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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PROPOSED NEW 35 ILL. ADM.)
CODE 225 CONTROL OF)
EMISSIONS FROM LARGE) R06-25
COMBUSTION SOURCES) (Rulemaking - Air)
(MERCURY))

HEARING DAY SEVEN

Proceedings held on June 20, 2006, at 9:05 a.m., at the Illinois Pollution Control Board, 1021 North Grand Avenue East, Springfield, Illinois, before Marie E. Tipsord, Hearing Officer.

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Chairman G. Tanner Girard
Board Member Andrea S. Moore

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Anand Rao, Senior Environmental Scientist
Timothy Fox
Erin Conley
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PROCEEDINGS

(June 20, 2006; 9:05 a.m.)

HEARING OFFICER TIPSORD: Good morning.

Just a quick reminder that your panel today is to my immediate left, Dr. G. Tanner Girard; to my immediate right, Andrea Moore, are the presiding board members. To Ms. Moore's right is Tim Fox, her attorney assistant. From our technical unit, Anand Rao is here. He's running a little behind schedule this morning. Connie Newman for any press questions and Erin Conley's with us, and I believe John Knittle is here, Tom Johnson's assistant, is with us today.

The first item before we get back into the questions, I had asked that you give me overnight to consider whether or not questions 71 through 78 were relevant to this proceeding. I heard argument from the Agency and argument from several people representing utilities and was cited cases, and I thank Mr. Forcade for e-mailing us the cases he was discussing. I think most of you got that e-mail as well. And I want to thank Tim Fox for running back and having the Supreme Court case to hand me when I walked back after the close of hearing yesterday.

In reviewing those cases and in keeping in mind

1 that this is a rulemaking and that we do -- the Board
2 does and is aware that we have other rulemaking
3 proceedings pending, I'm going to allow the Agency to
4 answer these questions 71 through 78. However, I want to
5 emphasize that we are not going to go down the path of
6 what's CAIR and what's in CAIR and what CAIR is all
7 about. CAIR has been filed with the Board. We know
8 what's in it. We know what it's about. And please keep
9 your follow-up questions to the relevance of CAIR to this
10 rule, if you would be so kind.

11 So with that, I would remind Mr. Romaine,
12 Mr. Ross and Mr. Kaleel, you're still under oath. And
13 does the Agency have anything this morning?

14 MR. KIM: Did you want to try and keep
15 numerical order or would you like us to answer the
16 CAIR-related questions first and then finish up with the
17 remainder of the Ameren general questions? Because I
18 believe the CAIR questions --

19 HEARING OFFICER TIPSORD: Let's finish the
20 rest of the general questions --

21 MR. KIM: Sure.

22 HEARING OFFICER TIPSORD: -- because I think
23 we only have about five or six of those to go.

24 MR. KIM: Sure.

1 HEARING OFFICER TIPSORD: And then we'll go
2 back to the questions about CAIR.

3 MR. KIM: That's fine. Thank you.

4 HEARING OFFICER TIPSORD: So I believe we're
5 on question 89.

6 MR. KIM: Jim Ross for the Agency will
7 continue to answer.

8 MR. ROSS: And I did want to make a point of
9 clarification. Yesterday, regarding some of the fish and
10 wildlife data, there was a table referenced, and I had
11 indicated that to the best of my recollection that
12 Rebecca Stanfield had sent me an e-mail that contained
13 that table, and I went back and checked my e-mails. I
14 believe it actually came from Faith Bugel and not Rebecca
15 Stanfield, so I wanted to make that clarification for the
16 record. But I was able to obtain the e-mail and the
17 information that was discussed about the fishing
18 industry, the table, and a supporting document that was
19 provided, and we will be providing all that. We are
20 doing as the Board directed us to do, going back and
21 checking the different sections and references, and at
22 that time I believe we'll submit all that as part of that
23 effort.

24 HEARING OFFICER TIPSORD: Thank you.

1 Mr. Bonebrake?

2 MR. BONEBRAKE: Mr. Ross, for clarification,
3 you mentioned a supporting document. Could you just
4 advise us of what that supporting document is?

5 MR. ROSS: Yes. I provided it to our legal
6 staff. I'm not sure if anyone here has that. It was
7 given to -- Do you guys have that e-mail, the supporting
8 document that was with the e-mail? If not at this time,
9 we can certainly provide it.

10 MR. KIM: It's in here somewhere.

11 MR. BONEBRAKE: The e-mail and the
12 supporting document, it's the intention of the Agency to
13 make both of those available for the record?

14 MR. ROSS: Yes, it is.

15 MR. BONEBRAKE: Then so we're clear, the
16 table you're talking about is Table 10.1 at page 190 of
17 the Technical Support Document?

18 MR. ROSS: Yes, that is correct. We can
19 hand it out now.

20 MR. KIM: Okay.

21 HEARING OFFICER TIPSORD: Okay.

22 MR. ROSS: As I look through my notes here,
23 we may need to clarify again that the e-mail actually has
24 Faith Bugel's name on it, but I believe it actually came

1 from a separate person that Faith had contacted.

2 HEARING OFFICER TIPSORD: All right. The
3 e-mail is not attached to this.

4 MR. ROSS: Yeah, I noticed that.

5 HEARING OFFICER TIPSORD: And can I assume
6 that this is from the National Wildlife Federation
7 magazine, newsletter, the article?

8 MR. ROSS: I'm not sure.

9 HEARING OFFICER TIPSORD: Okay.
10 Mr. Bonebrake?

11 MR. BONEBRAKE: Mr. Ross, can you
12 describe -- I guess we've not yet identified this by
13 number, but we've been provided a three-page document.
14 Can you describe for us what this document contains? Oh,
15 it's -- I guess it's front and back.

16 MS. BASSI: It's -- Yeah, it's six pages.

17 MR. KIM: Can I take a moment?

18 HEARING OFFICER TIPSORD: Sure. There's
19 source notes after, like, point one and then in point
20 one. We're going to mark this as Exhibit No. 38. If
21 there's no objection, we'll enter that. Mr. Forcade?

22 MR. FORCADE: Madam Hearing Officer, I know
23 this is a three-page document, the third page of which
24 appears to be some portion of a publication from the

1 National Wildlife Federation. This one-page document
2 from the National Wildlife Federation has one, two,
3 three, four, five separate issues that have not been
4 raised before this hearing about the impacts on fish,
5 bird species, etc., for which there's no testimony. We
6 have no one we can cross-examine on the content of this,
7 so to the extent this would be considered as factual
8 information in this record, I'm afraid I have to object
9 unless we have an opportunity to cross-examine the people
10 that were responsible for it.

11 HEARING OFFICER TIPSORD: I -- Your
12 objection is noted, but this is relevant and, you know,
13 this is a rulemaking proceeding and the Board can take it
14 for what it is. It's an exhibit in the rulemaking
15 without supporting testimony.

16 MR. FORCADE: Right, and I had to make the
17 objection.

18 HEARING OFFICER TIPSORD: And I understand
19 that completely. We are going to mark this as Exhibit
20 No. 38.

21 MR. ZABEL: Madam Hearing Officer?

22 HEARING OFFICER TIPSORD: Yeah, just --

23 MR. ZABEL: Just so the record's clear, I
24 join in Mr. Forcade's objection but would note that it's

1 a two-sided document from the Wildlife Federation with
2 more of what he objected to on the back.

3 MR. FORCADE: Sorry.

4 HEARING OFFICER TIPSORD: Okay. That's --
5 Like I said, we'll -- we will admit that -- this, as it
6 is a rulemaking, and your objections are noted for the
7 record.

8 Moving right along, then, can we begin with
9 question number 89? Mr. Harrington?

10 MR. HARRINGTON: I'm -- Is this on?

11 HEARING OFFICER TIPSORD: Yes, I hope so.

12 MR. HARRINGTON: If it isn't, if you can't
13 hear me, please let me know. Exactly who did this
14 document -- Exactly where did Exhibit 38 come from?

15 MR. ROSS: It came from -- well, if you want
16 me to go back to where it originated, after one of the
17 stakeholder meetings, we met with several representatives
18 of the environmental groups where we discussed many
19 issues pertinent to the rule, and one of the issues that
20 was raised was the economic -- potential economic impacts
21 that the proposed mercury rule would have on the fishing
22 industry, and during those discussions we asked that we
23 be provided further information on those impacts, and as
24 a result of those discussions, this information was sent

1 to us. Now, I have a -- I believe a -- one of the
2 representatives from the environmental community that was
3 at the meeting was -- well, I believe Rebecca Stanfield
4 was there, which was why my memory was somewhat foggy
5 there. Faith Bugel was there. Jack Darin was there.
6 There were some other parties there, and this topic was
7 discussed and they agreed to provide us with further
8 information on that, and as a result of those
9 discussions, an e-mail followed from Jean Flemma, who is
10 with Prairie Rivers, and this document -- what we
11 provided was contained in that e-mail.

12 MR. HARRINGTON: Was there anything else in
13 the e-mail?

14 MR. ROSS: No. Well, this document and the
15 e-mail itself, which I believe we can copy and provide.
16 It was separated from this, but we can provide it.

17 HEARING OFFICER TIPSORD: Mr. Harrington?

18 MR. HARRINGTON: I have a couple of
19 follow-up questions from yesterday. Could I ask those?
20 Would this be the appropriate time to ask those?

21 HEARING OFFICER TIPSORD: Absolutely.

22 MR. HARRINGTON: One question that --
23 Question 53 in our set of general questions, there's been
24 some discussion or debate as to whether that question's

1 actually been answered, so I'd like to go back to it and
2 ask if you would read it and either answer it or answer
3 it again since we haven't been able to conclude one way
4 or another from our notes that it was answered.

5 MR. ROSS: Yeah, I indicated yesterday that
6 I didn't believe it was answered, but question 53, "Has
7 Illinois EPA considered adopting the proposed rule for
8 Illinois and not incorporating it into the federally
9 enforceable Title V permit program or otherwise making it
10 federally enforceable?" And, no, we have not considered
11 this. We need to satisfy CAMR, and this is our approach.
12 We have to either adopt the federal CAMR or a rule that
13 meets the budget set forth in CAMR, and we have chosen
14 this straightforward approach.

15 HEARING OFFICER TIPSORD: Just for the
16 record, I think some of the confusion may be that Sheldon
17 Zabel actually asked that question as a follow-up to some
18 other question, so I don't think it was actually in order
19 of Ameren's questions but it was a question that came
20 earlier from Sheldon Zabel, so that may be some of the
21 confusion.

22 MR. HARRINGTON: Just briefly, the
23 suggestion of adopting this as a separate Illinois rule
24 which is not federally enforceable and adopting CAMR was

1 made during public hearings several times, was it not?

2 MR. ROSS: I believe it was discussed, and I
3 think our position was that that essentially would result
4 in two rules.

5 HEARING OFFICER TIPSORD: And if I may, when
6 you say public hearings, you're referring to the
7 stakeholder meetings, correct?

8 MR. ROSS: Correct.

9 MR. HARRINGTON: The public meetings.

10 MR. ROSS: Yes.

11 HEARING OFFICER TIPSORD: Thank you.

12 MR. ROSS: And we looked at that, and
13 obviously implementing two rules is more difficult than
14 one, and there is concern on the resources that would be
15 needed, implementation issues, so we have decided not to
16 take that approach.

17 MR. HARRINGTON: So it was considered but
18 rejected.

19 MR. ROSS: Yes.

20 MR. HARRINGTON: Thank you.

21 HEARING OFFICER TIPSORD: Identify yourself
22 for the record, please.

23 MR. INGRAM: Jim Ingram with Dynegy. I
24 wanted --

1 HEARING OFFICER TIPSORD: We can't hear you.

2 MS. BASSI: I have one on his questions. I
3 think he's on a different one.

4 HEARING OFFICER TIPSORD: I'm sorry?

5 MS. BASSI: I have a follow-up to
6 Mr. Harrington, if I may. Is that what Mr. --

7 MR. ZABEL: No, this is something different.

8 HEARING OFFICER TIPSORD: All right. Then
9 we'll start with Ms. Bassi and then we'll come back.

10 MS. BASSI: I'm Kathleen Bassi with Schiff
11 Hardin.

12 MR. KIM: Could I have just a moment? I'm
13 sorry. Just for housekeeping.

14 HEARING OFFICER TIPSORD: Do you still need
15 a moment or are we ready?

16 MR. KIM: No. I'm sorry. We're ready. I'm
17 sorry.

18 HEARING OFFICER TIPSORD: Ms. Bassi?

19 MS. BASSI: I'm sorry. Mr. Ross, is it not
20 true that there are other instances in Illinois' rules
21 where there is more than one rule addressing a single
22 pollutant; for example, NOx?

23 MR. ROSS: That is correct.

24 MS. BASSI: Thank you.

1 MR. INGRAM: Jim Ingram with Dynegy.

2 HEARING OFFICER TIPSORD: Could you spell
3 your last name, please?

4 MR. INGRAM: I-N-G-R-A-M.

5 HEARING OFFICER TIPSORD: Thank you.

6 MR. INGRAM: I wanted to ask a few follow-up
7 questions of Mr. Romaine concerning some testimony that
8 he gave yesterday --

9 HEARING OFFICER TIPSORD: Okay. You need to
10 speak directly into the microphone, not to the side.
11 Directly into it. It's very --

12 MR. INGRAM: -- concerning the --

13 HEARING OFFICER TIPSORD: Thank you.

14 MR. INGRAM: -- the Vermilion mercury
15 project. Mr. Romaine, yesterday you responded to a few
16 questions that Mr. Zabel asked regarding the Vermilion
17 Power Station mercury control project. Do you recall
18 that testimony?

19 MR. ROMAINE: Yes, I do.

20 MR. INGRAM: The Vermilion mercury project
21 is one of the environmental mitigation projects that
22 Dynegy agreed to implement under the consent decree,
23 isn't it?

24 MR. ROMAINE: That is correct.

1 MR. INGRAM: And that mercury project was
2 described in Appendix A to the consent decree; is that
3 correct?

4 MR. ROMAINE: I don't recall the specific
5 appendix. It's one of the appendices to the consent
6 decree.

7 MR. INGRAM: In your testimony you referred
8 to a 90 percent requirement. Do you remember that?

9 MR. ROMAINE: I certainly do.

10 MR. INGRAM: And in referring to a 90
11 percent requirement, it's not your testimony that there's
12 an enforceable requirement under the consent decree that
13 that mercury project achieve 90 percent reduction in
14 mercury, is it?

15 MR. ROMAINE: No, it is not. It is my
16 testimony that that system is to be designed by Dynegy to
17 achieve 90 percent removal efficiency to qualify as a
18 supplemental environmental project.

19 MR. INGRAM: It's to be designed with a goal
20 of achieving 90 percent; is that correct?

21 MR. ROMAINE: That is correct.

22 MR. INGRAM: And that project has been
23 issued a construction permit; is that correct?

24 HEARING OFFICER TIPSORD: That's the Exhibit

1 No. 37? I think we can move on to the next question.

2 MR. ROMAINE: Yes, it has.

3 MR. INGRAM: And that construction permit
4 also does not have an enforceable requirement to achieve
5 a 90 percent reduction in mercury emissions, does it?

6 MR. ROMAINE: No, it does not. We currently
7 do not have a regulation that requires that to be
8 achieved.

9 MR. INGRAM: Thank you.

10 MR. ZABEL: Just one follow-up to
11 Mr. Ingram's exchange.

12 HEARING OFFICER TIPSORD: Okay. I'm a
13 little confused. I'm not sure of the relevance.

14 MR. ZABEL: The point of it is to make clear
15 to the record that there is no agreement by Dynegy that
16 90 percent is in fact achievable or that it has a legal
17 commitment to attain 90 percent. It seems to us that's
18 an important fact in this record. The utilities --

19 HEARING OFFICER TIPSORD: All right.
20 Let's -- Ask your question, Mr. Zabel, please.

21 MR. ZABEL: Mr. Romaine, if you understood
22 the decree to require 90 percent, would that be an
23 appropriate condition to put into the construction
24 permit?

1 MR. ROMAINE: Not necessarily.

2 MR. ZABEL: Why not?

3 MR. ROMAINE: It depends how the decree is
4 crafted and --

5 MR. KIM: Can I -- We're getting -- We're
6 now talking about a consent decree in an enforcement case
7 in the context of a rulemaking. I don't see the
8 relevance of this at all and I --

9 HEARING OFFICER TIPSORD: I -- But I think
10 Mr. Zabel just answered that. Let's finish this question
11 and then we're going to move on.

12 MR. ZABEL: Okay. My last question is to
13 make clear on the record, if it were legally enforceable
14 in your view, would you have put it into the permit?

15 MR. ROMAINE: Yes.

16 MR. ZABEL: Thank you.

17 HEARING OFFICER TIPSORD: Mr. Harrington,
18 did you have additional follow-up?

19 MR. HARRINGTON: Yes. I believe the --
20 yesterday the response to a question whether the Agency
21 had considered the combined economic impact of the
22 mercury rule and the -- either the federal or the
23 proposed state CAIR rule, there was testimony that there
24 was an economic study or modeling done on each of them

1 independently; is that correct?

2 MR. ROSS: That's correct.

3 MR. HARRINGTON: Just for the -- I want to
4 clarify, there was no -- was there any study done that
5 looked at the combined effect of the two rules?

6 MR. ROSS: There was no IPM modeling done
7 that looked at the combined effect. We did independent
8 modeling for each rule. So when you look at the results
9 of the modeling, the impacts, when you look at -- you can
10 get individual impacts and then you can look at them
11 together and make a determination as to the economic
12 impact of the combined rule, and we have asked our
13 economic expert to look at that, so he would probably be
14 the appropriate person to address further questions on
15 that too.

16 MR. HARRINGTON: Thank you very much. We
17 can return to the questions.

18 HEARING OFFICER TIPSORD: All right.

19 Question number 89.

20 MR. ROSS: Question 89, "Is it Illinois
21 EPA's intention or contemplation that its Illinois
22 mercury rule would require or encourage switching to
23 Illinois coal at any facilities in Illinois?" And not
24 exactly. This was not our intention. The principle by

1 which we crafted the rule was to make the rule fuel
2 neutral, or more precisely coal neutral, and that it does
3 not establish different standards for different coal
4 types but instead treats sources identically regardless
5 of the coal being fired.

6 HEARING OFFICER TIPSORD: Mr. Harrington?

7 MR. HARRINGTON: You are aware, are you not,
8 that the federal CAMR rule is based on a principle that
9 removal of mercury from different types of coal involves
10 different technical challenges and the removal from
11 Powder River Basin or western sub-bituminous coal is more
12 difficult?

13 MR. ROSS: Yes, we are aware of that, and we
14 believe that is a flaw in the mercury rule, as we have
15 previously stated.

16 MR. HARRINGTON: Do you disagree with the
17 technical conclusion that removal of mercury from western
18 coal is more difficult to the same level as removal of
19 mercury to co-benefit with Illinois coal?

20 MR. ROSS: That's correct, and that's
21 something that our expert will speak to directly.

22 MR. HARRINGTON: Thank you.

23 MR. ROSS: 90, "To the extent that Illinois
24 appears to base its proposal in part on encouraging the

1 use of Illinois coal and the potential availability of
2 coal benefits from the use of wet flue gas
3 desulfurization and selective catalytic reduction on
4 bituminous-fired power plants, has it made any study of
5 the availability of Illinois coal and transportation
6 networks to deliver that coal to Illinois power plants
7 particularly within the time required by these rules?"
8 And, "If so, please describe."

9 And no, we have not attempted to, again, directly
10 promote the use of Illinois coal as the question implies
11 but instead have sought to eliminate any unwarranted
12 incentives for the use of sub-bituminous coal in order to
13 create a level playing field, and we have not conducted a
14 study on the availability of Illinois coal and
15 transportation networks. It does bear noting that as
16 recently as 1997, Illinois coal-fired power plants used
17 around fourteen million tons per year of Illinois coal,
18 and as of 2004, only seven million tons of Illinois coal
19 were utilized, or half as much as was burned seven years
20 earlier, so essentially Illinois coal use was cut in half
21 over that seven-year period, and although we do not know
22 how much of the infrastructure remains from 1997 when
23 Illinois coal use was double that of 2004.

24 HEARING OFFICER TIPSORD: Mr. Harrington?

1 MR. HARRINGTON: This is not a follow-up,
2 just correcting a typographical error of my question. It
3 says "potential availability of coal benefits" and it
4 should have been "co-benefits," so for the record. Thank
5 you.

6 MR. ROSS: 91, "During the public meetings
7 on the proposed Illinois mercury rule, Illinois EPA
8 discussed a technology out which would have provided a
9 significant extension of time to come into compliance
10 with the requirements of the Illinois rule if a facility
11 installed the halogenated powdered activated carbon
12 injection prior to the ESPs and was unable to achieve 90
13 percent reduction by the spring of 2009, is that not
14 correct?" And yes, and we have since amended the rule to
15 include this temporary technology-based standard, or the
16 TTBS, as it's often referred to, and we believe this
17 provision adds considerable flexibility while maintaining
18 the intent of the rule.

19 HEARING OFFICER TIPSORD: Mr. Harrington?

20 MR. HARRINGTON: I know we will get -- I
21 trust we will get to a more detailed consideration of it,
22 but just so the record's clear, the proposal that is
23 before the Board now is limited to 25 percent of the
24 electrical capacity of any of the companies; is that

1 correct?

2 MR. ROSS: That is correct.

3 MR. HARRINGTON: So it's not available for
4 the other 75 percent.

5 MR. ROSS: That is correct.

6 MR. HARRINGTON: Thank you.

7 MR. ROSS: 92 says, "Is Illinois still
8 willing to consider such a proposal?" Obviously, we have
9 amended the rule to include it.

10 93, "Would Illinois EPA agree to a proposal that
11 facilities willing to commit to more elaborate controls
12 such as halogenated powdered activated carbon injection
13 after the ESPs with baghouses could have a later
14 compliance date?" This option for an extension under
15 this compliance scenario is currently not available in
16 the rule, and we believe that a source should have
17 adequate time to install halogenated ACI and a baghouse
18 under the current time frames.

19 HEARING OFFICER TIPSORD: Mr. Ross, I
20 actually have a follow-up. We talked yesterday about
21 variances and adjusted standards. Would this be one area
22 that you would expect that there would be availability of
23 the variance and adjusted standard procedures?

24 MR. ROSS: For --

1 HEARING OFFICER TIPSORD: For example, to
2 give a later compliance date?

3 MR. ROSS: Well, we believe that all units
4 will be able to comply with the rule by some strategy or
5 another, so --

6 HEARING OFFICER TIPSORD: Right, but the --
7 but by definition, an adjusted standard or a variance is
8 for circumstances that we don't contemplate as a part of
9 this rulemaking.

10 MR. ROSS: To that extent, then certainly, I
11 believe the adjusted standard or variance would be
12 available.

13 HEARING OFFICER TIPSORD: Thank you.

14 MR. ROMAINE: I would suggest it's probably
15 more appropriate for a variance than adjusted standard.

16 HEARING OFFICER TIPSORD: Mr. Zabel?

17 MR. ZABEL: Is it the Agency's position,
18 then, that no unit in the state would need a variance or
19 adjusted standard under the current rule?

20 MR. ROSS: I believe that is our current
21 determination, yes.

22 MR. ZABEL: So while they're available, the
23 Agency would oppose them.

24 MR. ROSS: Pardon?

1 MR. ZABEL: I assume in any such variance or
2 adjusted standard proceeding the Agency would take an
3 adverse position; is that correct?

4 MR. ROSS: That's not correct, and we
5 addressed that yesterday. We would have to review each
6 proposal on its merits and make a determination at that
7 time before we made a recommendation to the Board.

8 MR. ZABEL: Well, your determination as of
9 today is that no unit would need one; isn't that correct?

10 MR. ROSS: That's what we believe to be the
11 case, that is correct.

12 MR. ZABEL: Thank you.

13 HEARING OFFICER TIPSORD: Mr. Forcade?

14 MR. FORCADE: Mr. Ross, since you're now
15 raising the issue of the TTBS, I'd like to direct your
16 attention to 225.234, I guess it's (b)(3), where it talks
17 about the eligibility. If a unit such as Kincaid had two
18 equal units and no more and was restricted by this
19 section to 25 percent of the total generating capacity,
20 how would it qualify under this rule?

21 MR. ROSS: I don't believe those units could
22 qualify for the TTBS.

23 MR. FORCADE: So effectively, the TTBS would
24 be meaningless to Kincaid Generation, LLC.

1 MR. ROSS: I believe that option for
2 compliance is not available to those units, that is
3 correct.

4 HEARING OFFICER TIPSORD: We're ready for
5 question 94.

6 MR. ROSS: "Would Illinois EPA consider
7 later compliance dates if such controls were to be phased
8 in across a company-wide or multi-company-wide system?"
9 The Agency would need considerably more information
10 before it could reasonably consider such a proposal. Our
11 current belief is that such controls can be installed
12 within the time frame specified in the rule. In
13 addition, there are other parties involved in any policy
14 call regarding a revision to the rule, specifically the
15 Governor's office, which we would need to consult with
16 before we would make a final recommendation to the Board
17 to revise the rule in any manner.

18 95, "Since Illinois EPA is convinced that
19 injection of halogenated powdered activated carbon prior
20 to the baghouses would achieve a 90 percent limit, would
21 it agree to a proposal requiring such installation in
22 Illinois companies allowing them to operate or optimize
23 such a system subject to whatever limitations it
24 achieves?" In essence, we have agreed to something

1 similar with the incorporation of the temporary
2 technology-based standard into the proposed rule,
3 although I would like to point out that I believe that
4 statement is somewhat inaccurate, and instead of -- it is
5 more likely referring to halogenated powdered activated
6 carbon prior to a cold-side ESP rather than a baghouse.
7 That is what our determination has been. So although we
8 certainly do believe the utilization of halogenated
9 activated carbon prior to a baghouse will achieve 90
10 percent control, our position is that injection of
11 halogenated ACI prior to an existing ESP should achieve
12 90 percent control on such units that are burning
13 sub-bituminous coal.

14 HEARING OFFICER TIPSORD: Mr. Forcade?

15 MR. FORCADE: Would you say, Mr. Ross,
16 there's a substantial difference in cost associated with
17 baghouse and ESP?

18 HEARING OFFICER TIPSORD: Excuse me. Did
19 you get all of that? Okay. I just wanted to check. You
20 faded away a little bit. Go ahead.

21 MR. ROSS: Not necessarily. I believe that
22 the cost of installing a new ESP and installing a new
23 baghouse is -- can be nearly equivalent, but again, this
24 is outside my area of expertise, and we will have experts

1 on this testify to the cost and timing of installation of
2 all these controls.

3 HEARING OFFICER TIPSORD: Ms. Bassi?

4 MS. BASSI: I'm sorry, Mr. Ross. Did you
5 say -- Do I interpret this correctly, that you said that
6 the Agency does believe that halogenated activated carbon
7 injection prior to a cold-side ESP will result in 90
8 percent reduction and that the TTBS is your response to
9 the question of -- question 95?

10 MR. ROSS: We believe that configuration
11 will allow compliance with the rule, and we went over the
12 flexibility that the rule provides in detail yesterday.

13 MS. BASSI: Okay. If the Agency believes
14 that this configuration allows compliance with the rule,
15 then why would your answer to the question
16 notwithstanding the TTBS not be yes?

17 MR. ROSS: Well, I believe that the question
18 was -- at least when I read it was worded somewhat
19 inaccurately in that they were referring to halogenated
20 ACI prior to a baghouse.

21 MS. BASSI: Okay. But --

22 MR. ROSS: So it was implying that our
23 position was that that configuration would allow
24 compliance with the rule, which is accurate --

1 MS. BASSI: Yeah.

2 MR. ROSS: -- but that is -- I don't think
3 there's any question that that would achieve compliance
4 with the rule, so I --

5 MS. BASSI: But --

6 MR. ROSS: I'm sorry. Go ahead.

7 MS. BASSI: I'm sorry. But with the
8 revision to the question that this is halogenated ACI
9 prior to a cold-side ESP yielding 90 percent reduction,
10 why --

11 MR. ROSS: I think I see where you're going.

12 We --

13 MS. BASSI: Yeah.

14 MR. ROSS: The answer wasn't directly yes
15 because it says "would achieve a 90 percent limit," and
16 our position, as we described yesterday, is you don't
17 necessarily have to meet a 90 percent limit to comply
18 with the rule. There's flexibility built into the rule,
19 and that -- we discussed that at length yesterday.

20 MS. BASSI: Okay. Let me pose it a
21 different way.

22 MR. ROSS: Okay.

23 MS. BASSI: Forget this question.

24 MR. ROSS: Okay.

1 MS. BASSI: All right. If halogenated ACI
2 prior to a cold-side ESP -- if it's the Agency's position
3 that that configuration will result in a 90 percent
4 reduction of mercury from sub-bituminous coal, would the
5 Agency be willing to -- or would the Agency be willing to
6 propose a rule or amend the rule so that whatever
7 limitation this particular configuration achieves,
8 operated correctly, optimally, all that, and let that be
9 your rule rather than having to include a TTBS, rather
10 than doing anything more?

11 MR. ROSS: Well, you --

12 MS. BASSI: In other words --

13 MR. ROSS: -- you worded your question again
14 saying a 90 percent reduction, and --

15 MS. BASSI: Yes.

16 MR. ROSS: -- obviously I've stated that
17 that's not necessary to achieve compliance with the rule.

18 MS. BASSI: I know, but that's the question.

19 MR. ROSS: There's flexibility. But I get
20 the gist of your question, and that is not how the rule
21 is currently structured --

22 MS. BASSI: I know.

23 MR. ROSS: -- and we don't believe that
24 that's appropriate.

1 MS. BASSI: Why?

2 MR. ROSS: Because we believe that the rule
3 allows significant flexibility that will allow everyone
4 to achieve compliance in its current form.

5 MS. BASSI: But this is the ultimate
6 flexibility, and if you --

7 MR. ROSS: That's the ultimate flexibility,
8 but it would also result in more emissions.

9 MS. BASSI: So then you --

10 MR. ROSS: You could have several units not
11 achieving compliance with the rule -- well, unless you've
12 structured the rule where they achieve compliance, but
13 they would not be achieving the level of reduction that
14 we -- that the current rule requires.

15 MS. BASSI: Well, if --

16 MR. ROSS: There would be more emissions
17 occurring in the rule you're posing --

18 MS. BASSI: But I thought --

19 MR. ROSS: -- under that framework.

20 MS. BASSI: I thought you said that --

21 MR. ROSS: And that would not be consistent
22 with our principles and with the Governor's 90 percent
23 reduction.

24 MS. BASSI: But I thought you said that the

1 Agency's position is that halogenated ACI prior to a
2 cold-side ESP -- and those -- that's the only
3 configuration I'm talking about -- results in a 90
4 percent removal, and if that's the case, then it seems
5 that it would be consistent with your principles for
6 those units. Is that correct? That's a question.

7 MR. ROSS: Well, you said 90 percent
8 reduction again, and again, it's -- we believe that that
9 configuration would be able to achieve compliance with
10 the rule, but under the rule, the framework that you're
11 posing here, more emissions would result.

12 MS. BASSI: Why is that?

13 MR. ROSS: Because you're saying that they
14 put on this control configuration but they're not
15 achieving compliance with the current rule. Under the
16 current rule, there's a certain level of emission
17 reductions required.

18 MS. BASSI: 90 percent, isn't it?

19 MR. ROSS: 90 percent or the output-based
20 standard or certain units can enter the TTBS and not get
21 90 percent, so you have to -- when you determine the
22 emission reductions that this rule results in, you have
23 to take all these factors into consideration and you come
24 up with an estimate of the reduction. Under your

1 scenario, that estimate would be higher. You could have
2 every single unit in the state with -- burning
3 sub-bituminous coal with this configuration on not
4 achieving 90 percent or 0.008. You essentially could
5 have every single unit with that configuration in the
6 TTBS.

7 MS. BASSI: Well, Mr. Ross --

8 MR. ROSS: It wouldn't be limited to 25
9 percent. You're saying 100 percent.

10 MS. BASSI: Mr. Ross, then are you for the
11 Agency retracting your position that halogenated ACI
12 prior to a cold-side ESP will result in a 90 percent
13 reduction in mercury in a sub-bituminous unit?

14 MR. ROSS: No, I don't believe retracting.
15 I'm stating our position that that configuration will
16 allow compliance with the rule.

17 MR. ROMAINE: I think another part of our
18 position is that effective use of control technology for
19 mercury will ultimately be best achieved through a
20 position of numerical standards rather than qualitative
21 standards, so --

22 MS. BASSI: Yeah, but that's not -- is that
23 what the rule says?

24 MR. ROMAINE: The rule requires that

1 facilities ultimately achieve 90 percent removal or
2 comply with an output-based standard. The
3 technology-based standard is simply a temporary standard
4 allowing time until unusual facilities can take the
5 necessary measures to comply with numerical standards.

6 HEARING OFFICER TIPSORD: Mr. Forcade?

7 MR. FORCADE: Mr. Ross, for units such as
8 Kincaid which are not eligible for the TTBS, is it the
9 Agency's position that activated carbon injection or
10 halogenated activated carbon injection with a cold-side
11 ESP will achieve 90 percent reduction or 0.008 pounds per
12 gigawatt hour?

13 MR. ROSS: It's our position that those
14 units will be able to comply with the rule, and that is
15 something that I believe our experts will be discussing
16 in detail.

17 MR. FORCADE: That's not --

18 MR. ROSS: I mean, we go -- our expert
19 has -- in his portion of the Technical Support Document
20 and his testimony, he has stated a scenario where each
21 unit in the state can comply with the rule, and that's
22 what you're asking, is if they do this, can they comply
23 with the rule, and that's something I think will be taken
24 most likely unit by unit to some degree, and I think our

1 experts are the best ones to testify to that. We'll get
2 the doctors back up here rather than Mr. Ross.

3 MR. FORCADE: I'll be happy to defer the
4 question to the expert, but I keep asking about 90
5 percent, as does Kathleen, and 0.008, and you keep saying
6 comply with the rule. Those are fundamentally two
7 different issues. I'm specifically asking -- and I'll
8 defer the question if appropriate -- I'm specifically
9 asking whether for a facility not subject to the TTBS
10 that is operating a cold-side ESP with either activated
11 carbon or halogenated activated carbon, will it achieve
12 90 percent reduction or 0.008 pounds per thing? I'm not
13 asking about compliance with the rule. I'm asking about
14 two numerical limitations. And I'll be happy to defer if
15 it's appropriate.

16 MR. ROSS: I think it's appropriate to defer
17 that because that will be discussed in detail by our
18 experts.

19 HEARING OFFICER TIPSORD: Mr. Zabel?

20 MR. ZABEL: Why were hot-side precipitators
21 excluded unless they have a fabric filter from the TTBS?

22 MR. ROSS: That's something that we can get
23 into when we discuss the TTBS, but that was a policy
24 call. That's something we've taken into consideration in

1 our cost estimates. We did identify that certain units
2 would need to install fabric filters. Hot-side ESPs --
3 and our expert will talk about this to some degree -- the
4 level of mercury reduction that occurs with those units,
5 it's I think he estimates somewhere in between 50 and 70
6 percent, so it is well below the standards, the numerical
7 standards in the rule, so they would have much more
8 difficulty meeting the numerical standards or complying
9 with the rule unless they did something more.

10 MR. ZABEL: And if that number you just
11 gave, 50 to 70 percent, they wouldn't be eligible for the
12 averaging under either Phase I or Phase II, would they?

13 MR. ROSS: No, they would not. I believe
14 our current position is that those units would in all
15 likelihood need to install fabric filters, although there
16 are some options available to them that our expert will
17 be discussing.

18 MR. ZABEL: It occurs to me, Mr. Ross, that
19 in the Technical Support Document there seems to be a
20 shift of position. Page 197 of the Technical Support
21 Document states -- and I quote -- "Illinois" -- "One
22 potential application of the TTBS concept would be to
23 address the compliance of EGUs that are equipped with
24 hot-side ESPs." Why was there this what appears to me at

1 least to be a change of position?

2 MR. ROSS: Well, that was something we
3 addressed in the Technical Support Document, but you'll
4 note that we did not provide and in the TTBS there never
5 was a TTBS available to hot-side ESPs. It was something
6 that was discussed and decided against.

7 MR. ZABEL: And that's why I used the word
8 apparent, Mr. Ross.

9 MR. ROSS: Right.

10 MR. ZABEL: I know you didn't propose
11 anything in the original rule, but you seem to have
12 identified a particular type of unit that for which a
13 TTBS would be appropriate, and that's why I asked you,
14 why is there this apparent change of position?

15 MR. ROSS: It was discussed further and
16 there was a policy call made.

17 MR. ZABEL: On what basis?

18 MR. ROSS: That these units are well below
19 the numerical standards in the rule and that they needed
20 to do something more.

21 MR. ZABEL: That was the policy decision?

22 MR. ROSS: Yes.

23 MR. ROMAINE: I'd like to correct one point.
24 The provisions for averaging demonstrations would be

1 available for plants with hot-side -- with units with
2 hot-side ESPs. The determination of 75 percent control,
3 which is the eligibility requirement to participate in an
4 averaging demonstration, is made on a source-wide basis.
5 It doesn't apply to an individual unit. Accordingly, for
6 example, a facility like Midwest Generation that has four
7 units at its Will County station, only one of which is a
8 hot-side ESP, could conceivably still create an averaging
9 demonstration to cover the performance of the hot-side
10 ESP. Obviously that would only be a temporary means of
11 compliance, because averaging demonstrations are only
12 available through December 31, 2013.

13 MR. ZABEL: And if Mr. Ross' statement,
14 Mr. Romaine, that some of those would only achieve 50
15 percent, what would the other three units have to
16 achieve?

17 MR. ROMAINE: I'm trying to remember which
18 unit has the hot-side ESP at Will County. I don't think
19 it's the biggest; I don't think it's the smallest. It
20 really depends how the different utilization of the units
21 worked out.

22 MR. ZABEL: How would that work at Havana,
23 which has one coal-fired unit with a hot-side
24 precipitator?

1 MR. ROMAINE: I did not discuss Havana.
2 Obviously Havana is another exception because Havana is
3 also subject to the consent decree and is going to be
4 installing a baghouse.

5 MR. ZABEL: Coming back, then, to Will
6 County, without going through all the numbers of
7 generating capacity of each of the units, it would be --
8 the other three would have to be significantly above the
9 Agency's aggressive 90 percent standard; isn't that true?
10 Aggressive was in quotes. It was from Mr. Ross.

11 MR. ROMAINE: Which would have to be what?

12 MR. ZABEL: The other units of Will County
13 to compensate for the hot-side precipitator unit would
14 each have to achieve significantly more than 90 percent
15 to make the average, would they not?

16 MR. ROMAINE: No.

17 MR. ZABEL: Why not?

18 MR. ROMAINE: Because you're also involved
19 in system-wide averaging. You -- I'd say that the other
20 units at Will County would only have to make
21 significantly above 75 percent to be eligible, and then
22 it would be up to the system-wide performance to
23 determine what the averaging demonstration would show.

