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Court Reporters and Transcribers
1323 Rhode Island Avenue, N.W.
Washington, D.C. 20005
(202) 234-4433

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1 APPEARANCES:

2 On Behalf of USEC Inc.:

3 DONALD J. SILVERMAN, ESQ.

4 MARTIN J. O'NEILL, ESQ.

5 of: Morgan, Lewis & Bockius LLP

6 1111 Pennsylvania Avenue, N.W.

7 Washington, D.C. 20004

8 (202) 739-5502 (Silverman)

9 (202) 739-5733 (O'Neill)

10 FAX 739-3001

11

12 DENNIS J. SCOTT, ESQ.

13 Assistant General Counsel and

14 Director, Corporate Compliance

15 USEC, Inc.

16 6903 Rockledge Drive

17 Bethesda, Maryland 20817

18 (301) 564-3352

19 FAX 564-3206

20

21

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On Behalf of the Nuclear Regulatory

Commission:

MARGARET J. BUPP, ESQ.

BRETT M. KLUKAN, ESQ.

Office of the General Counsel

Mail Stop - O-15 D21

U.S. Nuclear Regulatory Commission

Washington, D.C. 20555-0001

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Factors (Public)

<u>EXHIBIT NO.</u>	<u>DESCRIPTION</u>	<u>MARK</u>	<u>RECD</u>
NRC-28		685	
NRC-65	Managment Directive 10.159	783	783

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

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9:57 a.m.

JUDGE McDADE: On the record. The hearing will come to order. For the record, would the panel members for the NRC staff introduce themselves?

DR. ECHOLS: Stan Echols, NRC.

MR. WOOD: Ray Wood.

MR. STRIBLEY: Todd Stribley, ICF.

MR. HAMMER: Don Hammer.

MR. BLEVINS: Matt Blevins.

MR. LAMASTRA: Mike Lamastra.

JUDGE McDADE: And all of you have previously been sworn.

Whereupon,

THE WITNESSES

was called as a witness, and having been previously duly sworn, was examined and testified as follows:

JUDGE McDADE: For the Applicant USEC.

MR. MINER: Peter Miner from USEC.

MR. SEWELL: Phil Sewell from USEC.

JUDGE McDADE: Mr. Sewell, you've not previously been sworn, have you?

MR. SEWELL: No, I haven't.

Whereupon,

PHILIP SEWELL

1
2 was called as a witness, and having been first duly
3 sworn, was examined and testified as follows:

4 MR. SILVERMAN: Your Honor, we have --
5 This is Mr. Silverman. We have our witnesses up for
6 HTE-1. Are you going to be continuing with any
7 further questions on liquid effluent control or HTE-
8 5? We would need to get Mr. Fouk to the witness
9 stand.

10 JUDGE McDADE: I believe that we're
11 ready to get started on Environmental-1.

12 MS. BUPP: In that case, the staff
13 thought that you might ask some more questions on
14 the LEC. So we don't have the correct panel up
15 there. If you could give us just a minute to switch
16 to the panel for HTE-1.

17 JUDGE McDADE: Okay. Mr. Blevins and
18 Dr. Echols --

19 MS. BUPP: Need to stay there and we
20 need to be joined by one of the other members of the
21 panel from the back.

22 (Off the record comments.)

23 MR. WYNGARDEN: Steve Wyngarden.

24 JUDGE McDADE: Mr. Wyngarden, you've not
25 previously been sworn, have you?

1 MR. WYNGARDEN: No, sir.

2 Whereupon,

3 STEVE WYNGARTEN

4 was called as a witness, and having been previously
5 duly sworn, was examined and testified as follows:

6 JUDGE McDADE: Thank you. Are there any
7 preliminary matters that we need to take care of
8 before we get started with the witnesses.

9 MS. BUPP: None for this panel, Your
10 Honor.

11 JUDGE McDADE: And this is an open
12 session.

13 MS. BUPP: Yes, it is, Your Honor.

14 MR. SILVERMAN: No preliminary matters
15 for the Applicant, Your Honor.

16 JUDGE McDADE: And you agree this is an
17 open session.

18 MR. SILVERMAN: We agree.

19 JUDGE McDADE: Judge Wardwell.

20 JUDGE WARDWELL: Good morning all. Good
21 late morning all I should say.

22 JUDGE McDADE: A matter of perspective.

23 JUDGE WARDWELL: To start off, I have
24 kind of a general EIS question and I thought I'd
25 bring it up now as well as any to be addressed. But

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1 hopefully, one of you panel members will be willing
2 to just briefly discuss the staff's review of the
3 environmental report and point out what review
4 guidance was used in that determination of the
5 adequacy of the ER that the Applicant submitted with
6 its application.

7 MR. BLEVINS: Okay. Matt Blevins. The
8 general process is one that we use for all our EIS
9 that I'm aware of. Generally, we follow the same
10 process. We look at the regulations in Part 51 and
11 then we have some additional guidance which is NUREG
12 1748 and the EIS itself, the format and contents, is
13 pretty well set. We go through and compare what the
14 environmental report, what it provides, and then
15 based on the staff expertise that we have, mainly
16 through ICF, we go through and we start looking for
17 additional information. That's what you'll see all
18 the requests for additional information.

19 The staff experts, they will determine
20 what other information is needed. Then we go
21 through the process of holding the public
22 interactions and the draft, both the scoping meeting
23 at the start of the process. Then after we draft
24 the EIS, we go back out for more public meeting and
25 comments. The staff experts look at what

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1 information is provided, what other information may
2 be provided by the applicant in the subsequent
3 updates to the environmental report and then we
4 publish the final EIS. Now that's it in a very
5 succinct and I don't know if that's --

6 JUDGE WARDWELL: I think so. Just to
7 make sure I understand it. I was more interested
8 now in strictly your review of the ER and how you
9 determined whether or not the Applicant's ER was
10 adequate and I heard you testify that you used Part
11 51 as guidance and what it requires in the ER and
12 then you also use NUREG 1748 as a review guidance
13 plan for that and that is what you used in this
14 application.

15 MR. BLEVINS: Correct.

16 JUDGE WARDWELL: In regards to the EIS,
17 are there any standard review plans that you used in
18 regards to preparing your EIS?

19 MR. BLEVINS: There is not a standard
20 review plan by name. 1748 is a staff guidance
21 document that some people think of, can be thought
22 of, perhaps as an SRP but it's not literally in the
23 NRC sense of standard review plan. So it's
24 *Environmental Review Guidance for NMSS Licensing*
25 *Actions* is the title of that document and it goes

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1 through a lot of different topics such as
2 categorical exclusions, environmental assessments
3 and then it gets into environmental impact statement
4 preparation and what the format and content of an
5 environmental report should be.

6 JUDGE WARDWELL: Where would that
7 standard review plan for NUREG 1555 fit in for
8 guidance of this? Does that not apply to situations
9 like this?

10 MR. BLEVINS: It does not apply.

11 JUDGE WARDWELL: In a general -- Thank
12 you for that. That was the basic question I had in
13 that regard. Now to the purpose and need. Could
14 you clarify for me where the need for 10 percent
15 enrichment is justified in the EIS or discussed or
16 elaborated on? You know it doesn't necessarily need
17 to be referencing it directly if you can just talk
18 from your memory in regards to how you addressed the
19 need for that.

20 MR. BLEVINS: Correct.

21 JUDGE WARDWELL: That's fine. I didn't
22 need necessarily to see a reference to it or
23 whatever else. But I would like to have that
24 summarized if you could.

25 MR. BLEVINS: Matt Blevins. The 10

1 percent request as you know came from the license
2 application. So the purpose and need, this is
3 certainly that we looked at ultimately and I think
4 we asked an additional request for information on
5 this. It came down to USEC stating the need to be,
6 I think, it was flexible business plans. They
7 wanted to be able to adapt future or emerging needs.
8 So that's why in the EIS for the certain sections
9 that the 10 percent would have more impact we made
10 it clear in those sections. We analyzed both five
11 percent and ten percent.

12 In the EIS I think generally we
13 anticipated five percent would be the more normal
14 operations. But for some of those areas where ten
15 percent would present greater impacts, those impacts
16 are also addressed in those areas and I think
17 certainly for public and occupational health was one
18 of those and it might have been transportation was
19 one of those and there might have been one or two
20 more. But for some of the resource areas such
21 historical and cultural resources, the impacts would
22 be the same whether they're enriching to five or ten
23 percent.

24 JUDGE WARDWELL: Would it be -- As I
25 hear what you're describing then to a certain

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1 degree, the need is somewhat self-evident, if you
2 will, because the way it was presented in the
3 application by USEC that they wouldn't go to ten
4 percent unless there was a market available for it,
5 that their operations would be five percent or
6 slightly lower than that and they would go to that,
7 if in fact, they had a market for it and that market
8 therefore defines the need that you really need for
9 supporting that particular category of the EIS. Is
10 that a fair assessment of it as what I heard?

11 MR. BLEVINS: Yes, that's my
12 understanding.

13 JUDGE WARDWELL: Thank you. In your
14 pre-file testimony on pages five to six, this is
15 under --

16 JUDGE McDADE: Before you get into that.

17 JUDGE WARDWELL: Sure.

18 JUDGE McDADE: I have a more general
19 question and you can lead me through, a follow-up to
20 Judge Wardwell's. In the justification for need,
21 you talk about how currently approximately 20
22 percent of electricity in the United States is
23 generated through nuclear power plants. That could
24 increase. You indicate that currently about 86
25 percent of the fuel sources comes from overseas.

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1 Also talk about the fact that the current production
2 is the facilities are aging, the gas diffusion
3 facilities, that even with the LES coming on board
4 that will have a relatively small percentage of the
5 total need, that the megatons to megawatts is going
6 to diminish over time and that is the kind of
7 general overview of what the basis is for the need.

8 But there is no discussion that there is
9 any need for anything greater than five percent
10 enrichment. There's no indication if there's
11 currently any market for enrichment above five
12 percent. Have I missed something or how does that
13 factor into your analysis?

14 MR. BLEVINS: Matt Blevins. My
15 understanding is there is some need for, I think, up
16 to about seven percent though that might be small
17 currently. But ten percent, I don't know of any
18 need at the moment. So I think that's an accurate
19 statement what you said. There's no need at the
20 moment for ten percent. There are some needs above
21 five percent and I think we talked about that
22 briefly, but I think we touched on that in the FEIS
23 in that Purpose and Needs section.

24 JUDGE McDADE: When we get into a
25 balancing here of the cost and benefits, when we're

1 balancing need against the environmental impact, am
2 I accurate in saying that based on your analysis
3 there is relatively little additional environmental
4 impact of going from five percent to ten percent?
5 So therefore, you viewed in your analysis that you
6 didn't need a significant demonstration of need
7 above the five percent in order to justify the
8 staff's position that the license should be granted
9 as requested given the limited additional
10 environmental impact of that difference between the
11 five and the ten percent. Is that a correct summary
12 of the staff's position?

13 MR. BLEVINS: That is correct.

14 JUDGE McDADE: Okay.

15 JUDGE LAM: Well, actually I don't think
16 there's any need for enrichment at the ten percent
17 level. Currently, there is no domestic nuclear
18 power operating facility using enrichment exceeding
19 maybe five or six percent. Am I wrong?

20 MR. BLEVINS: Not to my knowledge. I
21 think that's a correct statement.

22 DR. ECHOLS: Stan Echols.

23 JUDGE McDADE: But the issue right here
24 has to do with what's in the application and what's
25 in the documentation before us and there's nothing

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1 in the documentation before us whether there is or
2 there isn't. But there's nothing in the
3 documentation before us talking about specifically a
4 need for ten percent. Correct?

5 DR. ECHOLS: And the balancing isn't
6 need versus benefit. It's the cost versus benefit
7 and you should read the purpose and need in
8 conjunction with the alternative sections. NEPA
9 provides the purpose and needs section to be a brief
10 statement to help define an appropriate range of
11 alternatives to be discussed. So those two
12 sections, the alternatives and the purpose and
13 needs, you generally read together as defining an
14 adequate statement of purpose and need to help
15 define a reasonable bounded range of alternatives to
16 assess along with the proposed action.

17 And that's how we looked at the purpose
18 and need here because it helped to inform us on
19 what's an appropriate range of alternatives and the
20 environmental impacts of both the proposed action
21 and those alternatives in relationship to the
22 purpose and needs statement.

23 JUDGE McDADE: Okay. Thank you, Dr.
24 Echols. Judge Lam, I'm sorry for interrupting.

25 JUDGE LAM: No, no. That clarified in

1 my mind as well because I thought if you're looking
2 for a buyer for ten percent enrichment fuel from the
3 civilian domestic nuclear industry you would not be
4 seeing any because nobody uses ten percent enriched
5 fuel. But based on what Dr. Echols said it makes
6 sense from a commercial viewpoint. You want to
7 bound the range of enrichment for production which
8 is okay.

9 JUDGE WARDWELL: Backtracking a little
10 bit just because of something I thought of in
11 regards to your response, Dr. Echols, would you mind
12 sharing with us what your vision of what the purpose
13 of NEPA is?

14 DR. ECHOLS: Well, NEPA as I understand
15 it and Matt Blevins is the expert as lead
16 environmental project manager, but NEPA, I think,
17 has two purposes. One is to inform the decision
18 maker of the potential environmental impact of a
19 decision. It doesn't drive the decision, but it
20 informs the decision.

21 The second is it's a disclosure document
22 to inform the public and other interested parties,
23 state and local and other federal agencies, as to
24 the proposed action so that we can get their input,
25 the public's and other effected agencies into the

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1 NEPA process and so we can consider their views as
2 well as we develop the impact statement to take into
3 effect what is considered by others to also be
4 significant.

5 JUDGE WARDWELL: Would you consider it
6 procedural or functional or whatever else term you
7 would want to use for the opposite of procedural?

8 DR. ECHOLS: I think that that's a legal
9 assessment but it does not drive the decision. It
10 informs it. This is a procedural process to assure
11 that we have taken a look at all the significant and
12 relevant potential impacts to the proposed action.

13 JUDGE WARDWELL: Mr. Blevins, would you
14 like to comment more?

15 MR. BLEVINS: Matt Blevins. I would
16 just comment that Dr. Echols is also a NEPA expert
17 and I don't think I could have stated it any better.
18 He's right on.

19 JUDGE WARDWELL: Thank you. Back to
20 your pre-file testimony on pages five to six and
21 it's mostly on the top of page six, you're stating
22 that the ACP is intended to offset the eventual
23 satiation of operations of the Paducah gaseous
24 diffusion plant and the U.S. reliance on megatons to
25 megawatts program which relies on foreign sources of

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1 uranium and that seems to me to conflict with what
2 appears to be more of an emphasis that ACP put on
3 this in regards to driving the need to supply
4 domestic sources of enriched uranium. How is the
5 requirements for additional sources of enriched
6 uranium really being provided by merely offsetting
7 some that are now in existence now at this point?

8 MR. BLEVINS: Matt Blevins. I think the
9 purpose and need could be more clearly stated to say
10 and this is from Staff Exhibit 28. It's a good
11 place to look at this. But DOE stated that we need
12 an economically-viable, competitive and a more
13 reliable domestic nuclear fuel industry and that was
14 sort of in the big picture. In other words, the
15 diffusion plant, it has some high resource
16 requirements relative to the newer centrifuge
17 technology and it's also believed that the newer
18 centrifuge technology is more reliable.

19 So in order to maintain a domestic
20 nuclear fuel industry, they need to be competitive.
21 In that sense, this is how while it would be
22 replacing in some sense the diffusion plant, it
23 would be replacing them because it needs to be more
24 economically viable.

25 (Whereupon, the document

1 referred to was marked as NRC
2 Exhibit No. 28 for
3 identification.)

4 JUDGE WARDWELL: And I think that's the
5 way -- It makes more sense the way you just
6 described it in regards to what was being worded in
7 the EIS. Having said that, was that your basis by
8 which you concluded that there is sufficient need
9 expressed by the Applicant for this particular
10 project for your requirements that you need in order
11 to continue on with the evaluation of the EIS?

12 MR. BLEVINS: Yes.

13 JUDGE WARDWELL: What would happen in a
14 hypothetical case where there was no need really
15 provided by an applicant? How would that change an
16 EIS by any panel member? If someone came in with a
17 project and they were going to do something because
18 they wanted to do it and they were independently
19 wealthy and by golly, they wanted to do it, but they
20 were required to prepare an EIS and their need was
21 to satiate their overwhelming desires to do this and
22 you said, "Boy, that doesn't seem like a very strong
23 need for this," where would that be reflected in the
24 EIS?

25 MR. BLEVINS: Matt Blevins. I'll take a

1 shot at this, but legal counsel may stop me.

2 JUDGE WARDWELL: And this is in regards
3 to your review of it.

4 MR. BLEVINS: Theoretically say an
5 enrichment facility came in. They were very wealthy
6 but there was no demonstrated need. We had all we
7 needed.

8 JUDGE WARDWELL: Let's get it even more
9 general. It doesn't have to be enrichment facility,
10 just so we can see where this need fits into an EIS
11 because then we can better interpret and judge what
12 is the weight and significance of this purpose and
13 needs statement in regards to what's here at the
14 ACP.

15 MR. BLEVINS: I think if there truly was
16 no need, we would still go through the environmental
17 impact statement process. I think this would be
18 more of a licensing or a regulatory issues
19 especially when they got to the funding or
20 decommissioning funding requirements. If they had,
21 they would have to have the right capital or the
22 right backup in order to be able to decommission it
23 properly.

24 JUDGE WARDWELL: Ignoring that, we're
25 not concerned with how they have to deal. We're

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1 only environmental people and we're in our little
2 office and all we care about are EISes because
3 that's the most important thing in the world. Isn't
4 that correct, Mr. Blevins?

5 MR. BLEVINS: That is correct.

6 JUDGE WARDWELL: So we're only concerned
7 with that. How would the fact that someone came in
8 with that need statement be reflected in your EIS as
9 opposed to someone else that came in there and
10 demonstrated quite clearly that "Boy, I can see how
11 this need is more than just the self interest of the
12 applicant submitting it"?

13 MR. WYNGARTEN: Steve Wyngarten. We
14 would still evaluate the need and describe it as
15 best we can in the purpose and need portion of the
16 EIS and then we would go through the process of
17 evaluating the environmental and socioeconomic
18 impacts of that proposed action and if those impacts
19 were determined to be significant or problematic
20 relative to the need as we also described, then that
21 would probably support a decision that it was not a
22 viable project.

23 JUDGE WARDWELL: But it could also have
24 not so much significant impacts also? Dr. Echols, I
25 see you warming up the words.

1 DR. ECHOLS: Yes. Stan Echols. One
2 thing that the agency would not really get involved
3 in is substituting its own view of what the need and
4 purpose should be and to accept what an applicant's
5 statement is. We can flush it out, but again,
6 remember that the objective of the purpose and needs
7 statement is really to drive the alternatives. So
8 if we can flush out through probing questions on
9 what the applicant really expects to do so we can
10 get a handle on defining a range of alternatives to
11 that proposed action, then we could go forward with
12 the statement of need by the applicant. And if it's
13 purely economic, it's purely economic.

14 JUDGE LAM: Could it happen this way?
15 Could it happen that this is a pure commercial folly
16 and the agency would say there is no need? So no
17 action alternative is also viable and whatever
18 environmental impact there may be there may be.
19 That would be how the report is written. Could that
20 happen that way?

21 DR. ECHOLS: Sure. The environmental
22 impact statement could say that the proposed action
23 doesn't -- the impacts associated with the proposed
24 action might be greater than the no-action
25 alternative, but again it doesn't drive the

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1 decision. It provides so that the decision maker
2 doesn't make that decision in a vacuum, an
3 environmental vacuum, and then it could be
4 challenged on whether that decision was arbitrary
5 based upon the stated impacts. But again, the
6 impacts don't drive the decision. They inform the
7 decision.

8 JUDGE WARDWELL: And where you would see
9 the difference in EISes as the need varies would
10 really be in the no-action alternatives and the
11 other alternatives that are generated by that and
12 the relative differences associated with that in the
13 proposed plan.

14 DR. ECHOLS: Sure. Where it's not an
15 agency proposing the action like say the Corps of
16 Engineers proposing its own action to build a dam or
17 something and it's a commercial venture, someone
18 coming to an agency with their own proposed action,
19 we don't get in the business of substituting what we
20 think the action should be or what the proposal
21 should be or how it should be redefined. We take it
22 on its face and then do the analysis commensurate
23 with the statement.

