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1
               ILLINOIS POLLUTION CONTROL BOARD
 2
                        August 23, 2006
 3
    IN THE MATTER OF:
    PROPOSED NEW 35 ILL. ADM.
                                    ) R06-25
    CODE 225 CONTROL OF EMISSIONS ) (Rulemaking-Air)
 6
    FROM LARGE COMBUSTION SOURCES )
 7
     (MERCURY),
                                    )
 8
9
10
11
                    TRANSCRIPT OF PROCEEDINGS held in the
12
    above-entitled cause before Hearing Officer
13
    Marie E. Tipsord, called by the Illinois Pollution
    Control Board, pursuant to notice, taken before
14
15
    Denise A. Andras, CSR, a notary public within and
16
    for the County of Cook and State of Illinois, at
17
    the James R. Thompson Center, 100 West Randolph,
    Assembly Hall, Chicago, Illinois, on the 23rd day of
18
19
    August, A.D., 2006, commencing at 9:00 a.m.
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APPEARANCES:
 2
     ILLINOIS POLLUTION CONTROL BOARD:
 3
         Ms. Marie Tipsord, Hearing Officer
         Ms. Andrea S. Moore, Board Member
 4
         Mr. G. Tanner Girard, Acting Chairman, IPCB
 5
         Mr. Anand Rao, Senior Environmental Scientist
         Mr. Nicholas J. Melas, Board Member
         Mr. Timothy J. Fox, Board Member
         Mr. Thomas Johnson, Board Member
 7
     ILLINOIS ENVIRONMENTAL PROTECTION AGENCY:
9
         Mr. John J. Kim
         Mr. Charles E. Matoesian
10
         Mr. Christopher Romaine
11
          SCHIFF, HARDIN, LLP,
          6600 Sears Tower
12
          Chicago, Illinois 60606
13
          (312) 258-5646
          BY: MS. KATHLEEN C. BASSI
14
15
          McGUIRE, WOODS,
          77 West Wacker Drive
16
          Suite 4100
          Chicago, Illinois 60601-1815
17
          (312) 849-8100
          BY: MR. JEREMY R. HOJNICKI
18
              MR. DAVID L. RIESER
19
         CHICAGO LEGAL CLINIC
         BY MR. KEITH I. HARLEY
20
         205 West Monroe Street, 4th Floor
         Chicago, Illinois 60606
21
         (312) 726-2938
22
         JENNER & BLOCK
         Mr. Bill s. Forcade
23
         One IBM Plaza
         Chicago, Illinois 60611-7603
24
         (312) 923-2964
```

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1
     ALSO PRESENT:
 2
         C.J. SALADINO, Dominion, Kincaid Generation, LLC
 3
         ANDY YAROS, Dominion, Kincaid Head of Operations
         ROBERT ASPLUND, Dominion, Kincaid Environmental
 4
                         Manager
 5
 6
 7
 8
 9
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HEARING OFFICER TIPSORD: Good

2	morning. My name is Marie Tipsord, and today we
3	have the testimony of Dominion/Kincaid, and we
4	have pre-file testimony from both C.J. Saladino
5	and Andy Yaros.
6	Mr. Forcade?
7	MR. FORCADE: Good morning, Madam
8	Officer and Members of the Board. We have as our
9	first witness C.J. Saladino. After our pre-file
10	testimony was submitted, there were a number of
11	developments in the case, including the Dynegy
12	joint statements in the CDA. We have a brief
13	statement. I have an exhibit we'll introduce to
14	that, and we'll proceed to the questions if that'
15	okay.
16	HEARING OFFICER TIPSORD: First let's
17	have him sworn in.

- 18 (WITNESS SWORN.)
- 19 HEARING OFFICER TIPSORD: And am I
- saying that correctly, Saladino?
- MR. SALADINO: Yes, absolutely
- 22 perfect.

1

- 23 HEARING OFFICER TIPSORD: Actually,
- 24 did you want to enter their pre-file testimony as

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1
       exhibits?
 2
                   MR. FORCADE: No, this is a proposal
       for the Board that we'll be introducing.
                   HEARING OFFICER TIPSORD: So you are
       withdrawing their pre-file testimony?
 5
                   MR. FORCADE: No, the pre-file
 6
 7
       testimony can be entered as exhibits. I thought
       you meant the supplemental.
 9
                   HEARING OFFICER TIPSORD: Do you have
10
       copies for me?
11
                   MR. FORCADE: I will later.
                   HEARING OFFICER TIPSORD: Then C.J.
12
13
       Saladino's testimony will be marked as Exhibit 136
       and Andy Yaros' will be marked as Exhibit 137 if
14
15
       there's no objection. Seeing none, they are
16
       entered. Off the record.
17
                       (Brief discussion off the record,
18
                        after which the following
19
                        proceedings were had:)
20
                       Go ahead, Mr. Saladino.
                   MR. SALADINO: Dominion supplements
21
22
       its original testimony filed with the Board on
       July 28 with the following: As we have indicated
23
       in our original testimony, we at Dominion believe
24
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that with regard to our Kincaid plant, the
 1
 2
      Illinois mercury proposal provides none of the
 3
      so-called flexibility afforded every other
      coal-fired utility plant in Illinois. As we have
 5
      explained, the proposed averaging demonstration
      under section 225.232 of the Illinois proposed
7
      rule limits its applicability to only those plants
      under common control. And while the rule allows
9
      the very limited number of single source owners in
      the state to average, this option is not workable
10
      for Kincaid since its ability to average is
11
12
      limited to only two other much smaller generating
13
      plants. Nor can Dominion seek the compliance
14
      alternative presented by the TTBS because the
15
      capacity of the Kincaid plant exceeds the limit on
16
      the number of megawatts for which this option is
17
      available. The unavailability of the only two
18
      compliance alternatives to Kincaid is clearly
19
      unfair.
20
                       We also have concerns that the
21
       intended purpose of this rulemaking, to regulate
      mercury emissions from coal-fired power plants has
22
      morphed into a multi-pollutant regulatory
23
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proceeding. MPS alternative developed by Ameren

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and the IEPA has been designed only to accommodate
 2
       the exclusive needs of a single company and makes
 3
       no attempt at universal appeal or feasibility.
       The MPS alternative agreement between Dynegy and
 5
       the IEPA appears at initial glance to likewise be
       tailored to the needs of a specific company,
 7
       although we have not had the opportunity to
 8
       evaluate the details of that agreement. So
9
       Kincaid finds itself again excluded from IEPA's
       third attempt at IEPA regulatory flexibility. It
10
       appears that the MPS is so clearly tailored to
11
12
       align with Ameren's plans for compliance with the
13
       CAIR 2015 NOx and SO2 emissions and reductions and
14
       that company's goals to exempt the applicability
15
       and potential compliance costs for several small
16
       units that it is not useful to companies with
17
       fewer, and in Dominion's case only one, generating
18
       facility in the state.
19
                       In some respects this
20
       multi-pollutant approach forces emissions
21
       reductions at the Ameren plants that are already
```

well underway at other plants. For example, NOx

and SO2 emissions at Dominion's Kincaid plant have

been declining since Dominion purchased the plant

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23

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in 1998. Installation of SCRs and other NOx
 1
 2
       controls have reduced Nox emissions by 54% since
 3
       1998 with a cumulative reduction of over 70,000
       tons over that period. NOx emissions rates have
 5
       been cut by 67%. The ozone season NOx emissions
       rate from Kincaid, by IEPA's calculation, is the
 7
       lowest coal-fired utility rate in Illinois. 50%
       below that of the Ameren plants. When the SCRs
 9
       are operated on a year-round basis, beginning in
       2009, we expect Kincaid's NOx emission rate to be
10
11
       comparable to or lower than the NOx limit of the
12
       Ameren MPS that would not be effective until 2012,
13
       three years later. The SO2 at Kincaid is even
14
       more impressive. As we have stated previously,
15
       the Kincaid switch to subbituminous coal in 1999
16
       drastically reduced emissions of SO2. Kincaid's
17
       SO2 emissions in 2005 were 62% lower than 1998;
18
       SO2 emissions rates have been cut by more than
19
       73%. Over that eight-year period, Kincaid SO2
20
       emissions have been reduced by more than 190,000
21
       tons. By IEPA's calculation, the Kincaid SO2
       emission rate for 2002-2004 is as low as any other
22
       coal-fired utility in Illinois, and over 50% below
23
24
       the rate of the Ameren plants.
```

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1
                       As we have stated in our original
 2
      testimony, and verified by others in this
 3
      proceeding, we do not have confidence that at the
      current state of technology, halogenated activated
 5
      carbon injection with bromine, iodine or chlorine
      can achieve a sustained 90% mercury reduction at
 7
      Kincaid. We do not believe that this technology
      has been fully demonstrated, and we do not believe
9
      commercially offered, as some vendors say, is the
      same as commercially available. We agree with the
10
      conclusion of IEPA's consultant Dr. Staudt in his
11
12
      March 2006 article in Environmental Science &
13
      Technology, "A broad and aggressive RND program
14
      now under way will yield more experience and
15
      information in the next few years." Such
16
      expectations do not provide guaranteed performance
17
      from which compliance would be measured. Absent
18
      performance guarantees, Dominion cannot accept the
19
      risk of potential non-compliance.
20
                       Because the IEPA proposed mercury
21
      rule provides no compliance flexibility for
      Kincaid, and because we cannot tolerate the risk
22
      of non-compliance and continue to fulfill our
23
24
      operational commitments for the Kincaid generating
```