24 MR. ZABEL: And in Phase II?

1 MR. ROMAINE: Phase II, as I said, that
2 option is not available.

3 MR. ZABEL: Thank you.

4 HEARING OFFICER TIPSORD: Mr. Harrington,
5 you had a follow-up?

6 MR. HARRINGTON: This is an additional
7 question with follow-up on some comments that were made
8 earlier in the proceeding. We referred to stakeholder
9 meetings, or I think you called them at the time they
10 were public meetings, regularly scheduled for several
11 weeks in this room; is that correct?

12 MR. ROSS: That's correct.

13 MR. HARRINGTON: Were all the companies that
14 are represented here today also represented and in
15 attendance at virtually all those meetings?

16 MR. ROSS: I believe so, yes.

17 MR. HARRINGTON: Were all the issues that
18 have been raised in this series of questions or virtually
19 all the issues that were raised in this series of
20 questions raised in questions in writing to the Agency
21 during those proceedings?

22 MR. ROSS: I don't believe so, no. I would
23 have to go back and look at all the questions. I believe
24 there are some new issues raised.

1 MR. HARRINGTON: The issues of your
2 relationship with CAIR, potentially state enforceable
3 rules, questions as to whether baghouses would be
4 required, will the Agency consider that, these were
5 raised during those hearings.

6 MR. ROSS: These were raised. Those
7 specific ones I do recall.

8 MR. HARRINGTON: I will provide for the
9 Board, unless the Agency has a complete record, at least
10 the copies of those questions that we filed with the
11 Agency just so the Board is aware that there was an
12 active participation in the proceedings before the Agency
13 and discussion. I don't want to leave the impression
14 that nobody was there or nobody participated or was
15 attempting to deal with these issues at that time.

16 HEARING OFFICER TIPSORD: Well, I would note
17 that the record already includes these sign-in sheets, so
18 it's obvious that they were well attended.

19 MR. ROSS: And we do have a complete
20 compilation of all the questions that were asked.

21 MR. HARRINGTON: They're not in the record
22 as of this time, are they?

23 MR. ROSS: I don't believe so.

24 MR. HARRINGTON: You believe they are?

1 MR. ROSS: I don't believe. I'm not sure.

2 HEARING OFFICER TIPSORD: The Board would
3 appreciate that, Mr. Harrington.

4 MR. HARRINGTON: Okay. If the Agency has
5 them complete from all the companies and other parties,
6 then I think maybe it would be easier for the Agency to
7 submit them. I know I have mine, but I may have missed
8 some of the others.

9 HEARING OFFICER TIPSORD: Okay.

10 MR. HARRINGTON: Thank you.

11 HEARING OFFICER TIPSORD: Mr. Zabel?

12 MR. ZABEL: I guess I'm little confused.
13 Mr. Ross, in discussing Exhibit 38, you indicated
14 according to my notes that you met with several
15 representatives of environmental groups. Was that part
16 of the stakeholder meetings or were those separate
17 meetings?

18 MR. ROSS: Those -- That particular --
19 Several of these meetings occurred after the stakeholder
20 meetings where at the stakeholder meetings we offered to
21 meet with anyone at any time during normal work hours or
22 after.

23 MR. ZABEL: So these were separate meetings.

24 MR. ROSS: Yeah, the particular meeting I

1 referenced occurred immediately after the stakeholder
2 meeting.

3 MR. ZABEL: And who was in attendance
4 besides the Agency?

5 MR. ROSS: Besides the Agency?

6 MR. ROMAINE: I believe there were also
7 similar meetings that occurred with certain groups with
8 sources.

9 MR. ZABEL: That may be, Mr. Romaine. That
10 wasn't the question.

11 MR. ROSS: At that particular meeting, to
12 the best of my recollection, there were several
13 environmental groups present and our mercury cost and
14 control expert, Dr. Staudt. The environmental groups, I
15 think Sierra Club, Illinois PIRG, Illinois Environmental
16 Law & Policy Center personnel, and I believe that's it at
17 that particular meeting, to the best -- there may have
18 been more. I -- Best of my recollection.

19 MR. ZABEL: All I can ask for is your
20 recollection, Mr. Ross. Thank you.

21 HEARING OFFICER TIPSORD: Just to clarify,
22 Mr. Romaine, it's your testimony, though, that these --
23 that there were similar meetings with sources.

24 MR. ROMAINE: That there were also meetings

1 with sources, phone calls with certain sources.

2 HEARING OFFICER TIPSORD: Thank you.

3 MR. ROSS: Yes, we have had meetings with
4 sources as well.

5 HEARING OFFICER TIPSORD: All right. Are we
6 ready, then, to go back to question 71 and answer the
7 questions concerning CAIR and NOx, etc.? It might be
8 easier if Mr. Kaleel's going to address these if we can
9 move the microphone stand over just a pinch. That works.
10 That should do it. Question 71?

11 MR. KALEEL: Question 71, "Although Illinois
12 has not yet proposed its CAIR rule" -- actually, this
13 was -- this isn't a correct statement. We have now
14 proposed it, but I think the questions were offered
15 sooner than that.

16 HEARING OFFICER TIPSORD: And for the
17 record, that's R06-26.

18 MR. KALEEL: -- "did not the drafts that
19 were shared with industry provide for set-asides of 30
20 percent from what would have been the federally allowable
21 allocations rather than a 5 percent set-aside that might
22 be allowed under the federal rule?" The Illinois EPA
23 proposal that was submitted to the Board included a 5
24 percent new source set-aside as recommended by USEPA

1 guidance. The proposal also includes a 25 percent
2 set-aside for energy efficiency and renewable energy
3 projects, incentives for existing EGUs to install
4 pollution control equipment in Illinois, incentives for
5 new clean coal technology, incentives for completing all
6 of these types of projects early. USEPA guidance for EE
7 and RE set-asides suggests a 5 to 15 percent set-aside.
8 It is anticipated that a large majority of the 25 percent
9 set-aside proposed would be allocated to existing EGUs,
10 as they use different strategies to comply with the CAIR
11 requirements and the mercury regulation. These issues
12 will be discussed further during the hearings for the
13 recently submitted CAIR filing.

14 Question 72, "Would this not effectively impose
15 more stringent emission standards on each Illinois EGU
16 than would be required by the federal rule?" Our
17 response, this would not necessarily bring about more
18 stringent emission standards for Illinois EGUs. There
19 are a number of strategies for complying with the
20 proposed CAIR regulations that involve a number of
21 different set-aside options, many of which are available
22 to EGUs. In addition, in a trading program, a source may
23 purchase allowances from lower-emission plants in its
24 plea for -- purchase additional allowances on the market

1 in order to comply.

2 "When finally adopted" -- I'm sorry. This is
3 question 73. "When finally adopted, would this rule not
4 require significant additional controls on Illinois
5 facilities or purchases of significant allocations from
6 outside the state?" Again, not necessarily. Sources
7 could comply through energy efficiency, renewable energy,
8 pollution control or pollution prevention projects in
9 addition to purchasing allocations from other sources.

10 74, "Is not Illinois under an obligation to adopt
11 an attainment plan for fine particulate, or PM2.5, for the
12 Chicago and St. Louis metropolitan areas?" Yes, this is
13 true. We also have an obligation to adopt an attainment
14 plan for eight-hour ozone as well.

15 "Will not that plan likely require significant
16 additional reductions of nitrogen oxides and sulfur
17 dioxides on all coal-fired power plants in the state of
18 Illinois beyond those required by CAIR?" Our response,
19 it is unclear at this time what additional reductions may
20 be necessary in order to comply with PM2.5 compliance or
21 whether such reductions would be for SO2 or NOx or both.
22 It is true that the Agency has presented modeling results
23 performed in cooperation with the Lake Michigan Air
24 Directors Consortium at several of the public hearings

1 here in this room that indicated that the states in the
2 Lake Michigan basin have not been able to identify a
3 cost-effective strategy without further EGU control.

4 "Has not Illinois indicated an intent to apply
5 such limits state-wide as part of its attainment
6 strategy, at least with respect to the so-called NOx RACT
7 rulemakings?"

8 HEARING OFFICER TIPSORD: Excuse me. That's
9 question number 76.

10 MR. KALEEL: I'm sorry. With respect to the
11 NOx RACT rulemakings, we have had a public meeting, again
12 in this room. EGUs were invited to attend that meeting,
13 but the proposal that we shared with stakeholders at that
14 meeting did not have specific requirements for NOx RACT
15 for EGUs. It is possible that EGUs will be subject to
16 NOx RACT, though.

17 "Will not those attainment strategies require
18 emission reductions in the state of Illinois that cannot
19 be met by purchasing allocations from outside the state?"
20 That's number 77. Sorry.

21 HEARING OFFICER TIPSORD: Thank you.

22 MR. KALEEL: Not necessarily. To the extent
23 that other nearby states that affect Illinois also pursue
24 emission reductions, then not all reductions must be

1 achieved within the state of Illinois.

2 Question 78, "When would you expect those
3 limitations designed to achieve attainment with the PM2.5
4 air quality standards to be required?" The deadlines for
5 attainment for PM2.5 and ozone are given in a proposed
6 federal implementation plan. Well, it's actually
7 required by the Clean Air Act. The attainment date for
8 both pollutants is 2009.

9 MR. HARRINGTON: Could you repeat that,
10 please?

11 MR. KALEEL: The attainment deadline for
12 ozone and for PM2.5 -- actually, the -- I probably should
13 correct the statement. The Clean Air Act requires a
14 deadline of 2010. However, because of a quirk in the
15 dates that USEPA published, the nonattainment
16 designations, effectively the compliance date is 2009.

17 MR. HARRINGTON: 9?

18 MR. KALEEL: 2009.

19 CHAIRMAN GIRARD: May I clarify? Is that
20 January 1, 2009, or December 31?

21 MR. KALEEL: It would be -- For fine
22 particles it would be January 1, 2009. For ozone it
23 would be the beginning of the ozone season.

24 CHAIRMAN GIRARD: Thank you.

1 MR. KALEEL: So approximately May 1.

2 HEARING OFFICER TIPSORD: Anything else?

3 Mr. Rieser?

4 MR. RIESER: Just a quick question, not --
5 and not specifically on the rules that Mr. Kaleel just
6 read. The Agency has a VOC trading program; isn't that
7 correct? I should say the State of Illinois has a VOC
8 trading program.

9 MR. KALEEL: That is correct.

10 MR. RIESER: Could you describe very briefly
11 how that operates?

12 MR. KALEEL: It's the emission reduction
13 marketing system, or the ERMS program. The ERMS program
14 provides allotments, or ETUs, I believe they're called,
15 to VOC sources. The companies are required to retire
16 those in proportion or in the amounts that the companies
17 actually emit VOCs during the summer season.

18 MR. RIESER: And this is a -- is it correct
19 that this is just a state program? This wasn't a
20 federally driven requirement?

21 MR. KALEEL: It is a state program, and I
22 believe it's a unique program. It only applies to the
23 city of Chicago or the Chicago ozone nonattainment area.
24 It was our response to federal requirements to meet the

1 one-hour ozone standard.

2 MR. RIESER: And it's accurate that many of
3 the VOCs that are traded or involved in the ERMS program
4 are also hazardous air pollutants, or HAPs?

5 MR. KALEEL: That's true.

6 MR. RIESER: Thank you.

7 HEARING OFFICER TIPSORD: Anything further?

8 MR. HARRINGTON: I have no follow-up on
9 this.

10 HEARING OFFICER TIPSORD: Thank you very
11 much. Then we're ready, Mr. Matoesian. Where are we
12 going next?

13 MR. MATOESIAN: We've -- The Agency's now
14 answered most of the general questions for it. We were
15 going to proceed with the testimony of Dick Ayres next,
16 but we were wondering if we could take a few minutes'
17 break beforehand.

18 HEARING OFFICER TIPSORD: It's a little
19 early. All right. We'll take a ten-minute break. Let's
20 keep it to ten minutes.

21 MR. MATOESIAN: Thank you.

22 (Brief recess taken.)

23 HEARING OFFICER TIPSORD: Mr. Matoesian?

24 MR. MATOESIAN: Yes, ma'am. Before we go to

1 Richard Ayres' testimony, Mr. Kaleel would like to
2 clarify one of his answers.

3 HEARING OFFICER TIPSORD: Okay.

4 MR. KALEEL: It was actually a question --
5 was a question that Board Member Girard had posed about
6 the attainment dates, and I think I confused some folks
7 just based on comments that I received at the break, and
8 I thought maybe I should at least make an attempt to
9 clarify, knowing that the risk is that I might muddy it
10 up even more. But the attainment date for PM10 -- I'm
11 sorry -- for PM2.5 is April 5 of 2010. The attainment
12 date for eight-hour ozone is June 15, also 2010. The
13 reason why 2009 is a critical year for us for both of
14 those pollutants is the way USEPA published those.
15 The -- To attain by April 15, you're already four months
16 into the year. PM2.5 is an annual standard, so it
17 effectively means that we need to have a clean year the
18 year before, which is 2009. Similarly, for ozone, for
19 eight-hour ozone, the attainment date is June 15 of 2010,
20 which is partway into the ozone season during that year,
21 so effectively, the clean year that we need is 2009 for
22 ozone as well. So that's why I gave the response that I
23 gave.

24 CHAIRMAN GIRARD: Thank you.

1 HEARING OFFICER TIPSORD: Thank you.

2 MR. MATOESIAN: Okay. Then we'll proceed to

3 Mr. Ayres' testimony.

4 HEARING OFFICER TIPSORD: We need to have

5 him sworn in and I need his testimony.

6 MR. MATOESIAN: Okay.

7 HEARING OFFICER TIPSORD: Could we have

8 Mr. Ayres sworn in?

9 MR. BONEBRAKE: Madam Hearing Officer?

10 HEARING OFFICER TIPSORD: Yes.

11 MR. BONEBRAKE: If I may just put one

12 response to a comment that Mr. Matoesian made, if I may

13 respond to that. I think he had suggested that the

14 general questions that had been presented were answered

15 or mainly answered, and obviously a lot of those

16 questions have been deferred, so I just wanted to point

17 out for the record that a number of the questions that

18 have been addressed in the last day or day and a half

19 have been addressed only in part and we expect some

20 additional testimony.

21 HEARING OFFICER TIPSORD: That's correct.

22 Will you swear Mr. Ayres in?

23 (Witness sworn.)

24 MR. RIESER: The testimony being handed

1 out, is that different from the testimony that was
2 prefiled with the Board?

3 HEARING OFFICER TIPSORD: Shouldn't be.

4 MR. MATOESIAN: No, it's not.

5 HEARING OFFICER TIPSORD: We need clean
6 copies for the record, for the exhibits. I just need
7 one.

8 The testimony -- The prefiled testimony of
9 Richard Ayres will be admitted as Exhibit 39 if there's
10 no objection. Seeing none, it's marked as Exhibit
11 No. 39.

12 MR. KIM: We had raised earlier the question
13 of Rob Kaleel's testimony, and he may in large part be
14 done, but would you like us to do that now as well just
15 as a housekeeping matter or --

16 HEARING OFFICER TIPSORD: Yeah, that's
17 probably a good idea.

18 MR. KIM: Just so we don't forget.

19 HEARING OFFICER TIPSORD: If your plan is
20 not to put him back on except to answer questions, then
21 that's probably a good idea.

22 MR. KIM: That's correct.

23 MR. MATOESIAN: Okay. Here's Rob Kaleel's
24 testimony.

1 HEARING OFFICER TIPSORD: I only need one
2 copy, but where is Mr. Kaleel?

3 MR. KIM: He's in the hallway.

4 HEARING OFFICER TIPSORD: I think we should
5 have him here when I mark his testimony as an exhibit.

6 MR. KIM: I'll go get him. Okay.

7 HEARING OFFICER TIPSORD: We're pretty
8 loosey-goosey in a rulemaking, but not quite that
9 loosey-goosey.

10 MR. KIM: Well, he's gone. We'll wait till
11 he -- I apologize. I thought he was here. I'm sorry.

12 HEARING OFFICER TIPSORD: Let's go ahead.

13 MR. KIM: Yeah.

14 HEARING OFFICER TIPSORD: We'll go with
15 Mr. Ayres, and where are we starting with questions with
16 Mr. Ayres?

17 MR. KIM: I believe we're going to start
18 with Ameren's questions; is that correct?

19 HEARING OFFICER TIPSORD: Okay. We'll
20 continue. Please read them into the record and then
21 respond.

22 MR. AYRES: Thank you, Madam Hearing
23 Officer. I knew this rule was a stretch, but I realize
24 now it's really a stretch. I have to stretch over here

1 to get to the --

2 HEARING OFFICER TIPSORD: You can remove the
3 mic from the stand if that works better for you.

4 MR. AYRES: Let's try it this way and see
5 what happens. If I get a sore back, I'll --

6 Question 1, "You state that you were retained to
7 consult with the IEPA regarding the development of the
8 mercury rule. A, in what ways did you participate in the
9 development of the rule?" The answer is, I did not
10 participate in the development of the rule.

11 MR. RIESER: Excuse me, Mr. Ayres. What
12 was -- When were you retained, first of all, by the IEPA?

13 MR. AYRES: Let's see. You know, I don't
14 remember exactly. It would have been earlier this year.
15 Probably about January, yeah. I think that's about
16 right.

17 MR. RIESER: And you were asked sort of in a
18 layman's way whether you were retained by the IEPA. Were
19 you retained by the IEPA or by the State of Illinois or
20 by some other organization to participate in this?

21 MR. AYRES: The same kind of retainer as the
22 other consultants, I think.

23 MR. RIESER: And with whom was that?

24 MR. AYRES: It is with IEPA.

1 MR. RIESER: It's with IEPA.

2 MR. AYRES: Yeah.

3 MR. RIESER: And I assume you're getting
4 paid for your time here by the IEPA?

5 MR. AYRES: Yes.

6 MR. RIESER: In what ways did you
7 participate in working with the IEPA on this proceeding,
8 if any?

9 MR. AYRES: Well, I was consulted along the
10 way this spring as the rule was being finalized and then
11 of course submitted and published, but my role was very
12 peripheral at that period, so --

13 MR. RIESER: And I see from your testimony
14 on page 2 -- this is the first full paragraph on the
15 second page -- "Subsequently I was asked by the Illinois
16 Environmental Protection Agency to assist the Agency with
17 the mercury control rule now before the Board."

18 MR. AYRES: Correct.

19 MR. RIESER: So I guess the question is, in
20 what way -- I mean, what were the tasks that you
21 performed to assist the Agency with the mercury control
22 rule now before the Board?

23 MR. AYRES: Well, I tried to find the words
24 that best described it in my testimony, and I think those

1 are still the best, a resource and an advisor. I did not
2 write drafts or do legal research for the rule.

3 MR. RIESER: Did you review drafts?

4 MR. AYRES: Of the regulation?

5 MR. RIESER: Yes.

6 MR. AYRES: Yes, I think I did review one or
7 two of the earlier drafts.

8 MR. RIESER: And provide comments on it?

9 MR. AYRES: And commented, yes.

10 MR. RIESER: And did you also review draft
11 testimony to be presented before the Board on behalf of
12 the Agency?

13 MR. AYRES: Testimony to be presented here?

14 MR. RIESER: Correct.

15 MR. AYRES: Yes.

16 MR. RIESER: And I note you -- notice you've
17 taken an active role in the presentation of witnesses
18 here. Did you also work with the witnesses in preparing
19 them for the hearing?

20 MR. AYRES: I did with one or two.

21 MR. RIESER: Okay. Which one or two?

22 MR. AYRES: Dr. Rice and Dr. Staudt.

23 MR. RIESER: Dr. Staudt.

24 MR. AYRES: Staudt, yes.

1 MR. RIESER: Thank you.

2 MR. AYRES: And Dr. Hausman.

3 HEARING OFFICER TIPSORD: Mr. Zabel?

4 MR. ZABEL: Mr. Ayres, is there a written
5 retention agreement between you and Illinois EPA?

6 MR. AYRES: Yes, I think there is.

7 MR. ZABEL: Is there a scope of work in that
8 agreement?

9 MR. AYRES: Yes, I think there is.

10 MR. ZABEL: Do we have a copy of that,
11 Mr. Kim? That would more easily describe, I think, the
12 answer to Mr. Rieser's question.

13 MR. KIM: I believe that he's answered the
14 question, and I don't see the relevance of putting that
15 entire document into the record. He's already stated
16 exactly what it is he did probably in more detail than
17 what's in the written document itself.

18 MR. AYRES: That's certainly true. What
19 I've said is more detailed than the agreement.

20 MR. ZABEL: I don't know how the scope of
21 work in that agreement could be less than that single
22 sentence, but I'm happy to limit my request to the scope
23 of work provision of the agreement. The rest of it I
24 really don't care about.

1 MR. KIM: Well, my point is he's just
2 answered several questions and provided several examples
3 of what it is he did, and again, I'm sure that that's
4 more comprehensive than what was found in that written
5 document.

6 HEARING OFFICER TIPSORD: I think the Board
7 should be the judge of that. I think you need to provide
8 the document, because unlike you, Mr. Kim, I'm not sure
9 that he hasn't done more than just simply repeat what's
10 in his testimony, the one line in his testimony, so I
11 think you need to provide that.

12 MR. KIM: Okay. Can we -- So I'm assuming
13 that as Mr. Zabel stated, the scope of work portion of
14 that document?

15 HEARING OFFICER TIPSORD: That would be
16 fine.

17 MR. KIM: Okay.

18 MR. AYRES: Okay. Question 1b, "What was
19 the basis for your belief that 90 percent system-wide
20 control could be achieved for Illinois power plants by
21 2009?" My answer is, I'm not an expert on technology,
22 and for that reason I did not state an opinion of my own
23 on that subject in my testimony. I did describe the
24 results of a process undertaken by the state and local

1 organizations -- the organizations of state and local air
2 pollution control officials called STAPPA and ALAPCO --
3 S-T-A-P-P-A and A-L-A-P-C-O -- in which they attempted to
4 develop an alternative to the EPA CAMR rule, a model rule
5 that could be used by other states to serve as a model
6 for their own rule development process. The STAPPA and
7 ALAPCO committee -- and this is of course in their model
8 rule -- came up with a proposal for what a rule should
9 look like, and it includes a number of points that are
10 relevant to these proceedings.

11 The first one is that they -- the model rule
12 offers alternative kinds of standards. There's a percent
13 reduction standard and an output standard, just like the
14 Illinois proposal. Compliance with the first phase is
15 due at the end of 2008. It's almost the same as the
16 Illinois proposal. In 2008 utilities may choose one of
17 two paths. One is an 80 percent reduction across the
18 board for all units. The other is a 90 to 95 percent
19 reduction in mercury for half the -- I'm sorry, not half
20 the capacity -- half the generating -- half the -- the
21 units generating half the amount generated by the company
22 may comply with a 90 to 95 percent mercury rule or
23 requirement. The other half then may get an extension of
24 time until 2012, but they also have to agree to a

1 multi-pollutant strategy that includes installing
2 scrubbers and SCR units. So there are two different
3 options offered, and a third point about that is
4 whichever option is chosen by 2012, all units have to
5 achieve a 90 to 95 percent reduction or an output
6 equivalent to that, with the only exception being that
7 plant averaging -- plant-wide averaging is performed.

8 So obviously it's a similar kind of scheme, and
9 that's what the STAPPA committee came up with. A couple
10 of points about that that are relevant. One is that this
11 was a year ago when this work was done, and the
12 state-of-the-art in mercury control is advancing very
13 rapidly, Dr. Staudt testified and the others have too, so
14 it's unclear to me whether the committee would have
15 recommended a stronger standard had it been meeting this
16 year. In the second phase, the STAPPA/ALAPCO model rule
17 is definitely more stringent than the Illinois rule.
18 It's a 90 to 95 percent control.

19 And finally, I just want to emphasize, the rapid
20 development of technology and frankly having watched
21 these kinds of technologies develop over the last 35
22 years, it would be my expectation that when the
23 compliance time comes, we will find that compliance is
24 more easily attained and less expensive than we can

1 predict right now based on what we know today.

2 HEARING OFFICER TIPSORD: Ms. Bassi?

3 MS. BASSI: Mr. Ayres, you said that the
4 second phase of the STAPPA rule is more stringent than
5 Illinois' rule. Is the first phase of the STAPPA rule
6 more stringent than Illinois' rule?

7 MR. AYRES: Well, there's -- the percentage
8 reduction requirement is less, obviously. It's either 80
9 percent across the board or 90 to 95 percent for half of
10 the capacity. There are -- There is a slight difference
11 which I know the members of the committee thought made a
12 difference, and I'm not enough of a technical expert to
13 know, but the Illinois rule is written as a 90 -- or an
14 80 -- 90 percent reduction based on input. The STAPPA
15 rule is written as an 80 percent reduction based on inlet
16 concentrations, and what STAPPA/ALAPCO meant by that was
17 inlet to the pollution control device. As I understand
18 the Illinois rule, it would cover essentially from the
19 time the coal is put into the boiler to the time that the
20 gas exits, but -- you know, so that means that if there
21 is mercury captured in the boiler, that would make the 90
22 percent Illinois control requirement perhaps equivalent
23 to the STAPPA requirement. But as I said, I -- someone
24 who knows technology better than I will have to tell you

1 what the implication is of that.

2 MS. BASSI: Okay. And my second question
3 is, did you play a role in the development of the STAPPA
4 rule, model rule?

5 MR. AYRES: I did, yes. I was asked by
6 STAPPA to -- STAPPA/ALAPCO to serve as a kind of
7 mediator -- or not mediator -- facilitator and scribe for
8 the model rule, and that's the role I played.

9 HEARING OFFICER TIPSORD: Mr. Bonebrake?

10 MR. BONEBRAKE: You mentioned as well,
11 Mr. Ayres, in your testimony the 2012 date for the 90 to
12 95 percent --

13 MR. AYRES: Right.

14 MR. BONEBRAKE: -- reduction. Was that date
15 of 2012 identified in part because of the recognition
16 that not all units would be capable of achieving 90
17 percent reductions prior to that date?

18 MR. AYRES: Well, the -- as I mentioned, the
19 2008 requirement offers two options, and one option is 80
20 percent reduction. I must put an asterisk next to that
21 and refer back to my answer to Ms. Bassi just a minute
22 ago. And the other option is 90 to 95 percent applied to
23 only half the generation of the unit. So, yes, there's
24 more flexibility there than there is in the Illinois

1 rule.

2 MR. BONEBRAKE: And that flexibility was put
3 in place because of the recognition that not all units
4 could achieve 90 percent, Mr. Ayres?

5 MR. AYRES: I assume so. I mean, the
6 members of the committee felt that that was an
7 appropriate level, so --

8 MR. BONEBRAKE: I think you also mentioned
9 that you do not view yourself to be an expert on
10 pollution control technologies; is that correct?

11 MR. AYRES: By no means. An observer, yes,
12 but not an expert in the -- I'm not an engineer and I
13 don't pretend to be.

14 MR. BONEBRAKE: I had just a couple related
15 questions to put your testimony in context today for us,
16 and this actually is -- we had a related question in the
17 questions that were presented by Midwest Generation and
18 Dynegy, but I thought it would be useful just to touch on
19 these issues now. Do you have any formal training or
20 degree as an economist, Mr. Ayres?

21 MR. AYRES: No.

22 MR. BONEBRAKE: Any formal training or
23 degree as an engineer?

24 MR. AYRES: No.

1 MR. BONEBRAKE: Any formal training or
2 degree as a toxicologist?

3 MR. AYRES: No.

4 MR. BONEBRAKE: And are you a medical
5 doctor?

6 MR. AYRES: No.

7 HEARING OFFICER TIPSORD: For the record,
8 that was Dynegy's question number 1.

9 MR. AYRES: A lot of informal training in
10 all those, but no formal.

11 HEARING OFFICER TIPSORD: Mr. Zabel?

12 MR. ZABEL: Has any state adopted the STAPPA
13 proposal?

14 MR. AYRES: Has any state adopted the STAPPA
15 proposal?

16 MR. ZABEL: Yes.

17 MR. AYRES: I don't -- I can't answer that
18 question. I think at this stage I'd probably say that no
19 state has adopted the STAPPA proposal exactly as it was
20 made -- you know, as it was written. The intention was
21 that it was to be a model rule from which states were
22 expected to depart but to give a model for them to start
23 with, and I think that's the way it has served.

24 MR. ZABEL: And the 2012 deadline and

1 requirement to which you refer on page 6 of your
2 testimony would appear to be -- and I'm -- I guess you
3 were involved -- was it an attempt to coordinate that
4 model with the CAIR requirements as well as the CAMR
5 requirements?

6 MR. AYRES: I don't recall hearing anybody
7 talk about that, so I don't think so.

8 MR. ZABEL: It is addressed to sulfur
9 dioxide and nitrogen oxide emissions, though, is it not?

10 MR. AYRES: Well, it offers that
11 multi-pollutant strategy as an alternative, yes.

12 MR. ZABEL: And 2012 is one of the deadlines
13 in the CAIR proposal, is it not?

14 MR. AYRES: Yes.

15 MR. ZABEL: Thank you.

16 HEARING OFFICER TIPSORD: Mr. Rieser?

17 MR. RIESER: The -- Was there -- In the
18 development of the STAPPA/ALAPCO rule, did the people
19 involved in that produce a document which comprehensively
20 reviewed the state-of-the-art in mercury control at
21 coal-fired power plants and use that document -- and from
22 that document develop the reduction standards that they
23 included in the rule?

24 MR. AYRES: No.

1 MR. RIESER: And is that -- are those issues
2 addressed in the preamble which was attached to the
3 STAPPA/ALAPCO rule?

4 MR. AYRES: There -- As you know, there's a
5 document which includes a preamble and also includes
6 discussion -- other discussions of other issues involved
7 in adopting a mercury rule, but, no, there was no other
8 document created in that process.

9 MR. RIESER: So there was no -- Okay. Thank
10 you. So the statement in your testimony on page 6 under
11 "The Illinois EPA proposal is similar to STAPPA/ALAPCO
12 model rule," it says, "The model rule requires that
13 owners and operators of EGUs expeditiously adopt
14 available and reasonable emission reduction measures to
15 protect the public health." Do you see that?

16 MR. AYRES: Page 6, you said?

17 MR. RIESER: Correct, in the middle of the
18 page.

19 MR. KIM: Could you identify again -- I'm
20 sorry -- which passage you were reading?

21 MR. RIESER: This is page 6. It's the
22 paragraph beginning, "The Illinois EPA proposal was
23 similar," and it's the second -- excuse me -- the third
24 sentence of that paragraph.

1 MR. KIM: Thank you.

2 MR. AYRES: "The model rule requires that
3 owners and operators of EGUs expeditiously adopt --

4 MR. RIESER: Correct.

5 MR. AYRES: -- available and reasonable?"
6 That sentence.

7 MR. RIESER: Correct.

8 MR. AYRES: Okay. What's your question?

9 MR. RIESER: The question is, whose
10 characterization is it that the 90 percent -- 90 to 95
11 percent reductions are available and reasonable?

12 MR. AYRES: That was the conclusion of the
13 STAPPA/ALAPCO committee that was responsible for the
14 proposal.

15 MR. RIESER: But not being an expert in
16 these technical issues, that's not a conclusion that you
17 can testify to; is that correct?

18 MR. AYRES: It's not a conclusion I can
19 testify to as a technical expert, yes.

20 MR. RIESER: Thank you. And also, your
21 comments about that the state-of-the-art in mercury
22 control are advancing rapidly are made as your -- in your
23 position as an observer but also not as a technical
24 expert.

1 MR. AYRES: Yes, that's correct. It's based
2 on testimony we've heard here and my own observations,
3 but not -- it's not an engineering judgment.

4 MR. RIESER: And I think if you go to "c,"
5 we'll go -- we'll flesh that out a little.

6 MR. AYRES: Okay. "Is your understanding of
7 the technologies available to achieve 90 percent control
8 of Illinois systems different from that of Dr. Staudt?"
9 My comment on that is I defer to Dr. Staudt's expertise
10 on what is achievable technologically. What I can add to
11 that -- and actually, I'm not sure it's adding anything
12 to it -- but what I would observe is that over the last
13 35 years, when I've watched this field, I've found that
14 technologies have been -- have typically come on much
15 more quickly and much less expensively than people
16 thought at the time that the regulations were being
17 adopted.

18 MR. RIESER: But as far as the extent of the
19 state-of-the-art in mercury control, that will be for
20 Dr. Staudt to address; is that correct?

21 MR. AYRES: Yes.

22 MR. RIESER: And you have no additional
23 technologies or information or data other than what he
24 would present --

1 MR. AYRES: Correct.

2 MR. RIESER: -- to the Board?

3 MR. AYRES: Correct.

4 MR. RIESER: Thank you.

5 HEARING OFFICER TIPSORD: D?

6 MR. AYRES: D is, "Have you reviewed
7 Dr. Staudt's testimony?"

8 MR. RIESER: Yes, and I would add, his --
9 and his re-revised testimony.

10 MR. AYRES: That is true. Well, I have
11 reviewed his testimony and I think his revised testimony.
12 I'm not sure about the re-revised testimony, because it
13 was some time ago, but that's my answer to that question,
14 and --

15 MR. RIESER: I'm sorry. Which was --

16 MR. AYRES: I'm sorry?

17 MR. RIESER: You said some -- it was some
18 time ago.

19 MR. AYRES: It was some time ago I read it.
20 It's been several weeks since I read the last version.

21 "Do any of your conclusions change as a result of
22 his revised testimony?" My answer is none of my
23 conclusions change as a result of his testimony.

24 MR. RIESER: Okay.

1 MR. AYRES: F, "Have you evaluated Illinois
2 power plants to determine if it is technically feasible
3 and economically reasonable for them to achieve 90
4 percent control in 2009?" And again, my answer is I'm
5 not an engineer and I'd defer to Drs. Staudt and Hausman
6 and others on this panel on those kinds of judgments.

7 MR. RIESER: So the specific answer to that
8 question is no; is that correct?

9 MR. AYRES: That's correct.

10 MR. RIESER: Thank you.

11 MR. AYRES: Question 2, "In your testimony
12 you state that the Illinois proposed standard can be met
13 on a, quote, fleet basis after 2009 and on a plant basis
14 at the beginning of 2013." Question "a," "How can the
15 generating companies in Illinois meet the rule on a fleet
16 basis?" The Illinois rule allows owners of multiple EGUs
17 to comply by demonstrating that the average of the
18 emissions from their units located within Illinois meet
19 the standard. That's at the first stage. Owners of
20 single EGUs are in a separate pool, which may also comply
21 by demonstrating that the average emissions from the
22 units in the pool meet the standard. When I speak of
23 complying on a fleet basis, it was this flexibility
24 feature that I'm referring to.

1 MR. RIESER: Thank you.

2 MR. AYRES: "Did you evaluate the 22
3 coal-fired power plants in Illinois to determine what
4 level of controls would be required at each individual
5 plant in order to achieve a 90 percent system-wide
6 average?" The answer is no.

7 "To your knowledge" -- excuse me. C, "To your
8 knowledge, did anyone at the IEPA perform this analysis?"
9 My answer is I don't know. I have no way to know.

10 MR. RIESER: I'm sorry. Your answer is "I
11 don't know"?

12 MR. AYRES: I don't know.

13 MR. RIESER: I -- My recollection is that
14 you said you worked with Dr. Staudt on his testimony?

15 MR. AYRES: Yes.

16 MR. RIESER: And I think we've heard from
17 various testimony today and yesterday that Dr. Staudt
18 would be presenting an analysis of what sounds like on a
19 plant-by-plant basis.

20 MR. AYRES: Yes, but he is not -- he's
21 not -- the question asked whether I knew of anybody at
22 the IEPA who performed such analysis.

23 MR. RIESER: Fair enough. Thank you. Are
24 you aware of whether Dr. Staudt performed such an

1 analysis?

2 MR. AYRES: Well, I know that he performed a
3 thorough analysis, as we've seen in his testimony, of the
4 opportunities for controls at power plants in Illinois,
5 so, yes, of course I'm aware of that.

6 MR. RIESER: Thank you.

7 MR. AYRES: Question 3, "In your testimony
8 you indicate that Illinois filed a petition with the
9 USEPA to reconsider its decision not to issue a mercury
10 MACT standard and joined in a lawsuit to have the U.S.
11 Court of Appeals for the District of Columbia Circuit
12 void CAMR and require EPA to issue a MACT standard."
13 Question "a," "Have you reviewed the comments filed by
14 Illinois EPA with USEPA regarding CAMR and in support of
15 a MACT standard?" Answer, yes.

16 MR. RIESER: Let me stop you there, if I
17 can. I'm going to show you what's -- what we'll mark as
18 an exhibit, which the Hearing Officer will tell me the
19 number if I ask nicely?

20 HEARING OFFICER TIPSORD: Exhibit 40.

21 MR. RIESER: Thank you. And ask if this is
22 a correct comment of -- excuse me -- a correct copy of
23 comments filed with the IEPA on the mercury proposal in
24 2004. I'm sorry. On the USEPA's mercury proposal in

1 2004.

2 HEARING OFFICER TIPSORD: While you're
3 reviewing that, we will mark this as Exhibit 40 if
4 there's no objection. Seeing none, it's marked as
5 Exhibit 40.

6 MR. AYRES: My version of it is -- it looks
7 like it's just simply shifted on the page, but we're just
8 checking.

9 MR. RIESER: So far the only changes you're
10 seeing are format changes, but you're checking for --

11 MR. AYRES: Yes, yes.

12 MR. RIESER: -- other changes.

13 MR. KIM: And for the court reporter's
14 benefit, MACT is an acronym, M-A-C-T.

15 HEARING OFFICER TIPSORD: Stands for maximum
16 achievable control technology.

17 MR. KIM: Sorry.

18 MS. BASSI: If I may ask a question of him,
19 Mr. Rieser? I want to know, did you say this is 2004?

20 MR. RIESER: Correct.

21 MS. BASSI: Okay. That was it.

22 MR. KIM: Can I -- Just can I ask one
23 question?

24 HEARING OFFICER TIPSORD: Sure.

1 MR. RIESER: And also for the court
2 reporter, STAPPA/ALAPCO is S-T-A-P-P-A, space, as one
3 word, all caps, ALAPCO, A-L-A-P-C-O.

4 MR. AYRES: It's bad enough that way, but if
5 you speak it all out, it's State and Territorial Air
6 Pollution Program Administrators and Association of Local
7 Air Pollution Control Officials. Why they don't call it,
8 you know, State Air or something, I don't know.

9 HEARING OFFICER TIPSORD: Maybe they get
10 paid by the letter.

11 MR. AYRES: I guess. I've looked at this
12 document, and I noticed on the last page it says draft,
13 dot, DL, dash, 404, and I think it is not exactly the
14 same as the final comments that we filed.

15 MR. KIM: As a matter of fact, I think we
16 have the final comments, and they actually do on the last
17 page have that draft stamp, but the text is different
18 than what you provided, so if it would help, we don't
19 have copies right now, but we can make copies of the
20 final version. I don't -- I mean, I think it's just
21 fleshed out in bits here and there.

22 MR. RIESER: I -- And for the record, let me
23 just say this was downloaded from the USEPA's mercury Web
24 site, understanding that advising the Board that it was

1 available on its site was not sufficient, but, yeah, if
2 we could have --

3 MR. KIM: Yeah.

4 MR. RIESER: -- a copy, and maybe if we can
5 proceed with what I've got, and then I only have -- I
6 have some specific questions about specific language, and
7 I assume it's going to be more or less in the same place
8 that the language was revised for the final version, and
9 we'll address it as we go if that would be acceptable.

