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EXHIBITS

MARK RECD

|           |                                |     |     |
|-----------|--------------------------------|-----|-----|
| NRC000207 | NRC Staff Presentation Topic 5 | 575 | 575 |
| NRC000208 | Regulatory Guide 4.15          | 575 | 575 |
| NRC000209 | Regulatory Guide 4.16          | 575 | 575 |
| NRC000210 | NUREG-1302                     | 575 | 575 |
| NRC000211 | DOE-EIS-0269                   | 575 | 575 |
| NRC000212 | NRC Inspection Procedure 88045 | 575 | 575 |
| NRC000213 | NRC Inspection Manual Chapter  |     |     |
|           | 2600                           | 575 | 575 |
| NRC000214 | NRC Staff Presentation Topic 6 | 625 | 625 |
| NRC000215 | Archaeological Monitoring and  |     |     |
|           | Discovery Plan                 | 625 | 625 |

STAFF PRESENTATION

|                   |     |
|-------------------|-----|
| Topic 5 . . . . . | 574 |
| Topic 6 . . . . . | 630 |

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

2 8:29 a.m.

3 JUDGE BOLLWERK: Good morning, everyone.

4 We're here for the second and what I think will be the  
5 concluding day of the mandatory hearing on evidentiary  
6 matters for the AREVA enrichment facility, the Eagle  
7 Rock facility. Yesterday we heard presentations on  
8 four different issues, including the need for the  
9 facility, pre-construction activities, the -- I have  
10 to go back and look at my -- excuse me, I'm going to  
11 borrow your list one second here.

12 The greenhouse gas impacts and pre-  
13 construction and construction air quality impacts.  
14 And today we have two presentations, one dealing with  
15 radiological effluent monitoring program, the REMP,  
16 and the historical cultural resources memorandum of  
17 agreement that's pending as well as the associated  
18 mitigation measures that go with the consideration or  
19 the potential to unearth additional historical or  
20 cultural resources on the facility -- at the facility  
21 as the construction potentially goes forward.

22 I should mention we're starting a little  
23 early today. We did make an effort to update our  
24 phone line which didn't work out. We have a new  
25 voicemail system in Rockville and once again

1 information technology being what it is what wasn't  
2 broken now is so we weren't able to do that. But I  
3 see someone from the Snake River Alliance back in the  
4 back. We weren't able to contact them and let them  
5 know about the earlier start time. So I'm hoping  
6 everybody that was interested got the word.

7 And again, the reason we're trying to  
8 start a little earlier today is because we want to  
9 avoid the Rotary Club who's going to be here around  
10 quarter to 12:00, and I understand sometimes they sing  
11 a song and other things so that might not work out too  
12 well in terms of what we're trying to accomplish here.  
13 But I do anticipate, given the presentation subjects  
14 as well as the estimates from the parties that we will  
15 probably finish this morning without too much trouble.

16 A couple of things, just briefly on the  
17 administrative side. Once again, please turn off your  
18 cell phone if you haven't already done so. In fact,  
19 I think I hadn't done that yet this morning so I'll do  
20 that right now. And again, you're welcome to keep it  
21 on vibrate if you wish and if you get a call obviously  
22 you need to go outside the room to accept that call or  
23 talk to someone on your cell phone. Again, no food or  
24 drink in the hearing room other than water. I  
25 appreciate your following that guidance.

1 I'll mention again for anyone that might  
2 be here from the public that we do have a couple of  
3 items back on the back table. One is a kind of  
4 description of the proceeding. The second is a form  
5 that you can use if you wish to submit a written  
6 limited appearance statement. We're glad to receive  
7 those from members of the public. And there's also,  
8 you can either with respect to those written limited  
9 appearance statements you can either give John Eser  
10 our law clerk or Ashley Prange our administrative  
11 assistant who's here, if you see them just hand it to  
12 them, or there are instructions on the information  
13 sheet about the proceeding that will give you guidance  
14 on how to go ahead and submit those in terms of  
15 sending them back.

16 One other thing I would -- we'll sort of  
17 check with the parties. I guess we have to have  
18 potential to have some discussion when the evidentiary  
19 portion of this is over regarding the status of your  
20 discussions about the commission's directions to the  
21 board and to the parties from CLI-11-04 yesterday.  
22 And we have something to discuss I take it at the end  
23 or some information you'll be providing? Okay.

24 MS. LEMONCELLI: Yes, Your Honor.

25 JUDGE BOLLWERK: All right. Then we'll go

1 ahead and deal with that when we're done with the  
2 evidentiary portion then.

3 MS. LEMONCELLI: Thank you, Your Honor.

4 JUDGE BOLLWERK: Thank you. All right,  
5 anything either of the parties have at this point they  
6 need to bring to the board's attention before we  
7 begin?

8 MS. LEMONCELLI: Not from the staff's  
9 perspective, Your Honor, thank you.

10 MR. CURTISS: Not from our perspective  
11 either.

12 JUDGE BOLLWERK: All right. Anything from  
13 either of the judges? No? All right. Then I think  
14 we're ready to begin the next presentation. This was  
15 number five as I mentioned before, radiological  
16 effluent monitoring program, the REMP. The lead party  
17 on this one is the NRC staff but had two presenters as  
18 well as an available staff witness and AES also had  
19 two individuals available for board questions. So if  
20 those witnesses would not mind coming up and taking a  
21 seat at the table. We have five chairs up there,  
22 maybe it'll be a little more crowded than it was  
23 yesterday but I hope everybody will fit without too  
24 much trouble.

25 Let's go ahead and deal with the staff

1 witnesses and the exhibits first and then we'll turn  
2 to AREVA.

3 MS. LEMONCELLI: Thank you, Your Honor.  
4 The staff has two presenters, Mr. Karl Fischer from  
5 Argonne National Labs, and for your information his  
6 statement of professional qualifications was admitted  
7 as NRC000152, and Ms. Deborah Seymour from NRC Region  
8 II and her statement of professional qualifications  
9 was admitted in the safety proceeding, NRC000121. We  
10 also have Dr. Bruce Biwer who was already sworn  
11 earlier in the proceeding. And also if the board and  
12 AES have no objection it's possible we might also have  
13 Dr. Steve Lemont as needed as a backup witness.

14 JUDGE BOLLWERK: All right. If he needs  
15 to be -- he can find a place at the table. He's  
16 welcome to pull up a chair.

17 MS. LEMONCELLI: Right. He could switch  
18 out for someone if necessary.

19 JUDGE BOLLWERK: All right. We'll work  
20 that out as necessary. Does AES have any objection?

21 MR. CURTISS: We have no objection.

22 JUDGE BOLLWERK: All right. Then we'll go  
23 ahead and do that if it becomes necessary.

24 MS. LEMONCELLI: Okay.

25 JUDGE BOLLWERK: All right.

1 MS. LEMONCELLI: And as for exhibits?

2 JUDGE BOLLWERK: Let's do the witnesses  
3 firs there and then we'll.

4 MS. LEMONCELLI: Sure.

5 JUDGE BOLLWERK: Ms. Seymour, you  
6 testified previously in a safety hearing. That was  
7 awhile back. Thank you for coming back and talking  
8 with us again. But I'm going to go ahead and swear  
9 you in again. That was about four or five months ago  
10 and I'm not sure how long those things last but that's  
11 probably too long, so.

12 (Laughter)

13 MS. SEYMOUR: That's fine.

14 JUDGE BOLLWERK: So if you and Mr. Fischer  
15 could raise your right hands, please. And I need a  
16 verbal response to the question. Do you swear or  
17 affirm that the testimony you will give in this  
18 proceeding is the truth, the whole truth and nothing  
19 but the truth?

20 MS. SEYMOUR: I do.

21 MR. FISCHER: I do.

22 JUDGE BOLLWERK: Thank you very much. And  
23 Dr. Biwer, did I get it right? That's close.

24 DR. BIWER: That's fine.

25 JUDGE BOLLWERK: You're still under oath,

1 sir.

2 DR. BIWER: All right.

3 JUDGE BOLLWERK: All right. Let's do the  
4 exhibits then very quickly.

5 MS. LEMONCELLI: Okay, Your Honor. The  
6 staff has seven exhibits associated with this  
7 presentation. They are NRC000207, NRC Staff  
8 Presentation Topic 5, Radiological Effluent Monitoring  
9 Program; NRC000208, Regulatory Guide 4.15, Revision 2,  
10 Quality Assurance for Radiological Monitoring  
11 Programs, Effluent Streams in the Environment, Section  
12 C dated July 2007; NRC000209, Regulatory Guide 4.16,  
13 Revision 2, Monitoring and Reporting Radioactivity in  
14 Releases of Radiographic Materials in Liquid and  
15 Gaseous Effluent from Nuclear Fuel Processing and  
16 Fabrication Plants and Uranium Hexafluoride Production  
17 Plants, Section C and Appendix A dated December 2010;  
18 NRC000210, NUREG-1302, Offsite Dose Calculation Manual  
19 Guidance, Standard Radiological Effluent Controls for  
20 Boiling Water Reactors dated April 1991, NRC000211,  
21 U.S. Department of Energy DOE-EIS-0269, Final  
22 Programmatic Environmental Impact Statement for  
23 Alternative Strategies for the Long-Term Management  
24 and Use of Depleted Uranium Hexafluoride, Appendix B,  
25 dated April 1999 (excerpts); NRC000212, NRC Inspection

1 Procedure 88045 Effluent Control and Environmental  
2 Protection dated September 5, 2006; and NRC000213, NRC  
3 Inspection Manual Chapter 2600, Fuel Cycle Facility  
4 Operational Safety and Safeguards Inspection Program  
5 dated January 27, 2010.

6 JUDGE BOLLWERK: All right, then let the  
7 record reflect that Exhibits NRC000207 through  
8 NRC000213 as described by counsel have been marked for  
9 identification.

10 (Whereupon, the above-referred to  
11 documents were marked for identification  
12 as Exhibit Nos. NRC000207-NRC000213 for  
13 the record).

14 MS. LEMONCELLI: And at this point, Your  
15 Honor, the staff moves to admit these exhibits into  
16 evidence.

17 JUDGE BOLLWERK: Any objection?

18 MR. CURTISS: AES has no objection.

19 JUDGE BOLLWERK: Being no objection then  
20 Exhibits NRC000207 through NRC000213 are admitted  
21 into evidence.

22 (Whereupon, the documents previously  
23 marked as Exhibit Nos. NRC000207-NRC000213 for the  
24 record were admitted into evidence).

25 JUDGE BOLLWERK: All right. I think that

1 does it for the evidentiary material and I believe now  
2 we are ready to hear from the panel -- from the staff  
3 witnesses.

4 MR. FISCHER: Good morning, Your Honors.

5 MR. CURTISS: Should we identify our  
6 backup witnesses?

7 JUDGE BOLLWERK: Oh, we should. Thank  
8 you, sir, I'm getting ahead of myself. We're ready to  
9 hear from you, but we still have one thing to do. I  
10 apologize. All right. Yes, we need to get your  
11 witnesses taken care of, absolutely.

12 MR. CURTISS: AES has two backup witnesses  
13 that are available for questions. On the far right is  
14 Mr. Mark Strum and next to him is Mr. Barry Tilden.  
15 Mr. Strum's statement of professional qualifications  
16 has been admitted as an exhibit, AES000014, and  
17 likewise Mr. Tilden's statement of professional  
18 qualifications is in the record at AES000015.

19 JUDGE BOLLWERK: All right. And we heard  
20 from these gentlemen previously I think at the safety  
21 hearing?

22 MR. CURTISS: No, we have not.

23 JUDGE BOLLWERK: Oh, we have not, okay.  
24 All right. Then I will -- we welcome you this morning  
25 and if you could, please raise your right hands and I

1       need a verbal response to the question I'm going to  
2       pose for you. Do you swear or affirm that the  
3       testimony you will give in this proceeding is the  
4       truth, the whole truth and nothing but the truth?

5               MR. STRUM: I do.

6               MR. TILDEN: I do.

7               JUDGE BOLLWERK: Thank you, gentlemen. So  
8       you're sworn in now and I think now we're ready for  
9       the staff presentation. Thank you.

10              MR. FISCHER: Good morning. This is the  
11       presentation on the fifth topic identified in the June  
12       2nd board order entitled Radiological Effluent  
13       Monitoring Program. Slide 2, please. I'm Karl  
14       Fischer, certified health physicist and environmental  
15       systems engineer at Argonne National Laboratory. I'm  
16       a technical reviewer for the Environmental Review and  
17       the Environmental Impact Statement. I have the lead  
18       for this presentation on parts A through C of this  
19       topic. Ms. Seymour of NRC Region II has the lead for  
20       the presentation on part D of this topic. My  
21       presentation or my part of this presentation will  
22       provide an overview of the AES Radiological Effluent  
23       and Environmental Monitoring Programs, including the  
24       monitoring of cylinders in the cylinder storage pad  
25       area. Next slide, please.

