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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING FOR PUBLIC
COMMENT ON THE DRAFT GENERIC
ENVIRONMENTAL IMPACT STATEMENT
FOR IN-SITU LEACH URANIUM
MILLING FACILITIES

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Tuesday, September 23, 2008

Best Western Tower West Hotel
109 North Highway 14-16
Gillette, Wyoming

The meeting convened at 7:00 p.m.

PANEL MEMBERS:

FRANCIS X. "CHIP" CAMERON, Facilitator
PATRICE BUBAR, Deputy Director, Division of
Waste Management and Environmental Protection
ALAN BJORNSEN, Project Manager, Environmental
Review Branch
GREGORY F. SUBER, Chief, Environmental Review
Branch

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JOHN HULL, Office of General Counsel

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MR. CAMERON: Good evening, everybody.

My name is Chip Cameron, and I work for the executive director for operations at the Nuclear Regulatory Commission, which we'll be referring to tonight as the NRC. And I'd just like to welcome you to the meeting tonight.

And it's my pleasure to serve as the meeting facilitator tonight, and in that role I'll try to help all of you to have a productive meeting tonight. And I just want to go over a few things about meeting process: first of all, the format for the meeting; second of all, some simple ground rules to make sure that we do have a productive meeting; and finally, I'd like to introduce the NRC staff to you.

In terms of the format for the meeting, it's -- I always like to describe it as a two-part meeting. The first part of the meeting is going to be an opportunity for the NRC to give you some information about the generic environmental impact statement on uranium milling. And there'll be a couple of NRC presentations on that. And they're going to tell you what some of the preliminary

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1 findings are in the draft, and also how it might be
2 used when we get any site-specific license
3 applications; and most importantly perhaps, how to
4 influence the final product with your comments and
5 your participation.

6 After we're done with the NRC
7 presentation, we'll go out to you for some questions
8 on the NRC process. And then we're going to go to
9 the second part of the meeting, which is an
10 opportunity for the NRC to listen to all of you,
11 what your advice, your recommendations, your
12 concerns might be with this draft generic
13 environmental impact statement.

14 And the staff is going to tell you that
15 they're taking written comments on these issues, but
16 we wanted to be here tonight to talk to you in
17 person about the draft GEIS. So we're looking
18 forward to your comments, and anything that you say
19 tonight will have the same weight as a written
20 comment. And feel free to amplify on anything that
21 you say tonight with a written comment. Or you may
22 hear something that the NRC says or someone in the
23 audience says that will prompt you to submit a
24 written comment to the NRC.

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1 In terms of ground rules, these are real
2 simple. I would just first ask you to wait until
3 the two NRC speakers are done with their
4 presentations before we go to questions. And that
5 will allow us to get all of the information out to
6 you before we go to questions.

7 And if you do have a question, just
8 signal me and I'll bring you this cordless
9 microphone. And if you could just introduce
10 yourself to us and ask your question, and we'll do
11 our best to answer that question.

12 I would also ask that only one person
13 speak at a time, not only so that we can give our
14 full attention to whomever has the microphone at the
15 moment, but also so that we could get what I call a
16 clean transcript. We have Marcene Ness with us,
17 who's taking the transcript, and that will be the
18 NRC's record of the meeting, and it will be your
19 record of the meeting. It is publicly available.

20 When we go to the public comment part of
21 the meeting, we've asked you to fill out a yellow
22 card out there if you wish to speak. And I'll call
23 your name, and if you could just come up here to the
24 podium and talk to us, and we'll be listening. And

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1 I would ask that everybody try to be brief in their
2 comments, so that we can make sure that we hear from
3 everybody who wants to talk tonight. I don't think
4 we're going to have any problems, because we don't
5 have 30 or 40 people who want to speak, but I would
6 just ask you to try to be brief. I usually set a
7 five-minute guideline for comments. Usually that's
8 enough time for people to summarize, but it's not a
9 drop-dead type of rule, so if you go over, that's
10 fine. But when we get into the eight-minute range
11 or so, I'll just have to ask you to sum up. We know
12 that you spent a lot of preparing these comments,
13 and so we want to try to hear them all the way
14 through.

15 And finally I would just ask you to
16 extend courtesy to everyone here tonight. You may
17 hear opinions tonight that differ from your own, but
18 let's just respect the person who is giving that
19 particular opinion.

20 Let me introduce the NRC staff to you.
21 We're first of all going to hear from Patrice
22 "Patty" Bubar. And Patty is the deputy director of
23 the Division of Waste Management and Environmental
24 Protection at the NRC in this area, and she's also

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1 our senior NRC official here tonight. She's going
2 to give you a brief introduction to the NRC and the
3 draft GEIS.

4 And then after Patty, we're going to go
5 to Alan Bjornsen. And Alan is the project manager
6 on the preparation of this draft Generic
7 environmental impact statement. And he's going to
8 give you all the details on it, why the NRC decided
9 to do it, the methodology, the preliminary findings.

10 And then we'll go on to you for questions.

11 I want to introduce the other NRC staff
12 that are here tonight. Greg Suber. Greg is the
13 branch chief of the Environmental Branch that's
14 preparing the draft environmental impact statement.

15 We brought -- John Hull is here with us.
16 He's one of our senior attorneys in our Office of
17 General Counsel.

18 We have Ron Linton. And Ron is a
19 licensing expert. He's the one who reviews the
20 site-specific license applications.

21 We have Irene Yu, who is going to be a
22 project manager for the environmental reviews on any
23 site-specific applications that we get.

24 And we have two expert consultants with

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1 us. This is Patrick LaPlante from our Center for
2 Nuclear Waste Regulatory Analyses. And we have
3 Edgar Huber from -- it's SRA? Is that --

4 MR. HUBER: SRI.

5 MR. CAMERON: SRI? And Edgar is a
6 historical and cultural resources expert for us.

7 And with that, Patty, could we start
8 off?

9 MS. BUBAR: Yes. I'm going to try to
10 speak from the podium.

11 MR. CAMERON: Okay. Good. Good.

12 MS. BUBAR: Good evening, everyone.
13 Does this sound like it's working? Okay.

14 Well, thank you very much for being
15 here. We really appreciate the opportunity to hear
16 from folks. I'm -- as Chip has said, I'm Patty
17 Bubar, and I'm the deputy director in the Division
18 of Waste Management and Environmental Protection at
19 the Nuclear Regulatory Commission, working out of
20 Rockville, Maryland. And that division has many
21 responsibilities. Amongst them is licensing of
22 uranium recovery facilities, as well as
23 decommissioning of Title 1 and Title 2 oversight
24 sites under the Uranium Mill Tailings Act. The

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1 division also decommissions other complex sites,
2 including those that were uranium and thorium
3 processing sites. We also work with the Department
4 of Energy on legacy Cold War sites, on a waste
5 classification topic called Waste Incidental to
6 Reprocessing. But tonight we'd like to focus on
7 activities that are related to uranium recovery
8 licensing, and most specifically the environmental
9 review activities.

10 We have the regulatory oversight for
11 uranium recovery, and that includes licensing and
12 then subsequent coordination and inspection
13 activities as well. And those inspection activities
14 take place through the NRC regional offices. The
15 Wyoming activities are handled through our Region IV
16 office, which is in Arlington, Texas.

17 Next slide, please. What I would like
18 to try to do is to describe to you what we have been
19 doing to assess the environmental impacts associated
20 with uranium recovery with regards to in-situ
21 recovery of uranium. We want to listen to your
22 question and comments, and we want to have dialog
23 with you about the generic environmental impact
24 statement, or the GEIS.

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1 This is the second in a series of public
2 meetings. We had scoping meetings last August and
3 September, or August through September, as we were
4 developing the GEIS. And the scoping meetings were
5 held to assist us with determining what needed to be
6 included in the GEIS. This particular meeting
7 tonight is the second that we've had in Wyoming, and
8 we have another meeting on Thursday night in
9 Wyoming. We held similar meetings in New Mexico and
10 South Dakota. And so there will be a total of eight
11 public meetings on this particular document, the
12 GEIS.

13 This public meeting is designed to seek
14 more public involvement in the process, so we hope
15 that we're successful in that this evening.

16 Next slide. We're going to cover a
17 number of things tonight. I'm going to talk briefly
18 about our roles and responsibilities as a regulator,
19 and the emphasis will be on responsibilities as it
20 relates to the National Environmental Policy Act, or
21 the NEPA law. And the NEPA process is a process of
22 disclosure, and it is clearly designed to be a
23 public process.

24 The fundamental idea is when a federal

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1 agency is undertaking what is taking a major federal
2 action -- in this case that would be the potential
3 licensing of a uranium facility -- it is subjected
4 to the laws under NEPA, as directed by the Council
5 on Environmental Quality, CEQ.

6 We're going to cover the draft GEIS,
7 what's its purpose is, what was the approach, and,
8 as Chip had mentioned, Alan Bjornsen of our staff
9 will talk following me, giving you some of the
10 specific details. Alan will discuss with you the
11 findings that are reported in the draft GEIS. We
12 will talk with you about the schedule, what the next
13 steps are, and then, of course, turn to public
14 comment.

15 Next slide, please. The NRC is an
16 independent federal regulatory agency. What does
17 that mean? What do I mean by that? Well, it means
18 we are not part of the executive branch. Rather, we
19 report directly to the oversight committees of the
20 United States Congress.

21 The NRC was created to strictly carry
22 out regulatory responsibilities of a public health
23 and safety nature. Unlike the old Atomic Energy
24 Commission or the Atomic Energy Agency, which used

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1 to have a number of responsibilities, some which
2 were public health and safety, but not all, the AEC
3 was -- or the Atomic Energy Commission was
4 responsible for ensuring that the nation procured
5 the necessary uranium that we needed back in the
6 '40s, '50s, and '60s, first for national defense
7 during the Second World War, and then subsequently
8 during the Cold War.

9 We have no responsibilities at the NRC
10 of that nature. We are strictly regulatory. We are
11 focused on health and safety. Our mission is to
12 protect public health and safety and the environment
13 and to promote common defense and security.

