

Official Transcript of Proceedings

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Title: Public Meeting on Proposed MOX Facility Draft Environmental Impact Statement

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1 UNITED STATES OF AMERICA  
2 NUCLEAR REGULATORY COMMISSION  
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4 PUBLIC MEETING ON PROPOSED MOX FACILITY  
5 DRAFT ENVIRONMENTAL IMPACT STATEMENT  
6 + + + + +  
7 WEDNESDAY,  
8 MARCH 26, 2003  
9 + + + + +  
10 AUGUSTA, SOUTH CAROLINA  
11 + + + + +  
12 The Public Meeting was held in the North  
13 Augusta Community Center, 495 Brookside Avenue  
14 North Augusta, South Carolina, at 7:05 p.m., Francis  
15 "Chip" Cameron, Facilitator, presiding.  
16  
17 PRESENT:  
18 FRANCIS (Chip) CAMERON  
19 LAWRENCE KOKAJKO  
20 TIM HARRIS  
21  
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23  
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4	<p>P-R-O-C-E-E-D-I-N-G-S</p> <p>MR CAMERON: Good evening everyone. My name is Chip Cameron. I'm the Special Counsel for Public Liaison at the Nuclear Regulatory Commission. I just wanted to welcome all of you to the Nuclear Regulatory Commission, the NRC's public meeting tonight. And I have to say it's nice to be -- nice for all of us at the NRC to be with all of you in North Augusta. We've had several good meetings here in the past, and we look forward to having a good meeting tonight.</p> <p>Our subject is the NRC's draft environmental impact statement that the NRC has prepared to help its -- help it make its decision on the evaluation of the application for the construction of the mixed oxide fuel facility. That application is from the consortium of Duke, Cogema, Stone &amp; Webster. And you may be hearing that referred to tonight by its acronym, DCS. We'll try to keep the acronyms down, and explain what they are if we -- we use them. But that's -- that's one you might hear tonight.</p> <p>And I'm going to help out by serving as the facilitator for tonight's meeting, to try to help all of you have a -- a productive meeting tonight. And I just wanted to go over a few things about the</p>	5
1	meeting process before we get into -- to our	1
2	discussions. One is the purpose, why the NRC is here	2
3	tonight. We're here, first of all, to clearly explain	3
4	what the NRC's process is for evaluating this	4
5	application that we received, and to specifically talk	5
6	about the findings that are in the draft environmental	6
7	impact statement that's been prepared.	7
8	And most importantly, we want to hear from	8
9	you, any concerns you have, any recommendations you	9
10	have about the draft environmental impact statement,	10
11	the NRC process for evaluating this application. And	11
12	the ultimate goal is to use the comments that we hear	12
13	tonight, the written comments that we receive, and	13
14	comments from some of the other meetings that we're	14
15	doing, that's going to help us to -- to make our	15
16	decision on the application and to prepare the final	16
17	environmental impact statement.	17
18	And what you hear tonight from -- from the	18
19	NRC and from -- from other people in the community may	19
20	help you to prepare your written comments, if you want	20
21	to -- to submit any written comments to us. But let	21
22	me just emphasize that whatever is said tonight, those	22
23	comments will carry the same weight as written	23
24	comments. And we are taking a transcript tonight.	24
25	Melanie is our stenographer. And we will have a	25

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And in terms of ground rules, when we're in the question-answer period, if you have a question just signal me and I'll -- I'll bring you the microphone. And please tell us your name and affiliation, if appropriate, so that we'll have that on the transcript. And I would just ask you to try to be concise as possible. I know that's difficult because this is a complex issue. But if you try to do that, then we can make sure that everybody who's here tonight who wants to talk can have an opportunity to speak.

And when we get to the formal comments, we do have a lot of people signed up to talk tonight. So I'd like to keep the individual comments at five minutes; so that if you could try to keep it to five minutes, everybody will benefit from that. And I'll remind you when you're -- when you're getting there, although most people don't take that -- that five minutes. And I would just ask that only one person speak at a time, for obvious reasons, so that we can get a clean transcript, and also so that we can give our full attention to whomever has the floor at that time.

In terms of agenda, we're first going to go to Lawrence Kokajko, who is right here. And

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written record of what is said tonight. And that will also be available to anyone in the public who wants to see that transcript.

In terms of the format for the meeting, we're going to try to keep it real simple. We have a couple of brief -- two brief NRC presentations to give you some background information, and then we're going to go out for a question-answer period with you, make sure that -- that everybody understands what we're doing. And then we're going to go to you for a -- a comment session. And I don't want to say formal comment, although it is in a sense. We want to try to be as informal as possible tonight and -- and just have some good discussions. But when we get to the comment portion of the meeting, you can either come up to this podium and make your comment, or I'll bring you this -- this talking stick, this cordless mic, and you can -- you can use this to make your comments.

And sometimes it's -- we all know it's -- it's difficult to perhaps separate a question from a comment, or a question might lead into a comment. And so, when we're into question-answer period, it's fine if you sort of segue into a comment, but we really do want to save that question-answer period for -- for informational questions for the -- for the NRC.

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1 application. And he's been with the -- the Agency for  
2 about nine years now, and has a civil engineering  
3 degree from the University of Maryland. And he's one  
4 of Lawrence's staff.

5 And I should -- before I stop, just to  
6 make sure everybody knows, we have Dave Brown here  
7 with us. And Dave is the Assistant Project Manager on  
8 the safety evaluation on the DCS application. And  
9 introducing him allows me to make an important point.  
10 The NRC's decision on this application has two major  
11 components to it. One is the environmental evaluation  
12 that we're here to talk about tonight; and the other  
13 is the safety evaluation of the proposed facility.  
14 And both of those come together to help the NRC make  
15 a decision. So we do have Dave here tonight in case  
16 there are questions on any of the safety issues, and  
17 perhaps we can explain the difference between those a  
18 little bit more in -- in the discussion.

19 And with that, I just would thank you for  
20 -- for being here tonight. And we're going to go to  
21 Lawrence Kokajko.

22 Lawrence?

23 MR. KORAJKO: Thank you, Chip.

24 Can everyone hear me? Can everyone hear  
25 me? Let's try the cordless. Does it work now? No?

1 Lawrence is the acting Branch Chief of the  
2 Environmental and Performance Assessment Branch at the  
3 NRC. It's in our Office of Nuclear Materials, Safety,  
4 and Safeguards. And Lawrence's staff had a  
5 responsibility for doing the evaluation, the  
6 environmental evaluation on this DCS application to  
7 construct this facility, and also for doing  
8 environmental evaluations on other -- other  
9 facilities. And Lawrence has been with the Agency for  
10 about 14 years. And before he became the acting  
11 Branch Chief, he was chief of a -- a Special Risk Task  
12 Group that the Agency had formed to take a look at how  
13 to make our processes more -- more risk-informed. And  
14 he's been involved in reactors and spent fuel  
15 activities at the NRC, also. And Lawrence is just  
16 going to give you an overview of what the NRC is, how  
17 this environmental evaluation fits into our  
18 responsibilities.

19 And then we're going to go to Mr. Tim  
20 Harris, who's right here. And Tim is going to tell us  
21 about the findings in the draft environmental impact  
22 statement, what the schedule is for completing the  
23 environmental impact statement, how you submit  
24 comments, important information. And he's the Project  
25 Manager on the environmental review on this

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a set of slides; an agenda, facts sheet, and comparison of alternatives; and then feedback forms. We would appreciate hearing you responding to the questions on the feedback forms, and either handing it back to an NRC staff person, or you can staple the form together and drop it in the mail. If the NRC people could raise their hand one more time so you could give it to one of us. I think John Hull there, as well. You can drop it in the mail, as well. The form is self -- is addressed, and postage has already been paid.

If you would like a copy of the draft environmental impact statement, we have a limited number here. And if we run out, we will mail you a copy. Next slide. Next slide.

As Chip mentioned, the presenters tonight will be myself, as well as Mr. Tim Harris of my staff. We've included our phone numbers and Email addresses. And please feel to contact us (sic) if you have any questions after this meeting. And we will be hanging around a little bit in case you have some other comments you'd like to talk to us about.

The purpose of tonight's meeting is to get your comments on the draft environmental impact statement. Before we hear your comments, we'll

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Okay. It's working; right?  
MR. CAMERON: It's working. I think it just isn't quite level.

MR. KOKAJKO: How about now? Excellent. Good evening. My name is Lawrence Kokajko, and as Chip said, I am the acting Branch Chief for the Environmental and Performance Assessment Branch at the Division of Waste Management in the Office of Nuclear Materials, Safety, and Safeguards at the Nuclear Regulatory Commission. And I'd like to welcome you to this meeting on the NRC's draft environmental impact statement for the proposed mixed oxide or MOX fuel fabrication facility.

I'd like to thank you for taking your time out of your busy schedule to be here this evening. And we do appreciate it. And we do value your input. And we look forward to hearing from you this evening.

This meeting is one of a series of meetings planned to inform the public about the environmental impact statement, or the EIS, for the proposed MOX project, and to solicit public comments. Last night we met in Savannah, and tomorrow night we meet in Charlotte.

There are three handouts that you should have received on the way in. You should have received

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<p>1 provide some information on the NRC's role on the</p> <p>2 proposed MOX project, and describe the <i>National</i></p> <p>3 <i>Environmental Policy Act</i> and the EIS process, and how</p> <p>4 the EIS fits into the NRC's decision-making process.</p> <p>5 Tim will give an overview of the draft environmental</p> <p>6 impact statement, and then there will be time to</p> <p>7 answer questions. Next.</p> <p>8 The proposed MOX facility would take</p> <p>9 surplus weapons plutonium and depleted uranium and</p> <p>10 make nuclear reactor fuel. Congress, in the <i>Defense</i></p> <p>11 <i>Authorization Act of 1999</i>, gave NRC a role in the</p> <p>12 proposed MOX project. Specifically, NRC has licensing</p> <p>13 authority over the MOX facility, so our role is to</p> <p>14 make a licensing decision regarding the safe operation</p> <p>15 of that facility.</p> <p>16 The NRC is an independent government</p> <p>17 agency, and our mission is to protect the public</p> <p>18 health and safety, and the environment, in the</p> <p>19 commercial uses of radioactive material. Our role is</p> <p>20 different from the Department of Energy's. The</p> <p>21 Department of Energy's role in this project relates to</p> <p>22 implementing the United States nuclear non-</p> <p>23 proliferation policy, including the disposition of</p> <p>24 surplus weapons plutonium.</p> <p>25 The Department of Energy also has a</p>	<p>responsibility to design, build, and operate two</p> <p>facilities that support the proposed MOX facility.</p> <p>These two facilities are the pit disassembly and</p> <p>conversion facility, or the PDCF, and the waste</p> <p>solidification building, or the WSB. While the pit</p> <p>disassembly and conversion facility and the waste</p> <p>solidification building are considered in the NRC's</p> <p>environmental review, it is important to note that the</p> <p>NRC does not have licensing authority over these</p> <p>support facilities. That responsibility rests with</p> <p>the Department of Energy. The NRC only has authority</p> <p>over the proposed MOX project.</p> <p>I'd like to briefly describe the EIS</p> <p>process. The <i>National Environmental Policy Act</i></p> <p>requires government agencies to prepare an</p> <p>environmental impact statement for major federal</p> <p>actions such as the potential licensing for the</p> <p>proposed MOX project. An environmental impact</p> <p>statement presents an environmental impacts (sic) of</p> <p>a proposed action, along with reasonable alternatives</p> <p>to that proposed action. Note that the bolded areas</p> <p>are opportunities for public involvement in the</p> <p>process, and we consider this a very important part of</p> <p>the EIS process.</p> <p>The NRC's involvement in the MOX project</p>

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decisions that the NRC will make for the proposed facility. The first is whether to authorize construction of the facility, and the second is whether to authorize operation of the facility. These decisions are shown in the middle of the slide. The NRC's environmental review is shown at the top portion of the slide, and consists of preparing the final environmental impact statement. The final environmental impact statement will be used by NRC to decide whether to authorize construction, and later whether to issue a license to operate the MOX facility.

The NRC's safety review is shown at the bottom portion of the slide. The safety evaluation report for the construction authorization request focuses on a safety assessment of the proposed design bases to determine if it meets NRC's requirements. NRC's final environmental impact statement and safety evaluation report for the construction authorization request will be the basis for making a decision on whether to construct the proposed MOX facility. We anticipate making that decision later this year.

Duke Cogema Stone & Webster plans to submit a license application to operate the proposed facility in October of 2003. The safety evaluation

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started when Duke Cogema Stone & Webster, the applicant, submitted an environmental report and requested to construct the MOX facility. We published a notice of intent to prepare an environmental impact statement in the *Federal Register* in March of 2001. During the scoping process, the public helped determine what issues would be addressed in the environmental impact statement. We have now completed the draft environmental impact statement in February of this year, and we sent copies to approximately 550 people in that month.

We are currently in the public comment period for the draft environmental impact statement. This meeting is being transcribed, and comments made here tonight will be included in the official comment record. The last slide will show ways you can comment additional -- submit comments additionally. We will review and consider the public comments and finalize the EIS later this year. Next slide.

As I mentioned earlier, NRC's role is to make a licensing decision regarding the proposed MOX facility. I'd like to take a few minutes to describe the licensing process, and how the environmental impact statement we're discussing tonight fits into NRC's decision-making process. There are two

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Can everybody hear me?  
 What I'd like to do is discuss the alternatives that we considered in detail in the environmental impact statement; and also those alternatives that we considered, but did not analyze in detail. Then I'll provide a summary of the impacts in they DEIS.

To understand better how we decided which alternatives to consider in detail, and those that we did not, that relates to the purpose and need of the environmental impact statement. As we stated in our notice of intent that Lawrence mentioned, the purpose and need of the MOX facility that's presented in this draft environmental impact statement is essentially the same as used by the Department of Energy in its programmatic EIS's for the surplus plutonium disposition program. Those are: The purpose and needs relate to agreements between Russia and the United States to reduce the threat of nuclear weapons by insuring that those materials are converted into a proliferation-resistant form. It also relates to reducing the risk of plutonium falling into the hands of terrorists or rogue states.

The draft environmental impact statement evaluates two alternatives in detail. These are the

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report on the operating application and the FEIS will be the basis for making a decision on whether to allow them to operate the proposed MOX facility. There will also be two opportunities for hearings. John Hull, with our Office of General Counsel, is here, and he can answer questions related to the hearing process. To summarize, a single environmental impact statement will be used to support a decision to construct and later operate the proposed mixed oxide fuel fabrication facility.

Now I would like to turn this over -- presentation over to Mr. Tim Harris, of my staff. Mr. Harris is the Project Manager and the Lead for the Environmental Review for the MOX project at the NRC. Tim?

MR. CAMERON: And if I could just interject one thing. Tim has a lot of material for you, and he's boiled it down to a minimum. And you're going to have a lot of questions, I know, as he goes through that. But what we'd like to do is to let him get through his presentation, and if you could just note your questions on the view graphs, then we'll -- we'll go back out to you and get those -- those questions.

MR. HARRIS: Thank you, Chip.

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 1 no-action alternative and the proposed action. And  
 2 I'll describe those. The no-action alternative would  
 3 be continued storage of this surplus plutonium at  
 4 existing DOE sites. The no-action alternative is used  
 5 as a baseline to compare alternatives in an  
 6 environmental impact statement.

7 The proposed action includes impacts from  
 8 constructing, operating, and later decommissioning the  
 9 proposed MOX facility. It also includes impacts  
 10 associated with other connected actions, such as  
 11 transporting radioactive materials. As Lawrence  
 12 mentioned, DEIS also includes impacts associated with  
 13 the two DOE support facilities that he mentioned, the  
 14 pit disassembly and conversion facility, and the waste  
 15 solidification building. DEIS also includes impacts  
 16 associated with the potential use of MOX fuel. For  
 17 the proposed action, we also evaluated differences in  
 18 using a sand filter, which was a topic I think was  
 19 raised here during scoping, with using a HEPA filter  
 20 system that was proposed by DCS.

21 As I said before, the purpose and need  
 22 determined which alternatives we analyzed in detail,  
 23 and those that we considered, in discussing the  
 24 environmental impact statement, but did not analyze in  
 25 detail. In addition to siting and technology options

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 1 evaluated by DCS in its environmental report, several  
 2 alternatives were raised during scoping, and also at  
 3 our meetings here last fall.

4 Immobilization was initially considered as  
 5 a reasonable alternative. However, following the  
 6 Department of Energy's amended record of decision for  
 7 the surplus plutonium disposition program, DOE  
 8 believed that an immobilization-only approach would  
 9 not meet the U.S.-Russia agreements. Therefore, it  
 10 did not meet the purpose and need, and that  
 11 alternative was not analyzed in detail in the EIS.

12 Another alternative that was raised at the  
 13 Charlotte meeting that we had last fall was  
 14 deliberately making off-specification MOX fuel. And  
 15 I'll describe what that is. Essentially, the surplus  
 16 plutonium has impurities in it that, in order to use  
 17 it in a reactor, need to be removed. This off-  
 18 specification MOX fuel alternative consists of not  
 19 removing those impurities. It would also include not  
 20 burning the fuel or using the fuel in a reactor.  
 21 Instead, you'd make the MOX fuel off-specification,  
 22 which had the impurities, and then you would store it  
 23 at spent fuel pools at existing reactor sites prior to  
 24 disposal in a geologic repository. Again, we felt  
 25 that this alternative did not insure that it was going

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by the Department of Energy. And the impacts that are presented in their draft environmental impact statement are essentially the same as those in -- in their previous -- DOE's previous environmental impact statements.

We've included in the packet of information that Lawrence mentioned comparison tables, so that if you want to look at numerical differences for any particular resource area, what was the person rem for the no-action alternative compared to the proposed action, you have the numbers in your hands. When I talk about them tonight, I'm just going to summarize them relative to current SRS conditions.

The impacts associated with the no-action alternative to the public and workers are considered to be low, and there would be no significant air quality or water quality impacts associated with this alternative. As you can imagine, storing material in a building doesn't generate a lot of water concerns or air concerns. There was also no significant waste management concerns or environmental justice concerns.

Now I'd like to walk through the technical areas for the proposed action. And again, the proposed action includes the impacts associated with three facilities: the proposed MOX facility; the pit

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to be proliferation-resistant, and did not meet the purpose and need.

The proposed action and no-action alternative impacts were evaluated for the following comprehensive list of technical areas. The technical areas on the right are considered to be less significant, and those are discussed in appendices. The technical areas on the left are discussed in the body of the report, and these are because these are issues that we felt had more significant impacts or were raised during scoping, and these were issues that were more important to the public. So we provided detailed discussion in the body of the report.

To allow more time for public comment, I'm only going to focus on the impacts on the left. These are human health risk, air quality, hydrology, waste management, and environmental justice. In addition, I'll summarize the impacts associated with transporting radioactive materials related to this project, and also the potential use of MOX fuel. And I'll also provide a summary of the cost benefit analyses.

First, I'd like to summarize the impacts associated with the no-action alternative. The impacts of this alternative were previously evaluated

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conservative scenarios were evaluated for a number of potential accidents. These scenarios are the short-term scenario, which assumed that people were exposed by inhaling contaminated material from a plume that would be generated following an accident. We also evaluated a long-term scenario, which includes the impacts of the short-term scenario, as well as impacts associated with eating crops that could become contaminated.

Potential accident impacts are evaluated in terms of risk. The classical definition of "risk" is the probability of an event times the consequences of the event equals the risk. In keeping with NRC's mission to protect public health and safety, we want to insure that the overall risk to the public is very small. Therefore, events that result in significant impacts are required to be made highly unlikely through the use of design safety features. And these design safety features are currently being evaluated as part of the safety evaluation process that Lawrence talked about.

In March we notified a number of stakeholders that we had identified an error in the accident consequences due to a computer code bug. We felt that it was important to inform stakeholders in

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disassembly and conversion facility; and the waste solidification building. There would be no adverse chemical or radiological impacts during construction from operating the three facilities. The annual public collective dose would increase by about 11% above what is currently received at the Savannah River Site. And the following slide will help put that in perspective. While 11% seems like it may be of concern, the numbers are actually quite small. Next slide, Dave.

This slide shows radiation doses from several sources, and also NRC's annual public dose limit. The average annual dose from natural radiation -- natural background includes radiation from the earth, and also from space, and is about 360 millirem. And a millirem is just a measure of radiation dose. The annual public dose limit -- NRC's annual public dose limit is 100 millirem. You would receive about six millirem if you had a chest X-ray. The annual dose to the public from normal operations of the proposed MOX facility, PDCF, and waste solidification building is less than one millirem.

Accidents have the greatest potential consequences of the impacts that we evaluated in the draft environmental impact statement. Two

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fire at the pit disassembly and conversion facility. This event was estimated to result in less than one latent cancer fatality in the short-term, and less than 100 latent cancer fatalities for the one-year exposure scenario. These estimates are conservatively derived, and do not include credit for intervention actions that would be taken to reduce long-term exposure resulting from eating contaminated crops. We didn't -- these numbers assumed that those events wouldn't happen. So -- so we think that these are bounding numbers.

The probability of these hypothetical events occurring is considered to be highly unlikely, as I mentioned before. Part of the safety review is to make sure that the safety processes and features are into the plant to make sure that the accidents are highly unlikely. These consequences of these highly unlikely events are significant. However, we believe that the overall risk to public health and safety is very small.

Air quality relates to compliance with the *National Ambient Air Quality Standards for Emission of Chemical Pollutants*. Air quality at the Savannah River Site already exceeds the particulate matter 2.5 micron or PM 2.5 standard. The proposed action would

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a timely manner. And, in fact, I think I found out about the -- the error on a Monday after, and by Thursday afternoon we'd issued a letter to about 500 people. So we felt it was very important to provide the public with accurate information.

During our subsequent review, we found an additional error in wind data that was provided by Duke Cogema Stone & Webster. This error essentially doubles the impacts associated with normal operations and potential accidents. These errors, however, do not change NRC's conclusion or preliminary recommendations. The numbers presented on the slide and the numbers in the comparison table which you have, have been updated. We also plan to issue errata sheets to people that were mailed copies of the EIS. By you attending this meeting, you'll get a copy of the errata sheets, and also we'll post those on the web.

Hypothetical events that caused the highest consequences were an explosion event at the proposed MOX facility. This hypothetical accident would be estimated to result in less than 50 latent cancer fatalities for the short-term exposure, and less than 200 latent cancer fatalities for the one-year exposure scenario. The other event was a tritium

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1 result in a 0.1% increase during construction, mainly  
 2 due from earth-moving activities; and a 0.01 increase  
 3 during operations. However, the Environmental  
 4 Protection Agency has delayed implementation of this  
 5 standard. If and when attainment plans are developed  
 6 by states such as Georgia and South Carolina, the  
 7 Savannah River Site could be required to reduce PM 2.5  
 8 emissions, and this could have some future impact to  
 9 the MOX facility.

10 Next I'd like to talk about surface water.  
 11 Surface water would not be significantly affected  
 12 during construction through the use of sedimentation  
 13 control measures. And there would be no direct  
 14 operational discharges to surface water. Waste from  
 15 the proposed MOX facility would be managed by the  
 16 Savannah River Site. Discharges from existing  
 17 Savannah River Site waste management facilities are  
 18 not anticipated to change significantly as a result of  
 19 processing this waste.

20 Groundwater would be used during  
 21 construction and operation. Approximately 37% more  
 22 groundwater would be used in the "F" area in the  
 23 proposed action. Their existing groundwater wells and  
 24 existing capacity is present to allow this water to be  
 25 used, and we don't believe that the use of this water

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1 will create a significant impact on the aquifer or  
 2 water quality.

3 There would be no significant impacts on  
 4 the Savannah River Site waste management capability  
 5 from processing the proposed waste of the proposed  
 6 action. Operation of three facilities would generate  
 7 about 300% more transuranic waste than is currently  
 8 being generated at the Savannah River Site. This  
 9 transuranic waste is planned to go to the waste  
 10 isolation pilot plant in New Mexico for disposal, and  
 11 the volume of the TRU waste that would be generated  
 12 would be about 3% of the waste isolation pilot plant  
 13 disposal capacity. Operation of the three facilities  
 14 would increase low level waste by about 32%, and non-  
 15 hazardous waste by about 60%. But again, the current  
 16 Savannah River Site waste management system can  
 17 accommodate these waste volumes.

18 An executive order issued by President  
 19 Clinton directed federal agencies to address any  
 20 disproportionately high or adverse human health or  
 21 environmental effects on low income and minority  
 22 populations. This is commonly referred to as  
 23 environmental justice. The impacts from construction  
 24 and operation of these facilities are not high or  
 25 adverse. Therefore, there would be no environmental

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in insignificant impacts.

The potential impacts associated with using MOX fuel are discussed in the environmental impact statement on a generic basis. The collective dose to members of the public from normal operations would be essentially the same, whether a reactor used low enriched uranium fuel, or a mixture of the MOX fuel and low enriched uranium fuel.

We also looked at various design-based accidents, and found that the risk associated with developing a latent cancer fatality between low enriched uranium fuel and a mixture of MOX fuel varied from about 6% lower to 3% greater. We also looked at beyond design-basis accidents. The risk there would vary from about 7% lower to about 14% greater.

We have recently received an application from Duke Energy to place lead test assemblies in either the Catawba or McGuire reactor. We will do additional site-specific evaluations before these lead test assemblies are placed in those reactors, and before MOX fuel would be placed in any reactor. That is, the NRC would determine whether it's safe to do that before it's allowed to happen.

The draft environmental impact statement includes a cost benefit analysis on both a national

justice concern associated with construction or operation. However, due to the prevailing wind directions, there is a potential impact on low income and minority populations from these highly unlikely events.

The risk associated with these accidents is considered to be small to all populations. However, the NRC felt it was important to include mitigation measures to reduce these potential impacts to low income and minority populations.

Transportation of materials was identified during scoping as an important concern to many stakeholders. The transportation analysis includes the shipment of surplus plutonium from various DOE sites to the Savannah River Site, and also depleted uranium from an existing enrichment facility to a conversion facility where it would be converted to a powder form, and then to the Savannah River Site.

We also provided an analysis of shipping fresh MOX fuel from the Savannah River Site to a generic Midwest reactor. The impacts associated with this transportation would be less than one latent cancer fatality from routine transport to the public along transportation routes, and also to transportation crews. Hypothetical accidents result

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scale and a regional scale. The cost benefit analysis is used by the NRC to determine its preliminary recommendation. On a national scale, the project would cost about \$3.85 billion. The national benefits would include safe use of excess weapons plutonium, and also employment and income.

On a regional scale, which includes 15 counties surrounding the Savannah River Site, which would be of interest to you all, the proportion national cost within that region would be about \$8 million. The regional environmental costs are considered, and the impacts presented in the draft environmental impact statement conclude that the impacts are not significant. The regional benefits would include \$350 million of income during construction, and about \$640 million during operation.

In conclusion, the impacts of the proposed action are generally not significant. Accident impacts from the pit disassembly and conversion facility and the MOX facility are significant. However, the probability of such an accident is considered to be highly unlikely. Therefore, the overall risk to the public is considered to be very small. There is a potential environmental justice concern should an accident occur. And, again, NRC has

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proposed mitigation measures to reduce those potential impacts.

Staff's preliminary recommendation is the proposed action with appropriate mitigation measures to reduce potential impacts in all areas. Before making any decision, NRC will consider comments here tonight, and decide whether changes need to be made in the environmental report -- I'm sorry, environmental impact statement, and then we'll finalize the environmental impact statement, as Lawrence mentioned. He also mentioned that we're doing a safety evaluation report, and that -- those findings would be completed before NRC makes any decision whether or not to authorize Duke Cogema Stone & Webster to construct the MOX facility.

When DCS submits an operating license application, NRC will review that application, and prepare a second safety evaluation report. NRC will only grant authority to operate the MOX facility if it can be shown to be safe.

The next slide shows ways that you can submit comments. You can either submit them in writing, you can Email them to me. There's also a place on the Web where you can type in comments, or you can fax them to me. Comments are due by May 14<sup>th</sup>.

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1 And I would ask that when you provide your comments,  
 2 if you can provide detail that helps us in determining  
 3 how to -- how to address your comment. You know, a  
 4 comment that says, "I'm for the proposed MOX  
 5 facility," "I'm against the MOX facility," are nice.  
 6 But if you say, "I'm against the MOX facility because  
 7 I don't like XYZ," that's a much -- much more useful  
 8 comment to us. Or if you say, "I'm for the proposed  
 9 MOX facility because it would create jobs in the  
 10 area."  
 11 But that concludes my remarks, Chip, if

12 you...

13 MR. CAMERON: Oh, great.

14 MR. HARRIS: Be happy to answer questions.

15 MR. CAMERON: Great. And thank all of you  
 16 for your patience. That was a lot of material. And  
 17 let's go out to people for -- for questions now.

18 Yes, sir? And if you could just give us  
 19 your name, please.

20 MR. MARESKA: Bill Mareska, Augusta,  
 21 Georgia. To Tim or Lawrence, is the DOE or the NRC  
 22 prepared to terminate any further action and abandon  
 23 creating the MOX facility if the Russian and American  
 24 political agreement on MOX construction falls through?  
 25 This was the principal reason for choosing MOX over

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1 immobilization. And if those agreements fail, is the  
 2 NRC or the DOE prepared to terminate the MOX facility  
 3 construction and revisit immobilization?  
 4 Thanks.

5 MR. HARRIS: That's a good question which  
 6 maybe will help identify the differences in roles  
 7 between the Department of Energy and the Nuclear  
 8 Regulatory Commission.

9 The Department of Energy, as Lawrence  
 10 mentioned, has the overall mission to -- for the  
 11 surplus weapons plutonium. And they talk to Russia  
 12 and are involved in the agreements. So if something  
 13 happens between Russia and the U.S. relative to the  
 14 agreements, those decisions would be made by DOE. NRC  
 15 is only involved in determining whether or not the  
 16 proposed MOX facility can be built and operated  
 17 safely.

18 MR. CAMERON: And I think that -- that  
 19 answers...

20 MR. HARRIS: Does that answer your  
 21 question?

22 MR. CAMERON: And if there -- I imagine if  
 23 there was some type of a change that caused the  
 24 Department of Energy to reevaluate, then they might  
 25 withdraw the application or something like that.

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1 MR. HARRIS: Right. But those -- those  
2 decisions would be made by others.

3 MR. CAMERON: Okay. Yes, let's go back  
4 here.

5 Yes, ma'am. And please give us your name.

6 MS. ROCHE: My name is Peggy Roche. I'm  
7 with Carolina Peace Resource Center. And I had  
8 several questions.

9 One thing, I think the man's question  
10 needs to be addressed by somebody, because it's my  
11 understanding that the Russians have halted their MOX  
12 facility plans at the moment, so that we are currently  
13 in violation of that agreement.

14 Now, another thing is that you mentioned  
15 terrorist attacks. What better "come and get me" is  
16 there than having 100% of the plutonium in the United  
17 States in one single place, instead of spread out  
18 throughout the United States? In one single place.  
19 And the reason it's not spread out is because every  
20 place that you've gone to start a plant, public outcry  
21 has kept a license from being issued in the Northeast,  
22 the Southwest, the Northwest, the West, and now you're  
23 here in the Southeast.

24 My other comment is you said that the  
25 workers at the facility would not be -- their health

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1 would not be adversely affected. I direct you to  
2 Section 5, Page 11 of your DEIS that admits workers  
3 who are building the site could have their health  
4 adversely affected by, quote, "Exposure to soil or  
5 groundwater previously contaminated by radioactivity  
6 or chemicals."

7 Are you admitting the Savannah River Site  
8 is currently unsafe before you start stirring up dirt  
9 with construction? Could I have an answer to any of  
10 my questions, please?

11 MR. CAMERON: Let -- let's start with the  
12 -- the last question about the draft environmental  
13 impact statement and worker health. Tim, did you --  
14 did you understand the...

15 MR. HARRIS: Yeah, I did.

16 MR. CAMERON: ...trail to that?

17 MR. HARRIS: Can you still hear me?

18 The -- the answer is, is that there --  
19 there was a potential concern that since soil that's  
20 currently at the MOX site was moved, that there could  
21 be some residual contamination. We don't think that's  
22 likely. The applicant has done some testing. But we  
23 felt that it was important, to insure worker safety,  
24 that we had measures in there for testing during  
25 construction to make sure that that didn't happen.

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going to make a comment, we want to hear about anything like that. But what we want to do now is want to try to answer any questions that people have; okay?

Okay, go ahead, Lawrence.

MR. KOKAJKO: Okay. First of all, the purpose of the program, as we describe in the purpose and need, is to eliminate surplus weapons plutonium and to get it into a form that is not subject to being diverted to subversive or terrorist needs. And I mentioned that in my opening remarks.

The -- also I'd like to point out, as far as the location in one site, I'm not questioning the policy of the Department of Energy in this case. We were mandated by law to evaluate the fact that they're going to do the proposed MOX facility. I have no authority to question why they do that. I'm now trying to implement that and make sure that it was done safely and in accordance with the law.

In terms of the -- the general question about what the NRC may be doing in response to terrorist...

UNIDENTIFIED: Use the microphone, please.

UNIDENTIFIED: Use the other microphone.

That one's not working.

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And I think the answer to your question of whether or not we think it's unsafe now is: No, we don't think it's unsafe.

MS. ROCHE: (Inaudible)

MR. CAMERON: We need to get you on the -- the microphone; okay? So we'll go back to you right now to see if you have a follow-up.

MR. HARRIS: Chip?

MR. CAMERON: Yeah, go ahead, Tim.

MR. HARRIS: Did we want to have the Department of Energy address...

MR. CAMERON: Let's work -- let's work through these questions. There were three issues that were raised. And one was the one that you answered. And did you have a follow-up on that one?

Before we go to -- I'm going to ask Lawrence Kokajko to tell us a little bit, because we know it is a concern to all of us. Where are potential terrorist issues? Where -- where are those issues considered in the NRC's evaluation of the application, and what is the Commission doing generally in terms of the events after September 11<sup>th</sup>?

Well, fine. Peggy, when you -- is it

Peggy?

Peggy, when you get up, and I know you're

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1 yes, sir.

2 MR. CAMERON: Okay, good. Good.

3 And Peggy, when -- you'll -- you'll have

4 your -- your chance to speak. But just let me give

5 you -- is there any other question you have?

6 Okay, go ahead.

7 MS. ROCHE: Did the Department of Energy

8 tell you to license just one facility in the United

9 States?

10 MR. HARRIS: It's important to understand

11 that the Department of Energy has the overall lead.

12 But the applicant that we're reviewing is Duke Cogema

13 Stone & Webster. We're responding to one application

14 from them. We don't deal directly with the Department

15 of Energy. Our point of contact is the applicant, who

16 is Duke Cogema Stone & Webster.

17 MR. CAMERON: So, in other words, we have

18 an application for this facility, and that's why we're

19 reviewing it. And if the program that we're not

20 responsible for develops the need for another

21 application, that would come in to us and we would

22 review that. But we can only review what is in front

23 of us; is that...

24 MR. HARRIS: That's correct. We don't

25 make the decisions where to put it or who applies.

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1 MR. KOKAJKO: It's not working?

2 MR. CAMERON: Yeah, we're not hearing it

3 out here.

4 MR. KOKAJKO: Is this one -- is this one

5 working?

6 MR. CAMERON: Better.

7 MR. KOKAJKO: In terms of the general --

8 what is the NRC doing in terms of terrorist

9 activities, the NRC is -- throughout the -- for a lot

10 of commercial uses of radioactive material, are doing

11 vulnerability assessments to insure that the -- we

12 have assessed potential vulnerabilities of diversion

13 and use of whether it's radioactive dispersal devices

14 of dirty bombs or other diversion type activities. We

15 have issued interim compensatory measures to the

16 licensees and applicants as to what they need to be

17 doing. And we have taken an increased security

18 awareness for all commercial licensees and applicants.