1                   Before addressing the board's specific  
2                   questions I want to clarify several items in the  
3                   board's request for presentation topic number 5.  
4                   First, in topic number 5 the board defined the acronym  
5                   REMP as Radiological Effluent Monitoring Program.  
6                   This differs from how the REMP acronym is defined in  
7                   the Environmental Impact Statement where it stands for  
8                   Radiological Environmental Monitoring Program. In the  
9                   EIS the Radiological Effluent Monitoring Program is  
10                  referred to by the acronym EMP. The REMP and the EMP  
11                  are complementary but different programs. Therefore,  
12                  to ensure that we fully address the board's request  
13                  for topic number 5 this presentation addresses bot the  
14                  Radiological Effluent and Environmental Monitoring  
15                  Programs.

16                  Second, in part B of topic number 5 the  
17                  board asked how the staff determined that the types of  
18                  effluents monitored and the number, type, detection  
19                  limits and locations of monitoring equipment are  
20                  sufficient. Also in part C the board asked how the  
21                  staff ascertained that the REMP features are adequate  
22                  for the EREF construction, operation and  
23                  decommissioning phases. Please note that the  
24                  sufficiency and adequacy of the AES Radiological  
25                  Monitoring Program with respect to regulatory

1 requirements in 10 CFR Parts 20 and 70 were addressed  
2 by the NRC staff as part of the safety review as  
3 documented in Section 9.3.2 of the Safety Evaluation  
4 Report, or NUREG-1951, and not as a part of the  
5 environmental review in preparation of this EIS. The  
6 extent to which the Radiological Effluent and  
7 Environmental Monitoring Programs were reviewed for  
8 the EIS is addressed later in this presentation.  
9 Slide 4, please.

10 Finally, in part C of topic 5 the board  
11 also asked how the staff ascertained that the REMP  
12 features are adequate for off-normal operation such as  
13 accidents and extreme weather. The Radiological  
14 Effluent and Environmental Monitoring Programs do not  
15 address off-normal operation. Radiological effluent  
16 and environmental monitoring is designed to ensure  
17 that releases of radioactive materials remain within  
18 prescribed limits that have been established to ensure  
19 public health and safety. Such a program focuses on  
20 normal operations where any elevated sample analysis  
21 results would trigger action to determine and remedy  
22 the cause within the facility's process systems.

23 JUDGE LATHROP: Excuse me, a second.

24 MR. FISCHER: Yes, sir.

25 JUDGE LATHROP: Is it possible that the

1 environmental monitoring program could give warning of  
2 incipient off-normal conditions?

3 MR. FISCHER: I would have to have you  
4 define incipient, sir.

5 JUDGE LATHROP: If you get small traces of  
6 radioactivity early enough you begin to suspect that  
7 there might be leaks.

8 MR. FISCHER: There are action levels that  
9 would be associated with the environmental monitoring  
10 program to where when the environmental monitoring  
11 program results indicated that an action level was  
12 being exceeded, then yes, those results could indicate  
13 a problem.

14 JUDGE LATHROP: Thank you.

15 MR. FISCHER: Data from the radiological  
16 monitoring program would provide a baseline for  
17 determining the extent of contamination should an  
18 accident or other extreme event occur. Off-normal or  
19 extreme conditions such as accidental releases by  
20 their nature cannot be predicted with any certainty as  
21 to the location or amount released. To address the  
22 potential accidental release of radioactive material  
23 as discussed in Section 4.2.15.3 of the EIS, IROFs, or  
24 Items Relied on For Safety, would help limit the  
25 consequence of accident scenarios with potentially

1 higher releases. In addition, fire detection and  
2 alarm systems as well as radiation protection systems  
3 in the EREF would help mitigate impacts from such  
4 releases. As covered in AES's emergency plan which is  
5 not available to the public, AES would coordinate with  
6 external agencies such as the Bonneville County Fire  
7 and Police Departments to monitor and address  
8 contamination external to the EREF site. Next slide,  
9 please, slide 5.

10 Applicants such as AES have access to NRC  
11 guidance that identifies the need and requirements for  
12 radiological effluent and environmental monitoring  
13 programs that are applicable to facilities such as the  
14 EREF. NRC guidance documents used by AES to develop  
15 and the NRC staff to review the EREF radiological  
16 monitoring programs are shown here. NUREG-1748  
17 provides guidance to the staff for its review of the  
18 environmental report and for development of the  
19 staff's EIS. NUREG-1748 also discusses environmental  
20 information that should be considered by applicants in  
21 preparing the environmental report. Section 5.6.1 and  
22 6.6.1 of NUREG-1748 provide guidance on items to  
23 include in a description of the radiological  
24 monitoring program in the EIS and the ER respectively.  
25 The staff used this guidance in conducting the

1 environmental review and preparing Chapter 6 which is  
2 entitled Environmental Measurement and Monitoring  
3 Programs of the EIS.

4 NUREG-1520 is the NRC standard review plan  
5 for reviewing a license application for a fuel cycle  
6 facility. As part of the staff safety review the  
7 staff used the acceptance criteria found in Section  
8 9.4.3.2.2, or Effluent and Environmental Monitoring,  
9 to evaluate the adequacy of AES's Radiological  
10 Effluent and Environmental Monitoring Program as  
11 documented in Section 9.3.3.2 of the NRC Safety  
12 Evaluation Report. NUREG 1520 is not used in the  
13 staff's environmental review or in preparation of the  
14 EIS. Slide 6, please.

15 Shown here are additional NRC guidance  
16 documents available to applicants that are relevant to  
17 the Radiological Effluent and Environmental Monitoring  
18 Programs. Regulatory Guide 4.15 describes an  
19 acceptable method for designing a program to ensure  
20 the quality of radiological effluent and environmental  
21 monitoring results. Regulatory Guide 4.16 describes  
22 an acceptable method for the development and  
23 implementation of radiological effluent monitoring  
24 programs and for monitoring effluents in reporting  
25 data. NUREG-1302 provides guidance for design and

1 implementation of radiological effluent and  
2 environmental monitoring programs. As stated in the  
3 environmental report, AES used these NRC guidance  
4 documents to design their proposed effluent and  
5 environmental monitoring programs. Slide 7, please.

6 As discussed earlier in the presentation  
7 and in Section 6.1 of the EIS, the radiological  
8 monitoring program at the proposed EREF would consist  
9 of two components, the Effluent Monitoring Program or  
10 EMP and the Radiological Environmental Monitoring  
11 Program or REMP. The Effluent Monitoring Program  
12 addresses the monitoring, recording and reporting of  
13 data for radiological contaminants emitted from  
14 specific points at the facility. Physical samples  
15 collected for analysis in this program would include  
16 media such as exhaust vent air sampler filters,  
17 filters from mobile air monitors and liquid condensate  
18 from the evaporator exhaust vent. The Radiological  
19 Effluent Monitoring Program addresses the monitoring  
20 of general environmental media to include soil,  
21 sediment, groundwater, biota and ambient air within  
22 and outside the EREF property boundary. The slides  
23 that follow present the features of the Radiological  
24 Effluent and Environmental Monitoring Programs. Slide  
25 8, please.

1           The radiological monitoring programs  
2 addressed in the EIS are limited to the startup and  
3 operations phases and are not specific to the  
4 construction and decommissioning phases. With regard  
5 to the pre-construction and initial construction  
6 phases there would be no radiological materials  
7 present at the EREF site and therefore there would be  
8 no radiological monitoring associated with these  
9 activities.

10           There would be monitoring associated with  
11 operations occurring during later construction  
12 activities, but this monitoring is not associated with  
13 the construction activities because construction does  
14 not involve radioactive materials. For baseline  
15 information on the surrounding environment, the REMP  
16 or Radiological Effluent Monitoring Program will begin  
17 data collection at least two years before receipt of  
18 radioactive materials and startup operations begin.  
19 The EMP, the Effluent Monitoring Program, will start  
20 with the beginning of operations. Both the EMP and  
21 the REMP will be in place during the REF operations.

22           JUDGE BOLLWERK: Can the case of the Eagle  
23 Rock facility then, and assuming there's been talk  
24 that the agency may be in a position by the end of the  
25 year to grant a license if that were to happen, when

1 would the monitoring, the baseline monitoring start  
2 then approximately?

3 MR. FISCHER: It's my understanding that  
4 baseline monitoring has already begun. I would refer  
5 to our AES experts to confirm that if you would like.

6 JUDGE BOLLWERK: Okay. Gentlemen?

7 MR. STRUM: We have already started to  
8 collect our for example soil samples for pre-  
9 construction activities to get a baseline on  
10 activities, uranic activities and other elements that  
11 are in the soil. We've collected over 70 soil samples  
12 and that will continue during the construction phase  
13 of the plant. So as materials are brought onsite such  
14 as backfill which are not native to the site itself  
15 we'd be able to characterize them for future reference  
16 against operational conditions to see if there's been  
17 any change from what we had seen in the pre-op. So  
18 that at the present time we've done soil sampling.

19 JUDGE BOLLWERK: Okay. All right. Thank  
20 you.

21 MR. FISCHER: With the decommissioning  
22 phase, a radiological monitoring program would be  
23 included in the decommissioning plan that AES would  
24 submit to the NRC near the end of the license period  
25 prior to decommissioning the EREF. Slide 9, please.

1                   As mentioned earlier, the Radiological  
2                   Effluent Monitoring Program focuses on sampling of  
3                   effluents at discharge points at the EREF. An  
4                   overview of this program is presented on this slide.  
5                   Information on the most important features of this  
6                   program are summarized in the slides that follow,  
7                   including monitoring of any storage cylinders in the  
8                   cylinder storage pad area. Complete information on  
9                   the Radiological Effluent Monitoring Program can be  
10                  found in Chapter 6 of the Environmental Report and  
11                  Chapter 6 of the EIS. AES designed the EREF  
12                  Radiological Effluent Monitoring Program using the  
13                  model effluent monitoring program in NUREG-1302. The  
14                  EMP, the Effluent Monitoring Program, is designed to  
15                  confirm the effectiveness of effluent controls,  
16                  evaluate compliance with effluent release limits and  
17                  verify that operations have no detrimental  
18                  radiological impact. The Effluent Monitoring Program  
19                  includes continuous sampling at all release points for  
20                  both airborne and liquid effluents. There would be no  
21                  direct discharge of industrial liquid effluents to  
22                  surface waters or ground. The only discharge of  
23                  industrial liquid effluent is via evaporation. The  
24                  Radiological Effluent Monitoring Program includes  
25                  semi-annual reporting to NRC. The program would be

1 modified as necessary to maintain collection and  
2 reliability of data based on changes to regulatory  
3 requirements or facility operations.

4 JUDGE WHITE: Excuse me, but would this  
5 program be considered the program that would monitor  
6 the cylinder storage pad basin, the lined basin that  
7 would accept drainage off of the cylinder pad? Or is  
8 that the other one?

9 MR. FISCHER: No sir, that is the  
10 Environmental Monitoring Program.

11 JUDGE WHITE: It's the environmental.  
12 Thank you.

13 MR. FISCHER: Slide 10, please.

14 JUDGE LATHROP: I have another question.  
15 Do the airborne monitoring sample points cover  
16 possible evaporation from the liquid discharge points  
17 or possible liquid discharge points?

18 MR. FISCHER: There is one industrial  
19 liquid effluent discharge point and that's the  
20 evaporator. I'm going to actually cover that in a  
21 slide coming up. And that is continuously sampled.  
22 All of the basins where there is stormwater which  
23 could evaporate, those are sampled under the  
24 Environmental Monitoring Program.

25 JUDGE LATHROP: And are all such -- the

1 assumption is made that there are no liquid discharges  
2 to the environment, but there's possibility of off-  
3 normal conditions resulting in liquid discharges and  
4 so you would have to catch the possibility of such  
5 evaporation from airborne sampling points. And then  
6 what I'm asking is if you've got enough coverage of  
7 the airborne to include possible liquid discharges,  
8 evaporation from.

9 MR. FISCHER: All of the effluent  
10 discharge points, both air and liquid, for the  
11 facility do have continuous monitoring. I'm not aware  
12 of any other discharge points that would be  
13 foreseeable under accident conditions. Let me go  
14 ahead and refer to the AES experts and see if they  
15 might have anything to add on that.

16 JUDGE BOLLWERK: All right. Gentlemen?

17 MR. STRUM: We do sampling of both water  
18 and sediment from the retention and detention basins  
19 on a periodic basis. We do not expect to see uranic  
20 materials in that, but early indication of off-normal  
21 conditions which could cause the buildup of uranics,  
22 the Environmental Monitoring Program, the REMP,  
23 through the sediment and water sampling would be our  
24 indicator of an off-normal situation that we would  
25 evaluate. We do have air samplers along the site

1 boundary which are in the high D over Q sectors, so if  
2 there's re-suspended particulate from basins there is  
3 the potential for identifying that along with any  
4 other dust that may be brought up from the site area.  
5 We do sample effluents in the sanitary waste system  
6 prior to going to the basin on a periodic basis to  
7 confirm that in effect we do not see uranic materials  
8 going to the basins for the sanitary waste. If we did  
9 we would take investigative action to determine the  
10 source and to correct it.