- 1 units, we are offering a mercury reduction
- 2 proposal that we feel, though are not certain, can
- 3 be achieved at Kincaid.
- 4 This proposal commits Kincaid to
- 5 the specific limitations to mercury and includes
- 6 no provisions for trading with other plants and
- 7 targets greater mercury reductions by the federal
- 8 CAMR several years before the federal deadlines.
- 9 Our proposal surrenders all of the compliance
- 10 flexibility provided under the CAMR rule and
- 11 commits Kincaid to a substantial capital outlay as
- 12 well as significant annual expenses, costs that
- will have a profound impact on the economics and
- 14 profitability of the Kincaid plant.
- Phase I, July 1, 2009, install ACI
- on one unit at Kincaid at maximum sorbent
- injection rate of 3 pounds per million ACFM or
- achieve a plant-wide 40% mercury reduction from
- 19 inlet levels.
- Phase II, July 1, 2013, install
- 21 ACI on both units at Kincaid at maximum sorbent
- 22 injection rate of 3 pounds per million at ACFM or
- 23 achieve a plant-wide 60% mercury reduction from
- 24 inlet levels.

```
Phase III, July 1, 2015, achieve a
1
 2
       plant-wide 74% mercury reduction from inlet
 3
       levels.
                       Combined with Kincaid's continuing
 5
       NOx and SO2 reduction program, that has already
       resulted in hundreds of thousands of tons of
7
       reductions, and that will continue to provide a
       dramatic decline as the CAIR NOx and SO2
9
       reductions become effective in 2009-2010, this
       proposal offers a very substantial emissions
10
       reduction, reductions that will be achieved at the
11
12
       Kincaid plant, with no averaging and trading among
13
       other plants and no deadline extensions designed
       to accommodate small units for the purpose of
14
15
       avoiding controls.
16
                       We have drafted the necessary
17
       regulatory language that can be easily inserted
18
       into the existing proposed rule should the Board
19
       approve this alternative.
20
                   MR. FORCADE: At this time I have one
       clean copy only of the pre-file testimony, and I'd
21
       be happy to provide copies later on for both C.J.
22
       Saladino and Andy Yaros. And then at this time I
23
```

would like to ask if you will mark for

- identification the proposal of Dominion/Kincaid.
- 2 HEARING OFFICER TIPSORD: I have
- 3 before me a document entitled Dominion/Kincaid,
- 4 LLC. proposal. We'll mark this as Exhibit 138 if
- 5 there's no objection. Seeing none, it is Exhibit
- 6 138.
- 7 MR. KIM: Madam Hearing Officer, we
- 8 have no objection to the admission of the exhibit,
- 9 however, we would specifically reserve the right
- 10 to make comments to the exhibit during the written
- 11 comment phase of the proceedings, given the fact
- 12 that we have seen very -- we have seen this
- language before, but just in a short time, and we
- don't have a specific range of comments or
- 15 concerns that we have laid out to it.
- 16 HEARING OFFICER TIPSORD: I would
- 17 expect that everyone is going to be commenting on
- all of the proposals that have been submitted
- 19 during the hearing.
- 20 MR. FORCADE: Was there an Exhibit
- 21 number for that?
- 22 HEARING OFFICER TIPSORD: Yes, it's
- 23 Exhibit No. 138.
- 24 MR. KIM: And I don't know what order

- 1 you want to take this. Since this was some
- 2 supplemental testimony that was provided by Mr.
- 3 Saladino, I just had one or two questions that I
- 4 was going to ask him, but I can wait until you
- 5 want to do that.
- 6 MR. FORCADE: We're ready.
- 7 HEARING OFFICER TIPSORD: You want to
- 8 do the supplemental, then we'll go to the
- 9 questions?
- 10 MR. FORCADE: Any order that the Board
- 11 would prefer.
- 12 MR. KIM: I am actually -- it's just a
- 13 couple questions.
- 14 Mr. Saladino, without getting into
- 15 the specifics of the substance of the
- 16 conversations, it is true, isn't it, that
- 17 Dominion/Kincaid and IEPA prior to the Chicago
- 18 hearing in this proceeding did discuss possible
- means of flexibility that Dominion/Kincaid might
- specifically be able to take advantage of; is that
- 21 right?
- MR. SALADINO: Yes, we did have a
- 23 conversation.
- MR. KIM: And it is also correct, is

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1 it not, that unfortunately those conversations did
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- 2 not result in a proposal or language that we were,
- 3 that the IEPA and Dominion/Kincaid were able to
- 4 present jointly to the Pollution Control Board; is
- 5 that correct?
- 6 MR. SALADINO: That's correct.
- 7 HEARING OFFICER TIPSORD: Mr. Harley?
- 8 MR. HARLEY: I'd like to ask some
- 9 questions about Exhibit 138, if I may, Madam
- 10 Hearing Officer.
- 11 For the record, my name is Keith
- 12 Harley. I'm an attorney for Environment Illinois
- in these proceedings. Unlike the other additional
- 14 regulatory proposals that we have seen entered
- before the Board, this one is not accompanied by a
- joint statement. Can you explain why this
- 17 proposal is not accompanied by a joint statement
- 18 between Kincaid and the IEPA?
- 19 MR. SALADINO: We were unable to reach
- an agreement with the IEPA.
- 21 MR. HARLEY: I'm sorry?
- MR. SALADINO: We were unable to reach
- a mutual agreement with the IEPA.
- MR. HARLEY: Can you describe the

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1 reasons why that agreement could not be reached?
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- 2 MR. SALADINO: Well, we felt that some
- of the issues that they raised were beyond the
- 4 financial costs that we could incur.
- 5 MR. HARLEY: Can you describe what
- 6 specific aspects of your proposal lead to IEPA
- 7 objections?
- 8 MR. SALADINO: No, I don't know why
- 9 they objected to it.
- 10 MR. HARLEY: I notice that in terms of
- 11 eligibility that one of the companies that would
- 12 be eligible to use this proposal is Springfield
- 13 City Water Light & Power; is that correct?
- MR. SALADINO: I believe that's
- 15 correct, although my understanding is they reached
- 16 an agreement with the Sierra Club, so they would
- have no reason to do anything with us.
- 18 MR. HARLEY: Following up on those
- 19 lines, are you familiar with the PSD permit that
- 20 was issued by the IEPA on August 10th to
- 21 Springfield City Water Light & Power?
- MR. SALADINO: No, I'm not.
- MR. HARLEY: Would it surprise you
- 24 that Springfield City Water Light & Power permit

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1 includes the mercury limits from existing and new
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- 2 units contained in the proposal now before the
- 3 Illinois Pollution Control Board?
- 4 MR. SALADINO: Did you say would it
- 5 surprise me?
- 6 MR. HARLEY: Yes.
- 7 MR. SALADINO: No, it wouldn't.
- 8 MR. HARLEY: Why wouldn't it surprise
- 9 you considering that Springfield City Water Light
- 10 & Power is in a similar situation as
- 11 Dominion/Kincaid at least in terms of the language
- of your proposal?
- MR. SALADINO: Because the setup for
- the units and controlled technology they have are
- 15 different than what Kincaid has.
- MR. HARLEY: Did you discuss with
- 17 Springfield City Water Light & Power its inclusion
- in your proposal of Springfield City Water Light &
- 19 Power before including that facility in the
- 20 proposal?
- MR. SALADINO: No, I didn't.
- 22 HEARING OFFICER TIPSORD: Could you
- 23 speak up Mr. Saladino.
- MR. SALADINO: No.

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1
                   MR. HARLEY: Your proposal includes a
 2
       limit on the amount of halogenated sorbent that
 3
       would need to be injected in your system; is that
       correct?
                   MR. SALADINO: That's correct.
 5
                   MR. HARLEY: You have limited that to
 7
       3 pounds of halogenated sorbent; is that correct?
 8
                   MR. SALADINO: That's correct.
 9
                   MR. HARLEY: Are you familiar with
       testimony that has been entered in this proceeding
10
       that greater amounts of sorbent injection can lead
11
12
       to greater levels of mercury reductions?
13
                   MR. SALADINO: Yes, I have heard that
14
       and heard that it's also a diminishing return.
15
       You don't see as much the higher you go. You
16
       don't get as much reduction.
                   MR. HARLEY: If it were possible to
17
18
       achieve reductions more in line with the Illinois
19
       EPA's existing regulatory proposal using 4 pounds
20
       of halogenated sorbent, you would not be required
21
       to do that under this proposal, would you?
22
                   MR. SALADINO: That's correct, I
      believe.
23
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MR. HARLEY: You also include Southern