19 Beyond that, I cannot go into a lot more detail. But

20 we are aware of the terrorist threat, and we are

21 sensitive to it.

22 MR. CAMERON: The bottom line is, is that

23 potential terrorist threats are considered in the

24 NRC's evaluation of the application?

25 MR. KOKAJKO: In the safety evaluation;

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the MOX facility, wasn't associated with any...

MR. HOOKER: We're talking about Four Mile Creek. That's the one we're talking about.

COURT REPORTER: I'm sorry, we're -- I'm just not getting you.

MR. CAMERON: Yeah, we need to -- we need to get all this on the transcript.

Do you have one more question?

MR. HOOKER: The particular stream I'm talking about is Four Mile Creek.

MR. HARRIS: Yeah, we -- we did look at -- did the water quality associated with Four Mile Creek.

MR. HOOKER: And what did you come up with?

MR. HARRIS: We concluded that the proposed MOX facility would not significantly change the water quality in Four Mile Creek.

MR. CAMERON: And if you have information -- Mr. Hooker, if you have information that would -- that would cause us to -- to reevaluate that, please submit it to us.

Okay, great.

MR. HARRIS: Thank you.

MR. CAMERON: We have some questions out here, and one back there. And I don't know, does

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MR. CAMERON: Okay. Question, Mr. Hooker? Okay. Question?

MR. HOOKER: Did the NRC consider the environmental risk taken with the ratings on these streams that have got a high rate, medium rate, low risk? I mean, did you all get together with the EPA and look at where they match these things?

I'm going to give you a copy of it so you all can look at them. But...

MR. HARRIS: Yeah. What we evaluated...

MR. HOOKER: ...somebody needs to (inaudible).

MR. CAMERON: Okay. And that's why we're here, to find out what we should look at harder. And I think that your concern is -- is some of the streams.

MR. HOOKER: This had input with what you (inaudible).

MR. HARRIS: Okay, we looked at it. In Chapter 3 it evaluates what the current conditions are at the Savannah River Site. And -- but -- but as far as evaluating the impacts from the proposed action, we looked at those areas that would be connected to the proposed action. So -- so if there was a stream that was, you know, on the back 40 that was nowhere near

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1 anybody in the upper peninsula out there have a  
2 question?

3 UNIDENTIFIED: (Indiscernible)

4 MR. CAMERON: All right. Okay. Let's --  
5 let's go for some questions, and then at some point  
6 we're going to have to go to comment. Because we have  
7 -- luckily, we have a whole lot of people who -- who  
8 want to comment.

9 So let me start over here, and we'll go  
10 back there and over. And -- and please try to keep  
11 this to -- to mainly questions.

12 Don?

13 MR. MONIAK: I have a question concerning  
14 existing impact.

15 MR. CAMERON: Don Moniak.

16 MR. MONIAK: My name is Don Moniak, M-O-N-  
17 I-A-K.

18 Did you evaluate the impact that SRS would  
19 have if they were to -- say in their emissions if they  
20 were to release as much air pollution as they're  
21 permitted to, or did you evaluate what they are  
22 releasing? And the same with waste water discharge.  
23 Because their permit levels, what they're permitted to  
24 release is very different than what they do on an  
25 average. And some of the permit levels are very high.

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1 Then I had one other question regarding  
2 the NRC role.

3 MR. CAMERON: Why don't you -- why don't  
4 you put that before us now.

5 MR. MONIAK: Okay, the other question is,  
6 is the Nuclear Regulatory Commission responsible for  
7 making sure that the Atomic Energy Act is followed?  
8 And I'm referring to the provision on foreign  
9 ownership, control, and influence of a U.S. nuclear  
10 facility. And is the current determination on foreign  
11 ownership, control, and influence valid, considering  
12 Framatone bought out Duke Engineering a year ago?  
13 Thanks.

14 MR. HARRIS: The answer to the last  
15 question is: Yes, we do enforce the Atomic Energy  
16 Act. Those issues, ownership issues, are discussed in  
17 the safety evaluation report. And Dave could provide  
18 some information. But that's -- they're not really  
19 germane to the environmental impact statement.

20 MR. CAMERON: Okay. If we need to get  
21 more on that, we'll go to Dave. Can you answer  
22 Don's...

23 MR. HARRIS: Yeah, let me -- let me work  
24 -- let me work backwards.

25 The waste water issues I think we looked

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1 at because the waste from the proposed MOX facility  
 2 would go to existing SRS facilities. We looked to see  
 3 if -- if processing that waste would violate permits.  
 4 For the air quality, to be honest, Don,  
 5 I'm not sure whether we looked at existing emissions.  
 6 I want to say we did, but -- I see Ed nodding. I  
 7 think that's the case. We looked at what they are  
 8 currently emitting, not what they're permitted to  
 9 emit. But, again, we looked at that in terms of would  
 10 the MOX facility cause them to be out of compliance  
 11 with any of their air permits, and we thought the  
 12 answer was no.

13 MR. CAMERON: Okay. Great.

14 We're going to let Dave Brown tell us a  
 15 little bit. But the reference to Ed is Ed Pentecost,  
 16 who's back here. Ed, identify yourself. He is one of  
 17 our expert consultants that is helping with the  
 18 preparation of the environmental impact statement.

19 Dave, on the question of Don's on foreign  
 20 ownership.

21 MR. BROWN: Well, you know, just to give  
 22 you some context, we anticipate issuing our draft  
 23 safety evaluation report next month, in April. And in  
 24 there I can tell you our draft determination is we've  
 25 looked at the foreign influence and control

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1 information and we have advised and find there's no --  
 2 no issue there.

3 MR. CAMERON: All right, thank you.

4 Let's go to this gentleman right here.  
 5 Please give us your name.

6 MR. SUTHERLAND: I'm Jim Sutherland. I've  
 7 got a question. I noticed in the book  
 8 (indiscernible). Did you all send the EIS to anybody  
 9 that's on this list? I mean, like sitting  
 10 (indiscernible) first time I've seen the document, and  
 11 some of the data in here is not correct  
 12 (indiscernible).

13 MR. HARRIS: I'll take that as a comment  
 14 and hope that you'll provide some -- a written comment  
 15 showing where the datas are inaccurate and what the  
 16 datas should be.

17 MR. SUTHERLAND: My question is...

18 MR. HARRIS: Whether we contacted...

19 MR. CAMERON: Yeah, can -- can we -- do we  
 20 know if we sent a copy of the environmental impact  
 21 statement to local government officials?

22 MR. HARRIS: Yeah, we sent it -- we sent  
 23 it to about 500 people, and I don't remember whether  
 24 New Ellington was on the -- on that list.

25 MR. CAMERON: Okay. Let's make sure is

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1 there -- are any local government units that did not  
 2 get a copy, that people know about, or don't think you  
 3 got a copy, please give us that address and we'll send  
 4 them a copy.

5 MR. HARRIS: Actually, if you let Adrienne  
 6 know in the back table, she can make that happen and  
 7 we'll...

8 MR. CAMERON: And, Adrienne, just wave to  
 9 us.

10 All right, that's Adrienne back there. If  
 11 we can...

12 MR. HARRIS: But we'll take as an action  
 13 item, Chip, to make sure that New Ellington gets a  
 14 copy.

15 MR. CAMERON: Great. Okay. We'll put  
 16 that up on the board.

17 Let's go to Glenn Carroll.

18 MS. CARROLL: I actually thought he was  
 19 talking about something else. He didn't get his copy,  
 20 but do you have corrected data that you'll be getting  
 21 to us?

22 MR. HARRIS: Correct.

23 MS. CARROLL: You put some figures up  
 24 there tonight which were, you know, not very detailed.  
 25 But are those final figures?

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1 MR. HARRIS: Yes.

2 MS. CARROLL: So you do have the final  
 3 data?

4 MR. HARRIS: Yeah. Actually, the -- the  
 5 information that's in your handouts that talks -- the  
 6 numbers there are corrected numbers. But -- but  
 7 not...

8 MS. CARROLL: Are they just not attached  
 9 to the agenda?

10 MR. HARRIS: It's attached to the agenda;  
 11 correct. But not all the numbers that are in the EIS  
 12 are in there. That's why we're going to issue errata  
 13 sheets with -- you know, there are several huge tables  
 14 and other references. So we'll issue errata sheets  
 15 hopefully next week, so that you'll have those.

16 MS. CARROLL: Do you plan to hold public  
 17 meetings following the issuance of the correct data?

18 MR. HARRIS: I don't think that's  
 19 currently in the plan. But if you're making a  
 20 request, we would consider it, as always.

21 MS. CARROLL: I'm making a request.

22 MR. HARRIS: Well, thank you.

23 MR. CAMERON: And I would imagine that the  
 24 -- that issue might turn on whether the corrected data  
 25 would lead to or could lead to a different conclusion.

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1 MR. HARRIS: Well, again, as I stated in  
 2 my remarks, the corrected data does not change the  
 3 NRC's conclusion, you know. If the impacts associated  
 4 with operation, even though they're twice as much, are  
 5 still less than one millirem. The accident  
 6 consequences changed, but they're still large numbers.  
 7 So -- so the -- you know, whether the number was 20 or  
 8 400, it doesn't change the fact that they're  
 9 significant. So -- so even though the numbers  
 10 changed, it doesn't change our -- our conclusions.

11 MR. CAMERON: Okay. Thank you.  
 12 And let's go to this gentleman, and then  
 13 after that, down here, and we're working our way.

14 MR. CLEMENTS: My name is Tom Clements.  
 15 Just two -- couple issue of questions. As  
 16 we all know, four reactors have been chosen to do this  
 17 mission, which are mentioned in the draft EIS. But  
 18 four reactors are not enough to carry out the  
 19 irradiation of 34 tons. Where are the other two  
 20 reactors? Where does that stand? At least two more  
 21 are needed.

22 MR. HARRIS: The other two reactors would  
 23 be selected by either DCS or DOE. What we did in our  
 24 draft environmental impact statement was evaluated  
 25 impacts to reactors generically. So that would apply

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1 to whether the reactors near Charlotte ultimately  
 2 would become part of the program, or whether another  
 3 reactor in the nation would become. So we looked at  
 4 it generically so it's not a specific evaluation. And  
 5 also keep in mind that if and when a reactor requests  
 6 to use the MOX fuel, that requires an additional site-  
 7 specific review by the Nuclear Regulatory Commission  
 8 to determine whether it's safe to use that fuel at  
 9 that reactor.

10 MR. CLEMENTS: Also, because you -- you  
 11 mentioned the -- eliminating the immobilization  
 12 alternative because of the position of Russia. Has --  
 13 and this is -- may be more of a DOE thing. But has  
 14 the agreement with Russia been changed to dictate to  
 15 the United States what disposition options we choose?  
 16 I have a copy of it here and...

17 MR. HARRIS: I'm not aware that the  
 18 agreement has changed since...

19 MR. CLEMENTS: Well, let me just...

20 MR. HARRIS: ...2001.

21 MR. CLEMENTS: ...clarify this, and I will  
 22 make a comment. Because a mythology has been created  
 23 that we -- Russia is dictating to us that we do MOX.  
 24 And that is not true. The Article 3 of the agreement  
 25 says, "Disposition shall be by one of the following

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1 methods: irradiation, immobilization, or any other  
2 method agreed to by the parties in writing. So we  
3 appreciate it if you'd correct the document to reflect  
4 what is actually in the agreement. It allows  
5 immobilization, and the Russians can't dictate to us  
6 what we do with the material.

7 MR. CAMERON: Let's get some -- let's get  
8 some clarification on that for you from the Department  
9 of Energy. And, Ken, if you'd just introduce yourself  
10 and...

11 MR. BROMBERG: My name is Ken Bromberg  
12 from the Department of Energy. You are correct, the  
13 2000 agreement with Russia, plutonium (indiscernible)  
14 disposition agreement does not dictate. It allows  
15 either party to use immobilization and/or MOX.

16 However, Russia has made it known in  
17 negotiations with the U.S. over several years that  
18 they would not proceed to dispose of their surplus  
19 weapon grade plutonium if the U.S. used MOX -- rather,  
20 used immobilization only. The Russians feel that  
21 immobilization, to use their words, is another form of  
22 storage, because immobilization does not degrade the  
23 weapon grade plutonium so it can't be reused in  
24 weapons. As a result, the Russians have refused to go  
25 ahead and dispose of their plutonium. For that

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1 reason, the U.S. is proceeding, of course, as it is  
2 currently.

3 The other thing is that there have been a  
4 number of technical problems with immobilization in  
5 terms of the high level waste barrier, with the in-  
6 tank precipitation problem, and there are currently  
7 additional technical studies that have called into  
8 question the can and canister immobilization approach  
9 that we have been working on for many years. That's  
10 not to say it couldn't be fixed or corrected in the  
11 long-term, but right now there are a number of  
12 technical problems that MOX does not have.

13 MR. CAMERON: Thank you very much, Ken.  
14 We've got a couple here, and then we're  
15 going to come back here, and then we'll work over that  
16 way.

17 Yes, sir? Please give us your name.

18 MR. TEESE: Greg Teese from Aiken, South  
19 Carolina.

20 Tim, you stated that the numbers that were  
21 in the handout are the correct numbers?

22 MR. HARRIS: Yes, sir.

23 MR. TEESE: The numbers in the handout for  
24 the radiological accidents for continued storage, the  
25 no-action alternative, the dose that it has on the

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1 handout is 6.6 person rem; the dose that's in the  
2 draft environmental impact statement is 6.6 person  
3 sieverts. There's a difference of a factor of 100.  
4 Which is the correct number?

5 MR. HARRIS: Without looking at the  
6 document, I believe the information -- those numbers  
7 didn't change. So whatever's in the draft  
8 environmental impact statement is correct. And if --  
9 if, in fact, the handout used the wrong units, I  
10 apologize.

11 MR. TEESE: If the handout used the wrong  
12 units for that, on the same line as the proposed  
13 action, the explosion event, it's showing 91,000.  
14 What is the correct units for 91,000?

15 MR. HARRIS: I believe that person rem.

16 MR. TEESE: Not person sievert?

17 MR. HARRIS: Not person sievert. We -- we  
18 had both units, and we decided to convert them to rem  
19 since that's what most people understand in -- in the  
20 United States.

21 MR. TEESE: Okay, thank you.

22 MR. CAMERON: And I guess that the implied  
23 comment there is that we should really check these  
24 carefully to make sure that it's correct.

25 MR. HARRIS: Comment received.

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MR. HARMON: My name is Harry Harmon.

On your waste management slide you mentioned that the operation of the MOX plant would generate certain percentages, in addition to waste. My question is: Are those numbers for the total site or for "F" area?

MR. HARRIS: I believe those numbers are for the total site. Those are percentages above what are currently being generated by the Savannah River Site.

MR. HARMON: Is that on an annual basis or...

MR. HARRIS: Correct, annual basis.

MR. HARMON: Annual basis. All right.

MR. CAMERON: Thank you very much. I think we have two questions right here; or one.

Yes, sir?

MR. WALKER: My name is David Walker. I'm from Aiken.

Tim, you keep mentioning mitigating consequences regarding environmental justice. What exactly are those mitigating consequences?

And the second question is: Will the corrected EIS statement from your department be

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1 available prior to the May 14 deadline for submitting  
2 comments?

3 MR. HARRIS: Yeah, we hope to get that  
4 information out to you next week. Obviously the mail  
5 will take a little bit of time to get it to you. But  
6 we're also going to post that on the -- on our  
7 website. So if you want it quickly, you can access it  
8 that way. And yes, it will be available before the  
9 May 14 comment period.

10 Your question was: What are the  
11 mitigation measures that are proposed? Is that...

12 MR. WALKER: Yes.

13 MR. HARRIS: The Nuclear Regulatory  
14 Commission -- there's a number of mitigation measures  
15 discussed in the EIS, some of which were proposed by  
16 the applicant, DCS, and some of which were proposed by  
17 NRC.

18 These were proposed by the NRC, and they  
19 include focused public information campaigns to  
20 provide technical and environmental health information  
21 directly to low income and minority populations, or to  
22 local agencies and representatives for those groups.

23 Also, additional programs directed at  
24 local communities providing emergency response  
25 services or other emergency facilities to incorporate

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1 additional measures to protect low income and minority  
2 populations. So it's to EDC and also to provide some  
3 additional focus on environmental -- I'm sorry,  
4 emergency responses.

5 We received some comments last night from  
6 a Mr. Cutter on -- on some specifics, and that's  
7 really some of the things that will be helpful to us,  
8 is -- is as you review these mitigation measures, if  
9 you can provide some more details or additional ways  
10 that you think mitigation could happen, we're very  
11 receptive to that.

12 MR. CAMERON: Okay. Follow-up?

13 MR. WALKER: Follow-up. Will these  
14 measures take effect before an accident or after?

15 MR. HARRIS: They would -- they would  
16 happen before the accident. Certainly -- certainly  
17 the information can...

18 MR. CAMERON: You may want to rephrase  
19 that.

20 [Laughter.]

21 MR. HARRIS: Am I still beating my wife?  
22 I don't know.

23 [Laughter.]

24 MR. HARRIS: The information campaigns  
25 would happen if and when a license was granted, before

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1 any hypothetical event happened. So that -- you know,  
2 we're not going to wait for an accident to decide, oh,  
3 we better go to mitigate it. That mitigation needs to  
4 happen before an unlikely event happens.

5 MR. CAMERON: Okay. Thanks, Tim.

6 MR. HARRIS: Is that better, Chip?

7 MR. CAMERON: Sounds better.

8 MR. HARRIS: And call my wife to see --  
9 see if I'm still beating her.

10 MR. CAMERON: Okay. Brendolyn, do you  
11 have a question?

12 MS. JENKINS: Good evening. My name is  
13 Brendolyn Jenkins and I'm from Aiken, South Carolina.

14 I want to piggyback for a second on the  
15 question that Reverend Walker asked. If it's done  
16 before, you said that you would give technical  
17 information in a public information campaign. Would  
18 those campaigns be held specifically in the impacted  
19 community?

20 MR. HARRIS: I think the answer would be  
21 yes. But if -- but if you think that they should be  
22 in other areas, you know, we're receptive to that.

23 MS. JENKINS: Heretofore, until last  
24 Thursday, it was the first meeting we've had in our  
25 community. So that's pointedly why I asked.

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1 My question is, with the waste management,  
2 300% more TRU waste; 32% more low level; 60% more  
3 solid waste. Will new or existing facilities be used  
4 to handle that waste? And if it's coming from around  
5 the site and not this facility, how, then, does these  
6 numbers specifically address MOX?

7 MR. HARRIS: Those numbers represent the  
8 percentage increase that the MOX facility would have  
9 relative to what's currently being produced at the  
10 Savannah River Site. That is, if you look at the  
11 number of cubic meters or volume of waste, say TRU  
12 waste that the MOX facility will create annually, and  
13 divide that by what the Savannah River Site already  
14 does, you get 300%, about. So those numbers relate to  
15 that.

16 Your question also related to whether new  
17 facilities would be built. Most of the waste would be  
18 processed by existing Savannah River Site facilities.  
19 And, as I mentioned, those facilities have the  
20 capacity and are permitted to manage that waste. I --  
21 we also talked about the waste solidification  
22 building. And that will be a new facility that will  
23 process waste from the proposed MOX facility and also  
24 the pit disassembly and conversion facility. So that  
25 would be new construction.

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MS. JENKINS: And did you look at the additional impacts, environmental impacts, on these waste streams?

MR. HARRIS: Yes, ma'am, we did. And as I stated in my presentation, we concluded that the effort of processing the waste from the proposed action would not change significantly the permitted effluents from those waste process facilities at the Savannah River Site.

MS. JENKINS: One last question. On the readjusted or recalculated figures shown, I understand how you made the readjustments and came up with the new conclusions. But what does DOE, NRC, and DCS consider an acceptable death or disease number?

MR. HARRIS: I don't know that we have an -- a definition for that. Certain numbers of latent cancer fatalities that are very small are generally acceptable, but I don't think there's a hard-and-fast number on that.

MR. CAMERON: And I think that Tim used the word "we." You said DOE, DCS, NRC. And I think Tim is just speaking for -- for the NRC at this point. But it's a very pertinent question for the regulatory agency.

Lawrence?

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MR. KOKAJKO: We don't consider any death acceptable, first of all. Let -- first, we're talking about latent cancer fatalities, and it's not an actual death. Although we have...

[Laughter.]

MR. KOKAJKO: ...although we have come up with...

[Laughter.]

MR. KOKAJKO: Sir, please. Although we have come up -- we have done a bounding analysis to see what possible could happen in terms of these hypothetical accidents. The other part of that -- our job is to insure -- assure that they don't happen. That's what the safety review is for. We want to make those things highly unlikely. But the NEPA process asks us to take a look at the broad bounding case, and so we have done that. But we do not -- we don't find any death acceptable. We never have, and we never will.

MR. CAMERON: Okay, thank you.

We're going to go to this side, questions, and then we're going to get started with public comments. And, Jen, I see your hand. We'll go to you before we get public comments.

Gerald?

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1 be working on the DOE when they -- when the material  
 2 is in the hands of DOE, and when it's transferred to  
 3 the NRC license facility, are you only considering the  
 4 -- so there's no memorandum of understanding for  
 5 identifying...  
 6 MR. HARRIS: Well, I think MOX workers  
 7 would be employed by Duke Cogema Stone & Webster, and  
 8 other workers at the Savannah River Site are employed  
 9 by -- by other various DOE contractors.  
 10 MR. RUDOLPH: So there's no -- there's no  
 11 memorandum of understanding for that?  
 12 MR. HARRIS: Not that I'm aware of. But  
 13 I'll let Dave talk about the memorandum of  
 14 understanding for security of material, if you can.  
 15 MR. BROWN: Let me just try to address  
 16 your question with regard to who's a worker. For  
 17 Savannah River Site employees who -- who would not be  
 18 working at the MOX plant, DCS has committed to meeting  
 19 a certain section of our regulation that says we're  
 20 going to train those people about the risks at the MOX  
 21 plant, and we're going to provide both posting --  
 22 postings and notices. And if they do that, then our  
 23 regulations allow that they be treated as workers for  
 24 the purposes of the safety evaluation. That's their  
 25 proposal, and that's what we're evaluating as part of

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1 MR. RUDOLPH: I'm Gerald Rudolph from  
 2 Columbia. I have a few questions.  
 3 One is about memorandum of understandings.  
 4 Do you -- where can we get a copy of the memorandum of  
 5 understanding between the Department of Energy and NRC  
 6 about the security for materials, about the transfer  
 7 of materials between the -- within the complex  
 8 commercial process for MOX. And where are we going to  
 9 find the memorandum of understanding for who is or is  
 10 not a MOX factory worker, for purposes of this  
 11 accident analysis? That's the first question.  
 12 And you want me to go through all the  
 13 questions first?  
 14 MR. HARRIS: No, please.  
 15 I'm going to ask Dave to talk about the  
 16 MOU. I think as far as -- I didn't quite understand  
 17 your last question about what was a MOX facility  
 18 worker. Certainly...  
 19 MR. RUDOLPH: Who is -- who is a MOX --  
 20 for the benefit of accident analysis, who is or is not  
 21 a MOX factory worker or a MOX facility worker.  
 22 MR. HARRIS: Well, those would be workers  
 23 that -- that operate within the footprint of the  
 24 proposed MOX facility.  
 25 MR. RUDOLPH: I mean, but some of them may

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1 the safety review.

2 MR. RUDOLPH: So that allows you to  
3 exclude them from the submission of off-site impact?  
4 If they -- other -- if they -- more people -- how does  
5 that work? How do you define who's on-site and off-  
6 site from the MOX facility?

7 MR. BROWN: It does -- there is a little  
8 bit of a complication. For the purposes of a safety  
9 review, when we're looking at potential accidents,  
10 we're considering those Savannah River Site employees  
11 who are within the site boundary to be workers. When  
12 we're looking at normal operation, if the facility is  
13 constructed and operating, the question of who's a  
14 member of the public and who's a worker really is  
15 determined by what does that person do for a living.  
16 Are they already working at the Savannah River Site in  
17 an occupation where they're exposed to radiation? If  
18 they are, then they're workers. If they're not, then  
19 they're members of the public. And the NRC's position  
20 is: Yes, there can be members of the public on the  
21 Savannah River Site, even employees of the plant. And  
22 the radiation dose limits for those individuals would  
23 be NRC's limits for members of the public.

24 Is that answer your question (sic)?

25 MR. RUDOLPH: Perhaps. Not

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1 satisfactorily, though. Let me go to the next  
2 question.

3 MR. BROWN: Okay.

4 MR. RUDOLPH: You have -- from what I  
5 understand, the NRC says that the throughput rate at  
6 the factory could -- could (indiscernible) about 10  
7 years or 20 years. What is that -- what is that  
8 discussion about? And you showed us a 20-year license  
9 period for the operations, but -- but then you used 10  
10 years of operations for the analysis. What -- can you  
11 explain?

12 MR. HARRIS: Yeah. Basically we assumed  
13 that the license would be a 20-year period. And that  
14 would include they would have to have a license for  
15 initial startup and then processing. But the actually  
16 throughput we estimated it would take about ten years.

17 So we looked at things on an annual basis,  
18 and the maximum throughput I think was 3.5 metric  
19 tons, number comes to mind, on an annual basis. So we  
20 look at the impacts annually. So if they didn't  
21 produce, if the period of operation was longer than  
22 that, the throughput would be less. There's only so  
23 much plutonium that's going to be put through the  
24 facility.

25 MR. RUDOLPH: So you're assuming the

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1 impact is the same?

2 A. We assume that the impacts are bounded by  
3 -- assuming a ten-year operation period, with a  
4 maximum throughput of 3.5 metric tons.

5 MR. RUDOLPH: One more question. You say  
6 that the -- that the -- the impacts of the -- of 40%  
7 MOX or a 100% flow of enriched uranium would be the  
8 same; is that -- how do you support that?

9 MR. HARRIS: There's details in the  
10 environmental impact statement. But essentially, the  
11 conclusion that was drawn was on a generic basis. The  
12 emissions would be about the same from normal  
13 operations, whether it used -- the reactor used a  
14 mixture of MOX fuel or 100% low enriched uranium.

15 MR. RUDOLPH: Does it consider the  
16 temperature difference between...

17 MR. HARRIS: That segment's based on  
18 effluents that would come out of the plant; not  
19 internal safety operations, which would, as I  
20 mentioned, would be evaluated on a site-specific  
21 basis.

22 MR. RUDOLPH: So you're assuming that --  
23 that the hotter MOX fuel would have the same  
24 parameters or have the same impact, the same...

25 MR. HARRIS: No, not the same -- not the

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1 same parameters, but the emissions from the reactor  
2 would be the same.

3 MR. RUDOLPH: And is there a study for  
4 that, or did you just assume that?

5 MR. HARRIS: We looked at some information  
6 that the Department of Energy had, and the references  
7 are provided in the environmental report -- I mean,  
8 environmental impact statement, excuse me.

9 MR. CAMERON: Thank you, Gerald.

10 Did you have a question, sir?

11 MR. WATSON: My name's Darrell Watson.  
12 I'm from Columbia. Got a couple of questions for you.

13 First, has a safe, efficient, and  
14 successful use of MOX fuel been -- fuel made with  
15 weapons grade plutonium ever been accomplished?

16 MR. HARRIS: Do you want to answer that,  
17 Dave?

18 MR. BROWN: Could you repeat the question,  
19 please.

20 MR. WATSON: Has the safe, efficient, and  
21 successful commercial use of MOX fuel made with  
22 weapons grade plutonium ever been accomplished?

23 MR. BROWN: No, there -- there is no  
24 history in the United States of using weapons grade  
25 MOX fuel in a commercial nuclear power reactor.

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1 MR. WATSON: Is there any record of that  
2 being done anywhere in the world?

3 MR. BROWN: Not except on a test or  
4 experimental basis. No, not that I'm aware of.

5 MR. WATSON: So South Carolina's going to  
6 be the first test, so to speak, for the MOX program in  
7 the world?

8 MR. BROWN: The -- the...

9 MR. WATSON: In this -- in this regards of  
10 it being made with weapons grade plutonium.

11 MR. BROWN: With respect to weapons grade  
12 plutonium. And the distinction you're making is  
13 important. Because certainly there are countries in  
14 the world that do reprocess nuclear fuel, recover the  
15 plutonium, and put that back through a mixed oxide  
16 fuel plant to put back into reactors. France, of  
17 course, being the notable example, and the fact that  
18 Cogema is a partner in the consortium that's the  
19 applicant for this plant, reflects their experience in  
20 this.

21 MR. WATSON: Okay, that leads to my second  
22 question about Cogema. Given that Cogema's part of  
23 the consortium to handle the MOX process in the United  
24 States and South Carolina, given its bad safety and  
25 environmental record, especially in La Hague at the

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1 processing plant in France, why would DOE even bring  
2 a licensing consideration with Cogema involved?

3 MR. HARRIS: We have looked at some of the  
4 information that the applicant has provided us, that  
5 includes their experience in France, especially with  
6 regard to environmental effluents or emissions, if you  
7 will.

8 MR. WATSON: What's the status of Russia's  
9 MOX program currently, and does it use weapons grade  
10 plutonium like ours?

11 MR. BROWN: The Russian program, what  
12 we're working to here is -- what DOE's plan is, is to  
13 maintain parity between the U.S. and the Russian  
14 programs. Of course, their program is also about  
15 surplus weapons grade plutonium.

16 MR. WATSON: Okay, I'm -- correct me if  
17 I'm wrong, but I thought their program was currently  
18 at a stall. They're not processing MOX currently, as  
19 we speak.

20 MR. BROWN: Oh, no, they -- they were --  
21 there is no Russian MOX facility constructed or  
22 operating at this time; that's true.

23 MR. CAMERON: Right. We really need to  
24 get going to hear all of your -- your comments. We'll  
25 take one question here; we'll go over to Jen; and then

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MR. HARRIS: Do you want to answer that, Dave? Dave's involved with the safety review, and these really relate to -- because the measures to make those accidents highly unlikely are in the safety report review. So I'll let Dave discuss what they're doing there.

MR. BROWN: In the handout and one of Tim's slides we showed like a fine line of the safety review and the environmental review. One thing you see right away is the safety review extends for a couple of years from now. And so one of the things we're going to be doing, as we go through that licensing review, is trying to get a much better understanding of what the applicant thinks the likelihood of those accidents are. And more importantly, what's the reliability of the equipment that's going to be -- be used to prevent those accidents.

MR. GUILD: I'm sorry to interrupt. But you're going to make the decision now as to whether or not the *National Environmental Policy Act* requirements are met, whether you should authorize going forward with this as a matter of cost benefit. You're telling us you don't know the answer as to the likelihood of that accident occurring?

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we're going to start public commenting.

Yes, sir?

MR. GUILD: My name is Bob, and I have a couple of questions. I think maybe an appropriate observation in response to the environmental justice question, that consequences are high for having significant facilities, whether it be 20 or 2000. But that consequence has to be taken into account of risk of that consequence, which is a probability (indiscernible). How likely is the fact -- assume the accident would happen that would lead to those cancer deaths.

Yet, I find the EIS completely devoid of any effort at putting a number on that probability function, which is a key to your conclusion which is that the risk is acceptable. So you use a very precise number for the number of deaths, and then acknowledge an error and correct that error and create the impression that you know what the consequence would be. Yet I don't see any serious effort at trying to project what the actual probability of that accident in that occurring. And can you enlighten us on why you didn't do that; and if you did do that, didn't express in the EIS what that -- what that chance of a serious accident is at the facility.

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MR. BROWN: We're -- right now we're going to issue a draft report next month that's our consideration of the likelihoods for a construction authorization. My point is we're going to continue to look at those likelihoods as we continue through looking at their application to possess and use this plutonium in the plant.

MR. CAMERON: Could we get -- could we let Lawrence speak here, because you're raising an important point as to where is the supporting data for the conclusion you've requested.

Lawrence?

MR. KOKAJKO: Yeah, part of it, as -- as I mentioned earlier, the -- is the NEPA process, itself. It said to take a look at...

UNIDENTIFIED: Can't hear you.

MR. KOKAJKO: Some of the -- the problem I know is with the NEPA process, itself. It told us to take a look at the bounding conditions and the parameters of what these consequences are. Our regulations say these accidents will be made highly unlikely. And the DCS has to submit an integrated safety assessment which takes a look at the probabilities of these accidents occurring. And, as Dave pointed out, reliability of equipment,

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preventative and mitigating measures that may be used to prevent and preclude these things from occurring, so that we don't ever get into an accident situation where there could be latent cancer fatalities, or even actual deaths.

And, by the way, it includes more than just radiation. It includes anything like chemicals, chemical exposures, and those -- those, as well. As well as physical -- you know, normal physical things like, you know, falling off ladders and stuff like that.

MR. GUILD: I mean, just an observation, not to belabor the point, but good government decision-making, the NEPA requires -- requires you to be explicit now about those very issues. Because I want to know what the risk is of me walking across the street and not getting hit by a car, but I want you to know what the risk is of a serious accident happening at the MOX facility before you decide that you should go forward with licensing this plant.

MR. KOKAJKO: Before we go forward with licensing, we will do that. But for the environmental purpose for this evening, the assessment of the draft environmental impact statement, we've given you what we think are the -- could be the potential

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1 happen. But I think that the question would be: What  
2 would the NRC require in terms of new licenses,  
3 etcetera, etcetera, if that ever did happen. And we  
4 don't know if that's even feasible.

5 But, Lawrence, can you shed some light on  
6 that? I don't know if you can or not.

7 MR. KOKAJKO: I'm not sure I can prove a  
8 full response to your -- your question. Anything that  
9 would be involved in fuel fabrication would be  
10 licensed under 10 CFR -- excuse me, Title X, Code of  
11 Federal Regulations, Part 70. And those regulations  
12 do allow that any facility that fabricates and  
13 enriches fuel for use in commercial nuclear power  
14 plants, that it meet certain safety and environmental  
15 standards.

16 MR. CAMERON: The license would be very  
17 specific about what the facility could do.

18 MR. KOKAJKO: Correct.

19 MR. CAMERON: And if there was going to be  
20 any major change to that, it would be a new license.

21 But let me see if we can get the  
22 Department of Energy to shed some light on this. Ken?

23 MR. BROMBERG: Very simply -- this is Ken  
24 Bromberg again. That facility that's being designed  
25 and planted and built at the Savannah River cannot be

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1 consequences. And we know that the regulations are  
2 going to require that those accidents be made highly  
3 unlikely.

4 MR. GUILD: All right. The last question.  
5 I heard some -- a useful question earlier about  
6 license term and the projected expected throughput  
7 term, if you will, for the processing of the surplus  
8 plutonium. You know, I have a very strong concern  
9 that we're going to end up with a MOX fabrication  
10 facility that's -- that processed its surplus weapons  
11 plutonium, and then is going to be available for  
12 commercial mixed oxide fuel production for, you know,  
13 the wonderful, long-promised, never realized closed  
14 commercial nuclear fuel cycle in this country. And  
15 that, like those facilities you mentioned in Europe,  
16 we're going to suddenly have commercial mixed oxide  
17 fuel promoted with weapons non-proliferation as the  
18 foot-in-the-door.

19 So can you tell us what would be required  
20 in order to convert this facility, at the end of its  
21 license life, into a facility that does those things  
22 that I'm concerned about, and that is becomes a  
23 commercial fuel production facility.

24 MR. CAMERON: And you may -- you may not  
25 know, in terms of physical adaptation, what needs to

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1 used as a commercial facility. The entire facility,  
2 the shielding in it, is designed for the low radiation  
3 for weapon grade plutonium. It's entirely impossible  
4 to use for reactor fuel grade plutonium.

5 UNIDENTIFIED: Impossible?

6 MR. BROMBERG: Yes. Without just  
7 completely basically tearing out all the piping in the  
8 entire facility, and redesigning and rebuilding it.  
9 The facility just can't be used for that purpose.