24 JUDGE WARDWELL: I understand. Thank
25 you.

1 JUDGE McDADE: But, Dr. Echols, here the
2 federal action is the licensing of the facility.

3 DR. ECHOLS: Right.

4 JUDGE McDADE: And as you indicated when
5 there is going to be a federal action, there's an
6 environmental impact statement created. The purpose
7 of the environmental impact statement is to inform
8 rather than to drive the decision.

9 DR. ECHOLS: That's correct.

10 JUDGE McDADE: And, for example, if here
11 a change in the hypothetical that LES had been
12 approved for 20 million SWU and it indicated that
13 once they came up and were operational, they could
14 supply the entire domestic need for enriched uranium
15 at 20 million SWU that you would just simply note
16 that in the environmental impact statement that
17 would be part of the description, part of the
18 information, that you would then be providing to the
19 decision maker.

20 DR. ECHOLS: That's correct.

21 JUDGE McDADE: And that would satisfy
22 fully the purposes of the environmental impact
23 statement as you do your reviews.

24 DR. ECHOLS: That's correct. We
25 wouldn't get into whether any applicant has a

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1 competitive position where they want to go forward
2 in the marketplace despite ample potential supply
3 already. That's a marketing decision and an
4 economic decision for the applicant, not for the
5 agency.

6 JUDGE WARDWELL: I see. And under the
7 hypothetical case that Judge McDade just brought up
8 the difference between that EIS and the one you're
9 currently looking at may very well be in
10 relationship to the no-action alternatives
11 specifically and some of the other alternatives, but
12 certainly the no-action because one of the things
13 you'd have to address under the no-action is that
14 the current supply is already being provided and so
15 any impacts from the proposed action would be above
16 and beyond that or something long those lines.

17 DR. ECHOLS: And that would be a factor.

18 JUDGE WARDWELL: And that would be a
19 factor. And you would highlight that as a factor
20 and provide that to the decision makers in regards
21 to --

22 DR. ECHOLS: And that's the nexus
23 between the purpose and needs section and the
24 alternatives.

25 JUDGE WARDWELL: Exactly. Thank you. I

1 think that clarifies it very well. That's very
2 helpful.

3 JUDGE LAM: Now even hypothetically if
4 there's no need, the project is a pure commercial,
5 risky adventure, but if the environmental impact is
6 de minimus there's no barrier to any decision maker
7 not to grant the license. Am I interpreting your
8 statement correctly?

9 DR. ECHOLS: You don't need that
10 perspective. There's still the public health and
11 safety perspective that has to be viewed on whether
12 or not it's appropriate to grant a license.

13 JUDGE LAM: Yes. From a NEPA
14 perspective. So there's no barrier to decision
15 makers to say "Come on. This is nonsense."

16 DR. ECHOLS: No, and you can even take
17 another hypothetical where there was significant
18 negative impacts on the environment from a project.
19 This comes up in military bases where you're
20 expanding an airfield to land Air Force jets and
21 they're going to fill in a swamp area that's very
22 productive environmentally. You say there's a
23 national interest here that overrides the very
24 significant environmental impacts that might occur.
25 So even where the proposed action might have a very

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1 significant environmental impact that would not be
2 driving the decision on whether or not to go forward
3 with the particular proposal.

4 MR. WYNGARTEN: Steve Wyngarten. I can
5 just add one more example to maybe help illustrate
6 this. There's other agencies including the Federal
7 Aviation Administration that's currently
8 entertaining license applications for commercial
9 space transportation vehicles which are just purely
10 business ventures with different technologies and
11 designs that people are trying to prototype and make
12 available.

13 They are obligated to evaluate those
14 applications and they go through the NEPA process to
15 get the public input and review and make a decision
16 based on the impacts relative to what the proposal
17 is and that's a pure business venture.

18 JUDGE LAM: Thank you.

19 JUDGE WARDWELL: The previous testimony
20 by Mr. Blevins clarified for me how the various
21 components of the need expressed in the purpose and
22 needs statement were evaluated by the staff. One
23 could read this EIS and say that there are all these
24 different statements of need, one being that we
25 needed an economic source that clearly showed how it

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1 was more economical than the current diffusion
2 plants. And then there were other statements in
3 regards to as we talked about the need for domestic
4 supply and they could say there's no guarantee any
5 of this will be sold to a domestic market. If
6 hypothetically the domestic supply needs statement
7 was removed from the FEIS in your professional
8 opinions how do you think the results that's been
9 documented in the FEIS would change, if any, and all
10 the others still remained, the other ones that are
11 more clear and more definitive?

12 MR. BLEVINS: Matt Blevins. So let me
13 clarify this. If in the purpose and need, there
14 wasn't a need for a domestic need in industry --

15 JUDGE WARDWELL: That there was no
16 statement saying that there was domestic supply --

17 MR. BLEVINS: In other words, how would
18 we evaluate --

19 JUDGE WARDWELL: That the need for it as
20 a domestic supply wasn't stated. It's not that
21 there wouldn't necessarily be a domestic need. It's
22 the fact that we don't want to account for that in
23 the EIS because there's no guarantee that anything
24 that's produced by ACP will go to a domestic market.
25 There could be some rich guy in Europe that wants to

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1 buy all the enriched uranium because of his warped
2 desires.

3 MR. BLEVINS: The short answer is I
4 don't think it would have changed our final
5 recommendation. There is still a demonstrated
6 shortfall of SWU I believe in the worldwide market.
7 Whether or not USEC is able to sell that entirely
8 domestically or whether they sell some of it on the
9 world market, the impacts are still so small in
10 general. There were a few cases where they reached
11 moderate levels. I don't think that would have
12 affected the indecision or the final recommendation
13 of reaching the FEIS.

14 DR. ECHOLS: In addition -- Stan Echols
15 -- The need from a purely economic perspective from
16 the applicant is they are running more efficiently
17 with the improved technology than they would with
18 the existing technology both in maintaining the
19 plant and from the operating costs and the need to
20 update their facility would be an adequate statement
21 of need.

22 JUDGE WARDWELL: Third party like
23 comment again.

24 MR. WYNGARTEN: So clear.

25 JUDGE WARDWELL: Land of instant

1 clarity. Right. That's fine. Thank you. Turning
2 over to USEC if I could for a minute, pre-file
3 testimony on page four and I'm not sure we really
4 have to flip to that much because the question is
5 peripheral to that. But would you care to comment
6 on the future of Paducah and the gaseous diffusion
7 plant in ACP's plans in the future in regards to it
8 will remain operational with or without the ACP
9 being licensed and built?

10 MR. SEWELL: Phil Sewell. The decision
11 on Paducah being operational will be a business
12 decision just as the decision to deploy ACP is a
13 business decision on the basis of what looks like to
14 us to be an energy efficient technology and an
15 economically more competitive technology so that the
16 primary source of enrichment from USEC to meet the
17 customer demand we anticipate would come first from
18 an ACP. The Paducah plant will continue to operate
19 as long as we see that there is a demand for it.
20 And the dynamics that would dictate its longevity or
21 life will be economic just like the economic issues
22 dictate, I'll say, the replacement from a primary
23 supply standpoint from the American centrifuge.

24 In the long run, we would see that
25 depending on our sales volume that we would meet all

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1 of our commitments from the centrifuge technology
2 whether that be the first increment that we have in
3 our application or an expansion to seven million
4 SWUs that has been studied in the EIS. So to date
5 we have made no decision with respect to a definite
6 timing regarding the life longevity, shutdown,
7 continued operation of the Paducah plant. But we
8 have made a decision with respect to the preference,
9 with respect to the supply source.

10 JUDGE WARDWELL: And in that regard, if
11 I can interpret your answer correctly, you're saying
12 that Paducah would still be operational if the
13 demand was there as I heard you state and then I
14 assume and infer from your following statements that
15 you would define that demand as being in regards to
16 your abilities to produce it at the price that you
17 have to make in order to support the Paducah expense
18 associated with the enrichment process for that
19 facility.

20 MR. SEWELL: Yes. That's correct.

21 JUDGE WARDWELL: Thank you, Mr. Sewell.
22 That's all I have on that.

23 JUDGE McDADE: Okay. With regards --

24 MR. SEWELL: Excuse me, sir. If I could
25 offer a comment on your question related to the ten

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1 percent enrichment.

2 JUDGE McDADE: Sure.

3 MR. SEWELL: I wanted to clarify that
4 this is a 30-year operational plant and you
5 correctly identified that the ten percent or higher
6 than five percent enrichment for sales would be
7 dictated by the market. What we're seeing in the
8 marketplace over time is an increase in the average
9 assay that utilities are taking so that now a large
10 portion of our sales is very close to five percent
11 and utilities worldwide are looking to increase the
12 efficiency of their plants and the burn rates and
13 the time period in which the reactors will operate,
14 all of which is driving assays to higher and higher
15 levels.

16 There are some designs in the world that
17 actually call for enrichment higher than five
18 percent which you have referenced in the testimony
19 here by Mr. Blevins. But we're spending \$2.3
20 billion, over \$2 billion, for this first increment
21 and we want to operate the plant for 30 years and if
22 that market demand were to surface, we would like to
23 be in a position to not have to go through a
24 reconstruction stage with respect to the conditions
25 and the structures in that plant that we would have

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1 to put in place in order to meet the requirements
2 for a higher than five percent assay operation.

3 So this is a business decision on our
4 part. You correctly identified that. If the market
5 demands, we would like to be in the position to
6 respond to that and I think the NRC staff has
7 identified the safety requirements and all the
8 environmental issues associated with it. So all of
9 which leads us to a position of being able to be a
10 reliable, responsible and prompt supply source for
11 whatever the market may demand.

12 JUDGE LAM: So it is your anticipation
13 that future generation of light water reactor fuel
14 design because of the need for more efficiency and
15 cheaper fuel cycle for high enrichment for longer
16 fuel cycle. That's what's your anticipation.

17 MR. SEWELL: Yes sir.

18 JUDGE WARDWELL: Thank you, Mr. Sewell.

19 (Off the record discussion.)

20 JUDGE McDADE: Let me ask. We
21 anticipated going from purpose and need, balance of
22 conflicting factors, cost-benefit analysis. Am I
23 correct that the staff will have the same panel for
24 each of those?

25 MS. BUPP: We hadn't intended to leave

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1 Dr. Echols for the balance of conflicting factors,
2 but he can stay if you'd like. For the cost-benefit
3 analysis, we do have a separate panel for that. It
4 would be just Mr. Blevins and then Mr. Hammer.

5 DR. ECHOLS: I'll take advantage of the
6 if-you'd-like clause in that statement.

7 JUDGE McDADE: When you say "take
8 advantage of it" does that mean to leave or to stay?

9 DR. ECHOLS: To leave.

10 JUDGE McDADE: Thank you, Dr. Echols.

11 JUDGE WARDWELL: You jumped at that
12 opportunity awful quick.

13 DR. ECHOLS: Yes, I did.

14 JUDGE McDADE: And USEC has the same
15 witnesses identified for all of these issues.

16 MS. BUPP: I understand that we're
17 moving onto HTE-4 now.

18 JUDGE McDADE: Is Mr. Hammer coming up
19 for this?

20 MS. BUPP: No, he is for HTE-6.

21 JUDGE McDADE: Okay, because I had seen
22 him here earlier.

23 MS. BUPP: Yes. Actually, before HTE-6,
24 we'll need a short recess because we had intended to
25 present a PowerPoint presentation for the

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1 presentation that the Board asked for. So we'll
2 need a short break just to set up the computer
3 before we move onto HTE-6.

4 (Off the record comments.)

5 JUDGE WARDWELL: Now just to make sure
6 my organization is correct or maybe it's better
7 phrased my disorganization hasn't led me down a
8 garden path that I don't want to be, there was no
9 pre-file testimony submitted by the staff in regards
10 to this hearing topic. Is that correct? I don't
11 have any in front me.

12 MR. BLEVINS: Correct. We haven't filed
13 any written testimony.

14 JUDGE WARDWELL: So in regards to that,
15 I think I'll just go through some of the followup
16 questions that I had in this area and eliminate
17 those that have been answered by what we've already
18 talked about in these hearing days. The first one
19 dealt with our question dealing with the domestic
20 enrichment for the no-action alternative where I
21 think in the FEIS you initially show that the no-
22 action alternative has more impact than the ACP does
23 for impactable public health and occupational health
24 and the impacts to waste management on the tables.
25 I think it's 2.8, 2-8 in the FEIS.

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1 And then in your response in February of
2 this year on the 20th, you state that in fact they
3 should have been the same if I interpreted your
4 response correct.

5 MR. BLEVINS: That is correct.

6 JUDGE WARDWELL: So it should have had
7 the same rather small to moderate for the ACP as a
8 no-action alternative.

9 MR. BLEVINS: Yes, and that's reflected
10 in the actual Chapter 4. Table 2-8 is a summary of
11 the Chapter 4 analysis. So it's correctly reflected
12 in the text of the document back in Chapter 4.

13 JUDGE WARDWELL: You're saying that it
14 should be small in the tech spec.

15 MR. BLEVINS: Small. It is small in the
16 text in Chapter 4 Section --

17 JUDGE WARDWELL: So it's just mislabeled
18 in the table.

19 MR. BLEVINS: Correct.

20 JUDGE WARDWELL: And that all of your
21 comments in the text related to the small conclusion
22 in that you just didn't drop the small to moderate
23 in the text. That was the correct evaluation
24 leading to your conclusion that it was small for
25 both the ACP and the no-action in that the moderate

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1 happened to slip into the table.

2 MR. BLEVINS: Correct.

3 JUDGE WARDWELL: Okay. Well, that's
4 easy for the next question because it's moot, but I
5 just want to be sure. How does this fact that the
6 small to moderate in that table really should be
7 small affect the conclusions in the FEIS?

8 MR. BLEVINS: Matt Blevins. The answer
9 is it doesn't affect. I think our conclusion was
10 based on the document as a whole, not on that one
11 table.

12 JUDGE WARDWELL: And it was based on the
13 text which is the summary of your evaluation.

14 MR. BLEVINS: Sure. Certainly.

15 JUDGE WARDWELL: Thank you. That
16 clarifies that. Table 2-7 of page 240 of the FEIS
17 and I don't think you need to switch to it but it
18 showed the impacts from the socioeconomic factors.
19 I just want to verify that those are positive
20 impacts as opposed to negative impacts or have I
21 misinterpreted that.

22 MR. BLEVINS: Generally, we don't --
23 Generally, people think of -- If I know the table
24 you're referring to, if you're talking about job
25 creation, generally people think of those as

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1 positive. However, some people might think of
2 adding a bunch of new people to an area as negative.
3 So generally, that's why we try to categorize
4 impacts as small, moderate or large and try to get
5 away from maybe subjective qualifiers as positive or
6 negative.

7 JUDGE WARDWELL: But yet when you're
8 balancing things and you see that comparing it to
9 Paducah for instance, if you were building the
10 facility there which I think was one of your
11 alternatives that you did address, you would when
12 you see the large impact, you would evaluate in your
13 mind that means more jobs and you wouldn't
14 necessarily put the qualifier of positive or
15 negative. But you're aware that if one thought more
16 jobs and economic viability in an area was an
17 advantage, then it would be one of those impacts
18 that might lead one to conclude, a decision maker to
19 conclude, that Paducah has some advantages if that's
20 what they thought was an advantage.

21 MR. BLEVINS: Yes.

22 JUDGE WARDWELL: Thank you. On the FEIS
23 and on pages 2-48 and 2-49, I just want to verify
24 something that I misread. In that you made a
25 statement regarding that fact that there needed to

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1 be some management in handling of hydrofluoric acid
2 for other facilities and I thought you were saying
3 or implying that you didn't have to do that at
4 Piketon and I just want to clarify that that
5 statement's correct as written but it also means
6 that the same types of handling have to be done at
7 Piketon. Is that correct?

8 MR. BLEVINS: Correct. Yes.

9 JUDGE WARDWELL: Thank you. That's all
10 I have. I'm done.

11 JUDGE McDADE: Let me just ask a quick
12 followup question of USEC with regard to the pre-
13 file testimony that you all submitted and in
14 talking about the need, you indicated that first of
15 all currently USEC supplies about 11 million SWU a
16 year, about half of that from Paducah, half of that
17 from the megatons to megawatts which is intended to
18 be phased out or could be phased out under its
19 current terms in about five years from now and that
20 therefore need would be necessary.

21 You also made the further statement that
22 in the event of a national emergency or in the event
23 that there was a renewed need for domestic
24 enrichment services to serve the nation's defense
25 needs that this facility would be available for

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1 that. Not in terms of the license but in terms of
2 the technology, is this a reference that the
3 technology would allow for enrichment even above ten
4 percent to meet defense needs although that's not
5 the current intent of your facility?

6 MR. SEWELL: Phil Sewell. The answer is
7 correct. The technology base will be there to
8 support defense needs if indeed they occur. The
9 important distinction here is that the defense needs
10 are not going to be met by virtue of this
11 application. This is a commercial application for
12 enrichment below ten percent, the majority of which
13 would be below five. But to meet defense needs and
14 do so, I'll say, efficiency, economically, promptly,
15 it's very important for the U.S. from a policy
16 standpoint to have a technology base, expertise and
17 an infrastructure that's necessary to meet that need
18 should it occur.

19 With this commercial plant, all of those
20 factors will be in place. So that is, I'll say, a
21 tangential or a extra value proposition for the
22 country from a policy standpoint and not from a
23 commercial standpoint or associated with the license
24 conditions. But from a needs standpoint, it meets
25 very important policy objectives.

1 JUDGE McDADE: That's the way I
2 understood the statement in the pre-file testimony
3 and I just wanted to make sure that that's the way
4 it was intended.

5 MR. SEWELL: Yes sir.

6 JUDGE LAM: Could the need policy
7 objective be rephrased this way as well? This
8 facility consumed only about five percent of
9 comparable gaseous diffusion plant. In that regard
10 when this country needs to conserve energy, this
11 saving in energy would fit into that policy
12 objective that you just mentioned. Would it?

13 MR. SEWELL: Phil Sewell. Yes, sir.
14 That's very important and I was very remiss in not
15 mentioning that as a very important policy objective
16 from an environmental standpoint, a mission
17 standpoint and from an energy efficiency standpoint
18 for our country's policy objectives in reducing
19 carbon emissions or reducing the emissions that
20 would be necessary to fuel an enrichment plant. So,
21 yes sir. That's a very, very important policy
22 objective that is directly related to the license
23 application and the commercial operation of this
24 facility.

25 (Off the record discussion.)

1 JUDGE McDADE: I think we're ready to
2 move onto Issue No. 6. You indicated that you
3 wanted a brief recess prior to that.

4 MS. BUPP: We just need to get the
5 computer set up and hooked into the monitors.

6 JUDGE McDADE: Would ten minutes be
7 sufficient for that?

8 MS. BUPP: I believe so. Yes.

9 JUDGE McDADE: Okay. So we're currently
10 at 10:50 a.m. We're in recess then until 11:00 a.m.
11 Before we do, Mr. Silverman, do you need any more
12 time or is ten minutes enough?

13 MR. SILVERMAN: Ten minutes would be
14 just fine.

15 JUDGE McDADE: We're in recess until
16 11:00 a.m.

17 MR. SILVERMAN: Thank you.

18 JUDGE McDADE: Off the record.

19 (Whereupon, at 10:50 a.m., the above-
20 entitled matter recessed and reconvened at 11:05
21 a.m. the same day.)

22 JUDGE McDADE: Are we ready to proceed?

23 MS. BUPP: Yes, we are, your Honor.

24 MR. SILVERMAN: We are, your Honor.

25 JUDGE McDADE: Okay, thank you. The

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1 hearing will come to order. And we move forward to
2 Environmental Issue 6. We have fact Exhibit 63 has
3 been offered and admitted with regard to this
4 particular issue. We have all the usual suspects
5 here. I think everybody has previously been sworn.
6 Are we ready to proceed?

