15 from licenses. We don't get - there are license fees  
16 charged...

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

18 MR. CAMERON: ...the licensees. The NRC  
19 doesn't get those directly. The Treasury gets those,  
20 and we still have to go through the regular  
21 appropriations process; correct?

22 MR. HARRIS: Right.

23 MR. CAMERON: Okay. We're going to - why  
24 don't you just stay up there so that you can set up  
25 these two questions. And I want to ask you to try to

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1 maybe explain them as in plain English as - as  
2 possible. Let's see if there's any - any other  
3 questions out here.

4 Let's go to - let's go to this lady right  
5 here.

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

9 MR. HARRIS: Yeah, appointed by the  
10 President and approved by the Senate.

11 MS. KELLY: And after...

12 MR. HARRIS: Confirmed by the Senate.

13 MS. KELLY: Oh, the other thing is, that  
14 I - I would assume that no shipments have yet gone to  
15 Belgium, simply because Belgium hasn't agreed to  
16 process them; is that correct?

17 MR. CAMERON: Can someone give us a  
18 clear...

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

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

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

24 MR. RUDOLPH: My name is Jerry Rudolph  
25 from Columbia.

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1           The stated limits of the MOX program is to  
2     render plutonium unavailable for weapons. And I  
3     understand that part of the MOX production includes  
4     reprocessing or cleaning of plutonium. What - what is  
5     being done to assure this reprocessing will not result  
6     in plutonium that's more usable for nuclear weapons  
7     than the waste that they're - they're trying to  
8     remove? And is there anything that would keep the -  
9     keep the Department of Energy from using the  
10    reprocessing facilities, designed for MOX, from being  
11    used in nuclear weapons?

12           And - and I have one other question. Oh,  
13    the other question is: One of the objectives of NEPA  
14    is to provide relevant information about the project  
15    that's to be available to the public, to enable them  
16    to be a part. And I just want to know what documents  
17    outline the respective roles of NRC and Department of  
18    Energy, and how do the responsibilities relate to each  
19    other? I just want to - where would I find that  
20    documentation?

21           MR. CAMERON: Okay. Tim or Dave on the -  
22    the first two - first two questions.

23           MR. HARRIS: I'm sorry, Chip, I was  
24    writing and - and listening, and could - could you  
25    summarize them real quick, Jerry?

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

2 MR. HARRIS: And I'm sorry.

3 MR. CAMERON: Let's - let's go to the -  
4 let's go to the last question first, which is  
5 documentation on the NRC's environmental review  
6 process and relationship to the Department of Energy  
7 and - and DCS. Now, I think you're trying to explain  
8 a few minutes ago that - that the license applicant,  
9 okay, DCS in this case, first of all has to provide  
10 the environmental data to the NRC. Those regulations  
11 are in Part 51 of our regulations.

12 MR. HARRIS: Part 51.

13 MR. CAMERON: And is there something that  
14 we can - that we can get to this gentleman that  
15 perhaps lays that out?

16 MR. HARRIS: I think maybe if Betty can  
17 save a copy of the scoping summary report, that might  
18 shed some light on the different roles of the  
19 different bodies. And certainly, Jerry, if you - if  
20 you want to send me an Email or call me, I'll try to  
21 do better. You asked - you asked some pretty in-depth  
22 questions that - that don't have a two minute response  
23 to respond to.

24 MR. CAMERON: Okay, the other questions  
25 had to do with the reprocessing or cleaning of

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1 plutonium.

2 MR. HARRIS: Yeah. Maybe it's a  
3 semantical point on my part, but I don't think the MOX  
4 facility is reprocessing. I - at least from my point  
5 of view, reprocessing is taking spent nuclear fuel and  
6 reprocessing it to - to gather fissile material. I  
7 think what the MOX facility is doing is taking weapons  
8 grade plutonium provided by the Department of Energy,  
9 and purifying it, cleaning it, and producing fuel.

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

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

14 MR. HARRIS: It is weapons grade  
15 plutonium.

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

18 MR. HARRIS: Yeah. Because - because  
19 there's impurities in it, you can't put it directly  
20 into a fuel element. It has to be processed, it has  
21 to be homogenized. There's a - there's a...

22 MR. RUDOLPH: Well, I understand once you  
23 build new weapons, you need to do the same thing with  
24 the existing...

25 MR. CAMERON: Can I - I'm going to ask

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1 several people from the audience who might be able to  
2 clarify this for Mr. Rudolph, to - to deal with this  
3 - this offline, so we can get the answer to your  
4 question.

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

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

20 MR. HARRIS: Thanks, Chip. And again, if  
21 you have questions of Dave and I, we've provided our  
22 phone numbers and Email addresses. And please feel  
23 free to contact us.

24 One of the objectives of the - of NEPA is  
25 to provide relevant information about the project to

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1 the public, and enable them to be a part of it and  
2 provide input. Specifically, we're asking for  
3 questions tonight that relate to how the changes made  
4 by DOE and DCS could affect or how they should be  
5 interpreted in an environmental review or an  
6 environmental impact statement.

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

12 MR. CAMERON: Let me just check in to see  
13 if people understand those two questions. Lee, can  
14 you describe the uncertainty that you have about these  
15 two questions?

16 MR. POE: As I read the first question,  
17 and I - and from what I know about the NEPA  
18 regulations, the NEPA says there will be a - an  
19 analysis of a no-action alternative.

20 MR. HARRIS: Correct.

21 MR. POE: Now, I don't understand what  
22 you're asking us to provide for you in that first  
23 paragraph, and I think that is relative to the no-  
24 action alternative.

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

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

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

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

21           The question here tonight is: DOE has  
22 canceled those plans to build the facility. And the  
23 specific question is: Should we still consider that  
24 in our environmental impact statement? And if so, how  
25 - has any of the scope associated with that

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1 alternative changed as a result of the program  
2 changes?