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1 Illinois Power Cooperative in this proposal; is
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- 2 that correct?
- 3 MR. SALADINO: Yes.
- 4 MR. HARLEY: Southern Illinois Power
- 5 Cooperative is represented in these proceedings as
- 6 we've heard several times by the law firm of
- 7 Schiff Harden; is that correct?
- 8 MR. SALADINO: I don't know that.
- 9 I'll take your word for it.
- 10 MR. HARLEY: Is this proposal endorsed
- 11 by Southern Illinois Power Cooperative?
- MR. SALADINO: No, it's not.
- MR. HARLEY: I have no further
- 14 questions. Thank you.
- 15 HEARING OFFICER TIPSORD: With that
- we'll start -- I'm sorry, Ms. Bassi?
- MS. BASSI: I'm Kathleen Bassi, with
- 18 Schiff Harden. He just mentioned, Mr. Saladino,
- does Dominion/Kincaid have any concerns with
- 20 sorbent injection rates with respect to its affect
- or possible affect on PM opacity limits?
- MR. SALADINO: Yes, we do.
- MS. BASSI: And as Mr. Harley
- 24 mentioned that CWLP has reached an outside

```
agreement with the Sierra Club, and I believe --
 1
 2
      well, it has reached an outside agreement with the
      Sierra Club that is I assume reflected in the PSD
      permit that was issued August 10th. With CWLP
 5
      effectively out of the mercury control pool that
      was available to Dominion/Kincaid in the averaging
7
      demonstrations that are a feature of the Agency
      proposal and now under I guess whatever the MPS
9
      provides, does that further limit
      Dominion/Kincaid's flexibility in its attempts to
10
      comply with this rule?
11
12
                   MR. SALADINO: Yes, it does.
13
                   MS. BASSI: Thank you.
                   HEARING OFFICER TIPSORD: Then I think
14
15
      we're ready to go to pre-file questions. And do
16
      you want to start with the Agency or Dynegy?
17
                   MR. SALADINO: The Agency, I think.
18
                       Question No. 1. What is the
19
      description and responsibilities that fall under
20
      the position of Station Director of the Kincaid
21
      Generation LLC power plant?
                       I'm responsible for the overall
22
      operations of the plant. It's my job to make sure
23
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that the plant is run safely, meets all

```
environmental requirements and is run efficiently.
 2
                       Question 2. How long have you
 3
       been the station director?
                       Since June 1, 2001.
                       Question 3. Have you been
 5
       employed outside of Kincaid after receiving your
 7
       degree?
 8
                       No, I have not.
 9
                       Question 4. Do you have any
10
       formal training in economics?
11
                       No, although I have taken economic
12
       classes in college and have been handling the
13
       budgeting for the power plant for many years.
                       Question 5. What experience have
14
15
       you had with mercury control technology?
16
                       I have no hands-on experience. I
       have read some industry articles on it.
17
18
                       Question 6. What experience do
19
       you have assessing the mercury control technology
20
       economic market?
21
                       None.
22
                       Question 7. What experience do
       you have with activated carbon injection?
23
                       Just what I have read and heard.
24
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Question 8. What experience do
 1
 2
       you have with testing mercury emissions?
 3
                       Just what I have read and heard.
                       Question 9. Has there been any
       testing performed at Kincaid to evaluate mercury
 5
       control at the facility?
 7
                       Yes, there has.
                       (A) If yes, please describe the
       testing performed.
9
10
                       A short test was performed in 2005
       to measure the mercury at the stack.
11
12
                       (B) What were the results and
13
       conclusions of any testing performed?
                       A 44% reduction, but the test was
14
15
       so short that we couldn't base anything on the
16
       results.
17
                   HEARING OFFICER TIPSORD: Excuse me,
18
       Mr. Saladino, how long was the test?
19
                   MR. SALADINO: I believe it was
20
       several tests over a four-day period of time.
                   HEARING OFFICER TIPSORD: Thank you.
21
22
                   MR. SALADINO:
                       (C) Based on any test results,
23
       what is the current level of mercury control
24
```

occurring at Kincaid with the existing controls.

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2
                       My answer is, I'm not sure. We
 3
       had the one short test, and I don't know what
       would be occurring now.
                       (D) Based on any testing, what
 5
       additional level of mercury control would be
7
       required by halogenated ACI in order to achieve
 8
       compliance with the proposed rule requirements of
9
       either 90% reduction or 0.0080 pounds per gigawatt
10
       hour?
                       There's not enough data available
11
12
       to answer this question.
13
                       (E) Has the company assessed
       whether this level, this additional level of
14
15
       control is achievable using halogenated ACI?
16
                       No, we have not.
                       MR. KIM: I do have some
17
18
       additional follow-up questions, if I may.
19
                   HEARING OFFICER TIPSORD: Okay, go
20
       ahead, Mr. Kim.
                   MR. KIM: Mr. Saladino, at this time
21
       have western subbituminous coals been successfully
22
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treated with activated carbon injection?

MR. SALADINO: I believe based on some

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24

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1 of the testimony I heard.
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- 2 MR. KIM: Have other coals, for
- 3 example high sulfur coals, which have more
- 4 difficulty and less efficiency with activated
- 5 carbon injection?
- 6 MR. SALADINO: Again, just based on
- 7 some of the things I've heard in the hearings,
- 8 that's my understanding.
- 9 MR. KIM: Do you believe then based
- 10 upon your understanding that there is a
- 11 competitive advantage for companies such as
- 12 Kincaid with PRB subbituminous coal or for those
- companies that instead burn high sulfur coals?
- MR. SALADINO: I don't know if I have
- enough information to answer that question.
- MR. KIM: On page five of your
- 17 testimony, you stated that Kincaid has been
- 18 effectively forced into a seller's market. Do you
- 19 recall that?
- MR. SALADINO: Yes.
- 21 MR. KIM: Is it possible, given your
- 22 statement, that the use of PRB, subbituminous coal
- 23 will give Kincaid a competitive advantage over
- other companies that can enter into an averaging

```
1
       demonstration with Kincaid?
 2
                   MR. SALADINO: I'm not sure --
 3
                   MS. BASSI: Could he explain that
       question, please.
 4
 5
                   MR. SALADINO: I'm not sure if I
 6
       follow you completely on that one.
 7
                   MR. KIM: Well, let me try it a
 8
       different way. Is it possible that the use of PRB
 9
       subbituminous coal would allow Kincaid to make
10
       reductions -- you know what, I'm just going to
       pass on this particular line -- well let me
11
12
       clarify.
13
                       The understanding that you just
       testified to, you don't have any firsthand
14
15
       knowledge of that, you are just simply stating
16
       that your understanding is based upon testimony
       you heard at the hearings?
17
18
                   MR. SALADINO: Correct.
19
                   MR. KIM: Have you, yourself, been
20
       active in any activated carbonic injection
21
       demonstrations, taken part in an activated carbon
22
       study.
                   MR. SALADINO: No, I have not.
23
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MR. KIM: Has your facility done the

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1
       same?
 2
                   MR. SALADINO: No, we have not.
 3
                   MR. KIM: Do you have any experience
       or evidence that demonstrates the inability of
       activated carbon injection to achieve the proposed
 5
       requirements that Kincaid would fall under the
 7
       Illinois proposed rule?
 8
                   MR. SALADINO: Can we go over that one
 9
       more time?
10
                   MR. KIM: Well, it's sort of a
       follow-up to your previous answer. If you've
11
12
       stated that -- let's put it a different way.
13
       Kincaid therefore has not engaged or commissioned
14
       any studies concerning activated carbon injection
15
       and projections as to reductions that you would
16
       expect to see at your Kincaid facility; is that
17
       correct?
18
                   MR. SALADINO: That's correct.
19
                   MR. FORCADE: If I could inject here,
20
       we will be presenting Andy Yaros who will be
21
       testifying to the technology based portion of the
       questions. Not that we are cutting you off, but
22
       there is another witness that is more oriented to
23
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the technology portion.

```
1 MR. KIM: This may be a question for
```

- 2 him then, do you have any firsthand knowledge how
- 3 the 74% figure that was included in your
- 4 alternative language was arrived?
- 5 MR. SALADINO: No. I know it was
- 6 developed through Andy and his group.
- 7 MR. KIM: I'll ask him.
- 8 HEARING OFFICER TIPSORD: Excuse me,
- 9 Mr. Kim, while you are getting your thoughts. We
- 10 did have additional copies made of the language if
- anyone didn't get a copy of the proposed language,
- 12 Exhibit 138. We have additional copies if they
- 13 are needed.
- 14 MR. KIM: Thank you. I'm trying to
- separate the ones that maybe aren't going to be
- 16 helpful here.
- 17 Have you conducted or has
- 18 Kincaid's facility conducted any studies that
- 19 demonstrate mercury removal is dependent on ESP
- 20 size or any other plant specific factors?
- 21 MR. SALADINO: Kincaid hasn't done any
- 22 studies on that.
- MR. KIM: When I say Kincaid, I
- 24 understand that Kincaid obviously is a subsidiary

```
or what have you of Dominion, and do you know --
 1
 2
      when I ask these questions, is it possible that
 3
      Dominion may have information that is not within
 4
      the possession or maybe has not been made aware to
 5
      Kincaid that might otherwise be responsive to
 6
      these questions?
 7
                   MR. SALADINO: Yes, that is possible.
                   MR. KIM: So your testimony and your
9
      answers then are specifically geared towards the
      body of knowledge that has been made available to
10
      the Kincaid station; is that correct?
11
12
                   MR. SALADINO: Yes, that's correct.
13
                   MR. KIM: Did your testimony include
14
      certain estimates concerning a Toxecon system?
15
                   MR. SALADINO: I don't believe it was
16
      in my mind. I think that's Andy's.
17
                   MR. KIM: I'll save those then.
18
                       Going back again to your statement
19
      that Kincaid is effectively forced into a seller's
20
      market, I think you elaborated and you stated that
```

