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UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

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IN-SITE LEACH URANIUM MILLING FACILITIES

GEIS PUBLIC HEARING

+ + + + +

THURSDAY

SEPTEMBER 11, 2008

+ + + + +

1901 University Boulevard Northeast

Albuquerque, New Mexico

+ + + + +

7:00 p.m.

FACILITATOR:

Chip Cameron

NRC PANEL MEMBERS:

Larry W. Camper

James R. Park

Joan W. Olmstead

Gregory F. Suber

C-O-N-T-E-N-T-S

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

1  
2 MR. CAMERON: If everybody could just have  
3 a seat, and we can get the meeting started. Good  
4 evening, everyone, my name is Chip Cameron, and I work  
5 for the executive director of our operations out of  
6 the Nuclear Regulatory Commission, which we are going  
7 to be referring to as the NRC tonight. And it is my  
8 pleasure to serve as your facilitator for tonight's  
9 meeting. And in that role, I will try to help all of  
10 you to have a productive meeting.

11 The subject tonight is the NRC's draft  
12 generic environmental impact statement on uranium  
13 milling, and we are going to be discussing that with  
14 you tonight.

15 I just want to spend a few minutes on some  
16 meeting process issues, so you know what to expect  
17 tonight, and I want to tell you about the format for  
18 the meeting, some simple ground rules to help us all  
19 to have a productive meeting. And then I would like  
20 to introduce the NRC staff that's going to be talking  
21 to you tonight.

22 In terms of the format, it's really a  
23 two-part meeting. The first part is to give you the  
24 information on the draft generic environmental  
25 statement, what are the preliminary findings in the

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1 draft, how they might be used in site specific license  
2 applications, and how you can influence the final  
3 product. And we have two NRC presentations that's  
4 going to give you the background on this document.

5 And after that, we will have some time to  
6 go out to you for any questions that you might have  
7 heard or might have on the presentations that you've  
8 heard.

9 And after that, we are going to go to the  
10 primary focus of the meeting, which is to hear from  
11 all of you, your advice, your recommendations, your  
12 concerns on the issues that are in the draft generic  
13 environmental impact statement.

14 The NRC staff is going to tell you that  
15 they are also accepting written comments on these  
16 issues, but we wanted to be here with you tonight in  
17 person to talk to you.

18 And anything that you say tonight, any  
19 comment that you give, will have the same weight as a  
20 written comment, but feel free to amplify on things  
21 that you said tonight in a written statement, or you  
22 may hear something that someone -- one of the  
23 commenters says, or something that the NRC says, that  
24 will prompt you to submit a written comment.

25 In terms of ground rules, I would just ask

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1 you to hold any questions that you have until both of  
2 the NRC presentations are done. And that will allow  
3 us to give you a complete overview before we go out to  
4 you for questions.

5 If you have a question, just signal me,  
6 and I will bring you this cordless microphone, and if  
7 you could just please introduce yourself to us before  
8 you ask your question, that would very helpful.

9 I would also ask that only one person  
10 speak at a time. Most importantly, so that we can  
11 give our full attention to whomever has the microphone  
12 at the moment, but also so that we can get what I call  
13 a clean transcript, and we do have our court reporter,  
14 who is Beverly Schleimer, who is right over here, and  
15 Beverly is taking a transcript of everything that's  
16 said at the meeting tonight, and that's going to be  
17 the NRC's record of the meeting, and it's also going  
18 to be publicly available to anyone who wants to get a  
19 copy of it.

20 After we are done with the questions, then  
21 we will go to the comment portion of the meeting, and  
22 I believe that everybody who wants to speak has filled  
23 out a yellow card, and I will just call your name and  
24 ask you to join us up at the podium, and to tell us  
25 what's on your mind.

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1 I want to make sure that everybody who  
2 wants to speak tonight has an opportunity to speak,  
3 and also so that we can try to end the meeting before  
4 midnight.

5 So, I would just ask you to try to be  
6 concise, and I'm asking you to follow a five-minute  
7 guideline in your comments, and usually five minutes  
8 is plenty of time to summarize and make a comment, and  
9 it alerts people in the audience and the NRC to the  
10 issues of concern right now. And you can always  
11 amplify on that comment that you give tonight in  
12 writing. It is a guideline. It's not like a buzzer  
13 that's going to go off when you reach five minutes,  
14 and I'm hoping that some people will be shorter than  
15 five minutes. But I will -- I do try to judge if  
16 someone is finishing up, even though they're at the  
17 five-minute mark, so that I don't have to interrupt  
18 them, and so that they go to six or seven minutes, I  
19 really appreciate the fact that you put a lot of time  
20 into preparing your comments, a lot of time and a lot  
21 of thought. So I'm just apologizing in advance if I  
22 have to ask you to summarize because we have to go on  
23 to the next person.

24 And I guess a final thought is just please  
25 extend courtesy to everybody here tonight. You may

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1 hear opinions tonight that differ from your own, but  
2 just please respect the person who's giving that  
3 opinion.

4 Let me introduce the NRC staff to you, and  
5 we are going to go first to Larry Camper, who is right  
6 here. And Larry is the director of the Division of  
7 Waste Management and Environmental Protection at the  
8 NRC. And it's in his division that this draft generic  
9 impact statement is being prepared. And also in  
10 Larry's division is where all of the site specific  
11 licensing evaluations, that takes place in his  
12 division, and he's going to give you a brief  
13 introduction to who the NRC is, and some important  
14 points about the draft generic impact statement.

15 We are then going to go to the real  
16 substance of what's in the draft generic environment  
17 statement go to Jim Park, who's right here. Jim is  
18 the project manager for the preparation of this  
19 environmental impact statement. And he will be going  
20 through that in detail, and will try to be as crisp as  
21 possible on these things.

22 Let me also introduce Greg Suber, Greg is  
23 the branch chief of the environmental protection  
24 branch in Larry's division, and that's where the  
25 generic environmental impact statement is being

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1 prepared.

2 We also have one of our senior attorneys  
3 from our Office of General Counsel, Joan Olmstead, who  
4 is here with us tonight.

5 Mr. Ron Linton, who is right out here is  
6 one of the people who evaluates site specific  
7 applications for uranium processing.

8 And we do have other consultants with us  
9 tonight, so that we can try to answer your questions,  
10 and they will all be here after the meeting, and if  
11 you want to have an informal conversation with them.

12 And what I would like to do now is just  
13 thank you for being here, and helping the NRC with  
14 this decision, and turn it over to Larry Camper.

15 MR. CAMPER: Thank you, Chip. Good  
16 evening. Can you hear me okay back there?

17 AUDIENCE MEMBER: Yes.

18 MR. CAMPER: Thank you for being here  
19 tonight, and we pretty much appreciate you're coming  
20 out. This is the third public meeting this week in  
21 New Mexico. We had a meeting in Gallup on Monday  
22 evening, and in Grants on Tuesday evening and, of  
23 course, here tonight on Thursday, a good turnout on  
24 all of those meetings -- all of the meetings, 75 to  
25 100 people in Gallup, probably a couple of hundred in

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1 Grants, and I'm not sure of the count tonight. It's a  
2 hundred or more. So thanks for being here, we  
3 appreciate it. It's an important part of the process.

4 My division is the Division of Waste  
5 Management and Environmental Protection, it's a large  
6 division, a very broad program. Amongst our charge,  
7 for example, we do decommission nuclear power plants,  
8 we decommission research and test reactors, we have  
9 responsibility for our agency board waste program,  
10 we're close to the Department of Energy, on Waste  
11 Incidental to Reprocessing, which is cleaning up old  
12 nuclear waste.

13 We also have, of course, responsibility  
14 for licensing of uranium recovery, which is what we're  
15 here about tonight. And, as such, my division is  
16 responsible for -- developed the generic environmental  
17 impact statement, the GEIS, as part of our program,  
18 and also coordinated closely with our colleagues in  
19 Region 4, which is in Arlington, Texas, where the  
20 inspection activities are conducted as far as it  
21 relates to uranium recovery.

22 Next slide.

23 So the purpose of tonight is to share with  
24 you and clarify what it is that we have been doing  
25 with regards to environmental protection, as relates

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1 to the in-situ recovery of uranium, not conventional  
2 milling, but only in-situ uranium, which is the topic  
3 of the generic environmental impact statement we will  
4 be covering tonight.

5 We want to listen to what you have to say  
6 about our generic environmental impact statement, what  
7 your comments are, you're an important part of the  
8 process.

9 This is a second in a series of meetings  
10 that's been held on this document. Last fall we held  
11 some scoping meetings on the document, as part of the  
12 development of the process according to the National  
13 Environmental Policy Act.

14 This time around we're holding a total of  
15 eight public meetings, three here in New Mexico,  
16 others have been or will be held in Wyoming and South  
17 Dakota and Nebraska. And we are looking to get  
18 further input tonight, which is really the essence of  
19 the meeting.

20 We will cover a number of things tonight.  
21 First, I will talk briefly about our role and  
22 responsibility as a regulatory agency. Emphasis will  
23 be upon our role as we carry out our responsibilities  
24 to satisfy the National Environmental Policy Act.

25 We will talk about the purpose and the

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1 approach within the draft GEIS. Jim Park will talk  
2 about that in some detail. We will also cover some of  
3 the findings that are set forth in the GEIS document.

4 Again, Jim will talk about that.

5 We will talk about the schedule,  
6 completing the GEIS, what the next steps are. And, of  
7 course, we will accept public comments.

8 Next slide.

9 The NRC, the Nuclear Regulatory Commission  
10 is an independent general agency that is a regulator.  
11 And by that what I mean is it's an independent agency,  
12 and it's not part of the executive branch of our  
13 federal government, rather we report directly to the  
14 congressional oversight committees.

15 We are strictly regulatory in nature. Our  
16 mission is to protect public health and safety and the  
17 environment and to promote common defense and  
18 security.

19 Unlike our predecessor, the Atomic Energy  
20 Commission, we have no role in promoting or securing  
21 the procurement of uranium whether it be for national  
22 defense or for nuclear powers, we have no role  
23 whatsoever, other than for pure regulatory.

24 We do have responsibility, along with  
25 agreement states, for regulating and licensing the use

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1 of radioactive materials, including uranium in the  
2 instance at hand.

3 Openness and solicitation of comments is  
4 one of our core values of the agency. It's an  
5 extremely important part of the process. And we do  
6 truly welcome your comments tonight.

7 Our regulations governing the  
8 environmental protection are set forth in Title 10 in  
9 the Code of Federal Regulations, Part 51. Part 51 is  
10 a regulatory alphabet soup actually, but it is  
11 important to know where our regulations are if you  
12 want to take look at it.

13 In developing our regulation, Part 51, we  
14 did use the Council on Environmental Quality  
15 Regulation and Guidance in developing our regulation,  
16 and that's an important core standard, because the  
17 Council on Environmental Quality has responsibility  
18 for the entire federal government, in short, the  
19 National Environmental Policy Act.

20 Next slide.

21 In terms of our process, applicants submit  
22 applications to us for a license, whether it be for  
23 uranium recovery, for medical uses, for a nuclear  
24 power plant, across the board we receive applications  
25 to use nuclear materials and nuclear waste.

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1           Our decision to grant or to deny a  
2 particular application is based upon the quality of  
3 that submission, whether it satisfies all of our  
4 safety requirements, and all of our environmental  
5 requirements. There is no preordained decision  
6 whether we will grant or deny, rather it's case by  
7 case, based upon the application at hand, and whether  
8 it satisfies all of our regulatory criteria.

9           We do our review in two steps. We do an  
10 acceptance review, which is typically no more than 90  
11 days, we bring together a team of technical expertise,  
12 health physics, hydrogeology, engineering, and so  
13 forth, and determine whether the submission to us is  
14 of adequate quality to proceed with the full-blown  
15 technical review. If it is, we then move into a  
16 detailed technical review.

17           The technical review has two components.  
18 It is a safety review, whereby we are looking to see  
19 if all of the safety requirements in our regulations,  
20 and in particular for uranium are covered as in Title  
21 10 Code of Federal Regulation, Part 40, and our  
22 radiation protection is Part 20 of the regulations. So  
23 there's a safety review side and there's an  
24 environmental review side. These two are both  
25 necessary, they are complementary, and the overall

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1 process takes two years for uranium recovery.

2 Next side.

3 Now, as far the environmental review  
4 process itself for in-situ recoveries, we are  
5 developing this generic environmental impact  
6 statement. I wish we didn't use the term "generic" in  
7 our lexicon, because NEPA, the National Environmental  
8 Policy Act, is known as a programmatic environmental  
9 impact statement, but we use the term "generic" in our  
10 role, and sometimes "generic" creates some concern for  
11 people, for what "generic" implies.

12 But be that as it may, the document will  
13 provide a foundation of looking at numerous  
14 applications for in-situ recovery, consider the  
15 specific environmental issues that have to be  
16 evaluated, and looking at particular geographical  
17 regions of which northwestern New Mexico is one of  
18 them.

19 The draft document is out now -- I should  
20 mention in opening remarks -- it is out for public  
21 comment until October the 7th. Comments that are  
22 given tonight and all of the written comments, will go  
23 into considering those, revising the document, making  
24 adjustments, and so forth. So it's after the draft,  
25 public comments right now.

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1 We will proceed to produce a final generic  
2 environmental impact statement. Jim Park will tell  
3 you about the timing on that.

4 The next point I make is site specific  
5 review. I want to talk about that in more detail.

6 Next slide.

7 In looking at the transcripts from the  
8 previous public meetings on scoping, it became very  
9 clear to me, and in talking to my management and  
10 staff, it became very clear to me that there were  
11 several issues that warranted more explanation,  
12 because there was in some cases confusion, a  
13 misunderstanding, and I feel it's incumbent upon us to  
14 clarify a few points.

15 So I'm going to look at four issues. The  
16 first is GEIS and how it's used, and try to put out a  
17 clarification.

18 The GEIS is a document that will look at  
19 general issues applied to in-situ recovery wherever  
20 it's taking place, and in particular the four  
21 geographical regions that are being analyzed in the  
22 document. It will look at potential impacts, which  
23 Jim will talk about in more detail.

24 The GEIS is a starting point, it's a  
25 starting point to review each application for in-situ

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1 recovery. At the same time that's going on, we  
2 currently have before us right now three applications  
3 for in-situ recovery, a fourth will come very shortly.

4 And while we're developing this GEIS,  
5 we're also looking at -- and we're looking at all  
6 applications -- the applicant's environmental report.

7 As part of the application that is  
8 provided to our agency, the applicant provides a  
9 rather detailed generic report about the site in which  
10 they want to operate the in-situ uranium recovery  
11 process.

12 We look at that information, we review  
13 that information, we verify that information, we go  
14 on-site, we collect data ourselves, we verify the  
15 submission by the applicant, and that becomes an  
16 important part, along with the GEIS, what ultimately  
17 leads to a site specific environmental review.

18 Other relevant information is the safety  
19 review. The safety review and the environmental  
20 review go hand-in-hand. All of that information then  
21 leads to the site specific environmental review.

22 Every site for which we receive an  
23 application for in-situ uranium recovery will undergo  
24 a review for that site, a specific site review, each  
25 and every one of them. And all of these factors feed

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1 into the ultimate site specific review.

2 In conducting the site specific review, we  
3 will follow the National Environmental Policy Act  
4 guidelines in the process. It says for every site you  
5 run through a complex environmental assessment, you  
6 reach a decision as to whether or not you can have a  
7 finding of no significant impact, or you must do a  
8 full-blown environmental impact statement for that  
9 particular site. This is the process that we will  
10 follow for every one of these in-situ recoveries.

11 So the GEIS in no way eliminates the need  
12 for a site specific environmental review. And I  
13 thought there was some confusion on that, so I wanted  
14 to try to clarify that.

15 Next slide.

16 Another issue that came up was ground  
17 water -- or excuse me, drinking water. Drinking water  
18 is very important everywhere, drinking water is  
19 phenomenally important for the western United States  
20 and in some cases it's more than just important. The  
21 Navajo Nation, for example, deems it as being sacred.  
22 Drinking water is generally important.

23 When I read the comments from the scoping  
24 meeting, it struck me that there was some confusion, I  
25 want to try to clarify that.

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1           The point I'm making with this side is  
2 that for in-situ recovery of uranium to take place in  
3 an aquifer, that aquifer, or that portion of the  
4 aquifer in which the in-situ recovery is taking place,  
5 must be exempted by the Environmental Protection  
6 Agency.

7           The regulatory citation is at 40 CFR  
8 146.4, is where you will find that. It's one of the  
9 underground injection control program regulations. And  
10 to be an exempt aquifer, or a portion of an exempt  
11 aquifer, it says that the water does -- the drinking  
12 water does not currently serve as a source of drinking  
13 water in that aquifer, and cannot now, or will not in  
14 the future serve as a source of drinking water, or the  
15 total resolved solids in the water in the aquifer are  
16 unsuitable for this drinking water.

17           So any applicant that plans to conduct  
18 in-situ recovery in an aquifer, will need to obtain  
19 that exemption from the Environmental Protection  
20 Agency, in close coordination with the state.

21           When we issue a license to one of these  
22 companies, we do it conditionally, to point out that  
23 any and all permits and other regulatory process must  
24 be met in order to proceed with the license.

25           Next slide.

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1 Another issue that came up is restoration,  
2 you know, how's it going? A lot of people have  
3 questions about, okay -- and, by the way, on the  
4 exempt aquifer criteria, we have a requirement that  
5 the aquifer that's used for in-situ recovery, even  
6 though it's an exempt aquifer, or a portion of an  
7 exempt aquifer, that it be restored to baseline use,  
8 or that it be restored to maximum concentration  
9 limits, under the same Act, or that an alternate  
10 concentration limit be allowed there.

11 So, there have been a number of pilots  
12 done on small acreage sites. I don't know -- there  
13 are in-situ pilots at the bottom, and three commercial  
14 entities, in column 4.

15 And in column 4, it's entitled percentage  
16 constituents returned to baseline. You will see that  
17 the range of restoration for these five sites, it  
18 ranges from 50 percent to 86 percent for the  
19 constituent being restored to baseline. And then for  
20 the remaining percentage, they were restored to, if  
21 you will, to an alternate concentration level, which  
22 was an approved standard in the baseline values, plus  
23 pre-mining class of use. Pre-mining class of use is a  
24 state-driven standard.

25 So, to give you some idea of what

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1 restoration has taken place, in which you can see that  
2 the constituents have been restored to either baseline  
3 or some alternative improved concentration.

4 Next slide.

5 Another thing we heard was, have more  
6 government-to-government meetings, especially with  
7 Native Americans.

8 This week -- what you see on this slide is  
9 the meetings we've had this week. On Monday morning  
10 we met for about two-and-a-half hours with the Navajo  
11 Nation. I thought it was a very productive  
12 government-to-government meeting.

13 We had met today with the State of New  
14 Mexico Governor's office, with the director of  
15 environmental issues, a very productive meeting, I  
16 thought. We also met with the State of New Mexico  
17 Environmental Department. There's a great deal of  
18 interest, as you might imagine, by the Governor's  
19 office and by the State of New Mexico Environmental  
20 Department. They were here. They hear the concerns  
21 of the citizens of New Mexico, and they really welcome  
22 the opportunity to share their views with us and for  
23 us to clarify what we're doing and why.

24 We also had a meeting with the State of  
25 New Mexico Historic Preservation Division. We had

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1 meetings over the week with the mayor of Gallup and  
2 the mayor of Grants. And I certainly welcome the  
3 opportunity to have had all of these government  
4 meetings.

5 We are committed to further  
6 government-to-government meetings. For example, we  
7 hope to have a government-to-government meeting with  
8 the Pueblo of Laguna and the Pueblo of Acoma. We had  
9 committed to come back and meet with the Navajo Nation  
10 again before we finalize this document and maybe with  
11 the State of New Mexico, to meet with them  
12 government-to-government, whenever they feel it's an  
13 appropriate time to talk. So, it's an important part  
14 of the process.

15 Next slide.

16 So, in summary, why are we here? We want  
17 to review more information, to impart some detail of  
18 the current status of the GEIS, and some of the  
19 findings. We want to continue the listening process  
20 and have public dialogue. We hope to answer questions  
21 that you have about the draft GEIS.

22 And in a few minutes we're going turn to  
23 -- if we have questions, we will turn to your  
24 opportunity to provide comments.

25 A spectrum of comments will be provided.

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1 Some will be specific to the GEIS document itself,  
2 some will be of a broader nature. That's part of  
3 process. We welcome the opportunity to provide a  
4 forum for you to express your views.

5 I would encourage you, in your comments,  
6 if you can, though, to focus upon the document before  
7 you for consideration. It is your maximum opportunity  
8 tonight, coupled with your written comments, to  
9 influence the construct and the output -- the output  
10 contents of this document.