3 MR. CAMERON: Okay. And I think that -  
4 thank you.

5 MR. HARRIS: Is that in more plain  
6 English, Chip?

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

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

15 MR. ROGERS: I don't mind.

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

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

25 I want to - one of the comments I want to

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

6 And too often economic development people  
7 have not taken consideration into the risk to the  
8 workers, in the interest of short-term profits, and at  
9 the expense of public interest. And that's - and  
10 that's how I feel about the question of MOX, in  
11 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  
17 about is the Department of Energy, in 1999, admitted  
18 to 22 different contaminants and diseases at 14 DOE  
19 sites, SRS included. And for somebody to imply that  
20 there are no health consequences to what they're doing  
21 at SRS doesn't serve us, doesn't serve debate, and  
22 doesn't serve an honest evaluation of what kind of  
23 projects should be done and what kind of projects  
24 shouldn't be done.

25 The other, as someone that works in a

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

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

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

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1 Energy, which is being investigated on both states for  
2 questionable business practices; Cogema, which is -  
3 which I think should be part of the - you know, part  
4 of the investigation process as to what - what is the  
5 track record of Cogema in - in France.

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

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

12 Okay, again, Mr. Hooker. Is Mr. Hooker  
13 here? Oh, there's Mr. Hooker. All right.

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

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

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

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

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

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

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1 sites that are active.

2 And I've also had some tests run of  
3 chemicals like antimony. They had a reference point  
4 of .00 - .030. What I have in me is .212. Arsenic,  
5 they got a .100. I've got .109. Bismuth, I'm over  
6 the limit on that. Lead, I'm nine times over the  
7 limit on that one. Mercury, I'm over the limit on  
8 that one. Nickel, uranium. On some of these  
9 chemicals, the antimony is worse than arsenic. And  
10 I'm sitting here reading this. This is from ATSDR.  
11 It says the EP allowance, .006 parts of antimony per  
12 million parts of drinking water. EPA requires a  
13 discharge of spills in the environment of 5,000 pounds  
14 or more of antimony be reported.

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

24 Now, I've got right here where I was  
25 tested, and my family's sick. Just watch them. Far

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1 as trust, I don't - I don't - I don't trust them. And  
2 I personally feel I'm dealing with the devil. And I  
3 - and you make sure you get it on record, because I  
4 ain't - I ain't playing with them. And it's just  
5 sickening.

6 And - and now I've found out that you all  
7 - you all get paid by the government, too. And I know  
8 that NIOSH gets paid by the government, and they told  
9 me they'd give me a independent (sic) investigation,  
10 and that - that wasn't right, either. They left me  
11 hanging with all these men.

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

21 MR. CAMERON: Thank you.

22 MR. HOOKER: ...all I can say is watch  
23 them.

24 MR. CAMERON: Thank you, sir.

25 (Applause.)

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

3 MS. KELLY: I'm Mary Kelly with the League  
4 of Women Voters of South Carolina. The League has a  
5 rather unique niche among non-profit organizations  
6 because of our dedication to both the governmental  
7 process that is at the heart of our American  
8 democracy, and we also work to insure that all  
9 citizens get to enjoy their rights of participate -  
10 participating in that process.

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

24 We would like to see a real clarification  
25 of the role of the EPA, the NRC, DOE, and DOD in all

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1 aspects of the proposed programs. Where does the  
2 justification of each begin and end; how do they  
3 interact; and so forth?

4 It is certainly being glossed over that  
5 there are areas where you cannot proceed if you do not  
6 get permits from the South Carolina Department of  
7 Health and Environmental Control. We wonder how,  
8 when, and if the manufacturing process for MOX gets  
9 underway, the role of the Nuclear Regulatory  
10 Commission and the Departments of Energy and Defense  
11 will be defined and respected.

12 We find it a matter of great concern that  
13 the commercial and civilian aspects of nuclear  
14 material manufacturing and use are being mingled with  
15 the military. This has been a time-honored separation  
16 that has served this nation well, even though in some  
17 cases it had an aspect of unreality. It was this  
18 separation that permitted public acceptance of nuclear  
19 power for the generation of electricity, and the  
20 commercialization of the taxpayer paid weapons  
21 research of World War II.

22 People in an earlier era had a well-  
23 founded and health respect for the dangers of nuclear  
24 operations. And, despite the fact that there are many  
25 people in this area who think everything is perfectly

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1 safe, I assure you, as a chemist, and with the  
2 knowledge of the chemical industry, that both the  
3 heavy chemical operations and the radioactive  
4 materials handling is not perfectly safe. We have to  
5 believe that the people who are doing these things are  
6 doing them as safely as possible, but we have evidence  
7 to show that that is not always true.

8 Other matters that trouble us are the  
9 accelerated cleanup plan. This is supposed to save  
10 money; but will it? And it is justifiable to save  
11 money by doing that? The history of SRS is full of  
12 projects that had to be aborted. Cleanup at SRS still  
13 has a long way to go. We don't want to see this  
14 neglected or shortchanged. This state in some ways  
15 has been a sacrificial state for the nuclear -  
16 military nuclear and the commercial nuclear  
17 industries. We - I think we really do deserve better.  
18 The new plans for handling the high level liquid waste  
19 have been drastically changed. We are now - they are  
20 now planning to mix the bulk of the liquid waste with  
21 cement, and then leave it at SRS. That really isn't  
22 going to fly in South Carolina. It has already  
23 elicited a very negative response from major  
24 environmental groups, and South Carolina and Georgia  
25 officials. Cement isn't forever. It is leachable,

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1 and becomes easily broken up on aging in a relatively  
2 short time. We have enough bridges and highways  
3 around to show that it just is not a very good option.

4 The last speaker was talking about the  
5 health impacts. We have had a study going on through  
6 the Center for Disease Control that came to a halt  
7 because the money wasn't appropriated to carry it  
8 forth. And I'm referring to the study that was  
9 initiated by Dr. John Till. Dr. Till went back into  
10 the beginnings of the Savannah River Site. He  
11 collected all kinds of material.

12 And fortunately, at that time, more  
13 information was declassified, so that he really was  
14 able to get together a database. The database does  
15 exist. But the final analysis of that effort has  
16 never been done, and it should be done. That's  
17 something that the people of South Carolina should  
18 demand. We've had a number of studies that were  
19 short-term. They did not have access to that kind of  
20 information. So we really have never had a truly  
21 valid study on the health effects of the Savannah  
22 River Site dating back to its first early days. We  
23 need it.