Kincaid would be forced to strike a deal with

than to generate revenue. Do you recall that

companies that may otherwise have no incentive to

enter into an agreement to average emissions other

21

22

23

```
1
       statement?
 2
                   MR. SALADINO: Yes.
 3
                   MR. KIM: Is that related to the
       inclusion of SIPCO and CWLP as was previously
 4
       referenced in your alternative language?
 5
 6
                   MR. SALADINO: I believe that's
 7
       correct, yes.
 8
                   MR. KIM: Who was it that made the
 9
       decision to include those two utilities within the
10
       alternative language?
                   MR. SALADINO: Well, I think there
11
12
       was, if I remember correctly, there was only like
13
       three other companies besides us, and one of them
       is actually 80% owned by Ameren, so that just left
14
15
       CWLP and Southern Illinois.
16
                   MR. KIM: So you simply were going
       with those facilities that were not otherwise
17
18
       covered by the agreement?
19
                   MR. SALADINO: Yes.
20
                   HEARING OFFICER TIPSORD: If I may,
       Mr. Kim, we have characterized, starting with
21
       Mr. Harley's question, the language as including
22
```

and I put that in quotes "these other" CWLP and

Southern Illinois Power Cooperative, but I note

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23

```
1 that the actual language is actually just
```

- defining, as I understand, Kincaid. The EDU is
- 3 part of only an existing single source with EDU
- 4 and that's the definition of Kincaid. Is that
- 5 correct?
- 6 MR. SALADINO: That's correct.
- 7 HEARING OFFICER TIPSORD: So the
- 8 language goes on and gives, for example, lists
- 9 these other facilities that would be within that
- 10 definition, but by definition of Dominion/Kincaid
- 11 they are included not necessarily because
- 12 Dominion/Kincaid planned to -- I don't know how to
- 13 put it -- but by merely, by defining
- Dominion/Kincaid as Dominion/Kincaid has defined,
- they are automatically included; is that correct?
- MR. SALADINO: Yes.
- MR. FORCADE: The modeling of the
- units is the existing regulatory proposal which
- 19 had the single sources identified in one
- 20 provision, minus the Ameren unit, which is now
- 21 considered part of Ameren.
- 22 HEARING OFFICER TIPSORD: Excuse me.
- 23 Do you have a follow-up?
- 24 MR. RIESER: Yes, if I may. David

```
1 Rieser on behalf of Ameren, and I was just going
```

- 2 to ask just to clarify, these other companies that
- are included in B2, are purely by example; is that
- 4 correct?
- 5 MR. SALADINO: I believe that's
- 6 correct.
- 7 MR. RIESER: And you have not had any
- 8 discussions with any of these individual
- 9 companies, either Springfield City Water Light &
- 10 Power, Electric Energy, Inc., or Southern Illinois
- 11 Power Cooperative Marion Generating station about
- whether or not they even want to be included as
- part of this proposal; is that correct?
- MR. SALADINO: That's correct.
- 15 HEARING OFFICER TIPSORD: Mr. Kim?
- 16 MR. KIM: Going back to Exhibit 138,
- 17 which is the proposal, based upon the results of
- 18 2005 testing, is it probable or possible that
- 19 Kincaid would not have to install activated carbon
- injection on either unit until 2012?
- MR. SALADINO: That is correct,
- possible.
- 23 MR. KIM: Was that conversation taken
- into account when drafting this language?

```
1 MR. SALADINO: Some of that was and
```

- 2 just hoping that we learn more about how the units
- 3 can be operated.
- 4 MR. KIM: I don't think we have
- 5 anything else at this time.
- 6 HEARING OFFICER TIPSORD: I actually
- 7 have a question about the language. And I
- 8 apologize, I'm reading this as we go along. But
- 9 these are some of the same questions I asked of
- 10 Ameren when they were here and presented the joint
- 11 statement. Unfortunately, I still have not had a
- 12 chance to read Dynegy's and they got away without
- me asking any questions. But you used in Al a
- date of operation on or before December 3, 2008.
- I had asked previously of the Agency and Ameren
- 16 why they used, I believe it was a 2006 date if I
- 17 remember correctly.
- MR. RIESER: 2006 was in the Ameren
- 19 proposal.
- 20 HEARING OFFICER TIPSORD: Why 2008?
- 21 MR. FORCADE: I believe that's the
- 22 language from the existing definition of when the
- 23 EDUs came in. Let me see if I can just find that.
- MR. KIM: I believe Mr. Forcade is

- 2 MR. FORCADE: This was pulled directly 3 from the language of the existing Agency proposal. HEARING OFFICER TIPSORD: And different than the joint statements that we have 5 received, I'm not seeing any NOx or SO2 control? 7 MR. FORCADE: That's correct. HEARING OFFICER TIPSORD: I just wanted to be sure I wasn't overlooking it. That's 9 10 all I had. 11 Do you want to go on to Dynegy's 12 questions? 13 MR. ROMAINE: This is Chris Romaine 14 for the Agency. I think we will also have more
- emission limitation Dominion/Kincaid is proposing

through it. For example, I'm unclear what

questions about this particular language as we go

- to meet beginning July 1, 2015, and section C3 it
- 19 states, "Beginning July 1, 2015 Dominion should
- 20 achieve a minimum 74% plant wide reduction." But
- 21 in Al the duration of this alternative standard is
- limited to the period through June 30, 2015.
- 23 Could you explain that contradiction the relief
- 24 would extend to the first date?

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1

15

16

correct.

```
MR. FORCADE: The end of 2015
 1
 2
       exception would no longer be applicable. The
 3
       general rule would apply.
                   MR. ROMAINE: So the language in C3 is
 5
       not needed?
 6
                   MR. FORCADE: Right.
 7
                   MR. ROMAINE: Then the other question
       I have is what is the minimum carbon injection
 9
       rate that might be required under this proposal if
10
       carbon injection were required?
11
                   MR. SALADINO: Well, I guess the
12
       minimum would be whatever it takes to meet what
13
       we're saying we can do.
14
                   MR. ROMAINE: So the proposal does
15
       include a minimum activated carbon injection rate?
16
                   MR. SALADINO: Correct. It says we
       need to get to a 40% reduction, a 60% reduction.
17
18
                   MR. ROMAINE: Thank you.
19
                   MEMBER RAO: Just for clarification,
20
       if you can meet the 40% or 60% reduction without
       operating the ACI, does this language allow you to
21
```

MR. SALADINO: Yes, it does.

HEARING OFFICER TIPSORD: Then if

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do that?

22

23

```
we're ready for Dynegy's questions.
```

- 2 MR. SALADINO: Question No. 1. Why
- 3 will annual operations of the SCRs result in such
- 4 an increase in the operational costs of that
- 5 equipment?
- 6 It's simply a matter of paying for
- 7 ammonia to inject 12 months per year versus 5
- 8 months per year. In addition, the quicker
- 9 depletion of the SCR catalyst will increase costs
- 10 significantly. The additional fan power for the
- 11 year-round SCR operation will impact the heat rate
- 12 for Kincaid.
- 13 Question 2. Would adoption of the
- 14 mercury rule as proposed inhibit any of Kincaid's
- other environmental operations at the plant?
- 16 Absolutely. Installation of an
- 17 activated carbon injection system will certainly
- have negative impacts on the ESPs and could cause
- 19 an increase in particulate emissions at the stack.
- Question 3. How do you define
- 21 commercially available?
- I would define it as a product
- that's been fully tested and demonstrated over a
- long term, as long a term as it will be used for

compliance purposes; for example, over several

```
2
      years if it is used as a means for annual
 3
      compliance. I would also consider it commercially
      available if it is offered with performance
 5
      guarantees from a large number of vendors, not
 6
       just one or two.
 7
                   HEARING OFFICER TIPSORD: Mr. Harley?
                   MR. HARLEY: To clarify the definition
      which you just described for "commercially
9
10
      available, " how long a period of time would an
      activated carbon injection system need to be
11
12
      tested in order to satisfy commercial availability
13
      in your opinion?
14
                   MR. SALADINO: In my opinion, I think
15
      at least a full year and maybe longer. You know
16
      the outside, the environment changes things on how
17
      precipitators work. So it needs to be run for a
18
      period of time. Also you have to watch out if the
```

21 duct work and precipitators, there is a lot of

things that can happen over a period of time.

