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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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IN THE MATTER OF:)
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AMEREN ASH POND CLOSURE) R09-21
RULES (HUTSONVILLE POWER) (Rulemaking - Land)
STATION): PROPOSED 35)
ILL. ADM. CODE 840.101)
THROUGH 840.144)

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STATE OF ILLINOIS
Pollution Control Board

Proceedings held on September 29, 2009, at 8:36 a.m., at
the Crawford County Courthouse Annex, 100 Douglas Street,
Robinson, Illinois, before Timothy J. Fox, Hearing
Officer.

Reported By: Karen Waugh, CSR, RPR

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Board Members present:
Board Member Andrea S. Moore
Board Member Thomas E. Johnson

Board Staff Members present:

Anand Rao

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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SCHIFF HARDIN LLP

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PROCEEDINGS

(September 29, 2009; 8:36 a.m.)

HEARING OFFICER FOX: Good morning, everyone, and welcome to this Illinois Pollution Control Board hearing. I appreciate your timeliness in arriving and being prepared so that we may begin at the time of 8:30. My name is Tim Fox, and I'm the hearing officer for this rulemaking proceeding, which is entitled "Ameren Ash Pond Closure Rules, paren, Hutsonville Power Station, closed paren, Proposed 35 Illinois Administrative Code Sections 840.101 through 840.144."

I certainly want to introduce -- present today also from the Board at my immediate right is Board Member Andrea S. Moore, who is the lead board member in this rulemaking. At my far left is Board Member Thomas E. Johnson, and also present at my immediate left is Anand Rao of the Board's technical staff.

The board docket number for this rulemaking is R09-21. To review very briefly the procedural history, Ameren Energy Generating Company filed the original rulemaking proposal on May 9 of 2009, and in an order dated June 18, 2009, the Board accepted the proposal for hearing, granted Ameren's request for a waiver of specified filing requirements but denied Ameren's motion

1 for expedited review. In a hearing officer order dated
2 June 30 of 2009, this hearing was scheduled, and it is
3 the one now scheduled to take place in this docket.

4 For the hearing today, the Board on August 18,
5 2009, received prefiled testimony on behalf of Ameren by
6 Mr. Michael Bollinger, who is present here today. Also
7 on August 18, the same date, the Board received from the
8 Illinois Environmental Protection Agency prefiled
9 amendments to Ameren's original language and prefiled
10 testimony in support of those amendments from the
11 following persons: Mr. William Buscher, Mr. Lynn
12 Dunaway, Mr. Richard Cobb, Mr. Christian Liebman and
13 Mr. Stephen Nightingale, all of whom are present here
14 with Mr. Wight as the Agency's counsel.

15 On September 1, then, of 2009, the Board received
16 prefiled questions directed in part to Ameren and in part
17 to the Agency by Ms. Traci Barkley on behalf of Prairie
18 Rivers Network, and Ms. Barkley is present here as well
19 this morning. On June -- excuse me. On September 22 of
20 2009, then, the Board received a joint statement by both
21 Ameren and the Agency in support of proposed revisions
22 they had agreed upon which were based on the Agency's
23 language filed on August 18. On the same date, both
24 Ameren and the Agency filed written responses to the

1 questions that had been prefiled by Ms. Barkley on behalf
2 of Prairie Rivers Network. Other than as I have just
3 mentioned, no other participant has prefiled testimony,
4 questions based upon it or answers to them, and those
5 will form the heart of our procedure here this morning.

6 The proceeding is governed by the Board's
7 procedural rules, and under Section 102.426 of those
8 rules, all information that is relevant and that is not
9 repetitious or privileged will be admitted into the
10 record. Please note that any questions that are posed
11 today either by the board members or by the Board's staff
12 are intended only to assist the Board in developing a
13 clear and complete record and are -- for the Board's
14 decision and do not reflect any sort of prejudgment or
15 predetermination of the proposal.

16 In speaking off the record before our hearing
17 began with the participants on procedural issues relating
18 to the order of hearing, we will begin with the prefiled
19 joint proposal that I referred to from both Ameren and
20 the Agency. If either Ameren or the Agency has a brief
21 summary or introduction that they would like to offer in
22 support of that joint proposal, we may certainly do that
23 at the top of the hearing. I should note also that under
24 the Board's procedural rules, that proposal and all of

1 the other prefiled testimony, questions and answers will
2 be admitted as if read.