11 So I really encourage you to give us  
12 feedback on the document itself to the extent that you  
13 feel comfortable doing that.

14 I appreciate the opportunity to be with  
15 you. Again, I'm glad to see a large crowd. I'm sure  
16 we will have an interesting discussion tonight, and I  
17 thank you for your attention.

18 MR. CAMERON: Jim Park.

19 MR. PARK: Good evening. My name is Jim  
20 Park, and I'm an environmental project manager at the  
21 NRC, and I've been given the task of leading this  
22 effort to prepare the generic environmental impact  
23 statement.

24 There are a number of things that I would  
25 like to discuss tonight. First of all, I'd like to

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1 give an overview of the in-situ leach process, discuss  
2 some of the aspects of the generic environmental  
3 impact statement, and then close with how you can make  
4 comments on this document.

5 To begin, the in-situ leach process is  
6 distinct from conventional mining and milling, in that  
7 in this process, the in-situ leach process, there are  
8 no open pits associated with it, and no underground  
9 mines, there's no production of tailings, the waste  
10 material, of that sort.

11 Instead, there are three aspects to this.  
12 First, there is the mobilization of the uranium below  
13 ground, there's the recovery of the uranium on using  
14 the -- excuse me, using facilities above ground. And,  
15 finally, there's the restoration of the affected  
16 aquifer.

17 This is a photograph of a portion of a  
18 well field at one of the two NRC licensed in-situ  
19 leach facilities that are operating currently. This  
20 is from a facility located near Douglas, Wyoming.

21 I will describe a couple of things in this  
22 photograph. The white canisters are covers for the  
23 various wellheads that are associated with this  
24 process. Each of these wells are connected below  
25 ground with a pipeline that is four to six feet below

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1 ground to prevent freezing. And those pipes are all  
2 connected back to the building you see in the middle  
3 foreground, which is known as a header house. And  
4 it's in that header house where the flow between the  
5 various wells is coordinated and monitored.

6 With all of this piping -- and this is  
7 just a portion of one well field. A company can have  
8 multiple well fields in operation at any one point in  
9 time, and there are miles and miles of this piping, so  
10 there's always a concern for breaks in those pipes and  
11 spills that may occur.

12 This is meant to be a simplified diagram  
13 to show some basic concepts of the in-situ leach  
14 process.

15 First of all, I would like to draw your  
16 attention to the yellow layer. That's known as the  
17 aquifer of concern here because it has within, in  
18 gray, uranium deposits, and that's where the company  
19 is interested in accessing.

20 Above and below that yellow layer are two  
21 green layers, and these are layers that are, in this  
22 picture, designated as clays. These are less  
23 permeable, meaning water has greater difficulty moving  
24 through them. In the yellow aquifer, the water moves  
25 relatively freely, and that's important for this

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1 process to work.

2 I'll point out next the wells that you see  
3 associated with this. First, it has the wells that  
4 have -- one that has blue arrows associated with it  
5 and one that has red. The ones with blue arrows is  
6 known as an injection well. And what the company does  
7 is use the water that's down in that aquifer, add to  
8 it oxygen, carbon dioxide, and some sodium  
9 bicarbonate, and inject it down into the aquifer.

10 The addition of the oxygen and carbon  
11 dioxide and bicarbonate is to serve and to immobilize  
12 any uranium that's found there. It oxidizes and it's  
13 released.

14 And what happens next is it's moved, it's  
15 pulled by the well that has the red arrows with it,  
16 where the water is pumped from this below surface back  
17 to above surface. The uranium associated with it,  
18 that goes back to a central processing plant where the  
19 uranium gets extracted at that time.

20 After extraction, again, the oxygen is  
21 added back in, the carbon dioxide and bicarbonate, and  
22 the water is reinjected to continue the process of  
23 mobilizing uranium.

24 It's important to point out, though, in  
25 addition to the uranium that's mobilized in this

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1 process, there are other constituents that also are  
2 released, and these are associated with the uranium  
3 deposits, and these can include arsenic, selenium,  
4 manganese, iron, and other things. And these are part  
5 of the constituents that have to be restored following  
6 this process. And that's what Larry was referring to  
7 in his chart when you saw 15 out of 30 constituents.  
8 Those are some of the constituents that are involved  
9 in the restoration process.

10 Then up here in the left you see what is  
11 indicated as monitor wells, and these are to provide  
12 early detection of any of the fluids associated with  
13 this process, moving outside of the area where the  
14 company intends to mine and collect that uranium.

15 And you will notice that there are wells,  
16 monitor wells that are completed at level, where all  
17 of this activity is happening, as well as in this  
18 figure above. They can also be drilled and completed  
19 in -- below the lower of the green layers. And those  
20 are intended again to monitor any movement in the  
21 fluids in a vertical direction.

22 This figure is intended to be almost a  
23 view looking down on top of the well field. The boxes  
24 in the center of the figure are the wells that are  
25 associated with it, the underground deposit.

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1           And these, as you see, it's a box, these  
2           are known as five-spot pattern. At the four corners  
3           are the injection wells, and at the center is the  
4           production or recovery well. The water again is  
5           pumped into these injection wells, and pull it back to  
6           the surface through a recovery well.

7           I want to point out here, though, is what  
8           you see surrounding this well field, and that is the  
9           monitor wells that I showed on the previous figure.  
10          And these are at a certain distance away from the  
11          actual operation that is occurring below ground.

12          This distance is a site specific distance.  
13          It depends on characteristics of the deposit below  
14          ground and the conditions there, but typically it can  
15          be about 500 feet from the actual well field itself  
16          and from monitor wells, a monitor well that can be  
17          anywhere normally between 300 and 500 feet.

18          And, again, the purpose of these wells is  
19          to provide an early detection of any fluids that are  
20          moving outside of this well field. And if that is --  
21          and they monitor these wells every two weeks, and if  
22          they find something that's moving that way, that's  
23          called an excursion, and I will refer to that later.

24          This photograph is again from the same ISL  
25          facility near Douglas, Wyoming, and it shows two

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1 buildings. The larger of the two is the central  
2 processing plant, and that's the location where the  
3 uranium is extracted from the water that's circulated  
4 in this process.

5 The water is run through a series of resin  
6 beads that are an ion exchange process. And then once  
7 those -- the resin beads are filled up with uranium,  
8 they wash those beads to precipitate the uranium out.

9 They concentrate the uranium, they dry it, and then  
10 they package it in 55-gallon steel drums before they  
11 send it offsite to another facility where it's  
12 processed further.

13 It's also in this building where -- in  
14 order for this process to work, the company needs to  
15 draw off more water than they actually reinject.

16 Typically, these processes, these  
17 companies will operate generally between 4,000 and  
18 6,000 gallons per minute over the whole entire well  
19 field center involved.

20 And of that, 1 to 3 percent of that water  
21 is pulled off and needs to be disposed of separately.  
22 What they can use to do that is evaporation ponds,  
23 they can inject it in very deep wells, or if approved  
24 by state permitting, they can also use it in land  
25 application.

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1           So, also, in the same buildings as some of  
2 the equipment used to restore the water, the aquifer  
3 restoration effort are housed. And that involves  
4 processes such as reverse osmosis. And, again, the  
5 primary goal of that restoration is to return the  
6 affected aquifer and the constituents here to the  
7 pre-mining levels, that's the goal that's set for  
8 these companies.

9           If granted -- a license is granted by the  
10 NRC, it would cover these aspects of the facility's  
11 life cycle, from the construction of the facility, to  
12 its operations, through restoration of the aquifer  
13 that's been affected by the process, all of the way to  
14 the decommissioning and taking down of all of the  
15 structures, and return that site to its condition  
16 prior to the mining activities.

17           But as Larry indicated, there are other  
18 permits that need -- the company needs before it can  
19 actually operate an ISL facility. The license alone  
20 does not allow that to happen.

21           And as you can see, aquifer exemption,  
22 created by EPA with close coordination by the state,  
23 is one of the top things if necessary.

24           But also, they would need permits to  
25 operate the injection wells associated with this. If

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1 there's any discharge permits needed by the state,  
2 that they need to get.

3 And, finally, if they're involved with  
4 federal or state lands, there might be additional  
5 permits that they have to obtain to operate.

6 With that background, why do we need to  
7 prepare a generic environmental impact statement?

8 Do you see, the first thing had to do with  
9 the number of applications we're expecting to see. The  
10 next three to four years, companies have indicated to  
11 us the potential of seeing 24 applications, license  
12 applications, for the use and recovery of uranium  
13 through the ISL process.

14 Now we recognize that all of these  
15 companies would be using the same process, that these  
16 applications or potential sites would be located in  
17 specific regions of the country.

18 And, so, what we did is we looked at the  
19 regulations of the Council on Environmental Quality as  
20 well as our own regulations in CFR Part 51, and  
21 recognized that there is a potential to prepare what  
22 is known as the programmatic environmental impact  
23 statement, for what we call a generic impact  
24 statement.

25 So look at the broad issues associated

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1 with these processes and these types of facilities,  
2 and then to use that document to tier off, as it's  
3 known, for site-specific reviews, and what this will  
4 do is provide for the site specific reviews, a  
5 thorough and consistent approach the NRC has for  
6 fulfilling its duties under the National Environmental  
7 Policy Act.

8 So the purpose of this document is to look  
9 at issues that are associated with the ISL process.  
10 And as we do this, as Larry showed you in one of his  
11 figures, was to prepare us for site specific review.  
12 That's the purpose of this document.

13 Next slide, please.

14 The scope of this document, obviously,  
15 because licensing involves construction, operation,  
16 restoration and decommissioning, that we made the  
17 focus of this document. And in doing so, we're  
18 evaluating again the potential environmental impacts  
19 associated with the ISL process.

20 Our approach was a four-step approach, and  
21 I will go through each of these in turn.

22 The first involved identifying uranium  
23 milling regions, and there were certain considerations  
24 that we took. The first involved, needed to be in  
25 states where NRC was the licensing authority. As

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1 Larry indicated in his points, there are states known  
2 as agreement states, and these have accepted from NRC  
3 the duty and the responsibility of licensing in their  
4 particular states; Colorado, Texas, and Utah are  
5 examples of states where those states are the  
6 licensing authority for uranium milling.

7 We also looked at where in the past and  
8 where currently uranium milling is occurring, what the  
9 industry has told us about their plans. And finally  
10 where historically deposits of uranium have been found  
11 in New Mexico, as well as in Nebraska, South Dakota  
12 and Wyoming. From that we have identified four  
13 uranium milling regions.

14 This figure shows where those regions are.  
15 Two are found completely within the State of Wyoming,  
16 one straddles the states of Wyoming, South Dakota and  
17 Nebraska. And the reason for our meeting tonight is  
18 the fourth region, which is found in New Mexico.

19 This is a closeup of the New Mexico  
20 region, and it covers most of McKinley County, as well  
21 as portions of Cibola County.

22 If you would like to look at it, this is  
23 one of the handouts that we have outside. It will  
24 give you more detail.

25 The next thing that we did was describe

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1 the in-situ leach process. We did that for the life  
2 cycle of the facility. Some of the issues we looked  
3 at were the radiological health and safety of the  
4 workers who might work in these facilities, as well as  
5 the public who lives around them, how waste would be  
6 managed, transportation issues, as well as financial  
7 assurance. And that refers to moneys the company must  
8 put up to -- if anything happened, a third party could  
9 come in and complete the decommissioning and the  
10 reclamation of the entire facility. This amount of  
11 money is usually in the tens of millions of dollars,  
12 and that value is updated and reviewed on an annual  
13 basis.

14 And finally we have a section that looked  
15 at what has been NRC's experience in regulating these  
16 facilities for the past 30 years.

17 The third aspect that we -- portion to our  
18 approach, was for each of these milling regions is to  
19 describe the environment that we find in them. And we  
20 did that in terms of certain resources that we have  
21 noticed in a document the NRC has prepared, a copy of  
22 which is out on the table outside, known as  
23 NUREG-1748. And that is a document that provides  
24 guidance to the NRC staff, and how it is supposed to  
25 do its environmental reviews for licensing actions.

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1           These are the 13 categories that we used  
2 in describing the environment for each of these  
3 regions. As you can see, they provide quite a thorough  
4 and wide-ranging discussion of the environment. And  
5 we recognize certainly that absent site specific  
6 evaluations, this description is going to have more of  
7 a regional flavor than a very site specific  
8 discussion.

9           The fourth step in our approach was to  
10 evaluate potential environmental impacts, and we did  
11 that for each of the four uranium milling regions  
12 separately. We did it separately for each phase of  
13 the life cycle of an ISL facility, from construction  
14 all of the way through decommissioning. We did it for  
15 each of the 13 resource categories that you saw on the  
16 previous slide. And what we did is we characterized  
17 those potential impacts in terms of significance. And  
18 that is per the National Environmental Policy Act and  
19 the Council on Environmental Quality's regulations.

20           And, also, in that section of this guide,  
21 some of the mitigation measures that companies may  
22 take to avoid or minimize some of these potential  
23 impacts.

24           These are the three categories we used to  
25 describe the potential impacts that you might find.

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1           In order to make a determination as to  
2 whether any potential impact was small or moderate or  
3 large, it required subject matter experts who  
4 collectively -- we had about 20 of them working on  
5 this project to collectively have over hundreds of  
6 years of experience, and recognized by their peers, as  
7 well as doing thousands of hours of research and  
8 evaluation.

9           I would like to give you an example of  
10 sort of what we are looking for here. But what's  
11 important in each of these categories is there are  
12 certain attributes in the resource that may be  
13 modified or affected by the ISL process.

14           So, for example, if we took  
15 transportation, you're looking at things such as the  
16 carrying capacity of the road, how many cars could fit  
17 on that road at any one point in time, accidents  
18 rates, even just travel times from one point to  
19 another. Those are important as aspects of  
20 transportation.

21           From the ISL process, as it applied, what  
22 impacts might it have on the transportation to those  
23 aspects of it.

24           And that's where we come out to either you  
25 will notice some change or you won't. And the level

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1 of that change could actually be destabilizing. You  
2 could have so many cars on that road that traffic  
3 wouldn't move very well.

4 So that's an example of a large potential  
5 impact.

6 With that background, I will describe very  
7 quickly, and hopefully to your -- the preliminary  
8 findings for the northwest New Mexico region.

9 Again, the purpose of this document is to  
10 use some of these conclusions and site specific  
11 reviews. And from our analysis, these four categories  
12 have the potential for small potential impacts. And  
13 again those are impacts that will be either very minor  
14 or not noticeable.

15 Certainly, all of these resources in any  
16 type specific review will receive focus on NRC's part.

17 In this slide, we're showing that there  
18 are certain resources that have a range of small to  
19 moderate impacts. Moderate impacts again are those  
20 that would be noticeable. And that range is going to  
21 be due to certain conditions at that site, as well as  
22 certain situations that might occur. And these  
23 categories will receive additional focus in our site  
24 specific reviews.

25 And finally, you see, from these

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1 categories, land use, geology and soils, groundwater,  
2 threatened and endangered species and historic and  
3 culture resources, that there's a potential for a  
4 range of impacts anywhere from small to large.

5 What this again shows is that for each  
6 site there's going to be certain conditions that could  
7 affect the type of impact that you might see, and  
8 that's why for these categories, they're going to  
9 receive the most focus during NRC's review.

10 Now, I would like to quickly discuss what  
11 the schedule is for the generic environmental impact  
12 statement, and how you can submit comments on the  
13 document.

14 We began this process back in July of  
15 2007. We held scoping meetings in August, and  
16 September of that year.

17 On July 28th of this year, we issued a  
18 draft generic environmental impact statement for  
19 public comment, and the comment period closes on the  
20 7th of October. It is our hope to issue the final  
21 draft, the final generic environmental impact  
22 statement by June of 2009.

23 Comments can be provided by either regular  
24 mail or by e-mail or, of course, orally tonight. These  
25 addresses are in a handout outside, so I won't go into

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1 them in detail. But you will notice the October 7  
2 date for close of the comment period.

3 If there are any questions that you have  
4 about either the draft generic environmental impact  
5 statement, or about the in-situ leach process, my name  
6 is up there as well as another individual at the NRC.

7 Again, this contact information is out in  
8 the handout outside.

9 I thank you again, and thank you for  
10 coming tonight.

11 MR. CAMERON: Okay, thank you very much,  
12 Jim, and thank you, Larry. We do have some time for  
13 questions, does anybody have any questions on what you  
14 heard? And please introduce yourself to us, ma'am.

15 Hi, I'm Janet Greenwald, and I'm a  
16 co-coordinator of Citizens for Alternatives to  
17 Radioactive Dumping, and I have two questions.

18 One is, could you give us an example of a  
19 nuclear project that you have rejected during the past  
20 year, and what criteria you used to reject that  
21 project? And my second question is, how do you deal  
22 with the issue of environmental justice in  
23 relationship to in-situ uranium mining?

24 MR. CAMERON: Okay, thank you.

25 In terms of the first question, and in

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1 terms of projection of license applications, Larry or  
2 Greg. Greg, are you going to handle that? I just  
3 would ask you to describe the process that the NRC  
4 goes through when it evaluates a license application  
5 and how that might impact a withdrawal of an  
6 application, rather than rejection of an application,  
7 and then go to Jim for the environmental justice.

8 MS. GREENWALD: I'm sorry, sir, you  
9 misstated the question. My question was --

10 MR. CAMERON: Ma'am, we need to get you on  
11 the record. Do you want to repeat your question,  
12 because I don't think I did misstate it, but go ahead  
13 and state it again.

14 MS. GREENWALD: My question is, could you  
15 give us an example of a project which you have  
16 rejected within the last year, and also the criteria  
17 of the reason that you rejected it? Maybe I wasn't  
18 clear the first time.

19 MR. CAMERON: And could you also just talk  
20 about the whole process of how we evaluate an  
21 application. So an example criteria, and what the  
22 process is, so that people understand that.

23 MR. CAMPER: Yeah, okay. Is this on?

24 I'll speak to my program area, because  
25 within the NRC there a number of places where licenses

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1 are issued, or rejected, so I can't speak to the  
2 Agency as a whole, but on that I'm going to go to my  
3 responsibilities.

4 I guess more specifically in the context  
5 of tonight, you are inquiring about uranium recovery,  
6 I would imagine. We have had in the last year, three  
7 applications have been presented to us for uranium  
8 recovery in-situ. The fourth will come shortly.

9 Those three following acceptance review,  
10 one of them, the applicant chose to withdraw it and  
11 resubmit it based upon discussions with our staff. We  
12 did not reject it, but they opted to withdraw it and  
13 resubmit it.

14 The three, we have the completed  
15 acceptance review, and now have accepted them for  
16 comprehensive review. So, I don't have a rejection in  
17 the last year.

18 But the first step of the process, as to  
19 your point, is we do subject the process to acceptance  
20 review. The question is the acceptance review  
21 process. It does appear that the applicant has  
22 addressed all of the categories of information that  
23 has to be submitted. It's not an inadequacy  
24 determination, it's a completeness determination.

25 Then we determine they have appeared to

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1 have addressed all of the areas and they provided a  
2 reasonable application, we will then initiate the  
3 comprehensive and technical review. The technical  
4 review, coupled with the environmental review or  
5 in-situ recovery is about a two-year process.

6 MR. CAMERON: And, Larry, could you just  
7 talk about the request for additional information?

8 MR. CAMPER: Yeah, I will.

9 MR. CAMERON: And please address the issue  
10 of the criteria that are used when you evaluate it.

11 MR. CAMPER: Typically, almost always, I  
12 would say, that applications that the NRC receives for  
13 activity, any category of activity, and I've been  
14 involved with a number of activities over the years,  
15 and there is always, almost always, a generation of  
16 request for additional information, where we go back  
17 to the applicant and ask for more information, seek  
18 further clarification of their submittals. In any  
19 case, that's one more round of RAIs. We like to try  
20 to work with one round of RAIs, but oftentimes more  
21 than one round or request for additional information.

22 With regards to criteria, you've got two  
23 main areas of criteria going on. Our regulations for  
24 uranium recovery are set forth in Title 10 of the Code  
25 of Federal Regulations, Part 40. There's an Appendix

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1 A, and in particular identifies several criteria the  
2 applicant has to address.

3 We review the application following  
4 standardized review plans, standardized check sheets,  
5 we have to ensure all of the rules and requirements be  
6 met.

7 In parallel, there's an environmental  
8 review going on for reviewing the environmental report  
9 the applicant has submitted. When we're conducting  
10 this GEIS, I mentioned we prepared the site  
11 applications, then with the site specific evaluation.

12 All of that comes together.

13 And by the way, there's typically  
14 questions that are generated during the review of the  
15 environmental report and the content of the final  
16 review as well.

17 MR. CAMERON: Okay, thanks, Larry. Jim  
18 Park on environmental justice.

19 MR. PARK: Yes, the environmental justice  
20 involves the evaluation of whether there are  
21 disproportionately high adverse impacts on low income  
22 or minority populations associated with the activity  
23 in question.