MR. HARLEY: Tested in what situation?

carbon injection starts building up somewhere over

time. In my experience crawling through a lot of

In the situation of your specific plant? Tested

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19

20

```
1 at your specific facilities or tested at a
```

- 2 demonstration facility?
- 3 MR. SALADINO: You know, I think
- 4 there's going to be variations from facility to
- facility, but somewhere with similar equipment if
- it ran for over a year and they went in and didn't
- 7 see any problems and everything worked out like
- 8 you see it supposedly working over some of the
- 9 short-term tests, then in my mind that would be
- 10 acceptable.
- MR. HARLEY: Are you familiar with the
- 12 compliance date in the rulemaking proposal now
- 13 before the Illinois Pollution Control Board?
- MR. SALADINO: Of the July 1, 2009
- 15 date?
- MR. HARLEY: Which is almost three
- 17 years from now.
- MR. SALADINO: That's right.
- 19 HEARING OFFICER TIPSORD: Question No.
- 20 4.
- 21 MR. SALADINO: If EEI were considered
- 22 part of Ameren's Illinois fleet or system and City
- 23 Water Light & Power in Springfield was not
- 24 available for averaging because of its pending

```
deal with the Sierra Club, what impact would this
 1
 2
       have on Kincaid's ability to effectively average
 3
       with other single-facility companies in order to
       comply with Phase I of the Illinois mercury rule?
                   Since the EEI Joppa steam plant is 80%
 5
       owned by Ameren, we never considered that plant
7
       available for averaging, and we raised that
 8
       problem in our comments on the proposed rule and
9
       in our pre-filed testimony. So the effect is that
       we cannot average with those two plants.
10
                       Who would be left for Kincaid to
11
12
       average with?
13
                       The only plant still eligible for
14
       the Average Demonstration would be the Southern
15
       Illinois Power Cooperative plant in Marion,
16
       Illinois. The two units at the Marion plant
17
       comprise less than 300-megawatts, roughly half the
18
       size of one Kincaid unit.
19
                   Then there is (a) and (b). Is such
20
       and out-of-system averaging plan a viable
       alternative for Kincaid? Why or why not?
21
                       Such an arrangement would put
22
       Dominion at a severe negotiating disadvantage and
23
24
       we have never seriously considered it. When
```

- 1 compared to the averaging opportunities of the
- 2 other big three Illinois utilities, the chances of
- 3 working out such a deal would be very small. And
- 4 since the Marion plant is the only potential
- 5 averaging partner and that plant is only about 273
- 6 megawatts, the amount of averaging relief would be
- 7 very small. If the Marion plant was able to run
- 8 with 100% removal, the Kincaid units would have to
- 9 run at 88% removal in order for all three plants
- 10 to average 90%. I don't believe that 100% removal
- is realistic, therefore this alternative is
- 12 useless to us.
- 13 Question 5. Why would other
- 14 companies have no incentive to enter into an
- 15 Averaging Demonstration with Kincaid other than to
- 16 generate revenue?
- There's only one other plant and
- it's so small it wouldn't make sense for them to
- 19 try to over-comply just to help Kincaid.
- No. 6. In your opinion, does the
- 21 TTBS truly offer flexibility?
- No, it does not. The TTBS does
- 23 not offer much flexibility for several reasons.
- 24 First, the cap on the amount of megawatts in the

```
1 single-facility pool eligible for the TTBS is so
```

- 2 low that Kincaid is automatically excluded.
- 3 Second, the optimization provisions are overly
- 4 prescriptive and prohibitively costly. We
- 5 estimate the costs of ACI at 5 pounds per unit
- 6 would be approximately \$8.6 million dollars per
- 7 year. The net income after taxes at Kincaid over
- 8 the last six years has only averaged \$16.9 million
- 9 dollars. So this cost is over half of our annual
- 10 net income after taxes.
- 11 HEARING OFFICER TIPSORD: Excuse me.
- 12 Mr. Harley?
- 13 MR. HARLEY: You just testified that
- 14 you felt that the optimization requirements in the
- TTBS were overly prescriptive; is that correct?
- MR. SALADINO: That's correct.
- MR. HARLEY: Is there anything in the
- 18 proposal that you brought before the Board today
- 19 that requires optimization of an activated carbon
- 20 injection system?
- MR. SALADINO: No, it does not.
- 22 HEARING OFFICER TIPSORD: Question 7.
- MR. SALADINO: Have you had the
- 24 opportunity to review the Multi-Pollutant Strategy

```
1
      proposed by Ameren on July 28th?
 2
                   MR. SALADINO: Yes.
 3
                       If so, in your opinion does the
 4
      MPS offer Kincaid opportunities for flexibility?
 5
                       The MPS is so clearly designed to
      accommodate one company's plans for compliance
7
      with the 2015 CAIR, that it offers Kincaid no
      opportunity for compliance flexibility. Kincaid's
9
      NOx emissions are already the lowest in the state
      during the ozone season and will continue to be
10
      among the very lowest in year-round emissions in
11
12
      2009 when the first phase of the CAIR rule
13
      commences. IEPA calculations show that SO2
14
      emissions from Kincaid are already the lowest from
15
      among coal-fire plants in Illinois. Kincaid has
16
      spent many millions to reduce SO2 in the past
17
      eight years. The Ameren reduction plan is late to
18
      the game. The plan also allows several plants to
19
      get off with no mercury reductions until 2015.
20
                       Kincaid does agree with the
21
      general premises that ACI need not achieve 90%
      reduction and not all EGUs need to be installed.
22
                   HEARING OFFICER TIPSORD: I also need
23
24
      to note for the record I have continued to refer
```

- 1 to the questions as coming from Dynegy. I would
- 2 note that Schiff Harden has withdrawn as their
- 3 counsel of record in this, and so my apologies.
- 4 It is actually questions from Midwest Generation
- 5 that we had for Mr. Saladino, and we have some
- 6 more for Mr. Yaros. And in the record where I
- 7 have continued to refer to Dynegy, it is in fact
- 8 Midwest Generation, and I understand
- 9 Dynegy/Midwest Generation has entered their joint
- 10 statement just to clear the record up a little
- 11 bit.
- Do we have anything if else for
- 13 Mr. Saladino? Thank you Mr. Saladino. Then I
- think we're ready for Mr. Yaros.
- 15 HEARING OFFICER TIPSORD: You know
- 16 what, Mr. Saladino, why don't you stay up just in
- 17 case there are some follow-ups that you both might
- 18 be able to answer better together.
- 19 HEARING OFFICER TIPSORD: Ms. Bassi
- 20 had taken back Exhibit 128 to make additional
- 21 copies for participants, and she's handing that
- 22 back and she now has copies, color copies.
- Mr. Yaros, whenever you are ready.
- MR. FORCADE: We have no supplemental

- 1 statement. We are prepared to proceed with
- 2 questions.
- MR. KIM: Before we do that though,
- 4 there was just one or two questions that Mr.
- 5 Saladino thought that Mr. Yaros might be better
- 6 situated to answer concerning the proposal, and I
- 7 guess the only one that I can now recall was the
- 8 40% and 60% plantwide reductions that are proposed
- 9 to be implemented by July 1, 2009, and July 1,
- 10 2013 respectively. Can you explain how those
- 11 figures were arrived at?
- MR. YAROS: My understanding is that
- 13 40% was close to what we had seen in a test. 60%
- 14 I'm not sure how that specific number was arrived
- 15 at.
- MR. KIM: When you say a test, what
- 17 test are you referring to?
- 18 MR. YAROS: Just the four-day test
- 19 that we did at Kincaid last year to measure
- 20 mercury removal.
- 21 MR. KIM: That's all I have on the
- language.
- 23 HEARING OFFICER TIPSORD: Go ahead
- 24 with the pre-file questions.

```
MR. YAROS: These are the IEPA
 1
 2
       questions.
 3
                       No. 1. Has your company made an
       assessment of what level of mercury control the
 4
       control configuration at Kincaid achieves?
 5
                       We performed a limited stack test
 6
 7
       in 2005 with the SCR in service for NOx control.
 8
                       (B) If yes, what were the results
 9
       of this assessment?
10
                       An apparent 44% capture rate was
       measured at the stack. The tests that were
11
12
       conducted were not in compliance with the approved
13
       USEPA Appendix K-Part 75 method though. Only two
14
       traps per train were used instead of three and the
15
       sample flow rate did not follow the stack flow
16
       rate.
17
                   HEARING OFFICER TIPSORD: Mr. Yaros,
18
       could you slow down a little bit.
19
                   MR. YAROS: (C) Who conducted this
20
       assessment and what measures did they utilize to
21
       reach their conclusions?
22
                       EPRI solutions and Dominion
       personnel conducted the assessment by performing
23
```

the modified QuickSEM method. This method does

```
1
       not conform to the USEPA approved Appendix K-Part
 2
       75 procedure.
 3
                       (D) Has the company assessed
 4
       whether there are mercury control optimization
 5
       techniques for the existing controls at Kincaid
       that could help improve mercury control? Please
 7
       refer to Section 8 of the Agency's Technical
       Support Document for the proposed mercury rule for
9
       potential optimization techniques.
10
                       No mercury control optimization
11
       techniques have been tested at Kincaid.
12
       Increasing LOI was not considered to be a viable
13
       option due to the adverse impact on the operation
       of the SCR. As described in Section 8.6.2,
14
15
       halogenated sorbent injection tests are being
16
       submitted for budget approval in 2007.
17
                       No. 2. Has your company evaluated
18
       whether compliance could be achieved at Kincaid by
19
       utilizing either the 90% reduction option or the
20
       0.00080 pound per gigawatt hour option in
21
       accordance with the proposed mercury rule?
                       No in-depth evaluation has been
22
       conducted on whether Kincaid can achieve the 90%
23
```