10 Furthermore, the facility will be shut  
11 down at the end of the approximately ten-year  
12 plutonium disposition mission.

13 MR. CAMERON: Great. Thank you very much,  
14 Ken.

15 Okay, we're going to go to one last  
16 question over here, and then we're going to go to hear  
17 some more from all of you a bit more formally.

18 Jen?

19 MS. KATO: I'm Jen Cooch Kato. I'm with  
20 the Sierra Club in Georgia. I have actually three  
21 questions that will be answered very quickly.

22 The first one is an extension of this  
23 gentleman's question, and it's very direct and has a  
24 very simple answer. And the question is: Was the  
25 probability of one used in assessing the human health

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impacts of any accident scenario?

MR. BROWN: When you're looking at the  
consequences of the accident that's summarized, yes,  
it's a probability of one. In other words, the event  
was assumed to have occurred. Those are the  
consequences we've estimated.

MS. KATO: When I -- when I look at the  
doses and the -- and the (indiscernible), for example,  
for an explosion, which would undoubtedly involve  
plutonium, these figures are so miniscule that it  
seems like what you have done is actually risk-  
informed calculations. And risk-informed calculations  
do not assume a probability of one when you actually  
go out as far as latent cancer fatalities. They have  
been diluted by the probability of the accident  
occurring, and then further diluted by the probability  
of it occurring in a given day.

MR. BROWN: I understand your comment.  
That is not what we did.

MS. KATO: Okay, thank you.

Second, why not a 20-year windrows instead  
of a five year, since we're dealing with a possibly  
20-year mission?

MR. BROWN: The five-year windrows, I  
think, reflects a good estimate of the wind conditions

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1 at the Savannah River Site. But if you have  
2 information about, you know, updated data or something  
3 you'd like us to know about, we'd be happy to hear  
4 about that.

5 MS. KATO: Well, the dose reconstruction  
6 is looking at a 20-year windrow, so it's available.  
7 I know DOE has it.

8 And my last question is: What is the  
9 current NRC plan? This doesn't really have to do with  
10 this DEIS, but I'm really curious about it. What's  
11 the current NRC plan for continued supervision of the  
12 MFFF? And I'd like to feel like the guys in the white  
13 hats are out there on a daily basis or a very frequent  
14 basis.

15 MR. CAMERON: And could you just enlighten  
16 all of us on that acronym.

17 MS. KATO: MOX fuel fabrication facility.

18 MR. HARRIS: Fabrication facility.  
19 Was your -- was your question, Jen, what  
20 are we going to do...

21 MS. KATO: On the provision of ongoing  
22 oversight.

23 MR. HARRIS: Yeah. I think -- I think, if  
24 I understand your question---and I know you'll correct  
25 me if I didn't get it right---is what are we going to

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1 do in the future. You know, are we going to issue  
2 this license and walk away.

3 MS. KATO: I just want to know what your  
4 plan...

5 MR. HARRIS: The plan would be that, you  
6 know, again, we're going to look at the construction  
7 decision. We talked about the EIS. We're going to  
8 look at the operation. In the event that we do issue  
9 a license, we do inspections at the facilities, the  
10 current plan is to have an onsite resident there who  
11 is there on a daily basis to look at the operation of  
12 the facility. So, yeah, we will be there.

13 MR. CAMERON: If the NRC licenses it,  
14 we're going to regulate it; right?

15 MR. HARRIS: I think if we license it, we  
16 are regulating it; right?

17 MR. CAMERON: And -- you know what I mean.

18 MR. HARRIS: I know what you mean.

19 MR. CAMERON: All right. Okay, thank you  
20 for those questions.

21 We're going to go to -- to speakers. We  
22 have about 25 people. So I really need to ask you to  
23 try to be concise and -- and don't go any longer than  
24 five minutes. Of course, we want to stay and hear  
25 what everybody has to say. But it would help us all

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1 if -- if you could try to keep it in that window.  
 2 And the first four speakers, so that you  
 3 have an idea of when you're coming up here, we're  
 4 going to go to -- to Bill Robinson, then Camille  
 5 Price, Mal McKibben, and Thomas Williams.  
 6 So, is Mr. Robinson here? Oh, Mr.  
 7 Robinson. There he is. All right.  
 8 MR. ROBINSON: I'm Bill Robinson from  
 9 Allendale County, Vice Chairman of the county council.  
 10 I'm certainly proud to be here to express  
 11 our support for the MOX fuel facility at SRS. As we  
 12 went back and looked at our history, Allendale County  
 13 has always supported our nation's effort to keep us  
 14 strong and secure. Now, if you go back 50 years ago--  
 15 --and I think we all can remember---now, this country  
 16 was called upon to develop one of the most devastating  
 17 weapon known to mankind. And we did it basically, not  
 18 because we wanted to be the world powerhouse, so to  
 19 speak; we did it simply because -- to protect this  
 20 country. And we did it, also, to discourage the  
 21 misuse of that most powerful weapon by other nations.  
 22 Now, as we look today, to me the scenario  
 23 is the same. We have different players. In fact, we  
 24 have more players. The technology for weapons of mass  
 25 destruction is available to any nation. And what's

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1 scary, weapon grade plutonium, the supply is  
 2 plentiful. I think Russia looked at it, extended a  
 3 hand to us to come and help. Again, I think we see  
 4 our nation's security at risk.  
 5 We support the MOX initiative, simply  
 6 because we feel what we face today is as great as what  
 7 we faced 50 years ago. I thank you.  
 8 MR. CAMERON: Thank you very much, Mr.  
 9 Robinson.  
 10 And we're next going to go to Camille.  
 11 Camille Price.  
 12 Is Camille still here?  
 13 (No audible response)  
 14 MR. CAMERON: Okay. Mr. McKibben. Mal  
 15 McKibben.  
 16 MR. MCKIBBEN: Thank you very much.  
 17 My name is Mal McKibben, and I'm a native  
 18 of North Augusta and have an office over in Aiken as  
 19 Executive Director of Citizens for Nuclear Technology  
 20 awareness, CNTA.  
 21 We are the nation's largest citizen-based  
 22 pro-nuclear education group with about 2,400 members.  
 23 We strongly support the pit disassembly and conversion  
 24 facility and the MOX facility, and we have been  
 25 encouraging that for a long time.

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1 However, when we look at the -- the draft  
 2 environmental impact statement, we do find quite a  
 3 number of inadequacies and quite a number of flaws.  
 4 I'm only going to talk about one of those tonight, but  
 5 in the written statement I'll address some of the  
 6 others, which have to do mainly with the lack of  
 7 sufficient data so that you could analyze it.

8 The guidance that is given to NRC -- by  
 9 NRC and DOE to the people who write environmental  
 10 impact statement and who are required to evaluate  
 11 accidents says that those accidents should be  
 12 reasonably foreseeable. Unfortunately, it doesn't  
 13 tell you what that is. Is that -- is that a once-in-  
 14 a-million-year frequency for that accident; or is that  
 15 a once-in-a-billion-year frequency for that accident;  
 16 or is that once in a trillion? You know, the earth's  
 17 only a few billion years old, so I'm not quite sure  
 18 how silly we want to get with that.

19 But the hypothetical accident in the draft  
 20 EIS is a fire that takes place in a plutonium glove  
 21 box in the pit disassembly and conversion facility.  
 22 There is also one in the MOX plant that I just saw  
 23 tonight, I guess, for the first time. But it assumes  
 24 that the fire in that plutonium cabinet or glove box  
 25 gets out of control; it releases tritium and plutonium

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1 from its glove box confinement. The tritium and  
 2 plutonium are soon to be expelled out of the  
 3 ventilation stack of the building. And some fraction  
 4 of that, then, gets disbursed and deposited on  
 5 farmers' products that are intended to be eaten by  
 6 people and not animals.

7 And then it further assumes that those  
 8 products are eaten 100% by people with 100% of that  
 9 radioactivity still on it. And it goes out for 50  
 10 miles. And it contains both a tritium component and  
 11 a plutonium component, but unfortunately the EIS  
 12 doesn't give you enough data to figure out how much of  
 13 each one.

14 The scenario contains a lot of  
 15 uncertainty. And it is CNTPA's opinion, based on what  
 16 we've looked at so far, that this pathway through the  
 17 food chain simply is an accident scenario that does  
 18 not meet the reasonably foreseeable criteria. And I  
 19 want to talk a little bit about why we think that is  
 20 so. And also we don't believe that the fluid pathway  
 21 should be considered or put into the final  
 22 environmental impact statement for that reason. It is  
 23 not a viable or reasonably foreseeable incident.

24 The scenario, as I said, has a lot of  
 25 unreality. Let me go through some of that reality,

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1 just quickly. First of all, the fire -- for the fire  
 2 to occur is a very unlikely event, for just a little  
 3 fire to start. During -- just a little history might  
 4 be of value here. In the 1950s and 1960s, when we  
 5 were starting up plutonium processing facilities here  
 6 and in other places around the country, there were, in  
 7 fact, some fires in plutonium processing facilities.  
 8 They were small. And they taught us a lesson. They  
 9 taught us why they happened, and we made changes to  
 10 the design as well as to the administrative controls,  
 11 to keep those from ever happening again. And -- and,  
 12 by golly, it worked. We haven't had anymore since  
 13 then.

50-2  
cont.

14 But one other thing that happened that --  
 15 that is more important and more relevant to the -- to  
 16 the DEIS that we're talking about, in 1957, and again  
 17 in 1969, serious fires occurred in plutonium glove  
 18 boxes in Rocky Flats in Colorado. Now, these were  
 19 glove boxes that were connected in a train, one glove  
 20 box connected to another. And these glove boxes  
 21 contained a number of combustible materials, including  
 22 they were made -- some components of them were of  
 23 wood. And the glove boxes today are designed quite  
 24 differently. They're made of stainless steel. And  
 25 the amount of plutonium and the amount of combustibles

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1 in a glove box is strictly limited by procedure and  
 2 requirement.

3 At Rocky Flats there was no fire  
 4 suppression system and there were no fire barriers  
 5 between the glove boxes. Today there are fire  
 6 barriers and there are fire suppression systems. The  
 7 Rocky Flats glove box ventilation system pulled air  
 8 from one end of the train all the way down through,  
 9 and exhausted on the other end. It spread the fire  
 10 very quickly from one glove box to another. Today we  
 11 have each box ventilated separately, and barriers  
 12 between them.

50-2  
cont.

13 But not only that, these glove boxes in  
 14 question, both in the PDCF facility and in the MOX  
 15 facility, are inerted. There is no air there for  
 16 combustion to take place.

17 MR. CAMERON: Mr. McKibben, can you sort  
 18 of summarize for us.

MR. MCKIBBEN: Okay.

19 MR. CAMERON: We really appreciate your --  
 20 your comments, but if you could -- could finish it.

21 MR. MCKIBBEN: All right, I'll rush  
 22 through it real quick.

MR. CAMERON: All right.

MR. MCKIBBEN: Those fires, which were far

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1 worse than any fire that we could have today, had an  
 2 interesting result that is relevant to this draft  
 3 environmental impact statement. In one of those fires  
 4 no plutonium left the facility, left the building. In  
 5 the other one, there was a breach by the fire of the  
 6 -- of a filter, and there was a small amount that got  
 7 outside the building, but none of it could be detected  
 8 more than two miles away. My point there is that  
 9 because plutonium is not a volatile component, it is  
 10 very dense, heavier than lead oxide, it does not  
 11 migrate easily. So it stays put. So, assuming that  
 12 plutonium is going to be scattered for 50 miles and  
 13 land on farm products is not reasonably foreseeable.

50-2  
cont.

14 Let me just quickly summarize, then, and  
 15 close this out. The tritium in this accident would,  
 16 indeed, go up the stack. It would, indeed, be  
 17 deposited. But I think the amount that is assumed to  
 18 have -- to be there and the amount that is assumed to  
 19 deposit is grossly in excess of what it would be in  
 20 reality.

21 But there are a lot of -- several other  
 22 assumptions here in this that don't come close to  
 23 reality. One of them is that the -- this only occurs  
 24 -- or this will occur when the food is ripe and ready  
 25 to pick. Now, that's interesting. But the tritium,

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1 if it landed any other time, would dissipate and not  
 2 be in the food. It exchanges with the water vapor in  
 3 the atmosphere and it evaporates as water. It assumes  
 4 there's no rain before it's picked, because that would  
 5 wash it away. It assumes that -- that food, once  
 6 picked, is not washed by the packing house, by the  
 7 wholesaler, by the retailer, by the housewife. At  
 8 least in my house, that probability is zero. It also  
 9 assumes that the food is eaten immediately, because if  
 10 you sit it -- leave it sitting around in your  
 11 refrigerator for a while it will evaporate and go away  
 12 and there won't be any of it there.

50-2  
cont.

13 Finally, and most importantly, it assumes  
 14 that the government would not collect that  
 15 contaminated food so that people couldn't eat it.  
 16 Now, what do you think the probability of that is?  
 17 Bottom line is, this is a hypothetical accident that  
 18 was not occur, cannot occur, and it shouldn't be  
 19 included in the draft EIS.

Thank you.

21 MR. CAMERON: Thank you very much, Mr.  
 22 McKibben. And we'll look forward to your -- your  
 23 written comments on this.

24 Is Mr. Williams -- Thomas Williams...  
 25 Hi, Mr. Williams.

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MR. WILLIAMS: My name is Thomas Williams, and I'm from Barnwell, South Carolina, Chairman of the Barnwell County Council.

The Barnwell County Council has passed a resolution in support of the new MOX facility being built at the Savannah River Site. Some of us have reviewed the Nuclear Regulatory Commission's draft environmental impact statement on the MOX facility, and believe NRC's preliminary conclusion that the facility should be constructed is the right conclusion. We feel strongly that the MOX facility can be constructed and operated safely and efficiently. The companies involved are known expert in the nuclear arena (sic) and has many years of experience. In addition, the facility will be regulated by NRC. NRC has federal responsibility to insure the nuclear facility is designed and operated safely, with no current or future danger to the public or the environmental. This independent regulatory oversight should give the public confidence.

After almost a year of study and evaluation of the MOX facility, NRC says the benefit of MOX facility outweighs the disadvantage. The biggest benefit is to the world to get surplus weapons grade plutonium out of harm's way, out of circulation.

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This facility should be built. There is no major impact to the public or the environment from normal, routine operations. We think moving forward with this program would help insure a safe environment for years to come, and we feel that the construction and operation of this facility at Savannah River Site will truly be a benefit.

Thank you.

MR. CAMERON: Okay. Thank you very much, Mr. Williams.

I'm going to -- to assume -- Mr. Mareska? There was someone who signed in to speak, and there was just Sierra Club with that. Was that -- was that you?

51-1

MR. MARESKA: That -- that wasn't me.

MR. CAMERON: Was it Mr. Hooker? All right.

We're going to go to -- to Mr. Hooker. And amazing coincidence, Don Moniak is right after Mr. Hooker. And then Richard -- is it Richard Canty? Okay, we'll figure that out.

Mr. Hooker?

MR. HOOKER: Okay. Thank you for letting me speak tonight. Appreciate the opportunity.

First I'd like to have this put on record.

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51-1  
cont.

<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p>88</p> <p>MR. CAMERON: Great. Thank you. (Mr. Hooker hands certain material to the court reporter.) MR. HOOKER: I'm William Hooker, Chair of the Savannah River Group of the Sierra Club, representing over 500 citizens of this area. We oppose the MOX fuel fabrication facility, and support immobilizing of plutonium as an alternative. Many aspects of the MFFF make it mostly risky, least cost beneficial option of plutonium management or disposal. MR. CAMERON: Mr. Hooker, can you just speak up a little bit. MR. HOOKER: This thing -- I can't see with my bifocals. MR. CAMERON: Oh, that's one of -- yeah, I know about that. MR. HOOKER: Due to the high alert level, all shipments to and from SRS have been halted. That the threat of terrorism inspires this action is commended. The highlights -- this highlights the DEIS deficiency is not addressing a terrorist or sabotage set of action scenarios. Dose and risk cost benefit analysis must be evaluated for PDCF, MFFF, WSB, plutonium transport to and from the site, and offsite fuel transport for terrorism sabotage accident</p>	<p>89</p> <p>scenarios. Absence of offsite emergency plan by DCS for any accident scenario -- scenario a severe oversight. Either compounding the effect of the lack of an emergency must be evaluated by the EIS or the emergency plans must be present. The environmental impacts and human -- human health risks waste management of the PDCF and MFFF must be specifically evaluated. Latent cancer facilities associated with the proposed WSB and all substantial handling and transport are significantly portions of the real cost of this mission are minimized in the DEIS. This must be corrected. With operation data from the PDCF and the MFF not currently subject for review, the range considered for operational life of 10 to 20 years is huge. The arbitrary use of the ten-year figure is RC analysis of a default low-end assumption that doesn't offer conservative estimates necessary to protect human health. A 20-year figure for operating life must be used in estimating dose and risk cost benefit analysis. DOE has a very poor history of caring for those American citizens it has exposed outside possible military, and that's questionable. And</p>	<p>52-1 cont.</p> <p>52-2</p> <p>52-3</p> <p>52-4</p>
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1 that's from -- from me. The NRC has the opportunity  
 2 now to require that -- that proper care be taken to  
 3 prevent or mitigate any harm or expenses to the  
 4 stakeholders.

5 I'm going to give a couple of examples --  
 6 examples of fraud committed and covered up of exposure  
 7 to subcontractors and employees to heavy metals,  
 8 tritium, by DOE-Savannah River and its contracts to  
 9 the Savannah River Site is clearly shown in both my  
 10 congressional investigation I have, and the following  
 11 information submitted tonight with -- which will show  
 12 that they are still -- Savannah River Site is still  
 13 covering up and committing fraud. The information  
 14 submitted tonight is -- was sent to Dr. J. J. Stucker,  
 15 who is over the governor's Nuclear Advisory Council in  
 16 Columbia, South Carolina, certified receipt #7002 0510  
 17 0000 0205 2433, which includes an Email concerning  
 18 USCA reading room material being removed, Freedom of  
 19 Information Case #VFA-0749, a final replay from DOE  
 20 letter dated July 30<sup>th</sup>, 202 (sic), concerning my  
 21 freedom of information from DOE-Savannah River. Work  
 22 clearance permit signed on 2/22/1999, at 12:00, by  
 23 Westinghouse manager not identifying any hazardous  
 24 material in Four Mile Creek, from -- a reply from GSDL  
 25 hair analysis from three employees of Georgia

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1 Bowhunters Supply Company, information from ATSDR  
 2 concerning toxins: antimony 125 and 145, nickel,  
 3 arsenic, and mercury. The last item is a claim of  
 4 lien filed under miscellaneous Volume 1107, Page 281,  
 5 on 1/9/02 in the RMC office, County of Aiken, South  
 6 Carolina.

7 The draft report NUREG-1767 clearly shows  
 8 additional exposure path examples. We trusted  
 9 Westinghouse and the Department of Energy at the  
 10 Savannah River Site to tell us what we had been  
 11 exposed to from 2/10/1992 through 12/31/1999 while  
 12 working in high, medium, and low risk sites at the  
 13 Savannah River Site unprotected, and they -- all they  
 14 could do was laugh and make jokes out of what we had  
 15 been in while we were working for the U.S. Forestry  
 16 Service, slash, Savannah River Institute on 3/20, 21,  
 17 22, and 2000 -- of the year 2000, during a NIOSH  
 18 investigation. Lie and coverup is the name of the  
 19 game at Savannah River Site, and safety and health of  
 20 the employees or the general public is not the  
 21 interest. How can we trust the prime contractor and  
 22 its partners, let alone the U.S. Department of Energy  
 23 now with anything such as a MOX facility at the  
 24 Savannah River Site?

I included those three samples from -- for

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1 MR. HOOKER: Right.  
 2 MR. CAMERON: Thank you.  
 3 MR. HOOKER: I'd like to read the Email,  
 4 the portion of it, and then I'll -- on top of Notebook  
 5 Z105 is a sticky notepad that said, "William Hooker."  
 6 This note was being hauled off as a potential  
 7 sensitive, along with other 50 boxes. It contained  
 8 records of spills from 1990 to 19-1 (sic) time frame.  
 9 The person that wrote me this Email asked me do I have  
 10 a freedom of information in for such information.

11 I went back for my freedom of information  
 12 request that I -- and I got a reply on July 30<sup>th</sup>,  
 13 2002, from DOE. I asked for environment report for  
 14 2002, what caused the failures from 1988 -- 1999  
 15 exceedance of SCDHEC issued NPDES permit liquid  
 16 discharge limited as referenced. I asked for August  
 17 4<sup>th</sup> outfall G-10, Four Mile Branch failure, chronic  
 18 toxicity (sic), what causes failure. August 28<sup>th</sup>, acute  
 19 toxic, it was unable to determine what causes failure.  
 20 Seven exceeds as shown on Page 138 of 1991; ten  
 21 exceeds of '92; ten exceeds of '93; 9 exceeds of '94;  
 22 19 exceeds of '95; 14 exceeds of '96; 7 exceedances  
 23 1997. And this is their reply.

24 "The Savannah River Site performed a  
 25 search for exceedance and full-size map

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1 the analysis from the three individuals. And I'd also  
 2 like to say that I've -- I have eight dogs. Five of  
 3 them's been on the Savannah River Site; three of  
 4 them's not. The three that I have at the house,  
 5 alive; the five that worked on the Savannah River  
 6 plant is dead. I have -- I have these dogs that used  
 7 at the Savannah River Site, all these dogs are also  
 8 dead. And I believe it was from the exposure they  
 9 received from hunting them in these active waste sites  
 10 listed on the EPA Drawing GCO-1999, rev. no. Five area  
 11 Savannah River Site approved 4/6/1999 by Ed Campbell.  
 12 BSRI environmental -- this is the same units as EPA  
 13 drawing, except BSRI environmental management has  
 14 ranked the units -- numbers and units name risk  
 15 factors as low, medium, and high. These records also  
 16 show the Unit 29, Hp-52 pond as high risk, and per  
 17 Westinghouse presentation to NIOSH that was printed by  
 18 -- was presented by Sandy Human and Steven Johns, both  
 19 Westinghouse managers, that also committed fraud on  
 20 3/20/2000 to NIOSH.

21 MR. CAMERON: Mr. Hooker, you may want to  
 22 give us those numbers in -- in writing and just...

23 MR. HOOKER: They right there.

24 MR. CAMERON: ...give us your substantive  
 25 point. But could you try to wrap up for us now?

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1 portion of your request and found no  
 2 responsive documents to your remaining  
 3 request numbers 2 through 12. Also,  
 4 regarding these non-existing records, the  
 5 freedom of information does not require  
 6 compenation (sic) or creation of record  
 7 for purpose of satisfying a request for  
 8 records. Therefore, SRS does not -- did  
 9 not locate any responsive documents to  
 10 your request or what caused the  
 11 failures."  
 12 MR. CAMERON: And, Mr. Hooker, are you...  
 13 MR. HOOKER: I'm through.  
 14 MR. CAMERON: That's it?  
 15 MR. HOOKER: Yeah.  
 16 MR. CAMERON: All right.  
 17 MR. HOOKER: Yeah, I -- I submitted...  
 18 MR. CAMERON: And you've got this for the  
 19 record? Great. Thank you very much, Mr. Hooker.  
 20 [Applause.]  
 21 MR. CAMERON: And we're going to -- we're  
 22 going to go to Don Moniak now, and then we're going to  
 23 hear from Ed Presnell.  
 24 MS. CARROLL: Are you going to explain  
 25 your crack about the "by coincidence thing"?

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1 MR. MONIAK: Yeah, that was a crack.  
 2 MS. CARROLL: What does that mean?  
 3 MR. CAMERON: It wasn't a crack. It was  
 4 just that the next name on the list was Don Moniak.  
 5 MS. CARROLL: And you were standing right  
 6 next to him?  
 7 MR. MONIAK: By coincidence.  
 8 MR. CAMERON: Yeah. I mean, it's on the  
 9 list. I mean, you can look at it.  
 10 Don, go ahead.  
 11 MR. MONIAK: I'll let you go. Just a  
 12 second.  
 13 My name is Don Moniak, and I'm here  
 14 representing the Blue Ridge Environmental Defense  
 15 League on behalf of Janet and Lou Zeller, who couldn't  
 16 make it tonight. Janet had replacement hip surgery  
 17 this week.  
 18 Want to talk first about risk. It's  
 19 probability times consequences. Consequences are  
 20 economic and cultural. The stigma attacked -- the  
 21 stigma attached to the consequences of a radiological  
 22 accident are difficult to measure, but they have to be  
 23 addressed. This was raised repeatedly in Texas during  
 24 the surplus plutonium disposition EIS by people who  
 25 farm for a living. Accidents that may have no

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1 measurable human impact can put a farmer out of  
 2 business because nobody wants his product -- their  
 3 product. That's fact. There are other consequences  
 4 that have to be considered.

5 The only consequence that's considered in  
 6 here is latent cancer fatalities. If that is the only  
 7 health consequence that is going to be addressed, at  
 8 least say why other consequences are not being  
 9 addressed, what you know and what you don't know about  
 10 the impacts of ionizing radiation.

11 There's not much in here about what is the  
 12 hazard of radiation. We're presenting this chart all  
 13 the time about what the average natural background is  
 14 in this country. And Tim was wrong, in that the  
 15 natural background averages about 290 millirems per  
 16 year, and it was presented as 360. The 360's  
 17 including X-rays and things. Not everybody gets X-  
 18 rays. A Christian Scientist does not get X-rays. I  
 19 Certainly not to my -- I don't get many X-rays. I  
 20 don't let me dentist X-ray me every time I go in.  
 21 That is not part of natural background. You need to  
 22 say what is natural background around here, not what  
 23 it is at a national level, because around here, at  
 24 lower elevation, radon levels are low, there's very  
 25 few basements around here because there are such sandy

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1 areas. What is it around here? That needs to be  
 2 addressed in this. And what harm does natural  
 3 background radiation cause? We know what the benefits  
 4 are. Without solar radiation we'd be nowhere. Solar  
 5 radiation, the sun, solar energy is still our number  
 6 one power source. It just isn't on the grid. It  
 7 still provides us with almost all of our energy needs,  
 8 and always has and always will. And when it doesn't,  
 9 we won't be sitting around here talking about  
 10 plutonium.

11 What is not in this document is what the  
 12 radiological impact is. They tell us what the  
 13 potential radiological dose is, but not what the  
 14 impact is in terms of concrete measurements, curies or  
 15 becquerels. Whereas with the chemical hazard we're  
 16 told concrete numbers. We're told this many tons a  
 17 year of nitrous oxide or this many tons a year of this  
 18 or that will be released. But there's no equivalent  
 19 numbers for radiation impact. So that needs to be put  
 20 in this.

21 The NRC reported annual air pollutants for  
 22 select non-rad chemicals and elements at Savannah  
 23 River Site. And for the affected area they chose this  
 24 very arbitrary figure of one ton per year being  
 25 released of a chemical. Well, that doesn't have much

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53-1  
 cont.

53-2

53-3

53-3  
 cont.

53-4

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to do with what the hazard of that chemical is, because at SRS they release quite a bit of mercury into the environment, but they don't get up to one ton very often. More like anywhere from 100 to 600 pounds in the last ten years, which is a lot of mercury.

So what you need to do is, in the affected environment part, is say what kind of impacts are there, not which chemicals are being released at a rate of more than one ton per year. There's an absence of discussion on americium in here, because americium is the radioisotope that has to be separated from plutonium in order to make plutonium MOX fuel. And this poses a risk that's disproportional to plutonium, in general; and there will be a large waste stream of americium contaminated material. I asked: Why not just put all that americium into some smoke detectors and use it like a product, like we're trying to use plutonium to recycle. Tell us why that couldn't be done. What are the hazards of americium? The units in this document are not consistent. You go from cubic meters to gallons, back and forth. I think the liquid radioactive waste stream should be reported in liters and gallons, like it has been all along.

Sort of like to get along to the changes

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that have occurred since January 2000, three years ago, to this facility when the design cost was \$56 million. Today the design cost is \$171 million. And I'll bet you that it rises higher than that. The size of the facility has increased from 120,000 square feet of hardened space to 366,000 square feet of hardened space. Essentially, they're building a new canyon out there that will replace the capabilities of the existing canyons. That is a huge change from the Department of Energy's analysis. The amount of liquid radioactive waste has increased to about 500 gallons a year, to more than 400,000 gallons per year. And the decision was based to go forward with MOX instead of immobilization on this faulty analysis that occurred. The latent cancer fatalities that DOE said in a worst case accident, which would be an earthquake, it was much less risk of an explosion at a MOX fuel facility back then because it was all dry processing. They said we wouldn't need to do liquid processing. Now it's 200. There's a lot of other changes that have occurred, too. And the Department of Energy was very dishonest in their analysis.

355,000 gallons a year liquid radioactive waste. Yeah, that's not much compared to what Savannah River Site goes through every year. If it

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1 was at a Greenfield facility people would be up in  
 2 arms. It's still a waste stream that is unnecessary  
 3 if immobilization was implemented. And it's not a low  
 4 impact. That's a lot of waste that has to be treated  
 5 at the effluent treatment facility, and what is left  
 6 from that is going to end up in the streams of the  
 7 state and the rivers of the country.

8 The tritium accident, they don't list the  
 9 number of curries that are postulated to be released  
 10 in an accident, and don't say what the routine  
 11 releases will be at the pit disassembly and conversion  
 12 facility. Three years ago it was about 1000 curies  
 13 per year tritium being released. That's a drop in the  
 14 bucket for SRS, because they have released so much  
 15 tritium over time that an average day at SRS would be  
 16 an accident at any other sites. Like Lawrence  
 17 Berkeley, they actually do occurrence reports if they  
 18 release, like, a millicurie. Here a millicurie is  
 19 just nothing.

20 The non-rad toxins, as I addressed before,  
 21 SRS currently is permitted to release 253 toxic air  
 22 pollutants. Approximately 180 of these are permitted  
 23 only at the consolidated incinerator facility.  
 24 There's mention of the consolidated incinerator  
 25 facility in here, but it's not operating right now.

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1 If it was to operate, the air emissions out there  
 2 would be much, much higher than as what's been  
 3 reported. And until the decision is made on that, you  
 4 need to address that, because then the current impacts  
 5 at SRS are higher than what is being said.

6 Why MOX? This is a political issue. This  
 7 is a political decision here. The sole justification  
 8 for this project is the U.S.-Russian agreement. The  
 9 NRC did fail to address the status of the agreement.  
 10 And as we know, as we speak, George Bush is  
 11 antagonizing Russia by accusing them of providing  
 12 military aid to Iraq, and Russia is accusing us of  
 13 many other things. Vladimir Putin is a tyrant. He's  
 14 just another communist, tyrant, authoritarian, bad  
 15 person who cannot be trusted. Things are going  
 16 downhill. And to move forward on this project without  
 17 -- while pretending that things are just steady and  
 18 we're getting along with Russia is crazy. Russia's  
 19 Minatom is described as the last -- as the stronghold  
 20 of the last regime, the most conservative elements  
 21 within Russian society. Russian people despise  
 22 Minatom. 80% of them generally vote against new  
 23 nuclear projects. Minatom is an autonomous rogue  
 24 agency that hopes to export plutonium fuel if they get  
 25 an infrastructure to build it. And their trading

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1 partners are Iran, Pakistan, generally the ones that  
 2 are on our export control list.

3 MR. CAMERON: Don, could you sum up for  
 4 us?

5 MR. MONIAK: Yes.

6 The final issue is that I asked about the  
 7 foreign ownership and control and influence. And this  
 8 is a French project. This project primarily benefits  
 9 the French government at this point. Now, whether  
 10 that's right or wrong is irrelevant. The French -- if  
 11 anybody is to do the MOX, the best person for it's --  
 12 best company for it is Cogema, because we certainly  
 13 don't want BNFL to do it with their falsified quality  
 14 assurance data and an inability to get an plant  
 15 license there.

16 However, France is now on our enemy list,  
 17 essentially. We're boycotting French kissing, French  
 18 fries, everything but French nuclear fuel. And this  
 19 is controlled by them. I don't know how they arrived  
 20 at the conclusion that this was not a French-run  
 21 operation. Chairman Richard Meserve of the Nuclear  
 22 Regulatory Commission, a year-and-a-half ago, was  
 23 lobbying Dick Cheney and the Congress to remove  
 24 foreign ownership and control rules, weaken them and  
 25 lessen them. This is in a letter he wrote. This is

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53-10 cont.

1 before the world started to change.

2 The Atoms for Peace is the biggest  
 3 casualty of this war in terms of political situation.  
 4 If the UN is irrelevant, then the IAEA is irrelevant,  
 5 then the NRC is irrelevant when it comes to this  
 6 project. Because this project is an international  
 7 verification and inspection project. It's not all  
 8 about making power. And if you don't address the non-  
 9 proliferation impacts and say to the Congress, as an  
 10 independent agency, things have changed. DOE's  
 11 analysis might have been okay. Then you're not doing  
 12 your job. You have a responsibility just as a  
 13 government employee to do this.

14 Thank you.

15 MR. CAMERON: All right. Thank you.

16 [Applause.]

17 MR. CAMERON: Ed Presnell.

18 MR. PRESNELL: Thank you.

19 My name is Ed Presnell, and I'm the  
 20 President of the Augusta Metro Chamber of Commerce.

21 The Augusta Metro Chamber of Commerce,  
 22 with member businesses from across our two-state  
 23 community, supports the MOX project. Our chamber has  
 24 followed the progress of the project since the  
 25 beginning. And with the release of the Nuclear

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53-11 cont.

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1 Regulatory Commission's draft environmental impact  
 2 statement stating minimal environmental impacts, we  
 3 believe NRC should issue a license for construction,  
 4 and eventually for operation of the MOX facility.  
 5 Aside from being the right thing to do for the safety  
 6 of our planet, support of this international effort  
 7 will have the side effect of great economic benefit  
 8 for our community.

9 We believe any concerns of safety have  
 10 been answered. The safety of the process and the  
 11 facility, itself, has been evaluated for years by many  
 12 different groups. Every conclusion is the same. The  
 13 MOX facility can be constructed and operated safely  
 14 with minimal impacts.

15 With the question of safety satisfied, we  
 16 now hope that our citizens can now recognize the  
 17 economic boost the MOX project will have in the  
 18 regional economy. When focusing on some of the  
 19 numbers listed in the draft EIS for the construction  
 20 and operation of the MOX facility and its associated  
 21 facilities, the pit disassembly and storage facility  
 22 and the waste solidification building, it's easy to  
 23 see the positive impact.

24 For example, in the peak year of  
 25 construction, 1,820 workers will be required for the

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1 proposed action. On average, 1,000 jobs will be  
 2 created for the proposed facility. During operations,  
 3 1,260 employees will be required each year. Income  
 4 for workers during construction will be \$350 million.  
 5 Income during operations will be over \$600 million.  
 6 The proposed facilities will produce approximately  
 7 \$110 million in tax revenues from state income and  
 8 sales tax. And finally, the proposed facilities will  
 9 produce \$1,850 million for gross regional product.

10 The Central Savannah River Area will be  
 11 proud to be home for the mission to reduce weapons  
 12 plutonium. This project is one of great importance to  
 13 the security of the world. That reason alone should  
 14 be enough to see this MOX succeed. But it is also  
 15 positively impacts (sic) the CSRA in more ways than  
 16 expected. It shows that by doing the right thing and  
 17 supporting our country, our citizens will receive  
 18 benefits they never expected.

19 The Augusto Metro Chamber supports the  
 20 licensure of the MOX facility, and looks forward to  
 21 both the global safety and local prosperity that it  
 22 will create. Working together, the Central Savannah  
 23 River Area and the Department of Energy are making the  
 24 world a better place.