24 And you inquired about the in-situ leach  
25 process. Obviously, any environmental justice

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1 evaluation is site specific in nature. And that's  
2 what we did in this draft environmental impact  
3 statement is provide some additional looks at what  
4 might be issues on site specific environmental justice  
5 evaluation.

6 And first we looked at the populations in  
7 the regions around where we might see in-situ leach  
8 applications, to identify any low income or minority  
9 communities that would need to be -- that could be  
10 affected by this process.

11 And using that, we also -- and the  
12 information from our environmental impact analysis, we  
13 looked at are there particular resources for those  
14 communities that would be of more importance in an  
15 environmental justice concern.

16 And in the chapter 5 of our document we  
17 present all of that information for this particular  
18 region, as well as for the other four regions.

19 MR. CAMERON: Okay, thank you. Other  
20 questions?

21 AUDIENCE MEMBER: I have a question.

22 MR. CAMERON: Okay. Let me get this woman  
23 back here.

24 MR. PARK: I'm sorry, if I can clarify, I  
25 meant chapter 6.

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1 MR. CAMERON: Chapter 6, okay.

2 Yes, ma'am.

3 MS. ROGERS: My name is Ms. Rogers, and  
4 I'm a resident of New Mexico as of 50 years plus, and  
5 I'm here tonight, because I am concerned about mining  
6 in our areas of open space. I know very little about  
7 this, but I do have a concern about our environment.  
8 And I guess a concern is water, for one thing, you  
9 know, water across our country is a concern let alone  
10 looking at our own area in terms of water.

11 And just taking out some information that  
12 was outlined, that in drilling or mining, if --  
13 correct me if I'm not right here -- 4,000 to 6,000  
14 gallons of water a minute and, you know, over a  
15 certain period of time, you know, that's a big  
16 concern. I don't know when you are looking at that if  
17 that's considered a minor or a small impact? I don't  
18 think that that would be a large over -- I don't know,  
19 you know, the duration of time in mining areas. You  
20 know, that's one.

21 So, how is mining or drilling areas to  
22 sustain that? You know, without having the water?

23 The other question is, what's the acreage  
24 involved, and who owns this? Is it government, is it  
25 individual?

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1           And with that in mind, if it's government  
2 land, you are going to be talking about Native  
3 American, whether it's on the Navajo Nation or Pueblo  
4 land, do the people have any kind of say-so? Before  
5 we know it, these are already taking place. And, you  
6 know, I am an individual citizen, a community member  
7 making comments or finding out information, but do we  
8 have any say in this?

9           MR. CAMERON: Okay, thank you. Let's deal  
10 with the water issue, and I think that if we could  
11 just clarify the water figures that we talked about,  
12 typical water use on one of these facilities. A  
13 concern is the -- with the amount of water that is  
14 used, and I guess what happens to that water? Can it  
15 be reused for anything else, or is it just gone?  
16 That's one part of the question.

17           The second question is how big are these  
18 facilities? How much acreage is usually involved? Are  
19 they on private land, or are they on government land,  
20 and also what are the implications. Is it -- if it's  
21 in Indian country tribal lands, a complicated issue.

22           But, Jim, do you want to talk about the  
23 water first?

24           MR. PARK: Yes. As the licenses -- of  
25 course, we have two operating licenses at this time.

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1 And what's known as a flow rate, it's about how much  
2 water is moved in the system at any one point in time.

3 There are limits on that, and currently conditions in  
4 the licenses range from 4,000 to 6,000 gallons per  
5 minute. That's how much water is circulated in a  
6 portion of time.

7 And as I indicated, in order for the --  
8 part of this process, in order for it to be effective  
9 in recovering uranium and not leading to movement of  
10 these solutions outside of the well field, the company  
11 needs to take out more water than they reinject back  
12 into the subsurface, and that can amount to 1 to 3  
13 percent of that 4,000 or 6,000 gallons per minute.

14 MR. CAMERON: And, let me just ask if --  
15 Ron, do you want to add to that? Ron Linton is one of  
16 our site specific experts.

17 MR. LINTON: One of the things we talked  
18 -- Jim had it right, the 4,000, 6,000 gallons a  
19 minute. One of the things is it's kind of conceptually  
20 I think by an ISL is the pump project, recirculating  
21 projects, water being pulled out, drainage being  
22 stripped out off the water, oxygen, carbon dioxide,  
23 must be reinjected, so it's a big circulation project.

24 There's only a small amount of that, 40 to  
25 120 gallons a minute. You're talking about 4,000

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1 gallons per minute going through a process there.  
2 Actually going to have to be treated, either  
3 eco-injected and applied or evaporated. That's the  
4 percentage.

5 So it's not -- most of it's being reused  
6 and recirculated in the process.

7 MR. CAMERON: Thank you.

8 In terms of the amount of land that's  
9 typically involved, and what type of land it is, and  
10 then perhaps we can address the tribal issue briefly.

11 Larry, are you going to do that?

12 MR. CAMPER: Yeah.

13 MR. CAMERON: Larry Camper.

14 MR. CAMPER: Typically these are privately  
15 held lands, although they may border or share, some of  
16 the land may be on government-controlled land, BLM,  
17 Bureau of Land Management land.

18 A company may own several thousand acres,  
19 but typically the well field production zone is in the  
20 tens of acres, 20, 30, 40, 50 acres of production  
21 area, that add to the complex. It may be a few  
22 thousand to several thousand acres of land, privately  
23 owned. The government does not own these. The  
24 government does not operate them. The government  
25 involvement comes when they are juxtaposed next to

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1 each other or share BLM land.

2 The Indian country issue, when we review  
3 an application -- first of all, there are no  
4 applications that we have today that are on the  
5 forest, on the Navajo Nation, or in Indian country,  
6 that we have before us today.

7 If there were ever to become an  
8 application on Navajo land or in Indian country,  
9 certainly we would seek out consultation with the  
10 effected Indian nation.

11 The way we proceed is we review an  
12 application against our regulatory criteria. We  
13 operate under the assumption that an applicant will  
14 obtain any and all necessary permits and/or authority  
15 that is required by any government entity having  
16 jurisdiction.

17 We don't regulate to the Navajo Nation  
18 regulations or any other federal agency regulations.  
19 We regulate to those regulations of which we have  
20 authority on under the Atomic Energy Act.

21 One of the things we do in our uranium  
22 recovery license is we impose a condition that says  
23 that all other necessary permits and permission will  
24 be obtained before the applicant can proceed to  
25 conduct operations.

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1           So presumably -- that has not happened yet  
2 -- that would involve the applicant interfacing with  
3 the Navajo Nation or whatever Native American tribe  
4 was involved. We would have to look at it.

5           MR. CAMERON: Okay. Thank you.

6           Yes, sir. Please introduce yourself.

7           AUDIENCE MEMBER: The process is pretty  
8 complicated and listening to it, I take the NRC at the  
9 end of this two years or whatever, probably more, and  
10 the decision by whoever makes the final decision,  
11 either reject or approve, what happens then? Is there  
12 any follow-through, maybe law, or what have you? Do  
13 we stop with whatever party, the people that reject,  
14 or the people get the grant location, I can see lots  
15 of money spent for doing this. Does it end there, or  
16 do we have -- either party -- a recourse to come, we  
17 don't approve of it, or what have you, is that in  
18 anything? I knew there was a lawyer here and I knew  
19 she could tell us.

20           MR. CAMERON: And, Joan, are you going to  
21 go ahead and talk about the legal process on federal?

22           MS. OLMSTEAD: Yeah.

23           MR. CAMERON: Okay, thank you.

24           MS. OLMSTEAD: There's a hearing process  
25 that's available to people, too, not just the NEPA

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1 environmental review process to participate publicly.  
2 What the hearing process allows is issues of law or  
3 fact, in a license application is decided by an  
4 administrative law judge. And that administrative law  
5 judge is an employee of NRC, but they're independent  
6 from NRC staff. And they make their decision based on  
7 the record in that hearing.

8 Usually, what starts out the process is  
9 NRC will accept a license application, put in a  
10 Federal Register notice, giving people 60 days to  
11 request a hearing.

12 That information's also up on our website,  
13 on a chart.

14 Once we get that, license applications,  
15 there's time periods for requests for hearings.

16 And then any person that has an interest  
17 that may be affected by this decision, they can have  
18 -- they have to meet criteria, that they bring up for  
19 the law and fact that's under dispute in the licensing  
20 process.

21 And usually we get people that reside near  
22 the facility, or working near the facility, it could  
23 be an individual, citizens' group, private business or  
24 government bodies. Also, even interested state or  
25 local governments or affected federally-recognized

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1 tribes can participate in the hearing, too, if there's  
2 a hearing going on.

3 And then usually if they -- they call  
4 these statements or disputes. They call them formally  
5 contentions, but you have to make an allegation and  
6 have expert opinions to support the points that they  
7 are making that's under dispute that will be decided  
8 by the judge. It's like a trial, this process.

9 Usually contentions are based on  
10 environmental or safety concerns. And after this  
11 administrative judge makes a decision, that can be  
12 appealed to Commission. And after the Commission  
13 makes a decision, those decisions can be appealed to  
14 U.S. Court of Appeals.

15 MR. CAMERON: And no matter what the --  
16 what the decision is, whether it's a grant license or  
17 it's not grant license, a person who doesn't like that  
18 decision can go through the appeal process.

19 MS. OLMSTEAD: Right, as long as they are  
20 a participant in the hearing process.

21 MR. CAMERON: And Larry?

22 MR. CAMPER: Let me add to that. I think  
23 certainly Joan has done a good job in terms of the  
24 legal department hearing that matter.

25 I sense that your question had a practical

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1 aspect to it in terms of what happens once the license  
2 is issued. And what happens is, we conduct  
3 inspections, run recovery facilities under a defined  
4 time line as specified in our guidelines. We do  
5 review the license -- licenses having renewal time  
6 lines associated with them. We issue a license, say,  
7 for 10 years, that has to be renewed. We go through  
8 the review process again when it would be time to  
9 renew it.

10 If there are regulatory changes that take  
11 place, licensees are subject to that, it's not a  
12 static situation, if there is a new standard brought  
13 to bear or other criteria identifies to it.

14 Then the last, but not least, licensees  
15 may be subject to enforcement activities. Enforcement  
16 activities can run the range of minor violations to  
17 impositions of civil penalties to revocation of  
18 license. It depends on what the particular infraction  
19 is. We have a very defined and resolute reporting  
20 program.

21 MR. CAMERON: Thank you, Joan, and thanks,  
22 Larry for adding that.

23 We're going to get right here.

24 MORENA: Thank you. I appreciate you-alls  
25 information-keeping. It's been a very beneficial

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1 session and educational. My name is Morena and I'm  
2 the executive director of Citizens Alliance for  
3 Responsible Energy. And I want to kind of piggyback  
4 on the first woman's comment or questions, and the  
5 last man's. My understanding is that by the time  
6 someone presents an application, by the time a company  
7 presents an application for a license, it is my  
8 understanding that they have already gone through  
9 months, and not years, of environmental impact  
10 studies, they worked with consultants, you-all have  
11 very thorough guideline on what the application should  
12 be, et cetera. Therefore, by the time the application  
13 reaches you, they should have -- to use a  
14 colloquialism, dotted their I's and crossed their T's  
15 before the application ever gets to you. Therefore,  
16 your rejection rate should be extremely low if they  
17 have done their homework.

18 The last man mentioned the cost involved,  
19 and I know there's tremendous costs involved in this  
20 application process. So, someone's not just going to  
21 download your application on the website, fill it out,  
22 and expect you to approve it. Is that a correct  
23 assumption on my part?

24 MR. CAMPER: Yes, correct assumptions.  
25 Typically, by the time the application gets to us --

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1 the application for these things are usually about  
2 this thick. They have -- in many cases, taken several  
3 years to compile the application. But more  
4 importantly, I think to answer your question, a great  
5 deal of environmental information has been developed  
6 and submitted within that part of the application that  
7 I cited in my slide called the "environmental report."

8 And then we subject that application to  
9 the regular scrutiny and review of a two-year period  
10 when we're conducting our review.

11 MR. CAMERON: Okay. Thank you. Thank you  
12 for affirming that, Larry.

13 We have a question back here. yes, ma'am.

14 MS. HOUSE: Yah-ta-hey, I'm Dine, Navajo,  
15 and my name is Donna House. And I don't know, and I  
16 haven't seen this on your slide presentations on how  
17 NRC is actually expecting and supporting the banning  
18 of uranium that the Navajo Nation passed recently. How  
19 can -- I don't see that, as far as how you are  
20 supporting a population that has a code of law banning  
21 uranium.

22 Where this is located is right in the  
23 center of Eastern Agency, among the Navajo people. And  
24 they have spent thousands of hours doing research, as  
25 James has stated earlier, but there have been

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1 thousands of Navajo who have died from this particular  
2 uranium.

3           You know, I am from that area, and have  
4 relatives in the area. And it saddens me that the  
5 federal agency hasn't really put in their document how  
6 they are going to support the population and respect  
7 tribal sovereignty, the laws that are right beyond  
8 these white monitoring wells. The water flows about  
9 beyond the boundaries that we have designated on that  
10 site.

11           So, I don't see how you're going about  
12 respecting the Navajo law by granting uranium in your  
13 document, in your slide show.

14           MR. CAMERON: Thank you, all right. Okay,  
15 Larry, I think this is a question for you to address,  
16 and in terms of how does the NRC respect the Dine  
17 National Resources Protection Act, which placed a  
18 moratorium on uranium mining?

19           MR. CAMPER: Well, this is a complicated  
20 question. I will try to give a relatively simple  
21 answer. I apologize, it doesn't sound too simple.

22           Our agency certainly respects the Navajo  
23 law of 2005, but also understand that we have no  
24 authority to impose the Navajo ban of 2005.

25           When an applicant submits an application

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1 to us, we have to review it against our regulatory  
2 criteria, and the authority we have under the Atomic  
3 Energy Act.

4 I mentioned in my comments that if there  
5 were to be an application that would come to us from a  
6 company wanting to proceed on Navajo land, certainly  
7 one of the first things we would do would be to seek  
8 consultation with the Navajo Nation.

9 I dare say they would know it probably  
10 before we knew it, but be that as it may, we would  
11 pursue government-to-government interaction for -- I  
12 assume for the obvious reasons.

13 The question of the Navajo ban or Indian  
14 country -- the Indian country issue, for example, a  
15 certain part of it is currently under litigation  
16 before the 10th Circuit court. It's a narrow  
17 question. The broader question is not addressed, nor  
18 do we have any intention of causing it to be  
19 addressed.

20 So I guess in the final analysis, while we  
21 respect the land, what we can do and what we will do,  
22 subject to our authority, is to try to make sure the  
23 operations in your Navajo land are conducted in a way  
24 that is as safe as possible, our regulatory criteria  
25 and our environmental criteria are met. That is part

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1 of our obligation as an agency is to protect all of  
2 you-all's land.

3 Joan, do you want to add anything to that?

4 MS. OLMSTEAD: Right. I just also want to  
5 add to that any permit -- I mean, any license also has  
6 to be -- meet any permitting requirements, too, that  
7 would be going to the state or local or tribal, if  
8 they have tribal requirements. So it's not just NRC's  
9 license they need to operate, they also have to meet  
10 the local requirements, too.

11 MR. CAMERON: Okay. Thank you. We're  
12 going to go right here for the last question, and then  
13 we're to go to comments. Yes, ma'am.

14 MS. TODEA: I'm Nancy Todea. I'm a  
15 resident of Albuquerque. This has to do with a  
16 question of presentation.

17 MR. CAMERON: Just speak into that  
18 microphone.

19 MS. TODEA: Okay. On your summary of  
20 restoration history, I didn't see Shiprock or Grants  
21 included. They weren't listed. I was wondering why.

22 And then on your government-to-government  
23 consultation, I see that -- I'm a former federal  
24 employee, and I was wondering how come other tribes  
25 weren't listed on your government-to-government

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1 consultation, I'm finding under your -- you're  
2 required by law to consult with the tribes.

3 MR. CAMERON: Okay. I think those  
4 questions are pretty clear. Larry, do you want to  
5 deal with both of them? Do you understand the first  
6 one?

7 MR. CAMPER: No, would you repeat the  
8 first one?

9 MR. CAMERON: I'm going to get a  
10 clarification from the questioner on that one.

11 MS. TODEA: The first question was why  
12 Shiprock and Grants were not included in the  
13 restoration history since you included New Mexico and  
14 the others.

15 MR. CAMERON: Okay, I think she's  
16 referring to the slide that you put up, Larry.

17 MR. CAMPER: Yeah, the first question is  
18 the slide was addressing in-situ sites only.

19 MS. TODEA: Okay.

20 MR. CAMERON: And in terms of --

21 MR. CAMPER: The technology is different  
22 for restoration.

23 And the second question was?

24 MR. CAMERON: Was why aren't there other  
25 tribes listed? Why didn't we consult with other

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1 tribes besides the Navajo this time. And you might  
2 just explain that.

3 MR. CAMPER: Well, in setting up the  
4 meeting this week, we have these three different trips  
5 going on, we had consultation with tribes in Wyoming  
6 as well. There are additional tribal consultations  
7 being worked on now with regards to our next outing in  
8 Wyoming. These were consultations that we were able  
9 to arrange a time to do them while we were here this  
10 week. We have committed to have others, and certainly  
11 we will pursue opportunities to do that. And if any  
12 tribe would like a consultation, we would certainly be  
13 happy to do that.

14 MR. CAMERON: And, Larry, if we do get a  
15 site specific application and that could affect a  
16 particular tribe, consultation would be necessary in  
17 those cases, correct?

18 MR. CAMERON: Consultation would be  
19 necessary in those cases, correct?

20 MR. CAMPER: Consultation would be  
21 necessary in those cases, and clearly, we would do  
22 that.

23 MR. CAMERON: Okay. This final question  
24 right here.

25 MR. CLEMA: My name is John Clema. I'm a

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1 bit of a stranger in a strange land. I'm American,  
2 but been working overseas for quite a few years. So  
3 if my question seems a bit dumb, please pardon me.

4 The Grants area, of course, is known  
5 worldwide as a large uranium resource and, of course,  
6 the whole of the San Juan Basin up in the Four Corners  
7 area is considered part of that.

8 The questions that I have is the -- when  
9 you talk about the economic process, do you talk about  
10 only the individual mine submission, or do you look at  
11 this as a regional situation?

12 And then the follow-up question from that,  
13 I'm aware that the Navajo Nation has a deal with BHP,  
14 of course, is down in Australia, as I'm familiar with  
15 it.

16 As I understand it, the coal is mined in  
17 the Navajo Nation and then moved to a coal power  
18 plant. And have you had a look at the uranium content  
19 of that coal and particularly the ash afterwards, does  
20 that fall within your area of, I will say, expertise,  
21 to evaluate and make comment on?

22 MR. CAMERON: Okay, first question, I  
23 think for Jim Park is when we do a site specific  
24 environmental impact statement, what is the scope of  
25 the economic analysis in terms of cost and benefits?

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1 MR. PARK: Certainly, even in the generic  
2 environmental impact statement we --

3 AUDIENCE MEMBER: Sir, could you speak up.  
4 I can't hear you back here.

5 MR. PARK: Certainly. In terms of the  
6 generic environmental impact statement that we  
7 prepared, we looked at impacts on local communities  
8 and socioeconomics involved in that in terms of jobs,  
9 employment structure, housing, schools, similar  
10 socioeconomic conditions.

11 There is only limited information on -- if  
12 you are interested in -- so it would be economics,  
13 moneys that are brought in, tax revenues and others.  
14 The only -- there's limited information that we have  
15 on that. That comes from a site in Nebraska, the  
16 other NRC licensed facility. And that involves the  
17 amount of moneys used in buying materials from local  
18 services, and also the moneys put into county and  
19 state revenues. I'm not sure of those figures at this  
20 point in time.

21 MR. CAMERON: And if we look at things  
22 like multipliers in terms of economic benefit?

23 MR. PARK: I can't say off the top of my  
24 head. I would first need to talk with the staff who  
25 did that analysis, because I'm not clear tonight.

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1 MR. CAMERON: All right. Okay, thanks.  
2 And, Larry, do you have any comment on the coal issue  
3 at all?

4 MR. CAMPER: No. I mean -- I think I  
5 understand the concept of your question in regards to  
6 uranium being present in coal and release uranium from  
7 the dust certainly when coal mining occurs, but we  
8 don't -- you know, obviously, we don't regulate the  
9 coal mines in the United States, so we have no  
10 regulatory role to play there.

11 MR. CAMERON: Okay. Thank you. We are  
12 going to do comments now. And the first four speakers  
13 I'm going to ask Joe Trujillo to come up, and then  
14 Adela Duran, and then Joe Murrietta, and then John  
15 Bemis.