14 We have responsibility, along with our
15 agreement states. And an agreement state is a state
16 that we have imparted certain of our regulatory
17 authority to via an agreement signed by the
18 governor. So there are many agreement states that
19 carry out this regulatory responsibility for us.
20 And we have responsibility for licensing radioactive
21 materials covered by the Atomic Energy Act,
22 including uranium recovery.

23 And openness and soliciting comments,
24 like we are doing tonight, is one of the core values

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1 of the agency. It's a very important part of our
2 process. We do everything seeking input from the
3 public and ensuring that the public is aware of what
4 we are doing.

5 Our regulations covering environmental
6 reviews are set forth in the Code of Federal
7 Regulations, known as -- that's CFR, 10 CFR
8 specifically, and you can see it in the slide, 10
9 CFR, Part 51. That is where you will find our
10 regulatory process for carrying out environmental
11 reviews. And these regulations are built around
12 guidance from the Council on Environmental Quality.

13 This regulation is for insurance that is -- that
14 the NEPA laws are satisfied.

15 Next slide, please. Regarding the
16 licensing review process itself, a license is
17 submitted to our agency for review. In this case,
18 we would be talking about an application for uranium
19 recovery. The decision to grant or deny a license
20 is based upon satisfying the regulatory requirements
21 that we have for safety and for protection of the
22 environment. There is no foregone conclusion that a
23 license will be granted or that it will be denied.
24 Rather, it is a decision based upon a review of the

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1 merits of that particular application.

2 We do this review in two parts. The
3 first is called an acceptance review. And we put
4 together a team of technical people, such as health
5 physicists, engineers, groundwater hydrologists, and
6 we subject the application to a 90-day acceptance
7 review to determine if the application is of such
8 quality that it warrants processing with the --
9 proceeding -- I'm sorry -- proceeding with the full-
10 blown comprehensive technical review. So that
11 acceptance review is a very rigorous part of the
12 process.

13 Then, if accepted, we conduct a detailed
14 technical review, and that technical review has two
15 parts: a site-specific safety review and a site-
16 specific environmental review. And both parts are
17 required. They are complementary. We cannot issue
18 a license until both of these reviews are completed.

19 In the case of uranium recovery it takes about two
20 years to complete both components of the review.

21 Next slide, please. Regarding the
22 environmental review process for in-situ recovery of
23 uranium, we have developed the generic environmental
24 impact statement. The word "generic" is an NRC

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1 term. More commonly or typically in NEPA space, it
2 is referred to as a programmatic environmental
3 impact statement. It is one and the same, but we
4 call it a generic environmental impact statement.

5 And fundamentally, the idea in this
6 programmatic or generic environmental impact
7 statement is to look at all the technical issues or
8 all the common environmental consequence issues for
9 a particular modality, and then we will do a site-
10 specific analysis for issues that are particularly
11 unique to a given site.

12 The GEIS provides a foundation for
13 review of numerous in-situ recovery applications by
14 examining the impact of a broad set of actions
15 related by subject matter and geography. And Alan
16 will go through that in much more detail with you.

17 Next slide. In preparing for this
18 meeting, I went back and reviewed the transcripts
19 from the scoping meetings that we had this time last
20 year, and it struck me that there were certain
21 issues that surfaced again and again in comments in
22 all of these meetings. And I thought it was
23 worthwhile to take a few minutes to try to clarify
24 some of those issues.

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1 The first is the use of the generic
2 environmental impact statement. Frankly, I almost
3 wish that we did not use the term "generic," we used
4 the term "programmatic," because if we used the term
5 "programmatic," it's more appropriate. Generic
6 issues -- or the word "generic" causes confusion,
7 because folks will say, Well, this isn't generic;
8 sites are different. And you're absolute right, but
9 there are components of in-situ recovery that are
10 common no matter where the site is. So the GEIS is
11 a document we are developing consistent with NEPA
12 requirements or CEQ, Council on Environmental
13 Quality, guidelines. And the document will be used
14 as a first step. It is a first-step bounding
15 document that we will use in reviewing the
16 applications that we receive for in-situ recovery
17 here in Wyoming or elsewhere in the United States.

18 And at the same time that we are
19 developing the GEIS, I would draw your attention to
20 the box at the left called the, "Applicant's
21 Environmental Report." The applicant is required to
22 collect data specific to the site they want a
23 license for. They have done analyses specific to
24 that particular site. We evaluate that data. We

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1 verify the findings. We go to the site. We conduct
2 inspections. We collect data ourselves. We conduct
3 an examination of that environmental report. It's
4 another cornerstone in the ultimate conduct of a
5 site-specific review.

6 The box on the right says, "Other
7 Relevant Information and Data." I mentioned a few
8 moments ago that an important part of our review
9 process is the safety review. Well, that box
10 represents the safety review. At the same time we
11 are reviewing the environmental report, we are also
12 looking at the safety information that the applicant
13 has provided. It's a broad spectrum of information
14 that is required and is set forth in 10 CFR, Part
15 40. Part 40 identifies the safety requirements for
16 uranium recovery, whether it be conventional milling
17 or in-situ recovery. And then last but not least,
18 as shown on the slide, we conduct a site-specific
19 environmental review.

20 All this information -- the bounding
21 information in the GEIS, the environmental report,
22 and the safety review -- all come together as part
23 of an individual environmental review for each and
24 every site for which an application is presented to

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1 us.

2 In NEPA space, the environmental review
3 is called an environmental assessment. When you
4 step through the process of conducting an
5 environmental assessment, you can reach one of two
6 conclusions about a given site. Either you reach a
7 finding called a FONSI, or a finding of no
8 significant impact; or you determine that you must
9 conduct a full-blown site-specific environmental
10 impact statement for that particular site. We don't
11 know the outcome until we work our way through that
12 process.

13 The site-specific draft environmental
14 assessments will be issued for public comment, and
15 this will allow us -- or will allow -- or allow us
16 to maximize opportunities for citizens like you to
17 be involved.

18 Should there be a determination that
19 there needs to be a full-blown site-specific
20 environmental impact statement, then the process
21 starts all over again. There would be more scoping
22 meetings, a new EIS would be developed, and further
23 public involvement would take place.

24 Next slide, please. The next issue that

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1 kept coming up, both in the scoping meetings as well
2 as in some of the previous meetings associated with
3 the GEIS, is drinking water.

4 We understand drinking water is very
5 precious in the United States and particularly in
6 the western United States. I can readily understand
7 the questions and the concerns that have been
8 raised, and I thought it was important to point out
9 for in-situ recovery for uranium to take place, it
10 can only take place in an aquifer or a portion of an
11 aquifer that has been exempted by the Environmental
12 Protection Agency. And I cite the regulation there,
13 40 CFR, Part 146.4, which comes from the EPA's
14 Underground Injection Control Program Regulations.

15 I think this is a very important point
16 to understand. This type of activity can only take
17 place in an exempted aquifer. So what is an
18 exempted aquifer? Well, as the slide depicts, it is
19 an aquifer that does not currently serve as a source
20 of drinking water and cannot now, or will not in the
21 future, serve as a source of drinking water. Or it
22 contains too many total dissolved solids. And the
23 slide contains the numbers related to total
24 dissolved solids. It has to meet at least one of

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1 these criteria to be exempted by the EPA.

2 Next slide. Another question or issue
3 that came up a lot was restoration. And a point I
4 would make regarding the aquifer: Once in-situ
5 recovery is authorized, should it be, we have
6 regulations, as do the agreement states, that say
7 even though it is an exempted aquifer, it has to be
8 restored. It has to be restored to baseline, which
9 means what it was prior to the uranium recovery
10 activity, to maximum concentration limits that align
11 with the Safe Drinking Water Act or to an alternate
12 concentration limit.

13 And what this slide shows you -- and
14 hopefully you can see it -- is the status of two
15 pilots at the bottom. And there were a number of
16 other pilots that were done. They were on a smaller
17 scale, about four or five acres, fully remediated
18 through an approved plan. But what you see is the
19 three at the top; those three are commercial sites.

20 And this information comes from completed and
21 approved remediation or restoration plans for those
22 sites.

23 What's in the fourth column on the slide
24 is entitled, "Percent of Constituents Returned to

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1 Baseline." You see two numbers. The first one, for
2 example, is 23 out of 34. What that means is that
3 23 out of 34 constituents were returned to baseline
4 conditions. The remainder were remediated or
5 restored to an approved standard, which in this case
6 was baseline values plus a pre-mining class of use
7 standard. And that pre-mining class of use is a
8 state parameter, which does vary from state to
9 state.

10 So what you see is that remediation or
11 restoration has occurred either to baseline values
12 or to an alternate concentration limit for the three
13 commercial sites cited in the slide. So hopefully
14 it gives you some idea of what restoration has taken
15 place, and we'd be -- would welcome any further
16 questions you have on that particular topic.

17 Next slide. Another topic that has come
18 up in previous meetings has been government-to-
19 government meetings. And what this slide depicts
20 for you is some of the government-to-government
21 meetings that we are having this week. We've been
22 kind of talking with some of you before. We've
23 actually been traversing the state since Sunday
24 night, really trying to take advantage as much as we

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1 can of being here, meeting with some of the tribal
2 government folks as well as other federal government
3 agencies, state agencies, in a -- hopefully in an
4 opportunity to help them provide us with as much
5 information as possible to help us continue to do
6 robust analysis. So as we finalize the GEIS, if
7 there's any information out there that can help us
8 complete the analysis, then we want to do that. But
9 also, most importantly too, if -- when we get into
10 the site-specific analysis, it will be helpful to
11 have information provided to us from some of these
12 other agencies that we've been meeting with. So
13 trying to take advantage of the time of being here,
14 establishing relationships with some of these folks.

15 Next slide. So in summary, why are we
16 here tonight? In a nutshell, we would like to
17 provide more information to you about the contents
18 of the generic environmental impact statement. Alan
19 Bjornsen will give you those details in a moment.
20 But more importantly, we want to continue the
21 listening process and have more public dialog about
22 the contents of the GEIS. And, of course, we'd like
23 to answer any questions that you have.

24 I want to conclude with just one final

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1 thought. We're going to move into comments later on
2 in the meeting, and all comments are invited.
3 Comments, we know, will range all over the board,
4 and we will listen to all of them. And as Chip had
5 mentioned, we are recording all of them. But I
6 encourage you to focus your comments, to the extent
7 that you can and feel comfortable, on the contents
8 of the GEIS. And the reason I emphasize that is to
9 maximize your opportunity to influence the document
10 as we proceed to finalize the document.