25 Thank you very much.

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1 MR. CAMERON: And thank you, Mr. Presnell.  
 2 Is Richard -- is there a Richard Canty?  
 3 All right, Reverend Walker. And after  
 4 Reverend Walker, Mary Kelly.  
 5 MR. WALKER: Good evening. My name is  
 6 David Walker. I am President of the Aiken Branch of  
 7 the NAACP, and I'm the Regional Coordinator for Region  
 8 2 of the NAACP which include the branch in North  
 9 Augusta, Wagener, Salley, Edgefield, and Saluda.  
 10 I am here tonight to state that the NAACP  
 11 still fully support the MOX facility at Savannah River  
 12 Site. After seeing the draft environmental impact  
 13 statement released by NRC, I've noted a few things.  
 14 One is that in their report the NRC has stated that  
 15 they would most likely issue a construction license to  
 16 DCS. I think that NRC feels that they are doing this  
 17 because they have some degree of confidence in DCS.  
 18 While we continue to support the MOX  
 19 facility, we are awaiting the corrected EIS statement  
 20 from NRC to compare that statement with the statement  
 21 from DOE and from DCS. We feel that our support is  
 22 necessary because one of the economic impact that it  
 23 will have in this area. While there are some concerns  
 24 regarding the environmental justice portion of the EIS  
 25 statement, we will review all three EIS statements and

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1 submit a written report prior to the deadline.  
 2 But we come tonight to say that we  
 3 unequivocally -- the Aiken Branch NAACP supports the  
 4 MOX facility. The MOX plant should come to SRS and  
 5 DOE, and we are expecting DOE, SRS, and DCS to keep  
 6 its citizen (sic) updated on the plant. Before I take  
 7 my seat, I am making one request on behalf of the  
 8 Aiken Branch NAACP. In the past all of these meetings  
 9 have been held outside of the communities that will be  
 10 mostly affected should an accident occur. I am  
 11 requesting at this meeting that NRC, DOE, and DCS make  
 12 a considered effort to hold a meeting in the African  
 13 American community, the community that will most  
 14 likely be affected. But at this time we still  
 15 strongly support the MOX facility.  
 16 MR. CAMERON: Okay, thank you, Reverend  
 17 Walker.  
 18 We're going to go next to Mary Kelly. And  
 19 is there a -- is it Charlie Kleiss?  
 20 Okay, Mary Kelly, and then Charlie.  
 21 Let's see if we can make sure that this  
 22 microphone works for you, Mary.  
 23 MS. KELLY: Thank you. Short people.  
 24 MR. CAMERON: Yeah. See if -- see how  
 25 that is. Let's see if we can hear you.

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1 MS. KELLY: Okay. My name is Mary Kelly,  
 2 and I'm representing the League of Women Voters of  
 3 South Carolina. Some of what I was going to say is  
 4 repetitious, but I'm going to repeat anyway because I  
 5 think it's just so extremely important.  
 6 We question the wisdom of concentrating so  
 7 much plutonium on one site. SRS has to be the world's  
 8 most inviting terrorist target, even without the added  
 9 plutonium. And as the old saying goes, "Never put all  
 10 your eggs in one basket." Having such -- so much  
 11 plutonium in one place also increases the prospects of  
 12 a criticality accident.  
 13 We find it difficult to understand how you  
 14 can justify not including considerations about  
 15 terrorist acts or criticality accidents in this  
 16 document. The whole issue of homeland security hasn't  
 17 been well handled, I -- I think most of us would  
 18 agree. The public needs to know about the  
 19 possibilities of such accidents, and be given  
 20 information that will empower them to do something to  
 21 help themselves in such an event. There's a great  
 22 deal of danger in ignorance.  
 23 In addition, should you be transporting  
 24 plutonium and uranium around the country in a time of  
 25 war and international hostility to the United States?

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1 Some of that plutonium will be in the form of  
 2 plutonium oxide powder, a highly reactive and  
 3 flammable substance. Depleted uranium in the form of  
 4 gaseous uranium hexafluoride, a nasty substance, will  
 5 be transported probably from Ohio to a processing  
 6 plant in Wilmington, North Carolina, where it will be  
 7 solidified as uranium dioxide and then transported  
 8 back to SRS.  
 9 There should be more discussion about the  
 10 backgrounds of the entities composing DCSW, Duke  
 11 Cogema Stone & Webster, from the standpoint of their  
 12 financial stability and history, and their  
 13 environmental and safety records. It is extremely  
 14 troubling that one party to this consortium is Cogema,  
 15 a French company, owner and operator of sites like La  
 16 Hague that have had environmental and safety records.  
 17 It may not be possible to get adequate information  
 18 about Cogema, since France is far less open than the  
 19 United States about its nuclear operations.  
 20 Another point on the subject of health  
 21 effects. It's really distressing that the study that  
 22 was underway about the -- the Dosimetry construction  
 23 project proceeded to a certain point. They had  
 24 collected a lot of data, organized it and so forth,  
 25 and then the money was not forthcoming to analyze that

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1 data. That project should be completed and the  
2 information made available to all the people in this  
3 community and throughout South Carolina. It is most  
4 important.

5 The other -- another problem that I see in  
6 this DEIS is the weather discussion. You only discuss  
7 five years. It doesn't take into account some special  
8 South Carolina background. On a totally different  
9 kind of project in Columbia, we've been fighting  
10 against a big developer who wanted to put a  
11 development in a flood plane. Well, his information  
12 simply didn't go back far enough on the flooding that  
13 had taken place in the Columbia area. It took  
14 university people and interested people in the  
15 community who could remember or who had fathers and  
16 grandfathers who could remember the fact that there  
17 had been tremendous flooding in the Columbia area  
18 along the Congaree River.

19 The same thing is true with the  
20 possibility of the effects of hurricanes. Now, that  
21 all has by dismissed. But those of us who lived  
22 through Hurricane Hugo know that what happened there  
23 was that the hurricane came in just north of  
24 Charleston and followed the water courses up to  
25 Columbia; then went up the river, the Wateree River,

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1 to Charlotte. Charlotte was heavily impacted by  
2 Hurricane Hugo. You really need to have a more  
3 expansive idea of what weather patterns have occurred  
4 in this area and in South Carolina.

5 You also seem to only be concerned about  
6 the impact on the health of citizens within a 50 to 60  
7 mile radius. Well, if you have a major accident here,  
8 it will cover a far, far greater area than 60 miles.  
9 When Chernobyl -- the accident at Chernobyl occurred,  
10 people in Norway were affected. It just isn't true  
11 that you can consider such a limited area.

12 Another point has been brought out, and  
13 it's been about the Russian MOX program, which is not  
14 proceeding according to plan. Another factor  
15 involved, according to the *Global Security Newswire*  
16 that comes out from the -- well, it's the NYT, and I  
17 can't remember what that stands for. But,  
18 nevertheless, they're talking about the difficulties  
19 of adequately monitoring weapons of mass destruction,  
20 including nuclear, in Russia. It just doesn't seem  
21 that this program should be going ahead justified by  
22 what the Russians are going to do, until the world  
23 settles down a little more.

24 And I appreciate being able to make these  
25 comments, and I hope that will receive -- get to a

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Greater Aiken Chamber supports -- support for the MOX project, for what it can do for our country, and what it will offer to our entire region.

In the draft EIS, the NRC says it does not see any significant health or environmental impacts, and that the risk to public health is, indeed, very small. With tighter, more stringent federal and state regulatory controls, environmental safety should not really even be considered a factor in deciding the location for the MOX project. It is vital we all remember that the economic boom of the '90s cannot be counted on to sustain the quality of life that each one of us have come to enjoy. MOX, ladies and gentlemen, is not a four-letter word. On the contrary, it equates to improved education, parks and recreation, health care, and other very important attributes that contribute to a well-balanced community.

I believe that NRC should make it their final decision to locate the MOX facility at the SRS, and that we, the citizens of the CSRA, should support this program of immense importance for the continued safe of continued quality of life (sic) and economic growth.

Thank you for allowing me to speak to you

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satisfactory resolution of this whole issue. But there are just these -- some of these very pertinent facts that are like elephants in the garden. They just aren't going to go away, and you really need to pay attention to them.

Thank you.

MR. CAMERON: Okay. Thank you, Mary.

Next we're going to hear from Mr. Charles Weiss, and then we're going to go to Tom Clements.

MR. WEISS: Thank you very much. Good evening. My name is Charlie Weiss, and I am President of the Greater Aiken Chamber of Commerce in Aiken, South Carolina. We represent approximately 730 businesses in the region. It equates also to roughly 30,000 employees who really depend on a sound and stable economy.

I am pleased to see that the NRC has taken into account the substantial economic benefits that the MOX project provide, and the plutonium disposition program in general will offer to our area. I'm also proud to be in a community that has the opportunity to contribute to such an important national mission. SRS and the local community have a long history of such contributions.

I am here this evening to convey that the

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1 this evening. Very much appreciate it. Thank you.

2 MR. CAMERON: Thank you, Mr. Weiss.

3 Let's go to Mr. Tom Clements, now, and  
4 then we're going to go to Caroline Rivard.

5 MR. CLEMENTS: My name is Tom Clements,  
6 and I work for Green Peace International based in  
7 Washington, D.C., and I represent over two million of  
8 our members with offices in about 35 countries  
9 worldwide. And I'm a native to this area.

10 I just want to make some comments on the  
11 process. I'm going to submit some written comments  
12 about some accident scenarios and other issues, but I  
13 just want to hold my comments to a couple more of  
14 process and political points.

15 I found this draft EIS very confusing  
16 because it attempts to also present environmental data  
17 on two other facilities, in addition to the MOX plant;  
18 those being the pit disassembly and conversion  
19 facility, and the waste solidification building,  
20 which, to my knowledge, DOE has never stated or  
21 written publicly that that facility must be built.  
22 I've been trying to get answers from DOE about the  
23 facility, but so far there has been no response.

24 I'm also trying to find out if this  
25 document is also the environmental impact statement

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1 for those other two facilities, and I have not heard  
2 the question answered here tonight if this document is  
3 going to serve as the EIS for two other major  
4 facilities that are going to cost a lot of money and  
5 could have substantial environmental impact. One of  
6 the facilities is covered in this document to a very  
7 minor degree. It was also covered in a 1999 EIS on  
8 the plutonium disposition program. But the waste  
9 solidification building, to my knowledge, DOE has  
10 never done any NEPA analysis on its own. I think  
11 there are going to be some legal questions raised  
12 under NEPA if this document is substantial enough to  
13 stand in for two other full environmental impact  
14 statements which must be prepared.

15 Also, I can't determine now that there's  
16 any legal basis for disposing of 34 metric tons in the  
17 MOX program, and that's what this document basically  
18 addresses. The department has never shifted the  
19 plutonium that's being shipped from Rocky Flats from  
20 long-term storage into the MOX program. We've been  
21 waiting many, many months for a supplement analysis to  
22 come out on that. We feel it should be -- that they  
23 should prepare a supplemental EIS. So the program  
24 right now only has about 27 metric tons in it. With  
25 a wave of the pen, they could transfer the plutonium

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 1 get some scrutiny.  
 2 We also believe that because of the  
 3 problems in the budget and the problems that have --  
 4 some of which have been pointed out with Russia, that  
 5 this money that's going to building the MOX plant in  
 6 the United States and Russia could be more efficiently  
 7 spent in protecting and securing nuclear materials in  
 8 Russia. There's a dirth of funds going into the  
 9 program to make sure that all the nuclear materials in  
 10 Russia are secured, and there's no need to rush into  
 11 building a MOX plant now---which we're opposed to---in  
 12 Russia unless the nuclear materials have been secured.  
 13 And I think that that's going to be something that  
 14 Congress is going to be watching very closely.  
 15 I'll submit the rest of my comments in  
 16 writing. Thank you.  
 17 MR. CAMERON: Okay, thank you very much,  
 18 Tom.  
 19 Caroline Betsy Rivard, and then we're  
 20 going to go to Brendolyn Jenkins, and then Dave  
 21 Cowfer.  
 22 MS. RIVARD: Good evening. Two weeks ago  
 23 tonight I was actually in Hiroshima and I visited the  
 24 peace museum for the first time. And I was startled  
 25 to see that on a tableau that's there, part of the

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 1 into this MOX program. But we want to know how much  
 2 plutonium is coming from Rocky Flats, what the  
 3 impurities are in that plutonium, how some of it's  
 4 going to be disposed of if it's not going to be  
 5 disposed of as MOX. Rocky Flats has -- has clarified  
 6 that some of this is going to go to Whip. But we  
 7 don't know exactly what's going to happen to the  
 8 plutonium that's being shipped from Rocky Flats.  
 9 Just a couple more things, one related to  
 10 cost. The cost information presented in the document  
 11 is very confused and vague. They -- it gives a -- an  
 12 overall cost to the MOX program of \$3.8 billion, I  
 13 believe. But it doesn't break down this cost into  
 14 research and development, construction cost, operation  
 15 cost. There's a little discussion on the  
 16 decommissioning cost which gives a range. But the  
 17 people who wrote the document need to go back and  
 18 present very clearly what these costs are,  
 19 particularly given the budget crisis in this country  
 20 right now and the poor economy, and that \$75 billion  
 21 was just requested as a down payment on the war in  
 22 Iraq. The fact the DOE is trying to get \$415 million  
 23 in fiscal year 2004 is going to draw some attention.  
 24 The budget is going to be very tight. The \$650  
 25 million requested for the overall program is going to

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crashing into the Twin Towers, or two plane crashes into the Twin Towers. Is that like highly unlikely? Not predictable? Not considered? But, anyway, it did happen. So just wanted to consider that. It says, "If the accident occurred, the estimated consequences would include a dose of 4.5 rem to the maximally exposed offsite individual and a corresponding likelihood of .0023 that this individual would incur a fatal cancer.

Anyway, my point is that they were able to consider that, and I don't understand why -- their quote is that -- how is it? Will not address -- the EIS will not address impacts of terrorism because these impacts are not considered to be reasonably foreseeable as a result of proposed action -- of the proposed action of delivering 34 metric tons of weapons grade plutonium to the SRS plant and processing it. I -- I think that there's bad reasoning here. Is not the transportation, storage, and processing of 34 metric tons of plutonium reasonably foreseeable -- a reasonably foreseeable target for terrorism?

And I also disagree with the DEIS because it does not consider the immobilization alternative. And if the -- if the object is the disposition of

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museum is a list, half of it's in Japanese and half of it's in English, listing accidents that have happened since the dropping of the bombs on Hiroshima and Nagasaki. And there's only like 21 items listed, and one of the items mentioned SRS, which I was surprised about. And it says that in 28 years -- they have a date on it, 1988. September 30<sup>th</sup>, 1988. In 28 years, 30 major accidents at the Savannah River nuclear weapons plant in the United States. I'm not sure where they -- what -- you know, what information it says, but it certainly sent a chill up my spine.

I disagree with the DEIS, because the possibility of accidents was not adequately addressed. One of the related documents mentioned in the DEIS is the -- this final EIS from the Yucca Mountain -- the geological repository. And in here they managed to actually consider this terrorist possibility, and in -- it says, "In response to public comments, and to provide further information about accident risk, DOE analyzed an accident scenario in which a large commercial jet aircraft would crash into the repository facilities.

Now, you know, kind of raised the question in my mind, reading the DEIS, what -- you know, what probability would they have considered a plane

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1 weapons grade plutonium, immobilization needs to be  
2 considered. Russia's concerns don't really seem to be  
3 an adequate reason to not do it. And I also think  
4 that adverse economic effects -- I know that everybody  
5 is talking about the wonderful economic effects of  
6 building and having this MOX plant. I think we need  
7 to consider the adverse economic effects of a  
8 significant accident on the community.  
9 Thank you very much.  
10 MR. CAMERON: And thank you, Betsy.  
11 Brendolyn, and then David -- Dave Cowfer.  
12 MS. JENKINS: Good evening. And I thank  
13 you for this opportunity to speak regarding the draft  
14 EIS.  
15 In an -- in an economy that can be  
16 described in my community at best as being depressed,  
17 I stand to support the growth and development of the  
18 economy of the community. This project can represent  
19 future jobs, professions, and careers for the youth of  
20 my community. This project can represent economic  
21 stability to the CSRA. This project can also  
22 represent the continuation of missions at the SRS.  
23 But, comma, however, although I am in  
24 favor of all of these positive aspects, I have grave  
25 concern over the environmental impact portion of the

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1 draft EIS. Although it's been stated that NRC  
2 miscalculated their figures, and that an event is  
3 highly unlikely and improbable, there may have been a  
4 number of inadequacies found that causes even more  
5 concern to me about the concreteness of the data, and  
6 if it is likely to change again.  
7 I'm also deeply concerned because we as a  
8 community, a nation, and now an entire world live now  
9 in the land of "what if." We never thought that a  
10 space shuttle would explode on liftoff, and we  
11 certainly never thought that one would disintegrate  
12 upon reentry. I never thought, after having lived in  
13 New York a number of years, that the magnificent Twin  
14 Towers would be felled, or that the icon of national  
15 security and defense would be attacked, or even that,  
16 on the other Monday evening, we would have an  
17 earthquake in Aiken. But we live now in the land of  
18 "what if." And although we can talk all day long  
19 about wind patterns and wind shifts, we still remain  
20 when it settles, it settles, wherever it settles, in  
21 a community of disenfranchised, poor, and minority.  
22 One of the youth at a meeting the other  
23 evening pointed out to me, when it was talked about  
24 the wind shifts and wind patterns, that we also live  
25 on a spinning ball called earth. We are called to

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1 think critically about putting projects over people,  
2 and jobs over lives. I'm deeply disturbed that so  
3 much of the time and effort that my organization has  
4 spent was challenging the DOE and Westinghouse  
5 Savannah River Company about this issue, when both the  
6 NRC and Duke-Cogema should have been more forthcoming  
7 in their roles that were to be played.

8 I, as well as many of my members of my  
9 community and the four or five members of the SRS  
10 Alliance that was present at a meeting for the first  
11 time ever in a disenfranchised community in Aiken,  
12 we're very appreciative for Tim Harris attending the  
13 meeting last week with members of that impacted  
14 community that is spoken about in that draft EIS. We  
15 are also, however, quite disenchanted, and perhaps  
16 even insulted, that Duke-Cogema refused to meet with  
17 members of the SRS Alliance or, instead -- or even  
18 attend that meeting. But, instead, to go hundreds of  
19 miles last evening and be present---although not  
20 vocal---in Savannah, and present this evening, when  
21 the community that is spoken about in the  
22 environmental justice portion is not even the  
23 community in the faces of those of you that are  
24 present this evening.

25 So I don't want to be seem as -- seeming

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1 as unpatriotic for the questions that I raise that  
2 call us to be critical prophets in a time of "what  
3 if." I support the efforts of -- of the community, of  
4 this project, and of the SRS. You've been very good  
5 corporate neighbors that have empowered and impacted  
6 the communities around my community and the families  
7 of which I serve. But I also am called to critically  
8 think and critically look at any issue and any impact  
9 that would adversely affect the people that I serve.

10 Thank you.

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

13 Dave? And the next three speakers are  
14 going to be Glenn Carroll, Ed Arnold, and Ernie  
15 Chaput.

16 And this is Mr. Cowfer.

17 MR. COWFER: Yes, Dave Cowfer. I chair  
18 the Savannah River Site Retiree Association. I would  
19 like to say, first of all, that I and the association  
20 I represent strongly support the MOX facility.

21 My background, my 40 years in industry,  
22 I've been retired three years now. I have worked  
23 three-fourths of that under the jurisdiction or  
24 actually the regulation of the NRC, and I'm very  
25 confident the NRC will do a job -- a good job, an

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from even occurring. I've worked at SRS, and I can tell you the redundancy and certainly the safety basis for this facility, like others out there, would -- would bear out the fact that this is not a -- a credible scenario.

Over the years we've seen opponents of nuclear technology overstate the risks associated with the technology, and certainly we know that the NRC is neither a proponent or a proponent, but they're an objective regulator. I would expect the NRC to be even-handed and not overly -- be overly dramatic in the assessments of that facility. Even if they acknowledge that the assumptions they used are conservative, and if they acknowledge that the -- their evaluation does not give credit for protection that we know will be in place to prevent this accident scenario from happening, the statements gets lost in the cloudiness of what's generated in numbers---we've heard a lot of that discussion tonight---that fall out of these conservative evaluations. So I would hope the NRC heeds this concern and would insure that their final analysis portrays the risks associated with this program in a proper context.

Thank you.

MR. CAMERON: Thank you very much, Mr.

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excellent job on this project, both in the authorization of the construction and operation, and the regulation of the facility once it goes into operation.

I believe that the MOX facility can be constructed and operated safely. But I've got a concern about the EIS I'd like to -- some concerns I'd like to mention. Having reviewed the EIS and talked to some independent -- folks independent of the EIS development, I would like to say or make the concern, certainly, that the EIS is very conservative, and it makes some assumptions that I think are incredible. Particularly, and most particularly, on the worst case scenario.

I'm concerned that a perception of this kind of evaluation generates in the public eye -- that this kind of evaluation generates in the public eye with respect to perceive dangers at the facility are inflated. I think the NRC's postulating an accident that would breach at least two levels or more of containment, site boundary monitors, and go undetected for a year is just not -- not plausible. The scenario disregards the facility engineering safety features and operating procedures mandated by federal regulations that would prevent this sort of scenario

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cont.

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1 Cowfer.

2 Glenn Carroll, and then Ed Arnold and

3 Ernie Chaput.

4 MS. CARROLL: Hello. My name is Glenn

5 Carroll. I represent Georgians Against Nuclear

6 Energy. We are intervening in opposition to

7 construction authorization for the MOX facility, so

8 we've been studying it pretty hard.

9 I'm carrying this image tonight because

10 it's a Native American thunderbird, but it sure looks

11 like a nuclear waste symbol; doesn't it? And I just

12 think -- I put this out here and share it because I

13 really believe that we can finish this business we

14 started. That we can finish with the nuclear genie

15 which we've let out of the bottle.

16 Oh, could I ask you to put Slide 6 up.

17 Thank you.

18 One of the things I want to say is we have

19 something in common. This is our plutonium. If you

20 have ever paid federal taxes, you bought this

21 plutonium. You bought this facility, Savannah River

22 Site, and you're buying whatever we do with this

23 plutonium.

24 I want to celebrate that we are arguing

25 about what to do with weapons grade plutonium. Now,

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1 this is a really good place to be. It's progress.

2 I request an additional meeting. I didn't

3 quite follow what happened with the revised data you

4 furnished us tonight, but it sounds like we just

5 really could use something -- what you put out next

6 week, and we could really use to review it, and we

7 could really use a public forum to discuss it, because

8 this document is vast, and I really wonder what

9 individual knows everything that's in here. And it's

10 really important. And so I think we really benefit

11 from having a public meeting to hear from each other

12 about it. And I think the minimum is to come to this

13 community, which is going to be the most affected.

14 Okay, I'm sorry, this gets tiresome. I

15 say this every time we come out. There's a basic

16 problem with what we're doing with this EIS process.

17 Can I have your walk-around-with-it mic so that I can

18 use the slides?

19 MR. CAMERON: Are you going to give it

20 back?

21 MS. CARROLL: Did you hear about that?

22 You weren't here. I was beating up DOE that night.

23 Okay. What we have here -- where do we

24 have it? Well, it was kind of an interesting layout.

25 Okay, we're not even discussing a license. Let's be

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1 And I want to tell you something else.  
 2 This is our document. This is for us. Now, I love  
 3 Dave, I love Tim, I love Chip, I like John Hull -- I  
 4 love John Hull, I like that man over there, Peter.  
 5 But this is kind of hard to read. Sorry. And I have  
 6 a basic problem. I mean, one of the main issues GANE  
 7 is interested in here is the waste issue. And it has  
 8 been characterized differently in every single one of  
 9 these really hard to use -- and I want to say this  
 10 compares very favorably with the SBB EIS, which is  
 11 like...

12 MR. HARRIS: Do you like it more or less,  
 13 Glenn?

14 MS. CARROLL: I like it more. But, yes,  
 15 please convert your waste to gallons. It would be  
 16 helpful if you'd just use the same table that DCS used  
 17 unless, you know, you need to differ from it. It  
 18 would just make it a whole lot easier, because it  
 19 almost looks like maybe something's being hidden on  
 20 this waste issue, the way the language keeps changing  
 21 that we're talking about. Okay.

22 Trying to figure this out. So we got a  
 23 construction request. This is what we're talking  
 24 about. And this EIS is going along with this  
 25 construction request. Now, you notice this arrow

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1 clear on that. We're discussing construction  
 2 authorization. This isn't even defined in NRC  
 3 regulations, so we're pretty much making it up as we  
 4 go, which sort of leaves it open to challenge. We'll  
 5 have to see what happens with that.  
 6 So what you've got here, what we're  
 7 talking about here is a construction authorization  
 8 request. We want to consider whether to construct  
 9 this facility. Now, usually when you consider whether  
 10 you're going to construct a facility that's up to  
 11 something like -- Don Moniak said 360,000 square feet,  
 12 that's going to process is it 27 tons or is it 34  
 13 tons? I mean, that's another interesting point.  
 14 There isn't even officially a mandate to consider that  
 15 kind of plutonium. It hasn't been put in the MOX  
 16 program yet; right? Okay, so that's interesting.

17 And I heard a man from DOE say something  
 18 interesting tonight which is, well, you know, the  
 19 public out here, the people that are litigating this  
 20 have a record we have to refer to. We have to cite  
 21 it, you know, and we're beating each other up with our  
 22 citations out there. But you're saying, "Oh, well, we  
 23 kind of got the impression, talking to the Russians,  
 24 that they really don't like immobilization." I mean,  
 25 put it on paper. We're the public.

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1 here, this is when this starts. Maybe the layout  
 2 would be clearer if this box was over here. Okay,  
 3 now, it says in the EIS that they might give a  
 4 license, they expect to give a license, unless  
 5 compelling safety issues would suggest otherwise.  
 6 But look at this. We're done. We are  
 7 done. This starts. And this is the main event. I'm  
 8 here to tell you. This is where the plutonium is. We  
 9 are not talking about plutonium in this construction  
 10 thing. We're planning to add the plutonium to the  
 11 game here. But we're finalizing this EIS.  
 12 Now, there's some promise, but it doesn't  
 13 look binding enough. That's what bothers us. I mean,  
 14 you have acknowledged this and you have said, "We'll  
 15 capture it." But you're not bound to. That bugs us.  
 16 We have a law. We had a hard time getting this law.  
 17 You know, this little public law, this *National*  
 18 *Environmental Policy Act* that generates a document  
 19 like this for us.  
 20 So here you are, you're finishing the  
 21 safety analysis. And let me tell you, I think it's  
 22 pretty good. I actually thought the SER finished  
 23 here, and it was news to me. Here I am litigating  
 24 plutonium for four years, and I just figured out that  
 25 there's going to be an operation SER. I think that's

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1 really great. But, I'm sorry, your only real solution  
 2 here, you can either do another EIS or you can extend  
 3 the EIS. But you cannot construct this facility until  
 4 you've got this -- until you've got this review and  
 5 you've done the EIS on it. That's how we're reading  
 6 NEPA. And so I've clued you in.  
 7 MR. CAMERON: I wish I could be as  
 8 dramatic as you are with this thing. And, Glenn, I  
 9 got to -- you know, if you can just...  
 10 MS. CARROLL: Hurry up?  
 11 MR. CAMERON: Yeah, because we -- we have  
 12 a lot of people who want to -- want to speak, too.  
 13 MS. CARROLL: Okay, the next thing we'd  
 14 like to talk about, then, and I'll touch on two  
 15 topics: immobilization and waste.  
 16 Your reason for not reviewing  
 17 immobilization was not accurate. And I actually think  
 18 you might have been given a bum steer from the DOE in  
 19 some conversations I had tonight. But Russia declined  
 20 to immobilization itself, but accepts the United  
 21 States immobilizing. NEPA requires an affirmative  
 22 alternative to be analyzed if there's a reasonable one  
 23 available. And immobilization is reasonable because,  
 24 unlike storage, it would address the proliferation  
 25 concerns. And it's positive because, unlike storage,

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1 you again when you come back.

2 MR. HARRIS: Okay, thank you, Glenn.

3 MR. CAMERON: Ed Arnold and Ernie Chaput.

4 And I apologize for obviously running late. And we'll  
5 stay and hear everybody. But I apologize for -- for  
6 going over.

61-7  
cont.

7 Ed?

8 MR. ARNOLD: Thank you for the opportunity  
9 to address our understanding, which I have to say is  
10 -- is limited and confused.

11 My name is Ed Arnold, and I'm the Director  
12 of the local group of Physicians for Social  
13 Responsibility. We have over 500 physician and health  
14 care professional members and supporters in Georgia  
15 and Alabama. I come here from Atlanta, but we have  
16 members in the Augusta area, and downstream we have  
17 members in Savannah, as well.

18 This reiterates something I've said in the  
19 past at these meetings. I would hope that -- I was  
20 pleased to hear that you considered this a public  
21 health document. And I would encourage you to think  
22 about your visit to your physician. One thing that we  
23 always like to do is have enough time with our  
24 physician. And we're being told tonight that we don't  
25 really have enough time to discuss this fully. So I

1 it provides jobs. And, unlike storage, and certainly  
2 unlike MOX, would not generate waste, and would  
3 actually employ waste.

4 And I hear what you say about the  
5 vitrification problems. That vitrification facility,  
6 that's DOE's best success story. And I just really  
7 believe we can solve that problem with solvent  
8 extraction and ion exchange. That's what we'd like.  
9 So we really are going to make a case that  
10 immobilization should be analyzed, that NEPA requires  
11 it.

12 On the waste, we got a problem with the  
13 fact that we haven't heard anything from DOE yet on  
14 this waste solidification building. There's no  
15 budgets. And so we really think the analysis needs to  
16 reflect any possible -- you know, a possible outcome  
17 that a MOX facility is up and operating and the waste  
18 solidification building -- what...

19 MR. CAMERON: Okay, Glenn, is that -- is  
20 that it?

21 MS. CARROLL: Does it for me.

22 MR. CAMERON: Thank you very much.

23 MS. CARROLL: Thank you. Thank you.

24 MR. CAMERON: Ed Arnold?

25 MS. CARROLL: We look forward to seeing

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1 would urge the NRC to arrange for appropriate public  
 2 discussion that won't rush us.

3 Full disclosure is something that you  
 4 want. Your physician wants it from you; you want it  
 5 from your physician. This is really confusing. I  
 6 don't feel as though I have full disclosure from this  
 7 document. This is -- we're trying to understand the  
 8 risks, and frankly I don't -- I -- I won't say it  
 9 again.

10 Let me read something directly from the  
 11 document that was alluded to a couple of times earlier  
 12 this evening, just this one example. I'm going to  
 13 submit more comments in writing, but it's one example.

14 "The EIS will not address the impacts of  
 15 terrorism because these impacts are not  
 16 considered to be reasonably foreseeable  
 17 as a result of the proposed action."

18 Well, how about a range of what might be  
 19 foreseeable. How about a worst case scenario, which  
 20 I think most public work is -- is required to provide  
 21 on a statement like that. Now, for me it doesn't cut  
 22 it. We were told tonight something more about some  
 23 kind of a safety evaluation that will be provided next  
 24 month. Well, what's the public procedure connected  
 25 with that? And is it part of this? Is it separate

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1 from this? Will there be public participation once  
 2 that's released? Will we have an opportunity to  
 3 discuss it with you all? I -- these are -- this is a  
 4 big mystery to me.

5 So as someone who works regularly -- I'm  
 6 not a physician myself, but I work regularly with  
 7 public health officials and physicians, this document  
 8 doesn't look like any medical report I've ever read.  
 9 And I encourage that you make an attempt to step up  
 10 the standard.

11 MR. CAMERON: Thank you very much, Ed.  
 12 Mr. Chaput? And then we have two more  
 13 flights of three, I think. Robert Guild, Peggy Roche,  
 14 and Darrel Watson, next trio.

15 MR. CHAPUT: Good evening, and thank you  
 16 for the opportunity to provide comments on the draft  
 17 EIS work, the mixed oxide fuel fabrication facility.  
 18 I'm Earnest Chaput, and I am the Manager of Special  
 19 Projects for the Economic Development Partnership of  
 20 Aiken and Edgefield Counties in South Carolina.

21 Construction and operation of the mixed  
 22 oxide fuel fabrication facility is an important part  
 23 of our nation's international non-proliferation  
 24 programs. It is important we do all possible to make  
 25 surplus United States and Russia nuclear materials

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1 unusual for future use in nuclear weapons. We believe  
 2 the United States should continue to demonstrate moral  
 3 leadership by expeditiously preparing to make these  
 4 materials unsuitable for use in modern nuclear  
 5 weapons. We are pleased that the preliminary  
 6 conclusion of the NRC staff that the overall benefits  
 7 of the MOX facility outweighs disadvantages. Unless  
 8 safety issues mandate otherwise, the action called for  
 9 is issuance of the proposed license. We agree the  
 10 proposed facility can be operated safely, and urge the  
 11 NRC to issue the construction authorization request in  
 12 a timely manner.

13 We've reviewed the draft EIS, and offer  
 14 three comments which result in additional support for  
 15 your primarily conclusion. First, the safety and  
 16 environmental risks associated with the no-action  
 17 alternative have been significantly understated.  
 18 These are comments that we have previously provided to  
 19 DOE in their -- in their EIS statements on the surplus  
 20 plutonium disposition. The no-action alternative  
 21 assumes that DOE's surplus plutonium would remain in  
 22 storage at seven DOE sites. The DEIS does not state  
 23 the period of storage, and it appears the impacts that  
 24 are included therein are near-term and based on  
 25 maintaining the status quo. We believe current

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1 methods of storage are only valid for limited and  
 2 finite lifetimes. Storage without subsequent actions  
 3 is not realistic for time frames of 100 years plus.  
 4 At some time in the future, action will be required to  
 5 either repackaging or to disposition the stored  
 6 materials. The no-action alternative should assess  
 7 the incremental added risk resulting from actions to  
 8 periodically reprocess and repackaging materials in  
 9 long-term storage; and secondly, actions to eventually  
 10 remove the materials from storage and prepare them for  
 11 disposition. You can't babysit this stuff forever.  
 12 Something's going to have to be done with it sooner or  
 13 later.

14 Second comment. The risk to offsite  
 15 population in the hypothetical accident is  
 16 significantly overstated. Again, I don't have the  
 17 benefit of the revised analysis, but my sense, from  
 18 looking at the numbers, has not significantly changed  
 19 as far as the -- the assumptions made.

20 In analyzing the impact to offsite  
 21 population from a hypothetical tritium release from  
 22 the PDCF, the draft EIS assumes and calculates a dose  
 23 by ingestion during a one-year post-accident period.  
 24 The scenario is simply not possible. An assumption  
 25 that the South Carolina Department of Health and

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draft EIS should only analyze -- draft EIS for MOX should only analyze and include the combined accidents which result from the unique requirements associated to fabricate MOX fuel. Disassembly of the pit is not required solely to fabricate MOX fuel, and that's the primary impact that comes out of PDCF.

63-4 cont.

DOE has previously prepared an environmental impact statement for the PDCF---that was a question that was asked earlier---with a finding that the facility provides adequate protection to the public and the environment. NRC should not subject the PDCF facility to NEPA -- to NEPA double jeopardy.

Thank you for the opportunity to provide comments.

MR. CAMERON: Thank you very much, Ernie. And our next speaker is Mr. Robert Guild. And then we'll go to Peggy Roche and Darrell Watson.

Mr. Guild?