16 MR. TRUJILLO: Joe Trujillo. I've been  
17 with Pete Domenici for 30 years, 22 in Washington, and  
18 he has a statement, so it's his statement, not mine.

19 My fellow New Mexicans, America is on the  
20 verge of expanding our use of nuclear energy after a  
21 lull of 27 years. Today, we have 104 reactors. In  
22 the next two to three decades, there will at least be  
23 30 new units on line. As this occurs, America will  
24 use much more uranium to fuel our outgoing reactive  
25 fleet and to meet our energy needs.

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1 Today, only a small fraction of uranium  
2 purchased by utilities in this country is obtained  
3 from domestic. That is, United States sources. The  
4 more we can obtain from our own sources, the better  
5 off we will be as a country.

6 Though, the use of modern extraction  
7 processes -- pardon me, through the use of modern  
8 extraction processes, and environmental safeguards, it  
9 is possible to assess our -- access our massive  
10 uranium resources without any harm to New Mexicans.

11 In addition, the Nuclear Regulatory  
12 Commission has a thorough review and permitting  
13 process as part of it today, that enforces the  
14 responsible development of these resources.

15 There's one more paragraph.

16 Next year, a new uranium enrichment  
17 facility will begin operations near Eunice in  
18 southeastern New Mexico. This is very good news for  
19 America, for New Mexico, and for nuclear power.

20 Uranium extraction and production will  
21 allow New Mexico to play an even larger role in  
22 securing our nation's energy future.

23 And it's signed, sincerely, Pete Domenici.  
24 United States Senator.

25 And this is a footnote. If you want to

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1 know more about his thinking, he's got a whole book on  
2 this called A Brighter Tomorrow.

3 MR. CAMERON: All right. Thank you, Joe,  
4 and thanks -- thank the Senator.

5 This is Adela Duran.

6 MS. DURAN: Good evening. My name is  
7 Adela Duran. Representative John Heaton is a member  
8 of the New Mexico House of Representatives, and he  
9 wasn't able to be here tonight. He knew that I was  
10 going to be here in a different capacity, and so he  
11 has asked me on his behalf, for the record, to read a  
12 letter that he has written to Chairman Klein. So this  
13 is Representative Heaton's letter.

14 Dear Chairman Klein, I'm a New Mexico  
15 state representative from district 55 representing  
16 Eddy County, and I chair the radioactive and hazardous  
17 committee for the legislature.

18 I am writing to commend the NRC for its  
19 work in compiling the generic environmental impact  
20 statement on in-situ recovery, as it will indeed  
21 provide a foundation and expedite work that we do.

22 This is a timely subject in New Mexico and  
23 one that will involve a great deal of discussion in  
24 the near future.

25 The information on the potential

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1 environmental impacts of ISR operations contained in  
2 the GEIS will be valuable to us as we consider  
3 respective uranium mining activity in our state.

4 The GEIS will also serve as a valuable  
5 tool in educating the public, the state regulators,  
6 and particularly those that have concerns about the  
7 environmental impacts of ISR.

8 Thank you for making the GEIS available to  
9 us, and for taking the time to hear comments from the  
10 affected communities in New Mexico.

11 Sincerely John Heaton.

12 I am here tonight as an attorney  
13 completely aside and apart from Representative  
14 Heaton's letter, because he only asked me to read it,  
15 because he wasn't able to be here tonight.

16 So I'm here tonight in the capacity as an  
17 attorney for a Santa Fe law firm called Comeau,  
18 Maldegen, Templeman and Indall. And our firm  
19 represents a handful of uranium mining companies that  
20 own uranium properties here in the state that have  
21 informally organized the Uranium Producers of New  
22 Mexico.

23 Obviously, these companies are anxious to  
24 see uranium production in Florida and New Mexico, and  
25 they see the GEIS as a positive step in that

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1 direction.

2 If and when there is development here in  
3 New Mexico, it will mean significant jobs and economic  
4 development for mostly rural communities that so  
5 desperately need both right now.

6 Uranium Producers of New Mexico appreciate  
7 the NRC being in Albuquerque tonight and in Gallup and  
8 in Grants earlier in the week, and they also urge the  
9 NRC to finalize the GEIS as soon as possible.

10 Thank you for the opportunity to speak.

11 MR. CAMERON: Thank you Adela, and thank  
12 you for Representative Heaton, too.

13 Next we have Joe Murrietta, the mayor of  
14 Grants, New Mexico.

15 MR. MURRIETTA: Good evening, my name is  
16 Joe Murrietta. I'm the mayor of Grants. I'm a  
17 lifelong member -- I'm a citizen of Grants, which is  
18 almost 61 years, and I'm also a former employee of a  
19 uranium company in the Grants area during the '60s,  
20 '70s, and during the '80s. With that, I feel  
21 comfortable to say that I and the vast majority of the  
22 citizens of my community are familiar with the uranium  
23 industry, are aware of the impacts, and appreciate the  
24 effects the uranium industry has had in the past, and  
25 also will have in the future.

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1           Having said that, and I'm here tonight on  
2           behalf of the citizens of my community, as I was in  
3           Gallup, and I was in Grants, to let the people know in  
4           the audience, to the staff of the NRC, which are  
5           present tonight, that we support the draft GEIS  
6           document that has been prepared, and we are confident  
7           that the document will serve as a first step in the  
8           comprehensive evaluation of licensed applicants in the  
9           future.

10           With that, my people, my friends, my  
11           family, my citizens, are looking forward to servicing  
12           the great industry in our area. Thank you.

13           MR. CAMERON: Thank you. The next speaker  
14           is the Assistant Commissioner for Oil, Gas and  
15           Minerals, State of New Mexico.

16           MR. BEMIS: Good evening, everyone. My  
17           name is John Bemis. I'm the Assistant Commissioner  
18           for Oil, Gas and Minerals, at the New Mexico State  
19           Land Office. And thank you, Larry, for not putting us  
20           on your consultation. The end work comes up, it's  
21           amazing the passions that come out.

22           For the State Land Office, I represent  
23           Patrick Lyons, the New Mexico Commissioner of Public  
24           Lands, an elected official.

25           And in answer to someone's question that

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1 was earlier, we're one of the agencies, we own 13  
2 million acres in the state of New Mexico, second only  
3 to the federal government, in ownership of land in New  
4 Mexico. We own about 200,000 acres in McKinley  
5 County, about 260,000 mineral acres in Cibola County.

6 We've had a lot of keen interest lately in uranium  
7 mining. We've had two general mining sales where we  
8 have leased land in New Mexico, that's the state land  
9 office, and everybody has their own particular vision  
10 and their own particular viewpoint. I just have to  
11 explain the land office, the history of the land  
12 office, our land was given to us at statehood and  
13 before in trust, and it is to be used to make revenue.

14 And the primary beneficiary of our trust are the  
15 school children of New Mexico. We made about \$500  
16 million last year. About 84 percent of that goes to  
17 the school children. After that, it's our public  
18 universities, Carrie Tingley Hospital, The School for  
19 the Visually Handicapped, The School for the Blind.

20 So everybody has important issues here,  
21 and I'm simply here to say that from the Land Office  
22 perspective, we think you've done a very thorough job  
23 with the generic EIS review. We think that it's a  
24 document that should be finalized as quickly as  
25 possible in New Mexico.

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1           In follow-up to Joe's comments, I think  
2 New Mexico has the number one reserves of uranium in  
3 the United States, but we are not using them. This is  
4 tried and true technology, the in-situ leaching, it's  
5 going on in Texas, it's going on in Wyoming. This is  
6 not new technology, there's 30 years of history with  
7 this. So there are past damages, for sure, but this  
8 is a whole new ballgame, and I hope everybody  
9 considers that.

10           We have one more mining sale that's coming  
11 up in a couple of weeks where the interest again is in  
12 McKinley and Cibola County.

13           We support your draft GEIS, and thank you  
14 very much.

15           MR. CAMERON: Thank you, John.

16           We are going to go to Floy Barrett next,  
17 and then to Eric Jantz, Michael Bowekatz, and Chris  
18 Shvey. This is Floy Barrett.

19           MS. BARRETT: I'm not an official in any  
20 capacity. I am a very concerned citizen who cares  
21 about the health and safety of all of our citizens.  
22 And I have some questions that I want to submit to the  
23 NRC, and I would like them to answer them in writing  
24 after this hearing is over, and send them to my home  
25 address, which is 316 Washington, Northeast,

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1 Albuquerque, New Mexico, 87118. My full name is Floy  
2 Barrett, B-A-R-R-E-T-T.

3           These are the questions: Why would the  
4 NRC grant a license to HRI when its parent company,  
5 Uranium Resources, Incorporated, has a long history of  
6 license violations in Texas, resulting from dozens of  
7 leaks and spills and uranium mining fluids from its  
8 surface-gathering and processing facilities?

9           This company has had several suits already  
10 that it's had to deal with -- and I won't go into the  
11 detail of those suits. You can find them at the SRIC  
12 website.

13           The next question is, why does NRC promote  
14 in-situ leach mining when ISL mining deliberately  
15 contaminates groundwater in order to extract and  
16 recovery uranium?

17           In the case of the Westwater Canyon  
18 aquifer in the Crownpoint area, ISL mining will  
19 increase uranium levels by up to 100,000 times over  
20 the normal level, and radium levels 20,000 times  
21 overall.

22           Uranium and radium are both human  
23 carcinogens. Uranium can cause kidney damage and  
24 failure if ingested even at low levels.

25           This particular mining method has equally

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1 high levels of uranium toxicity as that found in  
2 uranium extracted from underground mines.

3 And I have a number of friends who were  
4 involved with the earlier mining in this state who  
5 lived with horrible cancers, and died very slow and  
6 horrible painful deaths.

7 Does HRI have no regard for human life and  
8 health?

9 The Westwater aquifer currently provides  
10 high quality drinking water for at least 13,145 people  
11 living in the Eastern Navajo Agency, which it projects  
12 will increase by double the number of people in 35  
13 years.

14 Computer modeling conducted by experts for  
15 income, and the East Navajo Dine Organization, found  
16 that mining fluids will migrate from the Crownpoint  
17 mining -- the Crownpoint mining site to the town's  
18 municipal wells within seven years, and those are not  
19 retractible. You can't do any kind of reclaiming that  
20 water that gets contaminated from another well.

21 You have to have these new wells, I  
22 understand, from this presentation, but you can't use  
23 certain of those wells. However, this is going to  
24 migrate from the Crownpoint mining site to the other  
25 wells. And there's not very much that you can do to

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1 mitigate that.

2 Will the NRC give me the names of the  
3 persons in its organization that will be responsible  
4 for mining contamination in the air, water and soil in  
5 the Crownpoint area if ISL mining goes forward?

6 The reason I ask for that is because they  
7 haven't been responsible for the cleanup in several  
8 other situations.

9 One, does the NRC not require a complete  
10 cleanup from earlier uranium mining activities after  
11 these many, many, years, dating from the 1950s? I  
12 heard that's over 50 years they have had time to clean  
13 this up. And I heard a report this morning, we're  
14 here in 2008, that the Laguna area has still not been  
15 completely cleaned up. There are uranium toxic waste  
16 in many forms that contaminated the air, the soil, and  
17 the Pecos River, all of the way through Arizona. That  
18 river runs from New Mexico all through Arizona.

19 There were hundreds of sheep who died  
20 because they drank water from that river. And I don't  
21 think all of the owners of the sheep have to this date  
22 been totally compensated. And this dates from the  
23 1950s. They have had plenty of time to clean up the  
24 Laguna areas.

25 And I had a report just today on a recent

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1 survey of the people who live in that area -- and  
2 those in that area, that have should have been cleaned  
3 up in these 50 years, that reported about many  
4 illnesses suffered by the people there, including  
5 kidney disease, cancers of many kinds, birth defects,  
6 skin problems, and lung disease.

7 I believe that there is ample evidence  
8 that uranium mining is hazardous to human health, and  
9 we do not need this any more in New Mexico.

10 MR. CAMERON: Is that it? Thank you,  
11 thank you. Thank you very much.

12 And we are going to go -- thank you very  
13 much. Eric Jantz.

14 MR. JANTZ: Thank you. My name is Eric  
15 Jantz. I'm a staff attorney with the New Mexico  
16 Environmental Law Center. I'm here on behalf of the  
17 Blue Water Valley Downstream Alliance and Blue Water  
18 Office, the Pueblo of Acoma.

19 I would like to make four points in  
20 commenting on the draft GEIS. They're points that I'm  
21 going to enumerate on in future written comments, but  
22 I would like to get them on the record at this point,  
23 as well.

24 The first point I would like to make is  
25 that the GEIS, as it stands now, is factually

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1 inaccurate and misleading.

2 The main purpose of NEPA, the National  
3 Environmental Policy Act, is to -- or one of the main  
4 purposes of the National Environmental Policy Act, is  
5 to fully inform the public of any federal -- major  
6 federal action significantly affecting the  
7 environment.

8 And to that end, of course, it required  
9 that EISs fully disclose facts, and the facts  
10 disclosed therein are accurate.

11 In this case, it wasn't done in the GEIS.  
12 And I have four examples of that.

13 One, the GEIS represents that there are no  
14 ISL projects on tribal lands. That's not accurate.  
15 There are two at least on tribal lands, one in Section  
16 17, citing Church Rock, the 10th Circuit determined  
17 that that land was tribal trust land, Navajo tribal  
18 trust land. The Unit One site of the Crownpoint  
19 uranium project is on allotted land, which is under  
20 federal statute is also Indian land. There may be  
21 more, depending on how the 10th Circuit rules on the  
22 current pending suit.

23 The second thing is that the track record  
24 doesn't fully evaluate in any comprehensive way the  
25 performance of the ISL industry over the last 30

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1 years.

2           You've heard a lot about how this  
3 technology has been proven. There is lot of  
4 information out there about the track record of this  
5 technology. We only receive snapshots of that in the  
6 draft GEIS.

7           One of the, I think, most egregious  
8 misrepresentations in the GEIS has to do with  
9 groundwater quality, pre-mining groundwater quality.  
10 The draft GEIS gives the impression everywhere there's  
11 uranium mining, groundwater quality is done. That's  
12 done by averaging. Groundwater quality in near and  
13 very small pockets, you may have very bad groundwater  
14 quality where the uranium is. 50 feet away, a hundred  
15 feet away, you can have good groundwater quality. You  
16 average those two things together, you get bad  
17 groundwater quality. It's almost as if Bill Gates  
18 walks into a homeless shelter all of a sudden, on  
19 average, you have a homeless shelter full of  
20 millionaires. It just don't make any sense.

21           This also skews groundwater restoration  
22 success when you have unreasonably and skewed high  
23 numbers for uranium, radon, and other poisonous  
24 pollutants.

25           Finally, with all due respect to Mr.

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1 Camper's Power Point presentation, the aquifer  
2 exemption issue that he presented is not entirely  
3 accurate. In New Mexico, there are no aquifer  
4 exemptions. New Mexico is a privacy state. Under the  
5 Safety Drinking Water Act in New Mexico, has temporary  
6 aquifer designations. That's different from an  
7 aquifer exemption. Uranium companies will be required  
8 to remediate groundwater to background levels of  
9 pre-mining conditions or groundwater standards. It's  
10 easy to track, which generally track drinking water  
11 standards. In 30 years of ISL mining, no company's  
12 ever been able to do that.

13 The second point I would like to make is  
14 the GEIS fail to address cumulative impacts.

15 One of the very few practical uses for a  
16 problematic environmental impact statement is to  
17 evaluate regional cumulative impacts. And the GEIS  
18 fails in this respect in two ways.

19 First, there's no federal program  
20 identified. It's simply -- the GEIS is simply a  
21 reaction to ad hoc permit applications from various  
22 mining companies.

23 Second, and most importantly, is that  
24 cumulative impact considerations pursuant to federal  
25 guidelines and regulations and case law, has to

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1 include consideration of past impacts, along with the  
2 proposed impacts, proposed project -- impacts on  
3 proposed projects and reasonably foreseeable future  
4 impacts.

5 In this case, the GEIS completely ignores  
6 the past impacts of uranium mining and milling in New  
7 Mexico, and elsewhere.

8 In order to fully assess in a  
9 comprehensive manner the impacts of IS -- future ISL  
10 mining, the NRC must consider the effects of past  
11 uranium mining, and how those effects are going to  
12 combine with the new effects, and how those are going  
13 to affect the people who live in these areas.

14 The third point in which the GEIS is  
15 inadequate is that it fails to analyze or even mention  
16 the federal government's trust responsibilities to the  
17 Indian tribes.

18 The federal government has an obligation,  
19 and every agency of the federal government has this  
20 obligation, to protect the tribal rights guaranteed by  
21 treaty and statutes. And those rights include water  
22 rights, hunting rights, fishing rights, religious  
23 rights. The GEIS doesn't even mention this  
24 responsibility. Without analyzing this  
25 responsibility, this document is totally inadequate.

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1           The final thing I would like to mention  
2 about the GEIS is it fails to address mitigation  
3 measures. GEIS -- EISs are meant to have reasonable  
4 -- reasonably complete discussions in mitigation  
5 measures. In this case NRC simply lists past  
6 management practices. That certainly is no substitute  
7 for any sort of meaningful discussion about what the  
8 NRC might do or might require mining companies to do,  
9 to mitigate impacts.

10           For example, a restriction on mining in  
11 aquifers that are 2,000 feet horizontal, vertical from  
12 a potential underground source of drinking water might  
13 be a mitigation measure that could be considered, not  
14 something -- not just simply a list of best management  
15 practices.

16           Thank you so much, I appreciate the  
17 opportunity to speak.

18           MR. CAMERON: Thank you, thank you, Eric.

19           And next we will hear from Malcom  
20 Bowekatz.

21           MR. BOWEKATZ:       (Zuni spoken.) Good  
22 evening, I'm here to represent the safety council, but  
23 also I'm personally speaking as a former governor for  
24 the Pueblo of Zuni.

25           Number one, we request a 180-day extension

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1 to the public comment period, and for the NRC to  
2 conduct another round of local public input hearings.

3 The local Indian tribes should be afforded  
4 government-to-government consultations. We know  
5 you're trying, but at least. Since the original  
6 scoping trials already took place in 2007, I think  
7 surely you guys could make an effort to come out here,  
8 especially my Pueblo, the Pueblo of Zuni. I talked  
9 with one of the gentlemen, and they're still looking  
10 for a telephone number, as well as sending a letter.

11 I think it's common courtesy that you  
12 could send a fast e-mail, e-mail's available. So we  
13 need to send that out.

14 We also note that the local communities  
15 that are not part of the GEIS and the field hearings,  
16 they should be given another opportunity to be heard  
17 for full disclosure and a fully-informed public  
18 comment process by the NRC, this is a reasonable  
19 request.

20 Number two, withdraw the GEIS. If site  
21 specific EISs were to be conducted, and we mean EIS,  
22 not environmental assessments or EAs.

23 The burden of proof on the safety,  
24 negligent hazardous impacts, and effects should be  
25 placed on the uranium companies, not the public. The

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1 NRC represents the whole public and it's taxpayer  
2 funded. Therefore, let the companies jump through the  
3 NEPA hoops, let them go through the process of  
4 applications, surveys, geological and hydrological  
5 studies. We have already shouldered the cost of toxic  
6 sites and their cleanups.

7 We are also, through this GEIS process,  
8 already subsidizing their bullet points for the  
9 industry.

10 Number 3, the GEIS is lacking, but not  
11 including the latest in mining citation. All it  
12 mentions is it will be part of the site specific EIS.

13 NRC explains the need to generate the EIS, is a  
14 method to standardize program areas on applications,  
15 boilerplates, easily cut and pasted sections.

16 The EIS has tons of information already  
17 done on behalf of uranium companies.

18 The appendix lists the reasons for the  
19 GEIS. It also lists those areas that are without --  
20 that are outside of the scopes of the GEIS. Legacy  
21 should be part and parcel of this. In that sense it's  
22 wholly and factually lacking. Because by the same  
23 token, if we're trying to substandardize and see what  
24 commonalities are in the ISL recovery processes and  
25 conventional minings, you cannot argue that it is

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1 common grounds that are copied by both of those.

2 So, in that sense, you should be able to  
3 include in this GEIS an issue of legacy cleanups. If  
4 not, we are artificially cutting off or redirecting  
5 the issue of the shortcomings to give ISL recovery  
6 mining processes on the fast track with the original  
7 authorization.

8 Number 4, groundwater and surface water  
9 resources are valuable, and we are not convinced that  
10 the GEIS is strong enough to address the issues, or  
11 you may be minimizing site specific evaluations.