11 So thank you very much for the time.
12 And I'll turn it over to Alan now, but I look
13 forward to continuing throughout the evening hearing
14 from you and being able to answer any questions.
15 Thank you.

16 MR. BJORNSEN: Thank you, Patty.

17 Good evening, ladies and gentlemen. My
18 name is Alan Bjornsen, and I'm an environmental
19 project manager for the Nuclear Regulatory
20 Commission, and I am the assistant or deputy project
21 manager for the generic environmental impact
22 statement. And for the next few moments, I'd like
23 to talk to you about the generic environmental
24 impact statement, the purpose of it, and, you know,

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1 why the NRC chose to develop such a document.

2 Next slide, please. What I'd like to do
3 tonight is present an overview of the in-situ leach
4 process; again, the need for a generic environmental
5 impact statement; the purpose of that document; the
6 scope or content of the document; and the approach
7 that the NRC took in developing that document; and
8 some general conclusions that we arrived at in that
9 document; and lastly, how you can submit your
10 comments to the NRC during this public review
11 process.

12 But before I go any further, I just want
13 to make it clear that even though it's a draft
14 document, it's a draft generic environmental impact
15 statement, doesn't mean that it's incomplete. It is
16 a complete document. And the reason we call it
17 draft is because you, as the general public, have
18 not had a chance to review it yet. Once the
19 comments are in and we apply those comments to the
20 draft and issue a final, then it will become a final
21 document. But what you have, what you have seen, is
22 a complete document.

23 Next slide. In-situ leach is different
24 than conventional mining. It does not involve open

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1 pits or underground workings. It does not involve
2 crushing or grinding of material. However, it does
3 involve increasing the concentration of uranium in
4 an aquifer and other potentially toxic heavy metals,
5 and these require remediation, once the process is
6 complete, it requires restoration.

7 Basically there are three components to
8 ISL, to in-situ leach. That's the -- number one is
9 the mobilization of the uranium in the aquifer;
10 secondly, it's processing that uranium on the
11 surface; and thirdly, it's the restoration of the
12 aquifer once the uranium is depleted.

13 Next slide. This is a portion of a well
14 field in Wyoming. Happens to be the Smith Ranch
15 facility. This is what you see on the surface. The
16 white objects you see are the well covers. The
17 building you see in the background is called a
18 header house. That's used to direct flow from the
19 pipes that you don't see here, that are underground,
20 that connect all the wells. And these pipes carry
21 what's call a lixiviant, and that's a -- that's
22 water that's been fortified with oxygen and carbon
23 dioxide. Sometimes it's also -- you also use
24 bicarbonate of soda. These pipes also have the

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1 potential for leaks, and hence remediation is
2 involved.

3 Okay. Notice the prong-horned antelope
4 that we had pose this picture, just to give you an
5 idea of size. I think you can see them. They're by
6 the first canister there.

7 Next slide, please. This is what you
8 don't see at an ISL facility. If you took a cross-
9 section and looked down into the ground, this is
10 what you would find out -- you would find.
11 Basically it's a simplified diagram. The aquifer
12 that is being used is in yellow, and the uranium ore
13 body is in gray. The aquifer is basically confined
14 by two layers: the layer above, which has a much
15 lower permeability; and a layer below, which is also
16 of low permeability. So basically it confines that
17 aquifer.

18 The injection wells are the ones that
19 have the blue -- is the one that has the blue
20 arrows. And that's where the fluid, the fortified
21 water with oxygen and carbon dioxide is injected
22 into the aquifer. The well that shows the red
23 arrows is the recovery well, drawing the uranium
24 that has been mobilized or dissolved into the water,

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1 bringing it to the surface.

2 There are also monitoring wells that you
3 see in this picture. Monitoring wells are installed
4 above the confining layer. Below the confining
5 layer -- it's not shown on this particular diagram,
6 but there are monitoring wells that are drilled
7 below the confining layer of the aquifer that's
8 being milled or mined. And then there are wells
9 that are drilled into the aquifer at distances
10 around the actual activity itself.

11 Next slide. This slide here is an
12 aerial view. If you were looking down on the
13 facility, this is what you would see. Of course,
14 this is graphically represented. But in the central
15 area, you can see this is a -- what's called a five-
16 spot recovery. So you have the recovery well in the
17 middle of four injection wells. And the recovery
18 well draws the liquid from the injection wells
19 toward it and then to the surface.

20 Monitoring wells ring the entire well
21 field. And depending on the permeability and the
22 size of the well field and the conditions in the
23 ground, these wells are spaced anywhere from 400 to
24 500 feet apart. What they're there for is to detect

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1 any excursion or any uranium that has been dissolved
2 that has escaped the well field itself. It's to
3 detect if it's going toward another area that it's
4 not supposed to. So it's the first line of defense,
5 if you will.

6 It's -- these monitoring wells are also,
7 again, like I said before, they're drilled into the
8 layers above the aquifer and also below the aquifer.

9 So there's multiple monitoring wells around an ISL
10 facility.

11 Next slide. This is the same facility
12 that you saw before, the Smith Ranch. This is the
13 main or central processing facility. This is where
14 the enriched liquid that is drawn up from the
15 aquifer with uranium in it is processed. In some
16 cases, the central facility is located at a distance
17 from the well fields, though there are intermediate
18 facilities that would carry the uranium liquid to a
19 central processing facility. But in this case,
20 there are pipes that go right to the building.

21 Next slide. Basically, what the NRC
22 license is is the life cycle of a facility from
23 construction to decommissioning. Construction would
24 include wells, piping, and all the surface

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1 facilities. Operation includes injection,
2 recovering, processing. Eventually the yellow cake
3 is the final product at a central processing
4 facility.

5 Restoration follows the uranium mining.

6 Once it's no longer economical to extract the
7 uranium from the aquifer, from the ore body,
8 restoration begins. And the operation is very
9 similar to that of an operating well, except that
10 you're not using a lixiviant anymore; you're using
11 clean water.

12 And then finally, decommissioning is
13 really deconstruction. It's just taking down the
14 facilities that were put up during construction,
15 sealing off wells, reclaiming the land, and
16 demolishing all the buildings.

17 Next slide. Along with the NRC, there
18 are other multiple and overlapping federal and state
19 agency reviews, permits, and approvals that are
20 required. Patty talked earlier about an aquifer
21 exemption that's given by the EPA. That means that
22 that portion of the aquifer, or the aquifer itself,
23 depending on the conditions there, are not suitable
24 for drinking. It's not a potable aquifer. And

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1 that's primarily due to the presence of the uranium.

2 Next slide, Need for the GEIS. By
3 October 2011, based on a number of letters of intent
4 that were received by the NRC from the industry,
5 we're expecting 14 applications for new ISL
6 facilities. In addition to that, there are eight
7 potential applications for either restarts of
8 existing facilities that have been laying dormant
9 for a while, or expansions of existing facilities.
10 This is the reason that the Commission has decided
11 to do a programmatic or generic environmental impact
12 statement. It will allow the staff to focus on the
13 truly unique aspects of individual sites in concert
14 with this document. It will allow a consistent
15 approach to all ISL applications in the
16 environmental review process.

17 Next slide. Because the ISL process is
18 relatively standardized throughout the U.S., no
19 matter where you would install it there is
20 commonality in the types of environmental impacts
21 that could be expected. And this document will help
22 us prepare for site-specific reviews.

23 Next slide. Again, the GEIS is intended
24 to address the life cycle of ISL facilities. It

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1 addresses the activities that are conducted by a
2 licensee under the conditions of the license, and
3 also permits that are granted by, not just the NRC,
4 but the EPA and other agencies as well.

5 Next slide. This is the four-step
6 approach that was taken but the NRC in the
7 development of the generic environmental impact
8 statement. And I will go through each one.

9 The first step -- next slide. The first
10 step in the process was to decide on how to identify
11 specific uranium milling regions. Well, to
12 accomplish this, we looked at a number of factors.
13 First of all, we had to look at the states that the
14 NRC has regulatory authority in. These would be the
15 non-agreement states. We looked at the locations of
16 current and past milling activity. We looked at the
17 locations for potential milling activity. And we
18 also looked at locations where uranium
19 concentrations were highest in the west. And from
20 this, four milling regions were identified. These
21 are detailed in Chapter 1 of the generic
22 environmental impact statement.

23 Next slide. Okay. This map shows the
24 four milling regions. We have two in Wyoming. We

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1 call them Wyoming West, Wyoming East. There is one
2 that kind of straddles Wyoming, South Dakota, and
3 Nebraska. And then the fourth milling region is in
4 the northwest corner of New Mexico.

5 Next slide. This is an enlargement of
6 the Wyoming East region, the region we're talking
7 about here tonight. The triangles indicate both
8 past and present -- actually past, present and
9 future, what we know -- ISL facilities to be
10 located.

11 Next slide. Next we will describe the
12 process. The process -- the ISL process, which I
13 briefly described before, is described in much more
14 detail in Chapter 2 of the generic environmental
15 impact statement. It addresses the full life cycle
16 of the facility, all four phases. In addition, it
17 talks about financial assurance, which means that
18 there is money set aside -- once the uranium has
19 been fully extracted from the site, there's enough
20 money to reclaim that site back to its preexisting
21 site condition. Also, Chapter 2 talks about the
22 history of ISL facilities in the United States.

23 Next we describe the environment, and we
24 describe the environment in each of the four milling

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1 regions. To use that -- to do that, we have what we
2 call a NUREG-1748, which is the guidance document
3 that the NRC uses for environmental reviews of ISL
4 facilities. The intent is to describe the baseline
5 or existing conditions before a site is developed.
6 This is all laid out in Chapter 3 of the generic
7 environmental impact statement, and it's done for,
8 like I said, each of the four milling regions.

9 Next slide. These are the 13 resource
10 areas that were assessed in the GEIS. Again, it was
11 taken from NUREG-1748. It represents a thorough and
12 wide-ranging description of the environment for each
13 region.