11 JUDGE LATHROP: For the cylinder storage  
12 pad, for example, your monitoring positions are at the  
13 catch basin which as I understand it could be  
14 considerably distant from cylinders being stored. So  
15 what I'm asking is if it's possible to detect  
16 evaporation say from a cylinder leak closer to the  
17 source of the leak.

18 MR. STRUM: For the cylinder storage pad,  
19 the cylinders are surveyed in the plant prior to being  
20 placed on the pad. So swipes looking for potential  
21 leaks, or leaks around the valve in particular as well  
22 as the cylinder to ensure that it's properly  
23 decontaminated on the surface before being put on the  
24 pad would be the normal course of business. We've  
25 also committed to doing annual surveys of the

1 cylinders, a visual inspection to see if there's any  
2 detectable deterioration in the cylinder surfaces.  
3 Beyond that the cylinder pad itself drainage runs to  
4 the catch basin. So again, on a quarterly basis  
5 that's where we would pick up any buildup from any  
6 residual or minute contamination that may have been  
7 missed on the surface of the cylinders.

8 JUDGE BOLLWERK: One second. Can you pull  
9 the mic just a little closer to you? I got a note  
10 from the technical folks saying -- there we go, thank  
11 you. Appreciate it.

12 JUDGE LATHROP: And it's your professional  
13 opinion that that would detect any possible problem in  
14 the cylinder storage pad quickly enough for remedial  
15 action?

16 MR. STRUM: I -- I believe that conditions  
17 on cylinders that would lead to a significant release  
18 of uranic materials from the cylinders would be  
19 identified by workforce on the cylinder pad itself.  
20 The minute quantities if they were to exist in terms  
21 of contamination would most likely be caught up as it  
22 accumulated and built up in the sediment layer of the  
23 retention basin. So that would be where you'd have  
24 the highest sensitivity to be able to determine that  
25 you've had a chronic long-term condition that has led

1 to uranics in some small form being built up in a  
2 final collection point.

3 JUDGE LATHROP: And that would be  
4 consistent with the safety evaluation that the  
5 probability of a significant discharge from the  
6 cylinders themselves is quite unlikely?

7 MR. STRUM: I believe so.

8 JUDGE LATHROP: Thank you.

9 JUDGE WHITE: Along this line just to  
10 clarify, and I'll probably have a question about  
11 cylinder leaks later on when that topic of plugs comes  
12 up, but along this line and following up your comment,  
13 sir. If there were workers on the pad would it be  
14 correct to say that even relatively small leaks that  
15 would be likely to produce hydrogen fluoride would be  
16 apparent or obvious to a person on the pad. Is that  
17 something that you'd be able to smell, for example, or  
18 recognize in the air?

19 MR. STRUM: Yes sir, I believe so. The  
20 hydrogen fluoride odor would be very distinctive even  
21 in small concentrations.

22 JUDGE WHITE: Thank you.

23 MR. FISCHER: Slide 10, please. All  
24 potentially radioactive effluent from the facility  
25 would be discharged only through monitored pathways.

1 The locations of the discharge points at the EREF are  
2 sensitive information that is not publicly available.  
3 As shown on this slide, routine gaseous effluent would  
4 be discharged from nine points. Six of these are  
5 gaseous effluent ventilation systems, including the  
6 separations building GEVS of which there are four, the  
7 technical support building GEVS and the centrifuge,  
8 test and post mortem facility GEVS. And once again,  
9 that stands for gaseous effluent ventilation system.  
10 The other three discharge points are the centrifuge  
11 test and post mortem facility exhaust and filtration  
12 system, the ventilated room HVAC system, H-V-A-C, and  
13 the technical support building contaminated area HVAC  
14 system. Following the guidance in Regulatory Guide  
15 4.16 AES would continuously monitor all gaseous  
16 effluent discharge points for gross alpha and hydrogen  
17 fluoride. Slide 11, please.

18 There would be no discharge of industrial  
19 liquid effluents to surface waters or the ground as  
20 liquid process effluents will be collected by the  
21 liquid effluent collection and treatment system,  
22 sampled and analyzed in the collection tanks for  
23 uranic content prior to treatment, and treated if  
24 necessary within the plant prior to discharge. The  
25 effluent would then be released to the atmosphere only

1 by evaporation. The cylinder storage pad retention  
2 basins would be lined to prevent infiltration and they  
3 would have no discharge outlets. In addition, there  
4 would be no facility connection to a publicly owned  
5 treatment works, in other words, a sewage treatment  
6 plant. Slide 12, please.

7 This slide represents a summary of  
8 locations, type, analysis and frequency of each  
9 potentially radiological effluent to be monitored in  
10 the Environmental Monitoring Program as discussed on  
11 the previous slides. It should be noted that isotopic  
12 analysis for uranium would only be performed if gross  
13 alpha and beta activities indicate that an individual  
14 radionuclide could be present in a concentration  
15 greater than 10 percent of the concentration specified  
16 in Table 2 of Appendix B to 10 CFR 20. AES would  
17 submit a semiannual summary report of the Radiological  
18 Effluent Monitoring Program to the NRC. Slide 13,  
19 please.

20 In part A of topic number 5 the board  
21 specifically asked for a discussion of monitoring of  
22 any storage cylinders in a cylinder storage pad area.  
23 Although AES will be implementing monitoring  
24 procedures for the cylinders in the storage pad area,  
25 this monitoring is not an explicit part of the

1 radiological effluent or environmental monitoring  
2 programs. Two lined cylinder storage pads' stormwater  
3 retention basins would receive stormwater runoff from  
4 the cylinder storage pads. Discharge from these  
5 basins would occur only through evaporation. There  
6 would be no direct discharge to surface waters.  
7 Although the basin would collect stormwater runoff  
8 from the paved cylinder storage pads as well as  
9 treated domestic sanitary effluents, it would not  
10 receive process-related effluents. Therefore, no  
11 significant releases of uranic material would be  
12 expected. However, stormwater, when present, and  
13 sediment from these basins would be sampled  
14 periodically to confirm that no uranic releases have  
15 occurred. In addition, AES will monitor external  
16 radiation exposure using thermal luminescent  
17 dosimeters or TLDs placed along the facility's fence  
18 line. Further, while cylinder monitoring is intended  
19 to detect releases, the EREF cylinder management  
20 program is intended to mitigate or prevent releases  
21 through inspection and maintenance. The cylinder  
22 management program would include routine inspection of  
23 the anti-corrosion layer on cylinders as well as  
24 inspection for mechanical damage. This inspection  
25 would be performed annually. If inspection of a

1 cylinder reveals significant deterioration or other  
2 conditions that may affect safe use the contents would  
3 be transferred to another cylinder in good condition  
4 and the defective cylinder discarded. The root cause  
5 of any significant deterioration would be determined  
6 and if necessary additional cylinder inspections would  
7 be performed.

8 JUDGE LATHROP: You've mentioned lining  
9 for the catch basin and for -- is the concrete  
10 cylinder storage pad itself lined?

11 MR. FISCHER: I do not believe the pad  
12 itself is lined. The pad is concrete and then all  
13 runoff from the paved surface of the pad would be  
14 diverted to a lined retention basin.

15 JUDGE LATHROP: So the entire storage pad  
16 will be paved eventually, it will be built in stages  
17 as I understand it. And the effluent from say the  
18 first stage will be piped, stormwater runoff will be  
19 piped to the catch basin. So there must be an  
20 inspection program both for the concrete to make sure  
21 that it's not cracked so that the runoff all gets to  
22 the catch basin, and also that the piping system that  
23 carries the effluent from the partially built storage  
24 pad does not leak. Is there such an inspection  
25 program planned?

1 MR. TILDEN: The potential for  
2 contamination on the cylinder storage yards doesn't  
3 warrant the level of sealing the cylinder storage pads  
4 or sealing the piping from the cylinder storage pads  
5 to the retention basin, or leak-checking those basins.  
6 We try to maintain the contamination control at the  
7 cylinder boundary itself by inspecting the cylinders  
8 and taking action before any contamination would get  
9 to the cylinder pad itself.

10 JUDGE LATHROP: But the inspection program  
11 is annually so you reckon that an annual inspection of  
12 the cylinders is sufficient to give you warning that  
13 there may be a leak.

14 MR. TILDEN: In my experience an annual  
15 inspection is more than sufficient. At the DOE  
16 facilities they inspect cylinders every four years  
17 except for the cylinders that have been known to be  
18 bad actors and they inspect those every year. And  
19 that's proven to be sufficient for maintaining  
20 contamination control.

21 JUDGE LATHROP: Thank you.

22 MR. FISCHER: Slide 14, please. I will  
23 now discuss the Radiological Effluent Monitoring  
24 Program or REMP. The program provides a supplemental  
25 check of containment and effluent controls and

1 monitoring and focuses primarily on locations within  
2 three miles of the facility. Sampling locations are  
3 determined based on identified exposure pathways such  
4 as direct exposure to a ground or plume, inhalation  
5 from a plume, and ingestion of food products. The  
6 Radiological Effluent Monitoring Program includes the  
7 collection of data during pre-operational years in  
8 order to establish background and baseline  
9 radiological information that will be used to  
10 determine and evaluate impacts from EREF operations on  
11 the local environment. Radiological environmental  
12 sampling will be initiated at least two years prior to  
13 facility operations in order to develop a sufficient  
14 database.

15           Following the guidance in NUREG-1302 the  
16 AES Radiological Effluent Monitoring Program includes  
17 monitoring of direct radiation exposure, continuous  
18 airborne particulates, groundwater, stormwater, basin  
19 sediment, soil and vegetation. Please note that the  
20 semiannual commitment of reporting to the NRC applies  
21 to effluent monitoring. There is no regulatory  
22 requirement for reporting on environmental monitoring  
23 programs and as a result AES has committed to annual  
24 reporting of their Environmental Monitoring Program  
25 which is consistent with the recommendations in NUREG-

1 1302. Slide 15, please.

2           Since the primary effluents from the EREF  
3 are airborne the main component of the EREF  
4 Radiological Effluent Monitoring Program is continuous  
5 particulate air monitoring. Following NUREG-1302 AES  
6 will conduct sampling at at least five monitored  
7 locations. They include three site boundary locations  
8 in the wind sectors with the highest calculated or  
9 predicted annual average ground-level concentration,  
10 one from the vicinity of a community having the  
11 highest calculated or predicted annual average ground-  
12 level concentration and one from a control location  
13 beyond five miles in the upwind or non-prevailing  
14 sector not in the vicinity of any other radiological  
15 facility. Samples will be retrieved at least  
16 biweekly. More frequent retrieval may be required  
17 during periods of heavy dust concentration. Gross  
18 alpha/beta analysis will be performed with quarterly  
19 isotopic analysis on a composite sample. Because  
20 there are no communities or residences within five  
21 miles of the facility footprint, the community  
22 location will be at the site boundary in the same  
23 sector as the nearest residence which is approximately  
24 five miles east of the facility. I will later in this  
25 presentation provide a map which shows the location of

1 all these environmental monitoring locations. Slide  
2 16, please.

3 JUDGE LATHROP: Just before you go ahead,  
4 so the site boundary locations were picked based on  
5 the expectation that those are the most probable  
6 directions in which airborne monitoring would detect  
7 any possible effluents, is that a correct summary?

8 MR. FISCHER: Those locations that were  
9 chosen were chosen based on the highest predicted or  
10 calculated concentrations of contamination. And  
11 that's a function of the wind rose, wind speed, wind  
12 direction, distance to the fence line, release point  
13 height.

14 JUDGE LATHROP: So most probable.

15 MR. FISCHER: Highest predicted  
16 concentration, yes.

17 JUDGE LATHROP: Thank you.

18 MR. FISCHER: Slide 16, please. Another  
19 major component of the Radiological Effluent  
20 Monitoring Program is groundwater monitoring.  
21 Following NUREG-1302 AES will install monitoring wells  
22 at eight locations that are based on the predominant  
23 direction of groundwater flow under the EREF site  
24 which is northeast to southwest. Two of the eight  
25 locations would be up-gradient to service controls and

1 two wells would be located to monitor unexpected  
2 leakage from the stormwater detention and retention  
3 basins. Two additional deep aquifer wells would be  
4 installed after operations to the west and south of  
5 the facility footprint. Semiannual isotopic analysis  
6 for uranium would be performed. Slide 17, please.

7 Additional components of the Radiological  
8 Effluent Monitoring Program are stormwater and basin  
9 sediment sampling. Stormwater and basin sediment  
10 sampling are for the site stormwater detention basin  
11 and the two cylinder storage pad retention basins.  
12 There would be no discharge from the site stormwater  
13 detention basin under normal operations. Evaporation  
14 and infiltration would be the only means by which  
15 collected stormwater would be released from that  
16 basin. No significant releases of uranic material are  
17 expected from the site stormwater detention basin  
18 because it would only receive runoff from paved  
19 surfaces, roofs and landscape areas not including the  
20 cylinder storage pads. These paved surfaces would not  
21 include cylinder storage pads.