12 In my experience as the governor of Zuni  
13 from 1999 to 2002, I experienced directly the failure  
14 of regulatory agencies, both federal and state. They  
15 fail to follow the rules, and in some instances they  
16 are blind, except the production company's reports,  
17 they go out and grant you the information, and totally  
18 blind as with that. We had to go out and do our own  
19 studies and get that done.

20 In GEIS discussions about hydrology,  
21 confined aquifers versus unconfined aquifers, cannot  
22 be targets. Geological surveys and depositions that  
23 are mischaracterized and been consistent throughout  
24 the region, the regional flavoring that they talk  
25 about. Yet the big anomaly or unconformity will exist

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1 in the center.

2 We're in a seismic zone that stretches  
3 from Raton, New Mexico, to Springerville, Arizona.  
4 There are fracture zones and faults laterally and  
5 vertically and horizontally. These geologic fissures  
6 render the issue of confined aquifers as a moot point,  
7 or rather when we talk about confined aquifers at the  
8 sites for leaching, I think that argument needs to be  
9 on a very specific level.

10 We discussed the same issue in the Zuni  
11 Salt Lake Coal Mine project. I dealt for four years  
12 with this issue, and I'm not about to do it again.

13 Number 5, the cultural and historic  
14 properties impacts is another concern. Your draft EIS  
15 section also lists thousands of sites that are within  
16 those areas. Most Pueblos, most Apaches, most Navajos  
17 have some cultural affiliations to that area. In one  
18 square acreage, you're going to find thousands and  
19 thousands of ruins, and don't tell me that you're  
20 going to drill those well holes, you're going to  
21 connect all of those pipes, and not do any ground  
22 surface disturbances. We will have the right to  
23 interface on that level.

24 On that note, I respectfully submit a copy  
25 for the record, and I also thank you for allowing me

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1 to talk.

2 MR. CAMERON: Thank you. We're going to  
3 hear from Chris Shuey at this point, then we're going  
4 to go to Barbara Telli, Benjamin House, Annie Sorrell  
5 and David McCoy. This is Chris Shuey.

6 MR. SHUEY: Good evening, this is -- my  
7 name is Chris Shuey. I direct the mining impact  
8 assessment program at Southwest Research and  
9 Information Center. Am I close enough to the  
10 microphone?

11 This is this third hearing that I've  
12 appeared at, and the pattern has developed. This is  
13 -- those of us that have concerns about in-situ leach  
14 technology, the lack of consideration in the GEIS  
15 cumulative impacts from previous mining. I've  
16 actually looked at these documents. I will have to  
17 admit that I haven't read the whole thing, but I read  
18 enough of it to actually put together quite a number  
19 of technical comments, and I would encourage those who  
20 come to the microphone with purely political  
21 statements about this document, to actually read it.

22 On Monday and Tuesday, I talked about how  
23 bad this GEIS fails as a disclosure document, one of  
24 the principal reasons for the enactment of the  
25 National Environmental Policy Act, so I'm going to

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1 tick off all of the areas that are not disclosed in  
2 the document; therefore, it's misleading to conclude  
3 from it that everything is fine in the in-situ  
4 leaching.

5 So the impacts of previous uranium  
6 milling, it doesn't even mention mining as  
7 specifically excluded. The GEIS page 1-13, the maps,  
8 it shows uranium recovery facilities in New Mexico are  
9 inaccurate, they don't include the Anaconda Bluewater  
10 Mill, they don't include the SOHIO Mill at Cebolleta,  
11 they don't include the Mobil section pilot project  
12 that's in Crownpoint.

13 None of these missing uranium recovery  
14 facilities are disclosed in table 5.2-1, and no  
15 information about the capacities of these facilities  
16 disclosed in the cumulative impact section in section  
17 5.

18 We've heard references to HRI's Crownpoint  
19 Uranium Project, which was licensed by NRC in 1998,  
20 the subject of a lengthy administrative adjudication,  
21 now in the 10th Circuit, as other people have said.  
22 It's represented as one triangle on the maps in  
23 several locations of the GEIS, and it actually  
24 consists of four separate units, two at Crownpoint and  
25 two at Church Rock.

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1           Now this -- the disclosure of past mining  
2 and milling facilities and their current impasse is  
3 critical to understand the potential impasses at the  
4 ISL mine.

5           For instance, NRC ruled that radiation  
6 dust to the Navajo community from radioactive waste in  
7 or around the post HRI section 17 ISL mine in Church  
8 Rock would be excluded from regulation because they  
9 were derived from previous mining operations, and NRC  
10 doesn't regulate. So hence the consequence of  
11 licensing an ISL facility, legalized radiation levels  
12 at dozens of other mines were violated in the NRC's  
13 100 milligram per year rule. Essentially, they ruled  
14 that all the waste there are now put back, and put  
15 there by the Creator Himself.

16           Dozens of old mines are being unreclaimed  
17 and uncontrolled and grants mineral and contamination,  
18 these could similarly be grandfathered for new ISL  
19 operations, leaving -- allowing impact at an even  
20 higher level of contamination at the end of their  
21 operations.

22           Now, "accurate" has been discussed,  
23 accurate determination of baseline water qualities is  
24 one of the most important elements of an ISL operation  
25 in an application. Yet in the Ambrosia Milan area we

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1 estimate that just about 1.2 million acre-feet of  
2 eluvial and bedrock groundwater that's been  
3 contaminated by historic uranium mining and mill  
4 discharges. That's enough water -- for those of you  
5 interested -- to supply Albuquerque for 20 to 25 years  
6 per consumption rates. But most importantly,  
7 depending upon the locations of future ISL mine sites,  
8 this meaning this existing problem may preclude an  
9 accurate determination based on water quality, and  
10 potentially allow companies to restore to a much less  
11 stringent and more polluted water -- set of water  
12 standards.

13 The GEIS, as my colleague, Mr. Jantz,  
14 said, the GEIS misrepresents and actually repeats  
15 inaccurate information about the actual uranium levels  
16 in the aquifers at Church Rock and Crownpoint.  
17 Essentially what they've done is they've taken -- or  
18 some water quality and averaged it with nonreserve  
19 quality to artificially inflate what the appearance of  
20 the natural baseline water quality is.

21 You know, I've been involved in a lot of  
22 work out in the southern portions of the San Juan  
23 Basin. I personally sampled more than 100 different  
24 unregulated wells, I've seen the water quality records  
25 for more than two dozen water supply wells, and I

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1 could find only eight that have had uranium levels  
2 above the federal drinking water standard occurring  
3 naturally.

4           You know, and we think that three of those  
5 were actually solely associated, and only one is  
6 actually in the Westwater Canyon.

7           There was some statements made previously  
8 at the previous hearings, that the Crownpoint  
9 municipal water wells are contaminated, they need  
10 treatment. That's not true. Uranium levels in the  
11 two Crownpoint municipal wells are less than a part  
12 per billion, less than one microgram per liter, less  
13 than 30 times the EPA drinking water standard. The  
14 only thing they can do to the Crownpoint water supply  
15 is to treat it with chlorination.

16           The draft GEIS in section 2 only scratches  
17 the surface about the history of excursions, and  
18 operating facilities in Texas. In section 2, it  
19 really doesn't talk about restoration. We get more  
20 information from Mr. Camper's slide up here. The only  
21 thing it says is that restoration has taken longer,  
22 and it's been technically difficult than it had been  
23 anticipated in the start of operations.

24           NRC has actual restoration data for all of  
25 the facilities that it regulates, and should include

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1 those restoration results in this GEIS, and include  
2 the Texas experience. And restoration has not been  
3 successful in commercial scale operations, not without  
4 the relaxation of standards, and the imposition of  
5 what they call alternative concentrations, which they  
6 were authorized by the statute, and when they were  
7 enacted by the NRC, it was supposed to be the  
8 exception to the rule. It become the rule. That's a  
9 higher level of contamination that's being allowed.

10 Every conventional mill has some sort of  
11 groundwater contamination policy. Some are very, very  
12 serious. And we can learn from the failure of the  
13 restoration operations at these conventional mills for  
14 this -- for application to the ISL restoration  
15 criteria.

16 And, finally, I want to note, that it took  
17 citizens and leaders of Church Rock, and the Church  
18 Rock chapter, working with organizations like ours,  
19 and several agencies, to conduct environmental  
20 assessments of the previous -- impasse of the previous  
21 operations long after the last mining was done.

22 We found more than 20 years after mining  
23 had ceased, very high levels of uranium and gamma  
24 radiation along the haul roads of the residential  
25 areas. This was all confirmed by the EPA when they

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1 came in last year. They found -- they confirmed high  
2 levels of cancer-causing radium in the back yards and  
3 soils of six Navajo homes, so that now they have been  
4 cleaned up, last year, 15 months ago.

5 And, you know, this is aggravating,  
6 because we're being told by the industry that they've  
7 learned a lot, and that they're not going to make the  
8 same mistakes at the same time.

9 The company that operated the mine that  
10 has not been reclaimed for 20-some years, is being  
11 honored at a deal, a celebration at the Mining Museum  
12 in Grants on Saturday night. But I can tell you that  
13 the people who have had to live with this  
14 contamination for 35 years, they're not celebrating  
15 anything.

16 Thank you.

17 MR. CAMERON: Robert Tohoe. And then we  
18 are going to go to Benjamin house, then Annie Sorrell,  
19 and David McCoy.

20 MR. TOHOE: Yah-Ta-Hey. (Navajo spoken).  
21 Good evening. My name is Robert Tohoe. And I'm here  
22 this evening representing The Environmental Justice  
23 Program for Sierra Club. And also here a lifelong  
24 resident of McKinley County on the Navajo Nation. I  
25 have a homesite lease there.

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1           You know, this evening I've been listening  
2 to the audience here talking about their positions,  
3 talking about their opinions, I thought about what  
4 this really means to us, what has this resource called  
5 uranium done? And I just have to conclude that it's  
6 the forbidden fruit of our generation. Why? Most  
7 nonindigenous communities have benefited by jobs, by  
8 economic growth from this resource, yet, for  
9 nonindigenous communities, it represents a curse, a  
10 devastation that has visited the land, and has not  
11 gone away. It has brought destruction to the identity  
12 of the indigenous cultures here in the state, and has  
13 forever polluted our land and water.

14           And now I'm afraid that this forbidden  
15 fruit will now disrupt our future generations, new  
16 people not having had a choice in this matter. And so  
17 I wanted to express that to you, this evening.

18           One example, is the -- currently, there is  
19 a situation over at Tuba City, Arizona, where past  
20 uranium milling was done, and has ceased back in the  
21 '70s.

22           What has happened since then is that we  
23 now know that there's an underground radioactive  
24 plume, one that originated from the waste from a city  
25 in New Mexico, the Village of Walpi. There is today a

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1 threat to one source of drinking water for the Hopi  
2 villages, and yet we also learn this week, EPA does  
3 not have enough money to clean that up.

4 And this situation is -- represents many  
5 communities where they were wanting to clean up,  
6 simply because of the manifestation of contaminations  
7 now evident. And yet when it comes to cleanup, it  
8 requires Congressional action. Congressional action  
9 will not immediately fix this. So these tribes are  
10 caught in a rock and a hard place.

11 Yes, Tuesday, we took a tour of the old  
12 Jackpile mine over in Laguna. They walled up 24  
13 million tons of raw ore or millings, and yet that  
14 place is still contaminated.

15 The communities of Laguna, the people  
16 still live with that legacy today. You walk around  
17 those communities now, you have to be concerned about  
18 exposure, and where do you go? So this is the legacy,  
19 this forbidden fruit that I'm talking about.

20 Those are some of the comments, but I want  
21 to read this into the final -- into the record here.  
22 Extension of the time is necessary for the following  
23 reasons on this GEIS. The first draft GEIS is a  
24 document that would have significant impacts with the  
25 environment, and a huge number of communities here in

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1 the western United States.

2           Unfortunately, it's apparent from our  
3 first reading that this draft, GEIS is grossly  
4 inadequate, as required by the National Environmental  
5 Policy act. NRC fails to take a hard look at the  
6 cumulative environmental impacts on the human body and  
7 the lands here in the western United States, including  
8 New Mexico.

9           In order for the communities, and its  
10 people to respond in a constructive and a meaningful  
11 way, they will require a significant amount of time  
12 and work to just address the basic impacts to  
13 groundwater, surface waters, soils, and local  
14 communities. The public will require an extension of  
15 time to prepare a constructive response. Why? NRC  
16 failed -- had failed to, number one, collect and  
17 represent in the draft GEIS the relevant documents and  
18 information necessary to properly evaluate the  
19 environmental impacts of the uranium mining. And this  
20 goes to all four regions of the agency that's been  
21 charged to analyze.

22           And, two, the potential useful documents  
23 and related information are cited but the agency  
24 failed to analyze and present this material in  
25 meaningful way so it could meet the requirements NEPA.

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1 A thorough response cannot be accomplished  
2 by the early October 2008 deadline.

3 And, finally, number 3 again, we strongly  
4 urge a 180-day extension of the comment period from  
5 the current deadline.

6 Thank you.

7 MR. CAMERON: Okay, thank you. We'll have  
8 Benjamin House at this point, and then Annie Sorrell.

9 MR. HOUSE: I would like to thank the  
10 panel for having me to speak for the third time.

11 We have a large reserve of uranium on the  
12 Navajo allotted lands. It developed, energized  
13 economy and employment. With 30 -- with nearly 30  
14 years of providing ISR operations, you or I have not  
15 been able to identify a case where domestic ISR  
16 recovery industry has caused a serious environmental  
17 health and safety risk or failed to restore an aquifer  
18 to pre-leach standard of any -- at any of its  
19 projects.

20 The lack of the economic development is  
21 destroying our people. Poverty is the major cause of  
22 illness. Well, promise -- promises help, poverty  
23 predicts sickness. Poverty is not only bad for your  
24 health, poverty kills. The biggest cause of ill  
25 health throughout the world is poverty. The medical

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1 authorities recognize this poverty as a major cause of  
2 illness.

3 Many of the disparities in cancer  
4 incidence may be caused by factors associated with  
5 poverty, rather than by genetic correlates of race.  
6 The Allottee Association and its members support GEIS  
7 process.

8 Thank you.

9 MR. CAMERON: Okay, thank you. We'll go  
10 to Annie, Annie Sorrell, and then we're going to hear  
11 from David McCoy, and then Martha Noon, John Clema and  
12 Jerry Slim. And this is Annie Sorrell.

13 MS. SORRELL: My name is Annie Sorrell.  
14 Thank you. I want to thank the panel, and a lot of  
15 you have come up, listened to our comments, and my  
16 comment is. I own the land. And we need to be  
17 thinking about our children's future. I have five  
18 children, and three of them off the reservation are  
19 because we wanted to finish their education, and  
20 because of their jobs and their home. And they're  
21 minding their own business out there. But there's two  
22 that's still on reservation, not making it because of  
23 their education. Well, those that graduate, and have  
24 no plans, I feel for them, lots of people, thousands  
25 and thousands of students that graduate, because I

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1 work in school district for 15 years, and in the  
2 counseling office, and wore out my carpet, because I  
3 encouraged them to get education so you live better,  
4 live up to how our white people are living. If you  
5 don't, you'll walk the road. Get -- kill yourself,  
6 get involved with alcohol, drugs, may become that  
7 medicine, because you're not eating right. And peyote  
8 -- peyote is a narcotic, and our people are using it.  
9 Very sad to see that.

10 So a lot of our people are half diabetic  
11 -- or are diabetic, and just suffering.

12 So, I think I'm speaking for my young  
13 generation. I would like to see them graduate, I'd  
14 like to see him get scholarship, our leader's not  
15 appropriating no funds for our scholarship. I know  
16 that for a fact, because all of my five children have  
17 scholarships with a good government functioning under  
18 Mr. McDonald, and they plan for it, discretions before  
19 -- even the budget went out, discretions brought in  
20 money. But nowadays, no, they run out of money.  
21 Every time I see newspaper, people are going to get  
22 laid off. People are going to get ripped. This is  
23 what's going on on our reservation.

24 I would like to see Crownpoint get  
25 improved. It's very sad, this has become a ghost

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1 town. We need good restaurant. We ate at real good  
2 restaurant right here, and I'd like to see a good  
3 restaurant out there, a motel, car, or car sales,  
4 there are jobs for our youngsters like that.

5 So I really support the uranium, and with  
6 the new technologies and all of the research being  
7 made, I think it is possible it can be handled.

8 We cannot speak of death, and we cannot  
9 have no faith -- and if we just sit in one place --  
10 and I don't want my government to sit in one place and  
11 have nothing, I really feel bad about it.

12 I talked to a lot of my students that have  
13 graduated, and they really feel it, what is going on?  
14 And they know that we have -- you know, we have a  
15 government that is in Window Rock, and maybe two more  
16 years we hope to have a good chairman or a good  
17 president for our Navajo reservation. We really need  
18 some help, people need help.

19 We just had a fair in Window Rock, people  
20 are saying Mr. Shirley, where is the money? Mr.  
21 Shirley, you have problems? Do you want to do  
22 something for us? Not nobody was cheering. It's very  
23 sad to see. So we need help.

24 We would like to give part of our  
25 revenues, our royalties back to -- our revenues so a

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1 child can establish scholarship or whatever that our  
2 youngster needs.

3 So I really need -- I really am hurting  
4 for young people, because I have children and I see --  
5 I see that they need help.

6 I have a lot of confidence in our new  
7 technology, they study, they are helpful on behalf of  
8 our children's future.

9 Now, if we allow a plan to do something,  
10 and our land -- and to our land as given to us as  
11 trust, and the federal government will see us and  
12 prove. They won't wipe us out, we're not going  
13 anywhere, because our people are involved in drugs,  
14 our children are involved in drugs alcohol. Everyday  
15 people gets runned over, everyday people gets killed,  
16 all because of drugs, and they're going into new  
17 drugs, and you know about it. Man, that is really,  
18 really awful, I think, because I don't think I -- I  
19 remember my dad took a little alcohol, but we were  
20 never into drugs. They were strict. Our parents were  
21 strict.

22 And if we don't do anything, you know, the  
23 government is just going to say, get out. You need to  
24 do something. That's what I'm afraid of in the  
25 future. So I would like to see some improvement, I

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1 would like to see us progress, and I'm in favor of  
2 this.

3 Thank you.

4 MR. CAMERON: Thank you, thank you, very  
5 much. We're going to David McCoy and then were going  
6 to go to Martha Noon then, and John Clema. I'm sorry  
7 if I'm mispronouncing that last name.

8 This is David McCoy.

9 MR. McCOY: Good evening. My name is  
10 David McCoy. I'm the executive director for Citizen  
11 Action New Mexico. Our group is concerned with the  
12 monitoring of groundwater contamination, air  
13 contamination at weapons production facilities,  
14 especially Sandia National Laboratories. We also do  
15 some monitoring of Los Alamos National Laboratories.

16 One of the things that I looked at in the  
17 GEIS is the groundwater monitoring. And it is section  
18 2.3.1.1, the hydrological characterization methods are  
19 way too vague, lack any specificity as to how it's  
20 going to be accomplished, as to what the exact goals  
21 are to accomplish it, the means to accomplish, as well  
22 as an inadequate description of the goals.

23 Under well construction, I'm really  
24 surprised at how antiquated the NRC's analysis is,  
25 they use PBC or steeled casing for your well

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1 construction, and well streams. It's been known since  
2 at least 1986, and you can read any of the documents,  
3 like Barcelona and Koles any of the EPA documents out  
4 there that talk about groundwater monitoring, and the  
5 construction of wells, and they will tell you that  
6 steeled screens are going to absorb the very type of  
7 contaminants and concern that you've got here, your  
8 heavy metals, uranium, that type of thing.

9 So, additionally, you are talking about  
10 the approval of the use of drilling muds to drill  
11 these wells. Drilling muds are known to change the  
12 mineralogy around the well screen, and additionally  
13 absorb the contaminants of concern.

14 So, you're really antiquated in this  
15 respect. Mud rotary has been known since the late  
16 '80s as not being acceptable drilling technology. Your  
17 sampling methodology is not set forward in an adequate  
18 manner.

19 Now, if you don't think this is not a  
20 problem, then take a look at the National Academy of  
21 Sciences study of Los Alamos National Laboratories  
22 done in 2006, where they find these specific problems  
23 with numerous well sites at Los Alamos. The mixed  
24 waste landfill at the Sandia Laboratories just  
25 recently had to replace four monitoring wells, because

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1 there was corrosion in the steel screens, a source of  
2 contaminates of concern.

3 There's 26 other wells out of 50  
4 monitoring wells at the Sandia National Laboratories  
5 that are on a list of defective wells, and many of  
6 them, the reason cited is that they have stainless  
7 steel screened wells.

8 So I don't believe that you have an  
9 adequate groundwater monitoring program, let alone a  
10 monitoring program description for detection of  
11 offsite monitoring.