10 MR. KIM: Right. I think the only
11 distinction is there might be a few extra sentences in
12 the final version, so --

13 MR. RIESER: Okay. That'd be great.

14 MR. KIM: But we'll -- yeah, we'll have that
15 made.

16 MR. RIESER: Yeah. That's satisfactory.
17 I'm happy to proceed on that basis.

18 MS. BASSI: Wait a minute. Did you say that
19 you downloaded this from the USEPA mercury Web site?

20 MR. RIESER: It was -- to be more accurate
21 was downloaded by one of my partners, is my
22 understanding.

23 MS. BASSI: But from the mercury Web site?

24 MR. RIESER: That's my understanding.

1 MS. BASSI: Then I don't understand --
2 Mr. -- Somebody over there, why would Illinois EPA's
3 version be different?

4 MR. KIM: I would turn that around and say
5 why would USEPA's version on their Web site be different?
6 I don't know.

7 MR. RIESER: And I'm going to accept that
8 it's a mystery of the -- either the USEPA or the IEPA or
9 the downloading process that we're not going to solve,
10 but --

11 MS. BASSI: Okay.

12 HEARING OFFICER TIPSORD: Buried in the
13 bureaucracy.

14 MR. RIESER: Just like the ark from Raiders
15 of the Lost Ark. All right. Subject to that, what we
16 discussed about the possibility that this isn't
17 completely accurate, the Exhibit 40 that we're looking
18 at, why don't we proceed with "b."

19 MR. AYRES: Are we at "d" or "b"?

20 MR. RIESER: "B" as in boy.

21 MR. AYRES: "Do you agree that in those
22 documents Illinois EPA stated that USEPA was required to
23 issue a mercury MACT standard requiring 80 percent
24 reduction by 2010?" Yes.

1 C, "Do you agree with the Illinois EPA position
2 in these comments that the statutory factors in the Clean
3 Air Act require a MACT standard of 80 percent based on
4 the best performing 12 percent of the sources?" I have
5 two comments on that. The first is that this process is
6 now two years old, the one that's referred to in these
7 comments, and this is an area where technology has
8 developed rapidly, so what was said two years ago might
9 not be said today, but more than that, it seems to me
10 that what was said in the 112 -- what the statutory
11 factors are in the 112 rulemaking are really irrelevant
12 to this proceeding, because EPA decided to proceed not
13 under 112 but under 111, so the federal CAMR rule is not
14 a 112 process and doesn't fall under that set of rules,
15 and probably more important, the Illinois rule is being
16 developed under Illinois law and therefore can be done in
17 a completely different way from a 112 federal standard.
18 As we know, Section 116 of the Clean Air Act guarantees
19 that states may have their own versions of these
20 requirements so long as they are at least as stringent as
21 federal requirements, so --

22 MR. RIESER: You'll agree that the 112 MACT
23 standard process involves a very specific review of
24 available technology in order to devise a control

1 standard, correct?

2 MR. AYRES: Yes, in a certain -- in a very
3 specific way.

4 MR. RIESER: And so that the 80 percent
5 number that the IEPA suggested was required to be adopted
6 under the MACT standard was based on that technical
7 review admittedly at the time, in 2004, correct?

8 MR. AYRES: Well, I think it was based on
9 reviewing the federal EPA's explanation of its own
10 process by which it arrived at the proposal, and of
11 course the 112 process requires that you start with a
12 MACT floor, which is supposed to be the performance of
13 the best 12 percent of the sources. EPA has tended to
14 interpret that, as I think they did in this case, to mean
15 the least -- the poorest performer of the top 12 percent
16 tends to be treated as the baseline. Nothing in the
17 statute requires that. It also -- The statute also
18 allows EPA to write standards that are more stringent
19 than the MACT floor. Again, EPA has not administered
20 that law in the spirit it was written in my view, but
21 that is possible. So yes, there was a MACT standard
22 process that was gone through here, and EPA identified
23 what at that time it thought was the bottom of the best
24 performing 12 percent of the sources, and the IEPA

1 comments were addressed to that process.

2 MR. RIESER: And the IEPA comments was that
3 the 80 percent was an appropriate MACT standard in 2004.

4 MR. AYRES: Yes, under that process it was
5 an appropriate standard, but of course that process is
6 not necessarily seeking the best performer, as I've just
7 said. D?

8 MR. RIESER: Yeah. I think we've answered
9 "c," but -- you've just answered "c," so if I can go on
10 from that. On my page 5 of the Exhibit 40, in the third
11 paragraph, the paragraph beginning, "You recommend that
12 new EGUs," and then the last sentence of that paragraph
13 says, "At this point in time, Illinois EPA has found that
14 the permittees have not been able to obtain performance
15 guarantees from equipment manufacturers at levels above
16 90 percent removal at this time." Do you see that?

17 MR. AYRES: I do, and it appears that that's
18 exactly the same in the copy -- in both copies that I
19 have.

20 MR. RIESER: Thank you. Do you agree with
21 that?

22 MR. KIM: I'm sorry. Are you asking --

23 MR. AYRES: This is a statement that I don't
24 think I can really agree with or disagree with because I

1 can't -- I'm not Illinois, and all it says is Illinois
2 EPA has made this finding two years ago.

3 MR. KIM: I just want to clarify. I mean,
4 obviously Mr. Ayres can answer these questions to the
5 best of his ability, but I don't think he's ever stated
6 that he was involved with the preparation of this --
7 these comments or had any working knowledge of -- other
8 than just reading them, the working knowledge of it, so
9 any questions concerning, you know, was that true or, you
10 know, did Illinois find this or find that, I think he
11 would -- I just don't see the relevance of those
12 questions.

13 MR. RIESER: Well, the relevance is that he
14 presented Illinois' -- as part of his testimony he
15 presented Illinois' position with respect to both CAMR
16 and MACT process, and I think it's -- given that, it's
17 important to see their entire position in context. If
18 his answer is he doesn't know, as he just gave, then
19 that's fine. Obviously that's the end of the discussion.
20 But it's important to point out the full range of the
21 discussion the Illinois EPA had at the time since he has
22 presented it as an important feature of his testimony.

23 HEARING OFFICER TIPSORD: And we'll continue
24 with his questions.

1 MR. RIESER: Thank you.

2 MR. AYRES: Okay. Let's see. We are on
3 "d."

4 MR. RIESER: We're on "d."

5 MR. AYRES: D, "Do you know whether any of
6 the plants considered among the 12 percent best
7 performing sources burned sub-bituminous coal?" Again,
8 this process seems irrelevant to the process before us in
9 my mind, but as I recall, this question doesn't quite --
10 isn't quite right. I believe there were two or maybe --
11 well, there were more than two analyses, but there was an
12 analysis of the best 12 percent performers burning
13 bituminous coal and the best 12 percent performers
14 burning sub-bituminous coal and then some other analyses
15 of lignite and one or two other fuels as well, as I
16 recall.

17 MR. RIESER: Thank you.

18 MR. AYRES: E, "What data is there to
19 suggest that if the statutory analysis under the Clean
20 Air Act indicates that 12 percent of the best performing
21 sources can achieve 80 percent reductions by 2010 that
22 Illinois power plants can achieve 90 percent reductions
23 by 2009?" Well, I -- again, it seems to me the analysis
24 under the MACT analytical structure is not really

1 relevant. EPA might well have found -- and I don't know
2 the -- I can't state this for a fact, but had they said,
3 let's look at the best performing source or the best
4 three performing sources, they might well have specified
5 a standard considerably higher than 80 percent
6 themselves. What they relate, as I recall, in that
7 rulemaking is that the floor -- that is, the worst
8 performer of the top 12 percent -- was at 80 percent. So
9 I just -- I don't think that that's the same enterprise
10 as what we're engaging in here, and therefore I don't
11 think that those numbers are particularly important.

12 Question --

13 HEARING OFFICER TIPSORD: 4.

14 MR. AYRES: -- 4. This is printed back and
15 front and you get lost in which ones are which. Here we
16 go. "The STAPPA/ALAPCO model base rule is apparently
17 based on the belief that 90 percent control is not
18 achievable until 2010. What is your basis for believing
19 that 90 percent control is achievable in Illinois by
20 2009?"

21 HEARING OFFICER TIPSORD: Mr. Ayres, the
22 question is not available until 2012, what is your basis
23 for believing that 90 percent --

24 MR. AYRES: Oh, I'm sorry.

1 MR. RIESER: No, it's "not achievable."

2 HEARING OFFICER TIPSORD: Oh, I'm sorry.

3 "Not achievable."

4 MR. RIESER: Not achievable until 2012.

5 MR. AYRES: 12. Okay. My mistake. Well,
6 the first phase compliance date in the STAPPA/ALAPCO
7 model rule is December 31, 2008. It's not 2009 or 10.

8 MR. RIESER: And is the -- I'm sorry. Is 90
9 percent control expected at 2008?

10 MR. AYRES: The model rule is -- as I said,
11 it has two options for compliance, and one of the options
12 for compliance is that half of the generation --
13 generating -- the sources producing half the generation
14 of a company would be required to meet 90 to 95 percent,
15 so I think it's fair to say that the committee
16 contemplated that that would be possible. They offered
17 another option, so they offered an alternative, but I
18 don't think that they would have come to that 90 to 95
19 percent number unless they thought that by the end of
20 2008 it would be possible to achieve that.

21 Question 5, "Were you involved in the development
22 of STAPPA/ALAPCO's multi-pollutant strategy?" If I
23 properly interpret the question, STAPPA/ALAPCO had a
24 multi-pollutant strategy which was I think published and

1 certainly discussed, I don't know, two years ago,
2 perhaps. I don't remember exactly. I was not involved
3 in it at all, so if that's the question, the answer is
4 not at all.

5 MR. RIESER: I think the question had to do
6 with the option that you've described where there would
7 be -- 50 percent of the units would be able to shift to
8 mercury control if they adopted a multi-pollutant
9 strategy to address NOx and SOx.

10 MR. AYRES: Okay. That's the other
11 interpretation possible with the question. Well, I was
12 involved in that in the same way I was involved in the
13 rest of it, which is to say I was a facilitator and
14 scribe. I wasn't relied on for my technical knowledge,
15 and so I wasn't involved in that sense if that's what the
16 question's asking.

17 Question 6.

18 MR. RIESER: Excuse me. 5a, please.

19 HEARING OFFICER TIPSORD: There's four
20 subsections to 5.

21 MR. AYRES: Oh, I'm sorry. Excuse me. No,
22 I don't have that. Sorry. Could I describe the approach
23 was question "a," and I think I have. The
24 multi-pollutant strategy is an option which a company

1 could adopt, and if it decides to go in that direction,
2 it then takes units that generated half of its electrical
3 generation the previous year, I believe it is, and puts
4 them in a mercury control mode, which requires them to
5 meet a 90 to 95 percent control requirement, and puts the
6 other half in a group which gets until 2012 to install
7 mercury controls, but -- or to meet the mercury limits,
8 but in return, it is required that that half install
9 scrubbers and SCR units, and I think the assumption was
10 that at least for many units that would be sufficient to
11 achieve the mercury standards, but it doesn't -- it still
12 requires that the mercury standard be met.

13 B, "What was the basis for this approach?" I
14 don't know what more to say than to say it allows for
15 greater flexibility, and that was an objective of the
16 group.

17 MR. RIESER: Well, would it also be fair to
18 say that it recognized that other regulations for
19 coal-fired power plants, including CAIR and in some
20 states nonattainment strategy, were also coming down --
21 were also going to be imposed in the not-too-distant
22 future and that it would be useful to have an approach
23 which allowed facilities to address all these rules at
24 one time?

1 MR. AYRES: I think that's probably true,
2 although it really wasn't discussed in any discussions I
3 was involved in.

4 MR. RIESER: Do you have any knowledge of
5 what the basis for the 50 percent limit on that was; in
6 other words, 50 percent had to -- only 50 percent of the
7 units could take advantage of the multi-pollutant
8 strategy?

9 MR. AYRES: Right. No, I think it was a
10 typical policy call. It's not 75 and it's not 25. It's
11 50.

12 BOARD MEMBER MOORE: I'm confused by what
13 you're saying are 50 percent of the units and what I hear
14 you say is 50 percent of the generating.

15 MR. AYRES: Yes, and the more correct way to
16 say it is that it's the units which generated 50 percent
17 of the electricity for that --

18 BOARD MEMBER MOORE: So that wouldn't
19 necessarily translate into 50 percent of the units.

20 MR. AYRES: Exactly.

21 MR. RIESER: I'm sorry. It's 50 percent --

22 MR. AYRES: It's not intended to be a
23 capacity --

24 BOARD MEMBER MOORE: Thank you.

1 MR. AYRES: -- question. It was intended to
2 be generating capacity.

3 MR. RIESER: My mistake. Thank you.

4 MR. AYRES: C is, "Did you discuss the
5 multi-pollutant approach with Illinois EPA?" Not that I
6 can recall.

7 MR. RIESER: It never came up at all?

8 MR. AYRES: I don't recall that it ever came
9 up in any discussions I was involved in.

10 D, "What was the basis for rejecting that
11 approach?" Well, I think I've answered that question.

12 Then 6, "Is it correct that you have written and
13 spoken in support of emissions trading programs?" The
14 answer is yes. I've never written or spoken in favor of
15 trading programs for mercury, however.

16 MR. RIESER: But you've written in support
17 of the acid rain program and the NOx trading program.

18 MR. AYRES: I think what I've written in
19 support of is acid rain and trading programs involving
20 ozone -- the ozone precursors, which for the most part
21 are VOCs rather than NOx, although some have NOx as well.

22 "Is it also correct that you have identified
23 USEPA's acid rain program" -- and there's a typo here, I
24 think, but I think the idea is have you -- "that you have

1 identified EPA's acid rain program --

2 MR. RIESER: It should be "for."

3 MR. AYRES: -- for trading emissions credits
4 for sulfur dioxide as an extremely successful program?"
5 I'm not sure what the word "identified" refers to here.

6 MR. RIESER: Well, I think identified refers
7 to you've written papers that say that the acid rain
8 program has been a very successful program.

9 MR. AYRES: Well, I have -- certainly have
10 said that it succeeded in two important respects. First
11 of all, the goals in the statute are being achieved with
12 great efficiency, and secondly, compliance has proceeded
13 with relatively little litigation or controversy. Both
14 of those are important steps.

15 In a related question, was the acid -- "b," "Was
16 the acid rain program successful in that it reduced
17 emissions faster and at less cost than predicted?"
18 Actually, I would say that acid rain emission reductions
19 have come slower than many of us wanted, and I think the
20 reason for that is that congress padded the budgets for
21 acid rain pollutants with a lot of early reductions
22 padding, and as a consequence, I believe we've just about
23 reached now the 8.9 million ton goal that was established
24 that came into effect as the cap in 1999, I think it was,

1 or 2000. 2000. So we had a lot of early reductions
2 allowed, early reductions credits allowed, which have
3 then been spent out and kept us from achieving the goal
4 until six years after the date that the cap was imposed.

5 MR. RIESER: So early reductions meaning
6 that people -- power plants established more stringent
7 controls more quickly than was expected.

8 MR. AYRES: Well, the statute gave credit
9 for some practices that didn't involve very strong steps
10 toward control, so there was a political process in order
11 to get the legislation passed, and as part of that
12 process, members of congress did the usual thing, which
13 was to make interests less -- make interests oppose what
14 they wanted to do less by offering some sweeteners, and
15 so the sweeteners have slowed down progress. As for the
16 cost --

17 MR. BONEBRAKE: Excuse me.

18 MR. AYRES: Could I --

19 HEARING OFFICER TIPSORD: I'm sorry.

20 MR. AYRES: Could I finish my answer? Then
21 I'd be happy to answer your question.

22 MR. ZABEL: Well, I think -- I thought you
23 finished your answer to that subpart of the question --

24 MR. AYRES: Okay.

1 MR. ZABEL: -- to "b," and that was what my
2 follow-up was with.

3 HEARING OFFICER TIPSORD: Go ahead,
4 Mr. Zabel.

5 MR. ZABEL: As I understood your answer,
6 Mr. Ayres, the question asked if the acid rain program
7 was successful, and it sounded like your answer was that
8 the congressional design of the program was not what you
9 wanted, so I'm not sure you really answered the question.

10 MR. AYRES: Well, I think it was less
11 successful than I had hoped. I think that's what I said,
12 because the emission reductions have occurred more slowly
13 than I'd hoped.

14 MR. ZABEL: But was that because of the
15 congressional design of the program?

16 MR. AYRES: I don't know if I'd use the word
17 design, but it was because of congressional action, yes.

18 MR. ZABEL: Okay.

19 MR. AYRES: As to the cost --

20 HEARING OFFICER TIPSORD: Mr. Bonebrake?

21 MR. BONEBRAKE: Just to follow up, I think
22 you did mention in response to 6a that the acid rain
23 program had led to reductions, and I think your term was
24 with efficiency or great efficiency. Do you recall that?

1 MR. AYRES: Yeah, with -- it has led to the
2 goals being attained efficiently and with relatively
3 little controversy or litigation is what I had said, I
4 think.

5 MR. BONEBRAKE: Okay. And then when you use
6 the term efficiently, Mr. Ayres, what is it that you
7 mean?

8 MR. AYRES: I mean economic efficiency. I
9 mean achieving a particular level of emission control for
10 a relatively lower cost than some other program might
11 have.

12 And as to the cost, to complete my answer to "b,"
13 the cost actually has been -- of the acid rain program
14 has been almost exactly what I predicted, though it's
15 certainly not what a lot of others predicted, but it's
16 very close to what I was predicting in testimony when
17 congress was considering it.

18 MR. RIESER: Was it close to what -- Was it
19 below what USEPA predicted?

20 MR. AYRES: Substantially. About less than
21 a third, I think, so far.

22 C, "Is it also correct that you've written in
23 support of the Illinois ERMS program for trading VOC
24 emissions credits in nonattainment areas?" I don't know

1 what the ERMS program is. I did write an article on
2 emission trading in 1994 that mentioned a draft proposal
3 then being considered by the Illinois EPA for a, quote,
4 VOM emissions trading system as one among a number of
5 emission trading programs that were being considered
6 then, so that may be what became the ERMS program, but I
7 don't know what happened to it after I wrote about it.

8 MR. RIESER: And I think you testified
9 earlier that you have written in support of VOC trading
10 programs. I think that was the term that you used.

11 MR. AYRES: Yes.

12 MR. RIESER: Okay. And you're not familiar
13 with the Illinois ERMS program as an example of a VOC
14 trading program?

15 MR. AYRES: I'm not, no.

16 MR. RIESER: You would agree that many VOCs
17 are also hazardous air pollutants, or HAPs?

18 MR. AYRES: Some are, yes.

19 MR. RIESER: And those HAPs are included in
20 the VOC trading programs?

21 MR. AYRES: I think usually the VOC trading
22 programs don't distinguish among VOCs. Sometimes they
23 attempt to take out benzene or something like that, but
24 mostly they don't.

1 MR. RIESER: So the answer to my question is
2 yes?

3 MR. AYRES: Your answer's yes.

4 MR. RIESER: Thank you.

5 MR. AYRES: Question 7, "Why do you believe
6 trading programs are successful?" I think this is an
7 important question because I think it illuminates some of
8 the issues involved here. I am not comfortable with the
9 notion of responding to an undifferentiated use of the
10 word successful. The reason I say that is because a
11 trading program's success is measured in terms of
12 economic efficiency, as I mentioned earlier. If you have
13 a trading program, you can get a particular degree of
14 emission control less expensively than if you didn't
15 trade. But the success of a pollution control program,
16 on the other hand, is based on broader values, how does
17 it deliver better public health, does it distribute its
18 benefits equitably among citizens. Those values are
19 different from the value of economic efficiency.

20 So a trading program can be highly successful in
21 its own terms -- that is, it can be highly efficient --
22 and still not deliver on those larger values, and I think
23 that's the problem -- basically that's the problem with
24 the CAMR program. It will no doubt deliver the

1 reductions that it calls for with economic efficiency,
2 but it does not assure that it will deliver the same
3 public health benefits as, for example, the Illinois
4 program, and it doesn't assure that the benefits will be
5 shared equitably among citizens in my view.

6 A colleague of mine has written that emission
7 trading programs are so successful and so popular that
8 they provide an incentive to oversimplify environmental
9 problems to make market mechanisms more workable, or
10 another way to put it is if you have a hammer, everything
11 looks like a nail, and I think that's a phenomenon that's
12 happened with trading. CAMR may be a good example of
13 this, taking a concept that works very well in some
14 places and trying to apply it in a place where it isn't
15 appropriate.

16 MR. RIESER: And why isn't it appropriate?
17 I'm sorry. Were you done with your answer?

18 MR. AYRES: Yes.

19 MR. RIESER: Were you done with your answer?

20 MR. AYRES: Yes, I am.

21 MR. RIESER: So why isn't it appropriate?

22 MR. AYRES: It seems to me it's
23 inappropriate because of two things. First of all, it
24 does not require the application of the technology that

1 is considered to be available by the -- this department
2 and others. CAMR calls for much lesser reductions than
3 are required by this rule. And secondly, inevitably, in
4 a trading kind of system, some areas receive -- some
5 units control more than others, and therefore the
6 reductions in emissions in some areas will be less than
7 they are in others. That means that the fundamental
8 decision about how to allocate the emission reductions
9 gets made on economic grounds, not on public health
10 grounds.

11 MR. RIESER: Is that not also -- Is that
12 consistent with your view of how trading programs
13 operate, that they don't address these issues?

14 MR. AYRES: Well, in the -- in some -- in
15 the trading programs that I've supported, I don't think
16 the same issues are posed. In the acid rain program,
17 you're dealing with a pollutant which is a -- what was
18 the word Dr. Keeler used -- a synoptic scale pollutant,
19 one that the National Academy of Sciences told us is put
20 into the air from all over the eastern U.S. and mixed in
21 a giant mixing bowl and no one can identify where the
22 rain that falls came from in terms of acid, so for a
23 problem like that, a trading program that allows moving
24 around the emissions seems a much more reasonable

1 proposition, or to take the most extreme example, a
2 trading program involving CO2 emissions around the globe
3 would be -- would seem justifiable because it makes no
4 difference where the emissions come from in terms of --
5 in the case of toxics, it usually does matter where the
6 emissions come from, and consequently, I think trading
7 programs are less applicable there.

8 MR. RIESER: How is that different from a
9 trading problem for VOC, though?

10 MR. AYRES: Most of the VOC trading programs
11 are dealing with a problem which was not as regional as
12 acid rain. It is a regional problem. It is a -- Plumes
13 of ozone tend to travel long distances, so a trading
14 program that allows shifting those around is not like
15 when you have the localized effects that a toxic trading
16 program has, in my view.

17 MR. RIESER: So do the -- strike that. You
18 were here for Dr. Keeler's testimony, correct?

19 MR. AYRES: Yes.

20 MR. RIESER: And my understanding of his
21 testimony -- and it may not be your understanding of his
22 testimony -- was that the findings that he had in
23 Steubenville were -- from the mercury deposit there came
24 from local and regional sources, which as I understand

1 it, he defined as from the eastern United States, so does
2 that not put it more in that big pot analogy that you
3 described?

4 MR. AYRES: Well, I did understand what he
5 said a little differently than what you did, and I was
6 actually very interested to hear him define local and
7 regional, because these are words that are often used
8 very loosely, and he actually had a definition which
9 seemed to me to be very precise. It was -- Local as I
10 recall was -- as he described it, to me, was the distance
11 that an air mass travels in a semidiurnal period, which
12 in English is 12 hours, and I think that's what he said
13 the other day in his testimony, and a regional scale
14 phenomenon is one which is within a two-day traveling
15 time for an air mass. I think the numbers that he gave,
16 the 1,000-mile limit, were the outside limits of what
17 that means in practice, and the inside limits he didn't
18 specify, but it could be literally only a few miles. So
19 I think that this is a phenomenon which is -- I won't use
20 the word local, but I think it's one where the impact is
21 felt within a reasonably short distance from the sources,
22 and therefore it is one where trading is not really
23 appropriate.

24 MR. RIESER: When you talk about the impact

1 that you've just described, this is not -- the
2 measurement of mercury deposition is another area in
3 which I take it you are not an expert; is that correct?

4 MR. AYRES: Yes.

5 MR. RIESER: Are you aware of whether the
6 IEPA is prepared to present other testimony on mercury
7 deposition other than that was -- that which was
8 presented by Dr. Keeler, again assuming his report comes
9 in at some point?

10 MR. AYRES: I don't know of any other.

11 MR. RIESER: Why don't we go on to 9.

12 HEARING OFFICER TIPSORD: Mr. Zabel has a
13 follow-up first.

14 MR. RIESER: Oh, I'm sorry.

15 MR. ZABEL: That's all right. The --
16 Mr. Ayres, the acid rain program does not require the
17 installation of available technology in all sources, does
18 it?

19 MR. AYRES: No.

20 MR. ZABEL: And the acid rain program does
21 result in differing reductions in different areas, does
22 it not?

23 MR. AYRES: Yes, it does.

24 MR. ZABEL: Thank you. Nothing else.

1 HEARING OFFICER TIPSORD: Question 9, then.

2 MR. AYRES: Question 9 and 10 really are the
3 same, I think.

4 MS. BASSI: Wait. Excuse me. I think we
5 skipped 8.

6 MR. AYRES: Parts of them are the same.

7 HEARING OFFICER TIPSORD: Actually,
8 Mr. Rieser is the one that said continuing on to question
9 9. I assumed that he felt question 8 had been answered.

10 MS. BASSI: Well, excuse me.

11 MR. RIESER: Oh, thank you. No, 8 needs to
12 be answered.

13 HEARING OFFICER TIPSORD: All right.
14 Question 8, then.

15 MS. BASSI: I was going to say, I don't.

16 MR. AYRES: Question 8, "Your testimony
17 indicates that the Illinois EPA opposed trading in its
18 comments to USEPA on CAMR. Would it be more accurate to
19 say that Illinois EPA opposed trading unless it provides
20 a protective level to avoid hot spots?" That is correct
21 as -- in terms of the way it was stated in the Illinois
22 comments. My view of the comment by Illinois was
23 essentially equivalent to what I said, and that's why I
24 didn't pay that much attention to the difference, because

1 I don't believe that it's possible to avoid an uneven
2 distribution of benefits with the trading program, so I
3 think the condition they offered was essentially not
4 satisfiable.

5 MR. RIESER: If you'll turn your attention
6 to page 9 of Exhibit 40 --

7 MR. AYRES: Of the comments?

8 MR. RIESER: Yes. And this would be the
9 third paragraph from the bottom that begins with
10 "Illinois has these additional concerns," and the last
11 sentence of that states, "Illinois prefers that if there
12 is a trading program promulgated, it would have the
13 authority to develop its own system for allowance
14 allocation, flow control, banking and other trading
15 issues." Do you see that?

16 MR. AYRES: Yes. I'm just checking the --

17 MR. RIESER: Oh, sure.

18 MR. AYRES: -- checking the other thing, the
19 other version here. Yes, I see the paragraph.

20 MR. RIESER: And it -- And have you
21 confirmed that it's the same as the comments that you
22 have? Or at least the sentence is the same.

23 MR. AYRES: Yeah, it looks the same.

24 MR. RIESER: Okay. Thank you.

1 MR. AYRES: I'm sorry. Your question --

2 MR. RIESER: My question is, was such a
3 trading program -- state-developed trading program
4 discussed as you were discussing with Illinois EPA the
5 development of this particular proposed rule?

6 MR. AYRES: It was not discussed with me,
7 no.

8 MR. RIESER: Do you know if there were any
9 discussions on such a trading program?

10 MR. AYRES: I don't know.

11 HEARING OFFICER TIPSORD: Question 9.

12 MR. AYRES: Question 9, "Is it accurate that
13 your basis for rejecting the cap and trade approach to
14 mercury control is the possible presence of hot spots?"

15 MS. BUGEL: I'm sorry. That was question
16 10. Question 9 --

17 MR. AYRES: Well, 9 and 10 are -- I think
18 they overlap. I put them together because --

19 MS. BUGEL: I just wanted to make sure for
20 the record.

21 HEARING OFFICER TIPSORD: Thank you,
22 Ms. Bugel.

23 MR. RIESER: Let's just skip 9 and go right
24 to 10.

1 MR. AYRES: Yeah. I think it's the same
2 thing. Well, to begin with, I think what I reported was
3 that the STAPPA/ALAPCO model rule does not include
4 emission trading. I didn't express my personal opinion
5 there, although I have here, about that, point being that
6 the model rule reflects the view of a number of air
7 pollution control officials that emission trading is
8 inappropriate for toxic air pollutants such as mercury,
9 but with respect to my personal views, I want to identify
10 an assumption which I think lies behind the questions
11 about trading of mercury that's -- to me is important.

12 A trading program only makes sense when the
13 emission reduction requirements are less demanding than
14 what the best technology can achieve, such as the CAMR
15 program. A program that requires application of
16 available technology across the board isn't a very good
17 candidate for trading because there's not much of
18 anything to trade, so to advocate trading is implicitly
19 to advocate a lower level of control, and of course
20 that's what's in the CAMR rule.

21 In addition, as I mentioned before, the -- my
22 concern about the cap and trade approach is that the
23 reductions on purpose get delivered unevenly across the
24 state. When you have a technology requirement in every

1 unit, then essentially every unit is controlled and
2 everybody gets as much protection as they can. If you
3 have a trading program, then utility executives make
4 economic decisions about which plants to clean up and
5 which plants to less clean up or maybe no cleanup on.

6 I don't use the term hot spots because I think it
7 confuses the issue, and I think that the real issue here
8 is not some abstraction called hot spots but the
9 equitable distribution of emission reductions across the
10 state, and so one of the reasons I think it's
11 inappropriate to use a trading system for this kind of
12 pollutant is that it ends up with a distribution that is
13 controlled by economic factors, not by public health
14 factors.

15 So I guess the answer -- the short answer to the
16 question is no, it's not accurate to say that the
17 presence of hot spots is the basis for rejecting the cap
18 and trade approach. It is two things. One is that
19 there's an uneven distribution of benefits, and the
20 other, which has nothing to do with hot spots, is that a
21 trading program implies a lesser degree of control than
22 is available.

23 MR. RIESER: And what basis do you have for
24 saying that CAMR requires a lesser degree of control than

1 is available?

2 MR. AYRES: Well, CAMR requires about 50
3 percent control by the year 2020. I think we've heard
4 enough testimony already and certainly will have seen it
5 in written form to know that considerably more than that
6 is possible. Whether it's exactly 90 percent or not,
7 I'll leave that to the technical witnesses to testify to,
8 but clearly it seems to me as a person interested in
9 policy more than 50 percent is possible, and I don't
10 think even the EPA will argue that that's all that's
11 possible.

12 MR. RIESER: It's not accurate that CAMR
13 requires 70 percent control by 2018?

14 MR. AYRES: Well, according to the EPA's
15 description in their rulemaking, they give -- 50 percent
16 is the number that would be reached by the year 2020.
17 That may be different from one state to another, but on a
18 national basis, that's what it is.

19 MR. RIESER: When you say it's different
20 from one state to another, that's because different power
21 plants and different states have different control
22 opportunities; is that correct?

23 MR. AYRES: No. I think it's because the
24 EPA allocated emission rights. EPA allocated allowances

1 or allowance budgets state by state and some states
2 got -- well, I'll put it a different way. Some states
3 that will require a greater reduction than others.

4 HEARING OFFICER TIPSORD: Mr. Forcade?

5 MR. FORCADE: Mr. Ayres, I've consistently
6 heard you use the phrase that cap and trade programs
7 provide for a lesser degree of control. Could you tell
8 me which would have the lesser degree of control, a
9 universal plant-by-plant requirement that you achieve 90
10 percent reduction or a cap and trade program that all
11 facilities across the United States receive a 95 percent
12 reduction?

13 MR. AYRES: Well, I think my testimony was
14 that a 95 percent reduction cap and trade program given
15 what we -- given what we've been talking about in terms
16 of the capability of the technologies wouldn't be much of
17 a cap and trade program because there would be very
18 little opportunity to trade. There would be very few
19 allowances to trade. So when people talk about a cap and
20 trade program and how it can make substantially more
21 efficient results, they're necessarily talking about cap
22 and trade programs which have lower emission
23 requirements. Acid rain, as Mr. Zabel pointed out, has
24 about a 50 percent reduction, and that 50 percent has

1 been accomplished very efficiently.

2 MR. FORCADE: But as a general concept, a
3 cap and trade program that leads to national reductions
4 of a particular degree would have the same level of
5 control as individual plant requirements effecting the
6 same control level, would it not?

7 MR. AYRES: It -- I'm not saying it is
8 impossible to write a program like that. You could adopt
9 one. You could write a regulation that required 95
10 percent control and allowed for trading. I'm just saying
11 that it would be of little use. It would not markedly
12 increase the efficiency of the program and there'd be
13 very little in the way of allowances to trade because
14 there's -- each unit would have to be reaching such a
15 high level of control. So no, it's not logically
16 impossible or conceptually impossible to write such a
17 program, but it doesn't make sense.

18 MR. FORCADE: So when you're talking about a
19 cap and trade program having a lesser degree of control,
20 you're talking about compared to the ultimate control
21 technology that can be imposed on every plant; is that
22 correct?

23 MR. AYRES: I'm talking about imposing the
24 available control technology on every plant, yes. That's

1 not the ultimate. I don't think we're talking about the
2 ultimate here, but I am saying that the CAMR rule, the
3 acid rain rule and I think it's true of most cap and
4 trade programs, if not all of them, they're only
5 appealing if they make -- if the emission reduction
6 requirements are substantially less than 90 percent or 85
7 percent or 95 percent.

8 MR. FORCADE: But you're talking about in
9 this case the mercury cap and trade program, right?

10 MR. AYRES: Yes.

11 MR. FORCADE: I'm talking generally about a
12 cap and trade program. Isn't that balancing the level of
13 control that would be achieved nationally under one
14 program compared with the level of control that would be
15 received under the other?

16 MR. AYRES: I'm not sure I understand your
17 question.

18 MR. FORCADE: If you take the total
19 emissions of a particular pollutant nationally and you
20 impose a certain degree of reduction requirement on every
21 plant and you take the same level of reductions and you
22 impose it in a cap and trade program, haven't you
23 achieved the same level of reductions?

24 MR. AYRES: Well, I think I agreed to the

1 point that it's possible to do that. If you would, yes,
2 then that -- then you would achieve the same level of
3 reductions, but my testimony goes to a slightly different
4 point, and that is to the kinds of programs which anyone
5 would propose for cap and trade. I think it's not
6 surprising that the CAMR program, which has relatively
7 lower emission reductions, might seem appealing to policy
8 makers for a cap and trade program because there are
9 greater economic efficiencies to be achieved in that kind
10 of a program. On the other hand, if your objective is to
11 provide the best protection for public health that is
12 reasonably achievable and you would write a -- you would
13 probably write a standard which required the application
14 of technology on each unit, and if that's the kind of
15 standard you wrote, you could allow for trading in
16 concept, but it wouldn't really be of any particular use
17 to anybody.

18 HEARING OFFICER TIPSORD: Mr. Bonebrake?

19 MR. BONEBRAKE: Mr. Ayres, you had an
20 exchange with Mr. Rieser regarding the variation among
21 the states in mercury reductions that flow from CAMR
22 state-specific caps. Do you recall that?

23 MR. AYRES: Yes.

24 MR. BONEBRAKE: Do you know what the

1 effective reductions in Illinois would be resulting from
2 the CAMR Phase II cap for Illinois?

3 MR. AYRES: I don't know exactly, no.

4 MR. BONEBRAKE: Do you know if it's in
5 the --

6 MR. AYRES: They're high, I understand, but
7 I don't know that.

8 MR. BONEBRAKE: Do you know if it's in the
9 80 percent range?

10 MR. AYRES: That's possible.

11 HEARING OFFICER TIPSORD: 10a.

12 MR. RIESER: Excuse me. I -- We need to
13 work on the second part of the discussion, which is
14 the -- and actually falls in with the questions of 10a I
15 guess through "c" that talk about hot spots, and we need
16 to follow up with Mr. Ayres' discussion of that term.

17 You -- You're using the phrase --

18 MR. AYRES: Wasn't Studio 54 a hot spot back
19 in the '80s?

20 MR. RIESER: I wouldn't know.

21 HEARING OFFICER TIPSORD: Before you do any
22 follow-up, though, I think he already stated that that's
23 not a term he uses, so let's find out how he defines hot
24 spots, so let's do -- ask "a," please.

1 MR. RIESER: That's exactly where I'm going
2 to.

3 HEARING OFFICER TIPSORD: Thank you, because
4 I'm getting really confused.

5 MR. RIESER: Okay. Well, we don't want
6 that.

7 You don't use the term hot spots but you do use a
8 term instead -- and correct me if I don't have it
9 accurate -- which is equitable distribution of public
10 health benefits; is that correct?

11 MR. AYRES: Something --

12 MR. RIESER: Or the opposite being the
13 inequitable distribution of public health benefits, which
14 you've also used. What do you mean by that phrase?

15 MR. AYRES: What I mean is that the
16 reductions from the program -- and we're talking to both
17 cases, the Illinois program and the CAMR program -- we're
18 talking about reductions in emissions overall.

19 MR. RIESER: Uh-huh.

20 MR. AYRES: But in a trading program, the
21 reductions are lumpy. They don't all happen -- They
22 don't happen evenly throughout all the sources, and
23 that's deliberately by plan because of the interest in
24 economic efficiency, but what that means in terms of the

1 public health benefits is that they're delivered in a
2 lumpy form as well, and that to me raises questions of
3 equity, which I think are involved in here. I'm -- do
4 not like the term hot spots because I listened -- among
5 other things because I listened to the discussion that
6 was here in this room last week, and I think the term
7 is -- it suggests that pollution will increase in some
8 spot; that there'll be a -- that as a result of one of
9 these emission reduction programs, there'll actually be
10 an increase in emissions. I think that's erroneous.
11 We're talking about how much reduction is going to occur.
12 So I just don't think the term hot spots adds anything to
13 understanding that problem, and I don't use it and I --
14 my answer to question "b" is that neither does STAPPA or
15 ALAPCO in their rule.

16 MR. RIESER: In stating that the controls of
17 mercury are lumpy, that implies that there are specific
18 impacts at specific locations that are different than
19 impacts at other locations, correct?

20 MR. AYRES: Yes.

21 MR. RIESER: And that's not as a result of
22 the increase. That's as a result of -- you know, again,
23 based on that assumption, that's as a result of the
24 current emissions.

1 MR. AYRES: Well, no. I -- What I mean is
2 that the benefits of reductions will be -- will not be
3 evenly distributed in a trading program. Some units will
4 control by a lot, others will control by a little or not
5 at all, so you will have a very uneven distribution of
6 mercury emissions based on the economics of controlling
7 the mercury rather than on any kind of public health
8 decision.

9 MR. RIESER: And in what way will the
10 benefits not be delivered on -- strike that. In what way
11 will the benefits be delivered unevenly if there's a cap
12 and trade program?