22 The two cylinder storage pad stormwater  
23 retention basins would be lined to prevent  
24 infiltration and have no outlets, and they would have  
25 the capacity to hold all in-flows for the life of the

1 facility. These basins could be dry for up to five  
2 months of the year June through October. Stormwater  
3 and basin sediment would undergo semiannual uranium  
4 isotopic analysis. It should be noted that the  
5 cylinder storage pad retention basins would receive  
6 treated domestic sanitary effluent which I will  
7 address on the next slide.

8 JUDGE LATHROP: So there are two basins  
9 and they both receive sewage?

10 MR. FISCHER: They both receive treated  
11 sanitary effluent, yes.

12 JUDGE LATHROP: So the idea is to monitor  
13 the combination of the stormwater pad runoff plus the  
14 sewage at the same time?

15 MR. FISCHER: The sewage is actually  
16 monitored at the release point and then it's monitored  
17 again because it is released into the cylinder storage  
18 pad retention basin.

19 JUDGE LATHROP: But if it joins the runoff  
20 it dilutes the runoff, and if it has no -- let's  
21 assume that there is a leak somewhere and that the  
22 sewage is examined and doesn't have any contamination,  
23 but then it joins the runoff doesn't that dilute the  
24 runoff so that it -- you wouldn't detect a possible  
25 leak from the cylinder storage pads as quickly if it's

1 diluted by the sewage. Is that --

2 MR. FISCHER: It's my understanding, sir,  
3 that the volume of stormwater runoff from the cylinder  
4 storage pads will actually be very light for most of  
5 the year. In fact, as I indicated it will very likely  
6 be dry for five months.

7 JUDGE LATHROP: That's even worse though.  
8 What I'm saying is that you're going to have the  
9 sewage all the time.

10 DR. BIWER: There is the potential for  
11 some dilution.

12 JUDGE LATHROP: So --

13 DR. BIWER: Over time it will be  
14 evaporating so the dilution won't be that great in  
15 terms of the detection limits.

16 JUDGE LATHROP: So there's steady  
17 evaporation from the catch basins?

18 DR. BIWER: Yes.

19 JUDGE LATHROP: And are these airborne  
20 monitoring positions near these catch basins?

21 DR. BIWER: You wouldn't really expect to  
22 have any uranic material evaporating from the ponds.  
23 The only risk you might have is if they do dry there  
24 may be some windblown dust. In which case your  
25 airborne monitors would --

1 JUDGE LATHROP: So the continuous  
2 evaporation would concentrate the solution that is  
3 monitored. So the situation would be more favorable  
4 than I imagined in my hypothetical example. Are you  
5 sure of that?

6 MR. FISCHER: Let's keep in mind that even  
7 if the effluent from the treated domestic sanitary  
8 sewage were to dilute the stormwater that we'd also be  
9 monitoring the sediment from the basin in addition to  
10 any stormwater that might be present.

11 JUDGE LATHROP: Thank you.

12 MR. FISCHER: Slide 18, please. Treated  
13 domestic sanitary sewage would also be directly  
14 monitored under the Radiological Effluent Monitoring  
15 Program although it is not expected to contain any  
16 uranic content. Samples will be collected  
17 semiannually for uranium isotopic analysis. As noted  
18 on the previous slide, treated domestic sanitary  
19 sewage would be released to the lined cylinder storage  
20 pad retention basins where it would also be monitored  
21 through basin and sediment sampling. Slide 19,  
22 please.

23 Soil and vegetation samples would be  
24 collected in the same vicinity at various locations  
25 around the facility. This could include crops or

1 grass depending on availability. Baseline sampling  
2 will be conducted prior to startup from each sector at  
3 locations near the fence line. After startup samples  
4 will be collected from eight sector locations  
5 including three with the highest predicted atmospheric  
6 deposition and one offsite control location. Samples  
7 will undergo semiannual uranium isotopic analysis.  
8 Slide 20, please.

9 In addition to environmental media the  
10 Radiological Effluent Monitoring Program includes  
11 monitoring of direct gamma radiation to assess the  
12 offsite dose from stored uranium hexafluoride  
13 cylinders and other facility operations. Quarterly  
14 thermal luminescent dosimeters would be deployed at  
15 the fence line in all 16 meteorological sectors and  
16 the offsite dose equivalent would be estimated through  
17 extrapolation of the dosimeter data using Monte Carlo  
18 N-Particle or similar program. Two offsite controls  
19 would provide information on regional changes in  
20 background radiation levels.

21 JUDGE LATHROP: Does deployed quarterly  
22 mean that that's -- the measurements are only made  
23 quarterly?

24 MR. FISCHER: It would mean that the  
25 dosimeters are collected and analyzed on a quarterly

1 basis, yes.

2 JUDGE LATHROP: They're there all the  
3 time.

4 MR. FISCHER: Correct.

5 JUDGE LATHROP: Okay. Deployed to me  
6 means putting in place, so. But you've corrected my  
7 understanding.

8 MR. FISCHER: Slide 21, please. This  
9 chart summarizes the type, number, locations, analysis  
10 and frequency of the media sampling included in the  
11 Radiological Effluent Monitoring Program as discussed  
12 in the previous slides. AES would submit an annual  
13 summary report of the Radiological Effluent Monitoring  
14 Program to NRC, including the types, numbers and  
15 frequencies of environmental measurements and the  
16 identities and concentrations of EREF-related  
17 radionuclides found in environmental samples,  
18 including the minimum detectable concentrations and  
19 error. Slide 22, please.

20 JUDGE WHITE: Could I ask one question  
21 with regard to the previous slide and the materials  
22 that are likely to be sampled. In a semiannual  
23 sampling of soil I would suppose that if you did that  
24 in the spring and fall soil would be available but for  
25 a number of months in the winter the ground will be

1 covered with snow. And I don't know whether there  
2 would be any thought or any use in sampling the snow  
3 surface at that location, at these locations once in  
4 the wintertime. Is there any discussion of that or  
5 thought of that or is that something that would not be  
6 feasible?

7 MR. FISCHER: That was not addressed in  
8 the Environmental Report. I would ask if our AES  
9 experts have anything to add on that though.

10 MR. STRUM: In terms of snow cover we have  
11 no plans to actually collect and analyze snow as part  
12 of the routine program. However, if deposition during  
13 the winter months when snow is falling and scavenged  
14 any materials out of the air and settled them on the  
15 ground, that would tend to stay with the snow and as  
16 the snow melt, build up onto the soil below and which  
17 we'd pick up in the routine soil sampling, yes.

18 JUDGE WHITE: Thank you.

19 JUDGE LATHROP: Could you go into a little  
20 more detail on how the minimum locations were  
21 determined to be adequate?

22 MR. FISCHER: The minimum locations for  
23 which media, sir?

24 JUDGE LATHROP: In slide 21. All of the  
25 locations.

1 MR. FISCHER: Yes, those --

2 JUDGE LATHROP: Was there a specific  
3 modeling done to place those, or was it following a  
4 NUREG recipe, or what exactly was done?

5 MR. FISCHER: Yes, sir. NUREG-1302 does  
6 provide a recommended program which identifies a  
7 minimum number of samples for each media type.

8 JUDGE LATHROP: Which is what was followed  
9 by AREVA. And it was followed based on the vagaries  
10 of the site and the wind rose and so on. I assume  
11 that has input into where these placements are.

12 MR. FISCHER: Yes. For example, for air  
13 monitoring NUREG-1302 recommends a minimum of five  
14 locations, three in the sectors of the highest  
15 average, you know, predicted concentration. So AES  
16 when they were formulating their program did that  
17 modeling and determined where those locations were  
18 going to be.

19 JUDGE LATHROP: Did the staff check that  
20 modeling?

21 DR. BIWER: That modeling was primarily  
22 checked in the Safety Evaluation Report because there  
23 are criteria in 1520 to check expected exposure levels  
24 to the public.

25 JUDGE LATHROP: The answer is that it was

1 checked.

2 DR. BIWER: Yes.

3 JUDGE LATHROP: Thank you.

4 MR. FISCHER: Slide 22, please. This  
5 slide shows the monitoring locations for all  
6 components of the Radiological Effluent Monitoring  
7 Program. Airborne and liquid effluent monitoring  
8 locations such as the stack and evaporator are not  
9 shown for security reasons. Slide 23, please.

10 Following the guidance in NUREG-1520 AES  
11 established minimum detectable concentrations for  
12 effluent sample analysis that are not more than 5  
13 percent of the concentration limits listed in Table 2  
14 of Appendix B to 10 CFR Part 20. The guidance in  
15 NUREG-1520 states that MDCs for environmental  
16 monitoring should be at least as low as those selected  
17 for effluent monitoring in air and water. In other  
18 words, not more than 5 percent of the concentration  
19 limits listed in Table 2 to Appendix B to 10 CFR Part  
20 20. MDCs for sediment, soil and vegetation are  
21 selected on the basis of action levels to ensure that  
22 sampling and analytical methods are sensitive and  
23 reliable enough to support the application of the  
24 action levels. Slide 24, please.

25 As discussed at the beginning of this

1 presentation, the sufficiency and adequacy review of  
2 the AES radiological monitoring program with respect  
3 to the regulations in 10 CFR Parts 20 and 70 was  
4 performed by the NRC staff as part of the safety  
5 review as documented in Section 9.3.2 of the Safety  
6 Evaluation Report and not as a part of the  
7 environmental review in preparation of the EIS. The  
8 extent to which the Radiological Effluent Monitoring  
9 Program was reviewed for the EIS will now be  
10 discussed.

11 NUREG-1748 contains guidance for the  
12 staff's environmental review in preparation of the  
13 EIS. With respect to the radiological monitoring the  
14 staff ascertained that the environmental report  
15 contained the information outlined in NUREG-1748  
16 Section 6.6.1 as shown on this in the next slide.  
17 This information includes maps or aerial photographs  
18 of the site with proposed monitoring and sampling  
19 locations clearly identified along with effluent  
20 release points, principal radiological exposure  
21 pathways, the location of characteristics of radiation  
22 sources and radioactive effluents, both liquid and  
23 gaseous. Slide 25, please.

24 The staff also ascertained that the ER  
25 contained detailed description of the monitoring

1 program including number and location of sample  
2 collection points, measuring devices used and pathways  
3 sampled or measured, sample size, sample collection  
4 frequency and sampling duration, method and frequency  
5 of analysis including lower limits of detection, a  
6 discussion justifying the choice of sample locations,  
7 analyses, frequencies, durations, sizes and lower  
8 limits of detection, and quality assurance procedures.  
9 Slide 26, please.

10 In part C of topic number 5 the board  
11 asked whether uranium tetrafluoride hydrate plugs are  
12 likely to form to seal small leaks of uranium  
13 hexafluoride or its reaction products in storage  
14 cylinders. When uranium hexafluoride cylinders are  
15 breached moist air reacts with exposed uranium  
16 hexafluoride and iron forming a dense plug of uranium  
17 tetrafluoride and iron fluoride hydrates that prevents  
18 rapid loss of cylinder material. This information is  
19 based on studies at three DOE sites, K-25, Paducah and  
20 Portsmouth. Deposition of lost material on the ground  
21 of the cylinder storage pad would likely be detected  
22 by routine radiological surveys that are performed to  
23 comply with 10 CFR 20.1302. In addition, quarterly  
24 isotopic analysis of cylinder storage pads' stormwater  
25 retention basin water and sediment would likely

1 indicate the presence of a cylinder leak before the  
2 annual inspection.

3 JUDGE WHITE: Can I ask one question about  
4 these plugs which are interesting? The assumption  
5 with regards to the chemistry here I guess is that  
6 there is some sufficient humidity or water available  
7 for hydrates to form. Is that assumption likely to be  
8 valid in the summer in the low humidity environment of  
9 the high desert in which EREF is located?

10 DR. BIWER: UF<sub>6</sub> is highly reactive to  
11 moisture in the air to form uranial fluoride. UF<sub>4</sub> is  
12 a fairly stable intermediate. Eventually when there's  
13 enough water it will fully oxidize to one of the oxide  
14 forms. In the desert environment basically it's just  
15 going to be a slower process but eventually it'll get  
16 there.

17 JUDGE WHITE: So -- okay. Is there any  
18 data on how small a leak would have to be in order for  
19 this to be an efficient plugging process? In other  
20 words if the leak is a millimeter it might be expected  
21 to actually plug fairly quickly, but if it were a  
22 centimeter perhaps much more slowly if at all?

23 DR. BIWER: Well, the erosion -- the  
24 corrosion process is a slow process so any openings  
25 will already have some oxidized form of the UF<sub>6</sub>

1 exposed to the air. These leaks are extremely small  
2 even with the larger surface areas. It's only if you  
3 actually have a breach of the cylinder like through an  
4 accidental drop or piercing or something where you  
5 might have a little bit of an immediate hazard to  
6 local workers, but that's only basically to the HF if  
7 there's enough water present. In other words, if it's  
8 raining you've got a problem. If it's not you just  
9 keep the workers away until you can move in and plug  
10 the hole basically.