14 Keep in mind that this is not site
15 specific, and this was done on a regional basis. It
16 will, again, form one of the first steps in our
17 analysis of doing a site-specific analysis when an
18 application is submitted and accepted.

19 Next slide. Fourthly, we evaluated the
20 potential environmental impacts for each of the
21 milling regions. This is done in Chapter 4. And
22 the assessment was, again, for each of the four
23 regions. It was for each phase of the life cycle of
24 an ISL facility, the four phases. And it was for

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1 each of the 13 resource areas. So this was a
2 rigorous analysis. The potential impacts were
3 categorized in terms of their significance. And
4 again, this is presented in Chapter 4 of the GEIS.
5 In addition to doing the impact analysis, the draft
6 GEIS also recognizes and describes ways to mitigate
7 these potential impacts.

8 Next slide. The significance categories
9 that we used are small, moderate, and large. They
10 represent -- we did this for each of the 13 resource
11 areas. The categorization represents a rigorous and
12 lengthy analysis, and this was done by a team of
13 experts whose sum totals hundreds of years of
14 experience. And they spent thousands of hours doing
15 this analysis to arrive at the small, moderate, and
16 large significance categories.

17 Next slide, please. Now this is the
18 same slide that you saw earlier when Patty was
19 talking about it. Basically, the end use of the
20 generic environmental impact statement is to get us
21 started on the detailed environmental review when an
22 ISL -- when a specific application comes in for
23 review. We also look at it in concert with the
24 applicant's environmental report. We look at other

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1 data. We take site visits. We send people out on
2 the site. It's just one of a series of a documents
3 that are used in developing a site-specific
4 environmental impact statement.

5 And during that process, as Patty
6 mentioned before, the -- you, as the general public,
7 will have again an opportunity to comment on that
8 document for that particular site for that
9 application. There will be a draft document for
10 review, and there may be public meetings as well.

11 Next slide. What I'd like to do now is
12 transition into the more specific aspects of the
13 Wyoming East milling region, what we found out as a
14 result of doing this analysis. The following slides
15 summarize what our subject-matter experts have
16 determined to be the impacts that can be expected on
17 a generic basis, on a general basis.

18 Next slide. And again, this is -- you
19 saw this slide earlier. It's just to give you a
20 reference point for what we're talking about.

21 Next slide. The generic environmental
22 impact statement found that four resource areas, the
23 ones that are shown here, would be the least
24 affected by an ISL facility in the Wyoming East

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1 region. If you recall from the previous -- one of
2 the previous slides, a small impact is one that is
3 either not noticeable or is so minor that it would
4 not alter the function of a particular resource.

5 Next slide. Resources shown here also
6 would minimally affect the -- would be minimally
7 affected by the development of an ISL facility. But
8 under certain situations and specific site
9 conditions, there could be a potential for a
10 moderate impact. A moderate impact, again, is one
11 that -- it is noticeable, but it doesn't upset any -
12 - the aspects of that -- or a characteristic of that
13 resource.

14 Next slide. Now, again, these resources
15 here, for the most part, would be minimally impacted
16 by an in-situ leaching facility. But under certain
17 conditions, there could be a potential for a
18 moderate or a large impact. And a large impact is
19 one that noticeably alters a facility -- alters a
20 resource and particular aspects of that resource.
21 For example, a large impact for threatened and
22 endangered species would be, if there happened to be
23 a threatened and endangered species found on the
24 site, then that is a potentially large impact.

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1 When we recognize that there is a
2 potential for a large impact, the NRC will focus its
3 attention on those unique aspects of that resource.

4 Next slide. Lastly, I would like to go
5 over the overall schedule of the GEIS, you know,
6 where we are now -- where we've been, where we are
7 now, and where we're going to be, and then how to
8 comment on that GEIS.

9 Next slide. We started the process last
10 July. And as Patty mentioned, we held scoping
11 meetings in August and September of last year. We
12 took the -- we gathered all those comments,
13 collected them, compiled them, analyzed them, and
14 applied them to our resources and put them into the
15 document. And in July of this year, we put out for
16 public notice the draft generic environmental impact
17 statement. We're in the public review right now,
18 which will extend until October 7. And our goal is
19 to have a final document by June of 2009, next year.

20 We're going to incorporate the comments that we
21 hear tonight, as well as the other public meetings
22 that we've attended. And any written and oral
23 comments will be treated and applied to the final
24 documents.

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1 Next slide, please. You can comment by
2 regular mail, and the address is up there. Or you
3 can comment by email. Both will be treated equally.

4 And you don't have to copy this down. We have
5 sheets that are copied; you can pick them up on the
6 way out. They're on the table in the hallway. In
7 addition, as Patty mentioned and Chip also, any
8 comments that you present orally tonight will be
9 recorded and they will be available as well on our
10 website.

11 Next slide. If you leave here tonight
12 and you decide, Oh, I should have asked that
13 question, or I should have asked this, there are two
14 individuals that you can contact. James Park, who
15 is the project manager for the GEIS is -- he'll take
16 environmental questions. And Steve Cohen is a team
17 leader in uranium recovery, and he can take any
18 questions of the safety aspects or on any hydro-geo
19 aspects that you might have. Again, you don't have
20 to copy this down; it's on a sheet of paper that you
21 can pick up on a table in the hall.

22 And next slide, and that ends my portion
23 of the presentation. And what I'd like to do is
24 turn it back over to Chip for any comments or

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1 questions that you might have regarding the
2 presentation tonight.

3 MR. CAMERON: Thank you. Thank you very
4 much, Alan. Very good.

5 And thank you, Patty.

6 Before we go to questions, there's one
7 person from the NRC that I forgot to introduce, and
8 it's David McIntyre right here. He's with -- he's a
9 senior public affairs official at NRC headquarters
10 in our Office of Public Affairs.

11 And with that, I'd like to open it up
12 for questions. Anybody have a question on the NRC
13 process or what you heard tonight? Yes, sir. And
14 please introduce yourself to us.

15 MR. JONES: My name is Jim Jones. I'm
16 from Hulett, Wyoming. We live in an area that's
17 being heavily explored at this time for uranium
18 mining. I would like to ask: How many field
19 inspectors does the NRC have in the field for the
20 western United States?

21 MR. CAMERON: And if I could just borrow
22 that back, Jim.

23 Patty, do you want to take that? And I
24 think that microphone up there does work, and I

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1 think the question is obvious. And besides the
2 number of inspectors, could you also tell everybody
3 how often they get out to inspect these facilities.

4 MS. BUBAR: Yes. I will provide an
5 answer, and then if any of my NRC colleagues want to
6 expand upon that, please feel free.

7 It's my understanding that we have two
8 inspectors out of the Arlington, Texas, office. And
9 those inspectors have the responsibility of focusing
10 on the uranium and materials activities. In fact,
11 we were with one of the inspectors today, doing an
12 unannounced inspection at one of the facilities.

13 And so they go out and do these
14 inspections on a regular frequency. And depending
15 on the performance of the licensee, that frequency
16 may be increased.

17 And so that's kind of general. Ron, did
18 you want to add anything? Because Ron would work
19 more closely with the inspectors as a licensing
20 person.

21 Sorry about the mike.

22 MR. LINTON: Yes. Patty -- is this --
23 there we go. Yes. We have uranium recovery
24 inspectors out of Region II -- out of Region IV, and

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1 they are dedicated uranium recovery inspectors.
2 This is what they do, uranium recovery inspections.
3 They don't do nuclear power plants or any other of
4 the facilities that I'm aware of.

5 And then the other issue was the
6 frequency, and the frequency will vary depending on
7 the facility itself. We have some facilities that
8 are on six-month inspections, some that are on one-
9 year inspections, and I believe some other ones that
10 are not active -- not operational -- might be on a
11 two-year cycle.

12 Again, they may not be operational, but
13 we have some that are in decommissioning; in other
14 words, there's no active operational license right
15 now, but they still do get inspected on a regular
16 frequency.

17 MR. CAMERON: Jim, do you have a
18 followup?

19 MR. JONES: Yes. Correct me if I'm
20 wrong, but I believe in your brochure this region
21 covers 19 states in the western United States?

22 MR. LINTON: Am I getting anything here?

23 MR. CAMERON: So --

24 MR. LINTON: I want to make sure that

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1 she

2 can --

3 MR. CAMERON: Yes. We need to get it on
4 the transcript. And the question from Jim was,
5 These two inspectors for 19 states, can you try to
6 put that in perspective in terms of agreement and
7 non-agreement states and all that sort of --

8 MR. LINTON: Right. The key is -- there
9 is how many facilities we have within that -- those
10 areas that you're talking about, the 19 states.
11 That might be the right number. I don't know if
12 it's 19 or 20 or 18, but it's the number of states.

13 For example, we have sites that we
14 inspect in Wyoming, sites in Nebraska. We have
15 sites also in New Mexico. You get into Colorado,
16 that's an agreement state. Texas is an agreement
17 state, has uranium recovery facilities there, but
18 they are an agreement state for 11(e)(2) byproduct
19 material, and they do their own inspections. The
20 states do their own inspections.

21 So while it is 19 states, we only have
22 facilities that we're inspecting right now in New
23 Mexico, Wyoming, Nebraska. I don't think we have
24 anything in South Dakota. I don't think we have any

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1 uranium recovery facilities in South Dakota. I
2 think that's it. So it's just covering those three
3 states for right now.

4 MR. CAMERON: Okay. Thank you. Let's
5 see if there's other questions, and Jim, if he has
6 any more. But let's go to some other people first.

7 Yes, sir.

8 MR. EVIARD: My name is Terry Eviard.
9 I'm a landowner in Crook County. First question, I
10 guess the meeting tonight is the need for the draft
11 GEIS, and I gathered by Alan's presentation what's
12 basically driving this is the number of proposed
13 requests for permits. Is that correct? Is that one
14 of the main driving factors? And if that's the
15 case, we're going to run into a bunch of them,
16 what's wrong with the current system? Why is it
17 broke?

18 MR. CAMERON: Okay. Sure. And, Patty,
19 I know you're going to go into this and also talk
20 about how it prepares us for getting there, too. Go
21 ahead, Patty.