24 But the Nuclear Regulatory Commission is  
25 the independent oversight agency. And the public is

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1 really extremely dependent on it. We urge you to do  
2 a thorough, conscientious, and truly independent job  
3 using the best science available. And I thank you for  
4 the opportunity to come here and say those things.  
5 Thank you.

6 MR. CAMERON: Thank you, Mary.

7 Let's go to - next to - is it Allen  
8 Blancett? Allen?

9 MR. BLANCETT: My question was answered.

10 MR. CAMERON: All right. Thank you,  
11 Allen.

12 Bobbie Paul?

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

15 My name is Bobbie Paul, and I'm the  
16 President of Atlanta WAND. WAND stands for Women's  
17 Action for New Directions. Historically it was known  
18 as Women's Action for Nuclear Disarmament.

19 I represent about 550 women and men in the  
20 Atlanta area, and about 40 partner organizations which  
21 joined with WAND. Our mission is to empower women and  
22 men to act politically, reduce militarism, and  
23 redirect excessive military spending---"excessive"  
24 being the operative word---towards unmet environmental  
25 and human needs.

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

13           I'm here in response. I feel like I  
14 should speak to the question which is immobilization.  
15 I don't really have a prepared speech. It is WAND's  
16 position that, with the current technology,  
17 immobilization is the way to go, and the safest way to  
18 go. We feel that it's cheaper, that it's absolutely  
19 less - less dangerous, it's not as transportation  
20 intensive, and that in some ways our studies show that  
21 it will provide more jobs for people.

22           But, to be brief and let other people  
23 speak, I wanted to quote a couple of things that we  
24 feel about - about MOX, and why we think MOX is really  
25 quite a bad idea. We feel that the MOX infrastructure

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1 supplies all the pieces needed for making plutonium a  
2 desire - a desirable commodity. While it claims to  
3 dispose of it, it legitimizes the production of  
4 plutonium by foreign countries, and creates a market  
5 for something that could be used in weapons of mass  
6 destruction, which seem to be in the news a lot these  
7 days.

8 Plutonium is dangerous and should be kept  
9 out of our economy and out of our commercial reactors.  
10 And I would say that our studies and our experts,  
11 whether it's Argin (phonetic) in Washington, IER and  
12 other people, shows that MOX produces more waste than  
13 the alternative of immobilization. That we are  
14 creating more waste. And it's a lie to say that we're  
15 trying to rend it useless and - or safe. It requires  
16 this plutonium polishing and which, as far as I  
17 understand---and I am not a scientist---produces more  
18 high level radioactive liquid waste.

19 I could make some more points, but I just  
20 want to close by saying our - that the nuclear power  
21 technology seems to me a first step towards nuclear  
22 weapons technology. And for years, as Mary said, the  
23 U.S. has maintained a clear line between nuclear  
24 weapons and nuclear power by keeping plutonium out of  
25 the utilities. I feel like MOX is a step backwards,

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1 reversing at least 20 years of non-proliferation  
2 policy. And I feel it's unlawful. Thank you.

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

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

12 MR. CAMERON: Okay.

13 MS. PAUL: I mean, I basically think we  
14 should stop making the stuff.

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

17 MS. PAUL: Thank you.

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

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

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1 It is not high level waste.

2 AUDIENCE: What is the distinction?  
3 What's the difference in the radioactivity and the  
4 half life?

5 MR. CAMERON: Thank you. Thanks for that  
6 clarification and...

7 MS. PAUL: What does that mean?

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

11 UNIDENTIFIED SPEAKER: My question is:  
12 What does that mean in practical terms? What does  
13 that mean in terms of the half life of the - the  
14 substance? Is it radioactive? How radioactive is it?  
15 How long will it last compared to high level  
16 radioactive waste?

17 MR. CAMERON: And, very similarly, what  
18 are the implications - where is that? What are the  
19 implications of the fact that it is not high level  
20 waste?

21 MR. HARRIS: Well, I think as Dave tried  
22 to point out, high level waste - the current plan for  
23 the disposal of that material is to - to go to a  
24 proposed geologic repository, potentially Yucca  
25 Mountain. This high alpha waste we would actually -

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1 actually be classified as transuranic waste. And what  
2 it means is, basically, it's - it's got its high end  
3 - it's got that lot of americium, which is an - and  
4 it's - it's alpha, which is a form of radiation. You  
5 have alpha, beta, gamma. And we could go into  
6 discussions on health physics.

7 But the distinction is, it's - it's - high  
8 level waste is generated by reactors. The MOX waste  
9 would end - ultimately end up being high level waste.  
10 But the waste that we're talking about coming out of  
11 the waste solidification or the MOX facility is high  
12 alpha waste.

13 MR. CAMERON: Let me - let me just try and  
14 see if...

15 UNIDENTIFIED SPEAKER: Isn't that  
16 plutonium?

17 MR. CAMERON: Let me - let me just try and  
18 speak to this...

19 MR. HARRIS: No, americium.

20 MR. CAMERON: Let me just try to short-  
21 circuit this, and people can talk in detail  
22 afterwards. I think the question - the implications  
23 of what Tim said was that because it's not high level  
24 waste, that somehow it wouldn't be something  
25 hazardous. And I think that's not what you're trying

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1 to say.

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

13 MR. CAMERON: Okay.

14 MR. TURNIPSEED: Just a minute.

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

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

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

19 MR. TURNIPSEED: Thank you.

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

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

24 MR. CAMERON: Right.

25 MR. TURNIPSEED: Just do that. Just tell

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1 us.

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

3 MR. TURNIPSEED: Can you do that?

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

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

10 MR. CAMERON: All right. I will, Glenn.  
11 Okay, Karen Garcia.

12 MS. GARCIA: My question's been answered.  
13 Thank you.

14 MR. CAMERON: Okay, great.

15 Glenn Carroll.

16 UNIDENTIFIED SPEAKER: Bring your guitar?

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

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

22 MS. CARROLL: That's a song I don't want  
23 to sing. I do know the answer to that question, but  
24 I'll let them - I'm not spending my five minutes on  
25 it.

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

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

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

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1 time. It's got more jobs than MOX. Did you hear  
2 that? More jobs than MOX. And, instead of making  
3 waste, it would actually use the waste that has defied  
4 management for the last 20 years. Good plus.