MR. GUILD: Good evening. My name is Robert Guild. I'm from Columbia, South Carolina. I'm an environmental lawyer by training, but I appear as a member of the Executive Committee of the South Carolina Chapter of the Sierra Club to speak in opposition to the proposed licensing of the MOX fuel fabrication facility and allied facilities included in

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Environmental Control and that the Georgia Environmental Protection Division would ignore contamination -- ignore contamination of agricultural products for one year is incredulous, and it's an insult to their training, demonstrated performance, and professional status. The impossible assumption must be eliminated and the analysis revised.

Third, the DEIS places unwarranted emphasis on impacts associated solely with the PDCF facility. And it's also sometimes called connected actions. I think that's what you called it in your -- in your presentations. The PDCF is not necessarily solely required to support the MOX facility. The PDCF has a broad capability support of a variety of storage and disposition options for surplus nuclear weapons pits. For example, the PDCF was to have prepared the plutonium. That was included in the cancelled plutonium immobilization project. There has also been discussion that PDCF may convert surplus weapon plutonium components currently being stored as pits to oxide for long-term storage. By coupling MOX and PDCF facilities in a draft EIS, NRC creates the implication that impacts from PDCF will not occur if the MOX construction authorization is denied. That is not the case. PDCF and MOX are two separate actions. And the

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1 this draft environmental impact statement.

2 The South Carolina Sierra Club has over

3 5,000 members in South Carolina. As you know, we're

4 a national conservation organization with over 100

5 years of history of advocating for the protection of

6 our environment. Our governing body, the executive

7 committee, passed by unanimous resolution last year a

8 statement opposing the mixed oxide fuel fabrication

9 facility as an element in the management of our

10 surplus weapons plutonium, and alternatively supported

11 the pursuit of the now apparently abandoned

12 immobilization program as the prudent and preferable

13 alternative to more safely and appropriately manage

14 this surplus weapons material.

15 We are supportive of the objective of

16 managing this weapons material and converting it into

17 a non-weapons accessible form, but believe the

18 environmentally preferable as well as the security

19 preferable alternative of immobilization is

20 inappropriately not properly assessed in this draft

21 environmental impact statement.

22 My view, NEPA does not -- simply does not

23 permit the Nuclear Regulatory Commission to assume the

24 unavailability of immobilization as is apparently done

25 in order to avoid assessing the cost of the

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1 immobilization alternative. I won't repeat the I

2 think eloquent observations, quoting from the actual

3 language of the Russian-United States plutonium

4 disposition agreement, which obviously is contrary to

5 the representations made by the authors of this DEIS

6 with respect to the binding character of the -- of the

7 MOX alternative. But, suffice it to say, that

8 regardless, NEPA requires you to assess the costs of

9 that alternative.

10 DOE, even if they are the decision-maker,

11 deserves, and the American public demands a full

12 assessment by the Nuclear Regulatory Commission of the

13 environmental costs and benefits of this action, as

14 well as available alternatives. It's fine for you to

15 say that an alternative has been rejected by your

16 sister agency. It's simply not adequate for you to

17 fail to assess that alternative so that the public

18 will understand that it is environmentally preferable.

19 And we urge you to do that.

20 Several other comments. We like to echo,

21 without repeating, the written comments submitted by

22 the Nuclear Information Resource Service which

23 submitted some useful comments on procedural issues,

24 particularly with respect to the what appear to be

25 segmentation problems with regard to the way the NRC

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production at the Savannah River Site, we had turned the Savannah River Site into literally a national sacrifice area. The number of -- of Super Fund sites, the number of high level and low level rad waste contamination sites are legion at the facility. The most optimistic version of DOE's views say it'll be until the year 2025 before we clean up the ground water contamination at a number of these sites. And yet this action contemplates a renewed waste production mission at this facility before we have completed a satisfactory plan for environmental restoration of the damage we've already done. That is simply unacceptable.

With respect to environmental justice, the NRC has appropriately complied with the executive order by at least analyzing the disproportionate impacts that the credible accident scenarios at this proposed facility will have on communities of color and of low income. That really reflects the dynamic that really has been at work at the Savannah River Site from its inception; and that is that the people in this area of South Carolina represent the path of least resistance with respect to doing what no one else in the country finds environmentally acceptable. Is it a surprise that Rocky Flats and its neighbors no

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has chosen to evaluate this particular action; that is, failing to evaluate the necessary connected action such as the effects of accident sequences at the McGuire and Catawba reactors which will be using the MOX fuel. It simply seems incredible to say that you used a generic reactor and assumed the consequences of accidents in generic reactors, when I reviewed studies that indicate that because of the proximity of the high population concentration of Charlotte, North Carolina, to the reactors, out of all in the country that we've chosen to use as the MOX fuel facilities. Early cancer fatalities from -- from -- early fatalities and latent cancer fatalities from beyond design-based accidents at those very reactors exceeded virtually every other reactor site in the country because of the population concentration at Charlotte. And why you haven't acknowledged that in this -- in this review is beyond me.

Let me touch briefly on a couple of points. We believe fundamentally at the Sierra Club that the Savannah River Site should be required to honor its commitment to the people of South Carolina to focus principally on its environmental restoration mission. In conducting the 50-year mission of weapons

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1 longer will tolerate being responsible for managing  
 2 weapons plutonium, and instead are sending it to the  
 3 Savannah River Site in South Carolina?  
 4 So you've acknowledged the fact that if  
 5 there is an accident, disproportionate numbers of  
 6 African Americans and poor people will die. But  
 7 you've been glib in characterizing the numbers which  
 8 you claim to be precise about in other regards. And  
 9 I would strongly urge you, in your DEIS at Section  
 10 4.3.7.3.3, to not simply give us a map at in grainy  
 11 terms shows where those concentrations of  
 12 predominantly African American, low income populations  
 13 are. But to give us an actual table, as you do in  
 14 some of the other places when the data supports your  
 15 action, and tell us how many black people and poor  
 16 people will die in that accident scenario that you  
 17 assume. Tell us where they live. Tell us which  
 18 census blocks they live in, because you know that  
 19 data. That's the data source that generated the maps.  
 20 Let's give us the numbers so that the public can  
 21 transparently see what cost they're being asked to  
 22 bear.  
 23 And finally, as I tried to suggest in a  
 24 question, it's simply unacceptable for you to tell us  
 25 in this document, which purports to assess the costs

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1 and benefits of a proposed major federal action, and  
 2 assures us that risks are small and acceptable, that  
 3 you refuse to put a number on the probability of the  
 4 accident scenarios that you say will not happen. You  
 5 just refuse to tell us what that number is.  
 6 Now, I know EPA, when it says we're going  
 7 to release dioxin into the environment from an  
 8 incinerator, will tell you that the chances of a death  
 9 from cancer are, you know, 1 in 100,000 or 1 in  
 10 1,000,000. And they'll make an explicit judgement  
 11 that it's acceptable to expose the population to that  
 12 level of risk. We should expect no less of the  
 13 Nuclear Regulatory Commission when they tell us that  
 14 the risk of an accident at this facility is  
 15 acceptable, without giving us a value that represents  
 16 that acceptable risk.  
 17 And the last point I'd like to make with  
 18 regard to environmental justice impacts is you  
 19 acknowledge that more black people and poor people are  
 20 going to be down wind, essentially, from that plume,  
 21 from that accident location in the plume exposure  
 22 pathway. And yet you fail to acknowledge what seems  
 23 obvious to me, and that is poor people are largely  
 24 going to be far more dependent on subsistence  
 25 agriculture and dairy product consumption, the

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1 dominant ingestion pathways that you assume in your  
 2 cancer risk scenarios, without telling us that in the  
 3 EIS. I mean, the fact of the matter is it's very  
 4 likely that poor people will be the ones who will  
 5 continue to consume the vegetables that they're  
 6 growing in their garden or the dairy products that  
 7 come from the cow that eats the grass that's exposed  
 8 to the deposition of contaminants in the accident.  
 9 And you should be explicit about what those enhanced  
 10 risks are exposed -- that are -- that those -- that  
 11 those populations, communities of color and low  
 12 income, are -- are exposed to. One moment, I'll wrap  
 13 up.  
 14 That's all. Thank you very much.  
 15 MR. CAMERON: Thank you. Thank you very  
 16 much.  
 17 Our next speaker is -- is Peggy still --  
 18 Peggy? There's Peggy. And is it -- is it...  
 19 MS. ROCHE: Peggy Roche.  
 20 MR. CAMERON: ...Roche? All right.  
 21 MS. ROCHE: Thank you for allowing me to  
 22 speak tonight. I'm down to just a few remarks. So  
 23 one thing I'd like to address is the hearing process,  
 24 itself. We ask for more hearings to be held so we  
 25 wouldn't run this late. We'd ask for them to be -- I

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1 mean, this is a lovely area with friendly people, but  
 2 it's not the most centrally located area in the state.  
 3 We'd ask for them to be held in Columbia and  
 4 Charleston and other places around the state. And I  
 5 think that it would be very advantageous. You would  
 6 get a lot more input from the public. And that is  
 7 supposedly what you're wanting.  
 8 One point that I want to make, and one of  
 9 the charts in your EIS, it's on the East Coast, the  
 10 air flows in a northeasterly direction. But on one of  
 11 the charts---and I'm sorry, I don't have the page  
 12 number but it is in there---all the air quality  
 13 monitoring systems are located in the northwestern  
 14 section of the Savannah River Site. So you would be  
 15 gathering data from air not affected by the MOX  
 16 facility.  
 17 Then I also made some -- on a couple of  
 18 your charts I did your calculations with your formula  
 19 for the latent cancer fatalities, and I won't -- in  
 20 the interest of time, and I know other people are  
 21 wanting to speak. I won't go by them line-by-line.  
 22 But the numbers were mathematically astronomical in  
 23 the difference between short-term and the one-year-  
 24 later.  
 25 And I want to make mention of the fact

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1 that a MOX fuel processing facility is actually a  
 2 plutonium breeding facility. That when you -- when  
 3 you are -- you're actually increasing the amount of  
 4 plutonium you eventually end up with. Because as  
 5 uranium that it's mixed with is irradiated by the  
 6 plutonium, the irradiation of the mixture converts the  
 7 uranium into plutonium; therefore giving you plutonium  
 8 that you -- more plutonium than you started out with.  
 9       Recently there was a tremendous public and  
 10 official outcry about moving six tons of plutonium  
 11 into the State of South Carolina. Now you're talking  
 12 about move 34 metric tons into the state, which is  
 13 approximately 75,000 pounds of plutonium. Put some  
 14 perspective on that, the bomb that was dropped on  
 15 Nagasaki had approximately 20 pounds of plutonium.  
 16 With today's refinery numbers, it would take less than  
 17 20 pounds to get more bomb for the buck. And we're  
 18 talking about 75,000 pounds of plutonium being located  
 19 in one site here in South Carolina, when it took less  
 20 than 20 pounds to drop that bomb on Nagasaki.  
 21       I think more attention needs to be  
 22 addressed to if there was an accident, how would you  
 23 deal with it. Talked about a remote way. I don't  
 24 understand how that would work if you had an explosion  
 25 or you had a fire. Whatever remote facility was in --

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1 you know, remote control, whatever, was in the  
 2 facility, it's going to be fried when they had the --  
 3 and with plutonium being, you know, much hotter than  
 4 uranium, it would be much worse than the Chernobyl  
 5 incident. And the people that went in to shut down  
 6 that reactor at Chernobyl knew that they would be  
 7 incinerating themselves when they went in to do it.  
 8 And so it would be -- it would not be possible to go  
 9 into a MOX facility physically and do it. You'd be  
 10 incinerated before you could get to it to shut down  
 11 the reactor.  
 12       And any equipment that you had in there at  
 13 the reactor, the reactor would be so hot that it would  
 14 be -- we don't have anything that's capable of  
 15 shutting it down. It would be incinerated. If  
 16 there's an explosion or fire, then the reactor got so  
 17 hot that it needed to be shut down, any equipment that  
 18 we could put in there would be so hot that it wouldn't  
 19 work. So I would like, you know, to have that issue  
 20 addressed.  
 21       And the other thing is -- my last point is  
 22 the language, the way the language is worded in this  
 23 really bothers me. "Workers would be monitored as  
 24 appropriate..." As appropriate to whom? "...to  
 25 insure the radioactive doses are maintained at levels

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 cont.

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think is a very, very bad idea, exposing that much plutonium to possible interception by exactly the entities you want to protect this plutonium from apparently in your MOX program, and that's terrorists and rogue states. I think that really needs to be considered. That's 34 metric tons of plutonium. That's almost 75,000 pounds to move across the country to our backyard, as it is.

65-1 cont.

Number two, I think terrorism really needs to be addressed in the draft EIA (sic). I think nowadays that's definitely to be something that you -- you'd be completely irresponsible not to include. That's a facet of our everyday life now, and that needs to be addressed. It's no excuse for not -- that not being addressed.

65-2

Third topic is, this is an experimental process. This has been done nowhere in the world. South Carolina is the test bed for this project. This has not been done in Russia, this has not been done in France. This has been done nowhere except in labs and experimental settings and controlled settings. So we're going to find out firsthand the consequences of possible side effects of this.

65-3

Also the very last comment I have is I'm fully opposed to Cogema being involved in this

65-4

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as low as reasonably achievable. What is "reasonably achievable"? You know, a scientists idea of what is reasonably achievable? To me that leaves a lot of human beings as collateral damage.

Thank you.

MR. CAMERON: Thank you, Peggy.

And I know it's -- it's late. And perhaps we can answer some questions after we're done.

Did you want to say something quickly in summary, Mr. Robinson?

MR. ROBINSON: No, no, no, no.

MR. CAMERON: Okay. All right. Thank you very much.

Darrell Watson?

MR. WATSON: I just have a few quick comments. A lot of what I'm going to talk about has already been said, so I'm going to keep it short.

I've got four main issues with this. Number one is the transportation of the plutonium. According to your diagram here, 95% -- this is -- this is going to be Section 1-8, Figure 1.3. 95% of the surplus weapons grade plutonium in this country is located west of the Mississippi River. Now, to bring in 95% of the plutonium in this country all the way pretty much across the country to South Carolina I

65-1

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1 project, given their track record in France. Let's  
 2 see. Matter of fact, they have just a bad track  
 3 record, especially at La Hague or La Hague  
 4 (pronouncing), I guess is how you pronounce it, in  
 5 France. To me it proves that they are an  
 6 irresponsible company and they should not be involved  
 7 in this project in any shape or form if this project  
 8 does go forward. I think that needs to be addressed.  
 9 There needs to be more transparency in the histories  
 10 of the countries that are involved in this project.  
 11 And that's -- that's all I have. Thank  
 12 you.

13 MR. CAMERON: Okay, thank you, Darrell.  
 14 We have four speakers, and if I -- I think  
 15 I've gotten everybody. But if there's someone who I  
 16 don't have on my list, please tell me. We're going to  
 17 start with Jen Kato, then we have Tom Howell, Adele  
 18 Kushner, and Joanne Steele. And I'm sorry if I  
 19 mispronounced any names.  
 20 Jen Kato?

21 MS. KATO: I hope I didn't write my notes  
 22 in the same invisible ink that I wrote my name on that  
 23 list with.

24 MR. CAMERON: I hope not, either.  
 25 MS. KATO: Anyway, I'm Jen Kato, and I'm

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1 a local. I'm with the Georgia Chapter Sierra Club.  
 2 I represent the Executive Committee of the Georgia  
 3 Chapter of the Sierra Club. And we represent 14,000  
 4 people in the State of Georgia; 45% Republican, 55%  
 5 Democrat. And we have grave concerns about the MOX  
 6 fuel fabrication facility. We would like to see this  
 7 entire process canned, and would be more likely to  
 8 support the immobilization alternative, although we'd  
 9 just have to see what the figures were that would come  
 10 out of that.

11 The cost benefit analysis does not include  
 12 the cost of any accident scenarios for victim health  
 13 recovery or clean up to public property. This must be  
 14 corrected. The estimated public collective offsite  
 15 health impacts for accidentally scenarios are only  
 16 considered for one year after an accident, and only  
 17 for the standard man. Any accident would not likely  
 18 create a uniform offsite dispersion among the  
 19 population limited to a 160 pound man with effects  
 20 stopping at one year. The very use -- well, the use  
 21 of FRG-13 does not consider gender, race, or age  
 22 differences in response to radiation exposure, and the  
 23 radiation involved is hazardous for 240,000 years  
 24 plus, and their effects are cumulative. The DEIS must  
 25 be corrected to reflect these concerns. Further, an

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66-1

66-2

66-3

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1 people. And I think Tim has done a great job trying  
 2 to help me arrive at one portion of the calculation at  
 3 the region of influence. This prevents corroboration  
 4 of human health impacts figures which are important to  
 5 a lot of people. For this reason, and because of the  
 6 inclusion of the WSB and the PDCF, it makes a document  
 7 very, very deficient and suspect, and we need to have  
 8 additional and corrected data to evaluate this EIS and  
 9 offer comments on it. The distribution of this  
 10 additional data must be followed by a lengthened  
 11 public comment period and public meetings. Let me  
 12 see. Not -- not going to invisible ink.

66-5  
cont.

66-6

13 Well, right now Savannah River Site is  
 14 actually courting TRU waste from other sites which it  
 15 hopes to process -- characterize, process, and  
 16 package. The TRU waste generated by your mission will  
 17 just accumulate there behind all that other, waiting  
 18 to go to Whip. And right now there's a WIR (phonetic)  
 19 lawsuit against -- that's halting tank closer at  
 20 Savannah River Site. And when you're looking at  
 21 133,000 gallons of high level aqueous waste and what  
 22 it -- actually 355,000 gallons of low level waste per  
 23 year. If something like WIR persists, this -- this  
 24 waste will also accumulate. And in general, the human  
 25 health facts, the human health impacts have not been

66-7

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1 actual accident may cascade into several of the  
 2 scenarios illustrated in the EIS, compounding health  
 3 effects. And this must also be considered in the EIS.  
 4 And some sections in the back, human  
 5 health risk states statistically no fatalities during  
 6 normal operations will occur. Yet, according to your  
 7 own figures, 50 people -- and these figures I -- I  
 8 contest, but I don't have all of the -- I don't have  
 9 all the information to corroborate them. But yet you  
 10 say 50 people will die by latent cancer fatalities.  
 11 And they -- these will only be standard men, of  
 12 course, during the 20-year operating period.

66-3  
cont.

66-4

13 Also any impact -- you state any impacts  
 14 associated with the transportation of fresh MOX fuel,  
 15 including impacts on property values, will be minimal.  
 16 Did someone even do an Internet search on this topic?  
 17 It doesn't seem like it was very seriously addressed  
 18 at all in the EIS, whatsoever, as a cost. And it will  
 19 be a cost.  
 20 This, as well as transport of plutonium,  
 21 will affect populations throughout Georgia, including  
 22 property values. This must be just seriously looked  
 23 at and evaluated in the EIS. The DEIS has -- has  
 24 insufficient detail regarding how these calculations  
 25 were arrived at. This has been brought up by several

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1 evaluated with regard to waste in the EIS. And  
2 especially not in consideration of the variability of  
3 the handling of the waste at Savannah River Site.

4 I have sought to give comments that were  
5 not given by other people before, but I do want to  
6 stress that I am in -- we are -- the Sierra Club is in  
7 complete accord with very large concerns about  
8 terrorist activities and that they have not been  
9 evaluated at all with regard to any accident  
10 scenarios, latent cancer fatalities, costs in the EIS.  
11 This is a tremendous oversight. We need another EIS,  
12 we need another -- we need to lengthen comment period,  
13 and we need more meetings.

14 Thank you very much.

15 MR. CAMERON: Thank you, Jen.

16 Mr. Howell?

17 MR. HOWELL: My name is Tom Howell. I'm  
18 from Columbia.

19 I'm concerned about several issues. There  
20 are already millions of gallons of radioactive nuclear  
21 waste stored in this country. I understand that  
22 radioactive liquid waste is highly corrosive, and  
23 there have been problems with such wastes degrading  
24 their containment vessels. Liquid waste is projected  
25 to be produced when plutonium is polished in the MOX

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1 process. Do we know how much liquid waste is  
2 anticipated? Do we know how long it will be necessary  
3 to store this waste? Do we know what the long-term  
4 costs will be for storing this waste?

5 I understand that U.S. reactors are not  
6 designed to handle MOX. I'm concerned about how U.S.  
7 reactors will be modified to handle MOX, and how those  
8 reactors will be monitored. Will there be independent  
9 auditing of such a monitoring system? If there might  
10 be problems with the reactors that use MOX, does it  
11 make sense to build a MOX processing facility?  
12 Shouldn't problems with the reactors be solved before  
13 a MOX processing facility is approved?

14 I am also concerned about how the MOX will  
15 be safeguarded to prevent theft or loss at all points  
16 in its processing, use, and storage. Radioactive  
17 material has gone astray in the past. Is there an  
18 inventory system capable of tracking all the plutonium  
19 involved? If so, is this inventory system capable of  
20 tracking the other radioactive materials involved,  
21 including all waste? Will there be independent  
22 auditing of such an inventory system?

23 Thank you.

24 MR. CAMERON: Thank you, Mr. Howell.

25 We have Adele Kushner.

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66-7  
cont.

66-7  
cont.

66-8

67-2

67-1

67-3

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MS. KUSHNER: Thank you. My name is Adele Kushner. I represent Action for a Clean Environment, which is based in Northeast Georgia. We have a few representatives here. And this is very short, and you've all been very patient.

People in this country expect to trust their government. After all, it is a democracy. Under other forms of government people know not to trust official government statements. Those governments could be telling lies.

In this case, the Nuclear Regulatory Commission is telling us that there is very little danger from exposing people to accidentally emissions produced by a MOX plant. Then it turns out that the draft EIS contains large computer errors, and that there would be far fewer than the estimated 400 deaths in a population living within 50 miles of the plant. And, anyhow, this was a minority, low-income community. And furthermore, the new data will not be available until after the public meetings. But trust us. We are your democratic government. Would we lie to you?

This reminds me of another campaign also concerning radioactive materials. Years ago the NRC told us that a little bit of radioactivity in our

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cooking pots, our bicycles, our paperclips, our appliances would not hurt us one bit. The level of radioactivity would be so low, it would be, quote, "below regulatory concern," end quote. We found out there is no way you could tell how much radioactivity people would be exposed to once they were surrounded by such little bits, if the little bits were scattered around randomly. I once adopted a cat that the owner said was just a little tiny bit pregnant. That cat produced four good-sized kittens right on schedule.

It is hard to believe that the Savannah River Site, already the most radioactively polluted Department of Energy site, would even be considered for a process that can only produce more radioactive pollution. Especially when there is an alternative. Would you rather live and work near ancient tanks already leaking radioactive nitric acid attractive only to saboteurs and terrorists, or near glass logs in which nuclear waste is immobilized, out of reach for any reuse, providing safe jobs, leaving no mess behind? How about a real comparison of the pros and cons, NRC, before a decision is made on this DEIS.

Think about the perils of transporting plutonium across the country, then taking the MOX fuel to reactors, all of which subject to accidents and the

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1 possibility of spreading radioactive stuff in city  
2 centers and people's backyards. Think of a weapons  
3 grade plutonium out there waiting to be grabbed. A  
4 conscientious examination of the facts might produce  
5 a decision that would restore some of our trust in our  
6 government. That is a conclusion devoutly to be  
7 wished.

8 Thank you for your patient.

9 MR. CAMERON: Thank you for those  
10 comments, Adele.

11 And is it Joanne -- is it Steed?

12 MS. STEELE: Steele.

13 MR. CAMERON: Steele. Sorry. I can't  
14 read writing.

15 MS. STEELE: I probably didn't write it  
16 well.

17 I'm also a member of Action for a Clean  
18 Environment in Northeast Georgia -- in Northeast  
19 Georgia. And I work on looking after some of the  
20 activities going on at the Oconee Nuclear Power plant  
21 which is also a Duke Energy facility. And what -- the  
22 phenomenon that is going on is that so many old plants  
23 that were only designed to go for 30 years of  
24 licensing, or 40 years, are now being relicensed for  
25 another 20 years. And they weren't -- really weren't

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1 designed to go that long. And there've been problems,  
2 and there's been repairs of this part and that part of  
3 these plants.

4 So they've got old vessels starting to get  
5 new tops on them. And -- and the ways of monitoring  
6 these -- these facilities weren't -- weren't designed  
7 to look at 60 years of use, and surely weren't  
8 designed to look at MOX fuel being used in them. And  
9 so the whole MOX program is -- is dangerous to me. It  
10 just doesn't make sense. And when you consider that  
11 nuclear energy only provides 20% of the energy that we  
12 have in our country, and we're going to all of these  
13 risks of the unknown with this dangerous fuel, MOX  
14 fuel, and the whole development of MOX fuel is  
15 questionable, it just doesn't make any sense to me.

16 I'm a mother and I'm a grandmother, and  
17 I'm ashamed that our generation is -- and the  
18 generation before me is looking at this type of  
19 electricity production and the dangers of -- that it  
20 -- inherent dangers that it has, that it's leaving to  
21 my children and my grandchildren and to their  
22 children. And I'm just totally opposed to this. I  
23 think we have -- immobilization seems like the best of  
24 the worst situations that we've got with nuclear  
25 energy and messing with this stuff to begin with. And

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1 so I'm opposed to the MOX fuel facility. I'm in  
2 better support of the immobilization plan. But I just  
3 think this is very irresponsible behavior for the past  
4 50 years, and it's time for it to stop.

5 MR. CAMERON: Thank you, Joanne.  
6 And real quickly, we have Mr. Charles  
7 Utley who is just going to share a brief moment with  
8 us.

9 MR. UTLEY: Good evening. I'm Charles  
10 Utley, and I'm from the (indiscernible) Improvement  
11 Committee. Also I work with (indiscernible) and with  
12 Reverend Jenkins out of Aiken.

13 I just -- I wanted to just say briefly  
14 that let us not forget those communities that are  
15 impacted, and that is those communities in -- and  
16 we've talked about them being socially, economically  
17 deprived. But -- and we talk about wind shifts. And  
18 -- and all of us know how the wind blows because that  
19 even the Bible tells you that, so if you're a good  
20 Bible student you would know which way it's going to  
21 blow.

22 However, I want to remind you that,  
23 irregardless of race, creed, or color, there's -- if  
24 there's a fallout, it doesn't care about any of the  
25 above. But what I do want you to -- not as an NRC or

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69-2  
cont.

1 regulatory commission, I don't want you to take what  
2 President Bush has said about affirmative action and  
3 apply it to these neighborhoods. And no matter -- I  
4 know Georgia and South Carolina are at the bottom of  
5 our scholastic aptitude tests. But these are human  
6 beings that we're talking about.

Thank you very much.

MR. CAMERON: Thank you, Mr. Utley.

7 There's at least one thing I think --  
8 thank you all for your patience and your comments. I  
9 think the NRC got some great, very thoughtful,  
10 specific comments tonight.

11 One thing that we probably should just  
12 emphasize again, and I'm going to ask Lawrence to do  
13 that for us, is -- is that, even though terrorism  
14 isn't part of the EIS, can you tell us how that is  
15 factored in in our evaluation, and just close the  
16 meeting out for us, Lawrence?

MR. KOKAJKO: Okay. I'd like to -- to  
make several comments before I get to that, Chip.

First of all, we are not going to forget  
environmental justice. We are not going to forget it,  
and we will look into that.

A couple of comments. Fuel is accounted  
for, by the way, under a materials control and

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of safeguards, security, terrorist threats, vulnerability assessments. And that will be a determination made by the fuel cycle -- Fuel Cycle Safety and Safeguards Division at the NRC. And I think that's about it, Chip.

I would like to point out that Adrienne Lester, is she -- Adrienne. This meeting, by the way, would not have happened if it wasn't for the work of Adrienne Lester. She put on a dynamite effort to get everything and all the meeting rooms and the space here, and I'd like to -- to make a public acknowledgment for her help for the last month or so.

[Applause.]

MR. KOKAJKO: With that in mind, I have no further comments, Chip.

MR. CAMERON: I think we're -- we're adjourned, and thank you.

(Whereupon, the hearing was concluded at 10:50 p.m.)

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accountability program. And there is monitoring at the facilities. And that's also part of our regulations.

MR. CAMERON: If you could just make sure you get that on the mic. I think it's -- it may be hard to hear you.

MR. KOKAJKO: Also the use of MOX fuel is generally considered acceptable. However, before they can even put a lead test assembly in, it has to be evaluated by both the licensee, who wants to do it, as well as us. And unless found to be acceptable by them and they submit that application to us for our approval, it does not happen.

Finally, there was two more items. One is the draft environmental impact statement for the -- is for MOX only. It is not for the PDCF or the WSB. That would have to be done separately. That would be another EIS. DOE would have to do another environmental report for that, and that would not -- since that is not regulated by the NRC, that would be under their authority.

And finally, the security concerns. I'd like to point out that security concerns are going to be considered in the safety review of the proposed facility. The safety review will consider all aspects

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Official Transcript of Proceedings

NUCLEAR REGULATORY COMMISSION

Title: Public Meeting on Proposed MOX Facility  
Draft Environmental Impact Statement

Docket Number: (not applicable)

Location: Charlotte, North Carolina

Date: Thursday, March 27, 2003

Work Order No.: NRC-801

Pages 1-120

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
+ + + + +  
PUBLIC MEETING ON PROPOSED MOX FACILITY  
DRAFT ENVIRONMENTAL IMPACT STATEMENT

+ + + + +  
THURSDAY  
MARCH 27, 2003

+ + + + +  
CHARLOTTE, NORTH CAROLINA  
+ + + + +

The Public Meeting was held in the Charlotte-  
Mecklenberg Government Center, 600 East Fourth Street,  
at 7:05 p.m., Francis "Chip" Cameron, Facilitator,  
presiding.

PRESENT:  
FRANCIS (Chip) CAMERON  
LAWRENCE KOKAJKO  
TIM HARRIS

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parts, so it's a simple agenda tonight. And in terms of the purpose, one purpose is we want to make sure that we clearly explain what the NRC's process is for evaluating the DCS application, and to also talk about the findings in the draft environmental impact statement, and to answer any questions you have about the process or the findings.

Second purpose and most important purpose is to hear any comments that you might have on the draft environmental impact statement. And it may be that the information you hear tonight from the NRC or any of the other people in the audience will help you to prepare any written comments that you might want to submit on this draft environmental impact statement. And the NRC staff will be explaining in a few minutes what that process is for submitting written comments. But I just wanted to emphasize, anything that you say tonight will carry the same weight as a written comment. We are transcribing the meeting, and your comments tonight will be essentially in writing because they will be on a transcript. It'll be a written transcript. And we will make that available to whomever wants to have that -- that transcript. The ultimate goal is to use the comments that we hear tonight, in the other public meetings, and the written

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P-R-O-C-E-E-D-I-N-G-S  
MR. CAMERON: Okay. Good evening, everyone. My name is Chip Cameron. I'm the Special Counsel for Public Liaison at the Nuclear Regulatory Commission, and I welcome you all to the NRC---that's one acronym we'll be using tonight for Nuclear Regulatory Commission---I want to welcome you to the NRC's public meeting tonight.

And our topic is the draft environmental impact statement that the NRC has prepared to assist the NRC in evaluating the application that we've received from a consortium, Duke Cogema Stone & Webster, better known as DCS; an application to construct a mixed oxide fuel fabrication facility. And it's my pleasure to serve as your facilitator for tonight's meeting. And in that role, I'm going to try to help all of you to have a -- a productive meeting tonight.

And before we get into the substance of the discussion tonight, I usually like to go over some -- some items about the meeting process, why we're here tonight, what the format and ground rules are for the meeting, and to just briefly talk about the agenda.

The agenda does not have a lot of moving

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UNIDENTIFIED: A label.

MR. CAMERON: A label mic. Thank you, Mary. A label mic. I will bring this to you and get your question, and the NRC staff will answer it.

When we go to the formal comments, I would just ask you to come up here to the podium. And we want to make sure everybody gets a chance to speak. And I would ask that only one person speak at a time so that we can get a clean transcript and, more importantly, pay attention to whomever has the floor at the time.

We do want to keep it informal and have a discussion with you, so I would just say relax and speak what's on your mind tonight. We have people here from different parts of the -- the NRC. In addition to the NRC staff who are in charge of evaluating this application, we have people from our Office of General Counsel, from our regional office. And after the meeting is over, take advantage of talking to them about any pertinent questions you might have.

I wanted to -- to ask Adrienne Lester, who is -- did all to logistical arrangements for these meetings, to just come up and tell us about any logistical details that you think people should know

comments, to -- to illuminate our decision-making on this application.

In terms of format, we're going to have a couple of brief NRC presentations to give you background; question and answers from you. I know you'll have questions, and hopefully we'll have answers, good answers. And the second part of the meeting is to give any of you who wish to do so an opportunity to come up to the podium and give us some -- some formal comments. And I think we -- we have a nice turnout tonight, but I don't think that we'll have to worry too much about length of time speaking, but I would like you to hold it to ten minutes, at the most. We were in North Augusta last night. We had a lot of people. And I think we got out of there at 11:00. And, although that's -- that's okay with us, we want to hear everybody, in fairness to all of you we would like to make sure that the meeting ends at the time that we had promised it would end. So try to be concise, if you can.

And in terms of ground rules, if you have a question, when we get to the question and answer, just signal me and I'm going to bring you -- we don't have our usual talking stick, we have -- I don't know what you would call this, but...

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1 Our two NRC presentations are -- first  
 2 we're going to go to Mr. Lawrence Kokajko, who is  
 3 right here. And he is the acting Branch Chief of the  
 4 Environmental and Performance Assessment Branch at the  
 5 NRC. It's in our Office of Nuclear Materials, Safety,  
 6 and -- and Safeguards. And Lawrence's staff is  
 7 responsible for evaluating the environmental aspects  
 8 of this -- this application. And before he assumed  
 9 this acting Branch Chief position, he was the -- the  
 10 Section Chief of something called the Risk Task Group  
 11 at the agency, which was looking at how risk should be  
 12 factored into NRC decision-making. He's been involved  
 13 in the reactor world, the spent fuel world at the NRC,  
 14 so he has a wide breadth of -- of knowledge that he  
 15 brings to his present position. And were -- were you  
 16 a licensed reactor operator?

17 MR. KOKAJKO: A senior licensed.

18 MR. CAMERON: Senior licensed reactor  
 19 operator. And Lawrence is going to give you the broad  
 20 overview on this project, and then we're going to go  
 21 to Mr. Tim Harris, who is right here. Tim is the  
 22 Project Manager for the environmental review on the  
 23 construction authorization application. He's been  
 24 with the agency for about nine years now. And his  
 25 expertise is in civil engineering, I believe. And Tim

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1 about.

2 Adrienne?

3 MS. LESTER: Good evening. I would like  
 4 to you thank you all for coming out tonight. And I  
 5 just want to briefly go over the information that you  
 6 picked out -- picked up out on the desk out there.  
 7 The first thing is the agenda. And behind that you  
 8 have a facts sheet which just tells you what the NRC  
 9 is, what it does, and also gives you some information  
 10 on the MOX facility. And behind that is a very  
 11 important sheet, because it has where you can send  
 12 your comments to, which are due back by May 14<sup>th</sup>. And  
 13 the additional sheets behind that are just a  
 14 representation of the posters back there. So you can  
 15 just take that home with you and look over that.

16 The next sheet you should have picked up  
 17 would be the slides that Lawrence and Tim are going to  
 18 present tonight. And lastly is the public feedback  
 19 form. And you can just mail that back to us, because  
 20 the postage is already on there, or either you can  
 21 give it back to me tonight.

22 So thank you. And we hope to hear from  
 23 you very soon.

24 MR. CAMERON: Okay. Thank you very much,  
 25 Adrienne.

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1 I'd like to thank you for taking your time  
 2 out of your busy day and evening to be here this  
 3 evening, and we look forward to hearing from you.  
 4 This meeting is one of a series of meetings--in fact,  
 5 this is the third one this week---which are designed  
 6 to inform the public about the draft environmental  
 7 impact statement for the proposed facility, and to  
 8 solicit public comment.