22 MS. BUBAR: Yes. As Alan did mention in
23 his presentation, the use of a generic environmental
24 impact statement -- which is allowed under our own

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1 regulations, but certainly allowed under the Council
2 of Environmental Quality regulations -- provides
3 some efficiency in that it does the analysis on the
4 common factors, but then helps us focus our analysis
5 on the specific factors that we're going to analyze
6 in the site-specific environmental assessment. It
7 is a more efficient way of doing the environmental
8 analysis, but it doesn't cut any corners. I mean,
9 it's a way to do analysis that is allowed under the
10 regulations.

11 We don't know how many applications --
12 license applications we will specifically get, but
13 at this point, we are asking for the resources to
14 handle as many applications as we expect to come in.

15 We will only do reviews for applications that we
16 have the adequate resources to do.

17 So the generic environmental impact
18 statement provides the foundation for us to do the
19 site-specific environmental analysis. We have staff
20 who are already now -- you know, once we get a
21 license application in, will begin to do the site-
22 specific data analysis or data gathering in
23 anticipation of doing a site-specific environmental
24 assessment. But we will only to the environmental

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1 assessments for the -- we will only do those
2 consistent with the resources that we.

3 So doing the GEIS is an efficiency
4 mechanism, but we will not bite off more than we can
5 chew with the resources that we get allocated.

6 MR. CAMERON: So just to make sure
7 everybody understands that last point, if we have
8 seven applications in but we only have the resources
9 from Congress to do five, then we don't try to
10 stretch the resources and address seven; we just do
11 the thorough job on the five.

12 MS. BUBAR: That is absolutely correct.

13 And, in fact, we have to have adequate resources to
14 do an environmental and a safety review, because as
15 we both mentioned, we cannot issue a license
16 application without those two components going on.
17 So if we don't have adequate resources to do both of
18 those pieces, then we will not issue a license until
19 we have the ability to complete both of those
20 reviews.

21 MR. CAMERON: Okay. And, Terry, we'll
22 come back to you, see if you have other questions.
23 We'll see if anybody else has a question out here.

24 Yes, sir.

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1 MR. O'BRIEN: I'm Mike O'Brien. I'm the
2 chairman of the Crook County Land Use Planning and
3 Zoning Commission, and I've got a question. For the
4 individual sites, will there be an environmental
5 assessment done on each potential mining site in the
6 application, or just some sort of review?

7 MR. CAMERON: Thank you, Mike.

8 Patty?

9 MS. BUBAR: I didn't know if you wanted
10 to repeat the question or not. But, yes. There
11 will be an individual, site-specific environmental
12 assessment done for each application that is
13 received for each site. Depending on the -- if --
14 as I mentioned, if the results of that environmental
15 assessment are a finding of no significant impact
16 and the safety review is adequate, then that would
17 result in a major federal action of issuing that
18 license. But we will do an individual assessment --
19 environmental assessment for each application.

20 MR. CAMERON: Okay. Go ahead, Mike.

21 MR. O'BRIEN: Just a quick followup. In
22 the environmental assessment, there is another
23 public comment period. Correct?

24 MS. BUBAR: Yes. Each site-specific

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1 environmental assessment will be put out for public
2 comment.

3 MR. CAMERON: Okay. Thank you. Thank
4 you for that question.

5 Other questions? Yes, sir.

6 MR. HALLINAN: I am Tim Hallinan,
7 landowner in Crook County. And my question is, the
8 site-specific applications, how much area does that
9 cover?

10 MR. CAMERON: Can I borrow that back
11 from you? And I think this may be for either Alan
12 or Ron, but when we get a site-specific application
13 in, how large an area does that license application
14 take in, and is that devoted to -- how much of that
15 is devoted to the actual well production versus
16 buffer areas, whatever. And I don't know if you
17 looked at generic examples in the GEIS, but if you
18 did, you could tell us about that. And then we can
19 ask Ron to follow up.

20 Alan?

21 MR. BJORNSEN: Am I to understand that
22 you're asking the size of a facility that's being
23 applied for or --

24 MR. CAMERON: The size of the whole

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1 operation.

2 MR. BJORNSEN: -- the size of the
3 operation or the area that we evaluate under --

4 MR. HALLINAN: Well, my question really
5 is: There are different landowners in different
6 areas, and they do different things on their land,
7 and if there's -- you know, you are going to be
8 putting in these ISL projects. Is it going to cover
9 5,000 acres, or is it going to cover what's on my
10 land or on my neighbor's land? In other words, it's
11 going to affect different landowners in different
12 ways. So if it's a huge site, then I wonder how you
13 can reflect those differences of land use.

14 MR. CAMERON: Let's -- do you want to
15 say anything before we go to Ron?

16 MR. BJORNSEN: We did look at the range
17 of size of facilities in the GEIS. And some of the
18 smaller ones were a couple of thousand acres.
19 Larger ones could go up to 30,000 acres. It varies.

20 MR. LINTON: Yes. The size of the
21 sites -- some of them could be a thousand acres in
22 areal extent. Now, a company might own mineral
23 rights on many thousands of acres, but where the ore
24 is that they're looking for -- looking at in an

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1 application might be narrow band of ore, which might
2 encompass 500 acres, might encompass a thousand
3 acres, might be in two different sites. We have
4 some applications that have come in that actually
5 take, you know, one ranch here and another ranch
6 over here, and so the ore body in one ranch is here
7 and then over here in another section. And it could
8 be they get put together, 500 to 1500 acres, 2,000
9 acres, something like that. The permit area might
10 even be larger than that, whereas the permit area
11 is -- might be different from what the actual
12 physical impacts that you see on the surface, you
13 know, because the area that we look at might be
14 twice the size of where the actual ore body is and
15 where the actual wells are put in over top of that
16 ore body to actually extract the uranium.

17 MR. CAMERON: Thank you.

18 You want to follow up on that?

19 MR. HALLINAN: I would, thank you. When
20 you ask for the site-specific application and you
21 get that, and then is there going to be a -- there's
22 going to be a comment period, I understand. Now, in
23 that comment period, the person's comments would
24 certainly be influenced by where these facilities

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1 are actually going to be located, not within this
2 general mineral right area, but will you also make
3 available to those folks where the actual mining is
4 going to be done? Thank you.

5 MR. CAMERON: And Ron maybe could tell
6 what's in these license applications.

7 MR. LINTON: First off, we don't ask for
8 a site-specific application. It's up to the company
9 to send us the application, and then we review it
10 for, you know, health and safety, environmental
11 issues. The application that we get in is -- it's
12 up to the applicant to give the best possible
13 application they can to us, because they have -- we
14 have guidance -- we have regulations and we have
15 guidance documents that basically tell them what we
16 are looking for and when we do our environmental
17 reviews and when we do our safety reviews, both
18 circumstances. So they can look at our guidance,
19 and they can say, Okay, we know the NRC staff
20 wants -- needs this, this, this, this, this. And a
21 lot of it is maps upon maps and cross-sections and
22 hydro-geologic properties and threatened and
23 endangered species, cultural resource evaluations.

24 There are -- in some cases, there's two

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1 years of background work that an applicant might do
2 before they even submit an application to us, you
3 know, where they're out hiring people to do all
4 the -- this different work.

5 So if you look at one of our
6 applications when it comes in the door, one of the
7 things we do is an acceptance review, which Patty
8 alluded to. We look for those 15 points that were
9 up there. We look for the points in our safety
10 review. We go through: Is this addressed? Boom,
11 boom, boom, right down the line. If it's not --
12 something's not addressed or completely missing, we
13 may reject the application, send it back to the
14 applicant and say, There's not enough here to do a
15 full review.

16 If we see that they've addressed all
17 those points down the line that's in our guidance
18 documents, then we'll say, Okay, we'll review your
19 application. We'll do a full and rigorous
20 evaluation of what you have submitted to us. And
21 that process, then, it can be -- usually it's about
22 a five-month process, which usually results in a
23 request for additional information back to the
24 applicant.

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1 And we have done that now in two
2 different cases where we have sent requests back
3 from the safety side of the review. Remember,
4 there's two parallel tracks of the review. There's
5 an environmental track, and there's a safety track,
6 a safety review track. And we've sent questions
7 back to them saying, You need to provide additional
8 information. You need to provide more to us. We
9 need -- there's questions that we have. Maybe we
10 couldn't find it in the application. Maybe it
11 wasn't clear in the application. Or we need more,
12 more details. You must demonstrate that you can do
13 this in a safe -- environmentally safe or in a safe
14 manner to protect public health and safety. That's
15 really the keys that we're looking at.

16 So if you were to go to look at any one
17 of the applications, you will see a lot of maps in
18 there. And if you were a landowner in an area, you
19 would be able to pinpoint exactly where you were and
20 exactly what is proposed by the applicant.

21 MR. CAMERON: Okay. Great. Thank you
22 very much, Ron.

23 Any other questions over here? Okay.
24 Let's go back to Terry and then over to Mike and --

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1 Terry.

2 MR. EVIARD: My followup question. So,
3 Patty, you kind of gave me an idea that this is
4 basically to speed up the process, so -- and I agree
5 something needs to be done to move the process a
6 little faster, especially with the number of
7 applications. But I'm not a fan of industry in the
8 western United States. Their track record is not
9 very good. And I'll give you some examples.

10 We've got the vermiculite mine in Libby,
11 Montana. We've got the Butte Anaconda gold -- I
12 mean, copper and silver mines. We've got South
13 Pass, just out of Lander, Wyoming. We've got the
14 Amoco Refinery in Casper, Wyoming. We've got Wharf
15 Resources right here in back yard in the Black
16 Hills. All of these are Superfund sites that were
17 proposed, everything's fine, we're going to do okay.

18 Their bonds were set, but the company's gone, and
19 guess who pays for the cleanup. Us taxpayers.

20 We have right now an ISL mine that you
21 guys gave an example of right down here in Douglas
22 that's been cited by DEQ for excursions, spillage.
23 They're not following the rules. In other words,
24 they're doing your own monitoring, but they made

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1 mistakes, and now there's fines, and they're in
2 negotiation to settle this fine, and millions of
3 dollars. So we have our own ISL in Wyoming that's
4 not doing a very good job.

5 You're asking us to trust you that this
6 process is going to work. How can I trust you when
7 we're seeing that these examples don't work, and
8 these bonds are set so low, these companies just go
9 bankrupt and leave the United States, and we pay the
10 problem.