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

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

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

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

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

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

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

20               Now, I wanted to comment on Mr. Hull's  
21       remark that memorandums of understanding are public  
22       documents. And that's all well and fine. But there  
23       aren't any on the MOX program, and that is not fine.  
24       And the only one that I know about is one that would  
25       deal with security, which is supposed to come down

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1 later and might help GANE get a security clearance.  
2 Nobody even knows where we should go for one yet.

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

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

24 And then there's some issues beyond even  
25 DOE's commitment at SRS to deal with the waste, which

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

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

25 I think there's questions about - from

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1 other facilities, the PDCF. You can't be preparing  
2 plutonium pits for processing in a MOX facility faster  
3 than the MOX facility can process it. You've got to  
4 watch out for your scrap backing up. In France they  
5 generated so much scrap that they - that it swamped  
6 the system. They have got scrap plutonium,  
7 essentially weapons grade, backed up, trying to put it  
8 back into the hopper to make MOX pellets. There's a  
9 problem, coordination with the pit disassembly,  
10 coordination with the reactors. All that has to be  
11 laid out.

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

22 And it protects us from agencies not - you  
23 know, from gaps between agency interface that doesn't  
24 work, or even overlapping, where the right hand thinks  
25 the left hand is doing it, and also from gaps in steps

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1 in an elaborate process, like plutonium. And I think  
2 it's fair to say that it's really hard to overstate  
3 the complexity of processing plutonium, and the  
4 hazards in processing plutonium. And where it was  
5 said tonight that the NRC has experience in licensing  
6 plutonium facilities, it's not that much, and it was  
7 a long time ago. And one of the facilities that got  
8 licensed never operated at Barnwell, South Carolina.  
9 The other one was associated with Silkwood, and I  
10 think that probably says a mouthful.

11 MR. CAMERON: Glenn, can I get you to - to  
12 wrap up.

13 MS. CARROLL: Wrap it up?

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

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

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1           So we have to look at environmental  
2 consequences from red oil explosions, hydrogen  
3 explosions, how to mitigate them, how to respond. And  
4 also we need to look at Cogema's environmental record.  
5 We're looking at their - way they do, you know. We're  
6 borrowing from their processes. We need to look at  
7 the environmental results from using those processes.  
8 And I'll write a letter if there's anything I forgot.

9           MR. CAMERON: All right. Thank you very  
10 much, Glenn.

11           Mr. Ed Arnold?

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

21           Our - one of our missions is to eliminate  
22 weapons of mass destruction. So I think you can  
23 understand that we're delighted that we're dealing  
24 with plutonium and doing our best to get it out of  
25 circulation.

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1 Another mission we have is the achieve a  
2 sustainable environment. On that score, I think we  
3 have - I'm really pleased that this EIS is being  
4 undertaken so that we can find out - one thing I'd  
5 like to do is compare it to something that happens to  
6 all of us as we go to our physicians. I'm not a  
7 physician myself, I'm a health educator and - and  
8 administrator. But I recently went to the doctor and  
9 said, "Can you tell me whether I'm in good health?"  
10 I didn't go in and say, "Tell me I'm in good health."

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

18 MR. CAMERON: Yeah, and I - that's an  
19 important enough issue that we should just state it  
20 clearly on the record. The record of decision is the  
21 NRC's decision on whether to grant the license. So  
22 the record of decision could be a denial of the  
23 request for construction authorization. So we should  
24 not have any ambiguities on that. In other words, we  
25 do not have to grant the construction authorization.

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1 If the regulations are not met, then there will not be  
2 a grant of a construction authorization. Okay?

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

6 And I said, "Wait a minute. I mean, you  
7 know, I'm okay or not okay? I mean, what - what is  
8 it, and compared to what?"

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

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

25 PSR has a brief on plutonium resolution

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1       which I'd like - is there an opportunity to enter  
2       something into the record here? I think we'll...

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

5               MR. ARNOLD: ...we'll write subsequent  
6       comments, but...

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

8               MR. ARNOLD: ...I'll leave this with you,  
9       then.

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

11              MR. ARNOLD: Thank you.

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

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

20              MR. CAMERON: And thank you for being here  
21       tonight.

22              We're going to go next to - is it Mr. -  
23       Mr. Chaput?

24              MR. CHAPUT: Yeah.

25              MR. CAMERON: Ernest?

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1 MR. CHAPUT: Ernie, here.

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

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

5 MR. CAMERON: All right.

6 MR. CHAPUT: And I'll - I'll clean these  
7 comments up and formally submit them. I've just got  
8 some notes here.

9 I just want to go back and - and ask  
10 everyone to refocus on why we're here. The issue is,  
11 as was pointed out by several people, and, I mean,  
12 we're in violent agreement, except we're not in  
13 agreement with this thing. What are we going to do  
14 with the surplus weapons grade plutonium that is now  
15 coming available with the United States and Russia?  
16 That is the question. This question's been studied by  
17 people certainly smarter than me, probably smarter  
18 than many of the people in this room. And a national  
19 consensus, evolved around the *National Academy of*  
20 *Science* report, says the safest way to make sure that  
21 that material is the least likely, the least capable  
22 for use in a weapon of mass destruction is something  
23 called the spent fuel standard. In other words, you  
24 take that material, you irradiate it, you make the -  
25 you get the plutonium as reactor grade, not weapons

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1 grade, not near as capable. You put it in spent  
2 nuclear fuel. Material is very, very hard to work  
3 with, and it cannot be worked with - it has to be  
4 worked with behind six-foot shields, concrete shields.  
5 And that is a safer - that's the safest, most  
6 responsible way for - for trying to lock up this  
7 material. It's not - not good to babysit it. At some  
8 point you got to do something with it.

9 MOX is okay if you can't burn it in the  
10 reactor. But MOX you can extract the plutonium back  
11 out of it, and you don't need six-foot thick concrete  
12 shields to do that. You can do that in a relatively  
13 benign kind of a way that - that is not transparent.  
14 It's something that is a lot simpler, technically,  
15 than try to reclaim plutonium from spent nuclear fuel.

16 So there's been a consensus by a lot of  
17 people that says the right thing to do is take that  
18 surplus plutonium, fabricate it into MOX fuel, burn it  
19 in reactors. That's how you render it least  
20 attractive to somebody to use, by either another  
21 nation, or from a subgroup, or for - or for malevolent  
22 purposes.