3 Once we've received any summary that either
4 Ameren or the Agency wishes to offer, we can proceed to
5 Ms. Barkley, who has indicated that she may have some
6 follow-up questions based on the prefiled answers that
7 she has received from either Ameren or the Agency. Then
8 we will turn to questions that -- regarding the joint
9 proposal from any participant who did not prefile them.
10 I should note at this point that right inside the door
11 there is a sheet and a pen so that anyone who does wish
12 to offer testimony this morning and who has not prefiled
13 it may indicate that they would like to do so. Once we
14 have finished with any follow-up questions based on the
15 joint proposal, we can turn to any witness who did not
16 prefile but would like to testify today, and then the
17 Board does have some questions on the proposal, the joint
18 proposal, after which, as time allows, we can receive any
19 public comments that anyone would wish to offer.

20 Although many of you have participated in a
21 number of these proceedings, I know it will help our
22 court reporter if you speak as loudly and as clearly as
23 possible. I don't think our acoustics are bad here today
24 or that we'll have much difficulty hearing one another,

1 but if you would avoid speaking at the same time as any
2 other person, I'm sure that her task will be much easier.

3 Any questions procedurally before we get
4 underway? Very good. As I indicated, Mr. Wight on
5 behalf of the Agency and Mr. More on behalf of Ameren, if
6 you wish to offer a brief summary or statement, it
7 certainly is in order to do so, and we could defer to the
8 two of you on any order you might like to follow.

9 MR. MORE: Thank you, Hearing Officer Fox,
10 Board Member Moore, Board Member Johnson and Mr. Rao. My
11 name is Josh More. I'm here on behalf of Ameren Energy
12 Generating Company. Also on behalf of Ameren is Michael
13 Bollinger, principal environmental scientist in the
14 environmental services department of Ameren Services
15 company. We appreciate the opportunity to be here and
16 appreciate the time the Board has taken to hold this
17 hearing in Crawford County. We also thank the Agency for
18 being here and for working with Ameren so closely on this
19 proposal to resolve outstanding issues and arrive at
20 language agreeable to both parties.

21 Ameren's initial proposal grew out of the need to
22 have some regulatory certainty regarding the in-place
23 closure of ash pond D at the Hutsonville Power Station.
24 While in operation, ash pond D was permitted by the

1 Bureau of Water as a pollution control facility. The
2 operating permit and the current landfill regulations,
3 however, do not address closure of the ash pond.
4 Therefore, Ameren at the direction of the Board filed a
5 site-specific rule to govern the closure of ash pond D.

6 The current rule before the Board is a joint
7 proposal drafted by Ameren and the Agency. On May 19,
8 2009, Ameren filed a proposal for site-specific rule. On
9 August 18, 2009, the Agency filed proposed revisions to
10 Ameren's proposal, along with prefiled testimony of
11 several agency staff from the Bureaus of Water and Land
12 in support of the Agency's proposed revisions. The
13 Agency's revisions endorsed the closure approach proposed
14 by Ameren but revised the rule to conform to the Agency's
15 procedural and reporting requirements and preferred
16 mechanism for defining applicable groundwater quality
17 standards both on and off-site.

18 Following the filing of the Agency's proposed
19 amendments, Ameren reached out to the Agency and
20 initiated contact and a series of discussions were held
21 to determine if the outstanding differences could be
22 reduced. As a result, the parties have reached a
23 resolution on a conceptual framework for closing ash pond
24 D and have filed proposed regulatory language reflecting

1 that joint agreement. While the proposal has changed
2 since the initial filing, the concepts and the general
3 approach have not. Therefore, the TSD filed by Ameren
4 supports the joint proposal.

5 The proposal creates a new Subpart j specific to
6 surface impoundments not only at the suggestion of the
7 Board, but also because the landfill regulations in
8 Subpart i specifically exclude surface impoundments.
9 Unlike coal combustion waste landfills, ash ponds were
10 designed, constructed and operated as water pollution
11 control facilities, not as landfills.

12 The record demonstrates that the proposed rule
13 language as amended by the parties is protective of human
14 health and the environment. The proposed rule sets fixed
15 deadlines by which Ameren must proceed through closure
16 activities and strict design and construction standards
17 for implementation of the final closure and groundwater
18 management systems. The rule sets comprehensive
19 requirements for groundwater monitoring and data analysis
20 throughout the post-closure care period. Moreover, all
21 plans and reports are subject to IEPA review and
22 approval. Overall, the selected closure system is the
23 most protective combination of closure alternatives
24 investigated that is economically reasonable and

1 technically feasible for Ameren to implement in closing
2 ash pond D.

3 With that, Mr. Bollinger is here today to answer
4 any questions the Board may have or the public may have,
5 and at the appropriate time, we ask that you swear him
6 in.