13 MR. AYRES: Well, as I said, I contrast
14 mercury with acid rain. In the case of acid rain, the
15 science, at least as I understood it when I worked on
16 that, on trying to get that piece of legislation passed,
17 was that the eastern part of the United States was
18 essentially one big mixing bowl, and so you could make
19 big reductions in some places and small in other and
20 you'd still have the policy result you wanted, which was
21 the reduction of acid rain. Mercury I think is a
22 different kind of critter. Its effects are much closer
23 to where it's emitted as far as I read the science, and
24 that being true, if you have very different control

1 regimes in -- at different places in the state, then the
2 benefits of control will be distributed in a very uneven
3 and arguably inequitable pattern.

4 MR. RIESER: When you say the effects are
5 much closer, what do you mean by that?

6 MR. AYRES: I mean by that that the mercury
7 that's emitted is deposited more closely and that the
8 effects in terms of the ecosystem can be expected to also
9 be seen in that kind of a pattern.

10 MR. RIESER: Other than the testimony of
11 Dr. Keeler, is there any evidence that's been presented
12 here that mercury is deposited more closely, as you say?

13 MR. AYRES: Well, no. Dr. Keeler's
14 testimony is the main testimony here. Certainly,
15 however, the view of, for example, the people that worked
16 on the STAPPA/ALAPCO report, who are all air
17 administrators around the country, was also that trading
18 regimes for toxic pollutants like mercury are not good
19 because the effects are localized --

20 MR. RIESER: And I'm not --

21 MR. AYRES: -- to borrow a term.

22 MR. RIESER: -- disputing that that's a
23 common belief. What I'm trying to get at is what data we
24 can present to the Board in support of that.

1 MR. AYRES: Well, I think you've identified
2 the key piece that's been presented, and that's
3 Dr. Keeler's testimony.

4 MR. RIESER: Is there other evidence other
5 than that presented by Dr. Keeler that's been presented
6 that you're aware of?

7 MR. AYRES: I have not -- I haven't heard it
8 here.

9 MR. RIESER: And then taking the next step,
10 it's correct that the public health issue with respect to
11 mercury is the consumption of fish that's got certain
12 levels of methylmercury in them; is that correct?

13 MR. AYRES: Yes.

14 MR. RIESER: And that that issue is what the
15 Illinois EPA's proposed rule is designed to address.

16 MR. AYRES: Yes.

17 MR. RIESER: What evidence has been
18 presented here other than the testimony of Dr. -- excuse
19 me -- Ms. Willhite as to whether the -- as to whether
20 there are specific areas in Illinois at which the fish
21 methylmercury levels are higher than others?

22 MR. AYRES: Well, I think we heard testimony
23 from Ms. Willhite and from Dr. Hornshaw also in the
24 record, and this is I think also in response to a

1 previous question. The TSD addresses those issues as
2 well, so there is -- there's at least that much evidence
3 and there's I guess also the statement of reasons, it's
4 called here, would also be evidence to support those
5 points.

6 MR. RIESER: But other than that, other than
7 the testimony that you've described and the documents
8 that have been filed by the Agency, you don't have any
9 independent evidence that control of individual power
10 plants in Illinois will reduce the level of methylmercury
11 in individual streams in Illinois; is that correct?

12 MR. AYRES: I don't have any independent
13 evidence that I am -- that I have knowledge about or
14 responsible for. I think it is the consensus of
15 scientific opinion on this subject. I think that's
16 pretty reflected in the testimony here and the materials
17 in the record.

18 MR. RIESER: I'm sorry. When you say it's
19 the consensus, what are you referring to? Other than
20 Dr. Keeler, has that consensus been presented here?

21 MR. AYRES: Well, I can't --

22 HEARING OFFICER TIPSORD: Mr. Rieser, I'm
23 going to stop you now.

24 MR. RIESER: Okay.

1 HEARING OFFICER TIPSORD: You've asked him
2 several questions about what evidence has been presented
3 here, and the record speaks for itself. You can
4 certainly ask him if he has any independent knowledge
5 outside of the record, but I really don't think we need
6 to go over and over and over what's been presented in the
7 record.

8 MR. RIESER: Thank you.

9 HEARING OFFICER TIPSORD: Thank you.
10 Mr. Zabel? I apologize.

11 MR. ZABEL: Thank you. In contrast to the
12 acid rain program as being -- and I'm reluctant to use
13 regional or local words under the circumstances, but if I
14 may, regional and --

15 MR. AYRES: Synoptic scale.

16 MR. ZABEL: Synoptic scale. That's why I'm
17 not using a word I don't understand.

18 MR. AYRES: I now understand it for the
19 first time in my life as a result of this hearing.

20 MR. ZABEL: And mercury can have a localized
21 disbenefit on the public health scale.

22 MR. AYRES: Yes.

23 MR. ZABEL: That's the reason you oppose
24 trading on mercury.

1 MR. AYRES: That's -- Yes, that's one of the
2 reasons. The other is, as I mentioned, that I think
3 trading implies a lower level of control as a practical
4 matter.

5 MR. ZABEL: That's true in all trading
6 programs, is it not?

7 MR. AYRES: I think it's pretty much true in
8 all trading programs.

9 MR. ZABEL: And looking at the disbenefit
10 side, is it your understanding that first there has to be
11 a local deposition of the mercury? Is that correct? A
12 near region, near area -- whatever word you'd like --
13 deposition of the mercury.

14 MR. AYRES: I'm not sure I understand your
15 question.

16 MR. ZABEL: Well, I'm just -- I'm trying to
17 get at why the disbenefit in your mind occurs, and I'm
18 going to walk through several -- I think there were
19 several factors in that, and I just want to make sure
20 that we're on the same path on this.

21 MR. AYRES: Well, let me say this about
22 that. I think there is -- there's no doubt that there
23 are a number of steps between the mercury going out the
24 stack and the mercury that's consumed in the fish, and as

1 we've heard, those are -- those -- each of those steps
2 poses its own complicated issues. What I've learned over
3 the last 35 years of air pollution control experience is
4 that sometimes the tools that we have are not as subtle
5 as we know the problem is, but they may still address the
6 problem. Acid rain was like that, I think. There was a
7 lot to be understood about acid rain when that
8 legislation was passed, but we knew enough to know that
9 reducing the emissions made a difference in the acid
10 rain, and indeed that's what we've seen. I think in the
11 case of mercury, there are certainly lots of issues to be
12 learned more about, about deposition, about water
13 chemistry, about fish uptake, all those things, but my
14 sense as someone interested in policy is that we know
15 enough to know what we need to do in order to address the
16 fish issue, and we may learn lots more about those
17 subtleties along the way, but we have a pretty good
18 sense, in my view, that if we cut those emissions, we're
19 going to see a healthier population.

20 MR. ZABEL: And I appreciate your statement
21 since I hadn't even asked the question.

22 MR. AYRES: I know where the questions --
23 what the questions are. I think I'm just trying to put
24 them in context.

1 MR. ZABEL: But what I'm trying to isolate
2 here is the localization of the problem versus a trading
3 program, which in your view would not address
4 localization, and I want to look at those factors and
5 make sure we're on the same page as to what that would be
6 vis-a-vis a trading program. It would require local --

7 MR. AYRES: With my preamble, please do.

8 MR. ZABEL: Your preamble's in the record,
9 so we can't do much about that at this point. It would
10 require a local deposition, would it not?

11 MR. AYRES: Whatever local means. Yeah,
12 close in some sense.

13 MR. ZABEL: Make it lumpy, I guess is what
14 we're saying.

15 MR. AYRES: Right, right.

16 MR. ZABEL: And it would have to be on a
17 water body that would methylate the mercury, would it
18 not?

19 MR. AYRES: Well, there would have to be a
20 water body that was affected, yes.

21 MR. ZABEL: But we're looking for lumps, so
22 I'm looking close by.

23 MR. AYRES: But there are water bodies all
24 over.

1 MR. ZABEL: True, but they may be hundreds
2 or even thousands of miles downstream or down the
3 airshed, might they not?

4 MR. AYRES: Every power plant's close to a
5 body of water in my experience because they need a lot of
6 water.

7 MR. ZABEL: And that body of water has to be
8 of the right chemistry to methylate the mercury; is that
9 correct?

10 MR. AYRES: I don't know if that's what I
11 would come to as a conclusion from what I've heard or
12 not.

13 MR. ZABEL: Is not --

14 MR. AYRES: There is -- I'd be willing to
15 agree to the proposition that methylation --

16 MR. ZABEL: Yes.

17 MR. AYRES: -- is a complicated process.

18 MR. ZABEL: And methylmercury is the
19 ultimate mercury substance we're concerned about from a
20 health perspective, is it not?

21 MR. AYRES: Yes.

22 MR. ZABEL: So it has to be methylated.

23 MR. AYRES: Yes.

24 MR. ZABEL: It has to be eaten by biota in

1 the food chain, ultimately the fish that are consumed by
2 people.

3 MR. AYRES: Yes.

4 MR. ZABEL: And by people both sensitive and
5 maybe insensitive, I think were the terms used, before we
6 have a health problem, do we not?

7 MR. AYRES: The -- I'm not sure what you
8 mean by people who are sensitive.

9 MR. ZABEL: Well, if it's not -- if that
10 fish isn't caught and eaten by somebody, it's really not
11 a health problem, is it?

12 MR. AYRES: Oh, not for humans, yes. That's
13 right.

14 MR. ZABEL: Okay. That's what I was getting
15 at. Thank you.

16 HEARING OFFICER TIPSORD: Then are we ready
17 to go to 10c? Which I think since he says he doesn't use
18 hot spots, there's no --

19 MR. AYRES: Well, I can't answer the
20 question. I mean, it's asking whether -- well, never
21 mind.

22 MR. RIESER: No, go ahead.

23 MR. AYRES: I will not be able to answer the
24 question.

1 HEARING OFFICER TIPSORD: That means that it
2 is 12 o'clock, so let's go ahead and take a lunch break
3 today. As I said, tomorrow we'll start pushing it out a
4 little bit later since we're going to seven tomorrow
5 night. So let's take an hour for lunch.

6 (One-hour lunch recess taken.)

7 HEARING OFFICER TIPSORD: Then let's
8 continue with Mr. Ayres. Mr. Rieser, am I correct we're
9 on question number 11?

10 MR. RIESER: That's what I've got, yeah.
11 That's what I've got, yes.

12 HEARING OFFICER TIPSORD: Mr. Ayres,
13 question number 11.

14 MR. AYRES: Okay. Question 11, "Do you
15 believe that the atmospheric deposition modeling
16 performed by USEPA supports EPA's position that the CAMR
17 rule addresses hot spots?" Well, a disclaimer first,
18 which is I can't evaluate the quality of the EPA's
19 atmospheric modeling, so to the extent that's involved in
20 the question, I can't respond to it. But as I said
21 earlier, my view is that the appropriate public health
22 policy is to install the available technology on all the
23 EGUs on an accelerated schedule, and I think that's what
24 the Clean Air Act really should require as well for toxic

1 pollutants such as mercury. So in response to this
2 question, the studies they're referring to are
3 essentially studies of -- are predictions of how utility
4 executives will decide to implement CAMR, because the
5 implementation of the control technology is a set of
6 decisions made by the company executives using economics
7 as the basis for their decision, so the EPA modeling is
8 essentially assuming decisions will be made a certain way
9 based on what EPA knows about the economics of the
10 companies, but of course that's only a prediction, and a
11 prediction doesn't guarantee that there will in fact not
12 be areas where there remain high levels of -- or high
13 concentrations -- higher concentrations of mercury.

14 HEARING OFFICER TIPSORD: 12?

15 MR. RIESER: So is the answer "no" or "I
16 don't know" to this question?

17 MR. AYRES: The -- Well, I think the answer
18 is that in my view, the EPA modeling does not establish
19 that there won't be areas of high concentrations because
20 it is only modeling of how people will make decisions,
21 and of course those decisions will be made later by
22 people involved.

23 MR. RIESER: Understood. Thank you.

24 MR. AYRES: Question 12, "What data, if any,

1 supports your statement that there are hot spots in
2 Illinois?" And I think as I said earlier, I haven't made
3 the statement there are hot spots in Illinois. I haven't
4 used the term.

5 MR. RIESER: But using the term -- if we can
6 revise the question using the term that you prefer, which
7 I believe is uneven distribution of benefits, public
8 health benefits.

9 MR. AYRES: I think that the existence or
10 the unevenness of the health benefits, or the uneven
11 distribution of health benefits, is a kind of almost
12 logical deduction from the existence of the trading
13 system. The whole purpose of the trading system is to
14 allow for different degrees of control from different
15 units, and so it almost logically implies that -- except
16 in the one rare case where the economic -- economics
17 actually result in the same result as a non-trading
18 system, it logically results in an uneven distribution of
19 reductions.

20 MR. RIESER: And mindful of the Hearing
21 Officer's direction to keep this going as quickly as
22 possible, my recollection -- and not to go over stuff,
23 but my recollection is that you had answered a question
24 with respect to what's called localized impacts

1 resulting -- current localized impacts resulting from the
2 power plants is that you didn't have any specific data
3 other than what's been presented to the Board so far.

4 MR. AYRES: That's correct.

5 Question 13 says, "If there were no hot spots in
6 Illinois, would you support a cap and trade program for
7 control of mercury in Illinois?" And I think the answer
8 to that is that as I see it, it's virtually impossible
9 that there would not be areas that have higher
10 concentrations of mercury, and -- if there's a cap and
11 trade program, so again, as almost a logical matter, I
12 don't think this hypothetical can exist, so I can't
13 really respond to it in its own terms.

14 HEARING OFFICER TIPSORD: Mr. Forcade?

15 MR. FORCADE: Mr. Ayres, would it be safe to
16 say that sources of mercury in the environment are not
17 uniformly distributed across the United States?

18 MR. AYRES: Yes.

19 MR. FORCADE: Would it therefore be safe to
20 say that the anticipated concentration of mercury across
21 the United States would not be anticipated to be uniform?

22 MR. AYRES: That's no doubt so.

23 MR. FORCADE: Have you made any statements
24 that in fact you believe the health effects will be less

1 or greater in an area where mercury controls under the
2 Illinois rule will be in place than perhaps in other
3 areas where there are no sources of mercury?

4 MR. AYRES: I'm not sure I understand the
5 question.

6 MR. FORCADE: You've made the statement
7 several times that there will be uneven benefits. That I
8 can understand if you're talking about mercury
9 reductions. I believe you once also stated there would
10 be uneven impacts from mercury, which I believe has more
11 to do with the nature of the sources and reductions. I'm
12 trying to find out if there are sources, say, in the --
13 or there are areas such as the far southwest where there
14 are limited numbers of coal-fired plants and limited
15 numbers of other sources of mercury. Wouldn't you expect
16 that to have a lower, as you describe it, health risk
17 than an area that might have more densely populated
18 mercury sources?

19 MR. AYRES: Yes, I think that's probably
20 right. The -- But if you live in an area that doesn't
21 have coal-fired power plant sources near to you, to use a
22 term that we can use, if you live in that -- if you live
23 in an area that doesn't have nearby coal-fired power
24 plants, then you're probably not going to be suffering

1 from very much mercury deposition anyway. I mean, if
2 you -- I happened to grow up in Oregon. At the time, at
3 least while I was there, there were no coal-fired plants
4 anywhere in the northwest, so there was no mercury
5 exposure at least from coal-fired power plants in those
6 areas, but I think what matters here is the areas where
7 there are power plants, and if you require a reduction of
8 a certain percentage from each of those power plants,
9 then you are distributing the deposition reductions in
10 more or less equal fashion around the state. That's my
11 point.

12 HEARING OFFICER TIPSORD: Mr. Rieser?

13 MR. AYRES: I'm sorry. Let me say a little
14 bit more about that. You're -- I think you're
15 distributing the reductions -- benefits of the reductions
16 to the people who are suffering the impacts in a more or
17 less even fashion around the state.

18 HEARING OFFICER TIPSORD: Go ahead,

19 Mr. Rieser.

20 MR. RIESER: Yeah. And let's talk about the
21 suffering the impacts part, and you talked about growing
22 up in Oregon and not being exposed to mercury, but isn't
23 it accurate that the human exposure to mercury has to do
24 with the consumption of fish that have certain levels of

1 methylmercury in them?

2 MR. AYRES: Yes.

3 MR. RIESER: So as a --

4 MR. AYRES: Are you going to salmon?

5 MR. RIESER: I was going to go there, but
6 being even less of a fisherman than Mr. Zabel, let me
7 just say -- ask whether it was possible that in the
8 consumption of fish either from the ocean or the local
9 rivers that there was exposure.

10 MR. AYRES: There may well have been.

11 MR. RIESER: So the --

12 MR. AYRES: It would explain the loss of
13 memory.

14 MR. RIESER: So the --

15 MR. AYRES: I'm hoping for something that
16 will explain the loss of memory. Put it that way.

17 MR. RIESER: So that the exposure -- the
18 individual human exposure has to do with the fish-eating
19 habits of the individual and not their proximity to an
20 individual power plant, correct?

21 MR. AYRES: Yes. I mean, as I said earlier
22 in my preamble, there are plenty of variables along the
23 route, and I acknowledge that, and the policy options
24 that we have are not that subtle, but I think there is a

1 difference that's significant between a policy that
2 allows for quite varying degrees of reduction from
3 different units on the one hand and a policy that
4 requires all the units to reduce on the other.

5 MR. RIESER: But again, the public health
6 benefit you're seeking to address isn't necessarily
7 related, if it's related at all, to living near a power
8 plant or an area that's of -- let's call it local
9 deposition, assuming there is such a thing, just make the
10 assumption. It's got nothing -- It's got less to do with
11 that than the fish-eating habits of the -- of individuals
12 within the country, correct?

13 MR. AYRES: Well, you're suggesting that the
14 fish eaters are distributed in a very -- in a non-uniform
15 fashion.

16 MR. RIESER: Unfortunately, we've had no
17 real data about where the fish eaters are and aren't and
18 what fish they eat, so I'm not suggesting anything. I'm
19 saying that the key issue is not the residential
20 proximity, if you will, but where one is taking fish from
21 and eating fish from.

22 MR. AYRES: What I was getting at was if you
23 take the distribution of power plants around the state, I
24 can't think of any -- at least off the top of my head any

1 strong reason why you would expect the fish-eating
2 population or the fish-catching and eating populations to
3 be -- not to be distributed, you know, fairly uniformly
4 across the state. If you thought they were all
5 concentrated near a handful of power plants, then you
6 would perhaps want to focus on those plants, but I think
7 we don't have the evidence to know that they are
8 concentrated in that way, and the most sort of neutral
9 way of dealing with that as an assumption is that they're
10 distributed fairly evenly.

11 MR. HARRINGTON: With reference to Illinois,
12 are you aware of any commercially caught fish in Illinois
13 other than perhaps for at past times in Lake Michigan?

14 MR. AYRES: Other than what?

15 MR. HARRINGTON: Other than Lake Michigan,
16 leaving Lake Michigan aside, since we have nothing to --

17 MR. AYRES: Commercially caught other than
18 Lake Michigan?

19 MR. HARRINGTON: Right.

20 MR. AYRES: I don't know that.

21 MR. HARRINGTON: Are you aware that in
22 general, game fish which are at the top of the food chain
23 cannot be caught and sold commercially?

24 MR. AYRES: No, I'm not aware of that.

1 MR. HARRINGTON: Are you aware what -- where
2 the majority of fish that would be consumed in Illinois
3 come from?

4 MR. AYRES: No, although I heard the
5 testimony earlier of Dr. Hornshaw and Ms. Willhite and
6 their descriptions of the mercury content of fish and the
7 consumption patterns of fish in Illinois.

8 MR. HARRINGTON: I must have missed the
9 consumption patterns, but most fish -- commercially sold
10 fish, fish sold in restaurants, in general is going to
11 come from the ocean, is it not?

12 MR. AYRES: I don't know the answer to that.
13 I've heard that said, but I can't speak to that.

14 MR. HARRINGTON: I mean, do you know whether
15 there is any population in Illinois that is exposed by
16 actual consumption of mercury-laden fish?

17 MR. AYRES: Well, I think if you really want
18 an answer to that, the people to put that question to are
19 Dr. Hornshaw and Ms. Willhite. They're the ones who know
20 about the Illinois situation.

21 MR. HARRINGTON: But you don't --

22 MR. AYRES: I'm assuming from having heard
23 them that people do catch fish and eat them in Illinois,
24 or would like to.

1 MR. HARRINGTON: Again, I'm not going to
2 argue what their testimony was, but I didn't hear that in
3 terms of consumption. Catching, yes. I didn't hear one
4 bit of testimony about consumption of Illinois fish.
5 Just for the record, and if you did or if someone wishes
6 to point out my error, I would appreciate it.

7 HEARING OFFICER TIPSORD: I would note that
8 Dr. Hornshaw did speak of at least knowledge of one
9 subsistence of fisherman, which would have indicated that
10 there -- he did speak of at least one person who ate
11 their catch.

12 MR. RIESER: A member, he admitted, of an
13 insensitive population.

14 HEARING OFFICER TIPSORD: That's correct.

15 MR. KIM: Who ate an ungodly amount of fish.

16 MR. RIESER: That he could remember. Why
17 don't we go on to 14, is where we are.

18 HEARING OFFICER TIPSORD: 14.

19 MS. BUGEL: Before we go on --

20 HEARING OFFICER TIPSORD: Yes, Ms. Bugel?

21 MS. BUGEL: I would just like to -- before
22 we get too far off of trading and cap and trade versus
23 hot spots versus Illinois program, I'd like to ask some
24 follow-up questions on that. You testified earlier as to

1 the STAPPA/ALAPCO process and the development of a model
2 rule. I'd like to follow up a little bit on that. Can
3 you tell me again who makes up STAPPA/ALAPCO?

4 MR. AYRES: STAPPA is the association -- as
5 the name suggests, the association of the air pollution
6 and control officials of all the states.

7 MS. BUGEL: And --

8 MR. AYRES: ALAPCO is the Association of
9 Local Air Pollution Control Officials, which actually
10 there are quite a few of them. They're not just in
11 cities the size of Chicago or New York, but all around
12 the country.

13 MS. BUGEL: And in general, could you tell
14 us what sort of expertise they would have, what their
15 areas of expertise would be?

16 MR. AYRES: They are -- They're the people
17 who adopt the regulations and implement them on the state
18 level pursuant to the Clean Air Act and to their own
19 state legislation.

20 MS. BUGEL: And given the choice of a cap
21 and trade program versus a regulatory program that
22 regulates every plant, sets the limit on every plant,
23 what do they recommend?

24 MR. AYRES: They've recommended strongly

1 that they're against the adoption of the cap and trade
2 program, and I think -- if I can just add a point there,
3 I think it's -- their reasoning including -- probably
4 included the things I've mentioned. It may well also
5 have involved their sense as regulators of the
6 administrability, the workability of the program. I
7 think they have a unique sense of how enforceable a
8 program is and how they think it would actually work.

9 MS. BUGEL: Since you raised
10 administrability, earlier you testified -- a couple of
11 times you testified that the tools we have as regulators
12 are not as subtle as the problems. What do you mean by
13 that?

14 MR. AYRES: Well, I think the more one
15 learns about environmental problems, the more amazed one
16 inevitably is about the subtleties of nature, and when
17 man perturbs that system by injecting chemicals or
18 whatever into it, it is a very subtle process of teasing
19 out what the impacts are, what the pathways are, all the
20 rest of the issues that we've heard here, but -- and the
21 tools, on the other hand, to deal with it are usually
22 pretty simple. They're either keep emitting or stop
23 emitting as much as you can, and I think that in my
24 experience in being in this field for 35 years is that by

1 and large, the tools work, and when you reduce the
2 pollutants, you see benefits that are often very
3 proportional, and that indicates the subtleties may get
4 figured out afterwards but the impact comes from the
5 policy. It's subject to all kinds of subtle criticisms,
6 but it leads fundamentally in the right direction.

7 MS. BUGEL: So you also testified a little
8 bit as to MACT -- that came in through Exhibit 40 -- and
9 MACT addresses toxics; is that right?

10 MR. AYRES: MACT -- Yes. The MACT program
11 was enacted in 1990 because of the perception that EPA
12 had failed to deal with toxic air pollutants under the
13 previous program, and it requires that technology-based
14 standards be set for toxic pollutants and that if that
15 proves inadequate to achieve the results needed, then a
16 further program based on health has to be undertaken.

17 MS. BUGEL: And mercury is toxic because
18 it's a neurotoxin?

19 MR. AYRES: Right.

20 MS. BUGEL: If mercury had been regulated
21 through the MACT program, would it have been a trading
22 program?

23 MR. AYRES: No. MACT standards are -- at
24 least until now have always been technology-based

1 standards, and I think the statute clearly says that's
2 what MACT is.

3 MS. BUGEL: Thank you.

4 HEARING OFFICER TIPSORD: Mr. Bonebrake?

5 MR. BONEBRAKE: Just a follow-up, Mr. Ayres.
6 I think you earlier characterized your role with STAPPA
7 to be in part a scribe?

8 MR. AYRES: In part a scribe, yes.

9 MR. BONEBRAKE: I'm curious, in your
10 function as scribe, did you recall any discussion of
11 whether if a state were to adopt a command and control
12 strategy while neighboring states were to adopt a CAMR
13 approach that the EGUs in the state which adopted the
14 command and control approach could be at an economic
15 disadvantage? Do you recall any discussions about that,
16 Mr. Ayres?

17 MR. AYRES: No, I don't.

18 MR. BONEBRAKE: So from your perspective,
19 that issue was never discussed?

20 MR. AYRES: It was not discussed.

21 HEARING OFFICER TIPSORD: Question 14.

22 MR. AYRES: Question 14, "You testified that
23 despite the CAMR cap in Illinois, quote, Illinois EGUs
24 could meet some or all of their obligations by buying

1 mercury allowances from outside the state rather than by
2 reducing emissions, closed quote. Given your experience
3 with the acid rain trading program and other emission
4 trading programs, how likely do you think it is that
5 Illinois EGUs will elect to meet all of their emission
6 reductions under CAMR through trading rather than by
7 controls?" To my knowledge, there is no analysis
8 available of the amount of interstate emission trading
9 that has occurred under Title IV of the Clean Air Act,
10 the acid rain control program, and I don't know of any
11 studies -- similar studies for other trading programs.
12 My point in the language quoted from page 5 was that
13 under CAMR, the utilities would be free to choose the
14 degree to which they would comply by reducing mercury
15 emissions from Illinois, or on the other hand, by buying
16 allowances instead, and as I said previously, I think
17 public authorities, not utility executives, should make
18 this choice for a toxic air pollutant like mercury.

19 MR. RIESER: Do you think it's likely --
20 Let's go back to the question. Do you think it's likely
21 that all of the EGUs in Illinois under a CAMR type
22 program would choose to deal with the issue by buying
23 allowances?

24 MR. AYRES: What my statement says is that

1 they could meet some or all of their obligations, and
2 that's the truth. Whether -- No one can tell how they
3 would do it, but they could meet all. I think the
4 probabilities are they would meet some, but I -- you
5 know, none of us can predict.

6 MR. RIESER: So it would be your expectation
7 under a CAMR type program that some -- there would be a
8 range. Some EGUs would adopt controls so they could sell
9 credits; some in a different economic position would
10 adopt less controls and adopt a mix of buying and selling
11 credits; and some EGUs would not have controls and would
12 buy allowances in order to comply, correct?

13 MR. AYRES: Yes.

14 MR. RIESER: Thank you.

15 MR. AYRES: Question 15, "In your testimony
16 you describe findings, quote, suggesting that emissions
17 from coal-fired power plants are limiting the personal
18 and economic futures of a substantial number of kids
19 being born in Illinois, closed quote. Is this statement
20 based on Dr. Rice's testimony?" I think my statement is
21 a reasonably accurate characterization for purposes of
22 policy making, and the implications are the mercury
23 health studies, the findings of Illinois EPA's Technical
24 Support Document, authorities such as National Academy of

1 Sciences and Dr. Rice's testimony, so that's the answer.

2 HEARING OFFICER TIPSORD: Ms. Bassi?

3 MS. BASSI: Seems to me the answer to this
4 is yes or no. So which is it?

5 MR. AYRES: People always like that.

6 MS. BASSI: That's the question.

7 MR. AYRES: Yes or no. I think the answer
8 is no.

9 MS. BASSI: Thank you.

10 HEARING OFFICER TIPSORD: Mr. Bonebrake?

11 MR. BONEBRAKE: Mr. Ayres, have you --

12 MR. AYRES: I'm waiting for your next
13 question.

14 MR. BONEBRAKE: Have you read -- well, are
15 you aware of whether USEPA has issued a reconsideration
16 decision recently with respect to CAMR or the MACT
17 decision?

18 MR. AYRES: Yes.

19 MR. BONEBRAKE: Have you read a -- USEPA's
20 reconsideration decision issued in the last couple weeks
21 regarding mercury?

22 MR. AYRES: You're talking about the one
23 that was June 9, I think it was?

24 MR. BONEBRAKE: Was used as an exhibit,

1 that's right.

2 MR. AYRES: Yes, uh-huh.

3 MR. BONEBRAKE: And do you recall,
4 Mr. Ayres, whether there was any discussion in that
5 reconsideration decision regarding the portion of
6 methylmercury in fish that would be -- that USEPA
7 determined to be attributable to EGUs?

8 MR. AYRES: No, I don't.

9 MR. BONEBRAKE: Do you have any personal
10 knowledge about the portion of methylmercury in fish
11 that's attributable to EGUs?

12 MR. AYRES: Do I have any personal
13 knowledge? No. I rely on folks like Dr. Rice and their
14 scientific research.

15 MR. BONEBRAKE: So is it your view that
16 Dr. Rice testified that -- concerning the portion of
17 methylmercury in fish attributable to EGUs?

18 MR. AYRES: No. I guess actually that was
19 more others than witnesses who testified.

20 HEARING OFFICER TIPSORD: Excuse me. For
21 the record, the exhibit you just spoke about is Exhibit
22 No. 31.

23 MR. BONEBRAKE: Thank you. And just a
24 follow-up, beyond what might have already been entered

1 into the record at this point in the proceeding -- and
2 I'm going to try to avoid rehashing all of that --

3 MR. AYRES: Right.

4 MR. BONEBRAKE: -- are you aware of any
5 studies or analysis identifying impacts to Illinois
6 children from eating methylmercury contaminated by
7 mercury emissions from Illinois power plants?

8 MR. AYRES: No, I'm not aware of any
9 Illinois-specific studies.

10 HEARING OFFICER TIPSORD: Before we leave
11 this question 15, Dynegy's question number 2 is about the
12 same statement. I believe he -- you do specifically ask
13 in "c" what is the basis for the assertion that the
14 personal and economic futures are limited, which is a
15 part of this as well, but why don't we go ahead and
16 address Dynegy's question number 2 at the same time.

17 MR. AYRES: These -- I mean, my comment --
18 the comment that's drawing these questions is based on
19 the kind of testimony that we've heard before here and
20 the indication that the consumption of
21 mercury-contaminated fish can have an effect on the IQ of
22 children. I may have said it in a kind of colloquial
23 way, but I think that's the take-home lesson, if you
24 will, from the testimony.

1 HEARING OFFICER TIPSORD: Then I think we're
2 ready to move on to question 16.

3 MR. RIESER: Which I think has just been
4 answered, so --

5 MR. AYRES: More of the same, yeah.

6 MR. RIESER: -- I think we can go on to 17.

7 HEARING OFFICER TIPSORD: Thank you,
8 Mr. Rieser.

9 MR. AYRES: Thank you also. Question 17,
10 "You testify that you believe the Illinois EPA's mercury
11 proposal will meet the requirements of the EPA's CAMR
12 rule. A, What is the basis for this statement?" The
13 basis is that the Illinois program will achieve greater
14 emission control than is required by CAMR, and the EPA
15 has stated repeatedly that states are not required to
16 adopt a cap and trade program.

17 HEARING OFFICER TIPSORD: Mr. Rieser?

18 MR. RIESER: Is there within the proposal
19 presented by EPA a specified limit on the tons of mercury
20 emitted in the state of Illinois?

21 MR. AYRES: Yes.

22 MR. RIESER: A cap on the tons emitted?

23 MR. AYRES: Yes, there's a cap on the tons
24 emitted.

1 MR. RIESER: Where does it say that?

2 MR. AYRES: I'm sorry.

3 MR. RIESER: Where does it --

4 MR. AYRES: Maybe I misunderstood your
5 question. Could you repeat the question?

6 MR. RIESER: Okay. The question was,
7 stepping backwards a bit, CAMR places limits on the mass
8 emissions of mercury from given states, correct?

9 MR. AYRES: That was the yes answer I was
10 giving you for that question.

11 MR. RIESER: Okay. Does Illinois -- Is
12 there anything in the Illinois EPA's proposal that limits
13 total emissions in Illinois to the mass limits specified
14 by USEPA?

15 MR. AYRES: No, there is not a cap in the
16 Illinois program, that's correct.

17 MR. RIESER: So -- Thank you.

18 MR. AYRES: Question "b," "Did you
19 participate in any discussions regarding Illinois'
20 ability to demonstrate that it could achieve the CAMR
21 budgets?" The answer is no.

22 HEARING OFFICER TIPSORD: Okay. C.

23 MR. AYRES: C, "How will Illinois document
24 that its proposal will achieve the EGU mercury budget for

1 Illinois" --

2 MR. RIESER: "Set."

3 MR. AYRES: Pardon?

4 MR. RIESER: "Set," not "get."

5 MR. AYRES: Oh, I see. "The mercury budget
6 for Illinois set in the CAMR." Okay. Well, that
7 eliminates my "I don't understand the question." I think
8 that the demonstration will be that the Illinois plan
9 makes much greater reductions than CAMR would be required
10 to make and that the State will probably have to commit
11 to further reductions in the event that that ever
12 changes. Given the difference between the reductions
13 being required and the reductions required under CAMR, I
14 think that's a fairly remote possibility, but it's not
15 inconceivable, so in that case the State would have to
16 make changes in order to assure that it stayed under the
17 cap.

18 HEARING OFFICER TIPSORD: Okay.

19 MR. RIESER: I have one more question, if I
20 can. Again, looking at the Exhibit 40 on the last
21 page --

22 MR. AYRES: Which one is Exhibit 40?

23 MR. RIESER: Exhibit 40 are the Illinois EPA
24 comments on the mercury proposal. There is a -- On the

1 last page, right above the conclusion, there is a section
2 on program consistency.

3 MR. AYRES: Yes.

4 MR. RIESER: Okay. Which if I can
5 summarize -- and I'll accept an amendment to my
6 summary -- it essentially says that the Illinois EPA is
7 asking the USEPA to make all of the -- to organize the
8 compliance -- you know what? Rather than summarize, let
9 me read it. "We urge USEPA to make every effort to
10 ensure consistency, especially with respect to compliance
11 deadlines between the various federal air quality
12 programs, including the mercury reduction program, the
13 Interstate Air Quality Rule, IAQR, the regional haze
14 program and the NAAQS attainment dates." Do you see
15 that?

16 MR. AYRES: Uh-huh.

17 MR. RIESER: Is that -- Is the program
18 consistency a -- does that continue to be an invaluable
19 and important policy consideration in considering the
20 mercury rule?

21 MR. AYRES: Obviously the State thinks it
22 does.

23 MR. RIESER: Thank you.

24 HEARING OFFICER TIPSORD: Anything further?

1 Thank you, Mr. Ayres.

2 MR. AYRES: We've answered all the other
3 questions.

4 HEARING OFFICER TIPSORD: Dynegy was the
5 only one that filed questions, and I believe we got
6 those.

7 CHAIRMAN GIRARD: Thank you.

8 HEARING OFFICER TIPSORD: Thank you.

9 Would you like to enter Mr. Kaleel's testimony
10 since he is present?

11 MR. KIM: Yes. Thank you.

12 HEARING OFFICER TIPSORD: Mr. Kaleel's
13 testimony -- prefiled testimony will be marked as Exhibit
14 No. 41 if there's no objection. Seeing none, it's marked
15 as Exhibit 41. Thank you, Mr. Kaleel. And where are we
16 going next, Mr. Kim?

17 MR. KIM: I believe Mr. Romaine will be
18 next, if he's ready.

19 HEARING OFFICER TIPSORD: I would remind
20 Mr. Romaine he's still sworn in. And the only questions
21 I have for Mr. Romaine are Prairie State's, correct?

22 MR. KIM: I believe that's correct, yes.

23 MS. BASSI: Were some of those deferred
24 questions for him in the general --

1 MR. KIM: There were some general Dynegy
2 questions that were referred --
3 HEARING OFFICER TIPSORD: You're correct.
4 MR. KIM: -- to Mr. Romaine.
5 HEARING OFFICER TIPSORD: I'm not that fast.
6 My note was all the way at the bottom of the pile.
7 MS. BASSI: Well, I don't even have a note.
8 I couldn't remember.
9 HEARING OFFICER TIPSORD: So what would be
10 your preference, Mr. Kim? Prairie State or the Dynegy
11 referred questions?
12 MR. KIM: If we could do the Prairie State
13 first and then -- because I think there's just a few of
14 those.
15 HEARING OFFICER TIPSORD: Okay.
16 MR. KIM: If that's okay with Mr. Romaine.
17 MR. ROMAINE: If I can find them.
18 HEARING OFFICER TIPSORD: Before you start
19 answering these questions, the first one is, "Please
20 explain how the proposed rule gives a plant credit for
21 coal washing." My question is, were you primarily
22 responsible for drafting the rule language?
23 MR. ROMAINE: I played a significant role in
24 drafting the rule language, but my role was as a

1 technical expert, not as an attorney drafting the
2 language.

3 HEARING OFFICER TIPSORD: Thank you. That's
4 sufficient.

5 MR. ROMAINE: I contributed technically to
6 the aspects of the rule that required technical input.

7 HEARING OFFICER TIPSORD: Thank you.

8 MR. ROMAINE: Question 1, "Please explain
9 how the proposed rule gives a plant credit for coal
10 washing." The proposed rule gives a plant credit for
11 coal washing through the output-based standard. I can
12 explain this further, but it's easy to explain by
13 distinguishing it from the control efficiency based
14 standard. With the control efficiency based standard,
15 compliance is determined by comparing the amount of
16 mercury in the coal supply going into a unit and the
17 emissions from the unit. If the coal is washed, in those
18 circumstances there's no credit given for the reduction
19 in mercury that's achieved by coal washing because the
20 measurement of mercury going into the unit occurs after
21 coal washing. In contrast, the output-based standard
22 simply establishes an emission standard, 0.008 pounds per
23 gigawatt hour. A reduction in mercury emissions that's
24 achieved by coal washing will also contribute to

1 achieving that emission standard as well as the
2 reductions that can be achieved in the boiler and through
3 its control method.

4 HEARING OFFICER TIPSORD: Ms. Bassi?

5 MS. BASSI: Is there a reason why the 90
6 percent reduction option that's included in the rule
7 could not also include coal -- the reductions that are
8 achieved through coal washing simply by changing the
9 point at which the mercury content in the coal is
10 measured or by obtaining some type of a certification or
11 statement or something like that from the people who wash
12 the coal measuring before it's washed?

13 MR. ROMAINE: That is theoretically
14 possible. We considered that in developing the rule and
15 rejected it because of concerns about enforceability. We
16 do not want to be involved in regulating the activities
17 of a coal mine and a coal washing facility. Conceivably
18 some of this coal could be coming from out of state.
19 Accordingly, in terms of the interest of simplicity, we
20 simply selected an output-based standard, and one of the
21 obvious side benefits of taking that approach is a source
22 that elects to use the output-based standard doesn't have
23 to perform any analysis -- sampling analysis of coal for
24 mercury content under the proposed rule.