23 The cancellation of the plutonium  
24 immobilization project in my mind makes the MOX  
25 project that much more important. There is no

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1 alternative to MOX. And by that, I mean in an NRC  
2 environment, if I come in to license a nuclear  
3 reactor, does that mean that NRC should say, "Why  
4 don't you build a coal plant instead?" No, that's not  
5 what it means.

6 The options that are available are MOX or  
7 no action. DOE and the national - you know, and the  
8 - and the national strategic decision-making process  
9 says we're not going to do a plutonium immobilization.  
10 I mean, that causes a little bit of problems to some  
11 of the people in South Carolina on those two metric  
12 tons. That'll get resolved. That will get resolved.

13 But to - to force a plutonium  
14 immobilization back on the table, an option which is  
15 less attractive and less - less purposeful than MOX,  
16 is not the right answer. It's not on the table;  
17 should not be on the table. My answer to that is:  
18 No, that is not a - is not part of a - of the  
19 alternatives.

20 Thirdly, this is not a jobs program. This  
21 is a program to try to make this nation and this world  
22 safer. I don't care if this stuff goes at Pantex, I  
23 don't care if it goes to Rocky Flats, I don't care if  
24 it goes to Aiken, South Carolina. It just needs to go  
25 someplace.

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1           Those reviews have been done. And I've  
2 argued long and hard that Aiken, South Carolina, is  
3 the right place to do it. It's got the right  
4 facilities, the right people, and the right  
5 infrastructure. But if some other site has said  
6 that's the right place to do it, that's fine. The  
7 important thing is let's do it.

8           I guess to - the environmental report  
9 that's been submitted, as I understand it, says you  
10 got very minimal environmental and safety impacts in  
11 normal operations. It's difficult to measure the  
12 impact of the site in an accident environment. The -  
13 the consequences are well within applicable - well  
14 within applicable standards. The - the waste that's  
15 been talked about is a very small amount of waste when  
16 you look at what's been going on.

17           The thing I don't understand is they're  
18 talking a lot of deal about the 70,000 gallons---take  
19 your word for it---that goes into the waste - the new  
20 waste facility. How much liquid waste does not go  
21 into the liquid tanks, behind the liquid tanks?  
22 There's an offset somewhere. It needs to be dealt  
23 with like that. But the important thing is that  
24 waste, by the analysis that's been done, can be  
25 handled safely with no environmental impacts.

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1 I guess I would just end up by - by a  
2 couple of things. Number one, I think we're all in  
3 violent agreement that something needs to be done with  
4 surplus plutonium. And I would agree with what Mary  
5 said earlier, is what we want to have happen is for  
6 NRC to do a thorough review during - using the best  
7 science. And I think those were your words, Mary, and  
8 I - I totally agree with that. The - the Duke Cogema  
9 people that submit the environmental report, use your  
10 best review and your best science to make sure they've  
11 done the proper analysis and done - you know, run the  
12 numbers correctly.

13 Play that against the - the applicable  
14 regulations and standards that you use in the  
15 protection of the public health and safety and the  
16 environment, and let the chips fall where they may.  
17 I think you will find it meets the requirements.  
18 Thank you.

19 MR. CAMERON: Thank you, Ernie.

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

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

23 MR. CAMERON: No, actually...

24 MR. MONIAK: Okay.

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

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

2 Okay, my name is Don Moniak. I live in  
3 Aiken County. I moved here two years ago to work for  
4 the Blue Ridge Environmental Defense League. Prior to  
5 that, I spent four years in Texas near - in the  
6 Amarillo area, working for a group called STAND that  
7 monitored the Pantex Nuclear Weapons Plant.

8 So, when I started seeing, you know, in  
9 1998, four years ago and a month, there were two other  
10 hearings - actually there were four hearings those two  
11 weeks in August. And one of them was in Amarillo.  
12 And there was one in the afternoon, there was one in  
13 the evening. And one of them was in North Augusta, I  
14 believe. And there was one in the afternoon and one  
15 in the evening. And they were very crowded. They had  
16 300, 400 people in Amarillo showed up; I understand 6-  
17 or 700 were at each one of these meetings. And they  
18 were loud and boisterous. But that's because it  
19 involved the competition for new federal pork. Call  
20 it MOX, immobilization, what-have-you. You know, it  
21 was just strictly an economic discussion, and a highly  
22 emotional one at that. At Pantex they'd bash SRS; at  
23 SRS they'd bash Pantex, even though without one or the  
24 other there would have been no victory in the Cold  
25 War. I get rather tired of hearing there here, how

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1 SRS was instrumental in winning the Cold War. Because  
2 everybody who worked there should know that it was a  
3 team effort. It involved numerous facilities. So  
4 it's really kind of a - I guess it must be a  
5 rationalization or something. But - but those  
6 meetings degenerated, so these ones have been a little  
7 more - more interesting because there's no controversy  
8 over who gets what. And a year ago today almost I was  
9 in this room going through the hearing process with  
10 the NRC's Atomic Safety Licensing Board. I submitted  
11 something like 30 contentions. Two of them were  
12 accepted, barely. And I was whupped at the end of it.  
13 It's a very rigid process, and I really admire the  
14 licensing board, especially when they chew out the NRC  
15 staff and bring them around in circles and twist them,  
16 and it's - it's just fun to watch. Because they're  
17 very sharp people. It's just - I can only sit there  
18 and be subservient, which is uncommon for me.

19 (Laughter.)

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

25 So the goal for this project, according to

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1 the environmental report, the purpose is to - almost  
2 the sole purpose is to - need for the facility to  
3 propose action issuing a license to possess and use  
4 special nuclear material in a MOX plant is essential  
5 to successful implementation of a joint U.S.-Russian  
6 nuclear disarmament policy.

7 And it's funny, because this is the sole  
8 purpose and need for the program. If the NRC refuses  
9 to evaluate the situation over in Russia and to see  
10 whether Russia is anywhere near as far along as this  
11 project is, in terms of meeting that agreement, and  
12 that has to be done in this project.