7 MS. BUPP: Yes, we are, your Honor. Mr.
8 Hammer.

9 MR. HAMMER: Don Hammer. I am a
10 contractor with ICF International, working with the
11 NRC staff under a support contract to perform the
12 environmental review of the license application for
13 the ACP. In that role, I was the Deputy Program
14 Manager for the ICF effort to support the
15 development of the EIS. We're here today to present
16 to you information related to the cost benefit
17 analysis portion of that environmental review. I
18 would like to make just one qualification to the
19 Board before we begin. My colleague, Alliah Vargees
20 (phonetic) who actually prepared the cost benefit
21 analysis, is unfortunately on an extended leave of
22 absence in India with a family emergency and
23 unfortunately is not able to be here with us today.
24 I did, however, prepare this presentation with his
25 input and we're hoping that it will suffice to

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1 provide you with the information you've requested.

2 With this presentation we expect to go
3 through five different topics today. The first is
4 the actual --

5 JUDGE McDADE: Let me just make sure,
6 you're going through this presentation. You're
7 vouching for its accuracy through your testimony.

8 MR. HAMMER: That's correct.

9 JUDGE McDADE: Even though it was
10 prepared initially by your colleague, you are
11 familiar with the underlying facts such that you are
12 in a position to vouch for the accuracy of what you
13 stated.

14 MR. HAMMER: That is correct.

15 JUDGE McDADE: You're not just simply
16 saying I hope he was right.

17 MR. HAMMER: That's correct.

18 JUDGE McDADE: Okay, thank you.

19 MR. HAMMER: The presentation will be in
20 five different parts. The first will be the actual
21 purpose of the cost benefit analysis; why did we do
22 this particular analysis to support the
23 environmental review. The second we'll go into
24 discussion of the analytical methodology that we
25 used to prepare the cost benefit analysis. We'll

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1 talk in general principles and then we'll get into
2 more specifics about the various aspects of the cost
3 benefit analysis.

4 Third, we'll go through a summary of the
5 results of the analysis. And an important part will
6 also be to discuss the actual limitations of the
7 analysis and that will be our fourth discussion
8 point. And finally, we'll end with overall
9 conclusions of the cost benefit analysis as an input
10 into the environmental review.

11 The purpose of the cost benefit analysis
12 is to provide a rationale for deciding that
13 likelihood of a positive -- a net positive economic
14 impact resulting from the proposed ACP. We use the
15 cost benefit analysis to do a comparison of the
16 alternatives for achieving the specific goals that
17 are defined in the purpose and need. And the
18 ultimate goal of the cost benefit analysis is to
19 provide an objective rationale for choosing between
20 competing alternatives.

21 To that end, we employed some general
22 principles when we developed our methodology for
23 conducting the analysis. And these are highlighted
24 here. We summarized the environmental impacts along
25 with other costs and benefits associated with both

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1 the proposed action and the no action alternative.
2 We then compare those costs and benefits
3 quantitatively in monetary terms where we had
4 information to do so but we also have some
5 qualitative evaluation of both the cost and benefits
6 that factors into that overall analysis.

7 The focus of the analysis, it should be
8 clear, is on the incremental costs and benefits from
9 a given baseline and that's a standard practice when
10 conducting cost benefit analysis. You establish a
11 baseline, you determine the incremental costs and
12 the benefits against that particular baseline. We
13 attempted to determine both conservative estimates
14 of overall cost and savings associated with the
15 proposed action in order to insure that we were
16 comfortable with the fact that the analysis was
17 within the bounds and would actually support the
18 environmental review.

19 I would just point out that in the
20 analysis that we prepared, the net cost and benefit
21 analysis in Section 1 is partially qualitative in
22 nature and in Section 7.2, where we actually compare
23 the proposed action with the no action alternative,
24 we tended to quantify that and provide a monetary
25 value so that we could come up with a net present

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1 value for the savings or in other words, the net
2 benefits of the proposed action compared to the no
3 action alternative.

4 First, I'd like to talk to you about the
5 first portion of the analysis which was to actually
6 look at the proposed action on its own, the merits
7 of the proposed action compared against itself and
8 in order to do that we weighted the costs of the
9 proposed action against the benefits of the proposed
10 action. This is not a comparative analysis with
11 respect to other alternatives but we took a two-
12 pronged approach. So the first portion is really
13 looking at in Section 7.1 of the EIS is looking at
14 the costs and benefits of the proposed action when
15 compared against itself.

16 We account for all the important costs.
17 We adjust those costs for inflation. We also
18 include contingencies or overrun buffers to insure
19 that we've enveloped our analysis and then we
20 conservatively estimate the benefits, in other
21 words, in order to make sure that we weren't
22 overreaching what the actual benefits would be, so
23 it's a built in conservatism.

24 The information that we used came from -
25 - with respect to the discounting for inflation, all

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1 came from NRC documents, NUREG documents and we used
2 this over-estimation of costs and under-estimation
3 of benefits principle when we were performing our
4 inflation adjustments and other estimations, for
5 example, the higher cost of money.

6 JUDGE WARDWELL: Do you know what NUREG
7 documents you did use for this?

8 MR. HAMMER: I believe it's NUREG BR-
9 0184 and the title of that document is "Regulatory
10 Analysis Technical Evaluation Handbook, Final
11 Report", dated January of 1997.

12 JUDGE WARDWELL: Thank you.

13 MR. HAMMER: Now, a little bit more
14 about the specific approach, actually, we're talked
15 about the specific approach, excuse me. A summary
16 of the raw data that were used in the analysis,
17 which I believe points to the specific portion of
18 the question that was provided by the Board.

19 Excuse me. We used several sources of
20 data. We used data from numerous topical areas in
21 Section 4 of the FEIS which is the environmental
22 impacts section. The majority of those data are
23 qualitative in nature. We used information from
24 USEC's environmental report which also contained
25 qualitative information but it did contain

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1 significant amounts of quantitative data, mostly in
2 the area of socioeconomic costs and benefits.
3 Finally, we used responses for additional
4 information -- request for additional information
5 responses from USEC, in particular an April 21st,
6 2005 document which is actually a proprietary
7 document, which contains information on the cost to
8 operate and construct the facility.

9 With respect to the evaluation of the
10 proposed action against itself, again we quantified
11 the costs associated with each life cycle stage of
12 the facility and that's basically how the FEIS was
13 set up when we evaluated environmental impacts. We
14 evaluated the impacts of site preparation and
15 construction, centrifuge manufacturing and assembly,
16 facility operation and then decontamination and
17 decommissioning. And for each of the resource areas
18 that we evaluated impacts for, we followed that same
19 process. The cost benefit analysis, again, is
20 consistent with that approach.

21 The cost to the economy and environment
22 are, again, based on this document, NUREG BR0184
23 where we identified those specific areas that that
24 document believes are important to evaluate when
25 conducting a cost benefit analysis. Right now I'd

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1 like to go through a quick summary of the results of
2 that analysis for the proposed action and compare it
3 against itself. We identified economic and national
4 energy security benefits and we also identified
5 small increases in employment and tax revenue
6 benefits for the area surrounding the proposed
7 facility.

8 With respect to energy and economic
9 benefits, we identified that fact that increased
10 capacity for domestic production of enriched uranium
11 to reduce the existing and expected future
12 shortfalls would be a benefit. We, however, did not
13 quantify that number. That's a tricky number. It
14 has a lot to do with the market value of the
15 product, not something that when we're comparing the
16 proposed action against itself, but we felt was
17 critical to determining whether the costs outweigh
18 the benefits.

19 It also upgrades aging and less
20 efficient technology which results in reduction in
21 the energy required to perform the enrichment. We
22 see that as a benefit. And again, as I mentioned,
23 small increases in employment and tax revenue
24 benefits for the local economy. This next slide is
25 simply a table that presents the results of that

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1 analysis and as you can see, we have indicated both
2 for each life cycle stage the direct and indirect
3 jobs that would be created on an annual basis for
4 each of those and these are full time jobs. And
5 then have provided some dollar values for you with
6 respect to income tax revenues and sales tax
7 revenues.

8 The next slide details some of the costs
9 that were associated with the construction and
10 operation of the ACP. Again, we've indicated for
11 each of the life cycle stages what those costs would
12 be. I'll make this point but we'll talk about it in
13 the next section of the presentation as well. The
14 tails disposition costs are not included in the
15 comparative cost benefit analysis where we compared
16 a proposed action against the no action alternative
17 because we assume that the Paducah facility would
18 generate roughly the same amount of tails as the ACP
19 for an equivalent level of SWU production and I
20 should clarify that by saying the no action
21 alternative assumes that the Paducah facility would
22 continue operation and that the ACP would not be
23 built.

24 JUDGE McDADE: A quick question with
25 regard to Slide Number 10, the figures there are 1.4

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1 billion site preparation and construction, 1.4
2 billion for centrifuge manufacture equipment
3 assembly. That's 2.8 billion. The figures we heard
4 earlier were 2.3.

5 MR. HAMMER: That's correct, and I would
6 just note that this document was prepared and
7 finalized prior to that new information becoming
8 available. So in order to represent what we did as
9 part of the environmental review, I put the figures
10 in here that we actually used in our analysis. I
11 didn't want to take credit for other costs that we
12 didn't factor into our analysis.

13 JUDGE McDADE: And what do you mean by a
14 nominal dollar?

15 MR. HAMMER: A nominal dollar is one
16 that's not adjusted for inflation.

17 MR. MINER: Excuse me, Judge McDade,
18 could I offer --

19 JUDGE McDADE: Please.

20 MR. MINER: Peter Miner for USEC. The
21 \$2.8 billion shown there is actually the cost for
22 the 7 million SWU plant. That's a little bit --

23 JUDGE McDADE: And that explains part of
24 the difference.

25 MR. MINER: Yes, that's correct.

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1 JUDGE McDADE: Thank you.

2 MR. HAMMER: That is correct. I should
3 note that the cost benefit analysis as well, I
4 believe I testified yesterday all of the impacts
5 associated with the facility that were identified
6 and evaluated in the FEIS were based on the 7
7 million SWU plant from day one of operation.

8 JUDGE WARDWELL: With the nominal
9 dollars, does that mean that any incremental funding
10 is brought back to the present worth or did you just
11 assume you were spending it all at once right now,
12 today's dollars for various things?

13 MR. HAMMER: Well, we assume that that
14 money would be spent from 2006 to 2010. Those were
15 the figures that were provided to us by USEC in
16 their proprietary submission.

17 JUDGE LAM: Excuse me, now there is some
18 uncertainty here because there's money to be spent
19 between '06 and '10 depending on the cost of money,
20 the prevalent interest rate measured by whatever
21 measure you choose too, like the prime or whatever.
22 So that amount carries some uncertainty there.

23 MR. HAMMER: That is correct. I think
24 it's important to note that with respect to this
25 portion of the analysis, the focus is not so much on

1 the costs of building and operating the facility.
2 It's the costs and benefits to the public, to
3 society. As was stated in previous testimony, I
4 believe, this is a business decision for the most
5 part and we treated it as such. What we attempt to
6 do in the FEIS is to look at the costs and benefits
7 of that action regardless of what it costs or what
8 revenue might be generated from that in terms of
9 profitability for the applicant. We looked at it
10 more in terms of the costs and benefits to society
11 as a whole.

12 JUDGE WARDWELL: Just so I understand
13 your analysis better, taking the tails disposition,
14 the 1.8 billion could you elaborate on how that
15 number was derived? We were presented with a unit
16 cost, I think, for tails disposal. They changed
17 between the FSER and the FEIS.

18 MR. HAMMER: I would have to have the
19 April 21st, 2005 document in front of me to see what
20 was presented but my understanding is we based it on
21 a 512,000 metric ton volume of material to be
22 disposed and used the per unit cost at the time that
23 was provided to us in that April 21st document and
24 simply multiplied the two together to determine the
25 total cost.

1 JUDGE WARDWELL: So, in essence, you're
2 assuming that you're spending that all at once and
3 thereby putting it into a fund to be used for --

4 MR. HAMMER: That's correct. That would
5 have to be part of the decommissioning fund and the
6 financial assurance mechanism.

7 JUDGE WARDWELL: And not take advantage
8 of the time you've got to --

9 MR. HAMMER: That's correct.

10 JUDGE WARDWELL: -- increase the value
11 of that money. In fact, it would be worth a lot
12 more. Well, basically what you're assuming then is
13 that inflation matches the rate of return on that
14 money is what's inherent behind that --

15 MR. HAMMER: That's correct.

16 JUDGE WARDWELL: -- analysis. Thank
17 you.

18 MR. HAMMER: And unfortunately our
19 screens have gone out. Oh, I can't see them so if I
20 don't directly look at you, I'm having to look at
21 the slide here. I can't see it on the monitors.

22 JUDGE WARDWELL: We won't take that
23 personally. We're very flexible.

24 MR. HAMMER: We did identify some other
25 costs that are not monetized with respect to the

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1 analysis of the proposed action's costs and
2 benefits. And those relate to the specific areas
3 that we addressed in the Environmental Impact
4 Section 4 of the FEIS. And I have just listed here
5 some examples; air quality, socioeconomics,
6 ecological resources, transportation, public and
7 occupational health and waste management.

8 JUDGE WARDWELL: Now are you saying you
9 quantified these or you just qualitatively added
10 them into the mix?

11 MR. HAMMER: We qualitatively added
12 these into the analysis. And I wanted to just
13 briefly describe for you one example, for example,
14 air quality. The impact of the proposed action on
15 air quality is expected to be small to moderate. We
16 would have airborne emissions from site preparation
17 and construction but they're not expected to exceed
18 air quality standards with the possible exception of
19 a short-term increase in particular matter and as
20 has been previously testified, USEC has agreed to
21 implement mitigation measure to reduce that from a
22 moderate impact to a small impact.

23 Radiological releases from soil
24 disturbances and decommissioning of the GCEP would
25 be small and they would be controlled. Emissions

1 from diesel generators would not cause air quality
2 problems and the maximum predicted concentrations of
3 HF resulting from operations would be below safe
4 levels. So based on those maximum radiological
5 emissions rates and the comprehensive site
6 monitoring program, the expected impact to air
7 quality from the plant's radiological emissions is
8 expected to overall be small.

9 That is an example of a qualitative cost
10 that we would incorporate into our analysis.

11 JUDGE LAM: Now, you are compelled to do
12 it qualitatively because to quantify it would be
13 very difficult, isn't it?

14 MR. HAMMER: That's correct. Other
15 examples of these qualitative impacts are found in
16 Section 7.1 of the FEIS. More detail on those can be
17 found in Chapter 4 and also there's a very good
18 summary in the FEIS Table 2-8 which provides a
19 summary of all the impacts for each resource area in
20 a qualitative fashion. That table actually has a
21 little bit more information as well. That's a
22 comparison table where we look at the -- it
23 summarizes the impacts of the proposed action
24 against the no action alternative but it also does
25 give you in one place a good summary of the impact

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1 specific to the proposed action.

2 In conclusion with respect to the
3 proposed action, we believe that analysis
4 demonstrates both economic and energy benefits,
5 socioeconomic benefits would be realized. We
6 believe the cost to environmental resources are
7 expected to be small overall and the benefits of the
8 proposed action outweigh the costs.

9 JUDGE LAM: Now, may I ask a question
10 that may be unfair? In the risk assessment there's
11 all the same, which is unfair to everybody who has
12 been in this business for 30 or 50 years. Give me a
13 number -- tell me what number you want to give it to
14 you. I'm sure, you know, some of us may have heard
15 that. Now, in the cost benefit analysis, are we
16 facing the same type of uncertainty? Can it be if
17 somebody say, "Well, let us drive the analysis"
18 because there's so many qualifying things in there,
19 so much uncertainty. Could it be somebody say,
20 "Well, let us make the cost benefit analysis to go
21 one way", and could the analysis be done by tweaking
22 a number here, tweaking a number there, by saying,
23 well, you know the 30-year US Treasury rate is now
24 eight percent instead of five percent? The prime
25 rate in the year 2010 is whatever by making sort of

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1 an assumption to drive the analysis to come to pre-
2 determined conclusion? Could that be done?

3 Let me make it clear, I'm not accusing
4 anybody of tainting the data, but could it be done?

5 MR. HAMMER: The answer would be yes;
6 however, with respect to this analysis, that's why
7 we stayed away from including that information as
8 part of our analysis. We felt that it was too much
9 uncertainty and we just didn't feel comfortable
10 making predictions into the future to be able to
11 quantify that information and therefore, we did not
12 include it in our analysis.

13 MR. BLEVINS: I'd like to add something.
14 Matt Blevins. I think what you're getting at is the
15 way we insure that doesn't happen is we follow
16 standard methodology and that's the NUREG that Don
17 referred to. There are certain numbers that they
18 use for discount rates and other economic values so
19 that way people can't -- applicants can't skew data
20 to their favor. And that being said, though, the
21 cost benefit analysis itself overall I would qualify
22 it as qualitative, so we're not looking for an
23 absolute plus, minus just in terms of dollars.

24 JUDGE LAM: So your expertise and
25 professional experience indicate you're sensitive to

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1 how data can be manipulated.

2 MR. BLEVINS: Yes, and that's why
3 there's standard procedures in place so if you think
4 of that NUREG BR0184, that's the document, I believe
5 that talks about which numbers are appropriate to
6 use.

7 JUDGE LAM: Right, because some of these
8 projections go way into the future, right? I mean,
9 really, so what is in our record now it's your best
10 estimate.

11 MR. HAMMER: Yes, correct.

12 MR. WYNGARDEN: Steve Wyngarden. I'd
13 like to also add the best defense against the type
14 of, I guess, bias that you're describing is to try
15 to be as thorough and transparent as possible. And
16 that's what we're trying to do in this particular
17 chapter here, to lay out all the factors, to make
18 sure that we demonstrated to all the reviewers and
19 stakeholders and concerned parties that we were
20 looking at every factor so that nothing was missed
21 and then to try to build up that argument to support
22 our conclusion in a transparent way. Even though a
23 lot of the conclusions are qualitative, they are
24 frequently based on quantitative information. The
25 example that Don just described for air quality it

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1 was based on air quality modeling information about
2 the expected emissions and the transport and
3 exposures at different receptor locations.

4 And that again was a very transparent
5 and quantitative analysis. Now, the conclusions
6 overall about what it meant, that did require some
7 subjective determination about the small or the
8 moderate. But here again, if we can just make it as
9 perfectly clear to everybody, release it in a draft
10 form, let critics and everybody take a look at it
11 and if it survives, it's as good as it can be.

12 JUDGE LAM: Good, so it has survived a
13 major public and other scrutiny, that's what you're
14 saying.

15 MR. WYNGARDEN: Yes.

16 JUDGE LAM: It has, okay, thanks.

17 JUDGE WARDWELL: To make sure I
18 understand this correctly the analysis that you say
19 demonstrates economic and energy benefits and
20 comparing it -- well, basically your final bullet
21 item there, that the benefits of the proposed action
22 outweigh the costs, that is a qualitative statement
23 based on looking at all the quantitative and the
24 qualitative factors that you're looking at on both
25 sides of that particular comparison of benefits to

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1 cost.

2 MR. HAMMER: That's correct.

3 JUDGE WARDWELL: You're not calculating
4 out a ratio of those two and coming up with a
5 number.

6 MR. HAMMER: Correct.

7 JUDGE WARDWELL: Thank you.

8 MR. HAMMER: I'd like to move on now, if
9 there are no other questions on the proposed action
10 and how we analyzed the costs and benefits to that
11 to the second part of the analysis which is
12 described in Section 7.2 of the FEIS. That's the
13 portion of the analysis where we look at the
14 proposed action and compare it against the range of
15 alternatives that were identified in the FEIS. In
16 the FEIS we only had one other alternative and that
17 was the no action alternative. The baseline then is
18 for the no action alternative, is the continued
19 operation of the Paducah GDP and the fact that the
20 ACP would not be built.

21 With respect to this --

22 JUDGE WARDWELL: Could I stop you right
23 there while I think of the question?

24 MR. HAMMER: Sure.

25 JUDGE WARDWELL: Have you considered the

1 no action alternative being -- let me back up a bit.
2 One could select a no action alternative where
3 Paducah closes. Right, you assumed Paducah stayed
4 in -- for your no action you assumed -- what did you
5 assume again for no action?

6 MR. HAMMER: We assumed that the Paducah
7 facility would continue operation.

8 JUDGE WARDWELL: Right. One could
9 assume the no action as being Paducah closing. They
10 can -- that has some reasonable basis for it based
11 on the long -- the age of the technology that
12 they're using and all the energy expenses associated
13 with it.