9 As Adrienne said, there are several  
 10 handouts. One is a set of slides, the agenda, facts  
 11 sheet, and comparison of alternatives, as well as the  
 12 feedback forms. And we are especially interested in  
 13 getting the feedback forms from you as well, this  
 14 evening, besides your comments on the draft  
 15 environmental impact statement. We would use this  
 16 information to try to improve these meetings in the  
 17 future. And you may either hand it back to an NRC  
 18 staff member. And, once again, could I have the NRC  
 19 staff members raise their hand. You can give -- give  
 20 it to one of those people and we will take it back, or  
 21 you can mail it in the -- back to us. And it's  
 22 already self-addressed, and postage has been paid.  
 23 Also, if you'd like a copy of the draft environmental  
 24 impact statement you may obtain one here. We have a  
 25 limited number available. And if we run out, we will

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1 is going to walk you through -- walk us through the  
 2 findings in the draft environmental impact statement.  
 3 Those are the two presentations.

4 We also have Dave Brown, right here. Now,  
 5 Dave is the Assistant Project Manager on the safety  
 6 evaluation on this construction authorization. And  
 7 he's here to answer any questions on the -- the safety  
 8 side of the evaluation. So it's very important to  
 9 understand that the NRC's review of this application  
 10 has an environmental component and it has a safety  
 11 component. And, although our focus is on the  
 12 environmental tonight, we do know that you're  
 13 interested or might have comments on the safety side,  
 14 so Dave is with us to -- to help us out with that.

15 And with that, I'll turn it over to -- to  
 16 Lawrence.

17 MR. KOKAJKO: Good evening. My name is  
 18 Lawrence Kokajko. I'm the acting Branch Chief for the  
 19 Environmental and Performance Assessment Branch in the  
 20 Division of Waste Management in the Office of Nuclear  
 21 Materials, Safety, and Safeguards at the Nuclear  
 22 Regulatory Commission. And I'd like to welcome you to  
 23 this meeting on the NRC's draft environmental impact  
 24 statement for the proposed mixed oxide or MOX fuel  
 25 fabrication facility.

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mail you a copy. Next slide.  
Tonight there will be two presenters, myself and Tim Harris of my staff. And we've included our phone numbers and Email addresses. And please feel free to contact us if you have any questions after the meetings.

As I indicated, the purpose of tonight's meeting is to get your comments on the draft environmental impact statement. Before we hear your comments, we'll provide some information on NRC's role in the proposed project, and describe the *National Environmental Policy Act* and the EIS process, and how the EIS fits into the NRC's decision-making. Tim will give an overview of the draft environmental impact statement, and there will be time to answer some questions before we begin to take your comments.

The proposed MOX facility would take surplus weapons plutonium and depleted uranium and make nuclear reactor fuel. Congress, in the *Defense Authorization Act of 1999*, gave NRC a role in the proposed MOX project. Specifically, the NRC has the licensing authority over the MOX facility, so our role is to make a licensing decision regarding the safe operation of that facility.

The NRC is an independent government

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agency, and our mission is to protect the public health and safety, and the environment, in the commercial uses of radioactive material. Our role is different than the Department of Energy's. The Department of Energy's role in this project relates to implementing the United States nuclear non-proliferation policy, including the disposition of surplus weapons plutonium.

The Department of Energy also has a responsibility to design, build, and operate two facilities that support the proposed MOX facility. And these two facilities are the pit disassembly and conversion facility, also known as the PDCF, and the waste solidification building, or the WSB. While the pit disassembly and conversion facility and the waste solidification building are considered in NRC's environmental review, it is important to note that these -- that the NRC does not have regulatory licensing authority over these two support facilities. That responsibility rests with the Department of Energy. The NRC only has authority over the proposed MOX facility.

I'd like to briefly describe the environmental impact statement process. The *National Environmental Policy Act* requires government agencies

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evening will show you ways you can submit public comments. We will review and consider the public comments and finalize the environmental impact statement.

As I mentioned earlier, NRC's role is to make a licensing decision regarding the proposed MOX facility. I'd like to take some time to describe the licensing process just briefly, and how the EIS we're discussing tonight fits into NRC's decision-making process. First, there are two decisions that the NRC will have to make for the proposed MOX project. The first decision is whether to authorize construction of the facility, and the second is whether to authorize operation of the facility. These decisions are shown in the middle of the slide. The NRC's environmental review is shown at the top portion of the slide, and consists of preparing the final environmental impact statement. The final environmental impact statement will be used by NRC to decide whether to authorize construction, and later whether to issue a license to operate the MOX facility.

And I need to point out that the environmental impact statement does not cover everything that would normally be covered in the safety review. For example, response to terrorists

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to prepare an environmental impact statement for proposed major federal actions such as the potential licensing of the proposed MOX project. An environmental impact statement presents environmental impacts (sic) of the proposed action, along with reasonable alternatives to that proposed action. Note that the bolded areas are opportunities for public involvement in the process, and we consider this a very important part of the EIS.

NRC's involvement with the MOX project started when Duke Cogema Stone & Webster, or DCS, the applicant, submitted an environmental report and requested to construct the MOX facility. We published a notice of intent to prepare an EIS in the *Federal Register* in March of 2001. During the scoping process, the public helped determine what issues would be addressed in the environmental impact statement. We have completed the draft environmental impact statement, and we sent copies to approximately 550 people in February.

We are currently in the public comment period for the draft environmental impact statement. This meeting is being transcribed, and comments made here tonight will be included in the official comment record. And the last slide that Tim will show this

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activities, which is a security and safeguards matter, is -- would be considered in the safety review, not the environmental impact statement. It is not that it's not going to be considered, it's just that the forum for that will be in the safety review and not in the environmental impact statement.

The NRC's safety review is shown at the bottom portion of the slide. The safety evaluation report for the construction authorization request focuses on a safety assessment of the proposed design bases to determine if it meets NRC's requirements. NRC's final environmental impact statement and safety evaluation report for the construction authorization request will be the basis for making a decision on whether to construct the proposed MOX facility. And we anticipate making that decision later this year.

Duke Cogema Stone & Webster plans to submit a license application to operate the proposed facility around October of 2003. The safety evaluation report on the operating application and the final environmental impact statement will form the basis for making a decision on whether to allow DCS to operate the proposed MOX facility.

I also want to point out that there will be at least -- there will be another opportunity for

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hearing on the operation of the facility. John Hull, with our Office of General Counsel, is here this evening, and he can answer questions related to the hearing process.

To summarize, a single environmental impact statement will be used to support the decision to construct and later operate the proposed MOX facility. And let me also stress, once again, the environmental impact statement has a separate mission than the safety review. And the safety review will be -- will be used to determine if it meets the regulatory requirements as outlined in Title X, Code of Federal Regulations, Part 70.

Now, I would like to turn the presentation over to Mr. Tim Harris of my staff. Mr. Harris is lead for the environmental review for the MOX project at the NRC.

Tim?

MR. CAMERON: And Tim is going to cover a lot of material for you. And let's let him get through that material and go for questions. So if you could mark any questions that you have on your -- your view graphs, then -- so that we make sure and get them.

Tim?

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administered by the Department of Energy. So the purpose and need for this, our draft environmental impact statement, is essentially the same as used by the Department of Energy in its programmatic EIS's for the surplus weapons plutonium disposition program.

The purpose and need relates to agreements between the United States and Russia to reduce the threat of nuclear weapons by insuring that those materials are converted into proliferation-resistant form. And also to reduce the risk that that plutonium might fall into the hands of terrorists or rogue states.

The draft environmental impact statement evaluates two alternatives in detail. These are the proposed action and the no-action scenarios. The no-action alternative would be continued storage of surplus weapons plutonium at existing Department of Energy sites. The no-action alternative is used as a comparison -- as a baseline for comparing different alternatives.

The proposed action includes impacts from constructing, operating, and later decommissioning the proposed MOX facility. And it also considered impacts of other connected actions that are things that are closely related to the operation of the MOX facility.

18

MR. HARRIS: Thanks, Chip. Thanks, Lawrence.

The document we sent out is a culmination of approximately two years of effort. And I would like to provide an overview of that document. It's quite lengthy, so I'm going to try to focus the discussion on several issues. And if one of the issues we don't talk about is important to you, please ask a question and we can provide some additional detail.

I'll describe the alternatives that we analyzed in detail, and also alternatives that we considered but did not analyze in detail. And then, as I stated, I'll go through a summary of the alternatives we did analyze in detail.

To understand how we did, that---that is, which alternatives we analyzed in detail and those that we just considered but did not do a detailed analysis of---it's very useful and helpful to understand the purpose and need associated with the environmental impact statement. As we stated in the notice of intent that Lawrence noted was published back in March of 2001, the purpose and need for the MOX facility relates to a larger surplus plutonium disposition program that, as Lawrence mentioned, is

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These would be transportation of various nuclear materials, feed stocks, fresh fuel, spent fuel. And also, as Lawrence mentioned, DEIS includes impacts associated with those two DOE support facilities. And again, those were the pit disassembly and conversion facility and the waste solidification building.

The pit disassembly and conversion facility would take weapons material in a classified form, declassify the form, and convert it from a metal into a plutonium powder. That powder would go to the MOX facility where it would be mixed with depleted uranium in order to make reactor fuel. The waste solidification building would take waste from the proposed MOX facility and the pit disassembly and conversion facility and process that waste. The impacts associated with the proposed action also includes the potential use of MOX fuel in reactors.

For the proposed action, we also evaluated differences in using a sand filter versus HEPA filters. The idea of using sand filters was raised at a scoping meeting in North Augusta.

As I said before, the purpose and need is used to determine which alternatives we considered to be reasonable and were analyzed in detail, and those that were not. In addition to siting and technology

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options that were evaluated by DCS in its environmental report, several alternatives were raised during scoping, and also at public meetings that we had last fall.

Immobilization was initially considered to be a reasonable alternative. However, following DOE's -- excuse me, the Department of Energy's amended record of decision, DOE believed that an immobilization-only approach would not meet the U.S.-Russia agreements. Therefore, it did not meet the purpose and need, and we did not analyze that alternative in detail.

Deliberately making off-specification MOX fuel was also raised during meetings we had last fall. This alternative involves not removing impurities that are in the -- the weapons plutonium that would make it less useful to use in the reactor fuel. They have to remove the impurities in order to make it useful in a reactor. This alternative would not remove those impurities, so you wouldn't get the waste associated with the removal, and also they would make the fuel, but it would not be used in a reactor. Instead, the off-specification MOX fuel, under this alternative, would be stored at spent fuel pools at existing reactor sites prior to disposal in a geologic

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the EIS.

First, I'd like to summarize the impacts associated with the no-action alternative. The impacts of this alternatives (sic) were previously evaluated by the Department of Energy, as I mentioned, the programmatic EIS's that they did. They evaluated the impacts of continued storage. And the impacts that are included in our draft environmental impact statement are essentially the same as DOE had previously evaluated.

The information packet that Adrienne mentioned includes tables which shows numerical differences. So if you want to compare the differences for a particular resource area, like how much groundwater would be used or what the air quality impacts would be, you have that information in your handouts. I'll just summarize those quickly.

The impacts to the public and workers from this no-action alternative--that is, continued storage--are considered to be low. There would be no significant water quality or air quality impacts associated with this alternative. As you can imagine, if you're storing material in a warehouse or other type of facility, you're not going to generate a lot of air emissions or -- or water impacts. Also, there

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repository.

The impacts of this alternative are addressed qualitatively in the draft environmental impact statement. The monetary costs of the off-specification MOX alternative would be about the same as the proposed action. That is, you would still build the facility. Those costs would still be there. However, the off-specification MOX fuel alternative would generate less waste than the proposed action. However, the benefits would be lower because you would not produce electricity. Therefore, the off-specification MOX fuel alternative was not obviously superior to the proposed action. And also, this alternative did not fulfill the U.S.-Russia agreements.

For the proposed action and no-action alternatives, the impacts associated with the following list were evaluated. In order to allow time for public comment, I won't go through the -- the exhaustive list. I'll focus on the impacts on the left, which are human health, air quality, hydrology, waste management, and environmental justice. I'll also talk about the impacts associated with transportation and potential MOX fuel use. And I'll also summarize the cost benefit analysis discussed in

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would be no significant waste management impacts or environmental justice concerns.

The next series of slides summarize impacts associated with the proposed action. And again, the proposed action includes the impacts from three facilities: the proposed MOX facility; the pit disassembly and conversion facility; and also the waste solidification building. I've presented the impacts on the slides in terms of increase or decrease relative to current conditions at the Savannah River Site. And again, if you want to see the actual numerical numbers, those are on the handouts. There would be no adverse chemical or radiological impacts during construction. From operating these three facilities, the annual public collective dose would increase by about 11%. But as I'll show in the next slide, we'll put that in perspective. There would also be no significant chemical exposures during normal operations. Thanks.

This slide shows the radiation dose from several sources, and also, importantly, NRC's annual public dose limit. The average annual dose from natural background is about 360 millirem. And a millirem is just a unit of radiation exposure, to kind of give you a benchmark. If you looked at the -- the

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important thing to note is NRC's annual public dose limit, which is 100 millirem. And if you -- if you provide context, if you got a chest X-ray you'd receive about six millirem. The annual dose to the public from normal operations of the three facilities would be less than one millirem. So that, while the increase is 11%, it's still less than one millirem.

Accidents have the greatest potential consequences of the impacts that we evaluated. Two conservative scenarios were evaluated in the draft environmental impact statement for a number of potential accidents. The short-term scenario assumes that people would be exposed by inhaling contaminant material from a plume that would be generated following the accident. We have also evaluated a long-term scenario. And these would include the impacts from the short-term scenario, as well as potential impacts from eating crops that could become contaminated.

The potential accident impacts are evaluated in terms of risk. The classical definition of "risk" is you take the probability of an event times the consequences equals the risk. In keeping with NRC's mission to protect public health and safety, we want to insure that the resulting overall

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risk to the public from an accident is very small. Therefore, events that could have significant consequences are required to be made highly unlikely through design safety features. And I think Lawrence touched on that. With the safety evaluation report is where those safety features are addressed. The safety features are not defined in the EIS. Those are covered in a separate document.

In March we notified a number of stakeholders that we had identified an error in the accident consequences that was due to a computer code bug. And we felt it was very important to get that information out to the public in a timely manner. I think I got a phone call on Monday afternoon notifying me of the error, and by Thursday we had sent out a letter to over 500 people notifying them that, hey, we think there's an error. We think the numbers are going to change. We'll provide more information.

During our review, we also found an additional error, and that was related to wind data that Duke Cogema Stone & Webster had provided in its environmental report. This error would essentially double the impacts associated with normal operations and potential accidents. However, we reviewed the impacts associated with these errors and determined

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that they did not change NRC's conclusion or preliminary recommendations. That is, if you double a number that was significantly less than one millirem, that number's still going to be less than one millirem from normal operations, and we didn't consider that to be significant. If you looked at the accident impacts, if you double, say, 10 and get 20, 10 is significant, 20 is significant. That didn't change our conclusions that potential accidents have significant consequences.

We also promised in the letter that we sent out in March that we would provide you additional information. And hopefully we'll have those errata sheets prepared next week. And those will be mailed out. We're also going to post those on the Web site.

Hypothetical events caused the highest -- that caused the highest consequences were an explosion event at the proposed MOX facility. For the one-year scenario that I talked about, this would have an estimated result of less than 50 latent cancer fatalities. And then, for the long-term scenario, we estimated less than 200 latent cancer fatalities. And again, these numbers are one significant figure. So the -- the actual impact that was calculated numerically was less, but we reported 200 to be

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activities; and 0.01% increase from normal operations. Now, as I mentioned, this is a -- a proposed standard. EPA has delayed implementing the PM 2.5 standard. And if and when attainment plans are developed by the State of Georgia and South Carolina, SRS could be required to reduce PM 2.5 emissions or develop measures to -- to mitigate those.

Surface water would not have a significant effect -- or surface water would not be significantly affected during construction through the use of sedimentation control measures. And there would be no direct discharges during operation. Waste from the proposed MOX facility would be managed by existing Savannah River Site facilities. And discharges from those facilities are not anticipated to change significantly as a result of processing this waste. Groundwater would be used during construction and operation, and the figures are shown there. But existing well capacity exists to allow this water to be used. And it would not have a significant impact on the aquifer.

There would be no significant impact on the Savannah River Site waste management capability from processing the waste from the proposed action. Operation of the three facilities would generate about

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significantly accurate. These estimates for the long-term impacts do not credit any interventions that might be taken to reduce long-term exposures from eating contaminated crops. That is, it's assumed that the crops are contaminated shortly before harvest, that the people harvest the crops, eat the crops. So intervention that would follow an accident, such as not allowing people to eat crops and other things, are not credited in our analysis.

The probability -- getting back to risk, the probability of these hypothetical events is considered to be highly unlikely through preventative and mitigative features that are being developed in the safety review. The consequences of these highly unlikely events are significant; however, the overall risk--that is, consequences times probability---we believe is very small to members of the public.

I'll walk through these rather quickly. Air quality relates to compliance with national ambient air quality standards for chemical pollutants. Air quality at the Savannah River Site already exceeds one proposed standard, which is the particulate matter 2.5 micron or PM 2.5 standard. The proposed action would increase the PM 2.5 by about 0.1% during construction, and that's primarily from earth-moving

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1 300% more transuranic waste than is currently being  
 2 generated at the Savannah River Site. This TRU waste  
 3 is planned to be disposed of in New Mexico at the  
 4 Waste Isolation Pilot Plant. And the volume of the TRU  
 5 waste that would be generated would be about 3% of the  
 6 Waste Isolation Pilot Plant disposal capacity.  
 7 Operation of the three facilities would increase low  
 8 level waste by about 32%, and non-hazardous solid  
 9 waste by about 60% above what is currently being  
 10 generated at the Savannah River Site. But, again, the  
 11 current Savannah River Site waste infrastructure can  
 12 accommodate these waste volumes.

13 In an executive order issued by President  
 14 Clinton in 1994, it directed federal agencies to  
 15 address any disproportionate or high adverse human  
 16 health impacts to low income and minority populations.  
 17 And this is commonly referred to as environmental  
 18 justice. The impacts from construction and operation  
 19 from the three facilities are not high or adverse;  
 20 therefore, there would be no environmental justice  
 21 concern associated with operating the facility or  
 22 constructing the facility. However, due to prevailing  
 23 wind directions, we believe that there is a potential  
 24 impact to low income and minority populations in the  
 25 highly unlikely event that an accident might occur.

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1 The risk associated with that accident, as  
 2 I mentioned, is considered to be very small to all  
 3 populations. NRC felt it was important to include  
 4 mitigation measures to help mitigate those potential  
 5 impacts to low income and minority populations. And  
 6 those are addressed in Chapter 5.

7 Transportation of material was raised  
 8 during scoping as an important issue to many  
 9 stakeholders. And the transportation analysis is --  
 10 the transportation analysis includes shipping the  
 11 surplus weapons material from the various DOE sites to  
 12 the Savannah River Site, and also includes shipping  
 13 depleted uranium from an enrichment facility where it  
 14 would be converted to a powder form and then go to the  
 15 Savannah River Site. The analysis also includes  
 16 shipping of fresh MOX fuel to a generic Midwest  
 17 reactor. Transport of spent MOX fuel is also  
 18 discussed generically in the EIS.

19 To summarize the impacts, there would be  
 20 less than one latent cancer fatality from routine  
 21 transportation to members of the public living along  
 22 transportation routes, and also to transportation  
 23 crews. The hypothetical accidents that were evaluated  
 24 did not result in significant impacts.

25 The potential impacts of -- associated

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1 includes a cost benefit analysis of the proposed  
 2 action on both a national and regional scale. The  
 3 cost benefit was used in helping determine staff's  
 4 preliminary recommendation. The national cost would  
 5 be about \$3.85 billion, and the national benefits  
 6 would be the safe use of excess weapons plutonium, and  
 7 also employment and income. The regional numbers  
 8 include a 15-county area surrounding the Savannah  
 9 River Site. And those numbers are provided for your  
 10 review.

11 In conclusion, the impacts of the proposed  
 12 action are generally not significant. Accident  
 13 impacts from the pit disassembly and conversion  
 14 facility and the proposed MOX facility are  
 15 significant. However, the probability of such an  
 16 accident is considered to be highly unlikely. And  
 17 again, that's -- part of our job is to make sure that  
 18 those accidents are highly unlikely. Therefore, the  
 19 overall risk to the public is considered to be very  
 20 small. There is a potential environmental justice  
 21 concern should these accidents occur. And we've  
 22 provided mitigation measures to do that. Also, we've  
 23 been engaging communities around the Savannah River  
 24 Site to help refine those mitigation measures.

25 Staff's preliminary recommendation is the

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1 with using MOX fuel are also discussed generically in  
 2 the draft environmental impact statement. The  
 3 collective dose to members of the public from normal  
 4 operations would be about the same, whether you used  
 5 conventional, low enriched uranium fuel, or a mixture  
 6 of MOX fuel and low enriched uranium fuel.

7 We also looked at various design-based  
 8 accidents, and found that the risk of developing a  
 9 latent cancer fatality, comparing the two fuel types,  
 10 ranged from about 6% lower to 3% greater. And we also  
 11 looked at beyond design-based accidents, and found  
 12 that the risk was about 7% lower to 14% greater. And,  
 13 again, it depended on the actual scenario event tree  
 14 that was looked at, which is why in some cases the  
 15 impacts were actually lower.

16 We have received an application from Duke  
 17 Power to place lead test assemblies in either the  
 18 Catawba or McGuire plants. We will do additional  
 19 site-specific evaluations before these lead test  
 20 assemblies are placed in a reactor. That is, we will  
 21 determine whether or not they can be safe -- that can  
 22 be safely done. And also, before MOX -- we'll do  
 23 additional analysis before MOX fuel is placed in any  
 24 reactor.

25 The draft environmental impact statement

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presentations and hope that that was succinct enough, Chip, for a document that was two inches.

MR. CAMERON: Very, very good, Tim. Thank you. Good summary. A lot of material there.

Let's go out to you for -- for any questions that you might have about the presentation. And I'm going to go back here, and then I'll come up front. And if you could just, again, give us your name and affiliation, if appropriate.

MS. ODOM: Okay. My name is Linda Odom. I have no affiliation other than I'm from the Savannah River plant area.

I wanted to ask you, all the accidents, potential hazards that you have used are hypothetical. Why not look at the actual accidents, like I said to you earlier? When you were talking about the radioactive millirem that people are exposed to, in 1973 the accident from the Savannah River plant, it was estimated that the average person in the way received over 300 millirems of radiation. Now, how -- if that happens here, hypothetically, how would that affect people for the next 30 years?

And also, if just 20 pounds of -- of -- excuse me, 14 pounds of plutonium can cause a bomb destruction as big as Nagasaki, how big of an accident

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proposed action, again with appropriate mitigation measures to reduce potential impacts in all areas. Before making any decision, NRC will consider comments on the draft environmental impact statement, and we'll prepare a comment summary document, and we'll revise the environmental impact statement as appropriate. That is, comments that you make in writing and here tonight we will review and determine whether or not the analyses need to -- need to be changed, whether we need to consider additional information. And that will be documented in the final environmental impact statement.

When DCS submits an operating license application, NRC will review that application and prepare a second safety evaluation report. NRC will only grant authority to operate that facility if it can be shown to be safe.

The last slide shows ways that you can submit comments, and these are either by mail to Mike Lesser, you can Email me, you can provide comments directly through the Web, or you can fax me. And again, I think our phone numbers are up there if you -- if you have questions. We really want to hear your comments.

And with that, I'll conclude my

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first one. Okay.

I want to appreciate that you did look at the plutonium and uranium transport portion of this program, because clearly, to do MOX at Savannah River Site you have to move plutonium. I am curious, though, because the last time somebody told me that transportation impacts were not significant, they were using a population to make that determination that never occurred to me, which was the entire U.S. population. So I -- I'd like you to remind me, anyway, what the base of your compare -- you know, your group is to be able to say significant or not significant.

MR. HARRIS: I believe that the group was just people directly next to transportation corridors. The -- as determining whether or not the public was significantly impacted. The computer code that's used to do those estimates, you plot out your route, and then it has population data along that route, and it uses formulas and -- to determine, sum up all the exposures along that route.1

MR. CAMERON: So there were...

MR. HARRIS: And that's -- it's not the entire nation. It's people directly next to the transportation corridors.

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MR. HARRIS: I guess I can't tell you what the impacts would be because I'd need a calculator, and there's a lot of things involved. The EIS does tell you, if you know how many millirem you were exposed to, you can convert that to a risk of developing cancer. And if you have questions on how to do that, give me a call and I'll walk you through the steps. But I'm not sure I want to get into calculating impacts from an accident at a Department of Energy site that happened years ago.

MR. CAMERON: Okay.

MR. HARRIS: That's kind of outside our -- our...

MR. CAMERON: But we do, in the -- in the draft EIS, as you point out, you -- we do discuss the long-term impacts of the hypothetical?

MR. HARRIS: Impacts associated with -- that are hypothetical, associated with the proposed action, which is -- which is constructing the MOX facility.

MR. CAMERON: Okay. Thank you.  
 Mary?

MS. OLSON: I actually wrote down three different types of questions, but I'll do them one at a time, and you can come back to me again after the

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and I can't remember every word in there, but -- but I'll get you an answer.

MR. CAMERON: Do you want to ask your other questions now, or do you want me to come back?

MS. OLSON: That's it.

MR. CAMERON: I'll go to others, then I'll come back for -- for that.

Peter?

And that was Mary Olson.

And Peter, if you could just give us your name, and then we'll go to...

MR. SIPP: Sure. My name is Peter Sipp, Asheville, North Carolina. And I have two questions.

First of all, is -- you didn't talk about the Parallelex Project on -- on the one page there, alternatives considered but not analyzed in detail. Would you tell me what the Parallelex Project is?

MR. HARRIS: Sure. The Parallelex Project is a Department of Energy-Canadian project which is an experimental project to use MOX fuel in Canadian CANDU reactors. I think the quantity associated is 35 pounds. It's a very small amount compared to 34 -- 34 metric tons.

MS. OLSON: It's a test.

MR. HARRIS: It's a test. It's an

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MR. CAMERON: But there -- there were specific routes that were...

MR. HARRIS: No, there were not specific routes.

MR. CAMERON: Okay.

MR. HARRIS: Living in the new age that we are with terrorism and security, the routes are not plotted. What we did provide in the EIS is the stuff would come from here to here, but we didn't tell you what roads it was going to go on.

MS. OLSON: Just a word to the wise. There's currently pending in -- I've forgotten which federal court, a case questioning whether there is an environmental justice issue around the Yucca Mountain shipments. So I guess at this point, since you find no significant impact to anybody, this program doesn't have to worry about that. But should those numbers change, it's fairly evident to the casual observation that, for the most part, low income and minority people are the ones living near those transportation routes, no matter which one they are.

MR. HARRIS: Right. Let me -- let me check, but I think we looked at that, Mary. I want to say we did. I'll get you the answer, but I think we looked at that. Again, it's a two-inch thick document

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1 experiment. So that's what that relates to. And it's  
2 just -- the description, Peter, is in Chapter 2. It  
3 goes into a little bit more detail.

4 MR. CAMERON: Peter, why don't you ask  
5 your -- excuse me, Mary, let me squeeze past.  
6 Peter, why don't you ask your second  
7 question, and then we'll go...

8 MR. SIPP: Yeah. Yeah, sure.  
9 The other question is, Linda asked about  
10 how much plutonium is going to be -- you may be  
11 answered it, but I didn't quite hear it.

12 MR. HARRIS: How -- how much plutonium is  
13 going to be used?

14 MR. SIPP: Well, I don't -- what -- what  
15 was that question, Linda?

16 MS. ODOM: You said that it would be  
17 regulated, the amounts that would be used. It would  
18 be a safe amount. Actually, you said it would be  
19 safe. Well, just 14 pounds from -- according to the  
20 scientist at MIT University, he said 14 pounds of  
21 plutonium, if there is an accident, a human error,  
22 that 14 pounds would cause destruction like a bomb at  
23 Nagasaki. And that's where I got that information.  
24 So how much -- I mean, 14 pounds is a really small  
25 amount to me.

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1 MR. HARRIS: But the idea that Dave tried  
2 to say is that they use safe amounts in discrete  
3 locations. The throughput of the facility annually is  
4 about 3.5 metric tons. So 3.5 metric tons would go  
5 through the facility in any given year during normal  
6 operations. But, again, that -- the amount of  
7 plutonium would be in a number of different locations  
8 in order to make sure that it was safe.

9 MR. CAMERON: Okay, let's go to Dr.  
10 Patrie. Could you just introduce yourself.

11 DR. PATRIE: I'm Dr. Lew Patrie, L-E-W, P-  
12 A-T-R-I-E, from Asheville. I'm with the Western North  
13 Carolina Physicians for Social Responsibility.

14 I would like to find out -- follow up on  
15 Mary's question with regard to the denominator used  
16 for the population at risk in the case of an accident.  
17 I wonder if you could tell us the magnitude. If it  
18 wasn't the total population of the United States, if  
19 it was of a population of people along -- within a  
20 certain distance of transportation routes, what --  
21 what is that magnitude of denominator of population?

22 MR. HARRIS: Can we do this, Chip? Dave  
23 is going to go over and find the number in the EIS.  
24 I'm sorry, I -- I don't have that up here.

25 DR. PATRIE: Another question, and that

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Dave.

MR. BROWN: I don't...  
That number reflects the more recent recommendations of the ICRP. The kind of data...  
DR. PATRIE: I don't -- I don't know that acronym.

MR. BROWN: Oh, I'm sorry. The International Commission on Radiological Protection. Which forms the basis for many of NRC's radiation standards, protective guides.

DR. PATRIE: Do you think those standards are primarily derived from data that was extrapolated from the bomb -- bomb experience in Japan in 1945, or do you think they have modified those, considering the studies that were carried out by people like Dr. Alice Stewart and Dr. Steve Wing, who happens to be from North Carolina?

MR. BROWN: I don't know the answer to your question about the latter part. I do know that the Hiroshima and Nagasaki bombs do form a basis for our current understanding of the risk of radiation. I'm not familiar with the latter two studies.

DR. PATRIE: I understand that they have been used as sort of sacrosanct data basis for calculating risks, even though there's other data that

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is: What assumptions were you making when you calculated the risks of morbidity and/or mortality from acute or long-term exposure for the...  
MR. HARRIS: We're talking about transportation?  
DR. PATRIE: On any of the risks. Are we -- are you using the base -- assumptions based on studies that were extrapolated from world -- from the Nagasaki and Hiroshima experience?  
MR. HARRIS: Yeah, we -- I think you're asking about the conversion factor to convert from exposure to latent cancer fatalities. Is that what you're asking about?  
DR. PATRIE: Yes, or latent...  
MR. HARRIS: The number that we used was in *Federal Guidance Report 13* which is issued by the Environmental Protection Agency.  
DR. PATRIE: And do you know where they came from?  
MR. HARRIS: They came from -- I'll let Dave answer that, since he's a certified health physicist.  
MR. BROWN: That is -- as I understand, that is the most...  
MR. HARRIS: Use your mic right there,

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1 suggests a low level radiation over a long period of  
2 time, and some other kinds of radiation, may not  
3 follow those premises.

4 MR. CAMERON: And I -- I think that  
5 perhaps we -- I think we could say, Dr. Patrie, that  
6 there -- ICRP and other organizations are continually  
7 looking at -- at new data. But whether they're  
8 looking at data from people like Wing or Stewart is --  
9 is something that we don't know. But perhaps we  
10 could...

11 MR. HARRIS: Well, I...

12 MR. CAMERON: ...it's simple to get Dr.  
13 Patrie some information on that.

14 MR. HARRIS: ...I think you -- I think you  
15 can go to the EPA Web site and pull up a copy of  
16 *Federal Guidance Report 13* and look at the basis. And  
17 also I think that was a quasi-comment, Chip, that, you  
18 know, if there's a different basis or additional  
19 information that would be used to develop -- estimate  
20 latent cancer fatalities, that could be a comment.

21 MR. CAMERON: Good. And that's a good  
22 reminder, Tim, is that as we're asking questions here,  
23 there may be comments by implication or explicitly,  
24 and we will evaluate the transcript to make sure that  
25 we -- we capture all those, too.

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Yes, sir?

MR. TROZZI: My name is David Trozzi, and  
I have no affiliation at this point.

I had a question concerning travel safety.  
And I'll try to -- try to make this as simple as I  
can. What protocols surround transportation, number  
one?

And to qualify that, is -- do -- does DOE  
and EPA have a mocked -- a mocked plan? In other  
words, if an accident happened, what do they do? And  
let me -- let me qualify this a little more in a time  
period. Years ago I worked at IBM as a safety auditor  
and with the haz com team. And in 1989, at the  
Fishkill, New York plant, we had mocked up if we were  
bombed, so to speak. Because it was -- it was a semi-  
conductive facility that used quite a bit of lethal  
elements or chemicals.

And during this presentation that we --  
that we did, it actually showed where the site was  
bombed, and what to do for it and what to do with it  
and how to stop that proactively. Again, this is back  
in 1989. And I understand this program came up in '95  
when Clinton was in the -- when Clinton was in office;  
is that correct? So I don't know...

MR. HARRIS: '93. But yes.

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governments are -- can provide certain protective features, if necessary.

And, okay, the -- the other piece I want to tell you is the NRC is also looking at interim compensatory measures for transportation, as well as other aspects of the regulatory program, to insure that they are responsive to the terrorist threat. And we're also doing vulnerability assessments on certain things that are -- that we regulate, to insure that we understand the vulnerability, so that we can protect against it. And the interim compensatory measures are one step in how we're trying to handle that.

MR. CAMERON: I believe -- do you have a follow-up, Mr. Trozzi? And I think Dave has some information for you.

Here, other questions? And, Mary, I'm not forgetting. I'm going to come back.

Yes, sir?

MR. KEISLER: My name's Bill Keisler. I'm a resident of Lexington County, South Carolina, and been active in the nuclear industry for many years, including some standards of (indiscernible) engineering (indiscernible) consulting work.

There are a couple of things. Go back to Slide #6 with the process of the environmental impact

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MR. TROZZI: Okay. I don't know if terrorism, at that point and at that time, really was looked at as it is now. So I'm -- I'll stop right there and let you answer those questions.

MR. HARRIS: Just to make sure, you're asking one question? Okay.

MR. TROZZI: All right. Yeah. Yes.

MR. HARRIS: Okay. The answer is that the NRC is currently looking at design threats and -- the word -- the word just left me, Lawrence.

MR. KOKAJKO: The NRC takes its responsibility toward safe transport very seriously. UNIDENTIFIED: Could you get closer to the microphone.

MR. KOKAJKO: Certainly. The NRC takes its responsibility for safe transport very seriously, and I know the Department of Energy does, too. There are route controls and approvals, there -- many shipments are monitored by satellite and they're tracked, many have armed escorts. These shipments would qualify for those types of activities. Route approvals are not released prior to shipments. States typically are made aware and -- so that they're -- in case of -- as a shipment is rolling down the -- the highway, so that the state

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1 statement and the safety review.

2 MR. HARRIS: Dave, go back to Slide 6.

3 Go ahead. I'm...

4 MR. KEISLER: Okay. It's not clear to me.  
5 You have public comment up here with the EIS. Is  
6 there no public comment and review for the safety  
7 review?

8 MR. HARRIS: That's correct. Public  
9 comment is typically not a part of the safety  
10 evaluation. Again, that -- those -- the safety  
11 evaluation focuses on compliance with NRC regulations.

12 MR. KEISLER: Okay. Because you said --  
13 or whoever had this slide, maybe (indiscernible) said  
14 that terrorism or whatever would be covered under the  
15 safety review and not the environmental impact, and  
16 yet the environmental impact speaks to accident  
17 analyses, in trying to keep that to a minimum.