13 And I also argued a year ago, during the  
14 scoping meetings, that you have to - it's time to tell  
15 us just what the risk is from some - of somebody  
16 stealing plutonium that's stored in hardened  
17 facilities surrounded by well trained paramilitary  
18 forces like Wackenhut, stealing that plutonium and  
19 then waltzing off with it somewhere and - and  
20 successfully building a nuclear weapon. I mean, what  
21 is the risk? What's the probability? We know what  
22 the consequence of that could be, but what's the  
23 probability?

24 This is supposed to be a risk-informed  
25 process. Otherwise, the entire basis for this program

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1 is emotional in nature. It is a fear of somebody  
2 stealing plutonium, making a weapon. And that's a  
3 legitimate fear. But taking care of 34 tons here  
4 isn't going to - isn't barely going to make a dent  
5 when you have - Cogema has almost 100 tons, and  
6 British Nuclear Fuels has almost 100 tons of so-called  
7 reactor grade plutonium which is perfectly suitable  
8 for nuclear weapons, it's just that weapon states  
9 prefer to use military grade, which is mistakenly, I  
10 think, called weapon grade. Everything's weapon  
11 grade.

12 So I want to submit a report, because that  
13 - the purpose is to meet the Russian schedule. And so  
14 I've written this report under contract with Blue  
15 Ridge Environmental Defense League, because I - I quit  
16 my salaried position, because I was fed up with the  
17 Nuclear Regulatory Commission's process. It just - I  
18 was - I was just like completely tied up in knots.  
19 You had to argue these almost undefinable distinctions  
20 in the law. The regulations are - they even admitted  
21 at the hearing last year that the regulations are  
22 confusing. And then you have to simultaneously argue  
23 technical issues. And I quite frankly couldn't take  
24 it anymore, so I left and said, "The hell with this.  
25 I'll research it."

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

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

16 These are before the MOX plant starts. In  
17 which case, they already have proposed European MOX  
18 fuel fabrication for the initial batch. Or after the  
19 MOX plant starts, that the PDCF might not come on  
20 line. In which case, they will have to possibly  
21 procure emergency supplies of high - I mean, low  
22 irradiation induced (phonetic) uranium fuel, which is  
23 really not a very good business strategy. And it  
24 surprises me that Duke remained in the Duke Power  
25 remained in the program, in spite of this high risk,

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1 when Virginia Power pulled out. And Duke Power does  
2 have an exit strategy, and there is a high certainty  
3 that one of those reactors will be withdrawn.

4 There's 25 open risk items as of December  
5 2000, many of which were long-term risks. They took  
6 care of the - the low level risk, moderate level, for  
7 the most part. And now it's just the high level  
8 risk, such as DOE changing its mind again and forcing  
9 the engineers to redesign the facility. Because it's  
10 going to be built.

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

20 So, I want to finish. In regard to  
21 alternatives, the no-action alternative is just what  
22 it says. It remains in storage, which DOE's evaluated  
23 that option and established that it's a very viable  
24 alternative. It just doesn't meet the U.S.-Russian  
25 agreement. But then, of course, Russia's not meeting

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1 the U.S.-Russian agreement, either, so what's the  
2 point of it.

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

13 So, and most people in Russia - on the one  
14 hand many of them says that they really don't see an  
15 encourage for MOX, although in 1990 they began  
16 pursuing the process in cooperation with Cogema and  
17 Siemens, France and Germany, long before the U.S.-  
18 Russian cooperative efforts started. So this - this  
19 statement that MOX - Russia won't do MOX unless we do  
20 is - is just purely wrong. Because they'll do MOX if  
21 somebody gives them the money, whether or not the U.S.  
22 does anything or not. They've got 100 more tons than  
23 we do. What do they care.

24 So the other alternative that should be  
25 evaluated is not a return to the immobilization

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1 program that the Department of Energy managed to  
2 sabotage either through - by intent or by  
3 incompetence. The evaluation should be to make  
4 plutonium MOX fuel pellets, make MOX fuel that does  
5 not meet commercial requirements for re-irradiation in  
6 reactors, as advocated by Frank von Hippel a year ago  
7 in the *Bulletin of the Atomic Scientists*.

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

19 The only difference between diluting it in  
20 a matrix, whether it's MOX or immobilization, it's a  
21 ceramic matrix. And spent fuel standard is one  
22 security class. DOE has a graded approach to  
23 safeguards, and Level D is that diluted stuff that's  
24 suitable for being dumped in WIPP, which,  
25 incidentally, the *National Academy of Science* says

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1 that was a fine idea, too. Or at least one that  
2 should be pursued.

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

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

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

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

11 MR. CAMERON: Thank you. Thank you very  
12 much.

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

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

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

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

17 I would hope that people in South Carolina  
18 would take some lessons in that, because if you look  
19 at a - a map of the United States color-coded by  
20 levels of radioactivity, I assure you South Carolina  
21 is a sacrifice zone, but New Mexico takes the prize.  
22 There's - the highest level of radioactivity is two  
23 black dots; one where Oak Ridge is, and the other  
24 where Rocky Flats was, and still is, in reality, and  
25 will be for the next 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  
6           official. And you are, too, and so are my  
7           grandchildren. Because we live, I understand, in the  
8           county that has the highest cancer rate in South  
9           Carolina. And that's not going to change easily.  
10          Certainly not in our lifetime. Perhaps if we start to  
11          take some actions on these issues, it might change for  
12          our children and our grandchildren.

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

23                 My experience, when I talk to scientists  
24          that are not on these kind of payrolls, is they come  
25          to very different conclusions than those that are on

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1 government payrolls or on Westinghouse's payroll.  
2 And, by the way, we share Westinghouse at WIPP just as  
3 you do, and they've been just as nice to their workers  
4 as they have been here. I've been reading for about  
5 ten years about how nice they are to the workers out  
6 here.

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

17 We've known, according to Ralph Nader,  
18 since 1953 that if we pursued alternative sources,  
19 non-dangerous alternative sources---wind, solar, et  
20 cetera, hydrogen---that in about 25 years we would  
21 have stopped our dependence on foreign oil. But  
22 instead, two years after the government was told that,  
23 they started Atoms for Peace. And 25 years later we  
24 still were not - in fact, 50-some years later we still  
25 are not free of our dependence on foreign oil, and we

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1 have about a \$2 trillion debt that we didn't have in  
2 53 because we've poured about that much money into -  
3 into military and commercial nuclear energy, and what  
4 do we have to show for it except a big pile of manure,  
5 only its very hot manure and won't go away for the  
6 next half million years.