14 MR. HAMMER: I believe that we would
15 actually probably count that as another alternative,
16 not a no action alternative. The Paducah facility
17 is operating today and no action simply means there
18 is nothing -- it's the status quo. So if we were to
19 evaluate the impacts of the Paducah plant closing,
20 we would include that as a separate alternative.

21 JUDGE WARDWELL: Did you include that as
22 a separate alternative?

23 MR. HAMMER: No, we did not.

24 JUDGE WARDWELL: Is there any
25 requirement to include it as a separate alternative?

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1 MR. HAMMER: No, there is not.

2 JUDGE WARDWELL: Thank you. What is
3 required in regards to the number of alternatives?

4 MR. HAMMER: A reasonable range of
5 alternatives based on the information that's
6 provided.

7 JUDGE WARDWELL: Thank you. With
8 respect to the --

9 JUDGE WARDWELL: Wait, one more. And
10 who requires that -- who has defined that as the
11 definition of what needs to be in an alternatives
12 analysis?

13 MR. HAMMER: That's NEPA.

14 JUDGE WARDWELL: And then it's reflected
15 in the NRC regulations also.

16 MR. HAMMER: Correct.

17 JUDGE WARDWELL: But it's derived from
18 NEPA?

19 MR. HAMMER: That's correct.

20 JUDGE WARDWELL: Thank you.

21 MR. HAMMER: I believe that's actually
22 stated in the guidance document for environmental
23 review for NMSS licensing actions. For the
24 comparative analysis, the purpose was basically to
25 look at evaluating the alternatives for compliance

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1 with the policy and technical objectives, in other
2 words, the purpose and need. We compared those two.
3 Then we compare the cost and benefits across all the
4 resource areas and the attributes, again, based on
5 the NUREG BR0184.

6 Just to clarify for you in your mind,
7 benefits as we describe them in the analysis, are
8 the difference between the operating costs per SWU
9 for the no action alternative, in other words,
10 generated or produced at Paducah, and the proposed
11 action produced at the ACP. Then that number is
12 multiplied by the level of production of SWUs
13 substituted or replaced in that year, in other
14 words, if the number of SWU at Paducah were reduced
15 and that ACP were to replace that certain amount of
16 production given that both would be operating or not
17 operating.

18 With respect to that, we analyzed two
19 different scenarios. Scenario 1, we assumed that
20 the proposed action would replace 4.6 million SWU
21 production from the Paducah facility and in Scenario
22 2, we assumed that the proposed action would replace
23 7 million SWU production from the Paducah facility.
24 In both the scenarios, the proposed ACP is assumed
25 to be producing at the 7 million SWU capacity level.

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1 The difference is that in the first scenario the
2 proposed ACP is replacing only 4.6 million SWU that
3 would otherwise have been produced and this
4 information, this number 4.6, can be found in the
5 USEC RAI dated April 21st as I mentioned previously.
6

7 This analysis, it's important to note,
8 assumes that the proposed ACP's excess production
9 which in this case would be 2.4 million SWU,
10 substitutes production from sources that are no more
11 expensive than the proposed ACP. Therefore, the
12 incremental benefits from the proposed action don't
13 accrue beyond the 4.6 million SWU level.

14 In the second scenario, the proposed ACP
15 is replacing 7 million SWU and the benefits are
16 therefore higher in the second scenario.

17 JUDGE WARDWELL: In regards to this,
18 isn't this a particular case where the increased
19 production going from 3.5 to 7 wouldn't necessarily
20 be conservative? What would happen if, in fact,
21 they never went to 7 million? How would this effect
22 your analysis?

23 MR. HAMMER: Well, with respect to this
24 comparative analysis, we did utilize the fact that
25 there's an expected phase-in over several years,

1 specifically the ACP is expected to reach an annual
2 capacity of 1 million SWU by 2010 and projected to
3 have the annual 3.5 million capacity in 2011. And
4 then assumed that the full capacity of 7 million
5 would be reached by 2015 and we did factor that into
6 our cost benefit analysis for this comparative
7 analysis.

8 JUDGE WARDWELL: Did you do a similar
9 comparative analysis assuming that they never went
10 to 7 million but stayed at the 3 and a half or 3.8
11 whichever?

12 MR. HAMMER: No, we did not and the
13 reason for that is that we based the entire FEIS on
14 the assumption that it would be 7 million SWU so we
15 did not stop at 3.5.

16 JUDGE LAM: Now if you double the amount
17 in benefits over the life of the plant, or 30 years,
18 I'm looking at Slide Number 16.

19 MR. HAMMER: You moved ahead of me.

20 JUDGE LAM: Oh, I thought you were
21 already there.

22 MR. HAMMER: I believe that is correct.
23 That's the net present value net benefit of the
24 proposed action over its life.

25 JUDGE LAM: Okay.

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1 JUDGE WARDWELL: If they never went to
2 7, stayed at the 3-1/2 then neither of these two
3 scenarios would be reflective of that condition; is
4 that correct?

5 MR. HAMMER: That's correct.

6 JUDGE WARDWELL: Is that a -- is there a
7 requirement in the EIS to evaluate that other
8 scenario where, in fact, they never go to 7 million
9 but stay at 3.5 for the entire live of the facility?

10 MR. HAMMER: To my knowledge, there is
11 not such a requirement.

12 JUDGE WARDWELL: Would the other panel
13 members like to comment on that?

14 MR. BLEVINS: Yeah, I'll comment, Matt
15 Blevins. Certainly in terms of NEPA and the
16 alternative analysis, there's a -- there's a
17 multitude of different points you can analyze, so we
18 -- you know, in setting up the document, we looked
19 at the reasonable range and it looked reasonable
20 that they could go to 7 million but I think to get
21 to your initial question was in this case is it
22 conservative to assume that they operate at 7
23 million? No, it's probably not conservative. There
24 would be probably more benefits operating at that
25 higher level, I think because the environmental

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1 costs, so to speak, were so similar across those
2 different levels. So -- but I don't think that the
3 costs in and of themselves or the cost benefit would
4 have materially changed the outcome of our final
5 recommendation had we analyzed the 3-1/2 million SWU
6 scenario.

7 There's still a large resource savings
8 from going from the gaseous diffusion facility to
9 the gas centrifuge type facility. You just wouldn't
10 realize as much of those savings if you still had to
11 keep the gaseous diffusion plant on line to
12 supplement the gas centrifuge facility.

13 JUDGE WARDWELL: I would ask for you to
14 remember that and comment on that when we get to a
15 slide that may be a better point to look at that and
16 say, "Now, this is the results of Scenario 1 and 2",
17 and maybe you can point to areas where, "Gee, if we
18 had looked at Scenario 3 or 0," whichever you want
19 to call it, 0 or 3, the other one, how that might
20 just effect it.

21 MR. HAMMER: I believe that would be
22 actually a good point for the next slide which
23 presents the results, the net present value, net
24 benefits of both scenarios.

25 JUDGE WARDWELL: I knew that I was just

1 helping you out. Like some of our -- as opposed to
2 some of our Board members, I stay where you are, I
3 do not leap ahead. I know it's hard because I get
4 so excited about this but I stay right on the beat.

5 MR. HAMMER: It's fascinating material I
6 know.

7 JUDGE LAM: Well, I didn't do that with
8 excitement, so --

9 (Laughter)

10 MR. HAMMER: The slide on page 16
11 actually, as I just mentioned, provides the net
12 present value of the net benefits for the proposed
13 action relative to the no action. The dollar
14 values are all in positive numbers and those are
15 reflected. The proposed action would result in
16 those dollars worth of benefits over the no action
17 alternative.

18 And as you can see here, as was
19 previously mentioned, we applied three different
20 discount rates for -- to account for inflation in an
21 attempt, as Mr. Wyngarden mentioned, to make it
22 transparent and to insure that it was you know, a
23 credible analysis.

24 JUDGE WARDWELL: These would be related
25 to linear factors, would they not? By that I mean,

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1 if one wanted to roughly estimate what a 3.5 million
2 SWU was, one could take the difference between 4.6
3 and 7 at any given discount rate, divide that by the
4 difference in those units, 7 minus 4.6 which is 2.4,
5 and that would give you roughly the dollar
6 difference per SWU.

7 MR. HAMMER: That would seem reasonable.

8 Again, the driving factor for the net present value
9 net benefit determination is the energy consumption
10 difference between operating the Paducah facility
11 and operating the ACP.

12 JUDGE WARDWELL: And that's a linear
13 function. You've got some --

14 MR. HAMMER: That's correct.

15 JUDGE WARDWELL: -- cost per SWU and
16 you're just multiplying it times the number of SWUs.

17 MR. HAMMER: That's correct, it's
18 basically four times -- the assumption that we made
19 in the analysis was it was four times more costly to
20 produce a SWU at Paducah than at the ACP.

21 JUDGE WARDWELL: And you could check the
22 linearity of it by strictly taking the dollars for
23 each one and dividing it by the SWU that you have is
24 another check of that to make sure that there is --

25 MR. HAMMER: I believe that's correct.

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1 JUDGE LAM: Now, perhaps the best
2 estimate of these benefits are somewhere between 3
3 and 7 percent discount rate, isn't it, based on the
4 current financial --

5 MR. HAMMER: I would say, yes. The
6 three, seven and zero are standard discount rates
7 that are provided in the guidance from NRC on
8 preparing these analyses. So those are standards
9 that they actually require to be used.

10 JUDGE LAM: Right, but if you were to
11 manage the money for this project, by hedging it,
12 you'd probably lock in the 30-year US Treasury rate
13 of five percent. So that would be somewhere between
14 three and seven percent.

15 MR. HAMMER: I'm not sure I would be
16 qualified to answer that question. I think that
17 would be a business decision that the Applicant
18 would have to make but it sounds reasonable.

19 JUDGE WARDWELL: Well, and isn't it
20 correct that these discount rates aren't necessarily
21 an interest rate or anything but are they inherently
22 in the discussion of discount rates, is that not
23 just a value that you say is kind of the difference
24 between the rate of return and inflation as a rough
25 idea of what you're dealing with in regards to the

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1 net associated with that and then you're just doing
2 it at different levels to see how it effects -- it's
3 really hard to compare it to a given interest rate
4 or anything else in a true business analysis that
5 you might be doing that a CFO might do for USEC is
6 going to do it probably is slightly complex than
7 what --

8 MR. HAMMER: That's correct, and if I
9 recall correctly I believe that the three and seven
10 percent rates were based on historical values and so
11 it represents a range that is typical for the rate
12 of inflation in the United States over time.

13 JUDGE LAM: Let's hope we don't see
14 seven percent again, huh?

15 MR. HAMMER: I would not like to see
16 that. Are there any other questions on this slide
17 or should we continue to move forward?

18 JUDGE McDADE: Yes, as to the second of
19 the two questions.

20 MR. HAMMER: Okay, the next slide,
21 again, as we did for the proposed action, just a
22 summary of the results of the comparative analysis.
23 We believe that the proposed action better satisfies
24 DOE's policy and technical objectives as opposed to
25 the no action alternative. We believe that the

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1 proposed action will result in greater savings to
2 the national economy and more information if you're
3 so inclined on that particular aspect of the
4 analysis can be found in Appendix G of the FEIS,
5 which is where we provide more detail on the actual
6 comparative analysis that was conducted.

7 We believe that the proposed action
8 would have slightly lower health impacts and you can
9 refer to -- I would refer the Board to Sections 4-
10 212 and 4-2-1412 of the FEIS for more details on
11 that particular topic. And again, as we mentioned,
12 previously but it still applies to the comparative
13 analysis, the proposed action would have positive
14 impacts on local employment, income and tax revenues
15 as we describe in Sections 2-28 and 4-2-14-8 of the
16 FEIS.

17 I'd like to briefly discuss some of the
18 limitations of the cost benefit analysis, some of
19 the things that we did not account for, for various
20 reasons in this analysis. We focused on estimating
21 the economic savings to society from replacing
22 Paducah production with a less expensive and less
23 resource intensive source base, based on centrifuge
24 technology. So the focus -- I guess the limitation
25 that we're describing here is we were looking at the

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1 economic savings in that regard. We didn't look at
2 the economics of the market per se. We focused
3 simply on the differences between producing a SWU at
4 Paducah and producing a SWU at the ACP and tried to
5 keep out those extralities that have such large
6 ranges of uncertainty with them.

7 We did not make an attempt to model the
8 effects of reduced enriched uranium prices and this
9 is the point I was just making, on the ratio of
10 nuclear and non-nuclear power in the domestic
11 economy. We again, did not attempt to model the
12 effects of reduced prices on overall power demand
13 and price, nor did we look at the potential economic
14 welfare to the consumers and suppliers with respect
15 to a reduction in the enriched uranium price.

16 We did not consider the costs and
17 benefits associated with actions pertaining to the
18 Portsmouth gaseous diffusion plant. We believe that
19 no significant change in the factors that were
20 considered in USEC's decision to cease uranium
21 enrichment at Portsmouth would change and therefore,
22 would not factor into our analysis. We also did not
23 include actions pertaining to the Portsmouth -- I'm
24 sorry, actions pertaining to Portsmouth are
25 considered unrelated to the no action alternative

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1 and to the proposed action. Technically, this is
2 really not a limitation. It's more of an
3 assumption, but I put it in here just to make that
4 point separately and to make sure that it was clear
5 to the Board.

6 Certain impacts are not included as part
7 of the analysis because the effect of these impacts
8 is either assumed to be approximately equal for the
9 proposed action in the no action alternative or that
10 the impacts would be too small, a differential
11 effect impact to material and effect the analysis.
12 For example, the cost of tails disposition, as I
13 mentioned previously. We believe that the same
14 amount of tails would be generated either at Paducah
15 or the ACP and therefore, they cancel each other out
16 and those costs don't need to be included in the
17 analysis.

18 Another example would be transportation
19 costs for things such as feed and product which we
20 believe would roughly be the same between the
21 Paducah facility and the Portsmouth -- or the ACP.

22 JUDGE WARDWELL: And do you summarize
23 those in the FEIS, those examples that you're
24 talking about and any others that might --

25 MR. HAMMER: Those examples are ones

1 that I pulled out and as I was preparing the
2 analysis. We do have a section on limitations in --
3 I believe both in Chapter 7 and in Appendix G of the
4 FEIS, which probably says it more succinctly than I
5 just did.

6 Finally, the overall conclusions of the
7 cost benefit analysis with respect to its role in
8 developing the environmental review that the staff
9 prepared for this license application. We believe
10 the analysis in Section 7.1 which is the analysis of
11 cost and benefits of the proposed action compared
12 against itself, demonstrated that there are economic
13 and national energy benefits associated with the
14 proposed action. However, there are also costs
15 associated with all the life cycle phases of the
16 proposed action, site construction, operation,
17 decommissioning. These impacts, i.e., costs,
18 however, we believe are small in comparison to the
19 benefits of the proposed action.

20 In Section 7.2, our comparative
21 analysis, we believe it illustrates that the net
22 benefits of the proposed action in comparison to the
23 no action alternative in which there is continued
24 enrichment at Paducah, better -- we believe the
25 proposed action better satisfies DOE's policy and

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1 technical objectives for meeting future demand for
2 enriched uranium, improve national energy security
3 and desired technological upgrades relative to the
4 no action alternative. It's therefore, apparent
5 from our analysis that either considered on its own
6 or in comparison to the no action alternative, the
7 proposed action is associated with net positive
8 benefits.

9 That's the conclusion of my
10 presentation.

11 JUDGE WARDWELL: Just to make sure we're
12 clear on this, is it true that your analysis didn't
13 try to quantify any of the benefits associated with
14 the ACP in regards to specifically meeting the need
15 for enriched uranium to fill any domestic electrical
16 requirements? That there's no number in there
17 associated with that?

18 MR. HAMMER: That is correct, that was
19 qualitative analysis.

20 JUDGE WARDWELL: Is there a qualitative
21 with that in regards to that particular --

22 MR. HAMMER: Yes, I believe there is.

23 JUDGE WARDWELL: Specifically as focused
24 towards fulfilling a domestic need. I didn't see
25 that on your --

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1 MR. HAMMER: I believe with respect to
2 the fact that to produce a SWU, it would be one-
3 fourth as costly to produce it at ACP than at
4 Paducah. I believe from that we would infer that
5 it's more likely to better meet those needs.

6 JUDGE WARDWELL: But there's nothing
7 strictly solely related that's added into the mix
8 associated with statements made in the FEIS that --
9 especially in regards to the purpose and needs
10 statement where it's stated that this provides an
11 additional domestic source of enriched uranium.

12 MR. BLEVINS: Matt Blevins. I think
13 I've added -- there is quantitative analysis in
14 terms of when we talk about in that second
15 comparison. There's the quantitative comparison
16 between Paducah or the diffusion plant and the
17 centrifuge technology. So that in and of itself is
18 a quantitative type analysis which shows that that
19 there is some benefit from the centrifuge technology
20 but from a bigger picture of -- and it's not just --
21 and I -- when I clarified it before, it's not simply
22 maintaining domestic supply as much as maintaining
23 an economically -- an economic and viable domestic
24 uranium industry is where that -- you would simply,
25 we looked at that more in the qualitative sense of

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1 would this or would this not help us meet that goal.

2

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JUDGE WARDWELL: And as I interpret your statement as applied to my question, then that says to me you didn't add on any quantitative or qualitative benefit associated solely with the potential increased availability of additional enriched uranium for domestic sources.

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MR. BLEVINS: True. We didn't put a small monitor or large with that. That wasn't necessarily an environmental resource impact. So true, there was no qualitative statement of that designation.

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JUDGE WARDWELL: Thank you. I think it was stated either in 4 or 7 that the applicant estimated that 53 percent of its production would be purchased by the -- by and shipped to North American utilities and its world market share would be 27 percent. Somewhere you had, I think, said that in one of those sections or some other section in the FEIS.

22

23

24

MR. BLEVINS: Those numbers are consistent. We also say it in the purpose and needs section, I believe.

25

JUDGE WARDWELL: Okay. Are those

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1 figures that the applicant quoted consistent with
2 the values that the staff considered and does it
3 really feed or effect the cost benefit analysis in
4 any manner.

5 MR. HAMMER: I think as Mr. Blevins
6 mentioned, they're consistent. They did not,
7 however, feed into our analysis.

8 JUDGE WARDWELL: Do you agree with
9 that?

10 It seemed like you were eager to use the microphone,
11 so I would --

12 MR. WYNGARDEN: Again, Steve Wyngarden.
13 In the purpose and need discussion we cited a
14 slightly different figure. I think it was 56
15 percent. That was the number that we had available
16 at the time in terms of the supply for the North
17 American contribution and I believe the newer number
18 is slightly different but it doesn't change the
19 conclusion.

20 JUDGE WARDWELL: Thank you. Again for
21 completeness, I just want to assure that you would
22 also say as you did earlier, that the -- well, let
23 me not put words in your mouth. We discussed
24 earlier that the no action alternative for public
25 and occupational health and for waste management on

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1 a summary table is listed small to moderate where,
2 in fact, the text said it was small and that's what
3 you used in the analysis and that's consistent with
4 what -- however you might have used that in the cost
5 benefit analysis; is that correct?

6 MR. BLEVINS: That is correct and the
7 specific sections are 4.414 and 4.413. You can
8 refer back to that and see that the actual
9 qualitative designation was small.

10 JUDGE WARDWELL: Thank you very much.
11 I'm all set. I'm not sure how counsel wants to
12 handle this, but there also is a list of kind of
13 these wrap-up, follow-up questions that we submitted
14 in March and some of those to respond to.

15 MS. BUPP: The A, B, C and D on page --

16 JUDGE WARDWELL: Well, give me a second
17 to get ready for this.

18 MS. BUPP: Or the additional questions
19 related to the EIS on E1-1, the balancing of
20 factors?

21 JUDGE WARDWELL: Yeah, there's
22 additional safety questions and there's additional
23 environmental questions that we had in the back of
24 our March -- let me just get them myself.

25 MS. BUPP: Section 3 and Section 4 of

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1 the March 2nd order?