11 MR. CAMERON: Okay. And, Patty, you may
12 want to -- I don't know if you said that the idea
13 behind the GEIS was to speed up the process or not,
14 but you may want to address that. But how do you
15 give Terry and the rest of the people in the
16 community some sense of confidence about the NRC
17 review? And part of that may go to the hearing
18 process, openness, transparency of the process, and
19 it's not done behind closed doors. And maybe we can
20 talk a little bit about how it could be tested out,
21 too. But I'll let you talk.

22 MS. BUBAR: Okay. Thank you.

23 Those are actually very good questions.

24 And I think that, you know, over time -- well,

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1 first of all, some of the sites that you mentioned
2 were not sites that would have been regulated by the
3 Nuclear Regulatory Commission, so I can't
4 necessarily address those, but for those sites that
5 the NRC does regulate, I think that we do have
6 some -- a strong set of requirements that the
7 licensee has to follow. The process is such that we
8 put those requirements out there. It is a very
9 transparent process, we hope, such that the
10 requirements are understood, and whether the
11 licensee is following those requirements is also
12 understood, and it's done in a public manner.

13 If the licensee is not, and a compliance
14 issue arises, I believe that's evidence that the
15 process is working, because the regulatory oversight
16 process is trying to address where the problems are
17 and trying to hold the licensee accountable for
18 fixing those problems. That doesn't mean that
19 everything's perfect, but I think that might be
20 evidence that the regulatory process is strong.

21 But back to your first point, I don't
22 believe I said it was a way to speed up the process.

23 What I did say is that it is a way to allow for an
24 efficient evaluation process that is allowed under

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1 the regulations, under the requirements. But I also
2 said, I hope clearly, that we will not issue a
3 license that we have done a thorough evaluation on.

4 And we will do the site-specific environmental
5 assessments, and we will only do those for the
6 resources that we have. So I did not mean to imply
7 that we were doing this to speed up the process.

8 MR. CAMERON: John, could you just
9 briefly tell people about the hearing process.

10 MR. HULL: When we have decided that an
11 application is sufficiently complete, do the
12 detailed technical review, an notice of opportunity
13 for hearing is published. The public has the
14 opportunity to request that a hearing on the
15 application be conducted by a panel of NRC judges.
16 It's a very rigorous process, and the judges are
17 independent. And if someone is still not satisfied
18 after that adjudicatory process is completed, there
19 are appeals available to the federal courts. So
20 it's a very open process.

21 MR. CAMERON: Okay. Thank you, Patty.
22 Thanks, John.

23 Let's go over to Mike for another
24 question and then see if there's any other

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1 questions. Then we'll move into comment.

2 MR. O'BRIEN: I've actually got two
3 questions.

4 MR. CAMERON: Okay.

5 MR. O'BRIEN: So first one: Who
6 monitors the ground -- or who monitors the
7 monitoring wells, besides the company? Is there any
8 independent parties looking at those wells?

9 MR. CAMERON: Okay. Ron, do you want to
10 do this? Okay. We've got one good mike at least.
11 Right? All right.

12 MR. LINTON: The companies do their own
13 monitoring at the monitoring wells around the ring,
14 monitoring wells above and below.

15 MR. O'BRIEN: Nobody else checks that?

16 MR. LINTON: We could do split sampling.
17 I don't know that we have done split sampling
18 anytime recently. But right now the companies to
19 their -- the monitoring.

20 MR. CAMERON: Okay. Let me go back to
21 Mike. And I think that the concern is that -- and
22 maybe you want to tell people what the companies are
23 supposed to do with that monitoring data. Okay?
24 Who does that go to, and who reviews it and how?

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1 MR. LINTON: The monitoring data goes to
2 the State of Wyoming. Well, if it's in Wyoming
3 here, it would go to the State as well as to the
4 NRC. We get that -- those monitoring reports on a
5 semi-annual or an annual basis. We get it on a
6 semi-annual basis, the monitoring reports. The
7 monitoring is done every two weeks for the excursion
8 monitoring wells, above and below. And the -- they
9 have to use certain laboratory procedures and
10 certain methods. We do -- we look at that their QA
11 and QC processes, and it is part of the inspection -
12 - it can be part of the inspection when inspectors
13 go out.

14 I would also say that a company would
15 put themselves at a lot of risk if they were out
16 there trying to give us false information and false
17 data, if that were ever to be, you know, determined
18 or found out, because there is always that
19 possibility. We could do some split sampling with
20 them.

21 John could maybe discuss the
22 ramifications of that from a legal standpoint, but
23 it would be something that, if we found that out, it
24 would be referred to the Office of Inspector

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1 General, and there could be a full-blown federal
2 investigation into the company or into individuals
3 that have falsified data to the federal government.

4 MR. CAMERON: And maybe since we're on
5 that enforcement area, John, do you want to comment
6 on the company could lose their license, there could
7 be criminal sanctions as well as civil penalties?

8 MR. HULL: Yes. We have an Office of
9 Enforcement within the NRC, and it's totally devoted
10 to making sure that if there is any falsification of
11 data or other wrongdoing by a licensee, that proper
12 enforcement action is taken. It could be heavy
13 fines imposed. It could be taking away their
14 license. So it's a very -- it's an obligation or a
15 duty that the NRC takes very seriously.

16 MR. CAMERON: Okay. Thank you.

17 And, Mike, did you have one more
18 question, did you say? All right. We've got to get
19 this on the transcript.

20 MR. O'BRIEN: For interruption -- the
21 question about interruption of grazing rights on
22 federal land, if -- for any mining that takes place
23 on federal land, which has already been -- the
24 grazing rights have already been leased, in most

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1 cases, for many years. What kind of a compensation,
2 if any, is there for the holder of the grazing
3 rights, and for how long would they be excluded from
4 an area for grazing?

5 MR. CAMERON: Okay. That's a good
6 question, and, Ron, do you have some answers on that
7 one? Okay.

8 MR. LINTON: That's a good question, and
9 that's one I haven't heard before. But I'll tell
10 you in general from what we've seen with the other
11 sites that we have here in the Powder River Basin
12 around which involves federal land and ranchers.
13 The companies work pretty closely with the surface
14 owners, ranchers, any surface owner. And any
15 impacts that they may have to previous -- what'd you
16 call it? -- grazing rights? -- would have to be
17 negotiated with the company on how that would
18 affect, you know, a surface owner.

19 That's something that we don't get into
20 specifically, as far as what the compensation is and
21 how that's done. But that's something that the
22 company and the surface owner would have to work
23 out.

24 Again, I don't know the

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1 surface estate, mineral estate law as far as how
2 that has to be done from the company, but I know
3 that is something that, from when I talked to the
4 different individuals, different companies, they're
5 always talking about, Well, we can't go over this
6 road; we can't go over that road. That's a
7 forbidden road. I've heard that before. That's a
8 forbidden road, because we haven't purchased the
9 rights to travel over that ranch road. But we can
10 go over this ranch road, because we've purchased the
11 rights. We've paid compensation to the surface
12 owner.

13 That's, I think, where you're going to
14 be kind of seeing that.

15 MR. CAMERON: And, Mike, my colleagues
16 have been -- have told me that probably is a --
17 terms of federal land, a Bureau of Land Management
18 question. And we know when we're out here at the
19 NRC, we don't want to say, Well, that's just
20 somebody -- some other federal agency's job -- even
21 though that's true. But what we'll do is at least
22 try to get you some information on that or tell you
23 some person that you can contact to get some
24 information.

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1 And, Gregory, did you want to say one
2 more thing? All right. This is Greg Suber.

3 MR. SUBER: Yes. The one thing I wanted
4 to add to Chip's comment is the fact that what
5 you're talking about is actually part of our review.

6 When we do a site-specific review, we address a
7 resource area that Alan had on a chart that's
8 called, "Land Use." And within that land-use
9 evaluation, we will look at issues identical to the
10 issues that you're talking about. And we are in
11 contact with the federal partners, and BLM is one
12 who we are in close contact with here in the state
13 of Wyoming for all of our reviews on a site-specific
14 level.

15 So we can take this comment, and we can
16 try to address it in the GEIS in a general base, but
17 where we would really -- where the rubber hits the
18 road and where we would really evaluate this and
19 come up with a finding and an impact and a path
20 forward would be in the site-specific review.

21 MR. CAMERON: Okay. Thanks, Greg.

22 Why don't we go to hear from some of our
23 commenters. And I was going to start with -- okay.

24 Let's go one more question here, and we'll go to

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1 the commenters.

2 Yes, sir, and please introduce
3 yourself to us.

4 MR. LUBNER: I'm Tom Lubner,
5 and I'm here with lots of hats on tonight. I'm a
6 Crook County landowner. I'm a state legislator, and
7 in that capacity, welcome to the boondocks and spend
8 lots of money here. And I'm a HAZMAT technician.
9 And I know that this is an environmental process,
10 but a safety process, and it's got some
11 socioeconomic concerns. Where in the process is
12 training given to volunteer first responders?
13 Because you are in the boondocks. And what type of
14 training is that?

15 MR. CAMERON: Okay. And just so my
16 colleagues understand and I understand, you're
17 talking about emergency management concerns, first
18 responders, and who's responsible for providing like
19 equipment, training, things like that. In the
20 context of these types of facilities -- and it could
21 be occupational hazards or whatever that calls for
22 the need for that type of assistance -- can any of
23 us -- any of you provide any context on that,
24 including where the training and equipment and

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1 things like that usually come from? Patty, do you
2 want to give it a whirl?

3 MS. BUBAR: I will give it a whirl. I'm
4 not sure this is a complete answer, so I would like
5 to tell you we'll get back to you with a better
6 answer. But our license, if we issue one, would not
7 necessarily address that. That would be something
8 that would be handled more in the occupational
9 safety area -- unless, Ron, you've got something to
10 add to that.

11 So we wouldn't necessarily address that
12 in our licensing issuance or conditions. But to
13 operate, the licensees would have to basically also
14 be compliant with OSHA regulations and any other
15 regulations issued by the state where they would
16 have to address that. But I may not be the best
17 person to provide a full answer to that.