reduction or the 0.00080 per pound gigawatt per

```
1
       hour rate on a dependable basis. We are aware
 2
       that tests are ongoing with Activated Carbon and
 3
       Halogenated Activated Carbon injection systems at
       other plants nationwide, and we have monitored and
       evaluated the results of these studies in terms of
 5
       relevance to Kincaid. Due to the fact that
7
       Kincaid burns PRB coal with low chlorine content,
 8
       our initial assessment is that neither the 90%
9
       reduction nor the 0.00080 per pound gigawatt per
       hour options can be reliably obtained with the
10
11
       current technology.
12
                       And then since the answer to 2 was
13
       essentially no, then questions (A), if yes what
14
       were the results of the evaluation, and (B ) who
15
       conducted this evaluation and what measures did
16
       they use to make this assessment, were moot.
                       Question 3. Has your company
17
18
       assessed what additional control equipment
19
       measures and/or costs would be required at Kincaid
20
       to comply with the proposed mercury rule?
21
                       No detailed assessment has been
       conducted to date. However, our preliminary
22
       budget for 2007 provides for testing of
23
24
       halogenated sorbent injection at Kincaid.
```

```
Again, question (A), if yes, what
 1
 2
      were the results of this assessment, and (B) who
 3
      conducted this assessment and what measures did
      they utilize to reach their conclusions, are moot.
 5
                   MR. KIM: Mr. Yaros, you said no
 6
      detailed assessment has been conducted and you
7
      made reference to your upcoming budget. Has any
 8
      other review less detailed been conducted?
9
                   MR. YAROS: No.
10
                       No. 4. Your testimony states that
      your company supports the federal CAMR rule. Has
11
12
      your company assessed what additional control
13
      equipment measures and costs would be required to
14
      comply with the federal CAMR in Phase 1?
15
                       Yes, with the planned addition of
16
      several scrubbers on the Dominion coal-fired
17
      fleet, we're optimistic that we will overcomply on
18
      CAMR Phase 1 on an aggregate basis across our
19
      system. We also have the advantage of burning
20
      coal with a higher chlorine content at many of our
21
      plants. Due to the substantial difference of the
      proposed Illinois rule versus CAMR, no in-depth
22
      assessments have been performed specifically for
23
24
      the Kincaid plant.
```

```
1
                       Same question for Phase II of
 2
       CAMR?
 3
                       Yes.
                       (A) If yes, what were the results
 5
       of this assessment?
 6
                       Our preliminary assessment for
 7
       compliance with CAMR Phase II included continued
       reliance on the co-benefits on facilities that
 9
       burn a much higher sulfur coal than Dominion burns
       at Kincaid, and the ability to comply with the
10
       aggregate across our entire coal-fired generation
11
12
       fleet. We have placeholders for mercury-specific
13
       controls on some units, but no economic
14
       assessments have yet been completed.
15
                   MR. KIM: Mr. Yaros, do you -- just
16
       maybe by way of background, aside from Kincaid,
       how many other facilities does Dominion have in
17
18
       its fleet and where are those facilities located?
19
                   MR. YAROS: We have two coal stations
20
       in Massachusetts. A total of 7 coal units. We
21
       have, I think it's five stations in Virginia, a
       total of approximately a dozen coal units. We
22
       have three, one station in West Virginia, with
23
24
       three coal units and one station in Indiana, with
```

- 1 two coal units in addition to Kincaid.
- 2 MR. KIM: And was it your testimony
- 3 that although perhaps specific assessments have
- 4 not been done, as was described in question 4, for
- 5 the Kincaid facilities, that you might have some
- 6 similar information or assessments that were
- 7 performed at other facilities within the Dominion
- 8 system?
- 9 MR. YAROS: Yes.
- 10 MR. KIM: Could you describe what kind
- of assessment you are referring to and which
- 12 plants those were conducted at?
- 13 MR. YAROS: We did a similar test to
- 14 the four-day test that we did at Kincaid to
- measure mercury removal at many of our units.
- MR. KIM: And are those other units,
- 17 how do they compare in terms of coal type and size
- and capacity and so forth compared to Kincaid?
- 19 MR. YAROS: They are very dissimilar.
- 20 They for the most part burn foreign coal or
- 21 Eastern bituminous coal. Kincaid by far burns the
- lowest sulfur in the system.
- 23 MR. KIM: Is it safe to say Kincaid
- 24 because of its particular specifics stands apart

```
from the other systems within Dominion's fleet?
```

- 2 MR. YAROS: I am not sure what you
- 3 mean by that.
- 4 MR. KIM: Well, based upon coal type,
- 5 based upon things like that, I believe you just
- 6 stated that you don't have any other facility
- 7 within the Dominion system that is similar to the
- 8 Kincaid station; is that correct?
- 9 MR. YAROS: No. I guess I said they
- 10 are all different in some, in either technology
- 11 type or fuel, but we do have one other cycling
- 12 unit in Indiana that also burns PRB coal.
- 13 MR. KIM: So you do think some of the
- 14 assessment information you received at, for
- example, the Indiana facility might be applicable
- 16 to the Kincaid facility?
- MR. YAROS: Well possibly.
- 18 MR. KIM: Has that information been
- 19 reduced to writing in terms of a report?
- 20 MR. YAROS: We have a report with the
- 21 test results. I referenced the EPRI Solutions
- 22 testing that we did with EPRI Solutions last year.
- Yes, we do have a report from them.
- MR. KIM: And that report was not then