12 Your generic analysis is insufficient. In  
13 the GEIS, cumulative impacts are not discussed. You  
14 have a very limited discussion of RCRA, the public is  
15 not informed of what hazardous waste would be produced  
16 and would be regulated by RCRA, that's the Resource  
17 Conservation and Recovery Act.

18 You have a poor history, and exposition of  
19 that history of restoration discussed in the GEIS. I  
20 think others have discussed that, so I won't go into  
21 that.

22 There's a pattern that would appear to be  
23 deliberate pollution of viable aquifers that's been  
24 permitted in the past, and that should not be  
25 continued.

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1 Thank you.

2 MR. CAMERON: Thank you. Marta Noon, and  
3 then we're going to go to Leo Gomez.

4 MS. NOON: Thank you very much. My name  
5 is Maria Noon, Executive Director of Citizens Alliance  
6 for Responsible Energy. And my organization is a  
7 membership-based organization, and on behalf of the  
8 1,000-plus members that our organization has in its  
9 short three-year history, I am here with a pro-energy  
10 message. And I thank you-all for your efforts in  
11 producing this GIS -- GEIS document.

12 As I listened to comments that are here  
13 tonight, one has to wonder are we talking about the  
14 same document? Well, I'm not an expert in anything  
15 and everything, as no one in this room has the ability  
16 to be an expert in every single issue.

17 I have the benefit of a wonderful team  
18 that I can call upon. Some of the water issues have  
19 come into question, and my personal team of experts  
20 upon whom I can call is a gentleman whose expertise is  
21 in water. He has a Ph.D. and he's on the staff of  
22 Sandia National Labs. I personally talked to him  
23 about the reclamation issues involved with uranium, et  
24 cetera. And he has assured me that the water can be  
25 totally reconditioned, reclaimed, or whatever the

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1 correct terminology is, to better than drinking  
2 conditions.

3 I have had the opportunity to consult with  
4 a variety of people on these particular issues, with  
5 that ability, I say with confidence this evening,  
6 thank you for a fine document that you have put  
7 together, and all of the effort that you have put into  
8 it.

9 I also want to thank you this evening for  
10 putting together an opportunity for public comment  
11 like this, that you all would trek from Washington,  
12 D.C. here to little, remote New Mexico, spend your  
13 time in Gallup, spend your time in Grants where the  
14 stakeholders are, and then even come here to  
15 Albuquerque, New Mexico, which is a great credit to  
16 your organization, and your interest in getting public  
17 input, and I thank you for that here this evening.

18 My organization has entrusted with me the  
19 authority to speak on behalf of them, and on behalf of  
20 Energy in America. In America today, as I'm sure each  
21 one of you know, every one of you in the audience who  
22 drives a car or who has electricity in your house, in  
23 America today, we are facing a drastic energy crisis.

24 Regardless of which candidate sits in the  
25 White House next year for the next four years,

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1 regardless of who happens to win, they will support  
2 nuclear energy.

3 So regardless of what any of you in this  
4 room may think or may want, nuclear energy is going to  
5 be a part of the future of America. However, most  
6 people don't realize that nuclear energy is generated  
7 from uranium. I find as I educate the public, that's  
8 the primary mandate of my organization, the Citizens  
9 Alliance for Responsible Energy, despite what the  
10 Cibola County Beacon says about the organization, we  
11 are not a lobbying group. We do no lobbying  
12 whatsoever. We only do public education.

13 And as I work with the public, I find that  
14 most of them, highly educated people, support uranium  
15 -- I mean, support nuclear, excuse me, but have no  
16 clue that nuclear requires uranium.

17 Beyond that, the few people that have any  
18 concept that uranium is a part of nuclear energy, most  
19 of them have no clue that -- currently with the  
20 limited number of nuclear plants that we have in this  
21 country, most people that don't realize that 90  
22 percent of uranium that we use in this country today  
23 is imported.

24 So as we talk about, we need to get off of  
25 foreign oil, we need to get off of -- pretty much

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1 everybody agrees. I was at Boone Pickens' meeting  
2 yesterday here in Albuquerque, and pretty much  
3 everybody agrees, we should not be sending a huge  
4 amount of money overseas to those foreign countries  
5 that don't like us.

6 But do you know what? Do you know where  
7 uranium comes from today? Mostly, uranium comes from  
8 Russia, and Russia is increasingly hostile. They're  
9 not the Russia they were ten years ago. They have  
10 different leadership. And the agreement we have with  
11 Russia for uranium ends in 2013. Now, do you know  
12 what? The way Russia acted in Georgia, do you know  
13 what, do you think they're going to honor that  
14 commitment and keep it and keep giving us uranium  
15 until 2013? Not likely. They have no history of  
16 honoring their commitments.

17 And so if we get off of foreign oil and  
18 switch to nuclear powered electricity for electric,  
19 hybrids, or whatever you might want to go to. You  
20 know what? We're trading one person for another bad  
21 person. We're trading one bad source for another bad  
22 source.

23 And, in America, there are only a few  
24 sources where uranium is and New Mexico is number one  
25 or number two, depending on who you listen to. We

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1 have either the largest or the second largest uranium  
2 reserves in the country.

3 Do you know what? God gave us that  
4 resource. New Mexico is one of the poorest states in  
5 the entire country. If we stop energy production, as  
6 some people in this room would like to do, we will be  
7 worse than Juarez. I encourage each one of you to  
8 support uranium mining in New Mexico. And I thank  
9 each and every one of you for your diligent efforts on  
10 our behalf. Thank you for coming to New Mexico.

11 MR. CAMERON: Thank you. Leo Gomez is our  
12 next speaker. And then we go to Jerry Slim.

13 MR. GOMEZ: I thank you NRC for holding  
14 this public meeting, and I also thank the NRC  
15 distribution office for sending this draft GEIS so  
16 quickly. I got it two days after I sent them an  
17 e-mail, so I've had time to read the New Mexico  
18 section. I just found out about this meeting  
19 recently.

20 I support uranium mining and other  
21 operations in New Mexico for the following major  
22 reasons. We're facing a planetary catastrophe. Fossil  
23 fuel combustion to obtain energy results in toxic  
24 waste and a significant fraction of anthropogenic  
25 greenhouse gasses. Their impact is threatening the

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1 survival of tens of thousands of species, including  
2 our own. Yet our demand for energy continues to  
3 increase.

4 To replace fossil fuels, particularly  
5 coal, many other potential sources of that first  
6 generation that produce little or no greenhouse gasses  
7 are under development.

8 Nuclear power, which accounts for 73  
9 percent of our low carbon electricity generation in  
10 the U.S. is the only large scale means we can expand  
11 to provide clean, reliable safe electricity.

12 Wind and solar power are important, but  
13 deemed intermittent, cannot supply a base load of  
14 electricity, and the require backup power sources  
15 using fossil fuel.

16 Per square meter, nuclear power is cleaner  
17 and greener than the use of renewable energy -- energy  
18 sources, pardon me.

19 The European Union has called nuclear  
20 power the cleanest and safest large scale energy  
21 source. The United Nations intergovernmental panel on  
22 climate change, and international body of scientists,  
23 economists, and other experts, noted in its recent  
24 climate change report that, quote, nuclear energy can  
25 make an increasing contribution to carbon-free

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1 electricity and heat in the future, end quote.

2 I understand that these 31 new  
3 applications have been submitted to the Nuclear  
4 Regulatory Commission for the construction and  
5 operation of new nuclear power plants in the United  
6 States. Although approval of nuclear power is  
7 growing, many people remain skeptical. Their concern  
8 focuses chiefly on accidental exposure to radiation,  
9 even though a large U.S. National Cancer Institute  
10 survey failed to find any correlation between nuclear  
11 facilities and deaths or disease in the U.S. counties  
12 where they are located.

13 Also, safety practices have improved  
14 dramatically since large scale commercial operations  
15 were last conducted in New Mexico.

16 The risk of radiation exposure continues  
17 to be the most misunderstood and misused aspect of the  
18 nuclear power controversy.

19 I have a few additional comments about the  
20 draft GEIS. In the list of preparers, I did not see  
21 anyone listed with education or training on biological  
22 effects of radiation. Nuclear engineers and  
23 environmental scientists are listed, but their  
24 knowledge on viral infections and radiation should be  
25 indicated.

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1 In the list of species, some species are  
2 missing. For example, mule deer, antelope, mountain  
3 lions. I assume that the final EIS will be more  
4 inclusive with all species in the study areas.

5 The glossary in the documents was very  
6 useful for me in defining new terms, but editors  
7 should pay closer attention to typographical errors  
8 and missing figures, et cetera. I saw a couple of  
9 figures that were missing.

10 I urge the NRC to be very careful in  
11 implementing their charge to environmental justice,  
12 and to listen to all concerns about uranium operations  
13 in New Mexico and other states.

14 Thank you for listening to my comments.

15 MR. CAMERON: Thank you. Jerry Slim, and  
16 then we're going to go to Sue Brown, Joan Brown, Nancy  
17 Todea, and Marlene Perrotte. And this is Jerry Slim.

18 MR. SLIM: Good evening ladies and  
19 gentlemen, panel. Members of the Eastern Navajo  
20 Allottee Association is a group of owners who are on a  
21 checkerboard area and Crownpoint, outside of the  
22 Navajo reservation borders.

23 We own land, a lot of lands was for us to  
24 have the separate village, development to benefit our  
25 family and our people.

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1           Since uranium was discovered -- since  
2 uranium has been discovered, many changes have been  
3 improved in the way uranium was mined early on. The  
4 uranium companies have a knowledge of problems in the  
5 past, and they addressed those issues through  
6 legislation. To understand why Navajo allottees want  
7 to lease mineral rights for mining, uranium mining,  
8 probably lack of economic development is destroying  
9 communities surrounding and within the Navajo Nation.

10           The allottees are burdened and struggling  
11 to provide for their families, even each -- even  
12 though every members owned their valuable resource.  
13 They are not given the same right as a landowner.  
14 President Shirley and Navajo Tribal Council are  
15 neglecting an important source of revenues that might  
16 help everyone in the surrounding areas to be  
17 successful.

18           So we support generic environmental impact  
19 statement.

20           Thank you very much.

21           MR. CAMERON: Thank you. Sue Brown, Joan  
22 Brown.

23           MS. BROWN: Good evening. My name is Joan  
24 Brown. I am a Franciscan sister, and I work with  
25 several nonprofits of interfaith who are addressing,

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1 concerns about the care of God's creation, energy, and  
2 preserving life.

3 And as I was sitting here watching this  
4 Power Point, and hearing so many words, the image came  
5 to me of a place that I was this last week. I also  
6 went to a tour of the Jackpile mine, and the  
7 restoration that is not taking place.

8 But after that, I found myself on top of  
9 the Mesa in a place called Paguate, which many of you  
10 probably have never heard of or been to. And it's  
11 very private, because I was so struck by the beauty,  
12 by the quiet, and at the same moment, by a very  
13 poignant sadness. In this very beautiful expanse of  
14 thousands and thousands of acres, looking out to Mt.  
15 Taylor, I saw this enormous scar that had not been  
16 taken care of, nor would ever be taken care of, our  
17 past uranium mining legacy.

18 I also felt the sadness of many people in  
19 that area whose families have been impacted and whose  
20 spirits of those who passed over were still there. I  
21 felt that very strongly.

22 So as we are looking at this draft GEIS,  
23 and new leach mining, I guess I have doubts about some  
24 of the facts that have been presented. I'm not so  
25 trusting, I guess, because we have been fooled in the

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1 past.

2 The GEIS project, as is outlined, I don't  
3 feel adequately addresses the human or the ecological  
4 fatalities of uranium mining, nor is it really looking  
5 at the future wellbeing of generations of all species;  
6 peoples, creatures, and the ecology.

7 The majority of people in New Mexico who  
8 have suffered through the past legacy, are  
9 inordinately in economically depressed areas. They  
10 are being promised, quote, new jobs, new economy, new  
11 life again, even as they continue to deal with the  
12 deaths of their loved ones, and contamination of water  
13 sources, of land sources, that have not been  
14 addressed.

15 A large percentage of these people are  
16 also indigenous brothers and sisters, that's a concern  
17 of mine.

18 Finally, I don't feel that the GEIS  
19 adequately addresses environmental racism in its  
20 comments in chapter 6.

21 I understand that the reliance on the GEIS  
22 and the site specific environmental assessment would  
23 save prospective licensees a lot of money. The cost  
24 of the development in the GEIS is to spread to all NRC  
25 licensees, so that a prospective licensee to your

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1 leach mining licensee would not have to provide  
2 funding for a full site specific environmental impact  
3 study, but only a more limited environmental  
4 assessment.

5 And environmental assessment does not  
6 demand expensive participation of the public that's  
7 required by an environmental impact study, and it's  
8 cheaper.

9 ISL mining is site specific, and a generic  
10 analysis would not address unique concerns,  
11 particularly around concerns I have of water, of  
12 ecosystems, of cultural and spiritual sites.

13 Uranium mining has been put forth as, you  
14 know, a way for economic development, for jobs. And  
15 we've also been told that it is the new future for  
16 clean energy, as we address global warming, which is a  
17 huge concern.

18 I do not see it as the answer that's being  
19 put forth. We do need a new paradigm for energy and  
20 for the economy. But as I was in Paguate, I thought,  
21 look at the wonderful -- one of the ways that we have  
22 developed in a large part is the tourism.

23 Looking out at this land, wouldn't it be  
24 wonderful if we were to preserve it more and more,  
25 because the more and more scarce it is for people all

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1 around the world to have a place where they can go and  
2 to appreciate the wonder of God's creation.

3 Renewable energy technologies have not  
4 really been addressed fully. At this point, the waste  
5 issues with the uranium mining and nuclear power have  
6 not been adequately addressed to put forth that as a  
7 safe energy source. In-situ uranium leach mining is  
8 not convincing us that it is a safe source of getting  
9 this uranium.

10 The environment and the people of New  
11 Mexico are very precious, and water is one of the most  
12 precious assets. I question the ability to, quote,  
13 restore an aquifer. I mean, have we done this? I  
14 don't think so.

15 I looked at the land in Paguate. Is it  
16 restored? No. Is the water contaminated? Yes. Are  
17 the people of those villages, those communities  
18 suffering from that? Yes. Will their future  
19 children? Yes. I don't think it needs to be taken  
20 lightly.

21 My understanding is that ISL mines have  
22 failed to restore the groundwater, to original states.

23 Finally, I guess I would like to say that  
24 I don't believe this GEIS statement really takes into  
25 account human and Earth rights. My suggestion would

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1 be maybe to start over with a new paradigm, truly a  
2 new paradigm, that would address the challenges that  
3 we're facing, and that this document would be written  
4 from the eyes of a vantage point of truly human  
5 rights, including peoples of all color, of all  
6 economic status, and of the Earth's rights, including  
7 elements such as water.

8 Thank you.

9 MR. CAMERON: Okay. Thank you. We're  
10 going to hear from Nancy Todea and Marlene Perrotte,  
11 Jim Bonner, Leland Erdaul, Janet Greenwald, and  
12 Shrayas Jatkar. Can you come up? All right, great,  
13 thank you. And this is Nancy Todea.

14 MS. TODEA: I'm glad the camera's off. I  
15 got an e-mail this evening -- I was going through my  
16 e-mail from my daughter who is in environmental  
17 science, but she's taking vacation from that and  
18 taking care of her daughters. And she asked me to  
19 attend this. And I had to find a map and see where it  
20 was, and everything else. And I didn't get a copy of  
21 the GEIS, but I was reading the materials. And one of  
22 the things that I'm concerned about, I'm sort of  
23 split. I always equate uranium with cancer. My  
24 husband died of leukemia. I just lost another friend  
25 to colon cancer. So I have concern.

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1 I also looked at the nuclear power, at the  
2 -- if some way we wouldn't use uranium, would be  
3 great. But I wanted some clarification. Since we're  
4 talking about the regulation, and regulation can be  
5 waived. And it's -- unless it's statutory.

6 And one of the things I would like to see  
7 is the leaching liquid defined. In the NRC says  
8 oxygen and sodium chloride or bicarbonate. But if you  
9 look on the website, the leaching that they use is  
10 ammonia carbonate and/or sulphuric acid. You can go  
11 on the website tonight and look it up, look at your  
12 ISL, and that's part of website. That's my concern.  
13 I would like to have a law that will say that the ISL  
14 will use the oxygen where it is, that the NRC has.  
15 Not what's on the website. That concerns me because  
16 you get sulfur rain. My concern is health, if they  
17 are using what's on the website.

18 You people don't -- I'm from Shiprock.  
19 They have uranium tailing. You probably guess it just  
20 at IHS, how many people -- how many kids were born  
21 deformed?

22 You hear about Church Rock. People eating  
23 livestock that were -- for the water came down from  
24 Grants. How many people are deformed? And you can go  
25 -- my understanding their house is somewhere in

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1 Shiprock. And these are my concerns.

2 And groundwater, I'm very much concerned  
3 about it. And uranium, that blows. So I think that  
4 the health issue needs to be really, really looked at.

5 I understand some of the people from  
6 Navajo think about the economy. We have long distance  
7 that we can travel, and I don't see any motels and  
8 restaurants and truck stops, and all of these other  
9 things that Navajo tribe can develop.

10 And I'm concerned for my family, my  
11 children. My daughter is a chemist. She sells  
12 products, hazardous waste, in Denver. So they know  
13 how well they did with the environment.

14 And my son is a hydraulic engineer, water.  
15 I hear from them. They're concerned. Like me, I  
16 haven't read the GEIS, and I would like to get a copy  
17 so I can make some written comments on it.

18 Thank you.

19 MR. CAMERON: Okay, thank you, Nancy.  
20 Marlene Perrotte.

21 MS. PERROTTE: Good evening. I'm Marlene  
22 Perrotte, and I'm a Sister of Mercy, and I'm part of  
23 the Partnership for Earth Spirituality. A person  
24 before -- one of the speakers said, this is a new  
25 ballgame. I have to say, I don't think of it as a new

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1 ballgame. I think it's the same old game we've been  
2 playing for many, many years, and that has to do with  
3 uranium mining, waste, and the use of water.

4 I want to remind the NRC about your  
5 mission. Your mission is to protect people. I  
6 considered that the common good, not just a very  
7 specific isolated group of people. And it is to  
8 protect people and the environment from radiation  
9 hazards, through regulation of the various commercial  
10 and institutional uses of nuclear material.

11 ISL mining deliberately contaminates the  
12 groundwater to extract and recover uranium. Protect  
13 us from that. Excursions or releases of contaminated  
14 mining fluids into groundwater outside the mining area  
15 are commonplace. These are not isolated. This stuff  
16 moves. And it's commonplace with the commercial ISL  
17 lines in Wyoming and Texas.

18 ISL, by its very nature, irreversibly  
19 contaminates an aquifer by injecting oxygen, sodium  
20 bicarbonate, causing uranium and other radioactive  
21 substances free from the rock. That stuff comes off.  
22 That is then collected. The wind blows. Some of that  
23 stuff gets into the air, the air is contaminated.  
24 That stuff has to be transported. We have had  
25 accidents.

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1 I want to know how you are going to  
2 protect us and protect our environment?

3 Also, plumes of contaminated water have  
4 never been contained by monitoring wells.

5 ISL mines have failed to restore  
6 groundwater to their original baseline water quality.

7 I think it's very nice to put it on paper,  
8 but I think it's overwhelming, the proof that we have  
9 has not shown that they are able to -- or restore  
10 groundwater to a original base quality. And I think  
11 you have to consider the facts about the industry's  
12 poor history of restoration. And that is not fully  
13 discussed in the draft of the GEIS.

14 And in the high desert, an area of water  
15 scarce region to use that kind of water when my  
16 understanding that it is 4,000 to 6,000 gallons per  
17 minute, this is not a full system, because some of  
18 that water is coming out and there's some problems  
19 with that water. So that water coming out has to come  
20 back in, so we are using more and more water. And I  
21 think we really have to say that is this what we want  
22 to use our water for?

23 I think the other thing is uranium mining  
24 is not environmentally sustainable. Its cost  
25 effectiveness is very, very high. We are subsidizing

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1 the nuclear industry at tremendous amounts. I am  
2 hoping that we will take that kind of money and put it  
3 into sustainable jobs in wind, solar. I think that  
4 would be a better place to put our money, rather than  
5 this area.

6 Thank you.

7 MR. CAMERON: Okay, thank you. Jim  
8 Bonner, and then we're going to hear from Leland  
9 Erdaul and Janet Greenwald and Shrayas Jatker. Oh, he  
10 left.

11 MS. GREENWALD: Can you put some  
12 restriction on the people in the front row who keep  
13 laughing at the speakers?

14 MR. CAMERON: Well, I think that would  
15 probably put the fear of the Lord into them. So I  
16 think you have taken care of them.