11 JUDGE WHITE: So if it were a very low  
12 humidity summer environment and there were a piercing  
13 of some kind the material that would leak would be  
14 gaseous UF<sub>6</sub>, is that correct? If there were no --

15 DR. BIWER: It would be, if there were any  
16 uranium air releases it would be uranium fluoride or  
17 HF. Well, HF will come off, some uranium fluoride  
18 possibly. But it would be in very small amounts.

19 JUDGE WHITE: So that -- but that reaction  
20 does not require the presence of water? That  
21 reaction?

22 DR. BIWER: No, it requires water for the  
23 UF<sub>6</sub> to oxidize.

24 JUDGE WHITE: That's what I thought. But  
25 in the absence of water, if it were completely dry,

1 you know, very, very low humidity environment and  
2 there were a piercing then the gas that would emerge  
3 from that breach would be gaseous UF<sub>6</sub>, is that  
4 correct?

5 DR. BIWER: You may have --

6 JUDGE WHITE: - clarify the chemistry here  
7 a little bit?

8 DR. BIWER: Yes. You may have a very  
9 small amount of UF<sub>6</sub>, but even under low humidity  
10 conditions UF<sub>6</sub> is extremely reactive to any moisture  
11 present.

12 JUDGE WHITE: Okay. Thank you.

13 JUDGE LATHROP: He's asking in a number of  
14 different ways how quickly would a leak be sealed and  
15 under low humidity conditions and I gather you don't  
16 have any direct experience with --

17 DR. BIWER: Not directly, but it's not  
18 something that would provide a hazard to local  
19 workers, and it would eventually seal fairly quickly  
20 based on studies that I'm aware of.

21 JUDGE LATHROP: Thank you.

22 MR. FISCHER: This concludes my  
23 presentation on parts A through C of topic number 5.  
24 I will now turn the presentation over to Ms. Seymour  
25 who will continue with part D of this topic.

1 JUDGE BOLLWERK: Before you move on, you  
2 had a?

3 JUDGE LATHROP: I was going to thank the  
4 staff for discussing both aspects, both the safety and  
5 the environmental aspect in this presentation.  
6 Although we used the hybrid term in asking for the  
7 presentation this is what we wanted to hear. And  
8 thank you.

9 JUDGE BOLLWERK: Can I just get a  
10 definitional matter cleared up for me? Domestic  
11 sanitary sewage, that's basically everything from the  
12 facility, whether it's lab waste or the toilets,  
13 everything, is that what we're talking about? How is  
14 that defined?

15 MR. FISCHER: Anything that is not an  
16 industrial process effluent, yes. Primarily sewage,  
17 yes.

18 JUDGE BOLLWERK: Okay. And they have some  
19 kind of a sump system that they keep it in or how does  
20 it -- what are the -- how is it stored? It says it's  
21 processed so I'm assuming it goes?

22 MR. FISCHER: I'm going to let the AES  
23 experts answer that if I may.

24 JUDGE BOLLWERK: And you mentioned in one  
25 of the slides that -- I guess 11 maybe or something

1 like that, that it's not treated, there's no  
2 connection anywhere to a waste treatment facility, so.

3 MR. TILDEN: It's a packaged stand-alone  
4 sewage treatment plant and the laboratory waste is  
5 collected in the liquid effluent collection system and  
6 treated as a liquid effluent along with our other  
7 liquid effluents to make sure there's no contamination  
8 or -- it doesn't go to the sanitary sewage system.

9 JUDGE BOLLWERK: Okay. So they're treated  
10 separately?

11 MR. TILDEN: Yes.

12 JUDGE BOLLWERK: Okay. All right. Thank  
13 you.

14 MS. SEYMOUR: Good morning. I am Deborah  
15 Seymour, Branch Chief for Construction Projects Branch  
16 1 of the Division of Construction Projects in the NRC  
17 Atlanta Office in Region II. My branch is responsible  
18 for the oversight of the NRC construction inspection  
19 program for fuel facility construction and that  
20 includes the Eagle Rock Enrichment Facility. And I  
21 will be giving the presentation this morning on part  
22 5d of topic number 5. Slide 28, please.

23 Facility inspections for the Eagle Rock  
24 Enrichment Facility will be conducted by NRC Region II  
25 technical specialist inspectors. These inspections

1 will include verification of acceptable implementation  
2 of the Eagle Rock Enrichment Facility radiological  
3 monitoring programs. The objectives of these  
4 inspections are to determine whether the licensee's  
5 program is being implemented in compliance with NRC  
6 regulations and license requirements related to the  
7 processing of radioactive liquid and airborne  
8 effluents, the control of radioactive liquid and  
9 airborne effluents, the release of radioactive liquid  
10 and airborne effluents, environmental sampling  
11 including soil, vegetation, air samples and radiation  
12 dosimeters, and the reporting of the information to  
13 the NRC with regard to the above. The program will  
14 ensure that releases of radioactivity minimally impact  
15 the public and the environment, and that the licensee  
16 has implemented adequate management controls for the  
17 program. Slide 29, please.

18 NRC Inspection Procedure 8845, Effluent  
19 Control and Environmental Protection or an equivalent  
20 inspection procedure will be used for the inspections  
21 of the radiological inspection monitoring program.  
22 Beginning prior to the startup of the Eagle Rock  
23 Enrichment Facility, during testing, startup,  
24 operations and decommissioning of the facility.  
25 Inspections using Inspection Procedure 88045 will

1 focus on management controls, including  
2 responsibilities and internal audits and inspections,  
3 quality control of analytical measurements, monitoring  
4 stations and sampling locations including  
5 environmental sampling locations, records and reports  
6 of environmental and radioactive effluent monitoring,  
7 radioactive liquid and airborne effluent procedures  
8 and license requirements, indication and resolution of  
9 problems and changes to the program if needed. Slide  
10 30, please.

11 JUDGE LATHROP: You mentioned testing.  
12 What kind of testing of the system do you do? Later  
13 you mention hot acceptance testing.

14 MS. SEYMOUR: Okay.

15 JUDGE BOLLWERK: And you periodically test  
16 the system or how frequently is testing performed?

17 MS. SEYMOUR: Okay. This is -- I  
18 mentioned testing as in the reference of the licensee  
19 is performing testing. So if the licensee is  
20 performing testing and it involves in any way a  
21 special nuclear material they have to have in place  
22 the program to ensure that there's no impact on the  
23 environment or that there isn't an unmeasured effluent  
24 release. So we would come in and verify that that was  
25 the case, that their programs were in place

1 appropriately and that they were implemented.

2 JUDGE BOLLWERK: All right. I'll wait  
3 until you get to hot acceptance testing to ask you how  
4 you do that.

5 MS. SEYMOUR: We don't do the hot  
6 acceptance testing, again.

7 JUDGE BOLLWERK: They do it.

8 MS. SEYMOUR: They do it, and basically  
9 that involves a very small amount of natural uranium  
10 hexafluoride and it's used to perform some tests to  
11 determine how best to run different systems.

12 JUDGE BOLLWERK: All right, thank you.

13 MS. SEYMOUR: You're welcome. Slide 30,  
14 please. The results of the NRC's inspections will be  
15 documented in inspection reports that are available or  
16 will be available to the public in the NRC's agency-  
17 wide document access and management system known as  
18 ADAMS. Slide 31, please.

19 The NRC's radiological monitoring  
20 inspection program will begin prior to the receipt of  
21 special nuclear material and the start of hot  
22 acceptance testing which is the testing performed with  
23 a small amount of natural uranium hexafluoride. The  
24 time frame for starting these inspections is  
25 approximately one year prior to the start of

1 operations. However, this is an estimate and the  
2 schedule for these inspections will depend on AES's  
3 construction and testing schedule. The initial  
4 inspections will focus on the portions of the  
5 radiological monitoring program needed for the  
6 scheduled activities and verify that the monitoring  
7 program is effectively implemented prior to the  
8 receipt of radiological materials onsite. If these  
9 inspections do not identify any significant findings,  
10 barring other issues AES will be allowed to receive  
11 special nuclear material onsite and perform the hot  
12 acceptance testing. The licensee would be required to  
13 implement corrective measures if any significant  
14 issues are identified. Slide 32, please.

15 The next major step is implementation of  
16 the radiological monitoring inspection program prior  
17 to the onset of Eagle Rock Enrichment Facility  
18 operations. Prior to operations the NRC will conduct  
19 operational readiness review inspections known as  
20 ORRs. The ORRs will be required -- the ORR  
21 inspections will be required by a license condition.  
22 The ORR inspections will include safety program  
23 readiness such as nuclear criticality safety,  
24 operations safety and radiation safety, and will also  
25 include inspections to ensure that the radiological

1 monitoring program is adequately implemented. If  
2 significant inspection findings are identified during  
3 the ORR inspections NRC authorization of Eagle Rock  
4 Enrichment Facility operations would be impacted and  
5 could not occur until the licensee implements  
6 acceptable corrective measures. Slide 33, please.

7 Assuming operations are authorized, the  
8 radiological monitoring program will be inspected on  
9 an annual basis as part of the baseline inspection  
10 program. This is outlined in NRC's inspection manual  
11 Chapter 2600, Fuel Cycle Facility Operational Safety  
12 and Safeguards Inspection Program. The annual  
13 inspections of the radiological monitoring program are  
14 performed to verify continued effective implementation  
15 of the program. If significant inspection findings  
16 are identified additional inspection resources may be  
17 allocated to verify effective disposition of the  
18 issues as needed. The annual inspections of the  
19 monitoring program will continue during the  
20 operational lifetime of the facility and will continue  
21 through the decommissioning phase as required by the  
22 decommissioning plan. Slide 34, please.

23 In conclusion, NRC Region II inspectors  
24 will verify through inspection that the radiological  
25 monitoring program is properly implemented, adequately

1 tested and fully capable during the period from  
2 approximately one year before the start of operations  
3 to the end of decommissioning. Slide 35, please.  
4 This concludes the presentation for topic number 5.  
5 Thank you.

6 JUDGE BOLLWERK: Thank you.

7 MS. SEYMOUR: You're welcome.

8 JUDGE WHITE: Any questions?

9 JUDGE LATHROP: No more questions.

10 JUDGE BOLLWERK: No more questions.

11 JUDGE WHITE: All right. Perhaps I can  
12 just ask you an update question which is vaguely  
13 related to what you just talked about. Back in  
14 January when you testified about the construction  
15 inspection program, at that point you indicated that  
16 there was -- and you made reference to I guess the one  
17 that deals with the general 2600, the inspection  
18 manual chapter. There's supposed to be an inspection  
19 manual chapter 2635 being prepared. What's the status  
20 of that?

21 MS. SEYMOUR: It is still in draft but it  
22 is being ready to sent up to headquarters to be issued  
23 and my personal goal is that it will be issued in  
24 advance of any safety-related construction and I  
25 believe that will occur. If that did not occur we

1       could use the same inspection manual chapter we used  
2       for the Louisiana Energy Services National Enrichment  
3       Facility. We could use that. So there is a backup if  
4       there's some delay in the issuance of 2635 but I don't  
5       believe that will be necessary.

6                 JUDGE BOLLWERK: All right, thank you.

7                 MS. SEYMOUR: You're welcome.

8                 JUDGE BOLLWERK: All right, anything else  
9       again of the board members? No? All right. Then we  
10      thank you very much for your presentations and your  
11      service to the board. I think we found it very  
12      useful. As Judge Lathrop mentioned I think you hit  
13      the nail right on the head in terms of what we were  
14      looking for information about so really appreciate it.  
15      Thank you very much.

16                MS. SEYMOUR: Thank you.

17                JUDGE BOLLWERK: All right. We have one  
18      additional presentation on historic and cultural  
19      matters. We've been at it though about an hour, a  
20      little over an hour actually, so why don't we go ahead  
21      and take a 10-minute break here and then we will have  
22      that presentation when we come back. So let's say  
23      right around 10 o'clock, how's that?

24                (Whereupon, the foregoing matter went off  
25      the record at 9:42 a.m. and went back on the record at

1 10:01 a.m.)

2 JUDGE BOLLWERK: All right, if we could go  
3 back on the record, please. We've just concluded the  
4 break after the presentation on radiological  
5 environmental/effluent monitoring program and we are  
6 now going to move on to the last of our presentations  
7 which deals with historical cultural resources  
8 memorandum of agreement and the associated mitigation  
9 measures. The lead party on this presentation is the  
10 NRC staff. They have one presenter and a witness  
11 available and I guess we're ready to have those  
12 witnesses presented.

13 MS. LEMONCELLI: Thank you, Your Honor.  
14 As you indicated for the last presentation,  
15 presentation 6 on historic/cultural resources and the  
16 memorandum of agreement we have Dr. Stephen Lemont as  
17 our presenter and Dr. Lemont's statement of  
18 professional qualifications has already been entered  
19 into the record, NRC000155. As an additional witness  
20 available we have Mr. Dan O'Rourke from Argonne  
21 National Lab and Mr. O'Rourke's statement of  
22 professional qualifications has also been entered into  
23 the record at NRC000156.