2 JUDGE WARDWELL: Yes.

3 MS. BUPP: I think -- well, we had
4 provided written answers, the staff had for S4-1,
5 for E7-1 --

6 JUDGE WARDWELL: Hang on for a second,
7 wait just a minute. Okay, go ahead.

8 MS. BUPP: For -- we had provided
9 written answers for S4-1 and S8-1.

10 JUDGE WARDWELL: Yeah.

11 MS. BUPP: And then for E7-1C.

12 JUDGE WARDWELL: Yes, yeah.

13 MS. BUPP: I think -- I guess this
14 perhaps, wasn't clearly stated in my mind. I
15 thought that what we hadn't provided written
16 responses for that the Board would be addressing
17 these questions while we had the relevant panels
18 available. If we need to recall someone --

19 JUDGE WARDWELL: Let's see then. I'll
20 just go through it and we'll see because as you
21 mention that, I've got in my notes as I'm looking
22 now I've got S4-1 covered, S7-1. I may have a
23 question for USEC on this because you did, I think,
24 provide some comments in regards to S7-1. Is that
25 correct?

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1 MR. O'NEILL: Yes, that's correct, your
2 Honor. I think we addressed that in the context of
3 our prefiled testimony on the environmental
4 monitoring issues.

5 JUDGE WARDWELL: Yes, yes. That was
6 March 12th; is that correct?

7 MR. O'NEILL: Yeah, March 12th and I
8 would add again, this is Martin O'Neill for the
9 applicant. We addressed E7-1 additional
10 environmental questions in that same filing and we
11 also provided a separate filing on March 16th
12 addressing E3-1, the cylinder inspection issues.

13 JUDGE WARDWELL: Right. I had that,
14 here we go. And I don't have any questions on your
15 S7-1. Under additional environmental questions, I
16 asked this before but I want to be more specific to
17 make sure and this is a good panel to ask this; did
18 the NRC staff prepare the EIS in accordance with 10
19 CFR 5171 and did it use a review guidance provided
20 in NUREG 15-55 and if not, why not?

21 MR. BLEVINS: The -- that was a long
22 question. Matt Blevins.

23 JUDGE WARDWELL: I'll break it in two
24 spots. Did you do the EIS in accordance with 51-71?

25 MR. BLEVINS: Yes, as the Project

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1 Manager overseeing the preparation of the document,
2 I insured that Part 51 requirements were being met
3 and with regard to NUREG 15-55, we did not
4 explicitly use that document. Instead we referred -
5 - we relied on 17-48 to the extent that it was
6 needed to provide us additional guidance but Part 51
7 covers the essential topic, so to speak of the
8 Environmental Impact Statement.

9 JUDGE WARDWELL: And is there a reason
10 why you didn't also use 15-55 as guidance?

11 MR. BLEVINS: It's not as -- certainly
12 not as robust as 17-48 in terms of preparing and
13 EIS. That's specific to the fuel cycle.

14 JUDGE WARDWELL: Thank you. Onto E3-1,
15 USEC's submittal; is it March 16th, is that correct?

16 MR. O'NEILL: Yes, that's correct, your
17 Honor.

18 JUDGE WARDWELL: Who was the witness who
19 prepared this, or is it prepared by legal counsel?
20 It doesn't seem to be a legal brief, if it's that.

21 MR. O'NEILL: E3-1? I believe that
22 relates to the cylinder inspection.

23 JUDGE WARDWELL: It deals with site
24 monitoring. Most of your testimony deals with the
25 inspection, that's correct.

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1 MR. O'NEILL: Yes, that would have been
2 I believe Mr. Miner or Mr. Fout would be the
3 pertinent witnesses.

4 JUDGE WARDWELL: I think I would like to
5 ask them another one question on that if they are
6 present.

7 JUDGE McDADE: Mr. Miner is.

8 JUDGE WARDWELL: That's right. But he
9 switches chairs and I wonder if there's something
10 symbolic with that.

11 (Laughter)

12 JUDGE WARDWELL: And he hides in the
13 shadow a little bit.

14 MR. O'NEILL: We believe our witnesses
15 are ready when you are, your Honor.

16 JUDGE WARDWELL: I'll caveat this on
17 part lack of time and part laziness to jump into
18 this transcript and find it. So having stated that,
19 so that you don't harass me in your answer by
20 saying, "Well, we discussed this two days ago", I
21 know we have and I want to be clarified on that.

22 And that's in regards to the frequency
23 of proposed cylinder inspection and I know at the
24 time we first brought it up, we said, "Well, it's
25 stated here at one point to be such and such and

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1 then later on we said it was this rate". And in
2 regards to prefiled testimony you're talking about
3 them being inspected on a quarterly basis. What
4 other time frame for inspection was brought up in
5 any of the documents in this record and what will be
6 the actual inspection frequency for these DU
7 cylinders?

8 MR. FOUT: Greg Fout for the applicant.
9 Sir, there are multiple requirements for cylinder
10 inspections, one being the ANSI inspection
11 requirements and then the Ohio -- the Environmental
12 Protection Agency requirements and the Ohio EPA
13 drives a quarterly inspection requirement.

14 JUDGE McDADE: Am I correct in
15 remembering the previous testimony that that
16 quarterly inspection is required by the State of
17 Ohio EPA was the lowest or the greatest frequency
18 and therefore, that would be the degree at which you
19 would inspect. You would inspect at least
20 quarterly?

21 MR. FOUT: That's correct, sir.

22 JUDGE WARDWELL: Thank you. That's all
23 I have for that.

24 JUDGE LAM: Now, there's a basis for
25 that quarterly inspection, am I correct? The

1 quarterly inspection you insure the medium time of
2 something that's leaking would be limited to 45
3 days.

4 MR. FOUT: That's correct.

5 JUDGE WARDWELL: Thank you. Now leave
6 quickly before another question come up.

7 (Laughter)

8 JUDGE WARDWELL: I think the only other
9 question I have relates to the storm water flow and
10 I'm not sure who the appropriate one would be to
11 address this. I have it kind of listed under the
12 E7-1 category but I'm not sure that's the best one.

13 MS. BUPP: I think that Mr. Blevins is
14 prepared to answer that for staff except for E7-1C.
15 He did not prepare the written response for that and
16 that's not --

17 JUDGE WARDWELL: Yeah, and we've got
18 your -- that was -- we know more on that, that's
19 fine. I don't have any questions on that. That's
20 just what we needed, thank you for that.

21 MR. BLEVINS: Actually, it's Don Hammer.

22 MS. BUPP: Oh, well, then, Mr. Hammer
23 can respond.

24 MR. BLEVINS: At least for B, Ray Wood
25 is A. I can answer A, sorry.

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1 MS. BUPP: Okay.

2 JUDGE WARDWELL: I'm interested in the
3 mechanics of this more than the -- well, it also
4 relates to the environmental impact but not so much
5 in regards to preparing and EIS but more in regards
6 to a radiologic release to the environment
7 associated with any runoff coming from the storage
8 yards of the DU cylinder areas and that's where this
9 comes from and is that an area that one of you three
10 are prepared to discuss?

11 Specifically, I'll ask the questions, if
12 you aren't fine, because there is some testimony --
13 well, there is testimony that the staff said that
14 the additional runoff was about 74 CFS and the
15 testimony about the Manning and Ruftus coefficient
16 and everything and that's fine, I understand that.
17 My question said that as I look at that, it seemed
18 to me that the size of the storage yards,
19 especially the northern one would be a large enough
20 area that in my experience would require some sort
21 of detention pond to prevent increased flow rates
22 going into the receiving water bodies, which would
23 be the Scioto River.

24 MR. BLEVINS: Matt Blevins, I think the
25 part I can answer is, my understanding is it does go

1 into an existing holding pond.

2 JUDGE WARDWELL: That's what I wanted to
3 clarify that that's where I got confused because I
4 wanted to assure that holding pond does exist. It
5 is down gradient and it's also designed as a
6 detention pond and not just a mechanism to sample
7 the water. That is not a flow-through system, that
8 in fact, the levels are such that it acts as a
9 detention pond.

10 MR. BLEVINS: That was my understanding.

11 JUDGE WARDWELL: And everyone else as
12 far as their understanding, that's correct, it acts
13 as a detention pond. So, in fact, it would taper
14 off the peak flows so that they do not exceed the
15 post -- pre-construction post flows to the degree
16 that it would require anything more additional than
17 what that holding pond would do, would provide.

18 MR. HAMMER: I would concur with that.

19 JUDGE WARDWELL: Those are the questions
20 I have.

21 JUDGE McDADE: I'm sorry, just for the
22 record, who concurred with that?

23 MR. HAMMER: Don Hammer, excuse me.

24 MR. WYNGARDEN: I do as well, Steve
25 Wyngarden.

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1 JUDGE WARDWELL: Thank you. That's all
2 I have.

3 JUDGE McDADE: Okay, we have -- it seems
4 like it might be an appropriate time to take a
5 break, to break for lunch and then to come back and
6 have the legal argument. Before we do that, Ms.
7 Bupp, is there something?

8 MS. BUPP: I believe there are actually
9 two or three factual action items that are
10 outstanding and I think they're rather brief so we
11 probably could handle those before lunch if that's
12 acceptable to the Board and staff and applicant.

13 MR. SILVERMAN: That's acceptable to the
14 applicant and we also have one additional item we'd
15 like to take up before the witness panel leaves the
16 stand.

17 MS. BUPP: The first factual action item
18 that we had was that at the outset of the hearing, I
19 believe it was Judge McDade who had asked both the
20 applicant and the staff for an estimation of
21 resources that have been spent on the license
22 review. I can present those resources or if you'd
23 like we can call a witness, but I have the numbers
24 in front of me.

25 JUDGE LAM: That's a right question, the

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1 wrong attributed, I think it was me who asked that
2 question.

3 MS. BUPP: Oh, I'm sorry.

4 JUDGE LAM: That's okay.

5 JUDGE WARDWELL: We get very possessive
6 on our questions.

7 JUDGE McDADE: If you could provide that
8 information.

9 MS. BUPP: For the technical review,
10 both the fuel cycle safety and safeguards provision
11 and the environmental review, the NRC staff hours
12 are approximately 18,325. However, that number
13 does not include any management hours. That's the
14 General Counsel number is 2,761 attorney hours and
15 that's only the numbers for the attorneys. That
16 does not include any OGC management hours or
17 administrative support staff hours. But the fuel
18 cycle and environmental reviews do include
19 administrative support hours but do not include any
20 management hours.

21 We also used a contractor, as you can
22 see, for preparation of the FEIS and for assistance
23 in certain portions of the SER. Those combined
24 contracts are approximately one million dollars. So
25 the total including no management hours and a lack

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1 of some administrative hours, is approximately
2 21,000 man-hours for the staff and one million
3 dollars in the contract.

4 JUDGE McDADE: Okay, rather than calling
5 a witness to basically repeat what you just said,
6 would the staff be amenable to treating that as a
7 stipulation of fact that we can then receive it into
8 the record?

9 MS. BUPP: Yes, that would be fine, your
10 Honor.

11 JUDGE McDADE: Mr. Silverman, you have
12 no objection to that?

13 MR. SILVERMAN: No objection.

14 JUDGE McDADE: Okay, it is received then
15 as a stipulation of fact and is part of the record.

16 MS. BUPP: And just that it's clear,
17 that's the total hours since the receipt of the
18 application, approximately with those limitations.

19 JUDGE McDADE: Give or take 15 minutes
20 one way or the other.

21 (Laughter)

22 JUDGE WARDWELL: And a break for lunch,
23 huh?

24 MS. BUPP: The other two issues, I think
25 we can actually address both through testimony from

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1 Mr. -- from Dr. Echols. The first is the staff's
2 response to USEC's proposed changes for our
3 testimony in HTS-5, some of the edits that they had
4 made. He's consulted with the other staff reviewers
5 and is ready to present a consolidated staff
6 response to that and then also, yesterday you had
7 asked some questions about the maintenance of the
8 holding ponds at the reservation and he could
9 respond to that, but, of course, would also -- I
10 think it would be useful to have a USEC witness to
11 answer some of those questions as well.

12 So I think if Dr. Echols is here. I
13 can't see around the --

14 MR. BLEVINS: Should we leave?

15 MS. BUPP: I believe the staff feels
16 that the panel is finished if the Board has no
17 further questions for the current panel.

18 JUDGE McDADE: Also apparently, the
19 current panel did want to leave.

20 (Laughter)

21 JUDGE McDADE: We're not throwing you
22 out but you could withdraw if you desire and thank
23 you very much. And on this particular topic, you
24 indicated it might be advisable as well to have
25 somebody from the applicant, from USEC. Mr. Miner,

1 are you available to testify to this?

2 MR. MINER: Yes, sir, your Honor, and
3 Mr. Fout.

4 JUDGE McDADE: Okay, Dr. Echols has
5 previously been sworn. Please have a seat, sir.

6 DR. ECHOLS: Yes, sir. As to the
7 additional information provided by the applicant,
8 the staff has reviewed that and found no issues with
9 that with miner corrections and housekeeping kind of
10 errors.

11 With respect to the holding ponds, the
12 question there was to the maintenance of those
13 ponds, these are overseen by the Ohio EPA permitting
14 process for the maintenance of those, dredging,
15 sampling of the sediments and that type of thing,
16 and we did not look at that. And the applicant is
17 prepared to go into more detail as to the processes
18 that it undertakes to maintain, oversee and clean
19 those ponds.

20 JUDGE McDADE: For the applicant.

21 MR. FOUT: Greg Fout for the applicant.
22 Sir, the retention ponds were built by design to
23 provide a storm flow retention. The --

24 JUDGE WARDWELL: Can I interrupt quickly
25 just so I want to be sure --

1 MR. FOUT: Yes.

2 JUDGE WARDWELL: And that's in regards
3 to all of these ponds that are artificially built,
4 whether they're called a holding pond or a retention
5 pond, as the nomenclature may change between
6 documents? That's what you're referring to?

7 MR. FOUT: Holding ponds, sir. The
8 levels are periodically measured to determine the
9 amount of sediment and sludge in the ponds. Once
10 that level has reached a point that it could not
11 provide the designed retention, a dredging plan
12 would be developed, submitted to the Ohio EPA.
13 Sampling and analysis would be obtained to determine
14 the characteristics of that sludge and the
15 appropriate disposal methods would be proposed and
16 then the sludging -- the dredging activity would
17 take place.

18 JUDGE WARDWELL: How often did you say
19 they were measured? Do you know how often they are
20 measured as far as the depth?

21 DR. ECHOLS: The GDP does it annually.
22 I'm not sure what DOE does but I'm sure it's
23 comparable.

24 JUDGE WARDWELL: Thank you, that
25 addresses my question.

1 JUDGE McDADE: Mr. Silverman, there was
2 one other matter that you had?

3 MR. SILVERMAN: Yes, there is, your
4 Honor. We're determined to keep Mr. Miner on the
5 stand as long as possible. We just wanted to ask
6 Mr. Miner to comment a little bit further on an item
7 that's come up a couple of times in the previous
8 proceeding. We just want to make sure the record is
9 clear and ask him to please comment on the relevance
10 of the potential to increase the efficiency, the SWU
11 of the American centrifuge beyond three and a half
12 million SWU, the relevance of that to the safety
13 analysis and the licensing basis of the plant.

14 JUDGE McDADE: Mr. Miner?

15 MR. MINER: Thank you. Peter Miner for
16 USEC. As we've described the facility in our
17 license application, as we have evaluated it in the
18 integrated safety analysis, we've used 3.5, that's
19 the nominal capacity and it's a convenient way to
20 describe the facility. However the current ISA
21 assumptions for mass through-put currently bounds
22 the existing performance as well as the performance
23 improvements that we might anticipate.

24 As we've discussed, we don't -- we will
25 not be adding equipment to increase the SWU output.

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1 The 3.5 to 3.8 is due to equipment efficiencies of
2 the centrifuge themselves. The analysis is
3 conservative with respect to the mass through-puts
4 as I said, and would support increases in
5 performances such as up to 3.8 million SWU. There
6 is no impact on the safety analysis. It's a nominal
7 capacity and it's not meant to be a maximum capacity
8 and the capacity could vary with the efficiencies of
9 the machine as we create other design improvements.
10 So as I said, a nominal capacity is described. The
11 license application covers a two-building process
12 building scenario. And the safety analysis does
13 bound any increases in performance due to the
14 improvements in the machine.

15 JUDGE McDADE: Okay, thank you, sir.

16 MR. SILVERMAN: That's all we have.

17 JUDGE McDADE: Okay, I have now it's
18 approximately 12:30. I would propose to stand in
19 recess until 1:30 and am I correct that all we have
20 remaining is the representations of counsel with
21 regard to the various legal issues that were raised
22 during the course of the proceeding, that we are
23 done with the witnesses?

24 MS. BUPP: That's my understanding, yes,
25 your Honor.

1 JUDGE McDADE: Mr. Silverman?

2 MR. SILVERMAN: Ours as well.

3 JUDGE WARDWELL: Often times there's an
4 interface between something that may come up during
5 the legal discussions and may trigger additional
6 questions on the technical or safety and
7 environmental review side. Shall we just plan on
8 addressing those if they do come up in either to see
9 whether a witness he here to address it and then if
10 they are, we'll just plan on issuing a supplemental
11 questioning for that? Is that the way you would
12 like to handle it?

13 JUDGE McDADE: Well, it appears that for
14 practically any question we have, both Dr. Echols
15 and Mr. Miner have been on the panels. So in the
16 event additional questioning does come up, if we
17 could ask them to remain available this afternoon,
18 I'm sure you'll be very interested in the argument
19 of counsel and the questions of the Board as well.
20 And in the event it is necessary to bring back for
21 additional questions based on that, hopefully you
22 will be able to respond to those questions for the
23 staff and for USEC. I know an awful lot of the
24 witnesses who have testified over the past few days
25 have remained as spectators and you know, I'm sure

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1 they would also be available. This shouldn't last
2 very long. I mean, we're not talking about a
3 marathon here. We're not telling them that we're
4 going to keep talking about this through a week from
5 Wednesday. So it should be a relatively short
6 period of time this afternoon to ask them to remain.

7 If there is anybody specifically who you
8 believe you know, has transport issues, you know,
9 before 3:00 o'clock this afternoon to perhaps check
10 with them during the recess.

11 JUDGE WARDWELL: And I believe this
12 testimony will be breathtaking and spellbinding and
13 I do see several witnesses in the audience who
14 provide -- seeing them provides me with an
15 opportunity to say again, that as we're moving into
16 the legal part, I do appreciate all the
17 responsiveness that we received from every witness
18 on both sides of the applicant and the staff and
19 found that because of that responsiveness to the
20 questions we asked, we were able to certainly beat
21 any expectations I had in regards to length of time
22 it was going to take to get through this and we
23 certainly appreciate that. That's buttering them up
24 to see -- to make sure they come back. You see, a
25 corner of those, I'd love to see those individuals

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1 here, just in case something does pop up.

2 JUDGE LAM: They'll take that as a good
3 opportunity to escape.

4 JUDGE WARDWELL: See and flee.

5 (Laughter)

6 JUDGE McDADE: Okay, we are in recess
7 until 1:30. Thank you.

8 (Whereupon at 12:26 p.m. a luncheon
9 recess was taken.)

10 JUDGE McDADE: Ms. Bupp, is the staff
11 ready to proceed?

12 MS. BUPP: We're ready, Your Honor.

13 MR. SILVERMAN: The Applicant is ready.

14 JUDGE McDADE: The hearing will come to
15 order. There were a number of legal issues that
16 were raised during the course of the course of the
17 proceeding. Question, do you have any preference on
18 how to address these as far as the order or should
19 we just ask the questions and go from there?

20 MS. BUPP: The staff has no preference
21 as to order, Your Honor.

22 JUDGE McDADE: Mr. Silverman?

23 MR. SILVERMAN: We're fine with any
24 order you'd like.

25 JUDGE WARDWELL: Should we start with

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1 the ones that they're not aware of?

2 (Laughter.)

3 JUDGE McDADE: Well, why don't you get
4 them into the flow first with the ones that
5 hopefully they will be aware of.

6 JUDGE WARDWELL: I was hoping it would
7 give them time to think if they wanted, just to
8 bring them up now so you're -- what these are, are
9 some questions that I had that as I was reviewing
10 them, recognize that they probably were more legal
11 than technical and so delayed asking them and then
12 forgot that I had delayed asking them until I saw my
13 little stickie notes saying make sure we ask these
14 from a legal standpoint.