17 MS. GREENWALD: I would request that they  
18 please stop laughing at us.

19 MR. CAMERON: All right, request taken.  
20 Thank you.

21 Is Leland here? Leland Erdaul, and then  
22 we're going to hear from Jan Greenwald.

23 MR. ERDAUL: Good evening. I'm Leland  
24 Erdaul, and I live in Corrales, New Mexico, and as  
25 probably most of you know, that is adjacent here to

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1 Albuquerque.

2 Thanks, first of all, for the NRC for  
3 holding these public meetings. I think it's great  
4 that we do this and get public input.

5 I would like to say that I started in the  
6 uranium business in 1954, and I'm very happy to say  
7 I'm still alive and well. And part of that time, 10  
8 years of working with the Atomic Energy Commission,  
9 both at Grand Junction office in the procurement of  
10 uranium, and then back at the headquarters in German  
11 Town, Maryland. And since then, I've been in private  
12 industry. And including I was president of a mining  
13 company involved in uranium here with headquarters in  
14 Albuquerque. And more recently, beginning in 1994, I  
15 joined the board of uranium resources, HRI, and I'm  
16 very proud of that. I think our record has been  
17 absolutely excellent.

18 Now, I have a very personal passion in the  
19 interest in energy. Let me tell you why. I grew up  
20 during the big Depression, and Dust Bowl days. That  
21 was in the '20s and '30s. And I lived on a farm in  
22 South Dakota. And that was before the days of rural  
23 electrification. So we lived without any electricity.

24 I didn't like that. Boy, let me tell you about some  
25 of the tales where it was required to take a kerosene

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1 lantern wherever you wanted to go at night, to read,  
2 to go to the one-room country school house. You had  
3 to have that. We didn't have electricity. Believe  
4 me, I don't like it. And I think anyone that has ever  
5 had to go through that will say we need to have energy  
6 in this country, and that's all there is to it.

7 Now, I'm in favor of developing all kinds  
8 of energy. There's no question. I support coal, I  
9 support alternative energy, I support alternative  
10 energies, I say, oil, natural gas, hydroelectric  
11 conversation, we need it all.

12 But I support nuclear, because I believe  
13 that it is one source that can be substantially  
14 increased, and we need that. And the GEIS for the  
15 in-situ recovery, the design, forget the environment.

16 And as being in the mining business almost  
17 all of my adult life, I'm absolutely dedicated to  
18 clean air, clean water, and the safety and well-being  
19 of all employees. That's a primary thing as far as  
20 I'm concerned, as with all miners.

21 But what happens when you have inadequate  
22 energy? I think this is a question that has to be  
23 asked. Available energy costs much more, you may  
24 notice gas prices go up, transportation costs  
25 increase, food costs increase, and jobs are lost.

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1           You see, when you look at those impacts,  
2           you've got to say, who bears most of the burden of  
3           that particular -- those particular problems? And I  
4           say it's the poor, the minorities, the elderlies,  
5           they're the ones that die when you have inadequate  
6           heating or inadequate cooling, they are the ones that  
7           lose their jobs when the employers are required to cut  
8           back because of cost for energy gets too high. And  
9           they have inadequate food. They are the ones that  
10          suffer, and I urge all of you to consider that. If you  
11          do not support nuclear power, remember who suffers  
12          when you have inadequate energy. The poor, the  
13          elderly, and the minorities. And I just cannot buy  
14          that. I think that's the wrong way to put it.

15                 So, I support the ISR development. I  
16          think it's vital for New Mexico, the U.S., and all  
17          residents, and the draft EIS is a very important part  
18          of developing this energy resource, and it should be  
19          finalized as soon as possible.

20                 Thank you very much.

21                 MR. CAMERON: Thank you. Marlene. Did  
22          you want to talk, Marlene?

23                 MS. PERROTTE: I already did.

24                 MR. CAMERON: I'm sorry, Marlene. Janet  
25          Greenwald. My apologies. This is Jan Greenwald.

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1 MS. GREENWALD: I would like to thank you  
2 for the opportunity to speak this evening. I'm Janet  
3 Greenwald, and I'm co-coordinator of Citizens for  
4 Alternatives to Radioactive Dumping, or CARD. CARD is  
5 a 30-year-old organization, and it kind of deals with  
6 a lot of individuals, people who are seeking  
7 compensation. It also deals with projects that it  
8 considers dangerous or potential, and I say potential  
9 danger.

10 I want to address a few things that were  
11 said tonight. We have a CARD volunteer who lived in  
12 Germany 20 years ago. And during that time, Germany  
13 decided to go with solar and wind energy. And at this  
14 time, Germany gets most of its energy from wind and  
15 solar. And our CARD volunteer, Claudia Mayday, tells  
16 us that Germany is not the windiest or the sunniest of  
17 places, and it was just political will, I think, that  
18 made that possible.

19 I want to say something about nuclear  
20 power. I don't know a lot about nuclear power. Our  
21 organization doesn't usually deal with it. But I have  
22 been reading a study that came out of Germany that  
23 shows that children that live close to nuclear power  
24 plants are -- I think it's 12 percent more likely to  
25 have leukemia than children that don't.

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1           So that's a new study. It will probably  
2 be peer-reviewed. But I think I needed to throw that  
3 out there.

4           My husband and I have been making a  
5 documentary, and the documentary starts out with  
6 uranium mining, and we go into a production, and then  
7 into nuclear waste.

8           And I just want to tell you a few things  
9 that we learned through interviews. We interviewed a  
10 Navajo woman, who told us that there are many  
11 applications for permits for test wells on the  
12 shoulders, as she said, of Mt. Taylor.

13           And then we interviewed a family that  
14 lived down gradient from Mt. Taylor, and they told us  
15 that there is a certain danger even with the test  
16 well, because sometimes the well can go through the  
17 uranium and into the aquifer, or there can be some  
18 communication between the uranium and the aquifer. And  
19 they were really sad about this, because they have  
20 already been so affected by uranium mining.

21           They lost their grandmother when she was  
22 in her 50s, who was uranium mining for Miller. They  
23 lost -- the woman lost her husband, and the children  
24 lost their father several years ago. They came from  
25 an uranium mining family, who was also in his 50s,

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1 early 50s.

2 The youngest son in the family suffers  
3 badly from asthma. And the oldest son has cysts on  
4 his ears. And the doctor won't cut them off until  
5 they are about the size of a -- between the size of a  
6 large boulder -- if you play with marbles -- and a  
7 tennis ball. And these cysts keep growing all of the  
8 time.

9 And one thing that he found out is that  
10 once you are radiated, if you are radiated as a baby,  
11 a young child, then your reproductive system is  
12 affected so that malformations can happen in that  
13 reproductive system, and they go on until that line  
14 dies. It never stops.

15 So I just wanted to say, number one,  
16 there's alternatives to nuclear power.

17 Number two, the people that will be  
18 affected by in-situ uranium mining are people that are  
19 already having a rough time. A lot of them already  
20 having a rough time. So, is my time up? Okay.

21 Thank you very much.

22 MR. CAMERON: Thank you Jan. Shrayas?  
23 And then we're going to go to Amadeo Martinez,  
24 Patricia Martinez, and Carol House. This is Shrayas  
25 Jatkar.

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1 MR. JATKAR: Hi. I guess I will start off  
2 by bringing back to you the document that's the  
3 subject of this evening, the GEIS, and just readdress  
4 what other folks have said earlier, that the document  
5 is inadequate in terms of NEPA standards when it comes  
6 to analyzing cumulative impacts, as well as a full  
7 analysis of ISL activities.

8 And with that in mind, I would also like  
9 to request 180-day extension in terms of the comment  
10 period on the draft GEIS.

11 But I would also like to go a little  
12 broader and talk about uranium and nuclear energy.

13 As folks know, you know, there is a cost  
14 to uranium, just like there's a cost in oil, coal and  
15 other fuels. But the price of uranium has been going  
16 up and down in the last several years. And to me that  
17 means there's really no guarantee that, you know,  
18 nuclear power will ensure energy stability, and  
19 security, and certainly no price stability.

20 Also, there are increased domestic  
21 processing of uranium in the United States. It  
22 doesn't guarantee that uranium will be used here.

23 And before Rita left, I asked her if she  
24 would support any kind of bill or rule that would say  
25 whatever we mine in terms of uranium, if she would

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1 require that that uranium stay here in the United  
2 States. She said, no. Most people who advocate for  
3 more oil drilling or uranium drilling, they don't  
4 really care whether it stays here or goes on the world  
5 market.

6 And with that, I would like to say that  
7 nuclear power never really fulfilled its standard,  
8 being too cheap to meter, and now I think it's too  
9 expensive to matter. The cost of power plant  
10 construction continues to rise, the cost of waste  
11 disposal continues to rise. I believe now it's about  
12 a billion dollars per nuclear power plant.

13 And as people have said before, there are  
14 many better alternates, and there are sources of  
15 energy that are actually free. Solar and wind in  
16 particular. Of course, I don't mean to say that  
17 there's no cost of constructing a wind farm, but the  
18 cost of wind, the cost of sunshine is actually free.

19 And in terms of addressing the issue of  
20 jobs and economic growth. It's really funny that  
21 people would use ISL as a way to promote jobs and  
22 economic growth. It seems like an awfully  
23 capital-intensive industry. You know, the same kind  
24 of investment in things like solar and wind, and  
25 alternative fuels actually would produce a lot more

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1 jobs, and jobs that won't go away. You know, uranium  
2 is eventually going to -- you know, if we keep mining  
3 it and milling it, there's not going to be any left  
4 eventually, whereas that's not true of wind and solar.

5 So I would just encourage folks to really  
6 consider the alternatives. We have plenty of wind. We  
7 are the 12th windiest state in the country, second  
8 sunniest state in the country, and I think it's high  
9 time that we get serious about those alternatives for  
10 our children's sake.

11 Thank you.

12 MR. CAMERON: Thank you, Shrayas. We're  
13 getting down to our last several speakers. We had  
14 some late sign-ups, so we're going to get into that  
15 now. And as Amadeo is coming up to talk to us,  
16 there's one last name, there's someone named Mark, and  
17 I thought it was Pelizza. Okay, good. And you can  
18 tell us your last name when you get up here but, good.  
19 Amadeo.

20 MR. MARTINEZ: My name is Amadeo Martinez.  
21 I'm a future heir at the Juan Tafoya Land Grant  
22 Corporation. I believe that the GEIS is a step in the  
23 right direction. It will allow us to continue to go  
24 into the future while looking at the good of the  
25 environment. It will address the restoration of

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1 future mining activities, and I believe it will also  
2 address the concerns brought up about mining, uranium  
3 mining safety.

4 Thanks.

5 MR. CAMERON: Thank you, Amadeo. And  
6 Patricia Martinez, and then we're going to Carol,  
7 Carol House.

8 MS. MARTINEZ: First of all, I'd like to  
9 thank the NRC for allowing me to add a comment. My  
10 name is Patricia Martinez. I represent the majority  
11 of the Juan Tafoya Land Corporation, the members. I  
12 would like to add that I respect the past, and all of  
13 these concerns of the Navajo Nation. We've also had  
14 mining in our community. And we have no issues  
15 whatsoever.

16 We are currently in lease with NEI, and  
17 we're already seeing the benefits of what uranium  
18 mining is going to bring to New Mexico. My son is on  
19 scholarship and is studying geology. My daughter, who  
20 is in high school, is mentoring with some of the  
21 mining engineers, and also the geologists. They are  
22 going to be a major part of the mining in our  
23 community, and this is important to us.

24 Again, I'm a mother and a grandmother. I  
25 do not take the future of my children lightly,

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1 whatsoever. We have studied and we have worked with  
2 the company in our area, and we completely support  
3 uranium mining.

4 MR. CAMERON: Thank you, Patricia. We are  
5 going to get to Carol House at this point, and then  
6 we're going to go to Mark, and then Bruce McQuakay,  
7 Juan Velasquez, Ted Gengler, and Chris Baum. This is  
8 Carol House.

9 MS. HOUSE: Correction, it's Donna House.

10 MR. CAMERON: Donna.

11 MS. HOUSE: Yes. I am a botanist. I went  
12 to school and have a degree in biology. And as far as  
13 -- I haven't read the document. I am looking forward  
14 to it. I know that this has been an ongoing issue as  
15 far as on the Navajo Nation and other native land.

16 I have walked the grounds all over, mostly  
17 on the Navajo, looking for species, looking at the  
18 knowledge that we have of these issues.

19 The document -- usually when it comes to  
20 federal documents, they don't include the traditional  
21 knowledge of our relationship with the species. And  
22 so I am definitely going to want that diversity of  
23 information that we have on the species and the  
24 cultural diversity that we have.

25 Another thing that seems to me important

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1 when one is doing a federal document, and I know that  
2 this is what EPA was doing in the early days, is that  
3 they would come on to the Navajo, and other native  
4 lands, and basically hold a meeting like this in a  
5 place hard to get to, and not have it translated into  
6 the people's language. And in the area that this is  
7 developed, you have several different languages, you  
8 know, I don't know whether or not you are familiar  
9 with the different native groups in this area, but  
10 they speak all different languages.

11 So if you want to get adequate input, and  
12 hopefully avoid a lawsuit, you know, you have to give  
13 participation, and translate it into the different  
14 languages.

15 So that means that there's going to have  
16 to be some type of extension and also concern about  
17 how to go about reaching and getting the participation  
18 of the population that really surrounds the area.

19 You know, we can talk about economic  
20 development, but when you're absolutely working with  
21 degrading the ecology, you are creating ecological  
22 poverty, you know, poverty meaning that you can talk  
23 about bringing in money, which is solely beneficial to  
24 the company, and to the surrounding people, but the  
25 impact that it's going to have on a community, on the

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1 clans, on the relationship to this resource, is not  
2 part of your economic analysis.

3 We can talk about Mr. Lyon's concern about  
4 developing school plans for the benefit of money, but  
5 that doesn't address the issues of the health issues  
6 that are going to be possibly impacted, are going to  
7 be an issue in the years to come.

8 And, also, really looking at the cultural  
9 issues. I mean, native people were here before. We,  
10 in my generation, still have a concern, and this is  
11 taught in biology, as far as interconnection, which I  
12 know all of you at least had a biology course, as far  
13 as a connection of the resources to people, and we've  
14 had many examples of environmental justice health  
15 issues.

16 The native population is only two percent.  
17 Now when you come down to the southwest, in this area,  
18 it like absolutely reduces it into an even smaller  
19 percentage.

20 So the area that you are looking at, as  
21 far as developing, is going to have a big impact on  
22 the existence of our population in the future, and our  
23 culture.

24 You know, looking at the pattern of your  
25 lands, you're having an impact on the pathway of

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1 plants and animals, insects, and all of this, and we  
2 could talk about it from a cultural perspective, but I  
3 assume, as soon as I read that document, probably not  
4 going to be there, as in other federal agencies.

5 I have not had a federal agency that has  
6 really done the right thing on behalf of the native  
7 people, and the general population.

8 You know, there is a history of mistakes  
9 by the federal government. And uranium has an impact  
10 on our health, and eventually -- and it did kill a  
11 great deal of Navajo people. We don't even know what  
12 other native groups it has had an impact on. I mean,  
13 that to me, would be a great asset of information to  
14 have into your document, so that way we know what we  
15 are getting into.

16 You know, we can talk about the division  
17 of clans on our welfare of our children, our  
18 profit-making. You know, this is going to divide and  
19 has divided a great deal of the native people.

20 But I know right now, that the generations  
21 to come, you know, they are concerned. You know, the  
22 new policy instituted from the Dine College produced a  
23 document stating -- and these are researches done by  
24 young native people, that this is not beneficial for  
25 the Navajo people, and for the younger generation.

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1           So I hope that in the future, that this is  
2 broadened into a greater population that really does  
3 exist out there. You know, we have people that are in  
4 charge of our resources that are not there, that live  
5 in Washington, D.C., that lives in Albuquerque, that  
6 comes from other countries, and comment on our natural  
7 resources. We live there. I've flown over actually  
8 to look for plants in another part of Dine. I flew  
9 over it. And if you look at the devastation and the  
10 noncleanup, that is scary. To go up to even the  
11 Pueblos, and the impact to Los Alamos where they're  
12 not going to clean up, the impacts of their  
13 experiments for the Pueblo people, because they have  
14 their relationship with those lands and the mountains.

15           So, I'm looking forward to reading the  
16 document, and I'm sure it's quite lacking in a broader  
17 participation of the public, especially people on the  
18 native lands in that area.

19           MR. CAMERON: Thank you, thank you, Donna.  
20 And is Bruce still here? Okay. Bruce, and Juan  
21 Velasquez, and Ted Gengler, Chris Baum. But anyway,  
22 this is Mark.

23           MR. PELIZZA: Mark Pelizza.

24           MR. CAMERON: Thank you, Mark Pelizza.

25           MS. GREENWALD: There's a woman here that

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1 he didn't mention that did sign up.

2 MR. CAMERON: Okay. Well, we will come  
3 back to you, okay, Jan. We're going to go to Mark.

4 MR. PELIZZA: Thank you very much. I will  
5 be brief with my comments. I will file written  
6 detailed comments on the GEIS. I have read the GEIS,  
7 and I wanted to compliment NRC on a job well done.  
8 Being in the uranium business, in the in-situ uranium  
9 business for 30 years, I know the amount of  
10 information there is out there. I know the NRC did a  
11 very good job on working on this huge amount of  
12 information, and putting it in a way that is very  
13 helpful in evaluating the environmental impacts. I  
14 think this GEIS, when it's finished, when the comments  
15 are taken into account in the finalization, will  
16 become reference documents for many, many years to  
17 come when it comes to environmental impacts and  
18 in-situ uranium recovery.

19 I would like to make several comments on  
20 the document. First, I heard a number of people state  
21 concerns that the GEIS eliminates public  
22 participation, that the GEIS is essentially a  
23 gloss-over of the business and it cuts short future  
24 reviews. In reading through the document, I just  
25 can't understand how anyone could come to that

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1 conclusion.

2           Going through the GEIS, the NRC is clear.  
3 The GEIS is an aid, it's an aid to cut, to eliminate  
4 repetition, and the GEIS describes the tiering  
5 process, whereas new issues are found, they're going  
6 into it in more detail, as a result of -- you know,  
7 just coming off of the more general description.

8           There is no public participation, that I  
9 can see, that's cut out at all anywhere. The public  
10 is allowed to have an opportunity to a hearing right  
11 off the bat when an application is announced in the  
12 Federal Register.

13           So there's public participation no matter  
14 what. But then there's more. The staff will evaluate  
15 individual projects, site specific criteria of  
16 individual projects. And if they find nothing more  
17 than what's already been evaluated in the GEIS, the  
18 project will get what's called a finding of no  
19 significant finding, no significant impact, a finding,  
20 it's moved on.

21           But if the NRC finds anything that's not  
22 covered in the EIS, then the -- the GEIS, then the EIS  
23 is completed for individual projects, and then we go  
24 into the public participation process of scoping and  
25 comments, everything that we are going through right

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1 now, for specific projects.

2 But the NRC went even further. They went  
3 and specified various areas where probably going to be  
4 in the EIS and based on the CEQ criteria of one, two,  
5 three.

6 And they mentioned groundwater, surface  
7 water, ecology, cultural resources. Yeah, do you know  
8 what, given a site specific review, these are probably  
9 areas where we will have to go deeper and there will  
10 be a full-blown EIS.

11 So, to me, it's just baffling how one  
12 could look at the GEIS and say that NRC is cutting the  
13 public out of one bit of participation.

14 Now, to work with a little bit more in  
15 terms of comments where I think the draft GEIS could  
16 be improved. I see it, but I think that it's obvious  
17 from the comments that I've heard, that the GEIS did  
18 not do a good enough job in describing how constituent  
19 uranium recovery is limited just to ore zone, to the  
20 mining zone. There's a lot of concern about regional  
21 contamination, and there seems to be confusion with  
22 the public over that point. But it's important,  
23 in-situ uranium recovery is limited only to the area  
24 where there's uranium, well field patterns or  
25 engineers, they are monitored. And negative bleed is

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1 maintained, and restoration is conducted, all to keep  
2 the mining activity in the ore, and to restore it when  
3 it's done. And doesn't that make sense? As a  
4 producer, we don't want to leach a bunch of rock where  
5 there's no uranium. We only want to leach the rock  
6 where the uranium is.

7 So you have a situation where production  
8 economics and environmental concerns work together.  
9 Because we only want to leach where the uranium is.

10 And, finally, I think that, you know, one  
11 has to realize, and maybe this could be built up a  
12 little bit in the EIS, that these are very, very small  
13 deposit in a very, very large regional aquifer. We  
14 only impact the small deposits. Water in the regional  
15 aquifer moves very, very slowly, so regionally it's  
16 impossible to have regional contamination because the  
17 water just doesn't get there that fast. And what  
18 we're talking about is water that moves on the rate of  
19 tenths of inches per day. It's not an underground  
20 river. It is just something that's very controlled  
21 and very slow, tenths of inches a day.