24 JUDGE BOLLWERK: All right. And Mr.  
25 Lemont, you've previously been sworn.

1 DR. LEMONT: Yes.

2 JUDGE BOLLWERK: So you remain under oath.  
3 Mr. O'Rourke, if you could raise your right hand,  
4 please. And I need a verbal response to the question  
5 I'm going to pose to you. Do you swear or affirm that  
6 the testimony you will give in this proceeding is the  
7 truth, the whole truth and nothing but the truth?

8 DR. LEMONT: I do.

9 JUDGE BOLLWERK: Thank you, sir. All  
10 right, and I think we have a couple of exhibits?

11 MS. LEMONCELLI: That's right, Your Honor.  
12 There are two exhibits associated with this  
13 presentation. The first is the presentation itself at  
14 NRC000214, NRC Staff Presentation Topic 6, Historical  
15 Cultural Resources Memorandum of Agreement and  
16 Associated Mitigation Measures. The second one is  
17 NRC000215, Western Cultural Resources Management,  
18 Inc., Archaeological Monitoring and Discovery Plan for  
19 the Eagle Rock Enrichment Facility, AREVA Enrichment  
20 Services, LLC, and Bonneville County, Idaho dated  
21 September 13, 2009.

22 JUDGE BOLLWERK: All right. I have  
23 September 17, is that?

24 MS. LEMONCELLI: I'm sorry, September 17,  
25 2009. Thank you.

1 JUDGE BOLLWERK: The record should then  
2 reflect that the Exhibits NRC000214 and NRC000215 as  
3 identified by counsel are marked for identification.

4 (Whereupon, the above-referred to  
5 documents were marked for identification  
6 as Exhibit Nos. NRC000214-NRC000215 for  
7 the record).

8 MS. LEMONCELLI: Your Honor at this time  
9 we move to these exhibits entered into the record as  
10 evidence.

11 JUDGE BOLLWERK: Are there any objections?

12 MR. CURTISS: AES has no objection.

13 JUDGE BOLLWERK: All right, there being no  
14 objections then Exhibits NRC000214 and NRC000215 are  
15 admitted into evidence.

16 (Whereupon, the documents previously  
17 marked as Exhibit Nos. NRC000214-  
18 NRC000215 for the record were admitted  
19 into evidence).

20 JUDGE BOLLWERK: And at this point I  
21 believe we're ready for the presentation.

22 DR. LEMONT: Okay. Well, to reiterate  
23 this is a presentation on the sixth topic identified  
24 in the June 2, 2011 board order, that topic being  
25 historic/cultural resources memorandum of agreement

1 and associated mitigation measures. And in that the  
2 staff asked for the current status of the memorandum  
3 of agreement and also an overview of the September  
4 2009 AES monitoring and discovery plan.

5 Again, I'm Stephen Lemont. I'm a senior  
6 project manager in NRC's Office of Federal and State  
7 Materials and Environmental Management Programs in the  
8 Division of Waste Management and Environmental  
9 Protection. I'm the NRC project manager for the  
10 Environmental Impact Statement or EIS for the Eagle  
11 Rock Enrichment Facility, the EREF. I have the lead  
12 for this presentation but as we mentioned we also have  
13 the historic and cultural resources technical reviewer  
14 here from NRC's contractor Argonne National Laboratory  
15 and he'll help answer any specific questions that you  
16 may have about the monitoring discovery program. Can  
17 I have slide 3, please? Okay.

18 This slide presents information on the  
19 current status of the historic/cultural resources  
20 memorandum of agreement or MOA. The draft MOA was  
21 submitted to the Idaho State Historic Preservation  
22 Office or SHPO, AES and the Shoshone-Bannock Tribes  
23 for review and comment on March 30, 2011. Comments on  
24 the draft MOA have been received from the Idaho SHPO  
25 and AES. On June 9, 2011, the cultural resources

1 coordinator of the Shoshonne-Bannock Tribes informed  
2 the NRC that she had completed her review of the draft  
3 MOA and has no comments, but that she passed the MOA  
4 on for legal review to ensure that the MOA would not  
5 diminish the tribe's treaty rights. She added that  
6 when the legal review is complete the MOA must be  
7 presented to the tribal business council after which  
8 she will contact the NRC with any comments that the  
9 tribes may have. As of today the MOA has not yet been  
10 finalized. Can I have slide 4, please?

11 After the tribes comments on the draft MOA  
12 are received, the staff will determine whether a  
13 teleconference is needed to discuss and resolve the  
14 comments among the parties to the agreement. After  
15 all comments have been resolved and agreed upon the  
16 staff will incorporate the comments and will transmit  
17 the final MOA for signature by the parties. After the  
18 MOA is fully executed a copy of the final MOA and  
19 related documentation will be filed with the advisory  
20 council on historic preservation, or the ACHP, to  
21 complete the requirements of Section 6 of the National  
22 Historic Preservation Act. Can I have slide 5,  
23 please?

24 As I mentioned, the board also asked for  
25 an overview of the September 2009 Monitoring and

1 Discovery Plan that AES has proposed implementing to  
2 provide mitigation measures to address any additional  
3 historic or cultural resources that might be found  
4 during pre-construction, construction, operation and  
5 decommissioning of the EREF.

6 JUDGE BOLLWERK: Before we go on to that,  
7 can we just step back one second to the status of the  
8 MOA? Have you heard anything further from the tribe  
9 in terms of when they plan to provide their comments?

10 DR. LEMONT: Since June 9 I've made a  
11 number of follow-ups through email and phone call. I  
12 have not received the response so at this point in  
13 time I have not date as to when they're going to  
14 respond.

15 JUDGE BOLLWERK: And -- but I take it, I  
16 believe there was some information you provided us at  
17 one point that indicated the staff fully intends to  
18 have this finished before at a minimum the license.  
19 If there were to be a license issued that would be --

20 DR. LEMONT: The MOA will need to be  
21 signed before the license is issued.

22 JUDGE BOLLWERK: Do you want to ask the  
23 question?

24 JUDGE WHITE: Yes. And the Shoshonne-  
25 Bannock Tribes are not official signatories of the

1 MOA, isn't that correct?

2 DR. LEMONT: That's correct. They're only  
3 listed as --

4 JUDGE WHITE: They're a concurring party.

5 DR. LEMONT: -- as yes, as a concurring  
6 party.

7 JUDGE WHITE: And so in that respect what  
8 is staff's view on whether that concurrence needs to  
9 be completed by the tribes prior to license issuance,  
10 or is that not a deal-breaker so to speak?

11 DR. LEMONT: I mean, we'd like to have  
12 concurrence. I mean, we included the tribes because  
13 you know they could have a potential interest in the  
14 project and they have expressed some interest in the  
15 cultural resource aspects even though this project is  
16 not on tribal lands and nothing has been found so far  
17 that would be of any religious or cultural  
18 significance to the tribes, but then you never know  
19 what you might find in going through the project.  
20 However, we do need to complete this MOA before the  
21 license is issued. We do not want to delay the  
22 issuance of the license. And so we have begun  
23 internal discussions within NRC to determine how we  
24 want to proceed with this and how we might want to  
25 deal with the tribes in moving forward in completing

1 this MOA.

2 JUDGE WHITE: Thank you. That makes that  
3 clear.

4 JUDGE BOLLWERK: All right. I think on  
5 behalf of the board the one thing we would ask  
6 notwithstanding we will be moving forward with this --  
7 after we finish these presentations and potentially  
8 closing the record at some point, if you could keep us  
9 updated if there are any developments in terms of the  
10 MOA or the status of things as we go forward up to the  
11 time if there -- when the partial, you know, the  
12 initial decision is issued that would be very useful  
13 to us.

14 MS. LEMONCELLI: We'd be happy to do so,  
15 Your Honor.

16 JUDGE BOLLWERK: Appreciate it.

17 DR. LEMONT: Yes.

18 JUDGE BOLLWERK: All right. I'm sorry, I  
19 interrupted you about the monitoring and discovery  
20 plan.

21 DR. LEMONT: No problem. Okay. Well  
22 anyway, AES's Archaeological Monitoring and Discovery  
23 Plan or as I'll refer to it, the "plan," provides  
24 direction on how known archaeological and historic  
25 resources will be protected and how any unexpected

1 discoveries that are encountered such as human remains  
2 or archaeological materials would be handled during  
3 ground-disturbing activities for the EREF. The  
4 objectives of this plan are to ensure monitoring and  
5 protection of archaeological sites and historic  
6 properties, establish the process for addressing  
7 unanticipated discoveries of human remains and  
8 previously unidentified archaeological sites and to  
9 establish procedures for evaluation and treatment of  
10 unanticipated discoveries. Slide 6, please.

11 A qualified cultural resources monitor  
12 will perform the services required under this plan.  
13 According to the plan, the monitor will meet or exceed  
14 the Secretary of Interior's professional  
15 qualifications standards for archaeology. As  
16 specified in the plan, the monitor will work closely  
17 with construction personnel to ensure that impacts do  
18 not occur to documented significant sites or sites  
19 that have not had an official determination of  
20 eligibility for listing in the National Register of  
21 Historic Places. The monitor will identify and  
22 document previously undocumented cultural resources  
23 exposed by the ground-disturbing activities, if any.  
24 The monitor will evaluate newly discovered resources  
25 with regard to their potential eligibility for listing

1 in the National Register of Historic Places and the  
2 monitor will recommend treatment of discovered  
3 resources that qualify as historic properties. The  
4 plan acknowledges that a member of an interested  
5 Indian tribe may also be present with the monitor as  
6 necessary. In the case of the EREF project that would  
7 be a member of the Shoshonne-Bannock Tribes.

8 JUDGE BOLLWERK: A question. During the  
9 site visit we talked about this briefly in terms of  
10 the monitor and I believe at that point AES indicated  
11 that the monitor would not be the firm that they'd had  
12 do the initial report and assessment of the site and  
13 the report, but would be someone else. How is that  
14 individual or individuals chosen in terms of being a  
15 monitor? Who's responsible? Who pays for the person?

16 DR. LEMONT: Well, the selection would be  
17 made by AES. AES would pay for that person's services  
18 or there might be more than one monitor depending on  
19 what's going on.

20 JUDGE BOLLWERK: You indicate there may be  
21 multiple.

22 DR. LEMONT: Yes, there would be, and the  
23 key as I mentioned earlier is that these -- whoever is  
24 the monitor or monitors have to meet the Department of  
25 Interior's professional qualifications standards.

1 JUDGE BOLLWERK: So the responsibility  
2 then is AES in terms of the selection of the  
3 individual and reimbursing them?

4 DR. LEMONT: That's correct.

5 JUDGE BOLLWERK: Does the staff monitor  
6 that process at all or is it really an AES --

7 DR. LEMONT: That is not part of the NRC's  
8 inspection or monitoring process.

9 JUDGE BOLLWERK: All right.

10 DR. LEMONT: Okay.

11 JUDGE BOLLWERK: One other question to the  
12 degree you know. Is that something the SHPO then  
13 would watch, or is there anybody watching over --

14 DR. LEMONT: If something was -- the SHPO  
15 and the tribes have been given opportunities to come  
16 out and observe activities. For example, the key  
17 activity being the excavation and data recovery of  
18 site MW004. And it's my understanding that both of  
19 those groups declined to come out. I don't know -- in  
20 the case of the tribes it was not really an area of  
21 significance to them. In the case of the SHPO I think  
22 their issue is distance and funding in terms of what  
23 they can do. However, AES and their archaeological  
24 contractor did inform the tribes of this work and they  
25 were also in almost constant contact with the state

1 archaeologist at the SHPO about what they were doing,  
2 you know, at site MW004. And if there were any  
3 unanticipated discoveries the plan requires that they  
4 would coordinate with the SHPO, the tribes if  
5 necessary, AES and NRC, in other words they wouldn't  
6 be operating unilaterally or in the dark. Everyone  
7 would be informed of what was going on and would be  
8 involved in the decision-making process.

9 JUDGE BOLLWERK: All right.

10 DR. LEMONT: Can I have slide 7? To carry  
11 out the cultural resource monitoring procedures  
12 specified in the plan the monitor will implement the  
13 procedures shown on this slide. The monitor will  
14 conduct instructional briefings for all construction  
15 workers on monitoring procedures and requirements  
16 which would involve educating the workers on types of  
17 material that could be found that would indicate the  
18 presence of human remains or an archaeological site.  
19 This is done so that workers can assist the monitor in  
20 identifying any unexpected human remains or  
21 archaeological material. The monitor will also ensure  
22 that known significant archaeological sites and all  
23 archaeological sites that have not been evaluated for  
24 significance are marked and avoided during ground-  
25 disturbing activities. The monitor will observe if

1 ground-disturbing activities are being carried out  
2 pursuant to the plan and will keep a log of ground-  
3 disturbing activities in the vicinity of known  
4 documented sites and discoveries of previously  
5 undocumented sites which would be known as  
6 discoveries. The monitor will notify the supervisor  
7 or project lead supervisor at the site of any ground-  
8 disturbing activities that are contrary to plan  
9 requirements and will order work to cease if  
10 necessary. Can I have slide 8, please?