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1 limited just to Kincaid? That's the report you
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- 2 are referring to when you say it involved all the
- 3 other --
- 4 MR. YAROS: Well, there is a separate
- 5 report for Kincaid, but we also have information
- on some of the others, and we've also done
- 7 extensive testing -- we've also done more
- 8 extensive testing at our plants in Massachusetts.
- 9 MR. KIM: Thank you.
- 10 HEARING OFFICER TIPSORD: Mr. Harley?
- MR. HARLEY: You mentioned that you've
- done more extensive testing at your plants in
- 13 Massachusetts. Are you familiar with the fact
- 14 that Massachusetts, like Illinois, has developed
- or is in the process of developing a state
- 16 specific mercury standard different from the
- 17 federal CAMR?
- MR. YAROS: Yes, I am.
- 19 MR. HARLEY: Are you familiar with the
- 20 mercury reduction targets that Massachusetts is
- imposing on coal-fired power plants?
- MR. YAROS: Yes, I am.
- MR. HARLEY: What are those
- 24 reductions?

```
1
                  MR. YAROS: They are somewhat
 2
      different in that it's an 85% removal requirement,
 3
      but it is not 85% removal of the coal going in.
      It's based on a baseline at some point in the
 5
      past. So it gives you a lot more flexibility from
      the standpoint you can change coals, do other
7
      things. It's not nearly as severe as the 90%
 8
      requirement removal on the coal going in.
9
                  MR. HARLEY: And what have you done at
      your two Massachusetts facilities in order to
10
      comply with the 95% reduction?
11
12
                  MR. YAROS: Well, the 95% reduction
13
      does not go into place until 2008.
                  MR. HARLEY: What do you intend to do
14
15
      at your Massachusetts plants?
16
                  MR. YAROS: We intend to put ACI on
17
      those. Although, when we did test, the last test
18
      we did in 2004 we had trouble getting to the
19
      targeted rate. We hit, like C.J. was talking
20
      about before, diminishing returns where we were
21
      putting in 10 pounds per megawatts, and all of a
      sudden we went to 20 and no change. So we
22
      basically hit a wall. So we do have some concerns
23
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there.

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1 MR. HARLEY: What type of carbon were
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- 2 you injecting in 2004?
- 3 MR. YAROS: It was not a brominated
- 4 carbon. I don't think that was available at that
- 5 time. Although, we are not burning PRB coal
- 6 there. We are burning a different coal.
- 7 MR. HARLEY: Is it your opinion that
- 8 using activated carbon injection at the
- 9 Massachusetts facilities will enable you to meet
- 10 the Massachusetts' 85% reduction target?
- 11 MR. YAROS: I am not sure that it
- 12 will. We are looking at, we are actively looking
- 13 at -- we also have very stringent SO2 regulations
- 14 there. So we are putting scrubbers in on two of
- 15 the units. So between the activated carbon and
- 16 the scrubbers, you know, again, for these you
- don't want to be in a position of coping with
- 18 strategy, but we are hoping to get there with the
- 19 units.
- 20 MR. HARLEY: You previously testified
- 21 that you are going to be installing scrubbers on
- your Illinois facilities?
- MR. YAROS: No. I testified we are
- 24 putting several new scrubbers across our system.

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1 That is including units in Virginia and
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- 2 Massachusetts.
- 3 MR. HARLEY: But not Illinois?
- 4 MR. YAROS: Correct. When you look
- 5 at, when I look at this on a system basis, from a
- 6 cap and trade situation, which is the Clean Air
- 7 Act cap and trading SO2, it makes sense or it
- 8 makes most economic sense to scrub where your
- 9 sulfurs are.
- 10 MR. HARLEY: Can you generally
- 11 describe the expense? Can you describe generally
- 12 the expense of installing activated carbon
- injection systems on your Massachusetts
- 14 facilities?
- MR. YAROS: I think roughly for three
- 16 coal units it will be on the order of \$4 to \$6
- million dollars, but again, the expense is not in
- 18 the cap acts up front for those, it's in the
- 19 carbon that you have to use.
- 20 MR. HARLEY: What steps are you taking
- 21 at the Massachusetts facilities to optimize those
- 22 units, that is to integrate it with the
- 23 technologies at those facilities?
- 24 MR. YAROS: The ACI is not installed

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1 yet. We have not gotten to that pint yet.
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- 2 MR. HARLEY: Is it your intention to
- 3 optimize?
- 4 MR. YAROS: I am not sure what you
- 5 mean by optimize.
- 6 MR. HARLEY: To make sure that those
- 7 units are operating as efficiently as other
- 8 equipment can with sorbent injection rates
- 9 necessary to achieve the 85% reduction goal.
- 10 MR. YAROS: I assume we will run those
- 11 units as efficiently as possible given the
- 12 economic and the environmental requirements that
- 13 we need to meet.
- MR. HARLEY: In Massachusetts are you
- 15 prepared to inject more than 3 pounds of carbon if
- 16 necessary in order to achieve the 85% reduction?
- 17 MR. YAROS: I think it is a question
- of what is the overall best way to get there in
- 19 terms of compliance. Since we are putting
- 20 scrubbers on, we'll look at different types of
- 21 ACI, activated carbon. We'll also look at coal.
- 22 If we use foreign coals there, which we can't get
- 23 to or would be cost prohibitive in Illinois, we
- 24 use foreign coals that have low mercury and remove

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1 mercury very well there. So I'm not sure. I am
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- 2 hoping we won't have to get to 3 pounds.
- 3 MR. HARLEY: But if necessary in order
- 4 to achieve compliance --
- 5 MR. YAROS: Our company's position is
- 6 that we will do, we will comply with the spirit
- 7 and intent of the law.
- 8 MR. HARLEY: Why is it in
- 9 Massachusetts you would be willing to inject more
- than 3 pounds of carbon to achieve an 85% level,
- 11 but in Illinois under your proposal you are
- 12 prepared to only inject 3 pounds maximum?
- MR. YAROS: I think it's a question of
- 14 economics in Massachusetts. I believe it's a much
- 15 higher cost market. We are on the market. It
- 16 makes more sense to look at different
- 17 alternatives. I think C.J. talked about the
- 18 severe economic hit that we would suffer in
- 19 Illinois.
- 20 MR. HARLEY: And why is it that in
- 21 Massachusetts you would take steps to optimize an
- 22 ACI system with other aspects of the facility
- operations, but there's no such requirement in the
- 24 proposal you've now put before the Board?

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1
                   MR. YAROS: I assume that we will, as
 2
       I mentioned before, we'll run our plants as
 3
       efficiently and effectively as we can from an
       economic and environmental standpoint.
                   MR. HARLEY: Thank you very much.
 5
 6
                   Ms. Bassi?
 7
                   MS. BASSI: Mr. Yaros, I'm Kathleen
 8
       Bassi. Does a company like Dominion that has
 9
       units in many different states, had it been
10
       looking at CAMR compliance in -- that's CAMR --
       compliance for some period of time?
11
12
                   MR. YAROS: Yes, we have.
13
                   MS. BASSI: Do you have a sense of how
14
       long Dominion had been planning CAMR compliance?
15
                   MR. YAROS: We've been obviously
16
       looking at it since the rules with mercury were
17
       introduced back several years ago.
18
                   MS. BASSI: I don't recall exactly
19
       when that was, but I believe the rule was
20
       finalized in 2005. So it had been out there for a
       number of years before that; is that your
21
22
      recollection?
                   MR. YAROS: Yes.
23
24
                   MS. BASSI: And I believe you implied
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1 from your testimony that Dominion's plans for
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- 2 compliance with CAMR and probably CAIR was a
- 3 systemwide approach; is that correct?
- 4 MR. YAROS: That is correct.
- 5 MS. BASSI: When did you first hear
- 6 about Illinois' proposed 90% rule?
- 7 MR. YAROS: I guess it would have been
- 8 just earlier this year.
- 9 MS. BASSI: Earlier this year, perhaps
- 10 January this year?
- 11 MR. YAROS: I believe so.
- MS. BASSI: What did that do to your
- 13 systemwide planning?
- 14 MR. YAROS: It made it much more
- difficult. Again, we've got, there's a lot of
- 16 uncertainty anyway given the lack of history of
- 17 mercury measurements and the limited amount of
- 18 tests and the limited times, the limited lengths
- 19 of the tests. So it just added increased
- 20 uncertainty.
- MS. BASSI: Would you say or could you
- 22 characterize your systemwide planning as a type of
- 23 multi-pollutant strategy?
- MR. YAROS: Yes, definitely.

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MR. KIM: If I may. Mr. Yaros, you
1
 2
      stated that your company had been planning CAMR
 3
      compliance for a period of time; is that correct?
                  MR. YAROS: Yes.
 5
                  MR. KIM: And that you were not aware
      of Illinois' proposed rule specifics until earlier
7
      this year; is that correct?
 8
                  MR. YAROS: Yes.
9
                  MR. KIM: But as part of CAMR you did
      note that CAMR does provide flexibility to
10
      individual states to seek to impose their own
11
12
      specific state plan; is that correct?
13
                  MR. YAROS: That is true.
14
                  MR. KIM: So as part of your planning,
15
      you did assume that there was a possibility that
16
      different states, including Illinois, may take a
17
      different path than the federal CAMR; is that
18
      correct?
19
                  MR. YAROS: We assumed that was a
20
      possibility. But until we saw, until we had more
21
      definition on what those actions might be, it was
      difficult to take those into account in planning.
22
                  MR. KIM: Let's put it this way. If a
23
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state was going to take a different plan than

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federal CAMR, they wouldn't be taking a more
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- 2 relaxed plan, is that your understanding?
- 3 MR. YAROS: That is correct.
- 4 MR. KIM: If a state was to take the
- 5 option under CAMR to seek its own state plan, they
- 6 would be seeking a more stringent plan?
- 7 MR. YAROS: Yes, and we have more --
- 8 MR. HARLEY: One follow-up on that.
- 9 Did you oppose the 85% percent mercury reduction
- 10 rulemaking proposal in Massachusetts?
- 11 MR. YAROS: At the time of the
- 12 rulemaking, we did not own the plant. So we had
- 13 no ownership. So the answer is we were not
- involved.
- MR. HARLEY: Thank you.
- 16 HEARING OFFICER TIPSORD: And I
- believe we are back to question 4(B). And some of
- 18 these may have been answered in this discussion.
- 19 If you feel they have been answered or the Agency
- feels, then you can go on.
- 21 MR. KIM: I think 4(B) probably has
- 22 been.
- HEARING OFFICER TIPSORD: 4(C)?
- MR. YAROS: 4(C) What are the expected

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1 reductions in mercury emissions in pounds reduced
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- per year and percentage reduced per year from a
- 3 given base year as a result of your federal CAMR
- 4 compliance strategy in Phase I? Same question for
- 5 Phase II? Please use a year from 2002 to 2005 as
- 6 the base year, if available. If not, please
- 7 identify the base year.
- At the start of this process we
- 9 had very little specific information about the
- 10 mercury emissions from our coal-fired fleet. We
- 11 have been conducting stack tests across our system
- over the past year and are now beginning to get a
- 13 clearer picture of our mercury emissions. Our
- 14 preliminary assessment, based on the 1999 USEPA
- 15 ICR data, indicated the Dominion coal-fired plants
- would require a 30-36% reduction under CAMR Phase
- I and a 70-75% reduction in Phase II.
- 18 (D) Would Kincaid purchase or bank
- mercury emissions under the federal CAMR rule?
- 20 Please explain.
- 21 We have no plans at this time to
- 22 purchase mercury allowances under the CAMR rule.
- 23 Again, our preliminary plans are to rely on the
- 24 co-benefit reductions achieved through controls on

- 1 units that burn a much higher sulfur coal than
- 2 Dominion burns at Kincaid and to comply with the
- 3 CAMR requirements in the aggregate across our
- 4 generation fleet.
- 5 HEARING OFFICER TIPSORD: All right.
- 6 Mr. Harley?
- 7 MR. HARLEY: So is it correct to say
- 8 that you will be relying on mercury reductions
- 9 that you will achieve in Massachusetts, Virginia,
- 10 West Virginia or Indiana in order to comply with
- 11 CAMR, meaning in Illinois?
- MR. YAROS: Under the CAMR rule we
- would have the opportunity to use emission or
- 14 emission cuts in Virginia and West Virginia to be
- 15 able to do that.
- MR. HARLEY: So the mercury reductions
- 17 would be achieved in Virginia and West Virginia in
- 18 order to allow you to continue to operate with
- 19 higher mercury emissions in Illinois?
- 20 MR. FORCADE: Objection to higher
- 21 mercury emissions. Higher than what?
- MR. HARLEY: Than otherwise required
- under CAMR.
- 24 MR. FORCADE: CAMR doesn't require