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

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1 more like ten releases of radioactivity.

2 In fact, since 1999, there - they have not  
3 been doing very good on their - their track record in  
4 terms of shipping. They've had 89 safety violations  
5 just in New Mexico alone, and the New Mexico nuclear  
6 groups are suing to get the figures for the other  
7 states that they're coming through. Because they're  
8 coming from Rocky Flats, they're coming from Idaho,  
9 they're coming from Los Alamos, they're coming from---  
10 what is it?---Washington. So eventually they're going  
11 to be coming through 22 states, coming to a town near  
12 you.

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

21 In another situation, the driver fell  
22 asleep at the wheel, crossed over the median strip and  
23 started going towards oncoming traffic before the  
24 other driver, who was sleeping - supposed to be  
25 sleeping, came awake and realized what was happening

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1 and pulled it to safety.

2 In another situation which has not been  
3 reported, but drivers were seen in a populated area  
4 standing by the truck where kids and family - we have  
5 this on video - or friends of mine have this on video  
6 tape, smoking a cigarette, where clearly it's against  
7 the rules to be smoking a cigarette within 25 feet of  
8 the truck. And there are all kinds of radiations  
9 emitting from the truck, so it shouldn't be standing  
10 for a long period of time around a population.

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

21 Just one other thing, is that you might  
22 want to be checking out what are your first responders  
23 in the state. Are they based on volunteer fire  
24 departments? Have they been informed of what will  
25 happen if there's a breach of a plutonium shipment?

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1 And, by the way, TRU waste is very dangerous. And so  
2 don't cover it up with changing the language. Thank  
3 you.

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

5 MR. POE: When I came here tonight I  
6 didn't plan to - to make a comment, but I do feel that  
7 - that I need to comment. I need to comment first on  
8 - on these over here, and I will do that. But I would  
9 like to thank you for providing us the opportunity to  
10 come here and to listen and to learn and to have an  
11 opportunity to come. And I'll have to say, I've  
12 listened a whole lot and my ears are tired, so I hope  
13 to be short.

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

19 Now, I've heard a lot of discussion here  
20 tonight, and much of it centers around the Department  
21 of Energy. And I think that the Department of Energy  
22 should be part of that particular 2005 event, as well  
23 as the Duke Cogema team, so that everybody's here at  
24 one time and available to talk and to answer  
25 questions.

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1           The other thing I'd like to ask is that  
2           rather than have the 45 day comment period when the  
3           draft EIS is issued, that you extend it at least to -  
4           to twice that, a longer time, because what you've got  
5           to do is, you've got to take these documents that  
6           you're going to issue to us, in terms of a draft EIS,  
7           you got to look at them and understand them, and - and  
8           then it's got to soak in a while, or at least it does  
9           in my - for me. I can't make, by looking, a decision  
10          that everything is - is hunky-dory.

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

23                 So, in my mind, there is no value in doing  
24          a vitrification process no-alternative when the  
25          government has said we're not going to do that, unless

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1 somebody out there has got deep pockets and is willing  
2 to fund it, and I doubt that. I doubt that any of us  
3 have that capability, other than our U.S. government.

4 And the other comment that I - I read this  
5 - this bottom thing here. And - and I don't really  
6 know what that's asking me to do. So the thing I  
7 thought about was kind of similar to what Don Moniak  
8 said. It would seem to me that somewhere in here  
9 somebody ought to evaluate the theft and use of these  
10 plutoniums either from the MOX or from the no-action,  
11 either case, because that's the driving force for this  
12 EIS.

13 The last comment also on that - that  
14 bottom part there, it seems to me that one alternative  
15 might be to look at what happens if the Russian  
16 government doesn't do this or - or some payoff of  
17 that. I know again I wanted to thank you guys for  
18 being here, offering us the opportunity to come and  
19 listen and learn and - and speak our piece. Thank  
20 you.

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

23 Laura, would you like to give us some  
24 comments, and then we're going to have Mr. Willoughby.  
25 And we need to be out - we need to be done by - not

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1 out, but done by 10:30, so...

2 MS. BAGWELL: All right.

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

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

8 First of all, I really want to commend all  
9 of us for this dialogue. I mean, despite the fact  
10 that public participation is - is required, I think  
11 it's very beneficial. I think it lends a lot of  
12 credibility to this process, and I know I've learned  
13 a lot tonight.

14 I point to, for example, GANE's  
15 involvement in this process as an example of a very  
16 positive involvement. I don't think anything that  
17 we've talked about tonight is a foregone conclusion.  
18 And - and I think I'm going to open my comments with  
19 that remark and I'm going to close with that remark.

20 Secondly, despite the fact that I work at  
21 the Savannah River Site and I'm very proud of my  
22 efforts out there to help clean up that place, I'm not  
23 here to cheerlead for the Savannah River Site or for  
24 MOX in any way. I'm just here to be an interested  
25 participant.

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1 Thirdly, you know, no matter what our  
2 environmental or political standpoints are, I find  
3 that when a bunch of diverse people, such as people  
4 who are represented here tonight, get around the table  
5 to address complex issues, two things happen. The  
6 first thing that happens is that we find out that we  
7 have more in common than separates us. And the second  
8 thing we find out is that, you know, the problems are  
9 difficult. That's why they're problems.

10 In regard to those problems, and  
11 especially in regard to the complexity of the  
12 plutonium disposition issues, again, maybe just to  
13 echo Mr. Chaput's remarks, you know, all of these  
14 issues that we've raised here tonight are very  
15 complex. For example, is immobilization the way to  
16 go? Is MOX facility treatment the way to go? That's  
17 a complex issue. There are opponents and proponents  
18 for each of those. But again, I think the one thing  
19 that we in this room, all of us can agree on, is that  
20 something needs to be done to manage this plutonium.  
21 This is a very important international issue. It  
22 doesn't just affect the people in this room.