11 JUDGE BOLLWERK: So essentially the  
12 monitor is there any time there's any -- the ground is  
13 being disturbed. There's digging going on that has  
14 the potential to turn over soil or you know raise.

15 DR. LEMONT: That's correct.

16 JUDGE BOLLWERK: And if that individual  
17 then sees something that needs to have the ground-  
18 disturbing activity stopped he can -- he or she can do  
19 that?

20 DR. LEMONT: Yes.

21 JUDGE BOLLWERK: All right.

22 DR. LEMONT: They would have that  
23 authority. The plan states that in the event of an  
24 unexpected discovery of human remains all work in the  
25 area of the find will immediately stop and the monitor

1 will document the discovery and contact the Idaho  
2 SHPO, NRC and AES. The monitor will also contact the  
3 Shoshonne-Bannock Tribes if the discovery may be of  
4 tribal significance. No additional activities will be  
5 allowed at the location until appropriate  
6 consultations and reviews have been completed. The  
7 plan specifies that the procedures to be followed for  
8 reporting discoveries of human remains are further  
9 addressed under Idaho State Code Sections 27-502, -  
10 503, and -504. Slide 9, please.

11 Through the monitor's professional  
12 judgment and interactions with the Idaho SHPO and with  
13 the Shoshonne-Bannock Tribes if necessary, the  
14 appropriate treatment of discoveries will be  
15 determined. When a discovery of new archaeological  
16 material is made the monitor will inspect,  
17 characterize and document the discovery, determine if  
18 construction in the area can resume or if further  
19 study of the discovery is necessary, determine  
20 potential National Register eligibility of the  
21 discovery and coordinate with the Idaho SHPO,  
22 Shoshonne-Bannock Tribes, NRC and AES throughout this  
23 process. For sites determined to be eligible for  
24 listing in the National Register of Historic Places  
25 data recovery and other impact mitigation would occur

1 in accordance with approved treatment plans. And that  
2 concludes the presentation on topic 6.

3 JUDGE BOLLWERK: All right. Let me ask  
4 Mr. O'Rourke, you're the archaeologist here.

5 MR. O'ROURKE: Yes.

6 JUDGE BOLLWERK: We have not seen the  
7 memorandum of agreement. I take it because it's in  
8 draft it really hasn't been provided to us, but I take  
9 it you've been doing review for the staff of the  
10 memorandum of agreement?

11 MR. O'ROURKE: I did review the plan.

12 JUDGE BOLLWERK: All right. Are you  
13 satisfied with it in terms of is it fairly standard  
14 from what you've seen in the industry? It seems to  
15 meet all the basic requirements that you would want to  
16 see as an archaeologist on a site like this?

17 MR. O'ROURKE: Yes, it does.

18 DR. LEMONT: Well, let me take this one  
19 step further. As I mentioned earlier we did receive  
20 comments on the MOA from the SHPO and from AES, and  
21 the SHPO's comments consisted of two minor editorial  
22 changes. So the SHPO considers this agreement to be  
23 fully adequate for their purposes.

24 MR. O'ROURKE: Right, and they're the  
25 state office that's responsible for the preservation

1 of historic --

2 DR. LEMONT: That's correct.

3 MR. O'ROURKE: So, right. All right.

4 JUDGE WHITE: And AES has no revisions  
5 suggested as accepted?

6 DR. LEMONT: They had some suggested minor  
7 revisions which were acceptable to both NRC and to the  
8 SHPO. And the Shoshonne-Bannock Tribes in addition to  
9 reviewing the MOA itself have been provided with the  
10 comments of both the SHPO and AES so they could see  
11 everything that's happened up until this point.

12 JUDGE WHITE: And their status, just to be  
13 clear, is that their cultural person has no comments  
14 and now they're really just looking at sort of legal  
15 situation.

16 DR. LEMONT: Right, it's a legal review  
17 and then ultimately the tribal council has to make the  
18 final decision of whether or not they're willing to  
19 sign the document or what comments they may need to  
20 have addressed in terms of sign it.

21 JUDGE WHITE: Okay, thank you.

22 JUDGE BOLLWERK: Mr. O'Rourke, have you  
23 been out to the site?

24 MR. O'ROURKE: Yes, I have.

25 JUDGE BOLLWERK: Do you think they're

1 going to find anything else?

2 MR. O'ROURKE: There's always that chance.  
3 It has to do with the nature of the surveys they do  
4 because they're only surface surveys, they aren't  
5 subsurface surveys.

6 JUDGE BOLLWERK: I take it they're not  
7 planning on doing anymore -- I mean, the monitor is  
8 just there to look and see what's dug up. He's not  
9 going to be, for instance, going around and doing more  
10 shovel test bits or any digging, he's just there to --

11 DR. LEMONT: No.

12 MR. O'ROURKE: The expectation is that any  
13 sites that would be out in this area would have some  
14 surface manifestation, but given the time frame, the  
15 13,000 years of human activity out there there's  
16 always the chance that there wouldn't be surface  
17 evidence any longer.

18 JUDGE BOLLWERK: All right. Any other  
19 questions the board members have? All right, thank  
20 you very much, gentlemen. We appreciate the  
21 information you've provided us. Thank you. One other  
22 thing I would request from the staff is that if at the  
23 time you have more information for us in the  
24 memorandum of agreement is actually signed we'd  
25 appreciate, you know, you attaching that to whatever

1 document you might send to us, so.

2 MS. LEMONCELLI: Certainly, Your Honor.  
3 And if the board would find it useful I was just  
4 speaking with our branch chief in this area. We're  
5 happy to provide the board with a draft copy of the  
6 MOA if the board might find it useful.

7 JUDGE BOLLWERK: I think we wouldn't mind  
8 looking at it. Again, we didn't want to get in the  
9 middle of a process that appeared to be negotiation  
10 among the parties and putting something on the public  
11 record that you all weren't satisfied was final and  
12 make whoever might be uncomfortable with that. But if  
13 you have no problem and the parties don't we certainly  
14 would appreciate --

15 MS. LEMONCELLI: That was our initial  
16 concern, but assuming that there are no objections  
17 with the parties, Your Honor, the staff would be happy  
18 to do so.

19 JUDGE BOLLWERK: All right.

20 MR. CURTISS: Yes, AES has no objection,  
21 Your Honor.

22 JUDGE BOLLWERK: It may be a question of  
23 the tribe or -- since they're still the ones that have  
24 not signed off on it, so.

25 MS. LEMONCELLI: Right, and perhaps, Your

1 Honor, we would have to check with the SHPO.

2 JUDGE BOLLWERK: You should do that.  
3 Again, we're not trying to get in the middle of this.  
4 In fact, that's why we haven't really asked for it.  
5 But we don't want to be the one that causes, you know,  
6 throws sand in the gears of the works. So, all right,  
7 very good. We'd appreciate that.

8 MS. LEMONCELLI: Thank you, Your Honor.

9 JUDGE BOLLWERK: All right. I guess at  
10 this point we're finished with all the presentations  
11 and we need to talk for a couple of seconds about some  
12 other administrative matters. I should -- well, I'll  
13 get to that in a second here. I've got a lot of  
14 papers in front of me. I do need that piece of paper.  
15 All right.

16 We've heard the presentations on the  
17 environmental matters and there were some matters that  
18 of course we did not hear presentations on, a number  
19 of questions that you all have answered for the board.  
20 And as was the case with respect to the safety aspect  
21 of this proceeding those are obviously things that  
22 we'll be addressing, or potentially anyway. The next  
23 dates that we have set in terms of the proceeding  
24 itself, in terms of the environmental side and we'll  
25 come back in a minute to the question of the

1 commission and the certified question. The -- at this  
2 point transcript corrections are due on the 25th of  
3 July, a Monday, and let me just check with my  
4 information technology folks. When do you think the -  
5 - to the degree they wish to use them that the video  
6 will be available on the digital data management  
7 system?

8 MR. WELKEI: The video from yesterday  
9 should be available today, later today.

10 JUDGE BOLLWERK: Okay.

11 MR. WELKEI: And then today's will be  
12 tomorrow or Friday.

13 JUDGE BOLLWERK: All right. So in theory  
14 by the end of the week. If you want to use the DDMS,  
15 the video will be there. We asked for a 3-day  
16 turnaround on the transcript so I'm assuming by the  
17 beginning of next week that would probably be  
18 available. So and that gives you approximately a week  
19 to go ahead and do the transcript corrections. To the  
20 degree that it's possible if you can reflect that  
21 there's agreement among the parties in terms of any  
22 transcript corrections.

23 As we indicated the last time around, you  
24 know, stick to the highlights. There's lots -- often  
25 things that I wish I'd have said better in the

1 transcript but I generally don't actually change the  
2 transcript to do that. It's really what -- and  
3 particularly since we have the video it's what you  
4 said, not what you wish you had said. So in any  
5 event, try to keep to that idea.

6 In terms of then of the proposed findings  
7 of fact I believe the date we set was Friday, August  
8 the 12th. If there's any delays or problems with the  
9 transcript corrections, you know, if we need to  
10 reflect that with respect to the proposed findings we  
11 can do that, but I don't think that's going to be an  
12 issue. I'm hoping not. And again, as was the case  
13 with the safety portion of this proceeding, the  
14 proposed findings should address the board's previous  
15 questions, written questions and the parties' answers  
16 and the nature of the environmental findings that you  
17 would want the board to make. So I think you all did  
18 an excellent job on your proposed findings for the  
19 safety side so I think you've got the general idea and  
20 we just -- I just ask you to do hopefully another very  
21 good job on the environmental side. It was very  
22 useful to the board.

23 As was the case with the safety hearing we  
24 did not build any time into the schedule for  
25 responsive findings of fact. That didn't seem to be

1 necessary on the safety side, but if it does, if  
2 something, one of the parties sees something in the  
3 other parties' findings that they wish to let the  
4 board have some kind of additional views on let us  
5 know and we can certainly put that into the schedule  
6 quickly. Probably we'd want to see something -- you  
7 should certainly try to seek any permission from the  
8 board within about seven days of the submission of the  
9 initial findings so that we can, you know, deal with  
10 how to set the schedule for that. But that didn't  
11 seem to be necessary on the safety side and may not be  
12 necessary here.

13 And then as I think Mr. Curtiss mentioned  
14 the other day, we're set to issue an initial decision  
15 on the environmental issues by the end of September.  
16 So that's the schedule. I think the board met the  
17 schedule for safety and we're certainly going to try  
18 to do the same for the environmental you know,  
19 assuming the creek don't rise. What's the saying? I  
20 don't remember. Anyway, it's --

21 (Laughter)

22 JUDGE BOLLWERK: So that I think is where  
23 we're at in terms of the environmental portion of this  
24 mandatory hearing. We will also look at after in due  
25 course closing the record. That's something we did

1 the last time, we'll do that as well here in fairly  
2 short order. There's a few things. My records did  
3 not reflect any unadmitted exhibits. I look to Mr.  
4 Eser. Do you have any problems? I don't think there  
5 were any. If you all see anything let us know. I  
6 think all the exhibits, the official copies should be  
7 loaded into the DDMS and into the HD fairly promptly,  
8 within a day or so. Right, so certainly by the end of  
9 the week, tomorrow you can probably look at them, or  
10 Friday certainly. So again if you see any problems,  
11 anything that doesn't seem to be correct just let us  
12 know and we'll make sure we get the record straight.  
13 That's the important part before we close the record,  
14 so. All right? Let me turn to the parties. Any  
15 questions about the environmental side of what we've  
16 been doing? What we've been doing the last several  
17 days or what we talked about here in the last five  
18 minutes?

19 MS. LEMONCELLI: No, Your Honor, thank  
20 you.

21 MR. CURTISS: Your Honor, as I indicated  
22 in my opening remarks I just hope you found the  
23 presentations to be thorough by all the parties. And  
24 in the event that you have any additional follow-up  
25 questions that you might pose to the parties, would we

1 expect those in the near future?

2 JUDGE BOLLWERK: Certainly in the near  
3 future. I don't know, we haven't really -- we're  
4 going to sit down this afternoon in fact and begin to  
5 talk about what we've heard and anything. And  
6 hopefully if we have anything that would be -- we'd  
7 get back to you promptly.

8 MR. CURTISS: Thank you, Your Honor.

9 JUDGE BOLLWERK: We're not trying to  
10 extend this. We want to move along, you know, and do  
11 what is necessary relative to the schedule, so. All  
12 right? Let's talk then for a second about the  
13 certified question that the board had sent to the  
14 commission and the commission's decision, CLI-11-04.  
15 The commission essentially answered the question  
16 saying that what AES had proposed to do was sufficient  
17 but had raised a timing question in terms of when they  
18 need to put some papers into the process. And so let  
19 me see, you all I guess had had some discussions about  
20 what needs to be done. Let's see what you all have to  
21 say.