```
1
       mercury emissions.
 2
                   MR. YAROS: Yes. You have to trade.
 3
                   MR. HARLEY: I will withdraw that
 4
       question.
                   HEARING OFFICER TIPSORD: Question No.
 5
 6
       5.
 7
                   MR. YAROS: On page two of your
 8
       testimony you claim that there is a continuing
9
       problem with the current state of the mercury CEMs
10
       technology. However, isn't it true that the
       proposed Illinois rule also allows for the use of
11
12
       sorbent trap monitoring?
13
                       Yes.
                       No. 6. Therefore isn't it also
14
15
       true that your reasoning for rejecting the 90%
16
       reduction based on monitoring issues is flawed as
17
       you based that reasoning on the claim that one is
18
       unable to measure low concentrations of mercury?
19
                       No, our reasoning is not flawed.
20
       As we have stated many times, the reason we reject
21
       the 90% reduction is because we honestly do not
22
       have any confidence that at the current state of
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the technology we can achieve a 90% reduction at

Kincaid for a sustained period of time. Accepting

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23

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1 any realistic risk of noncompliance is
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- 2 unacceptable to Dominion.
- While we certainly believe the
- 4 monitoring technology must improve before these
- 5 monitoring requirements become effective, we also
- 6 have confidence that we will be able to work
- 7 through those difficulties with the cooperative
- 8 understanding of the regulatory authorities.
- 9 Regarding the USEPA's Appendix K
- 10 method, the minimum reportable threshold according
- 11 to Subpart 1, Part 75 is .5 micrograms per normal
- 12 cubic meter. Any level below this .5 microgram
- threshold would still be reported at .5 micrograms
- 14 per normal cubic meter. Utilizing the limited
- 15 2005 Kincaid mercury stack test results, the .5
- 16 microgram per normal cubic meter threshold would
- 17 be obtained before the 90% capture rate is
- 18 achieved. That's all.
- 19 HEARING OFFICER TIPSORD: Does the
- 20 IEPA have any additional follow-ups?
- MR. KIM: No.
- 22 HEARING OFFICER TIPSORD: Then let's
- go on to Midwest Generations questions.
- MR. YAROS: Question 1. On page 3 of

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1 your testimony, you quote from a DOE/NETL report.
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- 2 Just to clarify, is this document the report of
- 3 the activities and conclusions of the Pleasant
- 4 Prairie demonstration?
- Yes, it's a report, DOE/NETL
- 6 Report, Department of Energy, National Energy
- 7 Technology Laboratory, "Field Test Program to
- 8 Develop Comprehensive Design, Operating and Cost
- 9 Data For Mercury Control Systems." And I've got
- 10 the specifics if anybody wants it.
- 11 Question 2. What is the source of
- 12 your information regarding the Meramec
- 13 demonstration?
- 14 Meramec demonstration was
- referenced in the following report: "The Control
- 16 Of Mercury Emissions From Coal Fired Electric
- 17 Utility Boilers: An Update." This was an EPA
- document that I can give more information on.
- No. 3. What is a full-scale test
- 20 demonstration?
- 21 Test is applied to entire, fully
- 22 functional unit under normal operating conditions.
- Question 4. With respect to the
- Monroe demonstration, what is ADA-ES?

```
ADA-Environmental Solutions. The
1
 2
      company provides environmental technologies and
 3
      specialty chemicals for coal-burning power plants.
                   HEARING OFFICER TIPSORD: Slow down in
 5
      reading your answers.
                   MR. YAROS: No. 5. With respect to
 6
 7
      the St. Clair demonstration, you state that the
 8
      mercury capture averaged 93% over the first 25
9
      days of the 30-day demonstration. Question (A)
10
      What were the averages for the other five days?
      And (B) How do those averages affect the 30-day
11
12
      average? That is, what is the 30-day average?
13
                       We cite the USEPA report "Control
14
      of Mercury Emissions From Coal Fired Utility
15
      Boilers: An Update" from February 2005 for that
16
      statement. I do not know what the average removal
17
      was for the other five days.
18
                       Question 6. Did the St. Clair
19
      demonstration include tests of 100% subbituminous
20
      coal in addition to the testing of the 85/15 blend
      of subbituminous and bituminous coals?
21
                       My understanding is that some
22
      testing was also conducted with 100% subbituminous
23
24
      coal, but I do not have those results. My
```

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1 information on the tests for the blended coal
2 comes from the USEPA report cited above and
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- 3 directly from the company that owns and operates
- 4 the St. Clair plant, DTE Energy.
- 5 My understanding is that the plant
- 6 typically burns the blended coal, 85/15. The
- 7 biggest issue with this test is the oversized ESP
- 8 and the size of the St. Clair unit tested, which
- 9 was only 80 megawatts. Our Kincaid units are
- 10 about 600 megawatts each and have ESPs half the
- 11 equivalent size of the St. Clair units in terms of
- 12 specific collection area.
- 13 Question 7. What is a low-rank
- 14 coal?
- 15 High moisture, low BTU coal, which
- typically is subbituminous and lignite coals.
- 17 Question 8. In your opinion, how
- 18 may the difference in speciation of the
- 19 subbituminous coals burned at Kincaid, which is
- 20 55% elemental mercury compare to the speciation at
- 21 Meramec which is only 38% elemental mercury and
- 22 62% Hg2, affect mercury removal?
- The absorption rate on to fly ash
- and/or carbon is much lower for the elemental

1	mercury versus oxidized mercury downstream of the					
2	air heaters or the inlet of precipitators.					
3	That concludes the questions.					
4	HEARING OFFICER TIPSORD: Mr. Yaros,					
5	thank you very much for responding. Let's go off					
6	the record.					
7	(Brief discussion off the record,					
8	after which the following					
9	<pre>proceedings were had:)</pre>					
10	HEARING OFFICER TIPSORD: Let's go					
11	back on the record. Well we've reached the end of					
12	the currently scheduled hearings in this					
13	proceeding, and I want to put a couple questions					
14	on the record that I invite everyone to comment					
15	on, and they have to do with the joint statements					
16	and also frankly now the Dominion filing from this					
17	morning.					
18	First of all, we asked Ameren when					
19	Ameren was here, some very specific questions					
20	about some of the language, and we invite everyone					
21	to comment on those on both the Dynegy/Midwest					
22	Generation/Ameren joint statements and					
23	Dominion/Kincaid's proposed language.					
24	And now with the caveat that I					

```
have not thoroughly reviewed either joint
 1
 2
       statements or Dominion's filing today, one of the
 3
       concerns that I have, and I think that you saw it
       come out in our questions from the Board, are the
 5
       impacts and how this proposed language interacts
       with the CAIR proposal, specifically given that
7
       there are cross references in all three proposals
       to the language in the CAIR proposed rule that
9
       obviously has not yet been adopted, and there are
       reporting requirements at 240, 225, 229. I would
10
11
       ask that anyone who wants to comment on how the
12
       Board can best handle the interaction between the
13
       MPS and the CAIR proceeding, and that's more true
14
       with the MPS than obviously with Dominion's
15
       language, but how best to handle the interaction.
16
                       We've talked off the record and we
17
       will currently set as a date for post-hearing
18
       comments on September 20th.
19
                       And before we do close, I have a
20
       couple of comments. First of all, I want to put
21
       on the record my deep appreciation to the court
       reporting service and all of the court reporters
22
       who have been here, especially given the tag-team
23
24
       way they did it, which made them able to give us
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1
       the transcripts so fast. They have been
 2
       unobtrusive and helpful, and I really appreciate
 3
       it. And I want to thank you all very much, and I
       want that on the record.
                       I also want to thank all of you.
 5
       It's been 18 days of hearings. We have at times
7
       had our death stops, but for the most part
 8
       everyone has been courteous and collegial and has
9
       not gone as crazy as we all could have. And so I
10
       thank all of you very much.
11
                       Mr. Forcade?
12
                   MR. FORCADE: Just the last thing if
       we are done with the questions, we would move
13
14
       Exhibit 138.
15
                   HEARING OFFICER TIPSORD: It's
16
       admitted.
17
                       And so thank you all very much,
18
       and I thought I'd never get to say this, we are
19
       adjourned.
20
                       (Whereupon the hearing was
21
                        adjourned.)
22
23
       STATE OF ILLINOIS. )
24
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1) SS.				
2	COUNTY OF COOK)				
3	I, DENISE A. ANDRAS, CSR, and				
4	Notary Public in and for the County of Cook and				
5	State of Illinois, do hereby certify that on the				
6	23rd day of August, 2006, at 9:00 a.m., at the JR				
7	Thompson Center, Chicago, Illinois, this hearing				
8	of the POLLUTION CONTROL COMMISSION was had.				
9	I further testify that the said				
10	hearing was by me reported and witnesses were				
11	sworn to testify and that the foregoing is a true				
12	record of the testimony given on that day.				
13	I further certify that I am not				
14	counsel for nor related to any of the parties				
15	herein, nor am I interested in the outcome hereof.				
16	In witness hereof, I have hereunto set my hand and				
17	seal of office this 24th day of August, 2006.				
18					
19					
20	Notary Public				
21	CSR No. 084-00343				
22					
23					
24					