1 MS. BASSI: Your response to this implies
2 that the Agency would -- in its discussions of this
3 particular option or this particular approach felt that
4 it would have had to enforce something against the coal
5 company or the miner, the mining company or whatever, as
6 opposed to the power company who would be accepting that
7 documentation of the mercury content in the coal prior to
8 washing. Why does the Agency feel that it would have to,
9 if you will, go up the pipe that far? It --

10 MR. ROMAINE: I understand your point that
11 it would conceivably push that burden entirely on the
12 power company. In certain circumstances that might have
13 been the actual outcome, but we would have also felt
14 obligated to observe what was actually going on at the
15 plant to verify the adequacy of the certification
16 process.

17 HEARING OFFICER TIPSORD: Question number 2?

18 MR. ROMAINE: "On page 10 of your prefiled
19 testimony you discuss the federal PSD requirements.
20 Aren't hazardous air pollutants excluded from the PSD
21 provisions?" Yes, they are. However, my testimony was
22 discussing co-benefits for control of mercury that result
23 from the control of criteria pollutants achieved under
24 the federal PSD program.

1 HEARING OFFICER TIPSORD: Question number 3.

2 MR. ROMAINE: "On page 10 of your prefiled
3 testimony" -- oh. "On page 11 you also state that the
4 Illinois monitoring requirements are essentially
5 identical to the federal requirements. How are they
6 different?" What the testimony actually stated was that
7 the emissions monitoring provisions in the proposed rule
8 are essentially identical to those adopted by USEPA for
9 the Clean Air Mercury Rule. The monitoring provisions in
10 the proposed rule are obviously different from those in
11 the Clean Air Mercury Rule as they contain provisions
12 related to monitoring of electrical output and for
13 determining the amount of mercury contained in the coal
14 supplied to the unit.

15 With respect to emission monitoring requirements,
16 the emission monitoring requirements in the proposed rule
17 generally reference to relevant aspects of the Clean Air
18 Mercury Rule or related provisions in 40 CFR, part 75,
19 USEPA's I guess omnibus provisions for monitoring a
20 coal-fired power plant. Now, they started out as the
21 acid rain provisions, but they've grown since then.

22 Some of the differences between the proposed rule
23 and the Clean Air Mercury Rule are the result of
24 transferring or incorporating relevant provisions from

1 these other rules into the proposed rule. This has to be
2 done in a manner that is appropriate for a rule that must
3 meet the Illinois standards for drafting regulations.
4 Other differences result because the proposed rule would
5 be administered by the Illinois EPA separate from USEPA.
6 An example of one of those differences is the approach
7 that was taken to monitoring of non-subject units that
8 share common stacks with subject units. I'm not sure
9 that that's present in Illinois, but we had to address
10 that possibility. Similarly, we structured provisions
11 for the low mass-emission excepted methodology to again
12 appropriately include provisions from the federal rules
13 in the Illinois proposal.

14 Some of the other differences result because
15 sources under our rule would not be required to get a
16 budget permit that's required under the CAMR.
17 Accordingly, certain aspects of the CAMR that would be
18 relevant to that sort of approach are not included in the
19 rule. The most obvious example of that is the provision
20 for retired units. Our rule simply provides if you're
21 not operating, if you shut down, you're not a unit, that
22 is the end of it in terms of conducting monitoring.
23 There's some minor changes in the record-keeping -- I
24 mean I guess the reporting requirements related to

1 monitoring to facilitate the review of monitoring data by
2 the Illinois EPA. There's also some additional
3 information in there about information required to be
4 submitted for other types of continuous monitoring in
5 Illinois, so it's essentially identical to what's
6 required in the federal rules, but there were certain
7 changes that were necessary.

8 HEARING OFFICER TIPSORD: Question number 4.

9 MR. ROMAINE: "Are reliable mercury
10 emissions monitors commercially available," first
11 question. We believe they are. USEPA is relying upon
12 the availability of commercial mercury monitors for CAMR.
13 If you ask who are the manufacturers, we don't have a
14 specific list of manufacturers. The USEPA has identified
15 manufacturers in pilot studies that it's working on.
16 And, "What is each manufacturer's time frame to deliver
17 and install a monitor from the date of purchase?" We
18 don't have any information on that point.

19 HEARING OFFICER TIPSORD: Ms. Bassi?

20 MS. BASSI: You mentioned pilot studies.
21 What are those about?

22 MR. ROMAINE: USEPA is working to improve
23 continuous emission monitoring for mercury to assure
24 smooth implementation of CAMR.

1 HEARING OFFICER TIPSORD: Mr. Bonebrake?

2 MR. BONEBRAKE: I believe yesterday,
3 Mr. Romaine, you provided some testimony regarding the
4 cost of laboratory sampling. I don't recall that there
5 was any testimony about the cost of mercury emission
6 monitors, equipment. Do you have any information about
7 the cost of such equipment?

8 MR. ROMAINE: The USEPA in one of their CAMR
9 documents has suggested the cost would be on the order of
10 \$100,000 I believe per year, slightly higher for
11 facilities that would be using sorbent trap monitoring,
12 slightly lower for facilities that would be using
13 traditional continuous emissions monitoring.

14 MR. BONEBRAKE: Those were costs per year?

15 MR. ROMAINE: Yes.

16 MR. BONEBRAKE: In addition to that, then
17 are there capital costs of acquisition of equipment?

18 MR. ROMAINE: Yes, there would be.

19 MR. BONEBRAKE: And do you know what those
20 capital costs would be, Mr. Romaine?

21 MR. ROMAINE: I don't know what those would
22 be, and I don't know if those may have been incorporated
23 into the annualized costs as well.

24 HEARING OFFICER TIPSORD: Mr. Harrington?

1 MR. HARRINGTON: Just summary, my
2 understanding is that the IEPA does not claim any
3 particular expertise in either monitoring flue gas or the
4 coal. In particular with respect to flue gas, you're
5 relying on -- completely relying on the work of USEPA; is
6 that correct?

7 MR. ROMAINE: I think that's simplifying it.
8 Obviously the Illinois EPA has experience generally in
9 operation of continuous emission monitors. We are using
10 some of that experience as we assess what USEPA is doing
11 specifically for mercury continuous emission monitors.

12 MR. HARRINGTON: But do you claim any
13 special expertise in continuous emission monitoring of
14 mercury in flue gas?

15 MR. ROMAINE: No.

16 MR. HARRINGTON: Thank you.

17 HEARING OFFICER TIPSORD: Question number 5.

18 MR. ROMAINE: "Does IEPA intend to propose
19 an amendment to the rule to address situations where a
20 source has applied the appropriate technology but is
21 unable to achieve the proposed standards?" We have done
22 so in terms of the temporary technology-based standards.
23 It's also been mentioned that there are other features of
24 Illinois' regulations in terms of variances that can

1 address circumstances where sources are unable to comply
2 with the proposed standards due to extenuating
3 circumstances.

4 "If yes, when will it be proposed?" We've
5 already done it. "What is the scope of the proposal?"
6 Well, we have included in fact two separate temporary
7 technology-based standards. One standard applies to
8 existing sources. The other standard applies to new
9 sources. And as implicit in the title, these standards
10 provide an alternative technology-based standard for
11 subject units and will serve as an alternative to the
12 numerical emission standards. They are based on using
13 certain specific control technology. As also stated in
14 the title, they are temporary. They do not continue
15 forever. For existing units, the duration of this
16 alternative is limited through June 30, 2015. For new
17 units, the duration is limited through December 31, 2018.

18 As previously discussed, this technology-based
19 standard would not be available for all units. We have
20 limited the availability of the temporary
21 technology-based standard to 25 percent of the capacity
22 of the three entities in Illinois that have a system,
23 Midwest Generation, Ameren and Dynegy. For the other
24 companies, we've lumped those together as an artificial

1 system. Key criteria for eligibility is use of the
2 appropriate control technology. For existing units it is
3 use of halogenated activated carbon injection with either
4 cold-side ESP and baghouse. For new units it's a
5 complete sweep of controls for SO₂, NO_x and PM that
6 represents best available control technologies as well as
7 halogenated activated carbon injection. The further
8 criteria for eligibility is injection of activated carbon
9 at a rate that assures very effective control of mercury
10 emissions. The rate that was selected was based upon
11 review of data on control of mercury as summarized in the
12 Technology Support Document, and we picked a point at
13 which we believe the curve for control will have
14 certainly flattened so that further injection of
15 activated carbon would not be beneficial.

16 HEARING OFFICER TIPSORD: Ms. Bassi?

17 MS. BASSI: Why do new units get until
18 December 31, 2018, for compliance?

19 MR. ROMAINE: This was a policy decision
20 reflecting the specific circumstances of new units. As I
21 mentioned, new units will have a full sweep of emission
22 controls for control of mercury through co-benefit. They
23 will also be equipped with activated carbon injection. I
24 would assume as part of the initial design of the system

1 that they will be designed for activated carbon injection
2 in the beginning, not as a retrofit, which might
3 constrain the effectiveness of an activated carbon
4 system, and in fact, we don't really expect that when it
5 comes to actual practice new units will need to rely on
6 the temporary technology-based standard, and the
7 underlying reason for this standard is really to develop
8 the -- facilitate the development of new sources which
9 will most likely to be the development of Illinois coal,
10 which is one of the policy objectives of the State of
11 Illinois, provided they have appropriate emission
12 controls. In the absence of this technology-based
13 standard, we were concerned and we had incurred concerns
14 expressed by developers of the plan, such as Prairie
15 State, that risk-adverse investors would be reluctant to
16 provide funding for the development of a new unit. These
17 led to a decision to provide additional time as compared
18 to existing units for the temporary technology-based
19 standard for new units.

20 HEARING OFFICER TIPSORD: Ms. Bassi?

21 MS. BASSI: Did you just state that it is
22 Illinois' policy to encourage the use of Illinois coal?

23 MR. ROMAINE: I think that's our governor's
24 policy, yes. We had little --

1 MS. BASSI: Is that --

2 MR. ROMAINE: -- qualification on it, but
3 obviously it has to be appropriately controlled, emission
4 technology.

5 MS. BASSI: Is that consistent with
6 Mr. Ross' earlier testimony that the rule is fuel neutral
7 or coal neutral?

8 MR. ROMAINE: Yes, it is.

9 MS. BASSI: How so?

10 MR. ROMAINE: When I was discussing the --
11 Illinois' position on facilitating use of Illinois coal,
12 I was referring more specifically to the coal development
13 programs that provide funding, grants, all manner of
14 support facilitated to the development of new facilities
15 using Illinois coal and the development of markets for
16 Illinois coal, so in terms of the economic policy of the
17 State of Illinois, it is to facilitate the development of
18 Illinois coal. That's different than the environmental
19 policy.

20 HEARING OFFICER TIPSORD: Mr. Bonebrake?

21 MR. BONEBRAKE: Mr. Romaine, you used the
22 term artificial system, I think, when you were
23 referencing units for a number of companies. You were
24 referencing the companies that perhaps operated just one

1 station. Could you describe for us what you meant by
2 artificial system?

3 MR. ROMAINE: Simply we lumped those
4 entities together so that they would have some ability to
5 take advantage of the temporary technology-based
6 standard. As Mr. Forcade has noted, that ability may be
7 limited when it comes to a facility such as Kincaid.
8 Obviously Kincaid, however, would contribute to allowing
9 other facilities to take advantage of it, as it would
10 help contribute to the 75 percent of facilities for that
11 artificial system that would have to comply with the
12 numerical emission standards.

13 MR. BONEBRAKE: And are you referring -- and
14 I'm looking at the TTBS amendment, Section 225.234, and I
15 believe it's sub (b)(3)(B). Is that the provision you're
16 referring to, Mr. Romaine?

17 MR. ROMAINE: Yes, it is.

18 MR. BONEBRAKE: And I'm still struggling
19 with the concept of how this would work in practice. Are
20 you suggesting that the companies that are identified in
21 that section could in some way pool together to obtain
22 the benefit of a TTBS, and if so, how?

23 MR. ROMAINE: I would say that those
24 companies could take advantage of the temporary

1 technology-based standard as a group. I shouldn't say as
2 a group. Certain of those companies could take advantage
3 of the temporary technology-based standard as it is
4 provided. Certainly Electric Energy, Southern Illinois
5 Power Co-op and City Water, Light & Power would have
6 individual units whose capacity is less than 25 percent
7 of the total capacity of all units owned by these four
8 entities.

9 MR. BONEBRAKE: So in measuring the 25
10 percent, the capacity of any given particular unit is
11 compared to the total capacity of all the units operated
12 by the companies in Illinois identified in section sub
13 (3)(B)?

14 MR. ROMAINE: It would be the total capacity
15 of units operating under the temporary technology-based
16 standard compared to the total capacity of all four
17 stations.

18 MR. BONEBRAKE: And you limited, I believe,
19 the eligibility under this provision to EEI and Southern
20 Illinois Power Company, carving out, as I understand it
21 from that answer, then, City Water, Light & Power and
22 Kincaid, and why did you carve out the latter two?

23 MR. ROMAINE: I didn't carve out the latter
24 two. I simply carved out Kincaid, and I carved out

1 Kincaid because I believe the capacity of its units are
2 each greater than 25 percent of the total capacity of all
3 the units.

4 HEARING OFFICER TIPSORD: Mr. Zabel?

5 MR. ZABEL: Is this a race to the Agency
6 among these four, or among three, Kincaid being
7 precluded?

8 MR. ROMAINE: This rule does not include
9 provisions that would do anything other than first come,
10 first served. You're right.

11 MR. ZABEL: And because Forcade isn't here,
12 I'll be asking questions for him. They're sort of
13 piggybacking on Kincaid, aren't they?

14 MR. ROMAINE: When we established the
15 concept of having a 25 percent cap on eligibility for the
16 temporary technology-based standard, we were faced with
17 the decision of how to deal with our loners, and the
18 policy decision was made that we would keep the 25
19 percent cap but we will keep our loners together as this
20 artificial system.

21 MR. ZABEL: And I think the question was the
22 piggybacking on Kincaid. Is that answer yes?

23 MR. ROMAINE: Well, in terms of establishing
24 a large enough pool so that some units can qualify, yes.

1 HEARING OFFICER TIPSORD: Ms. Bassi?

2 MS. BASSI: Does there -- Is it necessary
3 for there to be agreement among these four companies for
4 one or more of them to use up that 25 percent capacity
5 under the TTBS?

6 MR. ROMAINE: The rule does not provide
7 anything other than first come, first served.

8 MS. BASSI: So then does that mean that the
9 Agency is looking at the total capacity of the four
10 companies and then, as Mr. Zabel was saying, whoever gets
11 there first can use whatever portion of the 25 percent
12 that they can use? Is that correct?

13 MR. ROMAINE: At this point, that is as far
14 as we have taken the thought process for this particular
15 provision.

16 HEARING OFFICER TIPSORD: Mr. Harrington?

17 MR. HARRINGTON: Are you aware that one of
18 the four companies you have named there shares a
19 substantial common ownership with the Ameren companies?

20 MR. ROMAINE: Yes, I am. I am aware that
21 Electric Energy and Ameren have a relationship.

22 MR. HARRINGTON: In fact, Ameren is -- I
23 believe the Ameren entity owns 80 percent?

24 MR. ROMAINE: I've heard that, yes.

1 MR. HARRINGTON: And it's operated in
2 conjunction with Ameren companies?

3 MR. ROMAINE: I'm not familiar with the
4 exact operating relationship.

5 MR. HARRINGTON: Is there any reason it
6 should not be included with the other Ameren companies?

7 MR. ROMAINE: You're bringing information to
8 our attention that we had not considered in developing
9 the regulation. That provision shift would affect not
10 only the provisions here for the temporary
11 technology-based standard then but presumably should also
12 affect provisions for averaging demonstrations where
13 Electric Energy has been treated as part of this
14 artificial system again for the purposes of entering into
15 averaging demonstrations.

16 MR. HARRINGTON: I don't think this is a
17 time to press for that answer, but I think the issue has
18 to be on the table.

19 HEARING OFFICER TIPSORD: Mr. -- oh, I'm
20 sorry. Go ahead, Mr. Harrington.

21 MR. HARRINGTON: Is this a time to ask
22 detailed questions about the technology out, or do we
23 want to go through the rest of the prepared questions and
24 come back to it?

1 HEARING OFFICER TIPSORD: Mr. Kim?

2 MR. KIM: I suppose it might depend on the
3 nature of the questions. I mean, if you'd like to start
4 and then if Mr. Romaine can --

5 HEARING OFFICER TIPSORD: Well, let me just
6 say we're not going to start -- does Mr. Romaine need
7 Dr. Staudt here to answer some of these questions?

8 MR. KIM: Well --

9 HEARING OFFICER TIPSORD: Is that what
10 you're wondering?

11 MR. KIM: Right, because since we don't have
12 those in prefiled form, I don't know -- if it's something
13 that Mr. Romaine can answer on his own, that's fine, but
14 if we hear the questions, at that point we would probably
15 say we're not going to get into that, we'll wait until
16 Mr. Staudt --

17 HEARING OFFICER TIPSORD: In that case,
18 perhaps we should have Mr. Romaine here with Dr. Staudt
19 and we can ask these questions at that time rather
20 than --

21 MR. HARRINGTON: I was going to suggest,
22 these are not questions about the technology or the
23 technology bases; simply about how the rule would be
24 administered, which I think would fall in the --

1 HEARING OFFICER TIPSORD: That's fine with
2 me. I just -- I don't want us to get into the
3 frustration we were all getting into yesterday as we kept
4 asking questions that kept getting deferred. If we want
5 to take a shot, we can take a shot. That's fine with me.

6 MR. KIM: At the first sign of trouble,
7 we'll ask that it be --

8 HEARING OFFICER TIPSORD: Well, like I said,
9 I just don't want us all to end up being frustrated
10 again.

11 MR. KIM: I agree.

12 MR. HARRINGTON: Do the other parties think
13 this is the most expeditious time to get into this issue?
14 I mean, I'm not trying to jump ahead. I just don't want
15 to let a train go by and --

16 HEARING OFFICER TIPSORD: That's fine with
17 me. I -- Like I say, I just want to avoid any -- as much
18 as possible.

19 MS. BUGEL: Before we go to the TTBS, could
20 I ask one question on monitoring before we switch topics?

21 HEARING OFFICER TIPSORD: Sure.

22 MS. BUGEL: Okay. I was just wondering,
23 Mr. Romaine, what's the benefit of a 12-month rolling
24 average as opposed to a shorter averaging time?

1 MR. ROMAINE: I guess I see two basic
2 benefits. One benefit is that it does allow a more
3 robust monitoring determination, as it relies on a larger
4 body of data that should account for variations, changes
5 in operation of the unit, changes in operation of
6 monitoring systems, calibrations, that would not be
7 present in a shorter period of time, so uncertainty or
8 the concerns about performance of a monitoring system
9 become much more critical when you're dealing with a
10 short period of time.

11 The other benefit of a longer compliance time
12 period, it allows establishment of standards that more
13 exactly reflect the level of control performance or
14 emission rates that is achievable and there is less need
15 to address short-term variability and set a limit that
16 accommodates that variability when you look at it on a
17 short-term basis. So when you set an annual limit, you
18 don't have to worry about what happens on Monday or
19 Tuesday. You're looking at what happened over the course
20 of 365 days a year. If you have a daily limit, you have
21 to worry about what about that particular day when
22 everything was working properly, it just didn't work as
23 well as it usually does, so the technology was doing the
24 right thing but it wasn't working as well as it normally

1 was. So annual standards allow a much more exact setting
2 of emission limitations in terms of the actual
3 performance that's achieved.

4 MS. BUGEL: Would you -- So the annual --
5 one of benefits of the annual limit, then, would you
6 agree, is an increased sample size compared to a daily or
7 monthly limit?

8 MR. ROMAINE: Yes.

9 MS. BUGEL: Okay. And would you agree that
10 the average becomes a better estimator of true value when
11 you increase the sample size?

12 MR. ROMAINE: That's -- Yes, that's
13 essentially what is -- statistics tell you.

14 MS. BUGEL: I have nothing else. Thank you.

15 HEARING OFFICER TIPSORD: I actually have a
16 follow-up with the 12-month rolling average, and it
17 brings one of those irritating questions that anybody
18 that's been in a rulemaking with me has heard before. In
19 the definition of rolling 12-month basis, you have "means
20 with regard to Subpart B of this part," and that's also
21 true -- that same phrase is used in output-based emission
22 standards. Subpart B appears to be the EGU -- control of
23 mercury from EGUs that we're talking about. Since this
24 is going to have to be folded into the CAIR rule, which

1 is also part 225, my question is, do all of these
2 definitions, including the 12-month rolling average,
3 apply just to the mercury emissions from coal-fired EGUs
4 or will they apply elsewhere? And if you can't answer
5 that, that's fine. I -- I'll have several of those
6 that'll need to get on the record as we go through the
7 administration of the rule.

8 MR. ROMAINE: I think that's a very good
9 question, and we'll have to take it back with us.

10 HEARING OFFICER TIPSORD: And also the
11 definitions, you might want to take a better look at the
12 coal-derived fuel definition. It seems to be any fuel
13 that's manufactured is becoming coal-derived. It's a
14 strange definition. Just take another look at it,
15 please. Thank you. And then I think we're ready to talk
16 about the administration of the rule.

17 MR. HARRINGTON: One follow-up on the
18 monitoring question you just asked.

19 HEARING OFFICER TIPSORD: Sure.

20 MR. HARRINGTON: A 12-month average would
21 not solve the problem of an inherent bias -- one-sided
22 bias in the analytical data, would it?

23 MR. ROMAINE: It would not solve that
24 problem if there was a one-sided bias that lasted for an

1 entire year.

2 MR. HARRINGTON: There will probably be
3 further testimony on that point as we go forward, but I
4 just wanted to get it on the record. I know we've not
5 filed prefiled questions, and it was not required as I
6 read it under the orders --

7 HEARING OFFICER TIPSORD: Correct.

8 MR. HARRINGTON: -- but the questions I
9 have, I tried to avoid technology questions until we get
10 there, but just so the record's clear, Mr. Romaine,
11 you're in charge of permitting for coal-fired power
12 plants; is that correct?

13 MR. ROMAINE: I am the manager of the
14 utility unit and the construction permit unit. I am the
15 unit manager that is responsible for issuing permits,
16 construction permits for coal-fired power plants. I'm
17 getting out of the business of issuing permits for Title
18 V permits, if I could only get the Title V permits
19 issued.

20 MR. HARRINGTON: My point is that at least
21 as of this point, are you the most knowledgeable person
22 at the Agency on how the -- both the mercury rule
23 permitting requirements and the TTBS requirements are
24 going to be administered by the Agency?

1 MR. ROMAINE: I don't know if I am or not.

2 I am the designated person to answer questions.

3 HEARING OFFICER TIPSORD: Fair enough.

4 MR. HARRINGTON: Fair enough. So just so
5 we're in agreement, if somebody is thinking they may have
6 to use the TTBS, that assumes they will start -- get a
7 construction permit to install the halogenated activated
8 carbon injection system before their particular control
9 device, correct?

10 MR. ROMAINE: Yes.

11 MR. HARRINGTON: And at that time, will that
12 permit require them -- construction permit require them
13 to demonstrate compliance with the mercury rule absent
14 the TTBS?

15 MR. ROMAINE: No. I think the purpose of a
16 permit application is to demonstrate compliance with
17 applicable regulations. The TTBS is one of the
18 applicable regulations.

19 MR. HARRINGTON: So there'll be no emission
20 limit in that permit when a facility applies for it?

21 MR. ROMAINE: When people install control
22 devices, whether emission limitations are placed into a
23 permit depends upon the applicable regulations, and if a
24 source is proposing to put in a control device and

1 indicates that it is intending to comply with the
2 numerical emissions standards, one would expect that the
3 construction permit would reference the purpose of the
4 compliance of the activated carbon system as to comply
5 with the numerical limits of the mercury rules. On the
6 other hand, we have not yet drafted a permit that
7 addresses this particular proposed regulation.

8 MR. HARRINGTON: I understand, but obviously
9 to companies affected by this, this process becomes vital
10 in understanding how the rule would work, so let's take
11 the example that a company decides to install the
12 halogenated activated carbon in all its units prior to
13 its existing particular control system, sub-bituminous
14 coal, and they don't identify which units they might wish
15 to have under the TTBS because they may not know. Will
16 those permits then -- If they follow the normal Agency
17 practice, would those permits then have 90 percent
18 removal requirements of the originally filed mercury rule
19 in those permits as part of the demonstration which is
20 always required in a construction permit?

21 MR. ROMAINE: I didn't follow your final
22 comment.

23 MR. HARRINGTON: My understanding is
24 construction permits I've seen for pollution control

1 device, there is always a compliance demonstration
2 requirement once the device has been installed and
3 operating; is that correct?

4 MR. ROMAINE: No.

5 MR. HARRINGTON: Is it generally true?

6 MR. ROMAINE: Whether there's a compliance
7 demonstration requirement depends on the federal
8 regulations that the emission unit is subject to.

9 MR. HARRINGTON: What would you envision in
10 the case of the mercury rule?

11 MR. ROMAINE: I have not put a lot of
12 thought into it. Off the top of my head, I would expect
13 it to be a fairly simplistic permit that simply
14 authorizes a source to go ahead and install an activated
15 carbon injection system with the stated purpose of that
16 system being to comply with the newly adopted Part 225.

17 MR. HARRINGTON: And as -- in its entirety.

18 MR. ROMAINE: Yes.

19 MR. HARRINGTON: And then they install a
20 system and they're operating it and they discover it is
21 not going to meet the applicable 90 percent removal or
22 0.008 pounds per gigawatt hours standard and they decide
23 that it needs a -- to take advantage of the TTBS. What
24 do they do next?

1 MR. ROMAINE: As explained in the TTBS, they
2 submit an application to the Agency to rely upon the
3 TTBS.

4 MR. HARRINGTON: And is that an application
5 for a permit?

6 MR. ROMAINE: Yes, it is.

7 MR. HARRINGTON: That would be a permit,
8 then, that would be reviewable by the Pollution Control
9 Board.

10 MR. ROMAINE: Yes, it is.

11 MR. HARRINGTON: What demonstration will
12 they need to include in that application in order to
13 obtain the TTBS?

14 MR. ROMAINE: As a general matter, they
15 would have to demonstrate that the eligibility
16 requirements for the TTBS have been satisfied.

17 MR. HARRINGTON: Calling your attention to
18 proposed 225.234(b)(2), in the second line it says, "The
19 owner/operator is injecting halogenated activated carbon
20 in a, quote, optimum manner." Will you please explain
21 what that means?

22 MR. ROMAINE: The statement of optimum
23 manner refers to the following -- well, it addresses the
24 type of activated carbon and it addresses the rate of

1 activated carbon injection.

2 MR. HARRINGTON: So those are the only two
3 requirements for it to be optimum, would be either one of
4 the named activated carbons or an alternative and the
5 rate.

6 MR. ROMAINE: I'm sorry. There's a third
7 criteria. With an injection system designed for
8 effective absorption of mercury considering the
9 configuration of the EGU's ductwork.

10 MR. HARRINGTON: So there's three criteria
11 in addition to just whether the plant qualifies.

12 MR. ROMAINE: That's correct.

13 MR. HARRINGTON: It's got to be the
14 correct -- right activated carbon, it has to be in a
15 system designed for effective absorption and it has to be
16 at the rate specified.

17 MR. ROMAINE: That's correct.

18 MR. HARRINGTON: With respect to the named
19 activated carbons, how were those companies selected?

20 MR. ROMAINE: These specific sorbents were
21 identified with the assistance of Dr. Staudt and looking
22 at the types of halogenated activated carbons that were
23 currently available on the market.

24 MR. HARRINGTON: So those questions -- any

1 further questions on that should include Dr. Staudt.

2 MR. ROMAINE: Yes.

3 MR. HARRINGTON: Okay. Thank you. Would
4 that also be true of what would be in the demonstration
5 if another activated carbon was equivalent to those by
6 this manufacturer?

7 MR. ROMAINE: It would be best if we were
8 both present to answer that question.

9 HEARING OFFICER TIPSORD: Ms. Bassi?

10 MS. BASSI: I have a slightly different take
11 on your same questions, and that is, are you aware of any
12 other rules adopted by the Agency -- I'm sorry -- the
13 Board -- proposed by the Agency that identify specific
14 brands of control materials?

15 MR. ROMAINE: Not off the top of my head,
16 but I haven't conducted a recent review to see what has
17 crept into our regulations.

18 MS. BASSI: Okay.

19 MR. ROMAINE: In terms of activated carbon,
20 the general belief was that due to the nature of
21 activated carbon, it would be simpler to identify
22 appropriate activated carbons by comparison to specific
23 types of carbon rather than attempt to identify
24 performance specifications for carbon.

1 MS. BASSI: What happens if these particular
2 companies produce halogenated carbons that don't meet
3 whatever these performance specifications are; in other
4 words, they expand their offerings?

5 MR. ROMAINE: The language requires
6 injection of halogenated activated carbon, so there may
7 be different types of halogenated carbon that these
8 companies provide but we have not identified beyond the
9 names of the companies.

10 HEARING OFFICER TIPSORD: Identify yourself
11 for the record, please.

12 MS. TICKNER: Dianna Tickner, Prairie State
13 Generating Company. I guess I kind of had a follow-up
14 along that line. As Mr. Ayres said earlier, you know,
15 there's lots of developments of technology in this area.
16 Just curious why by only selecting this sorbent we may
17 have ignored other types of chemicals or reagents that
18 might possibly exceed the performance of these
19 halogenated activated carbons.

20 MR. ROMAINE: That was considered during the
21 drafting of the regulation in terms of providing a very
22 specific concrete proposal for the temporary
23 technology-based standard, and that sort of open-ended
24 flexibility was rejected. If a source ends up with some

1 sort of new innovative technology, we'd have to approach
2 it through some other means than the adopted standard.
3 Mr. Ross has reminded me, we do have concrete data for
4 the halogenated activated carbon. We do not have that
5 data for these other possible developments or likely
6 developments in the future, which makes it hard for us to
7 address them in the context of a regulation.

8 MS. TICKNER: So then would they be
9 potentially considered on a case-by-case basis or just
10 if -- you use the halogenated activated carbon or you do
11 not qualify for the standard; is that correct?

12 HEARING OFFICER TIPSORD: We lost -- I lost
13 the last half of that question.

14 MS. TICKNER: Oh, I'm sorry. You either
15 use -- The question, I guess, then, would be in order to
16 qualify, you have to use the halogenated activated
17 carbon, or would there be some case-by-case consideration
18 for some of these other chemicals provided there was
19 sufficient data?

20 MR. ROMAINE: The rule does not provide for
21 case-by-case approval of other materials under the
22 temporary technology-based standard.

23 HEARING OFFICER TIPSORD: Mr. Harrington?

24 MR. HARRINGTON: The -- strike that. Is it

1 possible that other manufacturers will be coming out with
2 different forms of halogenated carbon which would be
3 appropriate to use?

4 MR. ROMAINE: Yes.

5 MR. HARRINGTON: In a given situation, what
6 demonstration would have to be made that one of these
7 alternative manufacturers' activated carbon was as good
8 or better in a particular application than the materials
9 produced by the designated manufacturers?

10 MR. ROMAINE: The effectiveness of the
11 activated carbon would most readily be demonstrated by
12 the actual removal efficiency being achieved and the
13 emission rates achieved with that other material on a
14 particular unit.

15 MR. HARRINGTON: One reason for the rule, if
16 I'm correct, is that there's recognition that there's
17 some facilities which may have a more difficult time
18 complying with the general applicable requirements and
19 need some relief such as the TTBS; is that correct?

20 MR. ROMAINE: That is correct.

21 MR. HARRINGTON: So for example -- and this
22 is a hypothetical -- let me back up and just make a brief
23 statement for the record. In asking these questions, we
24 are not necessarily challenging TTBS even as it's

1 written. We are trying to understand it and also to make
2 a record for future reference if somebody has to rely on
3 it as to what we all understood, so please don't read
4 anything more into it than trying to understand how this
5 works.

6 HEARING OFFICER TIPSORD: Understood,
7 Mr. Harrington.

8 MR. HARRINGTON: If one of these facilities
9 that may have a more difficult configuration and control
10 finds a different activated carbon and it doesn't achieve
11 90 percent because of that difficult situation, how do
12 they demonstrate that that was as good or better than the
13 ones that may have been manufactured by these
14 manufacturers? Or engineering -- and I'll add to that,
15 their engineering judgment deemed it would be better for
16 their particular application.

17 MR. ROMAINE: The other type of information
18 that could be used would be a pilot study in which
19 multiple forms or types of activated carbon are used on a
20 similar unit, so data is to be obtained not only from the
21 unit in question but from other units at which a pilot
22 study was conducted.

23 MR. HARRINGTON: And then this would be
24 evaluated as part of the permit application to seek TTBS?

1 MR. ROMAINE: The rule as adopted would
2 provide for some level of evaluation as is present in any
3 submittal of a permit application. The proposal would
4 not establish any particular criteria for the level of
5 demonstration that is required. I think our
6 general belief -- and this is something that might be
7 discussed later with Dr. Staudt as well -- is that the
8 performance of activated carbons can be fairly easily
9 demonstrated as similar or comparable, so we do not
10 expect this to be a particularly difficult technical
11 issue.

12 MR. HARRINGTON: Let's assume the system is
13 installed, one activated carbon is tried, does not get
14 very good results. You go through a series of others,
15 and whether they work or don't work I'm not trying to pin
16 down, but I want to get to the point, how long do you
17 have to run with one to demonstrate that it doesn't
18 achieve the 90 percent removal or 0.008 standard in order
19 for the Agency to accept TTBS?

20 MR. ROMAINE: The proposal does not
21 establish any particular length of time with which a
22 source needs to operate under a particular mode or
23 configuration as you've described before it proceeds to
24 apply for a TTBS. We're putting that on the judgment of

1 the source who is responsible for compliance to evaluate
2 the data they have and appropriately proceed.

3 MR. HARRINGTON: And then ultimately we'd be
4 relying on the technical judgment of the permitting
5 engineer who processes the permit application; is that
6 correct?

7 MR. ROMAINE: The technical judgment of the
8 permit engineer would most likely become involved if a
9 source was relying upon the aspects of the TTBS that do
10 provide for a level of discretion, so one aspect of
11 discretion is establishment of an alternative rate for
12 injection. The other aspect of discretion is injection
13 at a rate that is lower than the specified rate because
14 of concerns due to compliance with this manner of
15 emission standards or opacity standards.

16 MR. HARRINGTON: We'll come to that, but
17 there would also be discretion at the time they approve
18 an alternative carbon as part of the permit application.

19 MR. ROMAINE: The language simply says that
20 the owner or operator shall show that the alternative
21 carbon has similar or better effectiveness.

22 MR. HARRINGTON: I'm trying to understand
23 for the client what that demonstration is and who
24 approves it. My simple question is, won't that

1 demonstration ultimately be approved or disapproved by
2 the Agency in the permitting process, or is it solely in
3 the discretion of the operator?

4 MR. ROMAINE: I would suggest that the way
5 the TTBS has been drafted is the presumption is that the
6 demonstration made by the source is appropriate unless it
7 is flawed. It is not a matter of I guess convincing us
8 it's right. It's more of us coming back and saying this
9 demonstration is unsound.

10 MR. HARRINGTON: I'll accept that. Thank
11 you.

12 HEARING OFFICER TIPSORD: Let's go ahead and
13 take a break now. Ten minutes, please.

14 (Brief recess taken.)

15 MR. HARRINGTON: Would it be possible to
16 read back the last question and answer?

17 (Requested portion read back by the
18 reporter.)

19 MR. HARRINGTON: Going on in the same
20 paragraph -- is this still on?

21 HEARING OFFICER TIPSORD: Yes, it is, yes.

22 MR. HARRINGTON: The language, "At least at
23 the following rates, unless other provisions for
24 injection of halogenated activated carbon are established

1 in a federally enforceable operating permit issued for
2 the EGU," closed quote. Is that suggestion that any --
3 well, maybe I'll back up. What does it mean in the
4 context of paragraph (2)(D)?

5 HEARING OFFICER TIPSORD: And just to be
6 more precise, is that (b)(2)(D)? Correct?

7 MR. HARRINGTON: (b)(2) capital (D).

8 HEARING OFFICER TIPSORD: Yes. Thank you.

9 MR. ROMAINE: The provision that you're
10 pointing to would allow lesser emission rates to be
11 established in a federally enforceable operating permit.
12 It is not limited in application. That determination as
13 I would read this provision could be made in conjunction
14 to simply show that lower injection rate still provides
15 for optimum control of mercury; that is, injection of
16 mercury to a level at which the performance curve is flat
17 so that additional mercury -- or sorbent injection does
18 not provide additional control of mercury. It also
19 accommodates the provision in (b)(2)(D) that deals with
20 establishment of alternative rates that are lower than
21 the specified rate because of potential interaction with
22 particulate matter compliance or opacity compliance.

23 MR. HARRINGTON: Does this require obtaining
24 a federally enforceable state operating permit, or a

1 FESOP, in order to take advantage of the provisions of
2 (b)(2)(D)?

3 MR. ROMAINE: When this language was
4 drafted, the expectation was that it would not be
5 necessary to get a FESOP to take advantage of these
6 provisions but that the provisions would be memorialized
7 in a federally enforceable state operating permit after
8 having gone through opportunity for public comment.

9 MR. HARRINGTON: Break it into two
10 situations. One situation, which you mentioned, would be
11 if you established that, for example, three pounds per
12 million actual cubic feet rather than five got the same
13 removal rate for -- on sub-bituminous coal. In that
14 case, one could go in and ask for a FESOP to approve
15 three pounds rather than five pounds?

16 MR. ROMAINE: Yes.

17 MR. HARRINGTON: And if this rule has not
18 been approved by USEPA at that time, will we still
19 require a FESOP or will it require a state operating
20 permit?

21 MR. ROMAINE: As drafted, it would require a
22 federally enforceable state operating permit.

23 MR. HARRINGTON: And can you explain why a
24 federally enforceable state operating permit would be

1 required for that?

2 MR. ROMAINE: The language was used with the
3 hope that we would be doing this transaction in the Clean
4 Air Act Permit Program permit for the source. However,
5 we were also recognizing that it is conceivable that
6 certain sources may not have their Clean Air Act Permit
7 Program permits in place at the time this rule is
8 adopted, so this act would have to be taken in the
9 stand-alone permit, stand-alone standing in lieu of the
10 Clean Air Act Permit Program permit, and the appropriate
11 permit to stand in lieu of the Clean Air Act Permit
12 Program permit is a federally enforceable state operating
13 permit.

14 MR. HARRINGTON: If I understand you
15 correctly --

16 MR. ROMAINE: And I guess I should correct
17 myself. The language is actually a federally enforceable
18 operating permit. Doesn't have to be a state operating
19 permit. It can either be a CAAPP permit or a state
20 operating permit.

21 MR. HARRINGTON: So the amendment would have
22 to go through either a FESOP or the CAAPPs -- C-A-A-P-P,
23 CAAPPs -- permit; is that correct?