22 MS. LEMONCELLI: Your Honor, the staff  
23 would be happy to take the lead in making some remarks  
24 on this issue. Thank you. The staff would like to  
25 address the issue involving the timing as you

1 indicated, Your Honor, of the submittal of completed  
2 financial instruments pursuant to the recent  
3 commission order on the certified question.  
4 Specifically, the issue of the staff's potential  
5 reliance on 10 CFR 70.25 bravo (2) - and Your Honor if  
6 I may I'll use the convention "bravo" and "echo" to  
7 distinguish (b) from (e) so our record is clear - in  
8 granting the AES exemption.

9 The staff notes that in preparing its  
10 remarks it did have the opportunity to speak directly  
11 with the staff reviewer in Rockville responsible for  
12 analyzing the exemption and preparing the relevant  
13 portions of the staff's SER. In CLI-11-04 the  
14 commission correctly noted that financial assurance  
15 requirements in Section 70.25 are structured according  
16 to the quantity of material that will be authorized  
17 for possession and use. Depending on the quantity of  
18 material Part 70 licensed applicants must submit  
19 either a decommissioning funding plan or a  
20 certification of financial assurance.

21 The commission further stated that the  
22 staff cites Section 70.25 bravo (2) as authority for  
23 AES to defer execution of the financial -- excuse me,  
24 of the final letter of credit and standby trust  
25 agreement until after the license is issued but before

1 the receipt of licensed material. The commission's  
2 assertion that the staff relied on 70.25 bravo (2) is  
3 based on a phrase on page 10-15 in the staff's SER  
4 that while not inaccurate is somewhat imprecise and  
5 has led to some confusion, and we hope to clarify this  
6 issue here today. To be clear, in Section 1.2.5 of  
7 its safety analysis report AES requested an exemption  
8 from the requirement in 70.25 echo which requires an  
9 applicant to provide financial assurance for  
10 decommissioning funding based on the entire cost of  
11 decommissioning.

12 Instead, as discussed in Section 10.2.1 of  
13 its safety analysis report AES proposed to provide  
14 financial assurance on an incremental basis in  
15 proportion to the decommissioning liability accrued  
16 over time as its facilities are phased into operation.  
17 In Section 1.2.4.2.1 of NUREG-1951, that's the staff's  
18 SER, it's Exhibit NRC00032, the staff evaluated AES's  
19 exemption request and concluded that it was  
20 appropriate to grant the exemption from 70.25 echo.  
21 In its discussion of financial assurance in Chapter 10  
22 of the SER, the staff indicated on page 10-15 of the  
23 SER that, quote, "Financial instruments are not  
24 required at this time, consistent with 10 CFR 70.25  
25 bravo (2)." This statement was noted in the

1 commission order.

2 The staff's intention with regard to this  
3 statement was not to indicate or imply that the staff  
4 granted the exemption under 70.25 bravo (2). Rather,  
5 the staff was merely indicating that the approach it  
6 used is consistent with the logic of, or is analogous  
7 to the statement in 70.25 bravo (2) which indicates  
8 that, quote, "For an applicant this certification may  
9 state that the appropriate assurance will be obtained  
10 after the application has been approved and the  
11 license issued, but before the receipt of licensed  
12 material. The exemption from 70.25 echo allows AES to  
13 defer execution of its final financial instruments  
14 until after the license is issued but before receipt  
15 of licensed material.

16 AES requested the exemption in order to  
17 provide financial assurance at a rate that is  
18 proportional to the decommissioning liability that it  
19 incurs over time. In its evaluation in Section  
20 1.2.4.2.1 of the SER the staff determined among other  
21 things that the incremental funding approach proposed  
22 by the applicant will provide funding for all the  
23 applicant's decommissioning obligations at any point  
24 in time.

25 In Section 10.2.1 of AES's safety analysis

1 report in the discussion of the incremental financial  
2 assurance approach, AES also stated that it would  
3 provide final executed financial instruments prior to  
4 receipt of licensed material. Prior to receipt of  
5 licensed material AES's decommissioning funding  
6 liability will essentially be zero. Therefore, not  
7 providing the final financial instrument until after  
8 receipt of licensed material is acceptable to the  
9 staff under this exemption from 10 CFR 70.25 echo that  
10 provides for a financial assurance proportionate to  
11 decommissioning liability.

12 In summary then, AES requested the  
13 exemption from 70.25 echo and the staff granted this  
14 exemption from 70.25 echo, and this exemption allows  
15 deferral of execution of the final financial  
16 instruments until receipt of licensed material. We  
17 hope that this answers the commission's concern.

18 JUDGE BOLLWERK: All right. Mr. Curtiss,  
19 do you want to say anything at this point?

20 MR. CURTISS: Yes, thank you Your Honor.  
21 I'll be very brief because we agree with Ms.  
22 Lemoncelli's recounting of the basis for the exemption  
23 request that AES submitted as part of their SAR which  
24 is AES000037 exhibit in this proceeding, and in  
25 particular that 70.25 echo was the basis for that

1 exemption request. And that the staff in the relevant  
2 provisions that Ms. Lemoncelli cited reviewed and  
3 approved that exemption request under 70.25 echo.

4 The only additional point that I would  
5 make is that history, the basis for the request and  
6 the basis for the staff to grant that is recounted in  
7 exactly that way in footnote 4 of the commission's  
8 response to the certified question. So we agree  
9 completely with staff's description of the basis for  
10 our request, the effect of that in terms of deferring  
11 our obligations to submit the documents until six  
12 months prior to material coming onsite, and that the  
13 staff's basis for reviewing that as is recounted in  
14 the SER which is Exhibit 00032 and the relevant  
15 provisions cited are precisely the way the AES  
16 applicant views it.

17 JUDGE BOLLWERK: All right. So I think if  
18 I understood what you said, the bottom line is that  
19 because your financial assurance is due on an  
20 incremental basis your documentation is due on an  
21 incremental basis.

22 MR. CURTISS: Yes. Well, six months prior  
23 to --

24 JUDGE BOLLWERK: The receipt of the  
25 material that has to be covered by the financial

1 assurance.

2 MR. CURTISS: Precisely, and I think the  
3 description of that is reflected in the relevant  
4 documents at the sections that were cited by counsel  
5 for the staff. And we fully concur in the description  
6 of the basis for the exemption request and the grant  
7 of that exemption.

8 JUDGE BOLLWERK: All right. Given the way  
9 this arose which is basically relative to a commission  
10 order, you've laid this out fairly extensively. Do  
11 you want to file something with the board that sort of  
12 reiterates this, or do you want to stand on what  
13 you've provided here orally? I'll leave it up to you.

14 MS. LEMONCELLI: I was going to say I  
15 defer to the board on that. If the board would find  
16 it useful we would be happy to file something in  
17 addition. However, I think that we've done a fairly  
18 complete job in explaining our position at this point.

19 JUDGE BOLLWERK: Any comments you have,  
20 Mr. Curtiss?

21 MR. CURTISS: I think it is important to  
22 have this discussion on the record. And my only  
23 observation --

24 JUDGE BOLLWERK: There are records and  
25 there are records, so.

1 MR. CURTISS: Yes. My only observation  
2 would be that any filings that might be required I  
3 think would simply repeat what we have put on the  
4 record at this point. So I, subject to the desire of  
5 the board, and we would defer to the board, don't see  
6 the need to file additional pleadings on this subject.

7 JUDGE BOLLWERK: All right.

8 MS. LEMONCELLI: We agree with Mr.  
9 Curtiss.

10 JUDGE BOLLWERK: All right. What the  
11 board may actually do is then so that there is a  
12 record of where this resides in the docket and I  
13 believe -- it was your exemption and what you said  
14 sounds logical and reasonable given the exemption what  
15 with the history of this. I want to think about it a  
16 little bit but assuming we agree with it, we don't  
17 have any further questions about it, what I would  
18 propose to do is to issue an order that -- or a  
19 memorandum perhaps that references this discussion so  
20 that it's in the docket. And then if the commission  
21 has a question about where it is they will know  
22 exactly where to find it, or anyone else for that  
23 matter, so.

24 MR. CURTISS: Well, I would note that as  
25 I said in my remarks it is addressed in exactly this

1 way, somewhat more briefly in footnote 4 of the  
2 commission's decision.

3 JUDGE BOLLWERK: Right, and that may be  
4 another reason to put something else in writing in the  
5 docket so that we close that loop and there's paper  
6 wherever there needs to be. I'm not saying  
7 transcripts don't get lost, but there's sometimes a  
8 cross reference might be useful. So just to close  
9 that loop. And that's something the board can  
10 actually do, so. Anybody have any objections to that?  
11 Sound like a reasonable approach?

12 MS. LEMONCELLI: No objection, Your Honor.  
13 Mr. Curtiss?

14 MR. CURTISS: In this case I think we've  
15 said it the way we wished we had said it and --

16 JUDGE BOLLWERK: All right, that's fine.

17 MR. CURTISS: -- and so we're fine with  
18 whatever the board decides.

19 JUDGE BOLLWERK: We're not going to repeat  
20 it all, we're simply going to say here's where it's  
21 at. So all right. Okay, very good. Then it sounds  
22 like that matter unless the commission has some other  
23 concerns is probably going to be closed, or the board  
24 does. I don't think at this point we do but we need  
25 to talk about that a little bit this afternoon. All

1 right. Very good then. I think that matter may -- we  
2 can put that in the potentially closed, almost closed  
3 or fairly close to being closed category, so.

4 At this point you had mentioned, Mr.  
5 Curtiss, your concern that we'd gotten the information  
6 we wanted and we have. And I think I speak for the  
7 board members that we found the presentations on all  
8 the subjects to be very useful and very informative.  
9 You've been very forthcoming in answering both our  
10 questions of which there have been a number, sometimes  
11 multiples in multiple occasions, so. But we  
12 appreciated you kind of rolling with the -- going with  
13 the flow as it were. And I think it actually worked  
14 better for us to be able to issue you, particularly on  
15 the environmental side several different sets of  
16 questions to keep things moving rather than dumping  
17 everything on the end and maybe putting a little more  
18 pressure on you all to respond in the time frames that  
19 we'd set out. So hopefully that worked for everybody.  
20 I know it did for us.

21 But again, in terms of what we heard the  
22 last two days we did I think found them very useful.  
23 I know the discussion yesterday on the need for the  
24 facility brought a lot of information to the  
25 forefront, something we're going to have to

1 contemplate and think about. But I think we got a  
2 full presentation from both the parties in terms of  
3 their views on the current situation post Fukushima in  
4 terms of need for the facility.

5 Again I would offer our thanks to all the  
6 witnesses that have taken the time to come here. I  
7 don't know if it was worse -- I sort of liked Idaho  
8 Falls. Rockville is an okay place, but this is  
9 actually very nice, so.

10 (Laughter)

11 JUDGE BOLLWERK: But you know, I enjoy --  
12 and again, we appreciate the efforts that you put into  
13 the site visit. I think it was very useful for the  
14 board to be able to see, to go onto the site and see  
15 exactly what was going on. Let me turn to the other  
16 two board members and see if they have any comments.

17 JUDGE WHITE: I'd just reiterate our  
18 thanks and the usefulness of both the site visit and  
19 the presentations. Thank you.

20 JUDGE LATHROP: And I do the same. And I  
21 really appreciated the presentations. Thank you all.

22 JUDGE BOLLWERK: All right. And I would  
23 be remiss if I did not thank our administrative staff  
24 here who's done an excellent job setting this up and  
25 moving it forward. John Eser, our law clerk who kind

1 of keeps things moving, keeps me on track. Ashley  
2 Prange, our administrative assistant. We really  
3 appreciate all your efforts, Ashley. And Andy Welkei  
4 and Joe Deucher who have been doing all the IT work.  
5 And I think we've almost got this down now where it  
6 seems to work pretty well. So I think this, you know,  
7 on-the-road DDMS has come together pretty well. We'll  
8 find out. I think they're going down to South Texas  
9 and this will be the first proceeding where I think I  
10 haven't been the one, the chair that has been using  
11 it, so we'll have -- we'll road-test it on another  
12 board chair and see how that works out. And also the  
13 staff of the Red Lion Inn here who's been very  
14 accommodating in terms of setting this up. And we  
15 appreciate the folks in the pool kind of keeping it  
16 down.

17 (Laughter)

18 JUDGE BOLLWERK: And our friends across  
19 the hall as well. So I think that's worked out very  
20 well. Well at this point again we will get the  
21 proposed findings from you, the transcript corrections  
22 and the proposed findings. We'll close the record and  
23 then we'll have a decision that we have to issue in  
24 terms of the mandatory hearing.

25 On behalf of the board I don't know that

1 we'll be getting together again but I again want to  
2 express my appreciation. We thank the witnesses but  
3 also the counsel who have been very accommodating to  
4 the board, giving us the information we wanted,  
5 responded to all our requests, made your legal and  
6 factual pleadings very useful to the board and we  
7 again appreciate all your efforts. I know how much  
8 work it is and we do appreciate it. So again, thank  
9 you everyone and we at this point, and our court  
10 reporter as well. Thank you, sir. And we stand  
11 adjourned.

12 (Whereupon, the foregoing matter went off  
13 the record at 10:44 a.m.)