22 My last point, and my previous point leads  
23 into my last point. Since we are looking at mining  
24 only in the mineralized zone, I think that maybe there  
25 should be more emphasis placed on water quality in the

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1 mineralized zone. I think that maybe NRC would want  
2 to expand the database that they look at to see  
3 characteristics within uranium deposits all over the  
4 country, which makes the water unfit to drink.

5 Salinity, when we talk about salinity, and  
6 I think there's quite a bit of emphasis in the GEIS  
7 placed on just salinity, common ions in the water.  
8 It's pretty similar whether it's in the uranium  
9 deposit, or it may be 10 or 15 miles away from the  
10 uranium deposit. But that's not what makes the water  
11 toxic, or that's not what makes the water unfit to  
12 drink. It's the uranium, and the uranium decay  
13 products that make the water unfit to drink. And I  
14 think more emphasis needs to be placed on those decay  
15 products that are harmful.

16 Uranium. It's in the rock. It has a  
17 natural radiologic footprint. That's how we find the  
18 stuff. And it's just natural that the uranium would  
19 extend, and if the rock is surrounded with water, it's  
20 just natural that some of that footprint would extend  
21 itself into the water and, yes, it does. You know,  
22 you don't drink water from a oil well, why would you  
23 drink water from a uranium well?

24 I guess that to specifically target one  
25 parameter and finish up, there's one area that there's

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1 no mention in the GEIS in terms of a harmful element  
2 that I know is in all water around uranium deposits  
3 that I've ever looked at, and that's radon gas. Radon  
4 gas is perhaps the most toxic element associated in  
5 the uranium. At least some of the daughters of radon  
6 gas can come along very quickly.

7 If you look back at the legacy impacts  
8 that we are now suffering with, from uranium mining,  
9 it was radon gas almost always that caused the  
10 problem. So I think that radon gas deserves a good,  
11 hard look in the water, in uranium deposits. It's  
12 tasteless, it's odorless, but it's there.

13 EPA in 1999, proposed a radon gas standard  
14 for an MCL for drinking water of 300 pico curies per  
15 liter. It was never finalized because logistically it  
16 was a monster to deal with in terms of public water  
17 supplies. But it's a good measure, it's a good health  
18 measure in terms of what is dangerous in water for  
19 radon gas and what isn't. There's a lot of factual  
20 data out there, and what quantity of radon is in these  
21 solution mining deposits.

22 I know that in Wyoming, the number of NRC  
23 licensees have collected a lot of information. I  
24 don't know whether NRC has it. I guess they could get  
25 it if they asked, but it has good radon information

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1 there.

2 I know that in Texas, we have collected a  
3 lot of information. Here in New Mexico, this source  
4 of radon in the water is tabulated in the EIS for our  
5 Crownpoint uranium project. There you can go and look  
6 at the water quality data for Unit 1. Unit 1 site was  
7 a site that was developed by Mobil Oil Corporation.  
8 It's the only commercial in-situ well field that was  
9 ever developed in the State of New Mexico. Baseline  
10 data was required for an entire well field, and all of  
11 the monitor wells surrounding that well.

12 So it's the best dataset that's available.  
13 The site was never leached. It was never turned on.  
14 It was plugged. So no one can ever say, oh, well,  
15 that had something to do with the uranium mining  
16 activities, pure baseline data.

17 And just to underscore what the types of  
18 radon we are looking at, and how it should be compared  
19 against, what EPA proposes as a health hazard. We're  
20 not talking 300 ppm average within the ore. We're not  
21 talking 3,000 picocuries per liter within the ore.  
22 We're not even talking 30. There you had 80,000  
23 picocuries per liter average within the ore zone, and  
24 a hundred thousand -- or a million picocuries found in  
25 individuals' wells. So it's very high. And if 300 is

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1 bad, you know, certainly this has to be looked at as  
2 something that impacts water and its uranium deposits,  
3 and it makes the water very unsuitable for use --  
4 domestic uses.

5 MR. CAMERON: And can you summarize?

6 MR. PELIZZA: With that, I think it is  
7 important that we look at this. I think it's  
8 important as a measure for an additional analysis in  
9 future site specific EISs, is that the data of the  
10 water be looked at.

11 MR. CAMERON: Okay, thank you for that  
12 information. And this is Bruce. And, Bruce, I don't  
13 know how to pronounce your last name.

14 MR. McQUAKAY: You've got it right,  
15 McQuakay.

16 MR. CAMERON: McQuakay, oh, good. This is  
17 Bruce McQuakay of Southwest Cultural Preservation  
18 Project.

19 MR. McQUAKAY: Good evening, to everyone  
20 here that came tonight. My name is Bruce McQuakay. I  
21 am a board member on the Southwest Cultural  
22 Preservation Project.

23 I would just like to say that our  
24 communities are affected by uranium mining, and  
25 individuals have seen our family members and neighbors

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1 become ill and die prematurely from contamination from  
2 past uranium mining and processing. Federal energy  
3 policy has direct impact on our health, and  
4 environment. The existing levels -- legacy of toxic  
5 and radiological contamination in our communities,  
6 they are a direct result from past and current federal  
7 energy and defense policies.

8 Moreover, the lack of any comprehensive or  
9 meaningful federal response to uranium mining and  
10 processing causes legacy contamination in New Mexico  
11 and throughout the West is direct result of federal  
12 policy. Federal policy will only direct how it  
13 impacts from proposed uranium mining and processing in  
14 New Mexico, and the West will be addressed. But also  
15 how funds are allocated for development of renewable  
16 energy resources and improvements on energy efficiency  
17 standards.

18 All of these policy considerations will  
19 have a direct and long-term effect on our communities.

20 I would also like to remind everyone that  
21 we are testifying in front of Nuclear Regulatory  
22 Commission, a government agency. I am concerned  
23 because I have also heard a rumor that maybe the  
24 pro-uranium mining people have received funding from  
25 the HRI to testify and attend tonight's meeting.

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1 I would think it would be appropriate that  
2 any community member who received funding from the HRI  
3 to disclose that information along with their  
4 testimony. I believe this disclosure is in the best  
5 interest of the citizens in New Mexico.

6 I would also like to request a 180-day  
7 extension for the rest of our community members who  
8 are not able to make it tonight.

9 I would like to submit a hard copy of the  
10 statement to the Commission. And I would like to  
11 thank you-all for your time.

12 MR. CAMERON: Thank you very much, Bruce.  
13 We will hear from Ron Velasquez now, and then Ted  
14 Gengler and Chris Baum. And then we have four  
15 remaining speakers including Susan Rodriguez.

16 MR. VELASQUEZ: My name is Juan Velasquez,  
17 the vice president of government regulatory  
18 environmental affairs for Strathmore Minerals  
19 Corporation, and I'm here on behalf of the company, as  
20 well as the Uranium Producers of New Mexico, Uranium  
21 Producers of America, and the National Mining  
22 Association.

23 I'm going to leaf through my notes here  
24 and make it brief because I know it's late, and you've  
25 heard a lot of these comments already. But I would

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1 like to also extend my appreciation for having you  
2 come out at this public meeting. It's a very  
3 important aspect to have the stakeholder- and  
4 public-involved aspect of this fed into this kind of  
5 arena, and I encourage you to do more.

6 I believe, as a spokesman for the  
7 organizations that I enumerated that the information  
8 in the GEIS was comprehensive. I believe that it is  
9 quite voluminous, and I believe that the information  
10 will be quite useful in developing and meeting the  
11 program which you folks are trying to deal with here  
12 in licensing ISR projects in the future.

13 But I also would like to reiterate the  
14 fact that it is our belief, based on what we reviewed,  
15 that this GEIS certainly doesn't replace the need for  
16 site specific EISs, as you heard from some of my  
17 colleagues. It, in fact, is only one of the first  
18 steps. I am -- I'm very, very confused about the  
19 positions taken by some members of the public that  
20 they believe this is an obfuscation of some sort, and  
21 some form of means of skirting the issues so that we  
22 don't have to do an EIS for our projects. I can  
23 assure you that there are sufficient regulatory  
24 programs between the Nuclear Regulatory Commission,  
25 the State of New Mexico, the Environmental Protection

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1 Agency, and other agencies, such as the Forest Service  
2 and BLM which will indeed require one form of EIS or  
3 another for these types of projects. So you can look  
4 forward to a lot of late nights like this, I can  
5 promise you.

6 I would like to share a few general  
7 comments that we put together as a group. I don't  
8 want to get into a lot of detail, because it's late,  
9 and we will be providing you with a tremendous amount  
10 of commentary in this.

11 I reiterate my support for the kinds of  
12 comments that Mr. Pelizza set forth, because I think  
13 they are important and pertinent comments, as he has a  
14 lot of experience in the industry specific to in-situ  
15 recovery, and you should listen to his counsel.

16 Some of the general comments that we would  
17 like to put forth here for your consideration is that  
18 we would like to have more emphasis shown and placed  
19 on the kind of complementary relationships between  
20 natural conditions that we see out in the field, and  
21 those that are created within the ISR process.

22 The deposits there, they're there for a  
23 reason. And the reason we can understand, and an  
24 education of why they are where they are, what they  
25 mean in a small scale versus regional scale, so that

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1 we -- the folks that read these things have a more  
2 practical layman's understanding of what's meant by  
3 them. Because when you start talking about generic  
4 environmental impact statements, as was said very  
5 early in this meeting, it gets to be -- you get to  
6 thinking that you're talking about large, large areas,  
7 and very general subjects. And when you start talking  
8 about regional aquifers versus very site specific  
9 activities, you do tend to lose sight of the fact that  
10 these are very specific areas, and very controlled  
11 areas. And there are other agencies that get involved  
12 in these issues, depending on whether you're talking  
13 about water quality, reclamation, air quality, et  
14 cetera. So it's in very specific aspects of each one  
15 of these projects that need to be looked at and need  
16 to be vetted out a little bit more, and looked at a  
17 little more in the environmental statement.

18 I think that it would be useful,  
19 particularly given that we have a lot of misconception  
20 about just the NRC being responsible for the  
21 licensing, it would be useful to have some discussion  
22 in your GEIS as to the process that a prospective  
23 licensee has to go through with other agencies.

24 And you should look at it from the  
25 standpoint of how the agencies interplay, where the

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1 NRC may be a lead agency, you should also take some  
2 opportunity to discuss how the EPA interacts with it,  
3 how the BLM might interact with it, how the states  
4 will interact, and even how the local communities,  
5 local regulators might. Because this -- without doing  
6 that, you leave one with the impression that NRC is  
7 the only decision-maker, and that is truly not the  
8 case.

9 I think there also needs to be a little  
10 bit more emphasis within your documentation as you  
11 describe the process on the emphasis in the different  
12 stages of development. There are different places at  
13 which you have decision points that will create  
14 questions within the public's mind. And without  
15 describing those different phases in a little bit more  
16 detail, again they tend to get lost in the noise, so  
17 you start with the process, and then you clearly very  
18 shortly lose sight of the purpose of the document, and  
19 then you get to the end and you wonder, well, it isn't  
20 going to help the Agency really understand what's  
21 going to happen in the generic context, as well as  
22 support of the site specificity decisions that have to  
23 be made.

24 With that I will close my comments, and I  
25 appreciate again the opportunity to provide these.

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1 Thank you.

2 MR. CAMERON: Thank you. How about Chris  
3 Baum. Okay. Lydia Freyre or Chelsea Collonge and  
4 then Susan Rodriguez, and then I'm going to ask Larry  
5 Camper to close out the meeting for us. Okay. This  
6 is Aaron Boyce.

7 MR. BOYCE: How long do I have?

8 MR. CAMERON: Five minutes.

9 MR. BOYCE: Hello, my name is Aaron Boyce,  
10 and because I'm not too great at free-flow on the  
11 spot, I have prepared a little speech.

12 I currently live on an organic farm in the  
13 South Valley, where we utilize the river valleys,  
14 which we grow food. There are 50-plus people in the  
15 community, and a couple babies.

16 This is taking back unfertile land by  
17 natural processes to better our local community. By  
18 the same token, we can take the difficulties created  
19 by those on the public lands and private lands, and a  
20 lot of time find solutions that work with the  
21 long-term dynamic. Energy from the sun and wind are  
22 always more economically obtainable. They should be  
23 more seriously considered as an alternative.

24 Unfortunately, our attempts to work with  
25 nuclear technologies have not been acceptable. Dealing

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1 with uranium mining has led to misinformation, mis-  
2 documentation and false promises for restoration from  
3 the URI and the HRI, and this isn't acceptable.

4 We voice our disgust for such practices in  
5 this limited forum, primarily hidden from the broader  
6 public eye. We must go beyond our circle of  
7 compassionate thinkers to gain support for the larger  
8 community, to support the skepticism for these mining  
9 methods.

10 The unaware housewife, the  
11 behavioral-conscious college student, all of these  
12 must be pulled into awareness of these matters.

13 I feel our concerns are not taken  
14 seriously by these monolithic beings, with an  
15 unlikelihood to walk away from a profit at their  
16 convenience, and an inconvenience to future  
17 generations.

18 We are sweetly swayed to open up land and  
19 community to heavy mining and destruction of our land  
20 in exchange for temporal monetary benefits. Yet, it's  
21 all a ruse, a dangled carrot, to be ripped away at the  
22 last moment of truth. The aftermath is evident. The  
23 land itself has been stripped. And those who lost  
24 their connections to Mother Earth have suffered most.

25 We cannot permit our spiritual connection and our

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1 sense of respect for our heritage to be so easily  
2 exploited by money-making ploys, and leads to  
3 destruction of our culture.

4 This is not sustainable, and it's costly  
5 for those nuclear programs, which will never truly be  
6 in the hands of the people, and will always have toxic  
7 remnants that have no way to be safely disposed of.

8 It is truly heresy to even consider  
9 allowing this trade of fertile soil and ancient  
10 culture for a quick fix to poverty, or other problems  
11 which have been caused by the same governing bodies  
12 which, of course, is imperfect extraction technology.

13 I'm not from this land, and yet I respect  
14 it enough to take a stand and fight for its  
15 preservation. I gain nothing but self-respect from my  
16 involvement. Yet who -- if those were connected to  
17 these sacred regions by Earth, having unspoken  
18 responsibility to uphold sovereign sanctuary --  
19 sanctity.

20 Many of you who are here, have put your  
21 energy into the Earth and understand these cycles, and  
22 know the life in prosperity that you sacrifice by  
23 accepting these technologies. There is no monetary  
24 satisfaction, however compensated, for what you give  
25 up today.

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1           Your ancestors suffered much for this  
2 land. Preserve it for the next generations.

3           I'm going to talk less. Thank you.

4           MR. CAMERON: Thank you. Susan Rodriguez.

5           MS. RODRIGUEZ: Hello, my name is Susan  
6 Choplin Rodriguez. I have been here for 20 years. I'm  
7 married to a man from Colombia, and I work with Native  
8 Americans here. I'm not Native American. I'm from  
9 the East Coast. You get my accent right away, what  
10 part of the East Coast I'm from. I was born in  
11 Manhattan.

12           I lived in Africa for a year with my  
13 husband, part of the AID EIS study, an impact study.  
14 They wanted an AID and a private company hired someone  
15 to build, wanted to know whether it was feasible to  
16 build an electric plant on the river, the Gambia  
17 River. And it was very interesting, because the  
18 people there -- I was with the Americans, and they  
19 were paid to honestly see how that would affect the  
20 people.

21           And after one year, it turned out that it  
22 would flood areas, and cause damage to the crops that  
23 the people were dependent upon, and it would cause  
24 mosquitoes to come in there and cause serious  
25 blindness. So after a year they said, no, we don't

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1 want to do this. But the three companies involved  
2 finally, I heard later, did get the money, and I don't  
3 know if they actually built it. They were looking for  
4 funding through Germany, and the Germans more willing  
5 to give it to them.

6 So I have an idea what an impact study,  
7 environmental impact study is, including the kind of  
8 environmental study, impact study we wanted to have in  
9 the petroglyph area, here in Albuquerque, which was  
10 never done. It was an old one. But it took us so  
11 many years just to get to the point where they were  
12 finally going to build it. And they used the old one,  
13 and we felt that was very unfair.

14 Presently, I don't support nuclear energy  
15 in terms of giving us light, which is very important,  
16 because it's not a clean energy, because it does  
17 pollute, and it causes the punishing of next  
18 generations past our lifetime. And that kind of  
19 pollution is really wrong. I mean, when you drop a  
20 bomb on people, it's a crime.

21 It's also -- well, the type of energy I  
22 support is solar energy and wind energy, and I know we  
23 can't harness, you can't touch the sun, but there are  
24 companies that can sell the solar panels, and there  
25 are people at Pickins who own or use a lot of these

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1 wind machines. And so that's why he's pushing it.  
2 It's definitely profit motivated. I know in this  
3 country that's the way things work.

4 But it's going to harm people, and we know  
5 that the harm's already done to the Natives, the  
6 people in Crownpoint.

7 I understand that the people haven't been  
8 able to drink the water, that they're bringing water  
9 in there. It doesn't get on the news. Someone told  
10 me that that's what's going on, and I understand it  
11 has to do with the contamination there.

12 My husband works up in Santa Fe area, and  
13 I've over into the Pecos and I've seen the skull and  
14 crossbones on the roads and the forest area that we  
15 couldn't go into because of contamination.

16 We have a little piece of land near Ramah,  
17 and we have to go through Grants, and just north of  
18 Grants, I saw the tailing ponds and all of that  
19 contamination there.

20 So, this is serious business. I've seen  
21 it, and I'm very much against this type of energy.

22 The other thing I saw in the New York  
23 Times, July of this year, there was a very serious  
24 nuclear accident in the Rhone Valley where I think up  
25 to or more than a hundred times the amount of

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1 radiation, and there's two rivers there.

2 So I don't expect you guys want to make  
3 money, or drink water from that area, from the Rhone  
4 Valley, because the water there has been contaminated  
5 seriously. And you may want to look it up, Google it,  
6 go to nuclear accidents. And some people heard about  
7 it. It was in the Times.

8 There are a number of points, which I'm  
9 sure you already got. Before I get into that, I want  
10 to say that there should be an extension, a 180-day  
11 extension for the comment period. Not all of us  
12 listen and know this is going on. Have the time to  
13 come in and the more public comment you have, the less  
14 likely people are going to say that you're not doing  
15 it right, and you certainly don't want to be accused  
16 of that.

17 MR. CAMERON: Can you summarize the rest  
18 for us?

19 MS. RODRIGUEZ: Well, there are a number  
20 of points. I'm not a scientist, I don't pretend to  
21 know all of this, but I'm very much leery of this type  
22 of mining, and I don't think you should be  
23 contaminating the aquifer. People are depending on  
24 that water for drinking. That is just wrong.

25 Thank you.

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1 MR. CAMERON: Thank you. I want to thank  
2 all of you who are still here, and I have to thank  
3 Beverly, she's just done an incredible job. Of  
4 course, we will have to read what she's typed, but  
5 that's amazing.

6 Anyway, Larry.

7 MR. CAMPER: Well, thanks for staying so  
8 long, I appreciate that.

9 We've heard a lot of comments tonight, all  
10 of them are really with sincerity, I'm sure they were  
11 heart-felt, and we appreciate all of the comments.

12 We've heard some specific comments about  
13 the GEIS, that we can go back and take a look at in  
14 trying to further refine it and improve it.

15 Usually at this time of night what I try  
16 to do is if I heard anything that I feel warrants  
17 clarification for the record, so there's no confusion,  
18 I'll try to cite it.

19 There were two or three things that I did  
20 hear. We're not promoting the use of ISR, we're not  
21 promoting the use of uranium recovery. We are  
22 regulating its use, and the GEIS is intending to do  
23 that.

24 The request for extension 180 days, we've  
25 heard that, and we've heard it several times. I

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1 surely will take that into consideration.

2 At one point in the evening, some members  
3 in the audience were mentioning about the number of  
4 applications we had before us for nuclear power plant  
5 licenses. There currently are 9. The number 30 has  
6 been talked about over the next couple of years.  
7 Nobody's told us. Currently, there's 9.

8 The use of oxygen and sodium bicarbonate,  
9 the chemicals, we have no awareness of companies that  
10 use chemicals. They've moved away from that  
11 technology because of the cost and the management of  
12 the chemicals, so the use of i.e., sodium bicarbonate,  
13 in the current trend in that technology.

14 So, I think with that, I will stop.  
15 Again, we appreciate your comments, and we want to  
16 thank you for having us here in Albuquerque. It's  
17 been a pleasure being in New Mexico this week, and we  
18 appreciate all of your concern. Thanks for coming  
19 out.

20 (The above public hearing was concluded at  
21 10:54 p.m.)

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