24 MR. ROMAINE: That's correct.

1 MR. HARRINGTON: It would go through public
2 notice and comment?

3 MR. ROMAINE: Yes.

4 MR. HARRINGTON: It would be subject to
5 USEPA approval or disapproval?

6 MR. ROMAINE: If the rules are proposed,
7 conceivably the USEPA could introduce themselves into the
8 permitting process. If the rules are not approved, I
9 don't believe USEPA would have the authority to introduce
10 themselves into the permitting process.

11 HEARING OFFICER TIPSORD: Ms. Bassi?

12 MS. BASSI: If the rule is not approved, why
13 would a FESOP or a CAAPP permit be necessary?

14 MR. ROMAINE: Because that's what the rule
15 says.

16 MS. BASSI: Why would it be necessary for
17 the rule to say that?

18 MR. ROMAINE: We are concerned that when
19 we're taking an action that establishes alternative
20 provisions based on either technical demonstration or
21 consideration of particulate matter or opacity compliance
22 that that actually be taken with the benefit of public
23 comment if there is public interest in the proposed
24 action.

1 HEARING OFFICER TIPSORD: Mr. Bonebrake?

2 MR. BONEBRAKE: Mr. Romaine, are you saying
3 that 225.234(b)(2) requires as a component of the
4 eligibility for the TTBS provisions effectuating the TTBS
5 into the FESOP or Title -- in either a FESOP or Title V
6 permit?

7 MR. ROMAINE: Can you repeat the question,
8 please?

9 MR. BONEBRAKE: Well, we -- I think we were
10 talking about 225.234(b)(2); is that right, Mr. Romaine?

11 MR. ROMAINE: Yes.

12 MR. BONEBRAKE: We were looking at the
13 language, I think, that reads, "Unless other provisions
14 for injection of halogenated activated carbon are
15 established in a federally enforceable operating permit."
16 That's the language you've been talking about?

17 MR. ROMAINE: Yes.

18 MR. BONEBRAKE: And is it your view that
19 that "unless" language establishes an affirmative
20 requirement to obtain a FESOP?

21 MR. ROMAINE: That was not the intent when
22 the language was drafted. The intent of the language
23 when drafted was that this was an action that could occur
24 during the incorporation of the temporary

1 technology-based standards into a federally enforceable
2 operating permit.

3 MR. BONEBRAKE: So just so I'm clear, then,
4 you are saying, though, that if an application is made
5 for a TTBS, assuming the TTBS application is approved by
6 the Agency, that will in some way be reflected in a
7 federally enforceable operating permit, which would
8 require public notice and comment?

9 MR. ROMAINE: That is correct.

10 MR. BONEBRAKE: And how long does that
11 process typically take, Mr. Romaine; that is, the public
12 notice and comment process for a FESOP or Title V?

13 MR. ROMAINE: The public notice and comment
14 period can take anywhere between 35 and 75 days.

15 MR. HARRINGTON: Do I understand correctly
16 that in order to have the TTBS alternative standard, it
17 has to be incorporated in a federally enforceable permit?
18 Is that what you're intending to say?

19 MR. ROMAINE: No. The question was asked,
20 was it expected that the TTBS would be included in a
21 federally enforceable operating permit. The answer to
22 that is yes, but if you look at Section 225.234(d)(1)(B),
23 the provision includes an application shield similar to
24 the application shield that exists for CAAPP permit

1 applications. The language provides, "Unless the Agency
2 finds that the EGU is not eligible to operate under this
3 section or that the application for operation under this
4 section does not meet the requirements of subsection
5 (d)(2) of this section, the owner of the EGU is
6 authorized to operate the EGU under this section
7 beginning 60 days after receipt of the application by the
8 Agency."

9 HEARING OFFICER TIPSORD: And for purposes
10 of the record, that is (d)(1) capital (B).

11 MR. HARRINGTON: We can come back to that
12 section when we get to it, but I understand -- but I
13 thought I had heard something different, and that's why I
14 asked a qualifying question.

15 HEARING OFFICER TIPSORD: I don't think you
16 were the only one that thought you heard something
17 different.

18 MR. HARRINGTON: But is it correct that to
19 have an alternate injection rate either because it's
20 equally effective or because it's necessary to qualify
21 under (b)(2)(D), it would have to be included in the
22 federally enforceable permit first, or can you rely on --
23 I lost my place.

24 MR. ROMAINE: It was not the Agency's intent

1 when drafting the provision it would have to get a
2 federally enforceable operating permit and as a
3 prerequisite that they then get a comprehensive federally
4 enforceable operating permit or the basic temporary
5 technology-based standard. The question whether the
6 language for the application shield that was just pointed
7 to in (d)(2)(B), I'm going to refer to my attorneys to
8 consider whether in fact that application shield is
9 clearly enough drafted to assure that there would not be
10 a requirement for a federally enforceable operating
11 permit on top of a federally enforceable operating
12 permit.

13 MR. HARRINGTON: So we'll withhold further
14 questions on that until maybe you and your attorneys have
15 had a chance to take a look at it, because I'm not trying
16 to demote you to lawyer.

17 HEARING OFFICER TIPSORD: Mr. Bonebrake?

18 MR. BONEBRAKE: I did have a related
19 question of Mr. Romaine. In a circumstance where an
20 application is submitted to the Agency and there is a
21 finding that the applicant has met the eligibility
22 requirements, including that the source has been
23 injecting halogenated activated carbon in an optimum
24 manner, is it the expectation under these rules that the

1 Agency will issue some document to memorialize the fact
2 that eligibility requirements have been satisfied, and if
3 so, what is that document?

4 MR. ROMAINÉ: We have not considered that
5 aspect of the implementation of the rule. My
6 expectation, because that would be exactly the opposite
7 situation, that if an applicant is not informed that
8 their application is deficient, the applicant is able to
9 rely upon the fact that they have properly applied for a
10 temporary technology-based standard.

11 HEARING OFFICER TIPSORD: Go ahead.

12 MR. BONEBRAKE: And how long could an
13 applicant wait without getting a response before they
14 could reach that conclusion?

15 MR. ROMAINÉ: The particular provision says
16 beginning 60 days after the receipt of the application by
17 the Agency.

18 MR. BONEBRAKE: Okay. And what provision,
19 Mr. Romaine, are you referring to?

20 MR. ROMAINÉ: (d)(1)(B).

21 HEARING OFFICER TIPSORD: If I may, I --
22 sort of as a follow-up to that and something that I
23 noticed happen several places in the rule itself as well
24 as in here in this TTSB [sic] document, Mr. Romaine, this

1 is -- you consider the TTSB [sic] will be part of a
2 permit application or a permit application in effect that
3 is applied for by a source to the Agency. You've stated
4 that. The -- My question is, there's no cross-references
5 or there's no references in here to the procedures that
6 are already in place for permits, and I think some of --
7 like, questions on how much time it's going to take and
8 things like that, because I know there are specific
9 deadlines both in the Act and even in the Board's rules
10 on permits that it might be helpful if you take another
11 look and add some cross-references particularly to the
12 Act and even perhaps the Board's rules when you're
13 talking about content of the application and what the
14 Agency's going to be doing. I guess that's more than --
15 That really wasn't a question. What do you think?

16 MR. ROMAINE: I think that's a very good
17 question.

18 HEARING OFFICER TIPSORD: Thank you.

19 MR. AYRES: And not a bad answer.

20 HEARING OFFICER TIPSORD: My apologies for
21 shanghaiing the process further. Mr. Zabel?

22 MR. ZABEL: Just on this same section, (d)
23 as in David (1)(A) and (B), the time period for the
24 application under (A) is 90 days but the permittee can

1 rely on Agency inaction within 60 days; is that correct?

2 MR. ROMAINE: That's correct.

3 MR. HARRINGTON: I still have further
4 questions on that when we get to it, but I thought maybe
5 we could proceed through the rule since there's a lot of
6 questions in our mind. Is -- The next phrase is, quote,
7 "With an injection system designed for effective
8 absorption of mercury, considering the configuration of
9 the EGU and its ductwork," closed quote. Could you add
10 any explanation to that as to what is intended?

11 MR. ROMAINE: Yes. As a general matter,
12 people designing activated carbon injection systems do
13 use computer models to assess the distribution of the
14 activated carbon in the ductwork to assure that the
15 carbon has its maximum mixing and residence time for
16 effective absorption of mercury. This is something I'm
17 sure that some of our technical experts can elaborate
18 upon. On the other hand, when you're dealing with an
19 existing unit, there are only so many things you can do
20 given the layout of the ductwork and dimensions and turns
21 that could restrict the design of the activated carbon
22 system from what would otherwise be an ideal system, so
23 the intent was to require that the owner/operator show
24 that they fully or appropriately considered the

1 circumstances of that particular unit to make sure that
2 they've done what is reasonable to make sure the
3 activated carbon is being effectively utilized.

4 MR. HARRINGTON: From your answer, am I
5 correct in assuming that it's not intended to require any
6 major changes to the existing configuration of the EGU
7 and its ductwork?

8 MR. ROMAINE: It's intended to do exactly
9 the opposite, to recognize that those are things that are
10 not initially contemplated to occur as part of the
11 temporary technology-based standard.

12 MR. HARRINGTON: Referring to the next page,
13 paragraph (b)(2) capital (A) and (B), this refers to the
14 injection rate for the halogenated activated carbon.
15 Now, are you the appropriate person to ask questions
16 about how those rates were determined?

17 MR. ROMAINE: That decision could be
18 discussed better with both myself and Mr. Staudt on the
19 panel.

20 MR. HARRINGTON: Thank you. Referring to
21 capital subparagraph (C), the reference is, quote, "A
22 blend of sub-bituminous and bituminous coal," closed
23 quote. Is that intended to refer to a unit which may use
24 either or both in varying amounts or is it intended to

1 refer to a unit that has a design blend?

2 MR. ROMAINE: It is intended to refer to an
3 unlikely circumstance that a unit elects to burn a
4 mixture of two coals on an hour-by-hour continuous basis.

5 MR. HARRINGTON: The same mixture at all
6 times?

7 MR. ROMAINE: The mixture could change.

8 MR. HARRINGTON: And I note there are other
9 provisions on how to determine that, and we'll come to
10 those. Referring to subparagraph (d), would you please
11 tell us what the Agency's contemplation is with this
12 subparagraph and how it's intended to be invoked?

13 MR. ROMAINE: I can answer the latter but
14 not the former. I can't answer the former because we
15 don't think it would be necessary to invoke it. We
16 explained earlier, based on our very simplistic review,
17 we do not expect that activated carbon injection is going
18 to threaten either compliance with particulate matter
19 standards or opacity standards or major increases in
20 emissions that would be subject to PSD or nonattainment
21 New Source Review. In terms of how this would be
22 invoked, this would be invoked by the owner or operator
23 of the source coming forward in their application and
24 explaining the information they have, explaining why

1 under certain circumstances or all circumstances that
2 injection at a certain rate would endanger either
3 compliance or threaten a major modification for PM.

4 MR. HARRINGTON: Is it contemplated that in
5 order to demonstrate that injection at the specified
6 rates would endanger compliance with particular opacity
7 limits, the unit would have to try and run for some
8 period of time at the specified injection rates?

9 MR. ROMAINE: Again, that's a speculative
10 question given the possible circumstances. That
11 certainly would be reasonable if you were addressing the
12 occurrence of a major modification as a result of
13 activated carbon injection because a major modification
14 is triggered on an annual basis when they trigger 15 tons
15 per year of particulate matter emissions, so for a major
16 modification, an extended period of operation could be
17 used to evaluate what the implications of activated
18 carbon injections of particular rates would be for
19 increases in particulate emissions. On the other hand,
20 if you're talking about compliance with emission
21 standards, we would not expect a unit to operate in
22 violation for any period of time to qualify for this
23 particular special consideration.

24 MR. HARRINGTON: Could a unit start out at a

1 lower injection rate and then begin increasing injection
2 rate until it reached a point where it felt that opacity
3 or particulate standards would be potentially violated?

4 MR. ROMAINE: That sounds like a very
5 reasonable approach to be taken by a source.

6 MR. HARRINGTON: What if the source could
7 make an engineering demonstration that any significant
8 rate of injection would cause interference with opacity
9 and particulate standards?

10 MR. ROMAINE: That would give us grave
11 concerns, and I'm not as concerned about compliance with
12 the mercury rule as the lack of an adequate compliance
13 margin with the opacity and particulate matter standards.

14 MR. HARRINGTON: I know in the Technical
15 Support Document there's discussion that there will
16 not -- that adding activated carbon isn't going to cause
17 a particulate opacity problem because the amount of
18 carbon injected is not that significant in terms of total
19 loading. Am I correct in that?

20 MR. ROMAINE: That's correct.

21 MR. HARRINGTON: Does not the halogenated
22 activated carbon have other indifferent properties which
23 have the potential for either interfering with the
24 operation of electrostatic precipitators and/or react

1 differently in terms of the way the precipitator controls
2 the particulate?

3 MR. ROMAINE: I've heard information to that
4 effect, but that is something that's much better for
5 Dr. Staudt.

6 MR. HARRINGTON: We'll come back to it.
7 Thank you.

8 HEARING OFFICER TIPSORD: Mr. Zabel?

9 MR. ZABEL: You indicated that the Agency
10 didn't believe that there would be an adverse impact on
11 particulate opacity from the activated or halogenated
12 activated carbon injections. Did you look at any other
13 emissions?

14 MR. ROMAINE: Yes, we did.

15 MR. ZABEL: Which ones?

16 MR. ROMAINE: Jim? I don't recall.

17 MR. ROSS: We discussed the emissions of SO₂
18 and NO_x with Dr. Staudt.

19 MR. ZABEL: How about hydrogen chloride?

20 MR. ROSS: I don't recall discussing that
21 specifically.

22 MR. ZABEL: Do you, Mr. Romaine?

23 MR. ROMAINE: I don't recall.

24 MR. ZABEL: Thank you.

1 MR. HARRINGTON: There -- Another
2 consideration that I believe has been raised with the
3 Agency in the past concerning activated carbon injection
4 is potential problems for the safe operation of the
5 system. Was any consideration given to including
6 something such as the safe and efficient operation of the
7 ESP as one of the conditions limiting injection of
8 halogenated activated carbon?

9 MR. ROMAINE: I don't recall those
10 discussions. Again, I'd refer those type of technical
11 questions to Dr. Staudt.

12 MR. HARRINGTON: Thank you. We'll come back
13 to them with Dr. Staudt on those issues. Can I just have
14 a moment, please?

15 HEARING OFFICER TIPSORD: That's quite all
16 right. Mr. Zabel?

17 MR. ZABEL: On sub (D), 234(b)(2)(D), the
18 concern there is only with opacity of particulate
19 emissions, but I'm wondering if the source -- maybe this
20 comes up under the later portion of this rule -- has the
21 capability of demonstrating that a lower injection rate
22 is possible.

23 MR. ROMAINE: The provisions for
24 demonstrating a lower injection rate are contained within

1 paragraph (b)(2).

2 MR. ZABEL: So that would be part of the
3 initial application for the TTBS?

4 MR. ROMAINE: Yes.

5 MR. ZABEL: And that application, which
6 covers the various elements that you and Mr. Harrington
7 have been discussing, is all reviewed and determined by
8 the Agency; is that correct?

9 MR. ROMAINE: It would be reviewed by the
10 Agency.

11 MR. ZABEL: And review --

12 MR. ROMAINE: The extent of determination is
13 something that I don't believe that we would contemplate
14 a significant review. Again, we'd be looking for flaws
15 in the evaluation when we except for things that would be
16 exercise of discretion.

17 MR. ZABEL: And is it the Agency's view that
18 the exercise of that discretion is reviewable by the
19 Board?

20 MR. ROMAINE: Yes.

21 MR. HARRINGTON: This may have been asked
22 and answered, but was there any basis other than simple
23 policy decision for selecting the 25 percent in paragraph
24 3, capital (A)?

1 MR. ROSS: The answer is yes, we did use a
2 process. We had a rationale for coming up with 25
3 percent. It was in fact a policy determination. I'm not
4 going to be able to point to any technical calculation,
5 but I can give you an idea of how we arrived at the
6 figure. We discussed several issues and list them here,
7 and I'll go over them one by one. First, a principle of
8 the TTBS was to allow additional time for units that
9 encountered technical problems that interfere with
10 activated carbon injection enhanced compliance with the
11 rule to seek out a cost effective means to comply with
12 the rule.

13 Two, ensure that units complying via the TTBS
14 still achieve the maximum level of mercury control that
15 is reasonably achievable, and we accomplished that by
16 requiring an appropriate sorbent injection rate, and
17 that's identified in the rule.

18 Three, provide an incentive for sources to
19 achieve compliance without utilizing the TTBS; for those
20 units that do comply via the TTBS, provide an incentive
21 to achieve compliance with the standard as soon as
22 reasonably possible, and we accomplished that by, again,
23 requiring the appropriate sorbent injection rate with
24 some margin of safety built in. And I think Chris has

1 touched on and certainly our mercury cost and control
2 expert, Dr. Staudt, can go into this on a greater level
3 of detail, but the rate of sorbent injection is
4 proportional to mercury control. There is a performance
5 curve there.

6 Four, minimize the additional emissions in excess
7 of the numerical standard that can occur from units that
8 comply via the TTBS, and we accomplished this by limiting
9 both the number of units that can use the TTBS and by
10 requiring an appropriate sorbent injection rate.

11 Five, explicitly limit the availability of the
12 TTBS consistent with its role as a secondary compliance
13 option, and we do this by limiting the number of units
14 that can enter the TTBS. So taking all those principles
15 into account, it was discussed at length and we arrived
16 at 25 percent as the appropriate percentage of generating
17 capacity at the companies to enter the -- to be eligible
18 for the TTBS.

19 HEARING OFFICER TIPSORD: Ms. Bassi, you
20 have a follow-up?

21 MS. BASSI: Yes. Perhaps I misunderstood
22 what you said, Mr. Ross. I thought you said that your
23 first principle was to allow additional time for units
24 with technical problems from coming -- technical problems

1 in using the sorbent injection. Did I get that wrong?
2 What was the first principle?

3 MR. ROSS: Allow additional time for units
4 that encounter technical problems that interfere with
5 activated carbon injection enhanced compliance with the
6 rule --

7 MS. BASSI: Well --

8 MR. ROSS: -- to seek out -- one of the
9 criteria for eligibility of the TTBS is that you install
10 halogenated activated carbon or activated carbon
11 injection.

12 MS. BASSI: Well, if they encounter problems
13 that interfere with the ACI system or with the optimal --
14 with the use of the ACI -- I'm sorry. Maybe I'm just
15 encountering a mental block here, but all of your
16 requirements for using the TTBS require the use of ACI,
17 and so if they have a problem with using ACI, how come
18 they have to use ACI to get the TTBS?

19 MR. ROSS: Well, the wording may have not
20 been clear. The TTBS requires that -- and Chris has gone
21 over that in some detail, the eligibility criteria, that
22 you have to use -- how did he describe it -- appropriate
23 sorbent injection rates have to be placed at a certain
24 point in the ductwork, and there was another criteria to

1 be eligible. Chris has discussed that in detail. But if
2 you do all those things and you still cannot comply with
3 the rule, then you're eligible for the TTBS. Now,
4 there -- we've discussed the flexibility provisions that
5 could still allow you to comply with the rule without
6 utilizing the TTBS.

7 MS. BASSI: But is there -- So there's an
8 assumption that if you do all those things and you still
9 run into a problem, you're still injecting some level of
10 ACI; is that correct?

11 MR. ROSS: Absolutely, yes.

12 MS. BASSI: Okay. Would there be any units
13 that could not possibly inject ACI?

14 MR. ROSS: Any units that could not --

15 MS. BASSI: Yeah.

16 MR. ROSS: -- possibly inject ACI.

17 MS. BASSI: Yeah, because they can't get the
18 injectors in there somewhere.

19 MR. ROSS: Not to our knowledge.

20 MS. BASSI: Okay.

21 HEARING OFFICER TIPSORD: Mr. Bonebrake?

22 MR. BONEBRAKE: So the record's clear,
23 Mr. Ross, a unit with a hot-side ESP, though, even if it
24 experiences technical problems with the ACI, it's still

1 not eligible for the TTBS; is that right?

2 MR. ROSS: That's correct. We discussed
3 that this morning.

4 MR. HARRINGTON: Is it correct to state that
5 the 25 percent limit is simply a discretionary limit?

6 MR. ROSS: Yes. I mean, it was discussed --
7 it was a policy call, a level that was arrived at through
8 discussions of these principles and issues.

9 MR. HARRINGTON: Was -- Did the Agency go
10 through a process of looking at what units they thought
11 would fall into the 25 percent and which units would not
12 qualify for the 25 percent?

13 MR. ROSS: We did to some degree. Yes, we
14 did.

15 MS. BASSI: Mr. Ross, would -- did that
16 process play a part in your -- in the Agency's
17 determination that 25 percent of the capacity is the
18 appropriate number?

19 MR. ROSS: It was part of the discussion, so
20 to some degree, yes, it played a part.

21 HEARING OFFICER TIPSORD: Mr. Rao?

22 MR. RAO: Mr. Ross, when you considered this
23 25 percent as -- you know, as you have proposed in the
24 rule, were other levels considered or did you just pick

1 25 percent?

2 MR. ROSS: We discussed other levels.

3 MR. RAO: What were those levels that you
4 considered?

5 MR. ROSS: We discussed lower and higher.

6 MR. RAO: How much higher?

7 MR. ROSS: 5 percent, 10 percent. We
8 discussed 100 percent, so -- but again, a couple of the
9 guiding principles were that we wanted to minimize the
10 additional emissions that would occur from utilization of
11 the TTBS. If you allow 100 percent of the units, well,
12 obviously that reflects a lack of confidence in the
13 ability to achieve compliance with the rule, but also, if
14 the incremental emissions that could occur if all the
15 units entered the TTBS would be much larger than if we
16 only allow 25 percent, plus I believe in discussions with
17 our technology control expert, Dr. Staudt, that we do
18 have a certain level of confidence in the rule and that
19 units will be able to comply.

20 MR. RAO: So he'll shed more light on this,
21 Dr. Staudt?

22 MR. ROSS: On our level -- Well, Dr. Staudt
23 can shed some light on our level of confidence as we go
24 through each and every unit, which we anticipate will

1 occur, and how they -- we expect that they will comply
2 with the rule, sure.

3 HEARING OFFICER TIPSORD: Mr. Bonebrake?

4 MR. BONEBRAKE: Mr. Ross, did the Agency
5 also have a set of guiding principles with respect to its
6 decision to exclude units with hot-side ESPs from the
7 TTBS eligibility?

8 MR. ROSS: Again, that was discussions.
9 There wasn't any crafting of guiding principles. It was
10 a policy call that these units -- based on the
11 information that we have and in discussions with our
12 expert, these units are unlikely to achieve a high level
13 of mercury control in installing available technologies.
14 I think in our Technical Support Document we list a level
15 of control between 50 and 70 percent, so obviously there
16 is an extreme lack of confidence that those units will be
17 able to achieve -- readily achieve compliance with the
18 rule, and therefore the policy call was made that these
19 units need to do something more, and that more was
20 contemplated to be the installation of a fabric filter,
21 and so we included the installation of a fabric filter on
22 these two particular units. There's two units in the
23 state with hot-side ESPs that -- there is another unit,
24 but it is already under a consent decree to install a

1 fabric filter, so these two units -- the cost of
2 installing a fabric filter at these units was part of the
3 cost analysis performed by Dr. Staudt and the IPM model,
4 it's my understanding, to put fabric filters on these two
5 units, so both the modeling and Dr. Staudt's analysis was
6 done, and that's to determine the cost impact of our
7 rule. Both those analyses include fabric filters on the
8 two hot-side units.

9 HEARING OFFICER TIPSORD: Mr. Zabel?

10 MR. ZABEL: The unit you're referring to
11 under the consent -- under a consent decree, is that the
12 Havana 6 unit?

13 MR. ROMAINE: Yes.

14 MR. ROSS: Yes, it is, Havana 6.

15 MR. ZABEL: Sometimes referred to as 9, I
16 understand, depending on the boiler number or the
17 generator number. When is it required under the consent
18 decree to install a fabric filter?

19 MR. ROSS: Well, I know it's at a later
20 date, and Chris probably knows the exact date, so they
21 would have to install it earlier.

22 MR. ZABEL: And that would be a cost, would
23 it not?

24 MR. ROSS: Yes, it would.

1 MR. ZABEL: Not included in your analysis?

2 MR. ROSS: You would have to ask that
3 question of Dr. Staudt.

4 MR. ZABEL: I shall.

5 MR. ROSS: Okay.

6 MR. HARRINGTON: In selecting the 25 percent
7 cutoff, did the Agency have discussions with parties
8 outside the Agency or under contract to the Agency?

9 MR. ROSS: Yes, we did.

10 MR. HARRINGTON: May I ask who they were?

11 MR. ROSS: I'm recollecting everyone that
12 was involved in that. I believe the Governor's office
13 was certainly involved, Steve Frankel -- I believe I've
14 mentioned his name previously -- and persons from the
15 Environmental Law & Policy Center. Howard Learner was
16 involved in some discussions. Did you exclude people
17 under contract with the Agency?

18 MR. HARRINGTON: Yes, I did. I excluded
19 those.

20 MR. ROSS: Okay.

21 MR. HARRINGTON: I assume when I say persons
22 under contract with the Agency, I'm referring to those
23 that are here testifying as witnesses or otherwise have
24 already been identified.

1 MR. ROSS: Obviously Dr. Staudt played an
2 integral role in the --

3 MR. HARRINGTON: I understand that your
4 consultants have been involved in this.

5 MR. ZABEL: Just for clarification on that
6 question, did it include discussions with ICF?

7 MR. ROSS: No.

8 MR. HARRINGTON: Did it include any
9 discussions with any sorbent suppliers?

10 MR. ROSS: No.

11 MR. HARRINGTON: Okay.

12 HEARING OFFICER TIPSORD: Ms. Bassi?

13 MS. BASSI: Well, I have to ask the obvious.
14 With any companies, any power generating companies?

15 MR. ROSS: On this particular aspect of the
16 TTBS, limiting it to 25 percent, putting it in that
17 context, I do not believe any power companies were
18 included in those discussions.

19 MR. HARRINGTON: Move on? Moving to the
20 next page, page 5, monitoring and record-keeping
21 requirements, could you explain -- just give an overview
22 particularly of how the paragraphs (2)(A) and (2)(B) --
23 what kind of records you envisioned seeing from them and
24 how that -- you envision that data being put together?

1 MR. ROMAINE: During the initial phase of
2 the proposed rule, though December 31, 2012, we would
3 expect compliance with the required activated carbon
4 injection rate to be kept to a combination of existing
5 flow rate monitoring conducted pursuant to the acid rain
6 program and records for usage of activated carbon with a
7 compliance determination to be made as a weekly average.
8 For sources that continue to operate under the
9 technology-based standard for Phase II of the rule, we
10 would expect that the level of compliance procedures
11 would become more rigorous with actual monitoring of
12 activated carbon feed rate being performed with
13 additional information on flue gas temperature at the
14 point of sorbent injection if needed and then relying on
15 existing continuous emission monitoring with that data
16 being compiled on an hourly average basis.

17 MR. HARRINGTON: Looking at sub (2)(A)
18 paragraph, do I understand, then, that continuous
19 monitoring of the activated carbon feed rate would not be
20 required under paragraph (2)(A)?

21 MR. ROMAINE: That would be not -- would not
22 be required under the first phase through December 31,
23 2012.

24 MR. HARRINGTON: So just a record of what

1 the set rate was?

2 MR. ROMAINE: The records are for usage of
3 activated carbon. Those records could be determined from
4 delivery, shipments, inventory and storage tanks.

5 MR. HARRINGTON: Well, in reading the third
6 line, it says, "And the activated carbon feed rate," and
7 I'm wondering if that was intended to -- what that's
8 intended to require.

9 MR. ROMAINE: That is to be a calculated
10 value combining the usage of activated carbon and the
11 exhaust flow rate from the EGU.

12 MR. HARRINGTON: Thank you.

13 HEARING OFFICER TIPSORD: Mr. Zabel?

14 MR. ZABEL: Just out of curiosity, (2)(C)
15 refers to bituminous and sub-bituminous coal. Coal is
16 defined in the basic rule of four types. What if one of
17 the other types is being used as well?

18 MR. ROMAINE: We did not anticipate that
19 units in Illinois would use the other two types of coal,
20 which I assume you're referring to lignite and
21 anthracite?

22 MR. ZABEL: Yes.

23 MR. ROMAINE: If people believe they might
24 be using lignite or anthracite, then we need to know.

1 MR. ZABEL: The Agency would normally be
2 informed under the permit request, wouldn't they?

3 MR. ROMAINE: Well, I'm talking about in the
4 context of this rulemaking to make sure we have a rule
5 that addresses lignite and anthracite.

6 MR. ZABEL: My concern is --

7 MR. ROMAINE: In terms of lignite, my
8 understanding is that lignite is not burned other than in
9 mine-mouth facilities. That's something I recall from
10 the USEPA's work. Whether Illinois plants would ever
11 import anthracite, I have no idea.

12 MR. ZABEL: I -- My only concern is the spot
13 markets are what they are, and sometimes such coal can be
14 picked up. If the Agency hadn't addressed it, that's why
15 I asked the question.

16 HEARING OFFICER TIPSORD: Ms. Bassi?

17 MS. BASSI: If the Agency doesn't anticipate
18 that anyone would burn lignite or anthracite, or are
19 you -- well, let me back up. You said that you had read
20 in USEPA's preamble or someplace that lignite is
21 generally burned at mine-mouth plants?

22 MR. ROMAINE: That is correct.

23 MS. BASSI: Are those mine-mouth plants --
24 Is it burned in mine-mouth plants in Illinois?

1 MR. ROMAINE: No.

2 MS. BASSI: Okay. Then I will get to my
3 real question. If the Agency doesn't anticipate that
4 lignite or anthracite coals would be burned in
5 Illinois -- and I confess that I haven't looked at the
6 definition that closely -- why would you include
7 definitions for them in the rule, or did you? Oh, I see.
8 It's in the definition of coal.

9 MR. ZABEL: It's in the definition of coal.

10 MS. BASSI: Yeah. Why include them in
11 there? Just curious.

12 MR. ROMAINE: I don't know the exact reason,
13 but I can come up with one on the spot.

14 MS. BASSI: Okay.

15 MR. ROMAINE: It will certainly make it
16 easier for USEPA to check that our definition matches
17 their definition when they read it and it matches word
18 for word what they have defined coal to be in their
19 regulations.

20 HEARING OFFICER TIPSORD: Mr. Zabel?

21 MR. ZABEL: Just -- Since we're on the topic
22 of coal, (3)(A) refers to notification of the type of
23 coal fired. I assume we're still talking about the four
24 types of coal, not the source of a particular type of

1 coal. Page 5, I think, notification and reporting
2 requirements.

3 MR. ROMAINE: Yes, it is type.

4 MR. ZABEL: So --

5 MR. ROMAINE: If you switch from
6 sub-bituminous to bituminous or bituminous to
7 sub-bituminous.

8 MR. ZABEL: But if you switch from New
9 Rochelle to Antelope Mine and Powder River, you wouldn't
10 have to give that notice.

11 MR. ROMAINE: No, you would not.

12 MR. HARRINGTON: With respect to the coal,
13 some plants burn both bituminous and sub-bituminous coal
14 somewhat interchangeably and sometimes at the same time
15 out of the same bunker; is that correct?

16 MR. ROMAINE: I'm not sure if it is at the
17 present time. The gentleman sitting next to you might be
18 able to answer that.

19 MR. HARRINGTON: It does happen. It does.

20 MR. ROMAINE: Okay.

21 MR. HARRINGTON: I'm not sure what -- How
22 would you envision under paragraph (2)(A) those records
23 being kept and under paragraph (3)(A) receiving notice?

24 MR. ROMAINE: Under (2)(A) --

1 MR. HARRINGTON: (2)(C), rather. Excuse me.

2 MR. ROMAINE: Oh. Under (2)(C), we would
3 expect there to be records of reasonable accuracy that
4 are kept for the particular plant under those unusual
5 circumstances that quantify the amount of bituminous coal
6 delivered to the bunker and the amount of sub-bituminous
7 coal delivered to the bunker on a weekly basis.

8 MR. HARRINGTON: On a weekly basis?

9 MR. ROMAINE: On a weekly basis.

10 MR. HARRINGTON: And delivered to the bunker
11 would be the -- what do you mean?

12 MR. ROMAINE: Delivered to the bunker, in
13 the bunker, from the bunker, into the boiler. In terms
14 of the question on condition (3)(A), if the normal
15 practice of a unit is to burn this mix of coal types, I
16 would not consider switching back and forth as part of a
17 normal operation to be a change in the type of coal. I
18 would apply that type of provision to a facility that is
19 routinely burning one type of control -- coal and then
20 makes a change in their operation to introduce another
21 type of coal or conceivably to switch to the type of
22 operation you've described where a facility is burning
23 two types of coal.

24 MR. HARRINGTON: Thank you.

1 HEARING OFFICER TIPSORD: Go ahead,
2 Mr. Zabel.

3 MR. ZABEL: And if I could move on to
4 (3)(A), I had a separate question on it, Mr. Romaine.
5 The clause in (3)(A) that says -- and I quote -- "The
6 mercury emission standard with which the owner or
7 operator is attempting to comply for the EGU will
8 change," I'm not sure I understood what that means.
9 Wouldn't a source for the TTBS be seeking -- be unable to
10 comply with either standard? Otherwise it wouldn't need
11 the exclusion.

12 MR. ROMAINE: A unit operating under the
13 TTBS would be unable to comply with either standard.
14 However, one of the elements of the application and the
15 approach to the TTBS is that the applicable source is
16 required to identify whether they are pursuing compliance
17 with either the output-based standard or the control
18 efficiency standard.

19 MR. ZABEL: Wouldn't they likely be pursuing
20 compliance with both, whichever they could achieve?

21 MR. ROMAINE: It is more probable that given
22 the particular coal and configuration of the unit they
23 would be -- have identified as -- will have identified
24 one of those standards as the easier and more likely

1 emission standard with which they would comply.

2 MR. ZABEL: And at some point, I guess this
3 anticipates they might change their mind about that.

4 MR. ROMAINE: Exactly.

5 MR. ZABEL: Okay.

6 MR. HARRINGTON: Should we move on to page
7 6, subparagraph (d)?

8 MR. BONEBRAKE: Did you say (d)?

9 MR. HARRINGTON: (d), "Application to
10 Operate Under the Technology-Based Standard." Before we
11 get there, do you have it?

12 MR. BONEBRAKE: I had a question on (c)(3)
13 big (C), if you don't mind, Mr. Harrington.

14 MR. HARRINGTON: Okay.

15 MR. BONEBRAKE: Mr. Romaine, (c)(3)(C)
16 refers to measures taken during the past year and
17 activities planned for the current year to further
18 improve control of mercury emissions. Do you see that?

19 MR. ROMAINE: Yes, I do.

20 MR. BONEBRAKE: I wasn't sure if this was
21 intended to create an obligation, this provision, or if
22 it was referring to an obligation to do those things
23 established someplace else in the TTBS. Could you
24 provide your explanation of that provision?

1 MR. ROMAINE: It does not create a separate
2 obligation to undertake those activities. We believe
3 that obligation to undertake activities to reduce
4 emissions is inherent in the temporary nature of the
5 technology-based standard. This standard is not
6 available on an unlimited time basis. For an existing
7 unit, they have to be facing a June 30, 2015, deadline,
8 and this simply asks the source to report on activities
9 they have conducted and will be conducting to work toward
10 the goal of complying with the numerical standard by the
11 June 30, 2015, compliance date, assuming that it is not
12 possible to comply before that time.

13 MR. BONEBRAKE: And are these activities to
14 be undertaken specified somewhere in the TTBS?

15 MR. ROMAINE: No, they are not. I don't
16 think they are. Did we specify them, Jim? I apologize.
17 We've gone through a number of iterations during the
18 drafting process. Yes, they are. We did leave it in.
19 An action plan describing the measures that will be taken
20 while operating under this section to improve control of
21 mercury emissions.

22 MR. BONEBRAKE: Okay. And you're referring
23 to --

24 MR. ZABEL: What section is that?

1 MR. ROMAINÉ: That is in the application,
2 (2) -- (d)(2)(D).

3 MR. BONEBRAKE: Okay. So from your
4 perspective, Mr. Romaine, whatever (d)(2)(D) requires
5 then would be the activities about which you're supposed
6 to report under the provision we were just talking about?

7 MR. ROMAINÉ: Those activities would be
8 covered or any substitute alternative activities that a
9 particular source identifies as appropriate.

10 MR. BONEBRAKE: Maybe we can talk some more
11 about those activities when we get to the -- that subpart
12 of (d).

13 HEARING OFFICER TIPSORD: Mr. Harrington, I
14 think we're back to you.

15 MR. HARRINGTON: Will the Agency be in a
16 position to consult with a company during the period
17 running up to the compliance deadline on whether the
18 demonstration that's being -- might be prepared for TTBS
19 or -- is appropriate, what might be required and what
20 might be approved?

21 MR. ROMAINÉ: I would hope that it would be
22 available. The actual availability would depend on
23 resources. We would be more likely to be available if we
24 were not working on certain appeals.

1 MR. ZABEL: I'd move to strike that.

2 MR. HARRINGTON: Touché. If an
3 owner/operator applies pursuant to (d)(1)(A) three months
4 prior to the date when compliance is required and under
5 (d)(1)(B) the Agency finds -- strike that. I'll come
6 back to a more logical way to ask it. Looking at
7 (d)(1)(B) -- which is the application shield I think you
8 referred to; am I correct?

9 MR. ROMAINE: Yes, it is.

10 MR. HARRINGTON: If a company files the
11 application, it's submitted to the Agency and the Agency
12 finds that the EGU is not eligible to operate under this
13 section, is that an appealable permit decision?

14 MR. ROMAINE: Yes, it is. It's an action on
15 a permit application.

16 MR. HARRINGTON: And what is the company
17 supposed to do while it appeals that decision? And I'm
18 not asking for a legal opinion on stays and other things
19 stated in other context, but just in terms of what the
20 Agency's own contemplation is in writing this.

21 MR. ROMAINE: Our expectation or at least my
22 expectation when this was being prepared is that that
23 sort of appeal would allow the continued operation of the
24 unit until the appropriateness of the technology --

1 temporary technology-based standard was resolved by the
2 Board.

3 MR. HARRINGTON: Thank you. So the way you
4 envision this is they apply 90 days ahead of time; the
5 Agency must act within 60 days to determine if the
6 application is insufficient. If the Agency doesn't act,
7 it can continue to operate. The Agency finds it's
8 insufficient, there's an appeal to the Board and they can
9 continue to operate under the TTBS under their
10 application until the Board acts on it.

11 MR. ROMAINE: Yes.

12 HEARING OFFICER TIPSORD: Ms. Bassi?

13 MS. BASSI: So if a company has one of these
14 appeals pending before the Board that the Agency has
15 determined is not appropriately eligible for a TTBS, is
16 that unit using up a bit of its 25 percent -- a bit of
17 the company's 25 percent capacity or has the Agency
18 written that little bit off because they don't think it
19 applies?

20 MR. ROMAINE: That's an interesting
21 question. I'd have to give the conservative answer off
22 the top of my head, saying it's used up a bit of the 25
23 percent.