15 So I thought maybe with the chair's
16 permission, I'll just blurt them out now so that you
17 know what they are and you can address them -- we'll
18 talk about when you want to address them, whether
19 you want to do them right now and it's for both
20 staff and the Applicant.

21 Now I've just got to find them, because
22 I lost my -- here we go. And they all relate to the
23 ISA summary, HTS 12 area of topic of discussion.
24 And the first one on the prefiled testimony on page
25 four, the phrase "prevailing staff view" was used in

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1 regards to the DPO process. And I was curious on
2 what the staff uses as a definition for prevailing
3 staff view?

4 On the prefiled testimony on pages four
5 through five, you have a discussion of -- from the
6 bottom of page four up to the top of page five
7 regarding the DPO process and describes what is
8 involved with that. And I was wondering whether you
9 have any citation or reference for that or whether
10 it's merely your perspective of how it goes?

11 The next one in that same area, you
12 reference a management directive 10.159. I was
13 wondering if the Board could get a copy of that or
14 could be led to where we could get a copy of that.

15 And then I would be interested in the
16 history of the DPO process in regards to the
17 outcomes of any of these in the review of any
18 license application, how many of them actually said
19 the prevailing staff view is the appropriate one or
20 how many of them said well, it should be modified or
21 ones that said no, the differing opinion is, in
22 fact, has some merit and we ought to address it and
23 take some other action in regards to that. I was
24 just curious on what that, how that played out.

25 So those are the ones I had that I think

1 rightfully didn't ask the witness.

2 MS. BUPP: As far as your questions one
3 through three, we can provide answers to that
4 whenever you would like today, either right now or
5 later on during the course of this session.

6 As far as the history of the DPO
7 process, what was included in the staff response is
8 what we have right now. I don't know if you're
9 looking for some sort of a database of how DPOs have
10 come out or not.

11 JUDGE WARDWELL: I was just interested
12 and I didn't see your response to that. It seems if
13 I remember correctly that I wasn't clear in my
14 questioning, but I was interested in trying to get a
15 relative feeling for how many of these were, in
16 fact, led to some type of adaptation of the
17 prevailing staff review.

18 MS. BUPP: That is something that -- I
19 mean I'm sure if we went back through the entire
20 history of all the DPO process, every decision that
21 is made on a DPO is actually -- it's publicly
22 available when said position is made. So we could
23 go back through and look for all of that. We tried
24 to focus on how the DPO process inter-relates with
25 litigation and so there's a limited number of cases

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1 where there was actually an on-going hearing process
2 and a DPO. And so we focused on those in our
3 history.

4 I mean to go back and to read all the
5 DPO decisions and to sort of make a matrix of which
6 ones came out in a change that would -- I mean we
7 could do that, but that would certainly be a
8 significant amount of work.

9 JUDGE WARDWELL: I was afraid that was
10 going to be your response and the reason I was
11 afraid it was going to be your response --

12 MS. BUPP: All of the DPO decisions are
13 available on the public website because those are
14 public decisions. So all of those decisions are
15 available actually on the website. I think -- or at
16 least most of the recent ones. There have been some
17 changes over the years between different
18 professional viewpoint and different professional
19 opinion, but at least for the last few years since
20 the last time the DPO policy was revised, those are
21 available on the NRC's website.

22 JUDGE WARDWELL: And getting back to
23 what I was starting to say that I was afraid that
24 was going to be your response and the reason I had
25 this fear was not because it was crucial but just

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1 the opposite that I'm not so sure it's that crucial
2 to anything we have to reach here. I was hoping it
3 would be readily available so it would be one of the
4 things that we could look at, but I don't see the
5 necessity to require labor hours on your part to
6 achieve that. If we feel it's needed, we can
7 probably do it from our point of view with the
8 publicly available things, unless the chair deems
9 otherwise.

10 JUDGE McDADE: I would prefer that we
11 not just simply so that it's clear anything that we
12 consider is part of the record and it's on the
13 record what it is that we have reviewed and
14 considered.

15 I think the issue is connected with
16 something, following up on another matter that we
17 discussed earlier. One of the issues that we had
18 asked was should we move forward with this hearing
19 and our decision while the DPO process remains
20 ongoing. And specifically, if it's part of the DPO
21 process, the staff -- because effectively what we're
22 doing on the safety side is reviewing what the staff
23 has done. If the staff's position changed
24 significantly as a result of that, where would that
25 leave us in the event that we have moved forward and

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1 issued an initial decision in this particular case
2 and whether or not we should do so or withhold
3 action until that process had come to an end.

4 I think the issue is if it's a situation
5 where it's one in a million, and actually I should
6 remember where I am and talk about 10^{-5} --

7 (Laughter.)

8 MS. BUPP: You're talking to the lawyers
9 now, so --

10 JUDGE McDADE: -- of whether there's a
11 reasonable likelihood that there would be a
12 significant change in the staff's position or
13 whether or not using the terminology used early,
14 likely, unlikely, highly unlikely, you know, that
15 there would be a significant change. So I think
16 that's what Judge Wardwell was looking for to get an
17 idea of what kind of actions have happened in the
18 past with regard to the DPOs.

19 MS. BUPP: I'm not even sure if we were
20 to go back and make some sort of matrix that we've
21 had 20 DPOs in the past three years and of those two
22 of them resulted in a major change and the rest have
23 not, I'm not even sure how instructive that would be
24 because each --

25 JUDGE McDADE: By the way, you just

1 posed that as a hypothetical.

2 MS. BUPP: That was a hypothetical. I
3 was just picking numbers.

4 But --

5 JUDGE McDADE: Because otherwise, that
6 might have wound up in our opinion.

7 (Laughter.)

8 MS. BUPP: Each DPO is extremely unique
9 and the circumstances that surrounds the DPO, you
10 know, it could be -- it really depends on how
11 persuasive the differing viewpoint is and I don't
12 think that's something you can quantify by just
13 looking at numbers. Each DPO is analyzed
14 individually and there's not some sort of a quota or
15 a ratio and so I am not sure that what you're
16 looking for would actually be instructed.

17 We can explain some of the past
18 practices. In our memo we discussed the recent MOX
19 licensing where there was not an adjudication, but
20 the staff went forward with its licensing and there
21 actually was some slight changes to the policy after
22 the license was issued, but either we were able to
23 go back and work with the licensee to make those
24 changes or you know, they're more prospective
25 changes that they don't really change the licensing

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1 base and just to keep in mind, this is -- we're not
2 doing a new rulemaking, this is a change in the
3 policy of the way we interpret the rules.

4 So even if the DPO panel were to decide
5 that the differing viewpoint is a better policy,
6 that does not necessarily mean that the current
7 policy is not in compliance with the rules. It just
8 might mean that the Agency makes a decision that
9 they have found a better policy and a better way to
10 move forward.

11 So in that case, even if it were to
12 change the staff policy, as long as the current
13 policy is in accordance with the regulations, there
14 actually wouldn't be any change in the licensing
15 basis.

16 JUDGE McDADE: Starting with the
17 assumption that since we're not going to go outside
18 the record, we're not going to be doing that review
19 on our own of the existing DPOs that are available
20 on ADAMS, do you wish to pursue it or does --

21 JUDGE WARDWELL: No, I just said if it
22 came to the point that -- what I meant by the
23 statement saying us doing it by our own, if that, as
24 we got writing our decision it became apparent that
25 we really do need this which I don't anticipate now,

1 we at least have an option available to us to
2 acquire that, is all I meant by that.

3 I agree with what counsel says and
4 that's why I feared the answer because I knew it
5 wasn't a strong enough need that it would warrant
6 the type of efforts and the strong enough need was
7 for the reasons you said and I would add on to that
8 that even with knowledge of this, it still doesn't
9 say much in regards to how it would affect our
10 decision. So it's a very complicated thing, but if
11 the piece of information was there, fine. It isn't,
12 so I think that's fine and the process that you
13 described in the pre-filed testimony of what would
14 happen if it really was significant, I think
15 demonstrates that there would be an opportunity to
16 reopen the whole thing and if it showed that it did
17 have a potential to be a highly significant impact
18 on the conclusions in regards to safety analysis.

19 So I'm comfortable if the chair is that
20 we don't need that.

21 JUDGE McDADE: No objection, Judge Lam?

22 JUDGE LAM: No.

23 MS. BUPP: While we're on the topic, do
24 you want to address those other three questions now?

25 JUDGE McDADE: Sure.

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1 MS. BUPP: I'm just taking them one by
2 one. The first one, the prevailing staff view,
3 that's actually a term of art used in DPO space. We
4 took it from the management directive 10.159. And
5 the prevailing staff view is considered to be
6 basically management's view, that this is what
7 management and in general terms normally the
8 majority of the staff will then agree with
9 management. But it's really the management
10 viewpoint at the level of management that's making
11 the decision.

12 So that's what the prevailing staff view
13 is.

14 JUDGE WARDWELL: Is there any type of
15 guidance document, policy, something written down
16 that demonstrates or indicates to what degree
17 management has listened to other people in regards
18 to resolving their view?

19 MS. BUPP: Well, the one guidance
20 document that prevailed for the DPO process in
21 general is management directive 10.159. And that is
22 except to the extent where we cited to other case
23 law or specific DPOs in the MOX proceeding, that is
24 the source of the staff's explanation of the DPO
25 process. Because it is an internal process, it is

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1 handled only through that and those internal policy
2 documents, the management directive.

3 In management directive 10.159, there is
4 a requirement that the individual who is filing the
5 DPO must go up through their chain of management to
6 try to resolve it. There's not -- when they filed
7 the DPO, and I think you saw we submitted the DPO as
8 an exhibit, there is a question that have you worked
9 with management to try to work that out? And then
10 also in the documentation that's often gathered by
11 the DPO panel who makes the recommendation to the
12 requisite manager, they will sometimes ask do you
13 have emails? Do you have memos?

14 And so in this particular case there are
15 some emails and memos, some internal letters that
16 would indicate that there was an effort between
17 management and the individuals to try to work this
18 out internally before it gets to the DPO space.

19 Does that answer your question?

20 JUDGE WARDWELL: Yes, it does. And does
21 management directive -- I lost my train of thought
22 now because I was listening so intently to what you
23 were saying.

24 JUDGE McDADE: Ten point 1-5-9?

25 JUDGE WARDWELL: No, there was something

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1 I was going to ask you, sure that it was in that
2 management directive also.

3 MS. BUPP: The requirement for the
4 individual to work with their management before
5 filing the DPO is in 10.159 and then also there's a
6 handbook that's attached to the management directive
7 that provides more detail on what the DPO panel will
8 look at and what the scope of their review is. And
9 so it doesn't direct them to go out and you are
10 directed to go out and collect all of the
11 documentation, but as a normal course, what they
12 will often do when they're trying to determine the
13 DPO, try to make decision or recommendation on the
14 DPO is to ask for do you have emails? Do you have
15 notes? Do you -- could you please give us the
16 factual background of what happened when we were
17 trying to make these decisions that led eventually
18 to the DPO.

19 JUDGE WARDWELL: Thank you for allowing
20 me the time to remember what I was trying to
21 remember, and that is does 10.159 have any criteria
22 guidance or suggestions for what the panel, review
23 panel should be -- who it should be composed of?

24 MS. BUPP: Yes, it does. And I actually
25 need to grab my copy of it.

1 JUDGE WARDWELL: I don't really need to
2 know that.

3 MS. BUPP: It's in there.

4 JUDGE WARDWELL: Okay.

5 MS. BUPP: It's in there and it's
6 actually, there are suggestions of what the panel
7 should be comprised of and also the individual who
8 files the DPO, when they file it, they can suggest
9 some panel members and then it's generally a
10 combination of maybe some of the members that
11 they've suggested, and other ones that are
12 appointed. But there is some guidance in there for
13 it.

14 JUDGE WARDWELL: Thank you.

15 JUDGE LAM: So the whole process is
16 transparent and all the information is readily
17 available to the public.

18 MS. BUPP: Well, once a decision is
19 made, all of the information is available to the
20 public. While the DPO is still being reviewed, it
21 is not and generally the members of the panel will
22 keep all their consultations amongst themselves
23 until they make the recommendation to the director,
24 to the office director and then once the office
25 director makes their determination which is based on

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1 the recommendations of the DPO panel, then it
2 becomes public.

3 JUDGE LAM: And everything is available
4 after that?

5 MS. BUPP: There's not a record that's
6 published, but the director's decision is published
7 and certainly some of the other documents then could
8 be made available if someone were curious about it.
9 But it's not a record in the same way that a hearing
10 file is made public.

11 I've just been reminded that even when a
12 DPO decision is finally released to the public, the
13 identity of the individual or individuals who filed
14 the DPO is never released to the public unless the
15 individuals consent. In this case, the individuals
16 have consented to allowing their identities to be
17 made public even before the decision is made.

18 JUDGE McDADE: Okay, I believe the next
19 staff exhibit would 65, am I correct?

20 MS. BUPP: Yes.

21 JUDGE McDADE: Would it be possible to
22 mark Management Directive 10.159 as NRC Staff
23 Exhibit 65? Would you have any objection to our
24 receiving that?

25 MS. BUPP: No, not at all?

1 JUDGE McDADE: Mr. Silverman, would you?

2 MR. SILVERMAN: None.

3 JUDGE McDADE: Okay.

4 MS. BUPP: we can get a copy of that to
5 you.

6 JUDGE McDADE: We don't need it right
7 this instant, but just it will be marked and
8 identified as NRC Staff Exhibit 65. It is received
9 and within the next few days if you could get a copy
10 of that to us.

11 (Whereupon, the above-referred
12 to document was marked as NRC
13 Staff Exhibit 65 or
14 identification and was
15 received in evidence.)

16 MS. BUPP: And if in the meantime you
17 want to look at it, it's available on the internal
18 NRC website from the internal NRC home page. It's
19 under the policies and procedures where all the
20 management directives are available there. And it's
21 listed amongst the management directives that are
22 available, but we'll mark it as an exhibit as well
23 so that -- because it's not generally publicly
24 available since it is an internal policy.

25 JUDGE McDADE: Well, since it's going to

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1 be an exhibit, do you have a problem with USEC?

2 MS. BUPP: Oh no. I mean that as a
3 matter of course. We usually don't publish our
4 management directives, but there's nothing in them
5 that would prevent us from publishing them.

6 JUDGE McDADE: So a copy will be
7 furnished to Mr. Silverman as well?

8 MS. BUPP: Yes.

9 JUDGE McDADE: Thank you.

10 JUDGE WARDWELL: And I assume that that
11 is the reference to the opinions expressed in
12 regards to DPO process on the bottom of page four,
13 top of page five?

14 MS. BUPP: Yes, that is where we
15 received that information from.

16 JUDGE McDADE: Okay, the next question I
17 have is basically this. When you look at certain of
18 the regulations, specifically regulations having to
19 do with exemptions, and 10 CFR 70.17 and 10 CFR
20 40.14, both of which could be applicable here are
21 identical in language.

22 And it indicates that such exemptions
23 can be granted as the Commission determines are
24 authorized by law and will not endanger life or
25 property or the common defense. And it then goes on

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1 both of them go on and have a number of criteria for
2 the granting of exemptions. But the phrase there
3 that I was concerned with "exemptions that are
4 authorized by law."

5 When you look at certain of the
6 exemptions that have been identified during the
7 course of this proceeding, when you go to the
8 regulation, the regulation has a specific provision
9 authorizing the exemption. For example, with regard
10 to labeling, 20 CFR 1905 specifically authorizes an
11 exemption and sets out criteria and that's one that
12 was applied for and the Commission decided to
13 approve.

14 Here, when we're talking about these
15 other exemptions, the question is where do we look
16 to, where do we hang our hat for the view that it is
17 authorized by law? This came up in the context that
18 we were discussing on Monday with regard to the
19 liability insurance issue, that the Department of
20 Energy has indicated that in the event that USEC is
21 unable to secure appropriate liability insurance
22 that they would be in a position to indemnify. And
23 I believe it was up to an amount of \$5 billion.

24 Assuming that we find that that is
25 adequate to protect the public health and safety,

1 and that it would be an adequate substitute for
2 liability insurance, looking not at the ability of
3 the Department of Energy under its statute and
4 regulations to do what they purport to do, because
5 they do have a basis for that as specific statute
6 that authorizes them to do that, the question is
7 where could we look to in law or regulation that
8 would allow the NRC to grant this exemption?

9 And again, the way it's worded, it
10 doesn't say "unless prohibited by law." It says "if
11 authorized." And that was the question of what do
12 we hang our hat on to say that it was authorized,
13 the granting of the exemption?

14 MS. BUPP: This was sort of a thorny
15 legal question that we went to look at because I
16 went and I know how we do, how we review exemption
17 requests in OGC space, what happens when the staff
18 comes to us and says we have an exemption request,
19 can we grant it as a legal matter?

20 And I know how that works and how it's
21 done and I went to look for the case law that would
22 support that. Every case that I was able to find
23 that discussed exemption requests focused on the
24 safety aspect of the exemption request. There was
25 no legal explanation of what is authorized by law.

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1 I went back and I looked for internal
2 OGC memos that might outline the actual standard
3 that we follow and what I could find and what is
4 consistent with the way attorneys are trained and
5 the way we all work, in trying to review exemption
6 requests, is that you look first to see if it falls
7 under our authority under the Atomic Energy Act. If
8 it is not under the NRC's authority under the Atomic
9 Energy Act, we cannot grant the exemption. For
10 example, if there were some OSHA requirement or an
11 EPA requirement, we cannot grant exemptions from
12 those requirements. They do not fall under the
13 NRC's authority.

14 The second thing that you look for is to
15 see in the lucky circumstance where it is actually
16 specifically authorized by law, then obviously that
17 is authorized by law. But that would a very rare
18 exemption request because if it's authorized by law,
19 specifically and positively, an argument can be made
20 that you actually don't even need an exemption in
21 that case, if it is really and truly right there in
22 black letter law that you're allowed to do that,
23 then it begs the question of whether or not you even
24 need the exemption. So what we're really looking
25 for is that it's not prohibited by law.

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1 JUDGE McDADE: But specifically, for
2 example, in 20 CFR 1905 there, there are labeling
3 requirements and there are exemptions from the
4 labeling requirements and that regulation using the
5 general rulemaking authority of the NRC under the
6 Atomic Energy Act, says that we will grant
7 exemptions. So specifically, 20 CFR 1905 authorizes
8 exemptions from the labeling requirements.

9 The question is with regard to the ones
10 having to do here, 40.14 and 70.17, the language is
11 there and my question is this. One way to read that
12 would say given the nature of the regulation, it
13 perhaps is not the clearest language or looking at
14 it retrospectively, the best language to be used,
15 but implicit in those regulations, since they then
16 go on and list criteria for the granting of that
17 exemption that implicit in those regulations is the
18 authority that it is authorized by law, although not
19 articulated well, not articulated expressly, but
20 that if it were to be authorized by law, the rest of
21 those regulations would not make sense.

22 In making the argument for the
23 exemption, that's the best argument, legal argument
24 that I could come up with and I was wondering
25 whether or not the staff or USEC had in its research

1 or experience found anything in the regulations or
2 the statute that would be stronger than that. And
3 then the question is whether or not you think that
4 is a viable theory or that is a theory that given
5 the language of the regulations doesn't hold water.

6 MS. BUPP: I think if I understand
7 correctly, first, that 20.1905, for example, an
8 exemption like that, that it's those cases where
9 those types of regulations are labeled as
10 exemptions. That's really unclear. That in those
11 cases they aren't really exemptions, they're more
12 alternative regulations, that you know, you can
13 follow, in the labeling requirements, but in the
14 alternative if you meet these certain requirements
15 you can follow a different set of labeling
16 regulations. So it's not really an exemption. It's
17 actually an alternative regulation.