18 I was a senior consultant for the Davis-  
19 Besse Nuclear Facility in the late '80s following the  
20 June '85 event. We all know that there has been a  
21 serious problem with the discovery last year of their  
22 -- the regulatory failure to that, and there are open  
23 issues that cover a broad breadth of culture internal  
24 to the NRC. Also throughout the licensee. It's too  
25 lengthy now, but there is some relevance, particularly

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1 out of the Chicago office as relates to Paducah,  
2 Kentucky; Portsmouth, Ohio; the inspectors, same ones  
3 overseeing that didn't find a hole in a reactor  
4 vessel.

5 I spent 23 years on (indiscernible) boiler  
6 and pressure vessel (indiscernible), and the initial  
7 chairman of the replacement's working group, subgroup  
8 on repairs and replacements, a number of things. It  
9 is impossible to get to a hole in a reactor vessel  
10 that's leaking. And we all know that. But to  
11 conclude (indiscernible) implemented.

12 What we're saying here is -- but I don't  
13 know how -- and there's some things still emerging.  
14 I will assure you of that. That haven't seen the  
15 light of day yet. But it does have a relevance to  
16 this, and it was covered in the safety review with no  
17 public comment. How does the public make a comment to  
18 bring that to bear?

19 MR. KOKAJKO: Okay, I understand your  
20 question.

21 First of all, there -- I'd like to say  
22 three things. There are a number of public meetings  
23 that have occurred between the NRC and DCS over this  
24 process. And those are open, public meetings. And  
25 many times those meetings -- people have been --

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1 public members can observe them. And typically you  
2 may have the opportunity to comment at them, and  
3 particularly if you talk to the person who is in  
4 charge of the meeting. They will allow people to  
5 speak if you want to say something.

6 Second thing is, there is, as I mentioned,  
7 an opportunity for hearing in this. This is a formal,  
8 adjudicatory process that -- that may occur if you  
9 have a contention. It can be admitted and it will  
10 have a hearing on it. So that is a very formalized  
11 process and a very legal process that they have to go  
12 through if a hearing is requested. I would ask John  
13 Hull to perhaps comment on that after I finish.

14 The latter piece, the safety oversight,  
15 NRC does not abdicate its responsibility for safety  
16 oversight. I can't speak to the Davis-Besse incident.  
17 I haven't been in nuclear reactor regulation in some  
18 time, so I don't exactly know. But I do know that  
19 there has been a rather scathing report on lessons  
20 learned from the Davis-Besse event within the NRC.  
21 That is available, I believe. And we've taken  
22 ourselves, you know, to the cleaners, so to speak,  
23 trying to solve the problems that may have led to  
24 that.

25 In this case, the MOX case, I think we

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1 plan to have a resident inspector onsite for the MOX  
2 facility. It will be inspected in our post-licensing,  
3 and it will be monitored as we would any other fuel  
4 fabrication facility.

5 MR. CAMERON: And before we see if John  
6 wants to add anything, I guess one question for -- for  
7 you, Lawrence, is if anybody wants to find out about  
8 the meetings between the applicant and the NRC on the  
9 safety side, how would they do that, and are there  
10 minutes of those meetings that are publicly available  
11 if anybody wanted to tune into the safety side?

12 MR. KOKAJKO: Okay, first of all, the --  
13 the meetings are posted on the NRC Web site. And, in  
14 fact, those all -- most public meetings are open to  
15 the public. There are some that are not, primarily  
16 when they deal with privacy act information, or  
17 perhaps when they deal with safeguards and security  
18 matters. But you can look on the Web site to see what  
19 meetings are there.

20 I believe, also, the Davis-Besse incident,  
21 in itself, has its own subpage on the NRC Web site, so  
22 you can go to the Davis-Besse to find out more about  
23 that.

24 MR. CAMERON: And minutes of the -- are  
25 there minutes taken that are publicly available?

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1 MR. KOKAJKO: Typically...

2 MR. KEISLER: I'm well aware of that  
3 process.

4 MR. CAMERON: Okay.

5 MR. KEISLER: I've been involved in that  
6 process (indiscernible).

7 MR. CAMERON: Okay, we've got to get you  
8 on the -- the record.

9 MR. KOKAJKO: Let me finish that, because  
10 some other people may not know.

11 We do take -- we do have a meeting summary  
12 after each public meeting. Many meetings are  
13 transcribed, but I would say most probably are not  
14 transcribed. But at least a meeting summary is  
15 generated and is publicly available.

16 MR. CAMERON: Okay. And just -- you know,  
17 we -- we know that you may know a lot of that -- that  
18 part about it. But for other people's edification --  
19 and we do have David Ayres here from our regional  
20 office, the inspection specialist. And why don't you  
21 tell us a little bit in regard to one question, David.

22 MR. AYRES: Okay, I'm David Ayres. I'm  
23 the Chief of the Fuel Facility Inspection Branch in  
24 Region 2.

25 MR. CAMERON: It's not obvious, yeah. I

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1 think that that's -- so people...

2 MR. AYRES: And as was mentioned here just  
3 a minute ago, we do plan to have a resident inspector  
4 there at the site. If the construction authorization  
5 is approved, we would have a resident there from the  
6 beginning of construction all the way through startup  
7 and -- and beyond. Our plans are to have at least one  
8 resident there at all times.

9 And we are going to have fairly extensive  
10 region-based inspection program that will include  
11 virtually all of the aspects of the safety evaluation  
12 report that will come out, such that all of the -- all  
13 the commitments and requirements that are in the  
14 approved construction authorization that come out of  
15 the safety evaluation report would be inspected. So  
16 we were going to cover all the bases we possibly  
17 could.

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

20 Let's -- before we go back over to Mary,  
21 is there any other -- any questions over here?

22 Okay, Catherine, if you could just  
23 introduce yourself to us.

24 MS. MITCHELL: I'm Catherine Mitchell, and  
25 I'm here -- I'm not representing any organization.

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I was really struck, I was really pleased, I must say, that you did give a qualitative review of the off-spec MOX plan that was put forward by Frank Von Hippel and Alice (indiscernible) and others as a way to kind of go down the middle path. I didn't agree with a lot of your analyses, but one of the things that struck me the most is this invocation of DOE's statement that the Russians might not like something that doesn't degrade the plutonium from its current isotopic distribution. And it really bothered me so much, that I had the horrifying experience of a new idea at this late date in the game.

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But there's reactor grade plutonium lying around in large quantities. I mean, there may not be that much in the U.S., but West Valley operated for a while, and I'm sure there's other degraded plutonium around. We could probably even buy it at a pretty good price from European countries that really don't want to use MOX because it's so expensive. So why not just mix it. Instead of MOX it, let's mix it, and then do any of the other things we might do that wouldn't have the reactor risks associated with it, which I think you way underplayed in your cost benefit on the off-spec MOX, and DOE underplays on the immobilization decision. So, anyway, I'm now

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But my question is: Since this program was initially started as a joint program between the United States and the Russian government to dispose of surplus materials from dismantled nuclear warheads, what plans are in place in the event of -- and certainly, in light of current events, of deteriorating relations with the Russian government? How would that affect the ongoing plan for this particular program?

MR. CAMERON: Okay, thank you, Catherine.

MR. HARRIS: Those issues, Catherine, really relate to the Department of Energy who has the overall mission for implementing the agreements with Russia and the overall surplus weapons -- weapons -- surplus weapons plutonium -- the program. Sorry.

As it relates to us, likely what would happen would be, if -- if things did deteriorate. The applicant, DCS, would withdraw their application.

MR. CAMERON: Okay, let's -- let's go back to Mary, and then we'll go to -- to Gregg.

Mary, you have another question; correct? All right.

MS. OLSON: I am Mary Olson, the Southeast Office Director for Nuclear Information and Resource Service.

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1 advocating mix rather than MOX.

2 MR. CAMERON: And I think we -- we treat  
3 that as a -- as a comment.

4 MR. HARRIS: As a comment, but let me just  
5 make sure I understand, Mary. You're talking about  
6 mixing the surplus weapons grade plutonium with  
7 reactor grade plutonium and making reactor fuel?

8 MS. OLSON: No.

9 MR. HARRIS: Or you're saying mix -- oh,  
10 I'm sorry. I got you. Mixing surplus plutonium,  
11 reactor plutonium, making off-specification mixed  
12 fuel, and storing that and disposing of it. That...

13 MS. OLSON: What I'm suggesting is  
14 isotopic degradation through mixing rather than  
15 irradiation.

16 MR. HARRIS: Okay, got you.

17 MS. OLSON: It might take a large quantity  
18 of reactor grade plutonium, which is why I'm  
19 suggesting that other countries might have to be  
20 vendors of this stuff. But it could be done. It  
21 would isotopically degrade the weapons grade  
22 classification. And then you would not have all the  
23 reactor-related risks, which I believe you are still  
24 underplaying in your analysis.

25 MR. HARRIS: Okay, that -- thank you,

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Mary.

1 MR. CAMERON: Let's go over here to -- to  
2 Gregg Jocooy. If you'd introduce yourself to us.

3 MR. JOCOY: Sure. Thank you, Chip.  
4 I'm Gregg Jocooy. I'm here representing  
5 the York County South Carolina Green Party.

6 One question that I have. You talked  
7 about these resident inspectors. Now, we've all heard  
8 on the radio people -- reports that a listeria  
9 outbreak has happened in a meat packing plant and 12  
10 people have died and 40 billion pounds of meat have  
11 been recalled and so on like this. They have U.S. DA  
12 resident inspectors, as well. How long do NRC  
13 resident inspectors stay at any one particular plant,  
14 and what steps does the NRC take to assure that the  
15 resident inspectors don't develop an unhealthy  
16 relationship with the people that they're supposed to  
17 be watching?

18 MR. CAMERON: We're going to go to David  
19 for that one.

20 David? I think you have a sense of...

21 MR. AYRES: Right.

22 Right now the time frame for resident  
23 inspectors at the sites is a maximum of seven years.

24 And they are, you know, extensively trained in not

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1 fraternizing with the licensee, that kind of thing.  
2 I've known several personally, resident inspectors who  
3 lament about having to, you know, be kind of stand-  
4 offish in the community because they can't really  
5 interact with a lot of the people that we meet because  
6 of their status as an NRC resident inspector.

7 Now, I'm not that familiar with the  
8 residents at the reactor sites because I really deal  
9 with just the fuel facilities. But that's -- that's  
10 the way we've done.

11 MR. CAMERON: Thank you very much, David.

12 MR. JOCOY: Have any of the resident...

13 MR. CAMERON: Gregg, we better get you on  
14 the transcript. We'll give you a follow-up here.

15 MR. JOCOY: Thank you.

16 Have any of the resident inspectors at any  
17 of the power plants that have faced challenges like  
18 Besse -- I've got my state legislator on my mind. I  
19 want to call it Bessie Moody.

20 Have any of the resident inspectors at any  
21 of the power plants that have experienced difficulties  
22 lost their job as a result of dropping the ball and  
23 not noticing problems they should have noticed in  
24 advance, or have they been kept on? And, in fact,  
25 have people who have been resident inspectors been

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1 hired by the companies that they were inspecting?  
2 MR. CAMERON: David, do you have any --  
3 any information on that?

4 MR. AYRES: I really don't know about the  
5 residents at the reactor sites, whether or not  
6 anybody's been let go or whatever. I do know in the  
7 fuel facility arena there have been a couple of times  
8 where the resident inspectors, after their five to  
9 seven years time was up, that they didn't want to  
10 move, so they got a job with the licensee. So that  
11 has happened.

12 MR. CAMERON: Okay, thank you.

13 Lou, did you have a question before?

14 MR. ZELLER: In your presentation here,  
15 Tim, you talked about impacts on public health in your  
16 investigation. And largely the discussion is about  
17 cancer effects from ionizing radiation. Are you  
18 familiar with some of the work of Dr. John Gothman  
19 that (indiscernible) on some of the plutonium weapons  
20 in the early days before he turned to medicine,  
21 produced a report several years ago which point to  
22 ionizing radiation in the form of X-rays as a major  
23 component of ischemic heart disease, wholly and  
24 separate from cancer. And what we have found is that,  
25 for example, in Barnwell County, alone, there's a 15%

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1 a question that we haven't heard from at this point?

2 (No audible response)

3 MR. CAMERON: Okay. Well, let's -- let's  
4 go to -- Mary, you have one other question?

5 MS. OLSON: I think I'll fold it into a  
6 comment.

7 MR. CAMERON: Okay, good.

8 Well, let's go to -- we'll go to Linda,  
9 and then we'll -- we'll go over here, and then we'll  
10 get started with the formal comment. All right.

11 MS. ODOM: Tim, can I ask about something  
12 I read in this book that I was concerned about?

13 MR. HARRIS: Yeah, that -- that's...

14 MS. ODOM: At Wilmington, North Carolina,  
15 at a GEE plant, I was reading by the conversion of  
16 uranium hexafluoride and uranium dioxide.

17 MR. HARRIS: Correct.

18 MS. ODOM: And it said they are changing  
19 their process of converting that to -- from a wet  
20 process to a dry process. I want to know have they  
21 done that.

22 And also it says discharges are permitted,  
23 are -- they're monitored to insure compliance with  
24 permit requirements. I tried to find what the permit  
25 requirements would be, like how much of a discharge

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cont.

1 elevated level of ischemic heart disease above the  
2 average of the whole State of South Carolina.

3 MR. CAMERON: Was that considered?

4 MR. HARRIS: I think -- I think the answer  
5 is your observation was correct, that we only  
6 considered latent cancer fatalities as an impact. And  
7 I don't know if you want to add more to that, Dave, as  
8 far as -- I'm not familiar with the work of Dr. Goth  
9 (sic).

10 MR. BROWN: I'm a little bit familiar with  
11 Dr. Gothman's work. At this time his conclusions are  
12 not part of NRC's bases for assessing risk from  
13 radiation. I would be interested in the specifics of  
14 the information you have about Barnwell County, if you  
15 could give us a citation, that sort of thing.

16 MR. CAMERON: And it would be appropriate  
17 if Mr. Zeller wanted to submit the information on Dr.  
18 Gothman's work for us to -- to look at.

19 MR. ZELLER: We've got it.

20 MR. CAMERON: Okay, that's -- that's good.  
21 Before I -- and we'll -- we'll take a  
22 couple more questions and then go to comment, and then  
23 we can come back, if we have time, for questions. I  
24 know Linda has one, and Mary. And I just want to make  
25 sure that -- is there anybody else who wanted to ask

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1 can they release into the environment.

2 And I -- can I say one thing about the  
3 Russians? By Talli Khizhnyak, he was the head of --  
4 I'm sorry. I can spell it. K-H-I-Z-H-N-Y-A-K, who is  
5 head of the Russian nuclear agency, said it will never  
6 happen, the MOX project with the United States. And  
7 that we are paying their scientists, which I spoke to  
8 the DOE, who was kind enough to talk to me earlier.  
9 They -- we are still paying their scientists, but I  
10 understand why; to keep from the plutonium getting in  
11 terrorist hands, or Iraq, or -- which is probably a  
12 good thing. But he does say that will never happen.

13 MR. CAMERON: Okay, this is Section 4  
14 point...

15 MR. HARRIS: No, I -- I got it, Chip.

16 MR. CAMERON: ...4 point -- for other  
17 people, though, 4.4.2. And I'm glad you know that,  
18 too. That's...

19 MR. HARRIS: You mean not everybody is  
20 familiar with the document as I am, Chip?

21 MS. ODOM: I read it.

22 MR. HARRIS: Thank you.

23 I think Dave's going to confirm that, in  
24 fact, they have gone over to the dry process. That's  
25 my understanding.

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1 MR. BROWN: I'm going to ask Dave Ayres to  
2 confirm that.

3 MR. HARRIS: Oh.

4 MR. CAMERON: Let me bring this to you,  
5 David.

6 MR. HARRIS: But -- but it -- but, Linda,  
7 it's also important to note that we looked at both  
8 processes.

9 MR. AYRES: Yes, the facility at  
10 Wilmington converted over to a dry process two or  
11 three years ago. I was the inspector during the time  
12 of the conversion over to the dry process, and it has  
13 happened. The (indiscernible) detail I believe are in  
14 Part 20 either (indiscernible) in their license  
15 application. And if you need some more information,  
16 I'll get my project manager to send you some  
17 information on it.

18 MR. CAMERON: Great.

19 Okay, let's go for a final question, and  
20 then we'll...

21 MR. HARRIS: Can we thank David for  
22 coming? Thank you, David.

23 MR. CAMERON: Okay, here we are.

24 MR. KEISLER: This is Bill Keisler again.  
25 In July of 2000 there was one of these meetings in

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That that would fail the umbrella means, and it would instantaneously (indiscernible) the NRC.

How -- in this integration of regulatory authorities, what is the hierarchal protocol for accident events?

MR. KOKAJKO: Okay, I am -- by the way, I'm familiar with certain licensing things that we do regulate DOE on. For example, the -- the Independent Spent Fuel Storage Installation at the Idaho National Environmental and Engineering Laboratory which is storing the old Fort St. Berin spent fuel. We also regulate them and their storage of the Independent Spent Fuel Storage Installation at Fort St. Berin. So that fuel is in two different locations.

This is very comparable to the situation at Idaho where there is a small regulated area that we control within the overall site complex at the DOE, at the -- at the Idaho lab. In that case, DOE had to meet all our regulatory requirements for whether meeting the safety specifications to emergency planning, everything that -- that they would normally have to do. And, in fact, we ended up imposing upon them more stringent requirements in some areas for that facility and within the DOE complex.

And in this case, we would do the same

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Columbia, South Carolina. I attended that one. And I don't think there was a transcript made of that, at that meeting. But I asked a question there and it's never been answered. It was supposed to have been and it never has.

There's an umbrella of protection for the public that is never breached, ever, under the Atomic Energy Act. And yet, when we look now at the NRC-DOE interface, or even state -- State of South Carolina, I believe it indicates there's 199 licenses they have. There are issues in the State of South Carolina, violations of the Atomic Energy Act under 10 CFR 150, issuing licenses. There was one with an issue of a DOE contract for plutonium in a city in violation of that, who was allowed to continue to operate for seven years.

This is a unique situation now where geographically NRC has a facility inside a whole DOE boundary, 350 square miles. How is the hierarchy of authority, in the event of an accident or event, in that situation who holds that? Typically, with the way the Atomic Energy Act is written, it appears, with the Energy Reorganization Act of '74 and the DOE which was in '78, that the DOE exemptions from the NRC -- NRC authority are predicated on certain conditions.

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1 thing. The MOX facility would be regulated according  
 2 to our safety standards. It would have to meet our  
 3 standards in terms of emergency planning, procedure,  
 4 control, configuration control, and a whole host of  
 5 other things. And we would have that authority over  
 6 them, whether it was through licensing, inspection, or  
 7 enforcement. So that is -- that is allowed by the  
 8 Atomic Energy Act, the Energy Reorganization Act. It  
 9 is very well understood that once they submit to our  
 10 licensing program that is what the rules of the game  
 11 are.

12 MR. CAMERON: And that cannot be  
 13 delegated, under the Atomic Energy Act, to an  
 14 agreement spec.

15 MR. KOKAJKO: No, that cannot be delegated  
 16 to an agreement spec.

17 MR. CAMERON: And, Dave, do you have some  
 18 things to add on that? And you have a mic there, too.

19 MR. BROWN: I thought I would have. We  
 20 did have a question last night, I believe. There is  
 21 a question about, for example, there are many areas  
 22 that Lawrence outlined. One is radiation safety  
 23 standards, you know, which ones apply. And we think  
 24 we've laid that out pretty clearly for DCS, the  
 25 applicant, with respect to how to treat workers who

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1 would be in the Savannah River Site area who are not  
 2 employees of DCS and that sort of thing. So that  
 3 issue, I think, has been resolved.

4 MR. CAMERON: Okay, thank you. And if we  
 5 do have time to follow up on any of this, we will.  
 6 But I think we should get on with the -- hearing from  
 7 -- from all of you in terms of what your comments are.  
 8 We're going to go to Mr. Lou Zeller first. Lou, if  
 9 you could come up and talk to us.

10 MR. ZELLER: Okay, thank you. My name is  
 11 Lou Zeller, and I'm on the staff of the Blue Ridge  
 12 Environmental Defense League. And I appreciate the  
 13 opportunity to speak tonight.

14 Many of you know my co-worker and my wife  
 15 of going on seven years, Janet. She had hip surgery  
 16 this week. She'd love to be here tonight. But she  
 17 came home from the hospital today and she's recovering  
 18 quite nicely. So I do want to get into my comments,  
 19 though, tonight about this facility.

20 I do have to agree with -- with Linda, in  
 21 that this may seem like a collective whistling past  
 22 the graveyard, in that the international tensions and  
 23 the problems between the United States government and  
 24 the Russian government and the French government at  
 25 this time could ultimately scotch this project. The

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international agreements required for it to keep moving forward, the parity requirements explicit in the agreement may ultimately cause this project to come to a grinding halt.

The \$309 million increase in fiscal year 2004 budget appropriation for the plutonium fuel factory alone could be much better spent in some other area. So, the long and short of my comments is tonight that the no-action alternative would save us a great deal of money, and get us back on the right track on how to deal with dismantling weapons of mass destruction here in the United States.

One of the problems that we have identified with regards to safety lapses, false promises, environmental violations, and public health hazards, and illegal activities, have to do with one of the partners of DCS, the "C," which stands for Cogema over the last two decades. The record reveals a company which ignores or flouts the law, and which is oblivious to the dangers to public health and safety caused by its operations in Europe and in North America.

Cogema is a French company. It is a lead partner in DCS, and the sole provider of experience and techniques regarding the reprocessing of

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commercial plutonium into fuel. However, weapons grade plutonium has never been reprocessed into commercial nuclear fuel.

While I won't indulge in French bashing, as is -- seems to be the -- the rage these days, at least on some of the talk radio stations, the problems of dealing with a French company which is outside of United States law is a problem for the Nuclear Regulatory Commission. So you do have to deal with that. Cogema's flagship in -- in Europe is its giant reprocessing facility at La Hague on the north coast of France. During reprocessing, toxic and radiological chemicals are released into the air and the water at that facility. A recent report released by the European Parliament found that the combined discharges from La Hague---and the nearby Sellafield Plant in the United Kingdom---reprocessing sites correspond in contamination to a large-scale nuclear accident every year.

Cogema has consistently ignored international treaties that safeguard the seas from contamination, and Cogema has chosen to disregard findings of extreme contamination and health effects resulting from its own reprocessing activities, and has refused to abate its discharges as requested by

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1 the European governments, and as mandated by  
2 international laws and treaties.

3 The U.S. Nuclear Regulatory Commission  
4 simply cannot and must not repeat the failures of the  
5 U.S. Department of Energy in this matter. Cogema's  
6 track record must be considered by the Commission  
7 before issue a license for construction of a plutonium  
8 fuel factory. This is entirely proper and permitted  
9 under the *National Environmental Policy Act*.

10 We hereby request that, as a function of  
11 its environmental review of the mixed oxide fuel  
12 fabrication facility, the plutonium factory, that the  
13 Nuclear Regulatory Commission investigate the track  
14 records of Cogema, as well as Stone & Webster and Duke  
15 Energy. I might point out to a -- a quote which comes  
16 out of the *Augusta Chronicle* regarding Cogema and the  
17 failure of the Nuclear Regulatory Commission thus far  
18 to do this very thing. In July 14, 2000, *Augusta*  
19 *Chronicle* article, Nuclear Regulatory Commission's  
20 Melanie Galloway said that, quote, "Whatever their  
21 record, good, bad, or indifferent, it isn't going to  
22 affect our decisions," end quote. This assumption  
23 that Cogema, Inc., will abide by United States law---  
24 that's the American affiliate of Cogema---leaves much  
25 to be desired.

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1 Two other points which I would like to  
2 cover in my time tonight have to do with the  
3 contamination from such a facility. We have been  
4 commenting and investigating and doing research in the  
5 State of South Carolina offices with regards to the  
6 *Clean Air Act* permit which was recently issued for the  
7 Savannah River Site. Now, there are 1,500 emission  
8 sources, air emission sources located within that --  
9 the Savannah River Site reservation emitting a great  
10 many radio nuclides, as well as hazardous air  
11 pollutants. The national emission standards for radio  
12 nuclides, other than radon, from the Department of  
13 Energy facilities states that emissions of radio  
14 nuclides to the air shall not exceed that which would  
15 cause any member of the public to receive a dose of  
16 ten millirems per year. Emission measurements from  
17 the stacks are stipulated in the existing Title V  
18 permit.

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19 But the millirem standard for the maximum  
20 allowable dose to the public is an ambient standard,  
21 not an emission limit. The permit fails -- the  
22 existing permit fails to require any direct  
23 measurement of radioactive dose to the public, and  
24 cannot be enforced as a practical matter. This is a  
25 serious problem for many of the radio nuclide-emitting

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1 facilities, including the proposed plutonium fuel  
2 factory.

3 One other point I'd like to go into here  
4 tonight is the fact that it is very difficult to  
5 estimate the emissions because of the problems with  
6 the HEPA filters, the paper filters, the high  
7 efficiency so-called filters which are an unreliable  
8 means of controlling radio nuclide emissions. We have  
9 been in touch with Dr. Peter Richards, who is a former  
10 member of the Centers for Disease Control Advisory  
11 Panel at the Idaho National Engineering Laboratory.  
12 Dr. Richards has outlined the problems with alpha  
13 emitters like plutonium which creeps through four  
14 HEPA filters in sequence, the problems with alpha  
15 migration, reintrainment of particles, and alpha  
16 recoil, which is a DOE term for the ability of alpha  
17 emitters, like plutonium, to creep through these  
18 filters.

19 The bottom line here is no one knows how  
20 much plutonium comes out of the last filter. The  
21 Nuclear Regulatory Commission needs to get to the  
22 bottom of the plutonium releases for this factory  
23 before moving forward. Once again, thank you for the  
24 opportunity to speak here tonight. And we will be  
25 submitting written comments before the comment

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1 deadline.

2 Thank you.

3 MR. CAMERON: Thank you very much, Lou.  
4 Let's go to Dr. -- Dr. Lew Patrie. And I  
5 apologize if I'm mispronouncing your name, Dr. Patrie.  
6 DR. PATRIE: That's -- that's perfectly  
7 all right, Chip. Everybody else does.

8 Appreciate the presentation and the  
9 opportunity, very studied reports, so many people here  
10 tonight. I want to just say that from the perspective  
11 of Physicians for Social Responsibility, I wish to  
12 cite the dangers and massive costs of the entire  
13 plutonium bomb fuel experiment, the lesser costs and  
14 dangers of the option of plutonium immobilization, and  
15 how such a venture could affect us in North Carolina  
16 and the general area, and an apparent hidden agenda.

17 Dangers stem from this entire plutonium  
18 fuel experiment. The U.S. portion of the proposal  
19 involves shipment of plutonium from dismantled nuclear  
20 weapons sites in Western states, some likely by way of  
21 Interstates 40 and 26 en route to South Carolina. The  
22 greatest transportation risk would be an accident in  
23 which plutonium metal, which rapidly oxidizes when it  
24 comes into contact with air, would vaporize or burn  
25 and disburse its deadly particles, contaminating the

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1 air, our citizens inhale, the water upon which we  
2 depend, and the soil upon which we grow crops and upon  
3 which animals feed.

4 Inasmuch as you've already brought up the  
5 subject of terrorism in regard to a presumed reduction  
6 of MOX fuel and supposedly reducing the risk of being  
7 taken over and used by terrorists, I would also like  
8 to say the increased risks of -- the risks of  
9 terrorism on the highway create additional concerns.

10 Is there some reason this is making this  
11 clicking noise?

12 MR. CAMERON: I was going to make a joke  
13 that sometimes a raccoon gets under the podium.

14 DR. PATRIE: I don't know if I had a  
15 glottic click in my throat or something. But, anyway,  
16 I am sorry if it's disturbing folks.

17 MR. CAMERON: Don't worry.

18 DR. PATRIE: Creating the proposed MOX,  
19 mixed oxide fuel fabrication factory, would be  
20 counterproductive. Such a facility at Savannah River  
21 Site would place workers' health at greater risk from  
22 unnecessarily increasing their plutonium exposure. It  
23 would greatly increase the radioactive waste generated  
24 that are already highly contaminated -- at the highly  
25 contaminated bomb-building plant. It places

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1 populations in nearby areas at increased risks of  
2 exposure to plutonium and other byproducts of such a  
3 facility as stated.

4 I think that there has to be some  
5 consideration of the risks that are presented by the  
6 experts for reasons I've already stated in my  
7 question. I would feel better about it if there were  
8 some carefully carried out, long-term epidemiological  
9 studies by impartial, qualified scientists of workers  
10 and other potentially exposed people, populations.  
11 These should have been conducted on populations which  
12 have been exposed through air, water, or food  
13 ingestion over the many decades of the nuclear  
14 industry. Such scientists should not have their mind  
15 sets prejudiced by assumptions that were made as a  
16 result of extrapolating the data gathered from  
17 Hiroshima and Nagasaki experiences, which are pretty  
18 well limited to high levels of acute radiation. I  
19 fail to understand why such studies haven't been  
20 carried out and publicized; and further, how a DEIS  
21 can be adequately carried out without the results of  
22 such studies.

23 Inseparable from the proposed MFFF is the  
24 fact that once manufactured, plutonium bomb fuel is  
25 destined for use at Duke Energy's McGuire and Catawba

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1 reactors within 20 miles of downtown Charlotte.  
 2 Plutonium fuel is experimental, in that the fuel  
 3 derived from weapons grade plutonium has never before  
 4 been used in commercial reactors. These plants are  
 5 poor choices for an experimental program because their  
 6 cooling systems depend on constant supplies of ice.  
 7 In the event of failure for even a few hours, there is  
 8 a risk of a severe accident. Plants are encased in  
 9 weaker metal plates than the preferred thicker amounts  
 10 of concrete. Plutonium bomb fuel is inherently more  
 11 dangerous than currently used uranium fuel, in that it  
 12 bombards structures within the reactor chamber with  
 13 more damaging radioactivity, and would be more  
 14 difficult to control, increasing the likelihood of a  
 15 Chernobyl-type disaster. Compared with currently used  
 16 uranium, should a nuclear catastrophe occur in a MOX  
 17 fuel reactor, up to twice the number of cancer deaths  
 18 would result due to the nature of radioactivity  
 19 produced.

20 The possibility of terrorism should not be  
 21 ignored, either to the reactor vessel, itself, or to  
 22 the spent fuel rods that are stored onsite. A worst  
 23 case scenario would result in the entire Charlotte  
 24 area becoming a nuclear wasteland for decades to come,  
 25 with national repercussions, and most of the

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1 population becoming refugees. More and more danger  
 2 comes from vastly increased radioactivity produced  
 3 through MOX. Promoters deceptively claim it would rid  
 4 the world of plutonium, making it unavailable for  
 5 future nuclear weapons use. As you well know,  
 6 plutonium will be produced while MOX fuel generates  
 7 electricity. The proposed parallel tract whereby  
 8 plutonium is presumably converted into fuel in both  
 9 the U.S. and Russia reactors would markedly increase  
 10 the availability of plutonium on a global scale. It  
 11 would work contrary to our national interest. It  
 12 would favor further nuclear weapons proliferation.

13 Furthermore, MOX would vastly increase amounts of a  
 14 radioactive waste for which no satisfactory solution  
 15 has yet been discovered. The railway or highway  
 16 transportation of increased quantities of radioactive  
 17 waste to proposed Yucca storage facility in Nevada  
 18 would create new and extensive dangers which would  
 19 further increase the risk to large segments of our  
 20 population because of the risks of terrorism.

21 Finally, when the Yucca facility would be filled to  
 22 capacity, there would remain at Catawba and McGuire  
 23 sites almost as much high level nuclear waste as is at  
 24 present. In addition, these sites will continue to be  
 25 attractive targets to terrorists due to their

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1 proximity to a large population and financial center.

2 Immobilization is the safest and least expensive

3 alternative to converting plutonium into fuel. Even

4 though this has been discarded as an option, ongoing

5 immobilization was to have been developed along with

6 the MOX program. It would consist of vitrifying

7 plutonium, and made into a safer material for

8 indefinite storage. It would substantially reduce the

9 risks of accidents and terrorist procurement of this

10 deadliest of all elements. Although it is the best

11 choice for a problem like plutonium that we know of

12 today, all funds for this alternative have been

13 deleted from the budget, and the concept of such an

14 alternative appears to have been placed on an

15 indefinite hold. Failure to consider this option has

16 to be considered an abysmal decision. There appears

17 to be a hidden agenda with the decision to continue

18 with the MFFF, despite the risks and uncertainties of

19 proceeding with plans for this facility. The

20 production of quantities of tritium in three of TVA's

21 nuclear reactors which will be processed at Savannah

22 River Site has to have significance. Such quantities

23 of tritium can be used only in the production of

24 nuclear weapons, and MFFF could make plutonium

25 available in sufficient quantities for the production

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1 of nuclear weapons. What other explanation could

2 there be that another objective of the MFFF is in

3 conjunction with the production of large numbers of

4 new nuclear weapons. If this premise is valid, this

5 should be acknowledged as part of the DEIS, and should

6 be made apparent to the U.S. citizenry upon whose

7 taxes this project would depend. Without a

8 satisfactory explanation of this, the DEIS is

9 complete. If these premises are correct and we're

10 planning to create a new massive buildup of nuclear

11 weapons, it will create a massive increase in the

12 world's supply of weapons of mass destruction, and

13 stimulate even greater risks of nuclear weapons

14 proliferation. For the reasons I have stated, the

15 proposed MFF should not be approved for construction.

16 Thank you.

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

18 Doctor. And I hope that you will submit those written

19 comments to us.

20 DR. PATRIE: I will expand on them and

21 submit them later.

22 MR. CAMERON: Okay, great. Thank you.

23 Let's go to -- to Mary Olson. That's --

24 and then we'll -- we'll go to Peter Sipp.

25 Mary?

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MR. JOCOY: Chip, are we going to be able to hear from people whose name -- whose faces we don't recognize? I think there are some other people on the list who wanted to speak.

MR. CAMERON: Oh, yeah, we're going through the list of people who signed up to talk, Gregg. So we'll hear them and we'll know who they are. And this is Mary Olson.

MS. OLSON: I don't mind coming later if somebody needs to leave.

MR. CAMERON: I think we're fine. I don't think we have any problems with that, so go ahead, Mary.

MS. OLSON: My name is Mary Olson. I'm the Director of the Southeast Office of Nuclear Information and Resource Service. We are a national, and now international organization in our affiliation with the World Information Service on Energy, and have 15 offices on four continents.

The office in the Southeast has been primarily focused on the MOX issue, and I want to thank the NRC for coming to Charlotte, and I want to also give the information that a number of people I know, in addition to Janet Zeller, are here in spirit because of other health situations and competing

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events. So I want to emphasize that we appreciate this meeting's being held.

It's a little bit unusual for me to do a written statement. I usually like to just talk. But I do have a written statement tonight that I am going to embroider a little bit.

That being said, I'm deeply moved and having some difficulty standing here today while people are dying over the question of weapons of mass destruction, as well as power and control of resources. These matters are what ultimately we are talking about here.

The Nuclear Regulatory Commission has prepared a detailed analysis of the proposed -- proposal by DCS on behalf of their client, the Department of Energy, to build a factory to make plutonium fuel using plutonium from weapons of mass destruction that are being dismantled. NIRS is disappointed that NRC has issued a tentative approval for this project to go forward. We support the no-action alternative.

This approval is, however, based on a rather desultory dismissal of any other alternative. We are asked many times, in the introduction to the draft environmental impact statement, to concur that

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1 making MOX will, in fact, prevent plutonium from being  
2 used for mass destruction. We are asked to take the  
3 Department of Energy's word for it that the Russians  
4 will only accept U.S. MOX fuel production to stay in  
5 the program, and that NRC, even considering in detail  
6 the environmental consequences of any other option,  
7 would violate this consummate agreement.