24 HEARING OFFICER TIPSORD: Mr. Harrington?

1 MR. HARRINGTON: On the same provisions,
2 would -- does the permit shield and I'll call it the
3 appeal shield apply if it's an application to change the
4 injection rate?

5 MR. ROMAINE: We have applied, carried out,
6 implemented the temporary technology-based standard
7 through permit application. Therefore, we expect that
8 the provisions that generally apply to permit
9 applications and Agency actions on permit applications
10 would apply.

11 MR. HARRINGTON: So if somebody comes in and
12 says, "I can't do five pounds under provisions of 225.234
13 (b)(A) because it'll interfere with particulate," then if
14 the Agency says no or says we deny -- it's not -- you're
15 not eligible to operate that way, then there can be an
16 appeal and it can continue to operate until the Board
17 decides.

18 MR. ROMAINE: That was the expectation when
19 this language was drafted.

20 MR. HARRINGTON: Thank you. I'm going to
21 move on to (d)(2) unless --

22 HEARING OFFICER TIPSORD: Go ahead.

23 MR. HARRINGTON: Could you explain
24 (d)(2)(D)?

1 MR. ROMAINE: Yes. As I previously
2 explained, even though there are two numerical emissions
3 standards, we would expect that one of those standards
4 would be the -- identified as the most likely standard
5 for any particular emission unit, and this requires that
6 the owner/operator of a unit that's pursuing the
7 temporary technology-based standard to identify which
8 unit it has been attempting to comply with and present
9 this information relevant to the -- or as related to that
10 particular unit in the standard.

11 MR. HARRINGTON: So the election of which
12 one to comply with will be the applicant's.

13 MR. ROMAINE: Yes.

14 HEARING OFFICER TIPSORD: Mr. Zabel?

15 MR. ZABEL: Could the source pick both?

16 MR. ROMAINE: I don't see anything that
17 would preclude that. It seems improbable. The practice
18 of the output-based standard seems more likely to be
19 pursued by a source that is burning bituminous coal. The
20 control efficiency standard seems more likely for the
21 source that's burning sub-bituminous coal.

22 MR. ZABEL: But I understand from the
23 Agency's testimony that the two standards are close; not
24 identical, but close to that; is that true?

1 MR. ROMAINE: I think that's probably a
2 simplification.

3 MR. ZABEL: I expected it was, but they are
4 not identical; is that correct?

5 MR. ROMAINE: Well, they have different
6 effects. As I said, one is more likely to be pursued by
7 the person -- or unit using one type of coal versus
8 another type of coal. One allows credit for coal
9 washing, which is typically performed on bituminous coal
10 and is not performed on sub-bituminous coal, so there are
11 differences in practice between those two standards.

12 MR. ZABEL: But it's still possible. It's
13 still possible to even -- for example, for a
14 sub-bituminous unit with a highly efficient heat rate
15 that it might go for the 0.008 standard.

16 MR. ROMAINE: We'd be happy if they'd elect
17 to do that, yes.

18 MR. HARRINGTON: Moving on to (d),
19 (d)(2)(D), this requires an action plan, and the most
20 basic question is, can the Agency disapprove the
21 application because it doesn't like what is or is not
22 included in the action plan?

23 MR. ROMAINE: No, we have not included
24 criteria that would allow us to make that sort of

1 discretionary decision on an action plan. We may express
2 opinions on the action plan, we may express concerns
3 about it, but we haven't included provisions that would
4 allow us to find it deficient.

5 MR. HARRINGTON: So for example, the Agency
6 couldn't say, "Well, you failed to include adding an
7 expanding electrostatic precipitator as part of your
8 action plan; therefore we're going to disapprove your
9 application."

10 MR. ROMAINE: I don't believe so. We could
11 express concern that you haven't addressed that, but it
12 would not be a basis upon which to reject the
13 application, because it had an inadequate action plan.

14 HEARING OFFICER TIPSORD: Ms. Bassi?

15 MS. BASSI: I believe earlier when you were
16 talking about -- what was it -- the eligibility
17 requirements and operating in the optimum -- let's see.
18 It's in (b)(2). It's talking about the optimum manner
19 for control of mercury and the use of the ACI. You
20 stated that you could -- that the Agency could -- I
21 believe you stated that the Agency essentially could
22 reject an application for a TTBS relief if that optimum
23 manner were unsound.

24 MR. ROMAINE: I believe I said that, yes.

1 MS. BASSI: Okay. Is that -- How does that
2 correlate with the language in (d) -- what are we on --
3 (2)(D) that says, "Changes to operation of the unit that
4 affect the effectiveness of mercury absorption and
5 collection"?

6 MR. ROMAINE: The language in (d)(2) simply
7 is material that is required to be contained in the
8 application. It is informational material. It is not a
9 requirement for eligibility of a temporary
10 technology-based standard. In that regard, I think it's
11 important to note that obviously, as I said before, this
12 is a limited provision. We think there is a
13 significant -- it's hard to even call it an incentive --
14 deadline for sources to take appropriate activities to
15 come into compliance with the numerical emission
16 standards. Therefore, we have not included criteria for
17 the action plan. The eligibility criteria are much more
18 important because that shows how far the source has
19 gotten toward the starting point, how far toward the goal
20 of achieving compliance with the numerical emission
21 standard, before it is given the alternative relief of
22 the temporary technology-based standard.

23 HEARING OFFICER TIPSORD: Mr. Bonebrake?

24 MR. BONEBRAKE: With respect to (d)(2)(D),

1 is there a requirement, then, in the TTBS proposed
2 regulations to carry out the -- whatever the content of
3 the plan is that has been submitted as part of the
4 application?

5 MR. ROMAINE: We played with that as part of
6 the drafting, and we would -- considered including
7 requirements that would require the plan to be
8 implemented and we rejected that. We have not included
9 them in the proposed rule. This is because we believe
10 that there could be need for adjustment to the plan, new
11 developments, new technology, other changes that could
12 not be readily addressed in a plan that would be
13 submitted with the initial application, so we thought it
14 was more appropriate to take a pragmatic approach to this
15 obligation, have an initial plan and then simply ask the
16 source to keep us informed of the activities they were
17 conducting on an annual basis.

18 HEARING OFFICER TIPSORD: Ms. Bassi?

19 MS. BASSI: A follow-up to that, then. So
20 if I understand this correctly, what you're -- what you
21 are saying is that the elements that would appear in
22 (d)(2)(D) will not be enumerated in the permit that's
23 issued, including the schedule that is the very last
24 phrase in that provision; is that correct?

1 MR. ROMAINE: That's correct.

2 HEARING OFFICER TIPSORD: Mr. Bonebrake?

3 MR. BONEBRAKE: In a related question --
4 and, Mr. Harrington, I -- forgive me if I'm stepping on
5 something that you were going to ask about.

6 MR. HARRINGTON: No, no, no. Proceed.

7 MR. BONEBRAKE: There's a reference, as
8 we've been talking about, in (d) to an action plan, and
9 then Subpart (e)(1), which is at the bottom of page 7,
10 refers to "During an evaluation of the effectiveness of
11 the current sorbent, alternative sorbent or other
12 technique," and it goes on from there. You see the
13 section of (e)(1) that I'm referring to?

14 MR. ROMAINE: Yes, I do.

15 MR. BONEBRAKE: Is the action plan referred
16 to in (d) related in some way to the evaluation that's
17 being referred to in (e)(1)?

18 MR. ROMAINE: Not necessarily. Certainly
19 evaluations as discussed in (e) could be incorporated
20 into an action plan, but they could also be developed
21 subsequent to the initial submittal of an application for
22 approval of a temporary technology-based standard.

23 MR. BONEBRAKE: So is there a requirement,
24 then, under (e)(1) to perform some kind of evaluation

1 regardless of whether you set it forth in an action plan
2 or not?

3 MR. ROMAINE: No. The purpose of (e) is to
4 provide I guess an alternative standard for provisions
5 within the alternative temporary technology-based
6 standard. The temporary technology-based standard is
7 fairly strictly written in terms of having a specific
8 emission -- or injection rate for activated carbon.
9 Dr. Staudt when he was reviewing this reminded the Agency
10 that that sort of rigid approach to the temporary
11 technology-based standard could actually interfere with
12 evaluation of new developing technology, so what (e) does
13 is allow an exception to the requirement that would
14 otherwise be applicable to the temporary technology-based
15 standard as a source identifies a new sorbent, new
16 material, and wishes to evaluate it on their unit.

17 MR. BONEBRAKE: So make sure I understand
18 this correctly. What's set forth in Subpart (e) is an
19 evaluation procedure that is available to sources but is
20 not required of sources? So in other words, it's an
21 election by the source?

22 MR. ROMAINE: That is correct. I'm trying
23 to find the appropriate cross-reference. If you look at
24 paragraph (c)(1) on page 5, the provision states, "The

1 owner or operator of an EGU that is operating pursuant to
2 this section shall continue to maintain and operate the
3 EGU to comply with the criteria for eligibility for
4 operation under this section except during evaluation of
5 a current sorbent, alternative sorbents or other
6 techniques to control mercury emissions as provided by
7 subsection (e) of this section."

8 HEARING OFFICER TIPSORD: Ms. Bassi?

9 MS. BASSI: Mr. Romaine, can you identify
10 the language in (e), subsection (e), or elsewhere in the
11 TTBS that makes subsection (e) optional as opposed to a
12 requirement, please?

13 MR. ROMAINE: I just identified part of that
14 language, and then that language is effectively restated
15 in the first paragraph of (e)(1).

16 MS. BASSI: Well, it says during an
17 evaluation of the effectiveness of the current sorbent,
18 alternative sorbent or other it need not comply with the
19 eligibility criteria for operation under this section,
20 which implies and in fact I think boldly states that such
21 evaluations are required.

22 MR. ROMAINE: No, I don't believe so.

23 MS. BASSI: And why does it not? I -- The
24 reason why I ask this is you pointed out the language in

1 (c)(1) that says all of this -- all of these requirements
2 apply except when you're doing an evaluation under
3 subsection (e), and then when we turn to subsection (e),
4 it's talking about the evaluations but I don't see the
5 language in here that says that the evaluation itself is
6 optional, and that's where my question lies.

7 MR. ROMAINE: There's nothing that says
8 these options are mandatory. The first sentence simply
9 says during an evaluation of the effectiveness of current
10 sorbent, alternative sorbent or other technique.

11 MS. BASSI: So then is the answer to my
12 question that this language is optional or doing these
13 activities is optional because it doesn't say you -- that
14 the source must do this, the word "must" is missing, or
15 "shall"?

16 HEARING OFFICER TIPSORD: "Must."

17 MS. BASSI: Thank you. "Must."

18 HEARING OFFICER TIPSORD: "Shall" is --

19 MR. ROMAINE: I believe so, yes. I guess in
20 terms of a practical example, if a source is using a
21 particular activated carbon and it elects to evaluate a
22 different type of injection nozzle or injection system to
23 distribute the activated carbon differently into the
24 ductwork, it may reasonably decide that it needs to

1 collect -- or conduct a series of tests at different
2 injection rates to create a new curve for the performance
3 of the activated carbon using that new system of
4 injection. This provision would allow that sort of an
5 evaluation to be conducted without the unit being in
6 violation for operating at less than the otherwise
7 required carbon injection rate.

8 MS. BASSI: Okay. The bottom line I'm
9 trying to get at, though, is that such an evaluation of
10 the effectiveness of the current sorbent is not a
11 requirement of this TTBS; is that correct?

12 HEARING OFFICER TIPSORD: He's -- I think
13 he's answered that several times, that this is not a
14 mandatory section.

15 MS. BASSI: Okay. And then if one is
16 availing himself of subsection (e), then the subsequent
17 subsections of subsection (e) provide criteria, and they
18 do use "shall."

19 MR. ROMAINE: Yes, they do use "shall,"
20 because at that point you're taking advantage of this
21 additional flexibility within the general flexibility
22 provided in the temporary technology-based standard to do
23 a particular evaluation, and if you're taking advantage
24 of that flexibility on top of flexibility, there are

1 certain obligations that have been placed upon it. You
2 have to do it in accordance with the formal evaluation
3 that has been submitted to Illinois EPA in advance. You
4 obviously have to design the program to accomplish your
5 objectives. The purpose of this section or flexibility
6 on flexibility is not simply to allow unlimited loophole
7 from doing what would otherwise be required. If it
8 involves installation of new control equipment, changes
9 to control equipment for which construction permits are
10 required, in general a construction permit would be
11 required and you have to report the results to Illinois
12 EPA.

13 HEARING OFFICER TIPSORD: Mr. Bonebrake?

14 MR. BONEBRAKE: Follow-up question, then,
15 Mr. Romaine. Let's assume that a source has applied for
16 a TTBS and the TTBS is in effect either because there's
17 been affirmative grant -- affirmative acknowledgment of
18 the TTBS applicability by the Agency or there's been a
19 passage of time under the circumstances that we have
20 discussed. Once the -- a unit is in the TTBS, on a
21 going-forward basis, then, can you summarize for us the
22 requirements of the source to maintain that unit in the
23 TTBS? And this is a general question, Mr. Romaine, not
24 limited to Subpart (e), which we were previously talking

1 about.

2 MR. ROMAINE: I want to avoid asking for
3 this question to be repeated. There are two ways that
4 the question could be interpreted. The way I'm
5 interpreting this question is what actions by a source
6 would threaten an enforcement action for failure to
7 comply with the requirements to maintain a temporary
8 technology-based standard. We have not included
9 provisions in this rule that say that once a person has a
10 temporary technology-based standard it goes away if
11 certain actions fail to occur. Obviously failure to
12 carry out required actions would be grounds for an
13 enforcement. Under paragraph (c)(1) on page 4 and 5, the
14 general requirements for continued operation pursuant to
15 temporary technology-based standards, it reads, "The
16 owner/operator of an EGU that is operating pursuant to
17 this standard shall continue to maintain and operate the
18 unit to comply with criteria for eligibility for
19 operation under this section." There are, as I said,
20 also requirements imposed with regard to monitoring and
21 record-keeping.

22 HEARING OFFICER TIPSORD: This might be a
23 good time to take a break. Let's take about ten minutes.

24 (Brief recess taken.)

1 HEARING OFFICER TIPSORD: Just -- We've been
2 talking about the temporary -- the TTSB [sic].

3 MS. BASSI: BS are the operable letters.

4 MR. KIM: Think about BS.

5 HEARING OFFICER TIPSORD: Oh, I've been
6 thinking a lot about that, John. And Mr. Harrington is
7 back, so never mind. We had went from -- We had moved
8 from (d)(2) big letter (D) into (e). Mr. Harrington, did
9 you have anything further on (d)(2)(D)?

10 MR. HARRINGTON: Yes. A little confusion.
11 On (d)(2)(D), a company submits a plan, says their action
12 plan is "I'm going to think about it," and that's all
13 they say, does that get approved?

14 MR. ROMAINE: I hope not, but I'm not sure
15 how they wouldn't approve it.

16 MR. HARRINGTON: Well --

17 MR. ROMAINE: Let me think about it and
18 I'll -- I don't think it meets the letter of the rule. I
19 think the rule requires a little bit more -- something
20 more concrete in the way of thinking.

21 MR. HARRINGTON: Well, you know, if they
22 come back, obviously, and say, "I will consult with
23 vendors to see if there's a better halogenated activated
24 carbon," and that's it, they don't say any more, they

1 don't talk about injection systems, change in the
2 operation, changes to particulate matter control device,
3 they just talk about one thing, they pick one thing,
4 "I'll talk to vendors and consider if there's better ones
5 out there."

6 MR. ROMAINE: I don't see anything that
7 requires a source to consider multiple types of actions
8 in its action plan.

9 HEARING OFFICER TIPSORD: Mr. Bonebrake?

10 MR. BONEBRAKE: A follow-up on that. Taking
11 up Mr. Harrington's scenario that he described, let's say
12 the source talks to vendors and finds a source of a
13 better activated carbon compound to use. Is the source
14 then required somewhere under the TTBS proposed rule to
15 implement that new and improved activated carbon?

16 MR. ROMAINE: Again, this is a requirement
17 for a plan. There may be other things that that source
18 is evaluating besides other activated -- types of
19 activated carbon it believes are more effective than a
20 particular thing in terms of change for activated carbon.
21 The questions that I'm hearing suggest that we need to be
22 more specific on the contents of this plan.

23 MR. BONEBRAKE: Well, I think we're trying
24 to get an understanding of what the requirements are on a

1 going-forward basis, Mr. Romaine, and that's the nature
2 of my questions.

3 MR. ROMAINE: The requirement is we want an
4 action plan that reflects a serious consideration of
5 further actions that could be taken for a particular unit
6 to improve control of mercury with the objective of
7 complying with numerical standards as soon as possible
8 and certainly by the deadlines. Beyond that, this
9 provision allows a great deal of flexibility in the
10 nature of the plan and subsequent actions that a source
11 has to implement.

12 HEARING OFFICER TIPSORD: And before I go to
13 you, Ms. Bassi, if I may, Mr. Romaine, you've said before
14 that this would not result in rejection of a permit
15 application, or a permit, but for example, with
16 Mr. Harrington's first example where he said, "We're
17 thinking about it," you said that doesn't meet the letter
18 of the rule. Since this is a requirement for the
19 application, would that result in you saying the
20 application's incomplete, perhaps?

21 MR. ROMAINE: Yes.

22 HEARING OFFICER TIPSORD: Thank you.
23 Ms. Bassi?

24 MS. BASSI: I believe you said earlier in

1 response to my question that the action plan itself would
2 not be reflected in the permit; is that correct?

3 MR. ROMAINE: Yes.

4 MS. BASSI: So if I may sum, just to be sure
5 that I'm understanding what you're saying correctly, what
6 you're saying is is that you want to see some plan that
7 shows some serious attempt to -- or a plan for evaluation
8 or -- of alternatives or ways to come into compliance but
9 that the -- but these ways for coming into compliance
10 although they are reflected in the plan have no
11 further -- what's the word -- no -- they have no further
12 I want to say checking up on by the Agency. In other
13 words, there's not a requirement that one carry out the
14 plan; is that correct?

15 MR. ROMAINE: That is correct. There
16 certainly is a requirement, though, that the source
17 report on its activities on an annual basis.

18 MS. BASSI: And so it reports and says, "We
19 didn't find anything this year," or, "We didn't do
20 anything this year." Is that -- Does that create an
21 enforceable situation?

22 MR. ROMAINE: I don't believe so, no.

23 MS. BASSI: Okay. Thank you.

24 HEARING OFFICER TIPSORD: Dr. Girard?

1 CHAIRMAN GIRARD: Well, I'd just like to
2 clarify, Mr. Romaine. In looking at (d)(2)(D), you seem
3 to respond that the contents are sort of open-ended, and
4 yet what I read there is a checklist of elements that
5 should be in the plan and a checklist of elements for
6 sort of looking at measures within the plan itself. Is
7 that the way you read it?

8 MR. ROMAINE: Yes, but I don't read it to
9 say that there has to be a certain number of different
10 types of measures that have been evaluated. Again, this
11 is a general requirement. We don't know whether we're
12 dealing with a unit that requires the -- or pursues the
13 temporary technology-based standard because it's at 88
14 percent control at the present time and needs minor
15 changes that should be relatively easy to achieve in the
16 upcoming years or this is a facility that is doing
17 substantially below the numerical emission standards that
18 will require conceivably much greater effort to comply
19 with the numerical standards.

20 CHAIRMAN GIRARD: But you do expect to see
21 at least one alternative in the plan; is that correct?

22 MR. ROMAINE: Yes.

23 CHAIRMAN GIRARD: And if that one
24 alternative is in the plan, these are elements which

1 would form a checklist for an action plan that you would
2 then evaluate.

3 MR. ROMAINE: They would form a checklist
4 for the application contents, but in terms of a criteria
5 for evaluation, we have not included a criteria for
6 evaluation. We have not included something that says the
7 action plan must achieve certain amounts of further
8 reductions by a certain date or they must involve a
9 certain level of effort on the part of the source.

10 CHAIRMAN GIRARD: Thank you.

11 HEARING OFFICER TIPSORD: Mr. Forcade?

12 MR. FORCADE: Mr. Romaine, would it be safe
13 to say that in Illinois, citizens can file enforcement
14 actions against facilities for failing to comply with
15 board air regulations?

16 MR. ROMAINE: I think that's a rhetorical
17 question. Yes.

18 MR. FORCADE: Well, I was laying a
19 foundation for the next question, was if (D) would be a
20 requirement imposed on facilities, could citizens file an
21 enforcement action against a facility to submit an action
22 plan if they felt it did not meet the requirements
23 contained in (D)?

24 MR. ROMAINE: Historically, questions on

1 completeness of applications are matters that have been
2 addressed by the Agency during the permitting process.
3 It isn't a matter in which the public has gotten
4 involved.

5 MR. FORCADE: I don't think that answered my
6 question.

7 MR. ROMAINE: Then you're asking for a legal
8 opinion that's beyond me.

9 MR. FORCADE: Have you seen an enforcement
10 action filed by a citizens' group against a facility for
11 allegations of failing to comply with board regulations?

12 MR. ROMAINE: That wasn't the question. The
13 question was an allegation of failure to submit a
14 complete application.

15 HEARING OFFICER TIPSORD: Mr. Harrington?

16 MR. HARRINGTON: Perhaps the citizens could
17 not sue, but if this is going to be incorporated in a
18 Title V permit where a FESOP goes to public notice, then
19 the citizens have a -- and the rules are part of the
20 federally enforceable state implementation plan, then
21 could not a citizen appeal any permit that was issued if
22 they deemed the action plan to be inadequate?

23 MR. ROMAINE: The public is free to appeal
24 whatever they want to appeal, it seems, in the Title V

1 process.

2 CHAIRMAN GIRARD: Good answer.

3 HEARING OFFICER TIPSORD: Okay. Now you've
4 really got me confused, Mr. Harrington. Mr. Romaine, the
5 action plan is not going to be a part of the permit,
6 correct?

7 MR. ROMAINE: That is correct.

8 HEARING OFFICER TIPSORD: This would only be
9 an application content requirement.

10 MR. ROMAINE: That is correct.

11 HEARING OFFICER TIPSORD: So what the
12 citizens would be appealing would be the contents of the
13 application that was inadequate to support the permit.

14 MR. ROMAINE: That is correct.

15 HEARING OFFICER TIPSORD: Okay. Thank you.
16 Just wanted to clarify that. Mr. Bonebrake?

17 MR. BONEBRAKE: Mr. Romaine, let's say an
18 action plan is submitted, the action plan says that the
19 source will evaluate other technologies, evaluation is
20 conducted, source identifies three technologies that
21 would further reduce emissions. Any requirement under
22 the TTBS regulations as proposed to implement any of
23 those three alternatives?

24 MR. ROMAINE: No.

1 HEARING OFFICER TIPSORD: Mr. Zabel?

2 MR. ZABEL: Related to that, assuming a
3 source had gotten permission to operate under the TTBS,
4 one of the -- and I'll make it focused -- one of the
5 three approved sorbent vendors that he is not -- that
6 that source is not currently using offers him a cheaper
7 price, what does he have to do to switch?

8 MR. ROMAINE: Proposing a situation where
9 he's just using a sorbent that happens to be cheaper but
10 otherwise qualifies for eligibility under the temporary
11 technology-based standard?

12 MR. ZABEL: Does he have to reapply?

13 MR. ROMAINE: No.

14 MR. ZABEL: He'd applied, let's say, for
15 ALSTOM and he now wants to use NORIT. The application
16 that your agency reviewed was for ALSTOM. He could
17 switch to NORIT without reapplying.

18 MR. ROMAINE: If the activated carbon still
19 qualifies and that's -- the advantage is with the NORIT
20 halogenated, he would still be eligible.

21 MR. ZABEL: And he wouldn't have to
22 undertake an alternative control technique analysis
23 evaluation under (e) to do that, would he?

24 MR. ROMAINE: No. In terms of the drafting

1 of the proposal, I think we actually thought about an
2 alternative scenario where a current supplier would take
3 the material pieces to provide that material in a
4 particular marketplace and a source would be forced to
5 switch to an alternative material. Again, we would not
6 want to establish additional requirements providing they
7 contain a suitable substitute of activated carbon.

8 MR. ZABEL: Let me change the hypothetical
9 slightly, then. It's not one of the named -- three named
10 sources but it's another one. Would he then have to
11 reapply to make the showing that it is equivalent or as
12 good or better? I'm looking at the 225.234(b)(2).

13 MR. ROMAINE: We have not included a
14 requirement that the source must be -- reapply for the
15 temporary technology-based standard. That said, this is
16 a circumstance we would certainly expect the source to
17 come forward to demonstrate informally with appropriate
18 notification with supporting documentation that the
19 alternative activated carbon still qualifies for the
20 eligibility of the temporary technology-based standard.

21 MR. ZABEL: And if he didn't do that?

22 MR. ROMAINE: We'd probably send a letter
23 requesting that he do that.

24 HEARING OFFICER TIPSORD: And if I also may

1 in a follow-up to Mr. Zabel, didn't you indicate I
2 believe to a question from Mr. Bonebrake earlier that
3 there's really nothing in here that sort of says if you
4 go out of compliance you lose your TTSB [sic]? If you go
5 out of compliance, you're subject to an enforcement
6 action, but there's nothing that says this is
7 automatically suspended if you stop using --

8 MR. ROMAINE: That is correct.

9 HEARING OFFICER TIPSORD: Okay. Thank you.
10 Are we ready to move on to (e), then? Or wherever you
11 would like to go, Mr. Harrington. We will follow you.

12 MR. HARRINGTON: I was -- I can't resist.
13 One more question. If the -- If someone does not follow
14 the plan that they submit under (D), is that grounds for
15 the Agency seeking to revoke the TTSB [sic]?

16 MR. ROMAINE: No.

17 MR. HARRINGTON: Thank you. Am I correct
18 that --

19 MR. ROMAINE: Let me comment on one other
20 thing. I think the other piece of this is obviously when
21 it comes to the compliance dates we will have ample
22 opportunity to take appropriate action considering the
23 actions that the source took while it was operating under
24 the temporary technology-based standard.

1 MS. BASSI: What does that mean?

2 MR. ROMAINE: That means we expect people to
3 take good faith efforts while they have the benefit of
4 the alternative technology-based standard. If it turns
5 out on the compliance date then that technology standard
6 goes away, the source is out of compliance and it hasn't
7 carried out any actions to improve its performance, that
8 would presumably be reflected in the enforcement action
9 for noncompliance.

10 MS. BASSI: So you've added -- So it appears
11 to me, Mr. Romaine, you've added another element to this,
12 which is that these action plans go to the gravity
13 element of an enforcement case; is that correct?

14 MR. ROMAINE: I don't think so. I think
15 that's always a relevant consideration in an enforcement
16 case, what actions have occurred before the violation
17 that were under the control of the source that could have
18 potentially avoided noncompliance. I seem to have been
19 responding to a lot of questions that suggested that this
20 action plan was a fairly loose requirement, and I just
21 want to remind people that even though the action plan
22 requirement may be fairly loose, it is leading toward
23 much more concrete obligations when the temporary
24 technology-based standard goes away. For a source that

1 comes into compliance with the numerical emission
2 standards on or before the required date, that should not
3 be a concern. For the hypothetical examples that have
4 been given for a source that comes up with a marginal
5 plan or fails to do anything, the Agency will remember
6 that and I hope that the Board will remember that as we
7 approach them on penalties.

8 HEARING OFFICER TIPSORD: Are we ready to
9 move on, then?

10 MR. HARRINGTON: I think so. Just on (e),
11 there was a lot of discussion, but I'd like to see if I
12 can sum it up. Basically, (e) is not a requirement. (e)
13 is an option to allow you to operate outside the TTSB
14 [sic] normal standards to experiment --

15 BOARD MEMBER MOORE: Excuse me. Could I
16 just ask, is it TTSB or TTBS?

17 MS. BASSI: Ma'am, it's BS.

18 MR. ZABEL: BS and SB are quite confusing in
19 this record and -- for various reasons.

20 BOARD MEMBER MOORE: There are a lot of
21 lawyers here.

22 HEARING OFFICER TIPSORD: It's late in the
23 day. I'm not sure I can tell the difference.

24 MR. HARRINGTON: Dyslexia is always good,

1 right?

2 MR. ZABEL: I believe, Ms. Moore, it is --

3 MS. BASSI: It's BS.

4 MR. ZABEL: -- temporary technology-based,
5 so it's BS.

6 HEARING OFFICER TIPSORD: It is BS.

7 MR. HARRINGTON: I will back up.

8 BOARD MEMBER MOORE: Won't be the last time
9 you hear that.

10 MR. AYRES: Should we have a motion to
11 strike all that?

12 MR. ZABEL: Probably should.

13 HEARING OFFICER TIPSORD: Oh, but think
14 about the people who are reading the transcript.

15 MR. HARRINGTON: Basically, (e) is an
16 optional temporary provision that allows one to
17 experiment with other technologies outside the realm of
18 that which is initially approved as part of the TTBS.

19 MR. ROMAINE: That is correct.

20 MR. HARRINGTON: It's not mandatory. Thank
21 you. I don't have any questions on the temporary
22 technology-based standard for new sources.

23 HEARING OFFICER TIPSORD: Mr. Zabel has a
24 follow-up.

1 MR. ZABEL: Very minor. I think there's a
2 typo in (e)(1)(B). It probably should be "owner and
3 operator," not "owner and owner"?

4 MR. ROMAINE: I think you're correct. I'm
5 sure you're correct.

6 HEARING OFFICER TIPSORD: I'm sorry.
7 (e)(1)(B)?

8 MR. ZABEL: (e)(1)(B) -- big B, I guess is
9 the phrase you're using -- it says "owner or owner." I
10 suspect he means "owner or operator."

11 HEARING OFFICER TIPSORD: Okay.

12 MR. ZABEL: It's one thing I can get right.

13 HEARING OFFICER TIPSORD: Mr. Bonebrake?

14 MR. BONEBRAKE: And one question,
15 Mr. Romaine. It's on (e)(2), and the first sentence in
16 (e)(2), last phrase reads, "The owner or operator of the
17 EGU shall resume use of the prior control technique"? Do
18 you see that?

19 MR. ROMAINE: Yes.

20 MR. BONEBRAKE: What is the reference to
21 prior control -- let me rephrase that. What is referred
22 to by the reference "prior control technique" in that
23 sentence?

24 MR. ROMAINE: That would be measures that

1 were being used before the evaluation.

2 MR. BONEBRAKE: So for instance, it would
3 be -- could it -- could that be the measures that were in
4 place at the time of the TTBS application?

5 MR. ROMAINE: They could be, yes.

6 MR. BONEBRAKE: And they would be except in
7 those circumstances where a source has tried some other
8 intervening technique before it tried the most recent one
9 at issue; is that correct?

10 MR. ROMAINE: That is correct. The -- What
11 was being attempted in the particular section of (e)(2)
12 is to address what the consequences would be of an
13 evaluation, and given that the goal of these evaluations
14 are to improve control measures for mercury, if an
15 evaluation shows good results, we think it's appropriate
16 for a source to keep operating with that new control
17 technique. If it shows bad results, then it was a
18 failure and you have to go back to where you were before.
19 If it was neutral, then the source has its discretion as
20 to whether it keeps going with the new measures or goes
21 back to where it was.

22 HEARING OFFICER TIPSORD: Mr. Zabel?

23 MR. ZABEL: Isn't it possible, Mr. Romaine,
24 that in some evaluations that might be undertaken it

1 might not be possible to go back to the prior control
2 technique?

3 MR. ROMAINE: That is a good point,
4 Mr. Zabel.

5 MR. ZABEL: I was thinking if you made a
6 modification to your ESP and it turned out not to work,
7 you might not be able to go back. I'm not sure what you
8 do under that circumstance. That's a question.

9 MR. ROMAINE: That wasn't the circumstances
10 that I was considering. I would assume any changes to
11 ESPs would be clearly beneficial.

12 MR. ZABEL: I agree with that assumption. I
13 was trying to think of something that would be hard to
14 retreat from, and in the case of whatever hypothesis you
15 wish, if it would be impossible to retreat from it but it
16 was not beneficial but negative in some fashion, what
17 would the source have to do?

18 MR. ROMAINE: I don't have an answer. We'll
19 have to consider that one.

20 HEARING OFFICER TIPSORD: And then I believe
21 you had a couple questions on the new technology.

22 MS. TICKNER: Yeah. Dianna Tickner, Prairie
23 State Generating. Mr. Romaine, my first question is,
24 Subsection 225.238(b)(1), is this reference to BACT for

1 eligibility only or is it intended to reopen the BACT
2 determination made in the context of PSD permitting for a
3 new EGU?

4 MR. ROMAINE: This provision is for
5 eligibility only. It is certainly not intended to reopen
6 the BACT determination.

7 MS. TICKNER: Subsection 225.238(d), for a
8 new facility whose construction permit already includes a
9 provision regarding mercury control and the use of
10 sorbent, is a new or revised operating permit required?

11 MR. ROMAINE: As drafted, yes.

12 MS. TICKNER: Okay. Could the source
13 indicate in its Title V application that it is applying
14 to operate under the technology-based standard in
15 accordance with its PSD permit?

16 MR. ROMAINE: Nothing in this rule would
17 prohibit that. I was trying to think about the timing of
18 the series of events here. I think it's more likely that
19 that request would come in as a request to revise or
20 supplement a filed Title V.

21 MS. TICKNER: With this new permit, is the
22 public review process going to be triggered again then?

23 MR. ROMAINE: I don't believe that the -- a
24 new public review process would be triggered. We would

1 consolidate it with the Title V permit application so it
2 would be a single public review process.

3 MS. TICKNER: How about with respect to
4 Subsection 225.238(e)(1)(C)? Essentially the same
5 question.

6 MR. ROMAINE: As a general matter,
7 construction permits for new control devices do not
8 trigger requirements for public comment periods. It is
9 conceivable that in a controversial application you could
10 have requests for such opportunity for public comment.

11 MS. TICKNER: You touched on timing a little
12 bit, but under Subsection 225.237, there is the
13 appearance that you would have to -- or could potentially
14 have to submit a Title V permit application sooner than
15 normal with the technology-based standard. Is that your
16 understanding?

17 MR. ROMAINE: What section were you
18 referring to?

19 MS. TICKNER: 225.237.

20 HEARING OFFICER TIPSORD: That's the
21 original language.

22 MR. ROMAINE: I don't believe so.
23 225.237(b) states that the initial 12-month rolling
24 period for which compliance with the emission standards

1 of subsection (a)(1) of this section must be demonstrated
2 for a new EGU shall commence on the date that the initial
3 performance test for the mercury emission standard under
4 40 CFR 60.45(a) also commences, so the time period that
5 is specified for the standard for new sources or new
6 units is the date that the 12-month period commences.
7 The compliance determination would first be required 12
8 months later after 12 months of data have been compiled.

9 MS. TICKNER: That's all I have.

10 HEARING OFFICER TIPSORD: I have one quick
11 question, back to the beginning of the TTBS, Section
12 234(a)(1). There is a -- that "At a source with EGUs
13 that commenced commercial operation on or before December
14 31, 2008," etc., etc. What is the significance of the
15 December 31 date versus the effective date of the rule?
16 Or what is the significance of the December 31 date,
17 period?

18 MR. ROMAINE: I think this was an arbitrary
19 choice in drafting to be consistent with the federal
20 regulations. I don't think it affects anything because
21 we do not expect to have any new EGUs commence commercial
22 operation that are not currently operating in the period
23 between today and December 31, 2008. Dianna, do you have
24 any -- Ms. Tickner, do you have any comments on that?

1 MS. TICKNER: That was sort of the question
2 I had. I think the way 225.238(a)(1) is written, you
3 could read that to -- or at least it was my perception
4 that you could read that to say that it doesn't apply to
5 some sources commencing commercial operation after
6 January 1, 2009. I think that's what you're --

7 HEARING OFFICER TIPSORD: Yeah, that's --
8 Yes, that was also kind of my question. You might want
9 to take a look at that.

10 MS. TICKNER: There's a double negative in
11 that section.

12 MR. ROMAINE: Thank you for your
13 observations.

14 HEARING OFFICER TIPSORD: Okay. Then I
15 think we're back to -- there was still some questions
16 from Dynegy that had been postponed for Mr. Romaine.

17 MR. BONEBRAKE: On the underlying rule.

18 HEARING OFFICER TIPSORD: Yes.

19 MR. MATOESIAN: We had questions 3, 4, 18
20 and 19 from the general questions.

21 HEARING OFFICER TIPSORD: That's right.
22 That's the one I have as well. So if we could go to
23 Dynegy's question number 3. The -- It's 61. It's page
24 61 out of 66. Would it help, Mr. Romaine, if I read it

1 out to you?

2 MR. ROMAINE: Okay. It would help. Thank
3 you.

4 HEARING OFFICER TIPSORD: Question number 3,
5 "With the closing of the Northwest and Robbins
6 incinerators, what was the effect on the mercury
7 deposition in Illinois?"

8 MR. ROMAINE: Simply by intuition, I would
9 expect the deposition in Illinois would have decreased
10 because there was a reduction in the mercury emissions.
11 I don't have any quantitative data on the extent of
12 change in mercury deposition. I don't have access to
13 that mercury emission data for those facilities either.

14 HEARING OFFICER TIPSORD: Okay. Sub "a" is,
15 "How did the Agency make its determination regarding the
16 effect on mercury deposition?" And you said intuition?

17 MR. ROMAINE: Yes.

18 MS. BASSI: I'm sorry.

19 HEARING OFFICER TIPSORD: Ms. Bassi?

20 MS. BASSI: What was the last part of your
21 first answer about --

22 MR. ROMAINE: The fact -- I simply commented
23 that I did not have specific emission data at hand for
24 those facilities.

1 MS. BASSI: Okay.

2 HEARING OFFICER TIPSORD: Question number 4,
3 "What is the operating status of the medical waste
4 incinerator in or slightly east of Clinton, Illinois?"

5 MR. ROMAINE: The facility is operating.

6 HEARING OFFICER TIPSORD: "Is the Agency
7 monitoring ambient mercury in the vicinity of that
8 incinerator?"

9 MR. ROMAINE: No, it is not.

10 HEARING OFFICER TIPSORD: Then "b" is what
11 are the results, and that's --

12 MS. BASSI: May I ask why not if there is a
13 concern about mercury deposition?

14 MR. ROMAINE: I don't know the answer to
15 that question. We do conduct ambient monitoring for
16 mercury in the Chicago area, but we have not conducted it
17 in the vicinity of this facility. One possibility is
18 that based on experience with the mercury monitoring that
19 has been conducted, we would not expect ambient
20 monitoring for air concentrations of mercury to show
21 significant results any different or in a manner that
22 would be more effective than actual sampling of fish for
23 mercury content.

24 HEARING OFFICER TIPSORD: Ms. --

1 MS. BASSI: Mr. Romaine, would you agree
2 that the major water body closest to the medical
3 incinerator at Clinton is Clinton Lake, or whatever it's
4 called?

5 MR. ROMAINE: Yes.

6 MS. BASSI: Lake Clinton?

7 MR. ROMAINE: Yes.

8 MS. BASSI: Is -- Do you know if mercury is
9 monitored in fish in that lake?

10 MR. ROMAINE: No, I do not.

11 MS. BASSI: Can you describe for us the
12 differences in dispersion techniques or the dispersion
13 patterns of emissions from incinerators as compared to
14 power plants, please?