18 MR. CAMERON: Well, maybe a more basic
19 question is: Does a license applicant have to
20 provide any sort of emergency management plan to the
21 NRC for these types of facilities? In other words,
22 is there emergency management consideration, Ron?

23 MR. LINTON: One of the things that we
24 do look at in an application is in accident

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1 scenarios. We ask the applicants to provide us with
2 different scenarios of what could happen if you were
3 to have an accident and how that would be cleaned
4 up.

5 There also is radiation safety
6 technicians and radiation safety officers that are
7 at each facility, and their job is to make sure that
8 sites are protected from radiation safety. There
9 are procedures. Each one of the sites has specific
10 procedures on how they will deal with spills and
11 things within the plant.

12 But to answer that one question about,
13 you know, the, you know, fires and things like that,
14 the company would -- is the one that's going to be
15 contacting the local first responders and working
16 with them as far as looking at their fire safety
17 plans, their emergency management plans that the
18 company has developed, and then how one would handle
19 and work in a situation like that.

20 MR. CAMERON: Okay. So I think it's
21 going to behoove the local government people to
22 start talking with the license applicants early
23 about those types of issues.

24 Okay. Let's go to Mike O'Brien and then

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1 to Jim Jones. Mike, do you want to come up and
2 comment, since you're on the Land Use Planning
3 Commission, is what you said? Okay. Then we'll go
4 to Jim. And then we're going to hear from Rodney
5 Knudson, and then from Terry Eviard.

6 Let's make sure this guy is on.

7 MR. O'BRIEN: It is now. Speaking for
8 the Crook County Land Use Planning and Zoning
9 Commission, the -- we -- I expressed the same
10 comment I'm about to repeat now at the first scoping
11 meeting that you held down in Casper, and that was
12 the request that you require third-party monitoring
13 of the monitor well samples.

14 The -- considering what's going on on Wall Street
15 right now with the big financial mess that's going
16 on, company oversight where large dollars are
17 involved is not necessarily to be trusted. And in
18 the coalbed methane industry that's in this area,
19 third-party water samples are required for most of
20 the work. And we from the Crook County Land Use
21 Planning and Zoning Commission request that you
22 require third-party monitoring of the ground -- the
23 monitoring wells, the groundwater.

24 And the fact that you're only looking at

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1 those every two -- or the company's only looking at
2 those every two weeks, and that may be fine from a
3 scientific standard, but you guys are only looking
4 at them every six months or a year, that's scary.
5 If there is a problem, you know, that's a long time
6 before it could be discovered. And granted, you
7 know, you may have a full-blown federal and criminal
8 investigation. That doesn't fix the groundwater.
9 So with -- that's our major concern from the Land
10 Use Planning and Zoning Commission.

11 Our current comprehensive plan supports
12 the practical and sensible use of our resources in
13 Crook County. We'd like to see the mining happen,
14 but we need to make sure that it happens in a very
15 responsible manner. And I think we need more
16 oversight than what you guys have proposed. Thanks.

17 MR. CAMERON: Thank you. Thank you very
18 much, Mike.

19 Jim?

20 MR. JONES: As some of you know, my name
21 is Jim Jones. I'm a mechanical engineer. For
22 several years I was involved in the mining industry.
23 I worked in the heap leaching of silver and gold.

24 I've reviewed the generic environmental

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1 impact statement, and I'm here to say that it is not
2 in the best interest of the public. It appears to
3 me that it is in the best interest of the mining
4 companies. It will streamline the process and speed
5 things up for the mining companies. It will also
6 facilitate the work of the Nuclear Regulatory
7 Commission, which would be fine if it were safe.

8 Normally, there would be an
9 environmental impact statement rather than a GEIS.
10 And environmental impact statement allows for public
11 input, more public meetings, and a longer analysis
12 period. If the GEIS is put into place, then they
13 can tier onto this and will only have to do an
14 environmental assessment. The environmental
15 assessment will have a shorter analysis period and
16 is generally issued as final. Right now, we have a
17 promise from the Nuclear Regulatory Commission that
18 the environmental assessment will be open to public
19 comment. In other words, I believe that the public
20 will be losing some of their rights to be involved
21 in decisions that will affect a way of life.

22 The NRC says that they will still
23 address site-specific issues in the environmental
24 assessment, but so far they have only made promises,

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1 and it is not clear what is actually going to happen
2 if the GEIS is implemented.

3 The NRC has done a good job tonight
4 giving us all an overview of how ISL works. What
5 they haven't told us is that billions of gallons of
6 water are removed from aquifers during the process
7 and the restoration period. This now polluted water
8 is placed in evaporation ponds or injects into the
9 ground outside the aquifer. DEQ report from the
10 Smith-Highlands ISL project showed that at just six
11 of the many wells, 40 million gallons of water was
12 removed from the aquifer in one year during the
13 process, and 170 million gallons of water was
14 removed during the restoration process. This water
15 was not returned to the aquifer. This project has
16 been in place for more than ten years, so you can do
17 the math on the amount of water that's been
18 displaced from the aquifer. Wyoming just does not
19 have this kind of water to waste.

20 They did not mention that the Smith-
21 Highlands project was fined \$1 million for
22 violation, and that in a settlement with the State,
23 they raised their bond by \$40 million, making the
24 total bond 80 million-plus. If this process is so

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1 environmentally safe, why is such a large bond
2 required?

3 They did not mention that the Smith-
4 Highlands project has not been -- has not
5 successfully restored the groundwater to an
6 acceptable level and that they are past their
7 restoration date by years.

8 Did they mention that along with
9 radioactive uranium, that arsenic, selenium,
10 cadmium, and lead are leached into the water during
11 this process?

12 Throughout the GEIS, it clearly states
13 that the impacts due to ISL will be low due to
14 strict regulations. I don't believe that neither
15 the Nuclear Regulatory Commission nor the Wyoming
16 DEQ has sufficient staff or funding to properly
17 oversee these sites while in operation. They've
18 told you tonight that they have two inspectors.
19 There's 18 permits in the process for Wyoming. I
20 don't think that two inspectors are going to be able
21 to cover that.

22 I have a quote that I'd like to read to
23 you: "Although these in-situ leach mining
24 techniques are considered more environmentally

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1 benign than traditional mining and milling
2 practices, they still tend to contaminate the
3 groundwater." This quote is from the U.S. Nuclear
4 Regulatory Commission in 2007.

5 The GEIS should not be implemented, and
6 careful analysis and study of each and every site
7 for this type of mining should be performed prior to
8 permitting a company to operate.

9 And I'm going to play on the word
10 "generic." We are not generic people, and we do not
11 live in generic areas. Each and every area of the
12 proposed mining sites is unique, and the impacts due
13 to ISL will vary greatly in each area.

14 Thank you.

15 MR. CAMERON: Okay. Thank you, Jim.

16 Could we have -- is Rodney Knudson here?

17 Are you okay? All right. Thank you. Thank you,
18 Rodney.

19 Terry, would you like to come up and
20 talk to us, please?

21 MR. EVIARD: I don't have a prepared
22 statement, but my questions earlier pretty much gave
23 you my feelings of what's going on here. Again, my
24 concerns is streamlining this system and allowing

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1 industry a faster track to get their permits through
2 without the proper oversight and review of the
3 public. I think this review process or our ability
4 to comment needs extended at least by another 180
5 days or six months. Two weeks after today just
6 doesn't give us enough time to comment.

7 Also, Jim's comments were very well
8 heard. So is Crook County Land Use Planning and
9 Zoning Commission -- I agree with them. Wyoming
10 water is our most precious resource. In a rural
11 area, I've seen it over 95 percent of the landowners
12 out there depend on groundwater. If they lose that
13 groundwater, they don't have a ranch. It's just a
14 fact. They'd have to haul water, and that's very
15 time consuming and expensive for landowners in
16 Wyoming. So that's their lifeblood in our arid west
17 lifeblood, is groundwater. We need groundwater.
18 We're not blessed with runoff water and big
19 reservoirs in this small area of Wyoming like some
20 of the other larger cities in the west, so we need
21 groundwater here in Crook County.

22 So with that, again, my concern is with
23 allowing these companies to streamline a process
24 that we don't have a very good oversight on, and

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1 definitely a third-party review is necessary, in my
2 opinion. We've seen many, many poor examples in the
3 west, of industry -- the fox watching the henhouse,
4 and it does not work. We need somebody else to make
5 sure that those processes are not affecting
6 everybody else's livelihood around that mining
7 operation.

8 Thank you.

9 MR. CAMERON: Okay. Thank you, Terry.

10 In a few minutes, I'm just going to ask
11 Patty, as a senior official, to just close out the
12 meeting for us with some comments. But those are
13 the people that we had who signed up to comment.

14 Is there anybody else or any questions
15 we can answer before we close? Did you want to
16 speak to us, sir, or did you have a question? Okay.
17 And please introduce yourself to us.

18 MR. TOPE: Yes. I'm Jay Tope, and I'm a
19 rancher from Crook County. One of the things that's
20 been spread around is that it's never affected
21 groundwater drinking water. And I just found a
22 research paper from George Rice, "The Effects of
23 URI's, Kingsville Dome Mine, on Groundwater Quality:
24 Final Report, Kleburg County, URI Citizen Review

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1 Board, July 2006." In-situ leach mining has
2 contaminated people's drinking water.

3 MR. CAMERON: Okay. Thank you for that,
4 and if we could just make sure that we have the
5 correct citation to that, so that that can be
6 something that our staff looks at when you're doing
7 the -- preparing the final EIS. So after the
8 meeting, make sure that they have that quote. Thank
9 you very much.

10 Anybody else have anything to say before
11 we close for the evening? Okay. And this is
12 Rodney.

13 MR. KNUDSON: Rod Knudson from Hulett.
14 I noticed in the Casper Star that the Gillette
15 County -- no, the Campbell County County Commission
16 signed off on in-situ -- I think it was in-situ --
17 uranium mining. Is, in fact, the county commission
18 part of the structure -- determining structure?

19 MR. CAMERON: Okay. That's a good
20 question in terms of the company to operate has to
21 get a license from the NRC, but that doesn't mean
22 that that's all they need to get before they can
23 operate.

24 And, Rick, do you want to talk to other

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1 government permits necessary, I mean, just
2 generally, or to Ron? Okay. Ron.