18 JUDGE McDADE: Well, the downside on
19 that is that the regulation is headed exemptions.

20 MS. BUPP: Yes.

21 JUDGE McDADE: To the labeling
22 requirements. So one can argue that it was intended
23 as an exemption. But again, getting back to the
24 ones that are at issue, the 40.14, the 70.17, and
25 would you yield to Mr. Silverman? He seemed to --

1 MS. BUPP: Yes. He can take a stab.

2 MR. SILVERMAN: I'd be happy to.

3 Thanks, Your Honor.

4 First of all, there's a clear
5 distinction in our mind between the 20.1905
6 exemption which we do view as an exemption and the
7 70.17 type exemption. With the 20.1905, the NRC has
8 by regulation, exempted a certain practice or
9 activity on a generic basis. And there are other
10 examples like that. There are exempt quantities of
11 radioactive material exempted from regulation.
12 Those are done by regulation. They're generic in
13 nature. But the Commission has also established a
14 set of general exemption regulations, 70.17 is one
15 of them, which affords an applicant the opportunity
16 to come in and say in this particular case, on this
17 particular matter, even though the regulation does
18 not allow me to do this, I would like to be exempted
19 from the regulation.

20 So there are two very different types of
21 exemptions. That's the first point.

22 With respect to 70.17 and the language
23 authorized by law, it has been our consistent
24 experience and I think it's consistent with Ms.
25 Bupp's review of the cases that that has been

1 interpreted in exemption requests and in the
2 approval of exemption requests as being equivalent
3 to there is no statutory prohibition on granting the
4 exemption.

5 And the logic is pretty, I think, clear
6 there which is that the NRC cannot exempt you from a
7 regulatory requirement if there is a statute that
8 precludes you from engaging in that activity. So
9 any time we've ever prepared an exemption request or
10 worked with an applicant, when we addressed the
11 authorized by law standard we had identified whether
12 it is, in fact, prohibited by the Atomic Energy Act,
13 by NEPA or any other applicable statute.

14 When we look at the cases, we come up
15 just like Ms. Bupp with there's a lot of cases out
16 there. There's very little discussion in those
17 cases about the analysis of how you determine what's
18 authorized by law.

19 JUDGE McDADE: I could find none.

20 MR. SILVERMAN: Right. And I didn't
21 want to --

22 JUDGE McDADE: What did you find?

23 MR. SILVERMAN: But I think what that
24 points out, the absence of an explanation or any
25 real discussion in those cases, and in our mind

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1 points out I think an important point and that is if
2 there was a substantive requirement, if there was a
3 requirement to show that there was some affirmative
4 statutory authority as a basis for granting the
5 exemption and demonstrating it's authorized by law,
6 you would have expected the Commission would have
7 address that and identified it.

8 So in our view, we think the history --
9 while the cases are not clear, it is treated in a
10 very summary fashion. We think that the history and
11 practice of the NRC clearly indicates that
12 authorized by law is equivalent to not prohibited by
13 statute.

14 JUDGE McDADE: Okay. Now through the
15 Code of Federal Regulations, there are exemption
16 requirements. And they use the term "not otherwise
17 prohibited" or "not prohibited by law" or "not
18 prohibited by other regulations under this part."

19 Here, they chose not to use that
20 language for whatever reason and we start off with
21 sort of an issue of statutory construction that if
22 there's language there we should give meaning to it.
23 And the language there is "if authorized by law."
24 It doesn't say unless otherwise prohibited.

25 At the same period of time, again,

1 giving meaning to it, you then go on in each of
2 those sections in both 40.14 and 70.17, and you have
3 a number of criteria that would make it appropriate
4 to grant the exemption which would make no sense to
5 put in there, unless the exemption was authorized by
6 law.

7 So there appears to be a drafting issue
8 here and what I'm trying to do is avoid having an
9 inappropriate result based on specific language.
10 And my question specifically is given the way that
11 it is written, now would it be reasonable to argue
12 that implicit, although it not explicit, in these
13 regulations, given the fact that they have criteria
14 for granting the exemption, and given the fact that
15 it is not prohibited anywhere else in the
16 regulations under the NRC, that implicit in this
17 regulation is the authority to grant the exemption
18 if it meets the remaining requirements? Is that a
19 viable theory or if not, what's wrong with it?

20 MR. SILVERMAN: No, I think that's a
21 viable theory and I think there is clear case law or
22 at least the Commission has acknowledged in the past
23 it has the authority to grant these exemptions under
24 the Atomic Energy Act.

25 I think that's a reasonable

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1 interpretation.

2 JUDGE McDADE: Okay.

3 MS. BUPP: I think that that is a
4 reasonable interpretation or the way I'm hearing
5 that interpretation from you is really not that
6 different from the way the NRC staff currently
7 interprets the requirements in 40.14 and in part 70.

8 JUDGE McDADE: And there's nothing that
9 you've been able to find in the case law or in the
10 regulations or regulatory history here that would
11 indicate otherwise?

12 MS. BUPP: No, and actually to point
13 out, I looked at the statements of consideration
14 also for those regulations and I didn't find a
15 reason why it says authorized by law rather than not
16 otherwise prohibited or any other language that you
17 might find in another agency's regulations. That
18 was not a focus in the statements of consideration.

19 JUDGE McDADE: Okay.

20 JUDGE LAM: So now we have a consensus
21 on the ambiguous language, everybody agree with
22 that?

23 (Laughter.)

24 JUDGE McDADE: Well, we haven't agreed
25 yet, we're just hearing counsels' position.

1 JUDGE WARDWELL: Ms. Bupp, could you
2 describe the process that's usually followed by the
3 staff when an exemption request comes in? Do they
4 start off that process by coming to your office in
5 regards to saying what about this request or do they
6 usually follow the technical evaluation first or
7 another alternative would just do they anticipate
8 that you will review it once you see any draft
9 documents that are coming from them and as you
10 review overall license documents?

11 MS. BUPP: Well, the third option that
12 you've given, that OGC will review any licensing
13 documents, that's true. Before any SER is issued or
14 before any license is issued, OGC reviews it. So at
15 the very least we review the exemption request at
16 that point in time.

17 The other sort of timing as to when OGC
18 is involved in the exemption requests really varies.
19 There are some that if the staff can look at the
20 exemption requests on its face and say there's no
21 way that this will meet safety requirements, then it
22 doesn't matter whether or not we think it's
23 authorized by law. If it's not going to meet the
24 safety requirements, it won't meet the safety
25 requirements.

1 If there is an exemption request that
2 appears to raise more legal than safety issues, then
3 they will probably come to OGC earlier, but keep in
4 mind we're all in the same building, we're all very
5 close together, so there is a lot of interplay
6 throughout the entire license review process between
7 the staff and OGC.

8 So it does vary a little bit as to where
9 in the process they will come to OGC, but as a fail
10 safe, before any SER is issued, before any license
11 is issued OGC reviews those documents and exemption
12 requests are one of the main things we look at, even
13 if we've already discussed the exemption request
14 with the staff.

15 JUDGE WARDWELL: Thank you for that
16 clarification.

17 Judge Lam, did you have any other
18 questions in this area?

19 JUDGE LAM: I want to clarify what I
20 just heard earlier from staff counsel. Is it true
21 that it is your impression that most of the
22 exemption requests, that the staff had to deal with,
23 the majority of effort of the staff review is
24 focused on safety aspects because there had to be
25 two tests to pass for the exemption request to be

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1 granted. One is authorized by law. The second one
2 would not be any adverse impact on safety.

3 MS. BUPP: Well, the staff can only do a
4 safety review and not a legal review. I try not to
5 make engineering judgments for the staff and they
6 don't make legal judgments. So we have to work
7 together, but their review is limited to the safety
8 aspects of the exemption request.

9 JUDGE LAM: Right, but in terms of
10 proportionality, I think most of the staff, and by
11 staff I mean you, the legal staff and the technical
12 staff, I think the technical staff usually, and it's
13 just my perception, has spent a lot more resources
14 in reviewing.

15 MS. BUPP: Oh yes, certainly.

16 JUDGE McDADE: Did either counsel have
17 anything further on this topic? Ms. Bupp?

18 MS. BUPP: No.

19 JUDGE McDADE: Mr. Silverman?

20 MR. SILVERMAN: No, Your Honor.

21 JUDGE McDADE: Okay, the next issue that
22 I had goes back to the surety bond issue that we
23 discussed the other day, specifically 10 CFR 40.36
24 and 70 CFR or 10 CFR 70.25.

25 And my question was why is it necessary

1 to have an exemption and why is it necessary to have
2 a license condition here, given what USEC indicated
3 that they proposed to do, at first glance it
4 appeared that they met the regulation without an
5 exemption. And we had a bit of a discussion and it
6 was more appropriately a legal issue rather than a
7 factual issue from the witness.

8 So let me ask first to Ms. Bupp, what --
9 why is an exemption needed here?

10 MS. BUPP: Well, the exemption is needed
11 not for the surety bond, but for the incremental
12 funding for decommissioning, that the regulations
13 require that they have a decommissioning funding
14 plan that would cover all of the costs of
15 decommissioning and that that funding would be
16 provided up front as the start of operations of the
17 facility.

18 Because they want to incrementally fund
19 decommissioning as operations go on, that's where
20 the exemption comes in.

21 JUDGE McDADE: Okay, well, under that
22 regulation, there are various ways in which they can
23 meet their obligation, one of which would be, for
24 example, to have an external sinking funding. The
25 whole concept of an external sinking fund is that

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1 you have enough money in the fund to cover the costs
2 of decommissioning as of that time, not that you
3 would have all of the money in the sinking fund up
4 front before you received any of the materials.

5 MS. BUPP: Well, the external sinking
6 funds, having only an external sinking fund is only
7 for reactors. It's not for materials licensees.
8 For materials licensees, they must have an external
9 sinking fund, coupled with a surety bond to ensure
10 that they would have the complete funding for
11 decommissioning available at all times.

12 Now the surety bond, if they have the
13 sinking fund, coupled with the surety bond, they
14 might never have to cash in that surety bond and
15 they could eventually pay for decommissioning
16 through the sinking fund, but we require them to
17 have the backup surety bonds for materials licenses,
18 even if they have the sinking fund.

19 JUDGE McDADE: Okay, specifically, where
20 in the regulation can you direct me that indicates
21 that as the way you just said it or let me rephrase
22 that, the way I heard it, is that without an
23 exemption, at the time they received the first
24 materials, that they would need to have a surety
25 bond that would cover the disposition of depleted

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1 uranium 30 years down the road.

2 MS. BUPP: Well, actually, if you look
3 at 70.25E and that's what I have in front of me, but
4 they are substantially similar to the regulations in
5 Part 40, it says that the decommissioning funding
6 plan must contain a cost estimate for
7 decommissioning and a description of assuring funds.

8 Later in that paragraph, it explains the
9 license that the decommissioning funding plan must
10 also contain a certification by the licensee that
11 financial assurance for decommissioning has been
12 provided in the amount of the cost estimate for
13 decommissioning and a signed original of the
14 financial instrument obtained to satisfy the
15 requirements of paragraph F of that section. So
16 that's where having the executed document at the
17 time, that having the executed document at the time
18 of taking position of material comes into play.

19 At the time of the application, before
20 they're actually the licensee, they need only have a
21 plan for how they're going to move forward. But
22 then the licensee, which is different from the
23 applicant, must actually have that certification.

24 As a practical matter, and as NRC
25 experienced, we don't actually require them to have

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1 the certification from day one of licensing because
2 there actually would be no decommissioning need
3 until there is material on site. Well, once there
4 is material on site, that is why we require the
5 signed instrument at that time.

6 JUDGE McDADE: Okay, and perhaps we're
7 having a failure to communicate here. The
8 regulation allows an adjustment of the cost
9 estimates at least every three years. Now the
10 question is if I start a facility like this or USEC
11 starts a facility like this, I'm not likely to. On
12 day one, the day they first receive any nuclear
13 material, their costs of decommissioning at that
14 point in time would be minimal, practically nothing.
15 If you looked at all of the costs for
16 decommissioning that they would have over the next
17 30 years that the license would be operative, you're
18 talking hundreds of millions of dollars.

19 Now is what you're saying that on day
20 one they have a surety bond and they are paying for
21 surety bond that covers hundreds of millions of
22 dollars or is it just simply a commitment from the
23 party who has the surety bond that the amount will
24 go up proportionately to the estimates of the
25 decommissioning costs at any given time? In other

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1 words, there's a plan, there's a signed instrument,
2 but the amount of that bond increases as the amount
3 of cost is effectively incurred.

4 MS. BUPP: Absent an exemption, yes,
5 they would have a surety bond for the full amount of
6 decommissioning in place at day one. But keep in
7 mind that even if -- so they would have to be paying
8 the fees for that surety bond from day one.

9 But if the surety bond were cashed in
10 because they were unable to pay for decommissioning
11 through any other means, the surety bond wouldn't
12 necessarily pay out the same amount as the entire
13 decommissioning cost estimate. It would pay out the
14 actual cost of decommissioning which could be less,
15 if they ceased operations prior to what they
16 planned.

17 But yes, from day one, absent an
18 exemption, they would have to have a surety bond for
19 the full amount.

20 JUDGE McDADE: So -- and again, the
21 language of the regulation is that the bond would be
22 in the amount of the cost estimate for the
23 decommissioning and my question is that one month
24 into the operation the estimate of the
25 decommissioning at that point would be X thousands

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1 of dollars, that 25 years into the life, the
2 decommissioning cost estimates would be in the
3 hundreds of millions of dollars.

4 And you're saying that absent an
5 exemption, the way you all interpret the regulation
6 is it's not enough just to have a commitment from
7 the party giving the surety bond, that as
8 decommissioning costs go up, that the amount of the
9 bond will go up and then at the other end of the
10 spectrum, as decommissioning costs go down, in other
11 words, at a certain point, much of the tails will be
12 moved off, will have been converted, will have been
13 buried in Utah or elsewhere that the amount would
14 then go down.

15 MS. BUPP: Well, the decommissioning
16 funding plan at the outset and at the application
17 stage really, must be a plan that will cover
18 decommissioning for the entire facility, for all
19 waste associated with the facility. And so while
20 the estimate might change and you're correct, the
21 estimate could change over time, could go up or down
22 and thus the surety bond could be revised, at the
23 outside from day one, you must have an estimate that
24 covers the cost of decommissioning for the entire
25 facility for the projected life of the facility.

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1 And that is what the decommissioning funding plan is
2 required to be at the application stage and thus
3 pursuant to the language in the regulations, you
4 have to have some sort of financial assurance
5 mechanism for that decommissioning cost estimate
6 which does cover the entire life of the facility.

7 JUDGE McDADE: Now without an exemption,
8 just under the regulation, how would things be
9 different?

10 MS. BUPP: Without an exemption in this
11 case?

12 JUDGE McDADE: Yes.

13 MS. BUPP: The applicant would have to
14 provide up front the cost of decommissioning the
15 entire facility, the physical plant, the buildings,
16 all of the centrifuges and all of the tails that are
17 estimated to be produced over the life of the
18 facility.

19 JUDGE McDADE: But if they had a
20 decommissioning plan, they had estimates, and they
21 had a commitment from the provider of the surety
22 bond that the amount of the bond would rise
23 proportionate to the amount of the decommissioning
24 costs incurred or created, necessitated, I guess is
25 a better word, as of a certain point in time,

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1 wouldn't that meet the regulation and isn't that
2 what they're required to do under the exemption?

3 MS. BUPP: No, the money must be for the
4 entire facility, all of the centrifuges, and all of
5 the tails that would be produced, absent an
6 exemption, must in the surety bond at the outset of
7 operations. You have to have all of that money in
8 the pot, ready to go.

9 The exemption allows them to have in the
10 pot at the outside of operations just the money for
11 the physical plant of the facility, the first stage
12 of centrifuges and the first year's worth of tails.
13 And then it would increase.

14 Absent the exemption, the only changes
15 to the decommissioning cost estimate would be based
16 on factors like inflation, increased cost for
17 disposal for conversion of the tails and then, of
18 course, a decrease in the cost if they were able to
19 dispose of the tails over time.

20 But there wouldn't be any adjustments
21 made for the number of tails unless they disposed of
22 them. The only changes would be due to increased
23 costs, but not an increase in tails or centrifuges
24 that need to be decommissioned.

25 JUDGE McDADE: Mr. Silverman, does USEC

1 read the regulation in the same way?

2 MR. SILVERMAN: I do and if it would be
3 helpful, I'd just like to maybe elaborate a little
4 bit.

5 We read it exactly the same as Ms. Bupp.
6 There are generally two circumstances under the NRC
7 regulations where two circumstances where
8 decommissioning funding assurance has to be
9 provided. You have for, if I may take a different
10 example, utilities that are operating reactors,
11 that when they get their license, if they're a
12 regulated utility and they can recover their costs
13 through rate base, they are allowed to accrue their
14 decommissioning costs over time.

15 So when they get their license, they do
16 not have to put up in advance the full cost of
17 decommissioning as of the end of the license period.
18 But for every or virtually every other NRC licensee,
19 that's required to have a decommissioning funding
20 plan, materials licensees, you must before receipt
21 of license material project the cost of
22 decommissioning at license termination. That means
23 your buildings have been contaminated and you have
24 to -- to the extent they are, you have to clean them
25 up. That means to the extent you generated waste

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1 that you have not disposed of during normal
2 operations, that that has to be included in your
3 cost estimate. You must fully fund up front.

4 So without this exemption, this
5 regulation would require USEC like any other
6 materials licensee to fund the tails disposition,
7 the entire 30 years of tails disposition up front.

8 What we're asking for because this is a
9 unique facility and it's unique in the sense that
10 the tails generation is an issue that a lot of
11 materials licensees don't have, most materials
12 licensees they ship most of their waste off in the
13 ordinary course of operation. But this is a large
14 volume and a large costs and because of that unique
15 circumstance we're just asking for that and
16 centrifuge machine decommissioning, that that
17 limited increment be provided in an incremental
18 basis.

19 So the baseline though for most
20 materials licensees is full funding as projected out
21 at license termination.

22 JUDGE McDADE: Okay, so the way I've
23 described it would operate is the way you see it
24 operating under the exemption, but as you read the
25 regulation, you believe the exemption is necessary

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1 and the exemption being necessary therefore that the
2 license condition as proposed is appropriate?

3 MR. SILVERMAN: We do and it's also
4 consistent with the exemption that was granted to
5 the LES facility on the same basis.

6 JUDGE McDADE: Okay, thank you.

7 JUDGE LAM: Now I think the remaining
8 legal issue was related to the question I asked
9 yesterday where Ms. Bupp indicated she would
10 respond. If I may repeat the question,
11 hypothetically, if the Board is satisfied that the
12 staff has met its obligation under NEPA by taking a
13 hot LOCA, but -- I emphasis but -- however, the
14 Board is not satisfied with some of the responses to
15 our inquiry under the NEPA area, where would that
16 put the licensing board?

17 MS. BUPP: You mean you agree that the
18 staff has taken a hard look under NEPA and that the
19 staff's review under NEPA was sufficient, but you
20 disagree with the staff's recommendations of the
21 EIS?

22 JUDGE LAM: No, but the Board is not
23 satisfied with some of the responses since the Board
24 had posed many questions to the staff related to
25 NEPA matters. Assuming the Board is not satisfied

1 with all of the responses that you have provided to
2 us, where would that put us?

3 MS. BUPP: Well, I think if you look at
4 the notice of the hearing, the Commission outlined
5 what determinations the Board must make under NEPA.
6 And note the Board must, in its initial decision,
7 undertake an independent sort of balancing of the
8 factors of the conflicting factors in NEPA.

9 And so if you were not satisfied with
10 some of the staff's answers and that colored your
11 balance of the factors, you would consider the
12 staff's responses under the balance of the
13 conflicting factors and come to your own conclusion.

14
15 And I think that you are required to do
16 that, whether or not you are satisfied by the
17 staff's answers. If you are satisfied, you consider
18 those answers in your balancing; if you're
19 unsatisfied, you consider those whatever
20 dissatisfaction you have in your balancing of
21 factors. But you look at the NEPA record as a
22 whole. You look at the EIS. You look at the
23 presentations by the staff and by the applicant and
24 after your own balance of factors, it states that
25 you can recommend that the license be issued, denied

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1 or conditioned in some way to protect the
2 environment.

3 And the Board really has fairly broad
4 authority in this area because the NEPA documents
5 provided by the staff, as I think was explained by
6 the staff experts this morning are really an
7 information. They're information for the decision
8 maker and in this case, the decision maker is the
9 Board. And so you need to look at the entire NEPA
10 record and then decide based on the entire record,
11 what your decision in.

12 JUDGE LAM: Thank you for that insight.
13 But perhaps I did not make myself clear. What you
14 had said, I think was we're aware of. What is the
15 Board's obligation under NEPA. Perhaps I did not
16 make myself clear.