15 MR. ROMAINE: That isn't particularly in my
16 area of expertise, but generally power plants have much
17 taller stacks than incinerators.

18 MS. BASSI: Whose expertise would this be,
19 Mr. Ross? Would this be Mr. Sprague's?

20 MR. ROMAINE: I think it depends on what
21 answer you're looking for.

22 MS. BASSI: Well, I'm looking for an answer
23 that describes the differences in dispersion of emissions
24 from incinerators as compared to power plants, and

1 incinerators, specifically medical incinerators.

2 MR. ROMAINE: Well, I don't think --

3 MR. MATOESIAN: I think we've gone over this
4 with Dr. Keeler.

5 HEARING OFFICER TIPSORD: I think Dr. Keeler
6 covered this pretty extensively. We talked about the
7 dispersion, and I -- let me just ask a clarifying
8 question, if I may. Dr. Keeler is the Agency's expert --

9 MR. ROSS: That's correct.

10 HEARING OFFICER TIPSORD: -- you're relying
11 on for dispersion?

12 MR. ROSS: He did discuss it in his
13 testimony, the difference between emissions from
14 incinerators and emissions from power plants, and I
15 recall that specifically because we went into the results
16 of the Massachusetts and Florida studies, that they were
17 in fact emissions from incinerators that would be --

18 MS. BASSI: Okay. Are emissions of mercury
19 monitored from -- now, emissions, not ambient -- mercury
20 monitored at the Clinton incinerator?

21 MR. ROMAINE: No.

22 MS. BASSI: May I ask why not? I keep
23 saying "may I ask." I'm asking, why not?

24 MR. ROMAINE: Emissions are not monitored

1 because it's not required by the applicable regulations
2 for hazardous -- hospital medical infectious waste
3 incinerators. Those regulations developed by USEPA in
4 the late 1990s did not include that requirement. They do
5 include requirements for operational monitoring related
6 to proper operation of control devices.

7 MS. BASSI: Are there control devices
8 included at the Clinton incinerator that would control
9 emissions of mercury?

10 HEARING OFFICER TIPSORD: Excuse me,
11 Ms. Bassi. Before -- And I apologize for interrupting.
12 We'll go back to your question. But I would just point
13 out that several of your questions are regarding the
14 quality and sampling of Clinton Lake, etc., etc.
15 Ms. Willhite did answer that question for you previously
16 and addressed specifically those issues of ambient water
17 quality, talked about the mercury -- the methylation,
18 content of the fish, etc., so we have answered those
19 questions and they've been answered by the Agency.

20 MS. BASSI: But not whether or not we're --
21 whether they're monitoring mercury.

22 HEARING OFFICER TIPSORD: I know. That's
23 why I said we'll get back to your question, but I wanted
24 to clarify that, that just if Mr. Romaine didn't answer

1 it, your -- that question was asked before and answered.

2 MS. BASSI: Right.

3 HEARING OFFICER TIPSORD: And now,
4 Mr. Romaine, if you would answer the question about
5 monitoring.

6 MS. BASSI: Actually, I think I'm at the
7 point -- they don't monitor for mercury, but is there
8 something in the control configuration at the medical
9 waste incinerator in Clinton that would control mercury
10 emissions?

11 MR. ROMAINE: They have -- The incinerator
12 is equipped with scrubbers. I would expect those
13 scrubbers to have some effect on mercury emissions.

14 MS. BASSI: Do you know if they're injecting
15 any kind of activated carbon or carbon at all?

16 MR. ROMAINE: I do not know.

17 MS. BASSI: Okay. Thank you.

18 HEARING OFFICER TIPSORD: Question number 18
19 was also reserved for Mr. Romaine. Question number 18
20 is, "Please provide examples of the calculations for
21 Section 225.230(d)."

22 MR. MATOESIAN: We have an exhibit we'll
23 submit on that issue.

24 HEARING OFFICER TIPSORD: Oh, goody, math at

1 5:30.

2 MS. BASSI: That's why I asked the question.
3 Not because it would be 5:30, but because it was math.

4 HEARING OFFICER TIPSORD: I've been handed
5 sample emission calculations for the proposed mercury
6 rule, and we will mark this as Exhibit 42 if there's no
7 objection. And I'll wait till he hands it out before
8 I --

9 MR. RIESER: Ask for objections. I was
10 wondering about that.

11 HEARING OFFICER TIPSORD: Like I said
12 earlier, we're loosey-goosey, but not that loosey-goosey.
13 We will mark this as Exhibit 42 if there's no objection.
14 Seeing none, it is Exhibit 42.

15 MR. ROMAINE: I provided an exhibit that
16 includes some sample calculations describing how a group
17 of units would comply by means of an averaging
18 demonstration. Example one provides the basic
19 calculations. It shows data for three separate units, A,
20 B and C. It addresses the actual allowable emissions of
21 mercury from each of those units for twelve months. It
22 then sums the data for each of the twelve months for each
23 of the units below. It then sums the data for the total
24 of three units to come up with a total allowable

1 emissions and total actual emissions. In the example,
2 the units would be in compliance because the total of the
3 actual emissions are below the total of the allowable
4 emissions.

5 The second page continues on with a very similar
6 demonstration but simply shows what happens when you roll
7 over twelve months. When you roll over twelve months,
8 you lose a month, which has been crossed out. You add a
9 new month, which is month thirteen. You have a new total
10 for twelve months, which then gives you a new summation
11 of allowable and actual emissions for another compliance
12 period.

13 HEARING OFFICER TIPSORD: Ms. Bassi?

14 MS. BASSI: Mr. Romaine, my problem with
15 this calculation and the reason why we included this
16 question is because I don't understand where the
17 allowable emissions come from, and I believe I asked this
18 also in the stakeholder meetings, but I still don't
19 understand it, and so could you explain where the
20 allowable emissions come from, please?

21 MR. ROMAINE: So I didn't need to do this?

22 MS. BASSI: Oh, no. This is beautiful. We
23 thank you very much. But how'd you get that 1.5 in month
24 one for unit A?

1 MR. ROMAINE: The calculation of the
2 so-called allowable emissions on a monthly basis is
3 included in proposed Section 225.230(b)(2).

4 MS. BASSI: You say D as in dog?

5 MR. ROMAINE: B as in boy, 2. When you look
6 under the description of the summation, there are an
7 explanation of how "A" sub "I" is calculated. "A" is the
8 allowable mercury emissions. "I" is the allowable
9 emissions for a particular month, and --

10 BOARD MEMBER MOORE: Could you wait a
11 minute, please? Okay. Thank you.

12 MR. ROMAINE: And it generally describes "A"
13 sub "I" as being the allowable mercury emissions of the
14 EGU in an individual month and the 12-month rolling
15 period. It then describes how one would calculate
16 allowable emissions if one would comply with the input
17 standards and below that how we calculate allowable
18 emissions if you were allowing -- calculating by the
19 output-based standard. In this context input is
20 synonymous with the term control efficiency. If one is
21 calculating allowable emissions based on control
22 efficiency, one multiplies the input mercury to the
23 unit -- input to the EGU as 10 percent of the -- I'm
24 sorry. You calculate the allowable emissions as 10

1 percent of the input of mercury to the unit.

2 MS. BASSI: Then looking at Exhibit 42, in
3 month one, unit A, allowable emissions, you have 1.5
4 allowable pounds, 1.5. Does that mean, then, that the
5 1.5 equals 10 percent of the total average amount of coal
6 sampled in that month? In other words, there was, what,
7 15 pounds of mercury in the coal?

8 MR. ROMAINE: Yes, or alternatively it could
9 mean that a calculation of the electrical output of the
10 unit in gigawatts times 0.0080 pounds per gigawatt hour
11 yielded 1.5 pounds.

12 MS. BASSI: And then does this mean that
13 the -- as this changes on a monthly basis, the allowable
14 line changes on a monthly basis as we go across, does --
15 is that in this sample reflecting variability in the coal
16 that was sampled? I mean, in month two it's 2.0. That
17 has nothing to do with averaging, does it?

18 MR. ROMAINE: No.

19 MS. BASSI: It has to do with --

20 MR. ROMAINE: The 2.0 is different simply
21 because the level of operation of the unit in month two
22 may have been different. The amount of coal burned would
23 therefore be different. The mercury content of the coal
24 could have been different. The output of the unit might

1 have been different. I would not expect units to have
2 the same level of operation month to month given
3 variations of demand for power and outage schedules.

4 MS. BASSI: I believe I actually understand
5 it, at least on the input. Thank you.

6 HEARING OFFICER TIPSORD: Mr. Zabel, did you
7 have a follow-up?

8 MR. ZABEL: Yeah. On Exhibit 42, it appears
9 to me that the way this is structured -- and I just
10 looked at it quickly -- that unit A is sort of riding on
11 units B and C to overcomply. Is that the way it is?

12 MR. ROMAINE: That's the way I prepared the
13 example, yes.

14 MR. ZABEL: And I haven't done the math,
15 Mr. Romaine, but it occurs to me that these units all had
16 the advantage of operating all 12 months. There isn't an
17 outage planned or forced on one of them, but units do
18 have planned outages, don't they?

19 MR. ROMAINE: I would suggest that those
20 outages are partial outages that did not last an entire
21 month and are buried in the emissions data.

22 MR. ZABEL: But some units do go out for
23 maintenance and repair that exceeds a month.

24 MR. ROMAINE: Certainly if you want to come

1 up with an example that crossed out a particular month,
2 you could do that.

3 MR. ZABEL: Well, what I'm getting at, I'm
4 worried about -- I hate to use these phrases. The good
5 units are out and the bad unit isn't, isn't there a risk
6 to the rolling average compliance?

7 MR. ROMAINE: Not in the way I calculated
8 the example.

9 MR. ZABEL: I don't think that was my
10 question, Mr. Romaine.

11 MS. BASSI: Do you get to average zero?

12 MR. ROMAINE: My expectation is that in fact
13 the low utilization of smaller units would have greater
14 outages than the larger units that are more likely to be
15 overcomplied and that this phenomenon actually works
16 toward improving the compliance margin of the facility.

17 MR. ZABEL: Carrying that out, logically,
18 even if that isn't true, the -- if you took unit C, for
19 example, and it was out for a three-month turbine
20 overhaul for whatever reason, in months five, six and
21 seven, the total emissions from this plant would go down
22 significantly because there'd be no emissions from unit
23 C, would there?

24 MR. ROMAINE: That is correct.

1 MR. ZABEL: But it might blow its 12-month
2 rolling average because of the margin built into unit C.

3 MR. ROMAINE: That could conceivably happen,
4 yes.

5 MR. ZABEL: That wouldn't happen under a cap
6 and trade program, would it? They could always buy the
7 allowances.

8 MR. ROMAINE: That is correct.

9 MR. ZABEL: Thank you.

10 HEARING OFFICER TIPSORD: Ready to move on
11 to question number 19? "At pages 5 through 6 of
12 Mr. Romaine's testimony, he states that Section
13 225.230(b) provides that the compliance method can be
14 changed at a source on a month-to-month basis if the
15 company chooses to do so. In order to do this, the
16 source would have to maintain records of both types of
17 compliance so it could provide the 12-month rolling data
18 necessary to demonstrate compliance. Theoretically, a
19 source could be out of compliance relying on one method
20 during a month but in compliance if it relied on the
21 other method. Would the data demonstrating noncompliance
22 under a method that is not used for purposes of
23 compliance for a particular month be credible evidence of
24 noncompliance?"

1 MR. ROMAINE: First, as explained in the
2 example, it would not be necessary to keep data for both
3 methods for every single month. For each month, a source
4 need only select the method that it thinks is most
5 advantageous for it and provide the determination of
6 allowable emissions on that basis.

7 HEARING OFFICER TIPSORD: Ms. Bassi?

8 MR. ROMAINE: If I could --

9 MS. BASSI: Okay.

10 MR. ROMAINE: The I guess conclusion of that
11 is the source elects the numerical standard with which
12 it's complying. If it's in compliance, it's in
13 compliance. If it's out of compliance, it's out of
14 compliance.

15 HEARING OFFICER TIPSORD: Go ahead,
16 Ms. Bassi.

17 MS. BASSI: Okay. Thank you. In order to
18 demonstrate compliance, though, the source has to --
19 let's say with the 90 percent, the control efficiency
20 method, the source has to have 12 months' worth of data
21 to show the 12 rolling -- the 12-month rolling
22 compliance; is that correct?

23 MR. ROMAINE: Yes.

24 MS. BASSI: Okay. Next month, in month two

1 it switches to the output-based limitation, and in order
2 to demonstrate compliance with the output-based
3 limitation, again, does it not have to have -- to show 12
4 months' worth of data?

5 MR. ROMAINE: Yes.

6 MS. BASSI: Okay. In month three it
7 switches back to the control efficiency, and I have no
8 idea if somebody would actually do this, but this is an
9 option that's provided by the rule. My question goes to
10 the fact that in order in month two for the source to
11 demonstrate compliance with the output-based limitation,
12 it would have to have 12 months' worth of data, and if in
13 that month two it -- because it was going to switch over
14 to the control efficiency in month three, for which it
15 would still have to have 12 months' worth of control
16 efficiency type of data or it made that determination at
17 the date that it had to show compliance, it still is
18 going to have 12 months of data for both types of
19 limitations.

20 MR. ROMAINE: And my response indicated,
21 though, it doesn't need 12 months of data for both types
22 of -- to comply with both numerical standards. It simply
23 has to have 12 months of data -- in each of those months
24 it has to have data for one approach to numerical

1 standard or the other.

2 MS. BASSI: Would you explain that more,
3 please?

4 MR. ROMAINE: The example we're most
5 concerned with, again, tying back to switching coal, a
6 unit is going along on sub-bituminous coal, presuming
7 it's using the control efficiency standard as twelve
8 months of data based on control efficiency. It then
9 switches to bituminous coal and it has a month when it
10 decides to rely on the output-based standard. It then --
11 for that new rolling twelve-month period it would have
12 eleven months based on control efficiency and one month
13 based on the output-based standard.

14 MS. BASSI: Oh.

15 MR. ROMAINE: The next month it would drop
16 one of the control efficiency based months and it would
17 add a new output-based month at the end.

18 MS. BASSI: Would you provide some
19 demonstration or explanation as to how you can mix a
20 compliance demonstration based on the two different
21 standards?

22 MR. ROMAINE: I have.

23 MS. BASSI: Okay. Please explain.

24 MR. ROMAINE: Because the compliance date

1 demonstration is based on discrete data for individual
2 months.

3 MS. BASSI: So in other words, are you
4 saying that how the allowable -- pardon? I'm sorry.

5 HEARING OFFICER TIPSORD: Go ahead.

6 MS. BASSI: Okay. So the -- So a source
7 then has to determine essentially this allowable amount
8 every month. Is that what you're saying, that the
9 225.230(b)(2) calculation has to be done for every month
10 and the source can determine on its own how it is
11 figuring out what its allowable emissions of mercury are?

12 MR. ROMAINE: That is correct.

13 MS. BASSI: Is that what you're saying?

14 MR. ROMAINE: Yes.

15 MS. BASSI: Okay.

16 MR. ROMAINE: As I said, I expect that most
17 sources will identify one limit that is to their
18 advantage and they will routinely rely upon that limit.
19 They will only need to switch if something changes, most
20 likely a change in the type of coal.

21 MS. BASSI: Okay.

22 MR. ROMAINE: Or this extraordinarily
23 efficient unit Mr. Zabel mentioned.

24 MS. BASSI: Thank you.

1 HEARING OFFICER TIPSORD: Dr. Girard?

2 CHAIRMAN GIRARD: Chris, does a unit have to
3 operate a minimum number of days per month to come up
4 with a -- with data for that particular month?

5 MR. ROMAINE: Under an averaging
6 demonstration, no. That's something that Marie was
7 pointing out on the definition of rolling 12-month
8 period. For the rolling 12-month period determination
9 when you're doing an averaging demonstration, any one of
10 the units -- if any one of the units operates in a month,
11 it counts as a month for the collection of data as
12 covered by the averaging demonstration.

13 CHAIRMAN GIRARD: So even if a unit operates
14 for one day during the month, it counts.

15 MR. ROMAINE: Yes.

16 CHAIRMAN GIRARD: So if an operator has a
17 unit which is a so-called good unit, according to
18 Mr. Zabel's definition, he should advise his client to
19 make sure that unit operates at least one day during the
20 month.

21 MR. ROMAINE: No.

22 CHAIRMAN GIRARD: No?

23 MR. ROMAINE: Because he only gets credit
24 for the difference between the allowable emissions and

1 the actual emissions. He needs to simply advise his
2 client to make sure that he has enough good units
3 operating during every 12-month period to cover the
4 excess emissions for the bad units.

5 CHAIRMAN GIRARD: Thank you.

6 HEARING OFFICER TIPSORD: Mr. Zabel and then
7 Mr. Forcade. Mr. Zabel?

8 MR. ZABEL: I guess the -- Dr. Girard's
9 question raises one of my own. Doesn't -- If one of
10 these units didn't operate at all during a month, it
11 would not have a 12-month average, would it?

12 MR. ROMAINE: Yes, it would.

13 MR. ZABEL: It would have -- go ahead.

14 MR. ROMAINE: It would if it was
15 participating in an averaging demonstration.

16 MR. ZABEL: How would you fill in that
17 missing month?

18 MR. ROMAINE: I wouldn't. It would be a
19 zero for that unit for that month, but it would be
20 carried along with the others that are part of the
21 averaging demonstration. That's why the language on the
22 definition of 12-month rolling basis is important.

23 MR. ZABEL: So it -- in effect, it would
24 neither exceed nor be deficient on its allowable.

1 MR. ROMAINE: That's correct.

2 HEARING OFFICER TIPSORD: Mr. Forcade?

3 MR. FORCADE: Would I be correct that all of
4 the averaging calculations have to be computed based on
5 the first day of the month till the end of the month and
6 not from the 15th to the 15th or something like that?

7 MR. ROMAINE: That is correct.

8 HEARING OFFICER TIPSORD: Mr. Bonebrake?

9 MR. BONEBRAKE: If a unit is not in an
10 averaging demonstration, do we count the zero months in
11 the twelve-month rolling average?

12 MR. ROMAINE: No. As explained in the
13 definition of twelve-month rolling basis, if there is a
14 zero for a unit, you skip that month for that unit. It's
15 going on its own.

16 HEARING OFFICER TIPSORD: I think we've
17 probably answered sub "b" to question 19.

18 MS. BASSI: Yes, that's correct.

19 HEARING OFFICER TIPSORD: Then I think we're
20 done with Mr. Romaine.

21 MR. ROMAINE: Thank you very much.

22 HEARING OFFICER TIPSORD: Thank you,
23 Mr. Romaine. Actually, wait. Before you go, I stand
24 corrected.

1 BOARD MEMBER MOORE: Marie has questions.

2 HEARING OFFICER TIPSORD: I have a -- Let me
3 just say that I'm going to read these into the record --
4 it's probably the best way to do this -- and ask that
5 since you described the rule, I had these sort of
6 earmarked for you, and these are the irritating hearing
7 officer questions that you see.

8 In reviewing the rulemaking language -- First of
9 all, I would like to let everyone know that when we went
10 to the second first notice, the Joint Committee on
11 Administrative Rules had not made changes when we went to
12 the first first notice because of the 28.5 nature of the
13 rule. They were not able to resist with the second set,
14 so there are differences made by JCAR when we did our
15 second first notice, so they're minor differences. They
16 don't change the meaning. We're very careful to be sure
17 that that doesn't happen, but there are changes to the
18 rule itself. Yes?

19 MR. RIESER: I'm sorry. Changes to the rule
20 that was published as the second first notice --

21 HEARING OFFICER TIPSORD: Yes.

22 MR. RIESER: -- that are reflected in
23 that --

24 HEARING OFFICER TIPSORD: Actual Illinois

1 Register version will differ from what was proposed by
2 the Agency because of changes made by JCAR, not by the
3 Board.

4 MR. RIESER: Thank you.

5 MR. HARRINGTON: That has not been published
6 yet?

7 HEARING OFFICER TIPSORD: It has -- No, it
8 has been published. It was published March. Erin's not
9 here. She would be the one with that date. With the
10 second first notice that we published after we did the --
11 moved the rule to Section 27 and we republished the first
12 notice, that's what --

13 MR. RIESER: In May.

14 HEARING OFFICER TIPSORD: Yeah, May.

15 MR. RIESER: May 12?

16 HEARING OFFICER TIPSORD: That's right. The
17 first one was March, the second one was May.

18 MS. BASSI: It's an M month.

19 HEARING OFFICER TIPSORD: It's an M month.

20 In 225.210(b)(1), and my concern is with the phrase
21 "owner or operator of each source and each EGU at the
22 source" and how that language relates to the requirements
23 in (e) and liability provisions in (e). The way this
24 sort of reads, it's like each source will -- is

1 responsible for monitoring as well as each owner and
2 operator, and if they don't, then there's the liability
3 issue under (e), so if you would take a look at that and
4 see if that's exactly what you do mean. In subsection
5 (d) of 225.210 -- and this is a JCAR type of question --

6 MR. ZABEL: I'm sorry. Which section was
7 that?

8 HEARING OFFICER TIPSORD: 225.210(d), the
9 last sentence before we get to sub (1). "This period may
10 be extended for cause." What does "for cause" mean? And
11 then in (d)(2) and (d)(3) of that same section, you say
12 "copies of all reports, compliance qualifications and
13 other submissions and all records." I guess my question
14 is what are other submissions? Those both in (d)(2) and
15 (d)(3) seem to be a pretty complete list. And then just
16 for clarification purposes, back in 225.250 and 260, the
17 Agency decisions being made in those two sections --

18 MR. MATOESIAN: I'm sorry. 225 --

19 HEARING OFFICER TIPSORD: 250 and 260. This
20 is again a situation where there's no discussion about
21 appeal language or appeals to the Board, and so the
22 question is, these are Agency decisions being made.
23 Would it be your expectation that these would be made as
24 a part of the permit process so they would be appealed to

1 the Board, and if not, who would be reviewing or how
2 would those decisions be reviewed? That's it.

3 MR. ROMAINE: Thank you. We would like to
4 share some of those comments probably with the USEPA, who
5 contributed the underlying language.

6 HEARING OFFICER TIPSORD: Oh, yeah. Mike
7 McCambridge would like you to share those with the USEPA
8 as well. Ms. Bassi?

9 MS. BASSI: I'm sorry. What happens next
10 with these questions that you read in --

11 HEARING OFFICER TIPSORD: I'm asking them
12 just to take a look at them and then they can get back to
13 me by the end of the week if that's -- if that works.

14 MS. BASSI: Okay.

15 HEARING OFFICER TIPSORD: You can get back
16 by the end of the week?

17 MR. MATOESIAN: Yeah, we can get back to you
18 on them.

19 HEARING OFFICER TIPSORD: Tomorrow morning?
20 Just kidding. And it's my understanding, then -- it is
21 ten to six, but let's go ahead -- I believe we're going
22 to Sid Nelson?

23 MR. MATOESIAN: Yes.

24 HEARING OFFICER TIPSORD: Why don't we get

1 him sworn in, get his testimony admitted.

2 I'm being handed the prefiled testimony of Sid
3 Nelson, which I will mark as Exhibit No --

4 MS. BASSI: It's the same?

5 HEARING OFFICER TIPSORD: Yes, it should be
6 the same, Kathleen. Let's swear Mr. Nelson in.

7 (Witness sworn.)

8 HEARING OFFICER TIPSORD: And then Exhibit
9 43 for Mr. Nelson's testimony, if there's no objection.
10 Seeing none, it's marked as Exhibit 43.

11 And then, Mr. Matoesian, whose questions did you
12 want to start with? Let's see if we can't get a couple
13 of them knocked out today.

14 MR. MATOESIAN: I believe Kincaid. Kincaid,
15 I believe.

16 HEARING OFFICER TIPSORD: And, Mr. Nelson,
17 what we've been doing is letting you read the question
18 into the record and then answer the question, if that is
19 acceptable.

20 MR. NELSON: Okay.

21 HEARING OFFICER TIPSORD: Okay. And I
22 believe I heard it's Kincaid's questions?

23 MR. MATOESIAN: Yes.

24 HEARING OFFICER TIPSORD: Mr. Forcade, you

1 won the lottery tonight.

2 MR. FORCADE: Thank you.

3 HEARING OFFICER TIPSORD: Question number 1.

4 MR. NELSON: Just read it?

5 HEARING OFFICER TIPSORD: Yes, read it and
6 then answer it.

7 MR. NELSON: "Did you receive any
8 information from the Agency prior to your forming any
9 opinions including but not limited to the opinions
10 contained in your testimony?"

11 HEARING OFFICER TIPSORD: Mr. Nelson, you
12 need to pull the microphone down. We can't hear you at
13 all. It's turned off. That would explain it.

14 MR. NELSON: The answer to that first
15 question is yes.

16 "If so, describe that information in detail." I
17 received a copy of the TSD and I asked some questions for
18 more recent data on the configurations in Illinois of
19 various plants and coal information and received a copy
20 of the information fact sheets for Illinois coal-fired
21 electric power plants, and I believe we're going to make
22 that -- enter that as an exhibit. And then finally, one
23 of the later questions refers to --

24 MR. MATOESIAN: Hold on a second. I'll

1 enter this as an exhibit.

2 HEARING OFFICER TIPSORD: I've been handed
3 "State-Wide Coal-Fired Electric Utilities," which I will
4 mark as Exhibit 44 if there's no objection. Seeing none,
5 it is Exhibit 44.

6 MR. NELSON: One of the later questions
7 refers to control configuration inspections.

8 MR. FORCADE: I'm sorry. I'm really having
9 a difficult time hearing him.

10 HEARING OFFICER TIPSORD: You can actually
11 take it out and hold it if it works better.

12 MR. FORCADE: Thank you very much. I'm
13 sorry.

14 MR. NELSON: When this question informed me
15 that there was additional information on configurations,
16 I asked for some of that information as well, but it's
17 all because a lot of my information on which particular
18 coals individual plants were burning or what their
19 existing air pollution control configurations were, my
20 data was dated, and a lot of these plants have changed
21 coal types or added SO3 conditioning systems, that sort
22 of thing, and so this provided a little more information
23 so I could better assess the state of effluent here in
24 Illinois. And actually, my conclusion is the current

1 configuration is well suited for mercury control.

2 HEARING OFFICER TIPSORD: Mr. Forcade?

3 MR. FORCADE: Could we sort of start back
4 with the first one? The information you received from
5 the Agency, when were you first contacted by the Agency
6 regarding participation in this proceeding?

7 MR. NELSON: I don't recall exactly. It may
8 have been about a month and a half ago, perhaps two
9 months ago.

10 MR. FORCADE: So that would be April?

11 MR. NELSON: Probably about two months ago.

12 MR. FORCADE: April 20, roughly?

13 MR. NELSON: I wasn't -- I haven't had a lot
14 of close contact with the Agency. They just asked if I
15 would come in and testify as to --

16 MR. FORCADE: And the document that you
17 first identified was I believe the Technical Support
18 Document?

19 MR. NELSON: Correct.

20 MR. FORCADE: Is that the final Technical
21 Support Document that was filed with the Pollution
22 Control Board?

23 MR. NELSON: Correct.

24 MR. FORCADE: Okay. And what was the next

1 document that you mentioned?

2 MR. NELSON: The one that was entered as an
3 exhibit. The "State-Wide Coal-Fired Electric Utilities"
4 fact sheets.

5 MR. FORCADE: And when was this document
6 provided to you?

7 MR. NELSON: Again, I'm not exactly sure. I
8 would say perhaps four weeks ago.

9 MR. FORCADE: How long ago?

10 MR. NELSON: Perhaps about a month ago.

11 MR. FORCADE: This document carries a date
12 of May 30.

13 MR. NELSON: Oh. Well, then that wouldn't
14 be it. Hold on. Let me check my -- That's about a month
15 ago? Actually, mine's dated 3-3-06, so this might be a
16 little bit of an updated version.

17 MR. FORCADE: Would it be possible to ask to
18 have a copy of the document that was provided to you also
19 entered into evidence so we can tell what the differences
20 are between that document and the one that was just
21 handed to us?

22 MR. MATOESIAN: Okay.

23 MR. NELSON: That's fine.

24 MR. FORCADE: And to Counsel, has Exhibit

1 44, either the earlier version or the later version, been
2 introduced into the record in this case at any time?

3 MR. MATOESIAN: I don't believe so.

4 MR. FORCADE: Okay. It would be a little
5 difficult to ask questions about it. I just got it.

6 MR. MATOESIAN: Yeah.

7 HEARING OFFICER TIPSORD: You'll have this
8 evening to look at it.

9 MR. FORCADE: Oh, thank you.

10 HEARING OFFICER TIPSORD: Sorry. I
11 apologize. I just couldn't resist.

12 MR. FORCADE: All right. So the first
13 document I have is the Technical Support Document. The
14 second document was Exhibit 44, either in its submitted
15 incantation or perhaps an earlier draft, and that again
16 came in at about the same time as the TSD or thereabouts?

17 MR. NELSON: A week or two later, something
18 like that.

19 MR. FORCADE: What was the next document you
20 identified after the TSD and Exhibit 44?

21 MR. NELSON: Well, it was just a week or two
22 ago. Actually, the questions here alerted me to
23 something called control configuration inspections --

24 MR. FORCADE: Right.

1 MR. NELSON: -- and I received some data
2 from those.

3 MR. FORCADE: Okay. So then prior to -- am
4 I correct in assuming that prior to asking for the
5 control configuration documents you received a document
6 that indicated there were questions about that?

7 MR. NELSON: I received your questions or
8 the -- these questions.

9 MR. FORCADE: Yeah. When was that?

10 MR. NELSON: When did I receive these
11 questions? What was it, three weeks ago? The questions
12 from the attorneys.

13 MR. MATOESIAN: Oh, it was more than that.

14 MR. NELSON: A month ago?

15 MR. MATOESIAN: I don't have the date.

16 HEARING OFFICER TIPSORD: Is it safe --
17 Would it be safe to say that it was shortly after they
18 were filed with the Board and the Agency?

19 MR. MATOESIAN: Yeah, yeah.

20 HEARING OFFICER TIPSORD: Thank you.

21 MR. FORCADE: And then the next document you
22 received from the Agency were -- was what?

23 MR. NELSON: I didn't actually receive it
24 from the Agency. I got it from Jim Staudt.

1 MR. FORCADE: And what would that --

2 MR. NELSON: That was what -- Your questions
3 referred to these control configuration inspections.

4 MR. FORCADE: Correct. So what did you
5 receive from Dr. Staudt?

6 MR. NELSON: An e-mail with it looked like
7 control configuration inspection materials, again having
8 to do with which plants had what -- what did they look
9 like.

10 MR. FORCADE: On a procedural issue,
11 Counsel, could you tell me whether this is the document
12 we spoke with the Hearing Officer about Friday or
13 yesterday relating to the homeland security issues?

14 MR. MATOESIAN: I don't know. Mr. Kim
15 would. I wasn't --

16 MR. NELSON: Mr. Kim told me, yes, that's
17 the document. He said that there were homeland security
18 issues with it.

19 MR. FORCADE: Okay. I'll defer questions on
20 that till tomorrow if I could.

21 HEARING OFFICER TIPSORD: Okay.

22 MR. FORCADE: Then what was the next
23 information received from the Agency, please?

24 MR. NELSON: That's it.

1 MR. FORCADE: That's it? All right. And
2 when did you prepare your preliminary testimony?

3 MR. NELSON: About -- It was finished the
4 day it was due.

5 HEARING OFFICER TIPSORD: That would be
6 April 28.

7 MR. FORCADE: The reason I'm asking is my
8 understanding is that with the exception of the Technical
9 Support Document, would it be correct to say that all of
10 the other documentation you described came after you
11 prepared your testimony?

12 MR. NELSON: That would be correct.

13 MR. FORCADE: Okay.

14 MR. NELSON: I have various databases on the
15 configurations and the coals, you know, but they were
16 just dated, so this gave me more recent data.

17 MR. FORCADE: So going to question 1b, would
18 it be correct to say that the only information that you
19 received from the Agency that you relied upon in your
20 prepared testimony would be the Technical Support
21 Document?

22 MR. NELSON: That would be correct.

23 MR. FORCADE: Had you reviewed the
24 regulatory proposal prior to that time?

1 MR. NELSON: Not in detail. I had a
2 one-page summary.

3 MR. FORCADE: Was that part of the Technical
4 Support Document or was that an additional document you
5 were provided?

6 MR. NELSON: I don't recall.

7 MR. FORCADE: Then I guess we're on to "c."

8 MR. NELSON: C. "If" --

9 HEARING OFFICER TIPSORD: Wait. Ms. Bassi
10 has a follow-up.

11 MS. BASSI: I do have a follow-up. You said
12 you were first contacted a couple of months ago, which
13 would put us at about mid April, and you prepared
14 testimony, then, in a couple weeks' time; is that
15 correct?

16 MR. NELSON: I would believe so.

17 MS. BASSI: Does that sound -- Okay. And I
18 believe your product, Sorbent Technologies halogenated
19 activated carbon, is one of the products that's
20 identified in the TTBS; is that correct?

21 MR. NELSON: Yes.

22 MS. BASSI: Had you had any contact at all
23 with the Agency about your product prior to January of
24 2006?

1 MR. NELSON: Prior to January of 2006. I
2 may have volunteered an e-mail or two when I found out
3 that Illinois was considering going through a state
4 process.

5 MS. BASSI: And what would the nature of
6 those e-mails or two be?

7 MR. NELSON: They would have been
8 presentations that I had either given at professional
9 conferences describing some of my company's
10 demonstrations or they could have been presentations that
11 I had given in other states that are also considering
12 such regulations.

13 MS. BASSI: What was --

14 MR. NELSON: I'd have to go back and look at
15 the e-mails, but it's quite possible that I may have on
16 my own initiative sent something in.

17 MS. BASSI: What would the motivation for
18 that have been?

19 MR. NELSON: To give the decision-makers and
20 public in the state of Illinois as much information so
21 that they could make informed decisions.

22 MS. BASSI: Was the information about your
23 product only?

24 MR. NELSON: No.

1 MS. BASSI: It was -- What was it about?

2 MR. NELSON: Well, for example, I believe I
3 may have -- because I've done this numerous times, I gave
4 a -- three presentations, for example, at the January
5 Electric Utility Environmental Conference in Tucson.
6 It's a -- They have a mercury track there, and my company
7 gave three presentations. One was on our particular
8 demonstrations with our products. Another one was on
9 actually transport and deposition issues that you've
10 heard about.

11 MS. BASSI: Are you an expert on those?

12 MR. NELSON: I've become -- I wouldn't say
13 an expert, but unfortunately they -- those types of
14 studies are only funded by those who have an interest in
15 showing particular conclusions, like the Electric Power
16 Research Institute, for example, and consequently, that
17 in fact was the nature of that particular presentation,
18 was a summary of many other studies to refute some of the
19 modeling with actual data, so it was -- there's really
20 nobody to hold up that side that has any kind of
21 technical background, so that was the nature of that
22 presentation.

23 HEARING OFFICER TIPSORD: Mr. Forcade?

24 MR. FORCADE: What is that side that you're

1 holding up?

2 MR. NELSON: Well, there are -- for example,
3 the Electric Power Research Institute has funded for
4 years a couple researchers who put forth models
5 showing -- for example, supporting the proposition that
6 most of the mercury comes from China and not next door,
7 and it was -- there's a lot of data out there from
8 researchers that they don't frequently get presented in
9 public -- the public realm. In fact, researchers tend to
10 be researchers rather than policy advocates, and
11 consequently society -- unless there's a financial
12 reason, a lot of the information doesn't get into the
13 debate.

14 MR. FORCADE: I'm sorry. I'm still not --
15 What is the side you're holding up? That's what I'm
16 asking. What position was it you were advocating that
17 was not represented by the other side?

18 MR. NELSON: The position is that a lot of
19 the local deposition, the mercury that gets into the
20 environment, for example, it comes from local sources.
21 What goes up locally comes down.

22 MR. FORCADE: So that was the position you
23 were advocating.

24 MR. NELSON: Well, there was -- I wasn't

1 necessarily advocating it, but I was putting forth -- and
2 I'll be happy to put into the record these presentations
3 if you'd like to look at them.

4 MR. FORCADE: I'm sorry. I was just trying
5 to figure out what side you were holding up.

6 MR. NELSON: It was to present data as
7 opposed to simple models.

8 HEARING OFFICER TIPSORD: Ms. Bassi?

9 MS. BASSI: So I believe you said that there
10 was some kind of financial motivation for outfits like
11 EPRI to produce modeling that shows deposition comes from
12 China; is that correct? Is that a correct summary of
13 what you said?

14 MR. NELSON: Could you repeat it?

15 MS. BASSI: That there is some kind of
16 financial motivation for EPRI to produce models that
17 demonstrate that deposition of mercury comes from China?

18 MR. NELSON: Certainly.

19 MS. BASSI: Is there any financial
20 motivation for you to produce your -- or for you to
21 promote your product to the Agency?

22 MR. NELSON: Certainly.

23 MS. BASSI: Thank you.

24 MR. MATOESIAN: I was just going to say,

1 I --

2 HEARING OFFICER TIPSORD: You have
3 additional copies of the Exhibit 45?

4 MR. MATOESIAN: This is the 530 rule.

5 HEARING OFFICER TIPSORD: Let's finish with
6 question 1c, then, and then we'll wrap it up.

7 MR. NELSON: "If so, specifically what
8 opinions or parts of your testimony rely on the
9 information that you received from the Agency?" In
10 assessing the applicability and the relative costs of
11 mercury control in the state of Illinois, you need to
12 have an understanding of the types of coals that are
13 burned and the types of plants that burn them and what
14 equipment they currently have, so that was why I
15 requested that information in particular; understanding
16 the nature of some technologies that are out there for
17 mercury control, their relative costs and benefits with
18 respect to particular configurations.

19 MR. FORCADE: Again, I'm sorry. I'm not
20 sure that answers the question. I want to know what
21 parts of your opinions and testimony relied upon
22 information provided by the Agency, not what information
23 from the Agency you find important.

24 MR. NELSON: With respect to my testimony,

1 very little, if any, of the information was provided. At
2 that point I think it was just the TSD, which to be
3 honest, I didn't read in depth when I wrote my testimony,
4 and -- but with respect to my opinions since then as well
5 as my opinions rely on the data that I was given with
6 respect to coals burned and configurations.

7 Number 2 --

8 HEARING OFFICER TIPSORD: If we're done with
9 1c, it is now five after six. We'll wrap it up for
10 tonight. We'll start at nine a.m. tomorrow.

11 (Hearing recessed at 6:10 p.m.)

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1 STATE OF ILLINOIS)
) SS
2 COUNTY OF BOND)

3

4 I, KAREN WAUGH, a Notary Public and Certified
5 Shorthand Reporter in and for the County of Bond, State
6 of Illinois, DO HEREBY CERTIFY that I was present at
7 Illinois Pollution Control Board, Springfield, Illinois,
8 on June 20, 2006, and did record the aforesaid Hearing;
9 that same was taken down in shorthand by me and
10 afterwards transcribed, and that the above and foregoing
11 is a true and correct transcript of said Hearing.

12 IN WITNESS WHEREOF I have hereunto set my hand
13 and affixed my Notarial Seal this 28th day of June, 2006.

14

15

16

Notary Public--CSR

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#084-003688

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