8 Nuclear Information and Resource Service  
9 rejects the idea that making plutonium fuel from  
10 weapons grade plutonium will safeguard it from use in  
11 weapons of mass destruction. In fact, we believe that  
12 placing this material into commerce will vastly  
13 increase the risk that weapons grade material will be  
14 diverted, both in this country and in Russia.

15 Further, since the inception of this  
16 program, the U.S. DOE has stated that the weapons  
17 grade MOX fuel would be irradiated in other countries,  
18 in addition to Russia. First Ukraine was named;  
19 later, simply, quote, "Russia trading partners" were  
20 added to the list. In case people have failed to  
21 notice, many of the countries which the current  
22 administration in the U.S. labels "evil" or "rogue"  
23 nations are on the list of those who could potentially  
24 receive this material.

25 If Russia supposedly will not accept any

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1 alternative that would not degrade the isotopic  
2 composition of the plutonium, why would the United  
3 States accept a program that would -- could send  
4 weapons grade MOX fuel to countries like Iran, Syria,  
5 and potentially some day Iraq. And I'm sorry I don't  
6 have the full list of trading partners, but I'm sure  
7 it's available in the public record.

8 A very simple alternative was never  
9 considered by the DOE, and only recently considered by  
10 myself, which is to mix---M-I-X---mix weapons grade  
11 plutonium with reactor grade plutonium that could be  
12 purchased from any number of countries that have a  
13 huge plutonium, quote, "waste burden" that will be  
14 using it as problematic, expensive, deadly MOX fuel.  
15 There's a number of European nations with such  
16 inventories, not to mention Japan.

17 This mixed plutonium would then be  
18 isotopically degraded, and could be considered for a  
19 number of alternatives to MOX, none of which I am  
20 specifically advocating, but none of which would carry  
21 the risks associated with reactor use.

22 Instead, the U.S. Department of Energy,  
23 with lots of help from the U.S. Nuclear Regulatory  
24 Commission, is going forward with a program that  
25 places Charlotte at unprecedented risk. Plutonium

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1 fuel generates more radioactive activity and more  
2 deadly radionuclides than uranium fuel. In the event  
3 of an accident, or, heaven forbid, a retaliatory  
4 attack against our government or our corporations, the  
5 health consequences would up to double in proportion  
6 to the MOX fuel in the reactor core. And I will have  
7 to spend time with the current document to look at the  
8 estimates that are given there.

9 But that could happen on Lake Norman or  
10 Lake Wiley. We all now agree it could happen. The  
11 question is will it happen, and when will it happen.  
12 We can only hope that Duke Energy, in its  
13 international dealings, is making friends. And this  
14 is simply the tip of the iceberg.

15 I want to appreciate that NRC has  
16 faithfully analyzed the environmental justice impacts  
17 of the proposed factory. At the same time I am deeply  
18 disappointed. The analysis that shows that low income  
19 and minority people are disproportionately impacted by  
20 the proposed plutonium fuel factory also shows that  
21 these same people are and have been disproportionately  
22 impacted by the current and previous missions of the  
23 Savannah River Site. There is no recognition that the  
24 decision to add new radioactive missions to this site  
25 will impact a region already weakened by previous and

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ongoing exposures.

1 Not only is the cumulative and synergistic  
2 nature of this situation not fully expressed in the  
3 NRC analysis, but the proposed mitigation steps do not  
4 address this ongoing routine and repeated exposure.  
5 And I will insert here that the work of Dr. Alice  
6 Stewart, mentioned earlier, found that the Hiroshima  
7 and Nagasaki studies are deeply flawed, because only  
8 the survivors of an extremely traumatic and fatal set  
9 of experiences are analyzed, and many of those who  
10 were assumed to be outside the area walked into the  
11 center to find their loved ones, or try to find their  
12 loved ones, the day of and the day after the actual  
13 blast. And so that data has been reanalyzed by Dr.  
14 Stewart to show that, indeed, the young and the old  
15 are at much higher risk for radiation.

16 A millirem is not a millirem, it depends  
17 on who got the millirem as to what the dose risk is.  
18 And I will also add my other comment here, that the  
19 EPA has begun to adopt a separate set of evaluation  
20 standards for childhood cancers, and I think the NRC  
21 should follow suit and not use the standard man. Nor  
22 does the evaluation in environmental justice consider  
23 the long-term impacts of the waste from the MOX fuel  
24 factory, since the wastes are conveniently put into a  
25

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72-8  
cont.

72-9

72-10

1 shell game and moved over the NRC regulatory boundary,  
2 but not over the boundary of impact of these very same  
3 people.

4 This is another case of the powerful and  
5 the wealthy or the better informed dumping on those  
6 with less power or fewer resources, and less  
7 information. I have to admit that I have a part in  
8 this situation. In the years that DOE was considering  
9 where to put the MOX factory, I had working  
10 associations with people at the alternate sites under  
11 consideration in the West. There was a strong fight  
12 from people in Washington, Idaho, and Texas. Nuclear  
13 Information and Resource Service opposes a MOX factory  
14 anywhere, but we erred in not working more proactively  
15 in the Southeast to prevent the siting at the Savannah  
16 River Site. And I want to point out, while I'm in  
17 this room tonight, that it's rather convenient that  
18 the MOX factory, its potential for accidents and the  
19 environmental justice dimensions of those accident  
20 consequences, are far from Charlotte and Duke's  
21 headquarters.

22 Nonetheless, I do not believe that if we  
23 had placed our limited resources in the Southeast at  
24 that time, it would have been sufficient, since the  
25 decision to put the MOX factory at SRS was a fete a

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72-10  
cont.

1 comp11. The Savannah River Site is where DOE has  
2 always processed the bulk of the plutonium it  
3 generated. Now the MOX factory has been used as the  
4 camel's nose under the tent or the cover story for the  
5 Department of Energy's long-term plan to return to  
6 making new nuclear weapons. This is no longer swords  
7 into plowshares.

8 As such, the U.S. MOX program has become  
9 a magnet for other plutonium missions. We must turn  
10 again to the environmental justice concerns and admit  
11 that there will be even more elevated risks of  
12 accidents if the modern pitt factory is sited at SRS.  
13 There will also be more risk of accidents at the pit  
14 disassembly and conversion facility if it is  
15 processing twice or greater amounts of plutonium.  
16 There will also be more ongoing exposures to the  
17 workers and the public. All of this is a direct  
18 consequence of DOE siting the pit conversion and  
19 plutonium polishing at SRS, ostensibly for, quote,  
20 "peaceful MOX."

21 The second cover story for these new pits  
22 is that it is simply refurbishment of the existing  
23 U.S. nuclear arsenal that is there for deterrence.  
24 This statement is no longer credible. First, the  
25 current administration has declared deterrents a thing

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1 of the past and stated its decision to use nuclear  
 2 weapons preemptively. Secondly, the Oak Ridge Y12  
 3 factory has not -- has not only been updated, it has  
 4 been redesigned to make new nuclear weapons assemblies  
 5 for small, usable mini-nukes. Third, the production  
 6 levels of tritium in TVA reactors, as approved by the  
 7 U.S. NRC, indicate an intention to fuel as many as  
 8 60,000 weapons. This astronomical number might seem  
 9 ludicrous since the current U.S. arsenal has the  
 10 potential to destroy every population center on earth  
 11 several times over. On the other hand, the stated  
 12 U.S. intention to weaponize near space would require  
 13 a number of weapons on this order. I can only imagine  
 14 the payoff that Duke Energy must have negotiated to  
 15 posture disarmament while providing the cover for the  
 16 most massive arms deployment in the history of the  
 17 world.

18 We are asked by NRC to believe that the  
 19 rejection of any alternatives to MOX is to keep the  
 20 Russians at the table. Get real. This table has  
 21 nothing to do with the Russians, except to put them  
 22 and all other nations in the servile position that  
 23 they will share once the U.S. has control of near  
 24 space and can target any site on earth from space.  
 25 Surgically, of course.

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1 When it comes to the local aspects of all  
 2 this, it is important to note, for those in this room  
 3 who live in the Charlotte area, it is entirely  
 4 possible that the brief consideration given by the NRC  
 5 in this DEIS to the environmental and health impacts  
 6 of the reactor use of MOX fuel may be the only  
 7 environmental impact statement analysis we ever see.  
 8 This document affirms that other environmental reviews  
 9 will be conducted for any license amendment to use  
 10 MOX. This assertion, we hope, means that there will  
 11 be an environmental impact statement on the upcoming  
 12 MOX fuel test, or LTA, not mentioned at all in the  
 13 current report, and also when Duke applies for a  
 14 license amendment for each of the reactors to begin  
 15 using MOX fuel, if this program gets to that point.

16 There is no basis for confidence in these  
 17 environmental impact statements (sic) will, however,  
 18 ever be written, or that the public will have the  
 19 opportunity to be involved in these decisions. I am  
 20 being charitable here, since clearly we have been  
 21 effectively shut out of this one by the assertion that  
 22 the Russians can dictate the terms of our program.  
 23 Duke has four license amendment applications for the  
 24 20-year extension of the operating licenses of Catawba  
 25 and McGuire pending. Duke avoided any consideration

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which I believe would be the transport across Michigan, which was so heavily opposed by the local population, but nonetheless pursued by DOE.

As for the reactor license amendments to use MOX fuel, we similarly hope that the NRC will require that a full EIS be done for each of the reactors. We are not assured of this, however. In 1991, when then NRC Chairman Meserve was asked directly at a meeting whether the use of MOX fuel would trigger a full EIS he said no. Certainly this was an opinion, and an opinion that NIRS, and we believe the residents of Charlotte and the region, do not agree with. And we hope that the new chair will reverse this point of view.

This brings me, finally, to the concerns I raised in 1996 when then U.S. Secretary of Energy Hazel O'Leary announced the plutonium surplus disposition program in a public press conference. That day I was privileged to ask the Secretary a question that was featured later that evening on the *Leher News Hour*. My question started by pointing out that it is likely that MOX fuel use would increase the amount of plutonium in the so-called low level waste from the operations of nuclear power reactors. My question was: What would the impact of that

of their participation in the MOX fuel program in these applications. When Nuclear Information and Resource Service and the Blue Ridge Environmental Defense League brought MOX into the license renewal process, the Atomic Safety Licensing Board first accepted us -- the contentions. But then the ASLB was overridden by the five NRC commissioners on Duke's appeal. Therefore, MOX use is not reflected in the NRC's supplemental EIS for the Duke reactors' license renewal at this time.

The MOX fuel test or lead test assembly program will likely be given only an internal environmental assessment, and finding of no significant impact. NIRS will challenge this amendment in an effort to broaden public participation in the decision to put people in this community at higher risk, not to mention those along the transport routes to and from Europe, and the potential for malicious diversion in transit. Nonetheless, it will be a miracle if we win a full EIS for the test fuel. The U.S. NRC could act in good faith by ordering that an EIS on the test fuel be prepared because the unique nature of this program and the fact that the overall risk environment has changed since the last time such a matter was considered for significance of impact,

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1 additional plutonium be on the newly proposed, so-  
 2 called low level radioactive waste dumps? The  
 3 Secretary assured me that day, and the viewing public  
 4 that night, that there would be many analyses  
 5 performed under the *National Environmental Policy Act*  
 6 before the decision to make MOX fuel would be  
 7 finalized.

8 The Department of Energy did not analyze  
 9 the impact of MOX fuel use on reactor waste in any  
 10 depth, let alone any other affiliated nuclear service  
 11 such as nuclear laundries, component repair,  
 12 decontamination services, or decommissioning. We were  
 13 told that the NRC would do this. Today we are  
 14 reviewing a draft environmental impact statement that  
 15 devotes, perhaps appropriately, only a fraction of its  
 16 volume to the reactor use -- to the reactor use of the  
 17 fuel the factory would produce. But is not the reason  
 18 for the production of the fuel its use? Is it not  
 19 justified, the whole program, because of production of  
 20 electricity? The NRC should have done a programmatic  
 21 EIS that would encompass the impacts of from what is  
 22 known from all phases of this program. Instead, there  
 23 are all these cracks. And, barring NRC decision to  
 24 close them, my questions will continue to fall  
 25 through, right along with the victims. It is -- is it

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1 not the reason to not produce this fuel to avoid the  
 2 potentially catastrophic impacts that it could wreak  
 3 on this very location and a wide radius around here?

4 Once again, the federal government is  
 5 proceeding with decisions made long ago behind closed  
 6 doors, and now engaged in a masquerade where their own  
 7 employees are told it is their job to play by the  
 8 rules that will, in the end, inevitably deliver the  
 9 right decision, no matter how thin the stated  
 10 justification. In the end, that thin veil reveals  
 11 beneath the players who are paid to play this game,  
 12 Duke Cogema Stone & Webster, civil servants we like  
 13 very much, doing their job. But who is really paying  
 14 them? Who is paying them?

15 Us. You and me. Our tax dollars. I'm  
 16 almost done. In the end it is left to the victims to  
 17 fight for their rights. It is not too late to stop  
 18 this mess. And I call upon all those who want to help  
 19 to join forces with all the other potential victims  
 20 here in Georgia, in South Carolina, to support the  
 21 organizations that are intervening in these licensing  
 22 proceedings, and ultimately into federal court, if  
 23 that's where we have to go. Your time and your money  
 24 are needed. It is sad that we must first pay these  
 25 folks----it is tax season. Just remember some of your

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1 money goes to DOE and then to DCS and then to NRC.  
 2 That's how these guys get paid. And then also pay to  
 3 stop them. But that is the way it is when the so-  
 4 called protector of the U.S. public health and safety  
 5 sells out to Minatom and DOE. I sound completely  
 6 resigned, but I do believe in miracles. NRC, it's not  
 7 too late to change your mind. We support the no-  
 8 action alternative, including not transporting  
 9 plutonium at this time, particularly when this country  
 10 is at war.

11 NIRS will be submitting written comments.  
 12 We appreciate this opportunity to speak tonight.

13 MR. CAMERON: Okay, thank you, Mary.  
 14 [Applause.]

15 MR. CAMERON: Let me go to Peter Sipp, and  
 16 then we're going to go to Gregg Jocooy.

17 MR. JOCOY: Do you know (indiscernible)?

18 MR. CAMERON: I don't -- I don't know.  
 19 But we're calling all the people who -- who signed up.  
 20 There's another person after you; okay?

21 MR. SIPP: Thank you, Tim, and everyone  
 22 from the NRC, for coming today. And thanks for  
 23 putting all the work you put into this book. Just  
 24 didn't happen in five minutes.

25 And you are right about the minorities

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1 being affected. Because I lived in Georgia for 21  
 2 years and I know the area quite well. I can't agree  
 3 with the numbers part. I know you made a mistake and  
 4 then you -- and then you changed it. I still can't  
 5 agree with it. I worked at the SRS in the "K" area  
 6 for six months, and there's a whole lot of folks over  
 7 there that would be affected if something was to  
 8 happen at the -- at this new -- these new places.

9 And then your mitigation plan isn't --  
 10 isn't good enough. Sorry, but on Page 515 it -- it  
 11 doesn't say anywhere where you'll have a meeting, how  
 12 many meetings you'll have. And you ought to say,  
 13 "We're actually going to have an actual evacuation.  
 14 We're going to practice," to give -- to give the  
 15 locals -- like in school, when we went to school we'd  
 16 have fire drills where we'd leave our classroom and  
 17 we'd go down to the other hall and we'd wait or  
 18 whatever. We -- that's -- that ought to be part of  
 19 it.

20 Back to the part about being real familiar  
 21 with the Georgia and South Carolina area, there's a  
 22 whole lot of two-lane roads and they would get clogged  
 23 by people trying to get away. If there was a real  
 24 accident and everybody was trying to get away, there'd  
 25 be -- there wouldn't be -- people couldn't get away.

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1 And with Augusta there's nearly a million people. And  
2 they call it the Central Savannah River Area. There's  
3 nearly a million people there. There just -- there  
4 wouldn't be enough people to get away safely.

5 And for you Cogema employees, you people  
6 from France, I want you to know I'm very proud of your  
7 president, President Chirac. He wanted to take care  
8 of the Iraq situation with inspections and the  
9 President over here wanted to give the Turkey --  
10 Turkish people \$26 billion so that our folks could go  
11 there and our supplies could go there. \$26 billion  
12 could buy a whole lot of inspectors for a very long  
13 time, and wouldn't anybody gotten hurt like -- like  
14 they are right today, people being maimed and cut up.  
15 So the best toast in the world is French toast, and  
16 the best fries in the world are French fries. My --  
17 Mary's and my daughter is engaged to a Frenchman. I  
18 take my hat off to the French people. I can't do that  
19 for -- for the administration over here trying to beat  
20 up on everybody. Doesn't work well. It's not --  
21 people don't accept that.

22 And just like it doesn't work to -- to  
23 force all the -- all the smiling faces at the PR  
24 meetings that supposedly are going to be had in the  
25 minority communities, all those smiling faces, that

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1 ain't going to be good enough to get people away when  
2 there's a -- when there's a mess, when people got to  
3 get away. All them smiling faces, that's not going to  
4 be good enough. You need to actually have evacuations  
5 and have people try to get away so they can get used  
6 to it, what roads they should go on.

7 And -- and then there's another small  
8 comment. When people say "the environmental," well,  
9 that's almost right. It's our environment. Takes up  
10 the same amount of space in a -- in a paragraph.  
11 "Our," rather -- "our," O-U-R, is three letters, just  
12 like T-H-E. Whereas "the" implies separation, "our"  
13 implies ownership. Can't live here without clean air  
14 and clean water. We just can't do it.

15 So I thank you, everyone in the NRC, and  
16 you all have a tough job. I don't think I'd want to  
17 be there. But, so thanks for the chance to talk. And  
18 I think it'd be worthwhile to consider mixing the --  
19 the bomb grade plutonium with the other, like Mary was  
20 saying. So if you all would consider that, that'd be  
21 a good -- good option, also. There's still time.

22 MR. CAMERON: Okay, thank you. Thank you,  
23 Peter.

24 Our next speaker is -- is Gregg Jocoy.

25 MR. JOCOY: Thank you, Chip. I'll be

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1 plutonium fuel factory at the Savannah River  
 2 Site. Thank you for your valuable time and  
 3 consideration. Should you have any questions  
 4 or concerns, please do not hesitate to contact  
 5 me.

6 "With kind regards, I remain,

7 "Very truly yours, James E. Smith, Jr."  
 8 MR. CAMERON: Gregg, can we attach that to  
 9 the transcript?

10 MR. JOCOY: Please. It includes the fax  
 11 cover sheet.

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

13 MR. JOCOY: I had been anticipating two to  
 14 three minutes, so I trimmed my -- my presentation  
 15 down. But apparently I've got more than two or three  
 16 minutes, so fortunately I brought the longer version  
 17 with me, too.

18 This is a...

19 MR. CAMERON: Well, don't get too -- don't  
 20 get too carried away.

21 [Laughter.]

22 MR. JOCOY: Three pages versus two.

23 This is a statement of the York County  
 24 South Carolina Greens. The Nuclear Regulatory  
 25 Commission has issued a draft report for comment. The

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1 first presenting a statement on behalf of James E.  
 2 Smith, Jr., who is a member of the South Carolina  
 3 State House of Representatives, minority leader  
 4 representing the Democratic Party in the South  
 5 Carolina State House of Representatives. It's  
 6 addressed to Michael Lesar, and it says, "Dear Mr.  
 7 Lesar," is that pronounced right? Lesar, Lesar  
 8 (pronouncing).

9 MR. CAMERON: Lesar.

10 MR. JOCOY: Lesar. Okay.

11 "I write you today in regards to the  
 12 Nuclear Regulatory Commission's draft  
 13 environmental impact statement on the impact of  
 14 building a new MOX plutonium fuel factory at  
 15 the Savannah River Site. I understand that the  
 16 NRC has held public hearings to have public  
 17 input as part of the official record. I  
 18 respectfully request the Nuclear Regulatory  
 19 Commission hold a public meeting in Columbia,  
 20 South Carolina, prior to the end of the comment  
 21 period at May 14<sup>th</sup>, 2003.

22 "Additionally, I respectfully request  
 23 that my name and address be placed on all  
 24 mailing lists for any further meetings and any  
 25 -- and other public forums regarding a new MOX

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1 York County South Carolina Greens offer this comment  
 2 on the environmental impact statement on the  
 3 construction and operation of the mixed oxide fuel  
 4 fabrication facility at the Savannah River Site.  
 5 The Nuclear Regulatory Commission has  
 6 stated at public hearings on record that they are a  
 7 regulatory agency, alone, and plays no role in the  
 8 promotion of nuclear energy. Were the nuclear  
 9 industry examined with a careful eye, we are certain  
 10 that none of the justifications for nuclear energy  
 11 would stand scrutiny.

12 The environmental impact statement  
 13 addresses the question of cost versus benefits  
 14 throughout. Because of this dynamic, it is impossible  
 15 to believe that the Nuclear Regulatory Commission does  
 16 not behave as a promoter of nuclear energy. The  
 17 convergence of systems in the production of plutonium  
 18 fuel and plutonium triggers for nuclear weapons lays  
 19 bear the hydra nature of nuclear energy. Nuclear  
 20 weapons cannot exist without nuclear power. The  
 21 plutonium fuel program is nothing more than an attempt  
 22 to prop up the nuclear energy industry, advance the  
 23 production of new nuclear weapons which may well  
 24 violate any number of international treaties the U.S.  
 25 subscribes to, and line the pockets of those anytime-

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1 patriots who benefit from the promotion of war and  
 2 misery. Were this an agency which had at its heart  
 3 dedicated to regulating nuclear energy, it would be  
 4 out of business within a few dozen years. Over that  
 5 sort of time frame, almost all the difficulties we  
 6 face from nuclear power will be manageable, providing  
 7 that the NRC acts in the public interest and shuts  
 8 down each and every operational power plant as unsafe.  
 9 Instead, the NRC continues to offer a fig leaf to the  
 10 nuclear industry, all the while deceiving the public  
 11 as to who gets the benefits and who takes the risks.

12 The simple, naked truth is that those who  
 13 benefit from plutonium fuel programs can be counted in  
 14 the hundreds, while those accepting the risks number  
 15 in the millions. The top shareholders who will get  
 16 the financial benefit of this program and the top  
 17 managers at the companies involved will get a huge  
 18 windfall from this program. New multi-million dollar  
 19 homes, top-of-the-line college education, and world  
 20 travel will be funded by this program, all for a very  
 21 few. These are the ones getting the benefit from this  
 22 proposal.

23 Who takes the risks? These people and  
 24 more? Perhaps. And certainly so in the case of some  
 25 of the top managers of the companies in question.

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1 However, the stockholders who ownership stake (sic)  
 2 entitles them to profits from the effort are unlikely  
 3 to live anywhere close to the places where risks are  
 4 the highest. A stockholder who lives in France,  
 5 Japan, Saudi Arabia, the Bahamas, or any other tax  
 6 haven, nor one who lives in the swankiest places in  
 7 the United States is at substantial risk. In short,  
 8 the rich folks will, by and large, take no direct risk  
 9 to personal well-being, and millions of average people  
 10 will be close enough to the action to pay the costs.  
 11 The risk benefit analysis is unusable, for it assumes  
 12 that benefits flowing to a tiny portion of  
 13 shareholders are enough to justify the risks borne by  
 14 millions of others, almost all of whom will have no  
 15 chance to get a portion of the benefits.  
 16 Recently, Fred Rogers died. During a  
 17 radio appearance before he passed, he took a call from  
 18 a fellow who had heard him speak at his university's  
 19 graduation ceremony. During that speech he asked the  
 20 audience to think about the teachers who had brought  
 21 them to the point that they could graduate from  
 22 college. He gave them one minute. That's a long  
 23 time.

24 I ask us now to take a minute of silence  
 25 to remember. Remember the children you have raised,

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1 the parents who raised you. Think about  
 2 grandchildren, born and as yet unborn. Think about  
 3 your loves, your friends, your co-workers. Consider  
 4 the serious nature of the risks you are considering  
 5 exposing them to, and think about plutonium fuel with  
 6 them in mind. Think seven generations down the road,  
 7 about where we are, how we got here, and how we can  
 8 get out of this mess. One minute to think.  
 9 Concentrate on those we love the most, who love us the  
 10 most.

(Momentary pause.)

MR. JOCOY: Thank you.

MR. CAMERON: Okay, thank you, Gregg.

14 We have another speaker, and someone from  
 15 the Charlotte Green Party. I'm sorry I didn't, you  
 16 know, have your name on the list.

DR. AULETTE: I wrote it down.

18 MR. CAMERON: Well, why don't you come up  
 19 and introduce us.

20 DR. AULETTE: Hello. My name is Dr. Judy  
 21 Aulette, and I'm a member of the Charlotte Area Green  
 22 Party. I'm here to present our organizations  
 23 reactions to DEIS.

24 The Charlotte Area Green Party would like  
 25 to thank the NRC for this opportunity to speak about

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the environmental impact of the lead test assembly program which will impact the Charlotte area as part of the preparation for the use of MOX. These impacts include not only the dangers of putting experimental fuel into a nuclear reactor core, but also the transport of the plutonium and fresh MOX fuel.

Third, there is not yet an environmental impact statement on the new plutonium pit factory in South Carolina that seems to be part of the whole deal. Such a report may not be an assigned duty of the NRC, but it is a study that is necessary for a complete assessment of risk of this ever-expanding plan.

Fourth, although we were glad to see that the required environmental justice policy is being implemented, we do not believe the mitigation measures suggested are sufficient to achieve environmental justice for the low income populations in the area surrounding the SRS. At least these three additional efforts should be made.

First, we believe there need to be warning sirens in the area of the facility; second, there should be free health care for those with health risks elevated due to the operation of the facility; three, some economic benefit should be provided for those who

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the mixed oxide fuel factory proposed for the Savannah River nuclear site. At first glance, the draft environmental impact statement appears exhaustive, even to the point of being overwhelming. However, there is no overall assessment of the risk which would accumulate from all of the processes involved in the MOX production, in its transport, and in its use as a fuel. Information is presented in such a fragmented manner that it is very difficult to see the whole picture. No average citizen can be expected to glean from the statement the information necessary for a decision on whether or not to support the plans of -- of Duke Cogema Stone for a MOX factory at the Savannah River Site.

In addition to there being no overall assessment of risk for humans and the environment, there are several additional issues we wish to mention. First of all, there is no environmental impact information on MOX use in the specific reactors which will eventually burn this fuel. These reactors will have to be modified for MOX. The effects that these modifications may have on performance of equipment at these reactors has not been considered in this DEIS.

Second, there is no consideration given to

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1 reside near the MOX facility to offset the economic  
 2 and health disadvantages of living in the area.  
 3 However, we want to be clear that these efforts do not  
 4 justify exposing any population to the hazards of MOX  
 5 production.  
 6 Fifth, there is no mention of possible  
 7 security problems at the facilities manufacturing and  
 8 handling MOX. There's now an undeniably higher risk  
 9 of domestic terrorism than ever before, and these  
 10 facilities would be prime terrorist targets. And I  
 11 know a lot of other people who articulated this very  
 12 well tonight, but I just thought it was worth  
 13 mentioning because I think it -- it is a serious  
 14 issue.  
 15 Sixth, someone, whether it is DOE or the  
 16 NRC, needs to do an environmental impact study of  
 17 waste management in the manufacture and use of MOX.  
 18 This is a particularly glaring omission of relevant  
 19 facts.  
 20 Although the Charlotte Area Green Party  
 21 appreciates the time and effort of the NRC in hosting  
 22 these hearings, it is our fear that the NRC is just  
 23 going through the motions of pretending to listen to  
 24 public comments, when the decision to build and use  
 25 the facilities is already being taken for granted by

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1 the companies involved. Why, for example, has Duke  
 2 Energy already stated its commitment to the use of MOX  
 3 fuel? It appears they do not intend to pay attention  
 4 to the concerns of the public.  
 5 In closing, we would like to urge the NRC  
 6 not to approve the construction of the MOX factory at  
 7 the Savannah River nuclear site. The NRC's draft  
 8 environmental impact statement has failed to convince  
 9 us that this enterprise involves an acceptable level  
 10 of risk either to humans or to the natural  
 11 environment.  
 12 Thank you.  
 13 MR. CAMERON: Thank you, Doctor, for those  
 14 specific recommendations, too. We appreciated that.  
 15 That's the last speaker that we -- we  
 16 have. And I want to go out to you again to see if  
 17 there's any last questions. But I thought that I'd  
 18 ask Lawrence Kokajko if there's anything that he heard  
 19 that he might want to clarify for us.  
 20 MR. KOKAJKO: Thank you very much. I  
 21 appreciate you all coming out. We did hear some new  
 22 comments this evening that we have not heard in the  
 23 previous two meetings, and we do appreciate them. And  
 24 we also hear some of the same concerns, too, that  
 25 we've heard at both of the previous meetings, as well.

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1 I'd like to -- to provide a few  
 2 clarifications. One is the -- to use the MOX fuel in  
 3 the reactors does require license amendment. And that  
 4 is handled by the Office of Nuclear Reactor  
 5 Regulation. And as -- as you may know, for an  
 6 amendment to the operating license there is some type  
 7 of environmental assessment done, as well as an  
 8 opportunity for hearing. I do not know the full  
 9 status of that, but I know the licensee has to do a  
 10 review, and I know we have to do a review, and we have  
 11 to approve it. The project manager for that, I  
 12 believe his name is Robert Martin. And if you would  
 13 like to contact him to get the details on that  
 14 amendment....

15 UNIDENTIFIED: I speak with him regularly.  
 16 MR. KOKAJKO: Okay. I -- I do not, so --  
 17 but I do know that those things are done in the normal  
 18 Part 50 process.

19 Also, you mentioned about EPA and NRC,  
 20 about the child doses. There is a -- in the federal  
 21 government, a -- something called ISCORS, Interagency  
 22 Steering Committee on Radiation Safety. That is being  
 23 -- that is one of the topics that they do discuss, and  
 24 the NRC and the EPA are working together to come up  
 25 with something in that regard. I do not know the

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1 details of that, but I do know that that committee  
 2 does exist and those things are occurring.

3 MS. OLSON: NRC's participating in that?  
 4 MR. KOKAJKO: In ISCORS; yes, ma'am.  
 5 MS. OLSON: Well, I know in ISCORS, but is  
 6 it....

7 MR. CAMERON: Let's -- let's make sure we  
 8 get this on the record. I apologize for the  
 9 awkwardness of not being able to just have a simple  
 10 conversation, but we do need to get it on the record.

11 MS. OLSON: I appreciate that you're  
 12 telling people about ISCORS. I am aware of ISCORS.  
 13 But I was not aware that NRC was participating in a  
 14 consideration of a new way to set standards that would  
 15 consider children in a different way than the standard  
 16 man. So this is news to me. And let me understand  
 17 that you are saying that NRC is proactively seeking to  
 18 participate in this?

19 MR. KOKAJKO: The -- what I can tell you  
 20 is that we are aware of it and we're following the  
 21 work. I cannot tell you that we have -- we have made  
 22 a -- reached an agreement with the EPA or anyone else  
 23 as far as what the outcome will be. But I do know  
 24 that that work is -- is ongoing. That's -- that's  
 25 what I'm trying to tell you.

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1 One of the things that also was brought up  
 2 about Cogema, in particular. But the Duke Cogema  
 3 Stone & Webster consortium would be under our  
 4 oversight. If Cogema, to the extent that their  
 5 involvement in this activity, once it is licensed,  
 6 they would be within our regulatory reach. So Cogema  
 7 does not exist as this French entity that is beyond  
 8 our control. Because they've submitted themselves in  
 9 this consortium, and if this activity does get  
 10 licensed, that company, DCS, would be within our  
 11 regulatory reach.

12 And the final thing I want to say is that  
 13 there has been no approval, tentative or otherwise,  
 14 that has been made regarding the construction or  
 15 operation of this facility. DCS can take no action as  
 16 a result of the draft environmental impact statement  
 17 or even the final environmental impact statement.  
 18 That decision is based upon -- both the decision to --  
 19 to construct and operate the facility can only be made  
 20 after the safety evaluation is complete, the safety  
 21 evaluation reports are prepared, and any conclusion of  
 22 any adjudication, as a result of a hearing request,  
 23 has been made. So there has been no decision reached  
 24 anywhere in this process yet.

25 What we're saying in today (sic) is that

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1 there is a -- for the environmental review, the  
 2 tentative conclusion is that we feel we understand the  
 3 environmental impacts, and we feel we understand it  
 4 enough that we wanted to come out and solicit public  
 5 comments. That's why it's a draft. That's why the  
 6 Congress, in its wisdom, said you will have two  
 7 processes here. You're going to go out with a draft  
 8 first and get -- seek other comments, and then you  
 9 come out with a final. And that's why we're here this  
 10 evening. So I'd like to make sure that we understand  
 11 no decision has been reached on the -- the proposed  
 12 MOX facility.

13 MR. CAMERON: Okay, thank you.

14 Is there anybody who has not had a chance  
 15 to ask a question or anything, that you've been  
 16 listening to a lot of us who's -- anybody else who  
 17 wants to ask a question or say anything?

18 Let me see if there's anybody else first,  
 19 and then we'll go over there. Anybody? All right.

20 MR. KEISLER: This is Bill Keisler again,  
 21 in regards to environmental justice. This included  
 22 this environmental impact statement, but there was a  
 23 paper given or a speech given I believe in Australia  
 24 July 2000 by one of the commissioners, stated that the  
 25 -- being an independent agency, the NRC was not bound

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1 by executive order for the application of  
2 environmental justice standards.

3 MR. HARRIS: I was at that meeting with  
4 Commissioner Dicus, and I don't believe she made that  
5 statement. I think the point...

6 MR. KEISLER: Well, it was on the Web site  
7 (indiscernible).

8 MR. HARRIS: ...I think the point she was  
9 trying to make was that environmental justice could be  
10 viewed in a broader sense.

11 MR. KEISLER: She stated that it did not  
12 -- that they -- the NRC tried to accommodate it where  
13 they could, but was not bound by that executive order.

14 MR. CAMERON: Maybe I could...

15 MR. KOKAJKO: Let me -- let me...

16 MR. CAMERON: Go ahead, Lawrence, you --  
17 you can clarify this.

18 MR. KOKAJKO: Okay, yeah, I -- I think I  
19 know the answer to this.

20 There is -- we're under a federal system  
21 of government. Once again, the Congress, in its  
22 wisdom, when it set up the Commission, it -- we are --  
23 exist as an independent executive agency. And we do  
24 not follow under the executive branch, as say the  
25 Department of Energy or the Department of Commerce,

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1 where they have to follow the presidential orders.

2 What we do is, we evaluate them to see  
3 what may be applied to us, and then, you know, we may  
4 take it, we may not. The Securities and Exchange  
5 Commission also does the same thing. That they, as an  
6 independent agency, they can try to be independent of  
7 the executive branch as necessary.

8 The interesting thing is the NRC has said  
9 we would take the executive order on environmental  
10 justice and we would apply it. And we have, in fact,  
11 done so. Environmental justice is a very big concern.  
12 We are -- in fact, I know that our environmental  
13 review group, of which Tim and Adrienne and Stacy are  
14 involved in, take environmental justice very  
15 seriously. And, in fact, I would say that  
16 environmental justice has been one of the -- the  
17 stronger comments and themes throughout each of these  
18 meetings, particularly the first two meetings that we  
19 had on the draft environmental impact statement.

20 So the answer is we are following the  
21 environmental justice. I believe we did write -- we  
22 did write back to the executive branch and we said we  
23 would follow it to the degree that it applied to our  
24 environmental impact statements.

25 MR. CAMERON: And -- and, in fact, the NRC

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