17 What I really was trying to say is not
18 all the issues are created equally under NEPA. If
19 we are generally satisfied that the staff had indeed
20 performed a hard look, but since there will always
21 be as they are now, many little issues here and
22 there, related to a pump, to a rod, to a pond, to
23 effluent control, there are many, many issues out
24 there that the Board posed to the staff.

25 And I was just asking gee, if generally

1 we are satisfied with the hot LOCA approach, how
2 should priority be assigned to these numerous issues
3 collectively? But I think you had answered my
4 question. I just want to clarify for the record
5 where I was aiming at.

6 MS. BUPP: It boils down to the balance
7 of the factors and it depends on how major or minor
8 you feel that efficiencies are.

9 JUDGE McDADE: Judge Lam, anything
10 further?

11 JUDGE LAM: No, thank you.

12 JUDGE McDADE: Do you have anything
13 further?

14 JUDGE WARDWELL: No.

15 JUDGE McDADE: Okay, I have no further
16 questions.

17 Ms. Bupp, is there anything else that
18 you want to bring to our attention?

19 MS. BUPP: There were two specific
20 issues that were questions that were raised that the
21 Board had raised in the past couple of days with the
22 staff that we felt were more legal issues.

23 The first one was the question of
24 whether or not the license exemption for a 60-day
25 review prior to an increase in operations of 10

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1 percent enrichment, whether the staff felt that that
2 would be necessary. We are prepared with an answer
3 for that.

4 I think the baseline answer and I don't
5 intend for this to sound glib is that if the staff
6 had felt that more than 60 days were required for
7 the license condition, we would have proposed more
8 than 60 days; that we think that the 60 days is
9 sufficient time for the staff to take, whatever
10 action it deems necessary if any action is deemed
11 necessary prior to the applicant and at that point
12 in time the licensee moving from 5 percent
13 enrichment to 10 percent enrichment, it will give
14 the staff enough time to review the submissions of
15 the licensee, review any changes they've made to the
16 facility and to determine whether we need more
17 information and it is true that we've already
18 undergone a great deal of cooperation. And in
19 general, it is in a licensee's best interest to
20 cooperate with the regulator. But if that
21 cooperation were not forthcoming, we do still have
22 enforcement authority to issue orders to either hold
23 the status quo until we've done our review, if we
24 feel that there's a major safety issue that's been
25 raised that we need more time to resolve. So we

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1 feel that the 60 days is appropriate and is
2 sufficient.

3 JUDGE McDADE: And there appeared to be
4 a bit of a difference of opinion --

5 MS. BUPP: Yes.

6 JUDGE McDADE: -- On the part of the
7 staff. The prevailing staff position was that the
8 license condition as proposed is adequate and that
9 relates to one of the issues we had with regard to
10 our moving forward based on the prevailing staff
11 opinion or withholding judgment in this area until
12 the pendulum came to rest as it were.

13 It was explained articulately by the
14 witnesses what the current situation is, the
15 prevailing staff opinion was that within that 60-day
16 period, the staff would be able to know enough to
17 either be able to put its imprimatur on USEC going
18 forward, or in the alternative, to use the
19 regulatory tools that they had available in order to
20 delay or postpone USEC from going forward until the
21 staff received additional information.

22 The differing opinion seemed to be
23 whether or not there should be in the license
24 condition a two-step process; one, giving them the
25 opportunity to review the design, and then the

1 second, allowing them to review the implementation
2 of that design. The prevailing opinion was that the
3 60 days was sufficient.

4 And correct me if I'm misstating
5 something or stating the opinion different from
6 either that of the legal staff or the legal counsel
7 for USEC. As I understand it, it's your position
8 that on this aspect of our review, it is not a de
9 novo review.

10 We are looking not necessarily to
11 whether one opinion or the other is the better
12 opinion, but rather whether or not the proposal, as
13 it is currently before us, has a basis in law and
14 fact. And that if it does have an adequate basis in
15 law and fact, given the direction we have from the
16 Commission, we're not supposed to interpose our own
17 judgment, but rather to indicate that that decision
18 -- if we find that it is arbitrary or capricious, if
19 it isn't based on law and fact, then we have the
20 obligation, not only the authority, but the
21 obligation to modify the license condition.

22 But in the event we find that there are
23 reasonable minds could differ, but that the
24 prevailing staff opinion, as articulated in the
25 proposed license condition is supported by the

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1 record, that it absent authority to conduct a de
2 novo review that we would be in a position to move
3 forward with our decision.

4 Is that consistent with the legal staff
5 view on this particular issue?

6 MS. BUPP: Yes, that's exactly
7 consistent with our view on that issue.

8 JUDGE McDADE: Mr. Silverman, is that
9 consistent with USEC's?

10 MR. BAER: This is Bill Baer with Morgan
11 Lewis on behalf of USEC.

12 Yes, that is consistent with our view.
13 I would also point out that requiring us in advance
14 to provide a level of design information beyond that
15 required by Part 70 is something that we would
16 oppose. We've already provided information on this
17 in the course of the review and we feel that the 60
18 days would allow the staff to review the details of
19 the design and the implementation of the time.

20 We actually moved above 5 percent
21 withdrawal.

22 JUDGE McDADE: Okay, we have no other --

23 JUDGE WARDWELL: I thought you meant on
24 this topic.

25 JUDGE McDADE: I'm sorry.

1 MS. BUPP: I think the other issue that
2 came up yesterday was the discussion of disposal of
3 DU and this may have been adequately covered in the
4 staff's legal brief that accompanied our testimony
5 on disposition of DU, but simply that the standard
6 that the staff has to meet and had to review under
7 was whether or not the applicant had set forth a
8 plausible strategy for disposal of DU.

9 And in this particular case, the
10 Commission had already ruled in the LES proceeding
11 that disposal through Department of Energy is, in
12 fact, a plausible strategy and I think that that was
13 articulated in the staff's legal brief. But if the
14 Board had any additional specific questions on this
15 issue.

16 JUDGE WARDWELL: I don't in regards to
17 plausible strategy, it's just where we were going
18 with that line of questioning related to
19 decommissioning funding which is another issue.

20 MS. BUPP: Yes.

21 JUDGE WARDWELL: It's not an EIS issue,
22 it's not a plausible strategy issue.

23 JUDGE McDADE: Let me just ask one thing
24 by way of clarification in that on the brief. In
25 the brief that you submitted, you went into detail

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1 about what the decision was by the Commission in the
2 LES case.

3 Question, is it your position that that
4 is binding on us as a matter of law or rather that
5 we should just simply look to that, that that is
6 precedent and not necessarily controlling precedent,
7 but it indicates what the Commission's view is and
8 therefore with a clear articulation of what the
9 Commission's view is, we should accept that or is it
10 your position that actually it is res judicata on
11 this matter?

12 MS. BUPP: I actually believe that that
13 would be binding precedent on this Board. It's
14 based on a combination of the Commission's very
15 careful and thorough consideration in LES, and then
16 also in the hearing notice, for this particular
17 proceeding, the Commission did note that they were
18 currently considering matters of law applicable to
19 the disposition of tails which may be dispositive of
20 matters arising in the USEC proceeding.

21 And I think that now, stepping forward
22 in time to the point where they have made those
23 determinations, in the LES proceeding, that those
24 determinations are now dispositive, not that they
25 have been made.

1 JUDGE WARDWELL: Did use the phrase, I
2 believe, just now that you believe -- and you went
3 on.

4 MS. BUPP: Yes.

5 JUDGE WARDWELL: That to me said there's
6 room for legal argument in regards to different
7 people's opinion of -- or different people's belief
8 of what that means.

9 MS. BUPP: Well, I use the term
10 "believe" as far as my belief and my belief is quite
11 strong that the Commission's determinations in the
12 LES proceeding with regard to the disposition of DU
13 are dispositive in this case.

14 JUDGE WARDWELL: In regards to that, in
15 the hearing notice, when that was issued, there was
16 also charges to the staff to look at the potential
17 need for any additional analyses or evaluation in
18 regards to assuring that it met Part 61 performance
19 objectives, etcetera. And someone could argue,
20 could they not, that this Commission's ruling on LES
21 was not what they were referring to in that hearing
22 notice, but in fact, they were going to reach that
23 at some future time when all of those are tied
24 together. Could someone not argue that?

25 MS. BUPP: You mean that someone could

1 argue that -- well, when the USEC hearing notice was
2 issued, that was before any determination had been
3 made in the LES proceeding.

4 JUDGE WARDWELL: Correct.

5 MS. BUPP: With regard to disposition of
6 depleted uranium. So the issue of future revisions
7 to part 61 was not even on the table at that point
8 in time. I think that in the LES proceeding, where
9 the Commission did remand the issue of future
10 revisions to Part 61, that they were very clear that
11 it needed to be taken care of outside of any
12 adjudicatory proceeding and that to the same extent
13 that LES, for the LES case, they made a decision
14 that under the current Part 61 regulation, their
15 disposal strategy was plausible. Where here, this
16 application is also proceeding under the exact same
17 regulations as were applicable in LES.

18 Until those regulations change, I think
19 that the Commission's decision with regard to the
20 current regulations and what is needed to meet them
21 is dispositive. And any future change in the rule
22 would have to be something that would be taken up at
23 a later date. It's not dispositive here.

24 JUDGE McDADE: When you prefaced the
25 argument before by saying "you believe" would it be

1 accurate to say that that was an advocate being
2 polite to the tribunal in front of whom you were
3 currently --

4 MS. BUPP: Yes, Your Honor.

5 (Laughter.)

6 JUDGE McDADE: And it is the staff's
7 position that we are bound by and have no option and
8 have no discretion that our superior tribunal has
9 ruled and it's our obligation to follow it, period?

10 MS. BUPP: Yes, Your Honor.

11 JUDGE McDADE: Okay.

12 (Laughter.)

13 JUDGE WARDWELL: Again, that is your
14 position.

15 MS. BUPP: Yes.

16 (Laughter.)

17 MR. SILVERMAN: And the applicant
18 agrees, but respectfully.

19 JUDGE WARDWELL: Surprise. I have one
20 other note and I'm not sure needs any more, but I
21 thought I'd get my last stickie away from my list of
22 questions and responses. But I had under our
23 testimony dealing with discussion of increasing to 7
24 million SWU, how would the public be informed and
25 the proposed changes, etcetera, that would be

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1 required by that? I had it noted that that, in
2 part, needed some legal discussion. I don't feel a
3 need for it, if you don't have anything to add to
4 it, I just had it as a stickie and I feel it was
5 covered in our testimony to date that I'm
6 comfortable in understanding. But if you want to
7 add something, I wanted to make sure you had the
8 opportunity because I happen to have this little
9 stickie there.

10 MS. BUPP: If you don't have any
11 specific questions, I think that was covered
12 adequately by the staff. I had one more note that
13 was last on my list of potential legal issues.
14 There's just another note I had made of when I
15 interjected in testimony to point out that something
16 was a legal issue.

17 In the discussion in accident analysis
18 of the 60-day -- in the discussion under accident
19 analysis of criticality and the appropriate scope of
20 design information on criticality, there was some
21 discussion at one point in time the staff had
22 considered an additional license condition related
23 to that. And since that license condition was taken
24 off the table based on legal advice and if the Board
25 would like us to address that, I can do that at this

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1 time.

2 JUDGE McDADE: I don't really want to
3 get into any legal advice that you may have given to
4 the staff. I think we've discussed the legal
5 ramifications of that particular issue and have
6 received from the staff their view of how we should
7 proceed as a matter of law here.

8 Is there anything in that area and
9 again, without getting into what you told the staff,
10 what advice you gave them and why, anything further
11 that you would like to bring to our attention on
12 this issue?

13 MS. BUPP: I don't think anything that
14 hasn't been already raised in other areas.

15 JUDGE McDADE: Mr. Silverman?

16 MR. SILVERMAN: Just one moment, Your
17 Honor.

18 (Pause.)

19 MR. SILVERMAN: Sorry, Your Honor. We
20 have nothing further.

21 JUDGE McDADE: Okay, I understood from
22 Ms. Wolf, the Board's clerk, Mr. Scott had something
23 further to bring to our attention. Is that correct,
24 sir?

25 MR. SCOTT: Your Honor, I just wondered

1 if I could, just take an opportunity, if we're done,
2 just to make a short little, a couple of comments,
3 if you will. And first off, Dennis Scott, Assistant
4 General Counsel, USEC. Wanted to just thank the
5 Board for its attention and diligence in this and
6 your kindness to the witnesses. It was much
7 appreciated.

8 I also want to thank NRC counsel, Ms.
9 Bupp and Ms. Klukan, who have worked a lot of hours
10 on this, as you heard earlier in testimony on this.
11 And have been very cooperative and very professional
12 in our dealings. And also staff has been very
13 professional, cooperative, hard working and as you
14 heard, spent many, many hours on this license
15 application.

16 The American Centrifuge Plant is
17 critical to USEC and we believe also to this nation.
18 We are currently operating the only operating
19 facility, uranium enrichment facility, in the United
20 States. It was built in the 1950s, based on that
21 technology, very energy intensive. It currently is
22 operating around 1500 megawatts.

23 It's important to build this centrifuge
24 plant. It will be a domestic source of enrichment.
25 It's built in the United States, owned by a United

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1 States company, using U.S. technology, that provides
2 a secure, domestic source, that's free from foreign
3 interruptions or things of that nature. And also
4 provides a basis for, if needed, defense if that
5 materializes.

6 This, as we've been saying, has been a
7 long process. It started long before we filed our
8 application in August of 2004. We began working on
9 the centrifuge program in 1999 with Oak Ridge
10 National Laboratory. We've had literally hundreds
11 of people working on the application process alone.
12 Spent thousands of hours in preparing the
13 application, responding to requests for information,
14 etcetera. As you heard earlier, the staff, of
15 course, has spent 21,000 hours in total in reviewing
16 that process.

17 We take our obligations seriously. The
18 NRC sets high standards. We certainly try not only
19 to meet those, but exceed those. We have a long
20 history in this business. We have a long history in
21 enrichment. A lot of the individuals you saw here
22 as experts and who have worked on this process, have
23 been in uranium enrichment for years and years,
24 decades literally, including a number of people who
25 have worked before in the DOE centrifuge program.

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1 They spent -- I had a figure that it took 50 person
2 years just to prepare the license application, not
3 counting after we filed all the requests for
4 additional information.

5 Of course, the NRC staff brought their
6 wealth of experience and expertise to it. They're
7 very familiar with the site. We currently operate
8 in there. We currently have resident inspections.
9 I think most all the staff and MSS have been to the
10 site before. They're familiar with USEC. They
11 diligently reviewed that application, spent a lot of
12 hours, as you've heard.

13 We believe there's ample evidence that
14 USEC met its obligations in terms of the application
15 it provided and the information provided and we also
16 think there's ample evidence that the staff
17 fulfilled its statutory obligations and performed a
18 thorough review meeting the Commission's
19 requirements and I just wanted to ask that we
20 respectfully request that this Board affirm the
21 staff's decision and issue the license with the
22 conditions as specified in the SER.

23 Thank you very much. Appreciate it.

24 JUDGE McDADE: Ms. Bupp, do you have
25 anything in closing?

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1 MS. BUPP: I actually have two
2 administrative matters that I'd like to raise before
3 we close out.

4 JUDGE McDADE: If it's just
5 administrative, let me raise a couple others first.
6 The first has to do with the experts reviewing the
7 testimony. We would like to get this decision done
8 rapidly. I would ask, if possible, to have the
9 experts by the end of this week, make any
10 corrections they have and again, please advise them
11 what we're looking for just corrections, things that
12 need to be done.

13 Now if, in retrospect, should have said
14 that instead of which, you know, we're not looking
15 for those kinds of editorial changes that often
16 happen in depositions. What we're looking for is
17 where given what's recorded gives an inaccurate
18 description of what the witness actually said.
19 That's one. In the event a witness isn't able to
20 get it by close of business on Friday, if you could
21 just contact us and give us an indication of why
22 when you anticipate getting that. That's number
23 one.

24 Number two, with regard to additional
25 documents that would be coming, if during the

1 remainder of this week, if you could get a copy to
2 us of Exhibit 64 and also the updated witness and
3 exhibit lists that would -- we have the preliminary
4 ones that we received. There have been some
5 modifications during the course of the hearing. So
6 if you could get those to us as well by the end of
7 the week and if for some reason you can't, just let
8 us know by when you would be able to get those to
9 us.

10 Judge Wardwell, do you have anything?

11 Judge Lam?

12 Okay, did I cover the administrative
13 matters you had in mind or do you have additional
14 ones?

15 MS. BUPP: My first one actually did
16 relate to Exhibit 65 which is the management
17 directive. We have it now available, ready. The
18 one problem that we have is that while I'm 90
19 percent certain that we can make it publicly
20 available, I'm not 100 percent certain and I would
21 like to wait to share that with USEC until I'm 100
22 percent certain to make sure that we can release
23 outside the Agency since it is an internal policy,
24 an internal personnel policy.

25 JUDGE McDADE: Okay, well, I don't want

1 you to give it to us unless the applicant also has a
2 copy of it. So why don't we leave it this way.
3 Don't give it to us right now. Check on that.
4 Either give it to both the Board and to the
5 applicant by the end of the week or if there's an
6 issue, just give us a brief note indicating what the
7 problem is.

8 MS. BUPP: We'll do that. The second
9 was while the staff filed proposed findings of fact
10 and conclusions of law in October and there's not
11 been any provision made on the schedule for the
12 staff to file additional proposed findings, if the
13 Board would find additional supplemental findings
14 related specifically to issues explored in the last
15 few days in the oral hearing, whether or not the
16 Board would find that beneficial and would request
17 that of the staff.

18 JUDGE McDADE: Let me ask. We received
19 the original proposals and we received comments from
20 USEC. And the comments from USEC, we believe, were
21 well taken.

22 If you believe any of the comments that
23 they made were -- should not be incorporated, to let
24 us know, just simply give us your view of the
25 comments that they made. Likewise, if there are any

1 particular areas that you think would be helpful for
2 us, in putting our opinion together, I mean the
3 findings of fact that you submitted were very
4 comprehensive and very helpful as we got ready for
5 this hearing, as were the comments by USEC.

6 I don't want to put an undue burden on
7 the staff, but if you feel in any particular area
8 that it would be worthwhile or helpful, to
9 supplement, please feel free to do so, but I don't
10 want to compel you to do so and again, as I sit here
11 right now, I look at it and they were very
12 comprehensive. We've had a great deal of testimony
13 with regard to questions that we're had and I don't
14 think it's necessary for us to put a burden on you
15 to write it up at the same time we're writing up the
16 same thing.

17 So as I said, if you think it would be
18 helpful, please do so. But I'm not going to direct
19 that you do it.

20 MS. BUPP: I think, in hearing from the
21 Board that you don't feel that it's necessary, the
22 staff is satisfied with all of USEC's comments as
23 they have made both to the findings and to the
24 staff's prefiled testimony and with what has been
25 put forth on the record the last few days.

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1 JUDGE McDADE: Mr. Silverman, do you
2 have anything further that you want to file?

3 MR. SILVERMAN: We do not, Your Honor.

4 JUDGE McDADE: I know asking an attorney
5 do you want to file something, it's sort of like
6 waving the flag in front of a bull.

7 Okay, anything further, Ms. Bupp?

8 MS. BUPP: No, Your Honor.

9 JUDGE McDADE: Mr. Silverman?

10 MR. SILVERMAN: No, Your Honor.

11 JUDGE McDADE: Judge Wardwell? Judge
12 Lam? I want to thank counsel for the presentations
13 you've made both during the hearing and the rather
14 voluminous written presentations you made prior to
15 the hearing. They've been very helpful. It's been
16 of great assistance to the Board. And also I would
17 ask that you convey to your witnesses our
18 appreciation for their preparation in coming in here
19 and being ready to answer our questions and also for
20 their candor and cooperativeness in answering the
21 questions that we had of them. That being the case,
22 there being nothing further, this hearing is
23 concluded. Thank you.

24 (Whereupon, at 2:50 p.m., the hearing
25 was concluded.)

CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding: American Centrifuge Plant

Docket Number: 70-7004-ML

Location: Rockville, Maryland

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and, thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



Toby Walter
Official Reporter
Neal R. Gross & Co., Inc.