3 MR. LINTON: One of the things in our
4 licenses that we put in there as one of our
5 conditions is that the applicant, or the licensee,
6 has to get all other applicable permits, be they
7 other federal, other state, or other local permits.

8 For example, they need to get an aquifer exemption
9 from the U.S. EPA, and it was briefly discussed up
10 here, I think in Alan's presentation. That's one of
11 the things that they would need to get.

12 They'd need to get an underground
13 injection control permit from the State. If we're
14 in the state of Wyoming, they need to go to the
15 Wyoming DEQ and get that permit. So that's a second
16 one there.

17 The aquifer exemption permit -- the
18 State will do the review, look to EPA and say, This
19 is what we think the aquifer exemption should be,
20 but it's actually EPA's decision as to what the
21 aquifer exemption boundary will be.

22 And then you have all the other local
23 permits that you may have to get, building permits -
24 - one of them might be, if they're going to do deep-

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1 well injection, they have to get a deep-well
2 injection permit from EPA again, or from the State,
3 under the UIC program. There's a whole other myriad
4 of permits that might be out there that they would -
5 - a discharge permit, for example. They might have
6 a discharge permit. They might have to get through
7 the State for discharging the surface waters if they
8 would have that.

9 MR. KNUDSON: What is the role of the
10 county commissioners?

11 MR. LINTON: Well, the role of the
12 county commissioners is they could be an agency that
13 we may discuss with from a government-to-government
14 consulting party. They certainly have the option
15 of, you know, speaking to us at any time or us
16 speaking to them. I know we have in the past met
17 with mayors, we have met with county commissions and
18 discussed potential plans --

19 MR. KNUDSON: County commissioners --

20 MR. CAMERON: We need to make sure that
21 we're getting you on the record, and maybe I could
22 just offer one thing on this. There's a report from
23 our meetings in New Mexico that may answer your
24 question. County commission has to look at what

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1 legal authorities it has, and it's up to the county
2 commission to do whatever they think is necessary.
3 And we'll go to Mike O'Brien, who's connected to the
4 county.

5 When we were in New Mexico, the Navajo
6 Nation, they have a law, The Dine Natural Resource
7 Protection Act of 2005, where they say they're not
8 going to allow any uranium mining in Navajo Nation.

9 Okay. Company comes in to the NRC for a license.
10 If the NRC evaluates it and gives a license, a
11 company is still going to have to deal with the
12 Navajo Nation about the Navajo Nation ban.

13 And, Mike, do you want to offer
14 something on this for us? Mike O'Brien.

15 MR. O'BRIEN: I'm not speaking for the
16 Crook County Commissioners, but in my conversations
17 with the Crook County Commissioners, there's nothing
18 we as a county can say to the -- any of the mining
19 companies once they have their permits from the
20 federal government and the State DEQ. The only
21 thing that the counties can say specifically is road
22 use, and the county commissioners have the ability
23 to set weight limits and speed limits on all county
24 roads, and they can use that hammer to bring a

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1 mining company to the bargaining table, so to speak.

2 But that's the only authority that the county
3 commissioners have, to the best of my knowledge.

4 MR. CAMERON: Okay. Thank you, very
5 much, Mike.

6 Sir, did you want to offer something on
7 this particular issue? Please introduce yourself to
8 us.

9 MR. EDWARDS: I'm Roy Edwards. I'm one
10 of the county commissioners here in Campbell County.

11 We give a support letter to the company that was
12 getting ready to do the mine out on Moore Ranch in-
13 situ mine. That is where our part of it came in.
14 There is already currently one out on the
15 Christensen Ranch, and it has been there for years.

16 And those two people that the land is on are my
17 cousins, and I have heard no problems whatsoever
18 from my relatives out there that have that that say
19 if there is a problem. And we're fully supporting
20 the in-situ process on the More Ranch Mine.

21 MR. CAMERON: Okay. If any of the
22 Campbell County citizens want to talk to the
23 commissioner, he's here to talk after the meeting.

24 Okay. Patty, do you want to --

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1 Do we have one more thing? Is it Tim?
2 All right. Okay. Go ahead.

3 MR. HALLINAN: Thank you. I think the
4 suggestion of Mr. O'Brien, I believe it was, that
5 you would have third parties that would do the
6 laboratory testing on the specimens obtained in the
7 monitoring wells is a very good one. And that one
8 would -- and have these done, not necessarily --
9 they wouldn't have to go out and collect the
10 specimens, but the testing laboratories could report
11 their findings to DEQ and to the Nuclear Regulatory
12 Commission and to the mining company, as to what the
13 contents of those specimens were. And I think that
14 would give an added level of assurance that problems
15 would be found out prior to -- more of an early
16 finding of a problem rather than a late finding in
17 these yearly reports or yearly tests that would be
18 done.

19 I'm also a state legislator, and my
20 question would be: If the State of Wyoming wanted
21 these tests to be done by third parties, can we pass
22 a statute that would be controlling of how these
23 tests are performed?

24 And thank you. I'd like to get your

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1 answer now. Thanks.

2 MR. CAMERON: I think my colleagues
3 would probably be cautioned to not give their
4 opinion about what the authority of the state
5 legislature of Wyoming is, but -- why don't you talk
6 to that.

7 MR. SUBER: Just a point of information.
8 The State of Wyoming is a cooperating agency in the
9 GEIS, so they participated in the drafting of the
10 GEIS. And we anticipate that we will be
11 coordinating with them very closely moving forward.
12 So we can take this comment and we can include that
13 in our discourse with the State of Wyoming.

14 I know in the past that they have done
15 split samples with certain licensees. And the split
16 samples was when the applicant will -- or the
17 licensee will take a sample, they'll split it in
18 half. They'll have one -- they'll have their half
19 processed, and the State will have the other half
20 processed, and that way they can compare the
21 results. And I know that's been done in the past.

22 And I guess what you're asking is can we
23 add a license condition or can we make that a part
24 of the process moving forward. And we can take that

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1 as a comment, but like Chip said, we're not going to
2 speak for the State as far as what they would do.
3 But we can take that for a comment and address it in
4 the GEIS.

5 MR. CAMERON: Okay. Ron, did you want
6 to add something?

7 MR. LINTON: One thing I wanted to
8 address that you had brought up, and the planning
9 commissioner in the back there, I had mentioned
10 about semi-annual reports that we get. If there is
11 an excursion that is found out by the company when
12 they're taking these samples, there's a condition in
13 the license that requires them to take a second
14 sample within -- I believe it's 24 or 48 hours. I
15 can't remember exactly what's in the license right
16 now. And if it is confirmed by that second sample,
17 they have to immediately report that to us.

18 Okay. So it's not that, you know, it
19 happens and it goes out for six months. That needs
20 to be immediately reported to us. And then they are
21 into a whole 'nother sample regime at that point.
22 It's not in two weeks anymore; it's -- I believe
23 it's a weekly sampling regime. And they need to,
24 you know, give us a report: What happened, why it

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1 happened in their estimation, and what they're doing
2 to fix the problem.

3 And one of the things that a lot of the
4 companies then will turn around and do -- and, you
5 know, we look -- we showed that graphic up there,
6 the injection wells and the production wells. Those
7 wells are designed that they can be either injection
8 or production wells. So what can happen there is,
9 if they do have a flare or they do have some
10 solution that begins to escape -- and usually it's
11 not uranium; usually it's chloride or alkalinity,
12 something, one of those indicators that a solution
13 is beginning to -- they've lost a little control.
14 Not that it's getting out of the aquifer exemption,
15 because that monitoring well ring is within that
16 exempted boundary. We kind of consider that as part
17 of the whole mining unit itself, or the production
18 unit, that ring.

19 They can begin drawing more fluids from
20 more of those wells there. In other words, they
21 might take three or four in that area and turn those
22 into production wells and -- you know, so they can
23 draw that fluid back into the production zone
24 itself. So I just wanted to clarify that.

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1 MR. CAMERON: Okay. That's good. And
2 let me mention that Ron and Greg and John and Alan
3 and Patty, other NRC staff, are going to be here
4 after the close of the formal part of the meeting,
5 and will be glad to go into detail about these
6 issues we've been talking about.

7 I was going to ask Patty Bubar to close
8 the meeting out for us tonight. And, Patty, would
9 you like to do that?

10 MS. BUBAR: Yes. I hope this is
11 working.

12 Well, I'd just really like to thank
13 everybody for providing some thought-provoking
14 comments, suggestions, things for us to take back.
15 We got some comments on the GEIS, but also got some
16 good comments on either things for us to think about
17 to address the concerns that you have.

18 So I appreciate the thoughtfulness. I
19 appreciate the clarity that you provided in some of
20 your suggestions to address some of these concerns.

21 And as Greg said, we will take all of these back.

22 I will look forward to kind of having
23 the luxury of time to reading the transcript and
24 maybe trying to digest some of these a little more

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1 fully and thinking about them, obviously taking
2 these suggestions back and seeing if there's
3 something we need to do either in the GEIS or in the
4 licensing process to address some of the concerns
5 that were raised. So we thank you for those
6 suggestions and comments, and we will take them
7 seriously.

8 I'd like to thank Chip for his services,
9 for kind of giving everybody, I think, the
10 opportunity to be heard. We appreciate that.

11 I thank my NRC colleagues for being here
12 to answer questions. As Chip said, we're here;
13 we're staying in this hotel, so we will be here
14 after this meeting is over to have any further -- if
15 you have any further questions, please stick around
16 and ask them.

17 As I mentioned, we have another public
18 meeting on Thursday, if you care to attend that or
19 have any colleagues who will be attending, we
20 encourage you to ask them to do that, because we do
21 want to take advantage of being here to hear these
22 comments.

23 So I'd just like to thank you. And as I
24 think others had mentioned, this information will be

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1 made available. We will attempt to address all of
2 the comments -- not attempt; we will address all of
3 the comments that get provided both in these
4 meetings as well as in writing. And those will be
5 kind of dispositioned in the final GEIS.

6 So thank you for your insights. And
7 thank you for taking the time to coming out in the
8 evening and giving us this input. So thank you and
9 have a good evening.

10 (Whereupon, 9:00 p.m., the public
11 hearing was concluded.)
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