23 And finally, or maybe penultimately, with  
24 all due respect for the positions of organizations  
25 like GANE and - and other groups here tonight, and no

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1 matter what our respective positions are on nuclear  
2 energy and nuclear energy use, I think it's important  
3 for us not to function in a vacuum. It is a fact that  
4 when we turn on the lights in South Carolina, that a  
5 significant percentage of those photons come from  
6 nuclear energy, nuclear energy plants. And in an era  
7 when energy shortages such as were seen last year on  
8 the West Coast and such as may continue in the  
9 Northeast plague us, you know, that's a point that we  
10 need to deal with, regardless of what our positions  
11 are on those issues.

12 And - and lastly, again, just to close  
13 where I started, I don't think any - any of these  
14 issues that we've discussed tonight is a foregone - or  
15 are a foregone conclusion. I think this process is  
16 very beneficial, and I thank you for - for letting us  
17 be a part of this.

18 MR. CAMERON: Okay, thank you very much,  
19 Laura.

20 Our final speaker is Mr. Willoughby. Mr.  
21 Willoughby?

22 MR. WILLOUGHBY: I would preface my  
23 remarks with two comments. One, I have been one way  
24 or the other in nuclear energy business for 45 years,  
25 everywhere from chasing bombs to commercial power

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1 reactors. The other is that it's my personal belief--  
2 --that's what it is, a personal belief---that the MOX  
3 fuel is the best way to make the plutonium so that it  
4 cannot be used by anybody else for purposes of mass  
5 destruction.

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

16 As a - a reasonable alternate to be  
17 evaluated, in this case I disagree with Mr. Poe, and  
18 I think that the EIS should consider that the  
19 immobilization be considered as an alternate. If that  
20 comes out as the proposed solution from your EIS, then  
21 the federal government is going to have to find the  
22 money and some agency to do that, whether it is DOE or  
23 some commercial facility under the auspices of the  
24 NRC. So then the - in all cases, what in addition  
25 would be considered, the national viewpoint, it also

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1 what is looked at (sic) and evaluated as part of any  
2 of the process has to be the international situation.  
3 Thank you.

4 MR. CAMERON: Thank you very much, Mr.  
5 Willoughby.

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

14 Tim?

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

18 If your looking at simply - I mean, it's  
19 maybe a - a case of, one, where the waste comes from.  
20 Spent high level waste is spent nuclear fuel, and  
21 where that comes from a reactor after the fuel has  
22 been used to make electricity. Highly radioactive  
23 material.

24 In this case, the high alpha waste stream  
25 comes as part of the MOX process where some of the

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1 impurities that are now with the plutonium are being  
2 removed, and that generates a waste that we're terming  
3 high alpha waste, which is not high level waste.

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

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

15 MR. HARRIS: There's - there's differences  
16 in...

17 MR. CAMERON: ...the type of hazard, but  
18 they're both hazardous.

19 MR. HARRIS: They're both hazardous -  
20 hazardous stuff.

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

23 Don? Or a comment.

24 MR. MONIAK: High alpha activity waste is  
25 defined as - you know, it's kind of like in the

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1 middle; right? But...

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

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

13 (Laughter.)

14 MR. HARRIS: Was there - was there a  
15 question in there, Chip, or...

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

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

20 MR. UHRICH: well, when - when you use the  
21 term "transuranic," I get a little confused. Because  
22 the transuranic waste that was being shipped to WIPP  
23 consists of plutonium contaminated waste, basically.  
24 And there were all kinds of problems that would come  
25 out of that. For example, there's explosiveness in

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1 the canisters because you've got plastics mixing with  
2 the plutonium, all kinds of different materials  
3 mixing, molding together, creating - generating gases.  
4 There's been documented a number of explosions -  
5 explosions in transportation of some of those  
6 canisters.

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

11 MR. HARRIS: Yeah, I...

12 MR. CAMERON: Can anybody...

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

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

23 MR. CAMERON: I'm not sure how much that  
24 means to people.

25 MR. HARRIS: Yeah, it - people.

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

4 MR. HARRIS: I think it could be.

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

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

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

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

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

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

13 MR. CAMERON: Okay, thanks, Mary.

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

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

24 MR. HARRIS: No, I can't quote those to  
25 you, Harry. They were in the old environmental

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1 report, the December 2000 environmental report, and I  
2 - I can't speak to that.

3 MR. ROGERS: Because you haven't processed  
4 the other...

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

6 MR. ROGERS: ...you're processing - the  
7 processing of...

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

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

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

22 MS. CARROLL: Since you handed me the  
23 mic...

24 MR. CAMERON: Right.

25 MS. CARROLL: ...I would just say - and I

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1 think Jack probably knows this, but I think he wants  
2 to bring this out. I would say that the distinctions  
3 on waste classifications are largely legal  
4 distinctions, don't always, but loosely have something  
5 to do with the character of the waste. And that MOX  
6 waste is uncategorical. I mean, it's a new - or it's  
7 a new beast. And so it's a legitimate question, and  
8 it's something that potential host site may really  
9 take issue with, how we have tried to define MOX  
10 waste, and whether they think it should come there.  
11 Okay.

12 MR. CAMERON: Thank you, Glenn.

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

14 Mr. Uhrich, one last...

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

23 MR. BROWN: The - Jack, the risks are  
24 about the same. But you're right, the americium in  
25 the high alpha activity waste does have a higher

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1 direct radiation hazard than the weapons grade  
2 plutonium that would be handled at the MOX facility.

3 MR. CAMERON: Okay. I'm going to thank  
4 all of you for being such an engaging audience  
5 tonight. Thank you.

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

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

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

11 MR. CAMERON: Thank you.

12 Thank you all. And thanks to - thanks,  
13 Tim Harris, Dave Brown, for their excellent  
14 presentations. Betty Garrett for doing all the  
15 administrative work. Melanie, our stenographer  
16 tonight. And thank all of you.

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

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

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

4 I also want to tell you we're early in  
5 this process. Remember that we haven't yet prepared  
6 the EIS. You know, we will be back, we will be  
7 looking for your comment. I did appreciate the  
8 comment about extending the comment period. I  
9 personally have spent many years writing regulations,  
10 understand that certain time periods create problems  
11 for people. And we will look into that.

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

15 MR. CAMERON: Great. Well, goodnight.

16 (Whereupon, the hearing was concluded at  
17 10:35 p.m.)

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