7 HEARING OFFICER FOX: Very good. Thank you,
8 Mr. More. Mr. Wight, did you have any summary or
9 introduction to offer?

10 MR. WIGHT: Yes, just briefly.

11 HEARING OFFICER FOX: Please go ahead.

12 MR. WIGHT: Okay. Good morning. My name is
13 Mark Wight. The last name is spelled W-I-G-H-T. I'm an
14 assistant counsel with the Illinois EPA. I've been with
15 the EPA for a little over 17 years, mostly with the
16 Bureau of Land. Also here today on behalf of the Agency
17 are five witnesses. All the witnesses have prefiled
18 written testimony and will be involved in some way in the
19 implementation of Subpart A of Part 840. The Agency
20 witnesses are, on my immediate left, Rick Cobb, who is
21 deputy manager of the division of public water supplies
22 in the Bureau of Water; on my far right, Steve
23 Nightingale. Steve is the manager of the permit section
24 in the Bureau of Land. Next to Steve is Chris Liebman.

1 Chris is the manager of the permit section/solid waste
2 unit in the Bureau of Land. On my immediate right is
3 Bill Buscher. Bill is the manager of the hydrogeology
4 and compliance unit in the groundwater section of the
5 division of public water supplies in the Bureau of Water.
6 And to Bill's right is Lynn Dunaway. Lynn is an
7 environmental protection specialist in the hydrogeology
8 and compliance unit of the groundwater section of the
9 division of public water supplies.

10 Just a housekeeping measure here. I'd like to
11 point out to any participants that we have brought hard
12 copies of documents filed by the Agency. Those are
13 placed on a table in the back. They include the Agency's
14 proposed amendments to Ameren's original proposal, the
15 prefiled testimony of each of the Agency's witnesses, the
16 Agency's responses to the prefiled questions of Prairie
17 Rivers Network, the joint statement in support of
18 proposed revisions filed by Ameren and the Agency on
19 September 22 and the proposed revisions to the Agency's
20 proposed amendments filed jointly by Ameren and the
21 Agency. Copies of all those are available at the back.
22 It looks like we'll have plenty, but if we should run out
23 for any reason, feel free to contact me and I can provide
24 copies, or you can download them at the Board's web site.

1 The proposed revisions filed jointly by Ameren
2 and the Agency were described in the joint statement
3 accompanying the filing and to some extent in Ameren's
4 opening remarks. The Agency briefly notes that while
5 there are some substantive changes from the Agency's
6 proposed amendments to Ameren's original proposal, the
7 majority of the changes were for clarification and/or
8 consolidation of the Agency's proposed amendments filed
9 on August 18. Substantive changes from the Agency's
10 proposed amendments include the following:
11 Section 840.116(a) (3), where the on-site institutional
12 control provision was revised to provide flexibility for
13 the use of instruments that may be developed in the
14 future, and there is also an acknowledgment that Ameren
15 may continue to use on-site wells for potable water as
16 long as the wells remain fit for human consumption in
17 accordance with accepted water supply principles. This
18 language parallels the definition of potable in the
19 Environmental Protection Act at Section 3.340.

20 There's also a substantive change in
21 Section 840.118(a) (2) (A) (ii), which now provides that
22 compliance with the off-site groundwater quality standard
23 for the lower zone of the underlying aquifer requires in
24 part a demonstration of no increasing trend rather than a

1 demonstration of decreasing trend. A small change in
2 Section 840.120, which now provides that Ameren will
3 conduct an additional four quarters of confirmatory
4 sampling and analysis once it achieves compliance with
5 the off-site groundwater quality standards and
6 discontinues operation of the groundwater collection
7 trench.

8 Section 840.124(d)(3) has a change in which the
9 maximum final slope constructed with coal ash is revised
10 from 3 percent to 5 percent; and finally,
11 Section 840.152, the RCRA provision, which is revised
12 from a provision that works by operation of the law to a
13 conflict of laws provision in providing guidance to the
14 Board or courts in certain contested cases. In addition,
15 this RCRA provision also provides a basis for the Agency
16 to argue in an application to the federal government for
17 delegation or approval that nothing in Subpart A directly
18 conflicts with applicable federal rules.

19 Notwithstanding these changes, the bulk of the
20 Agency's prefiled testimony remains accurate, although in
21 some instances specific citations may have changed
22 because of reorganization of the proposal. Where the
23 substance of the proposal has changed from the Agency's
24 proposed amendments of August 18, the joint statement and

1 the agreed revisions are intended to be the guides to
2 these changes. With these provisions, any
3 inconsistencies with the Agency's prefiled testimony are
4 superseded by the agreed proposal itself and the
5 descriptions of the changes contained in the joint
6 statement.

7 Last but not least, Ameren and the Agency were
8 able to reach agreement on the proposal following a
9 series of discussions initiated by Ameren after the
10 Agency filed its proposed amendments on August 18. As a
11 starting place for discussions, Ameren accepted key
12 elements of the Agency's proposed amendments, including
13 direct administrative oversight and on-site or
14 off-site -- on-site and off-site groundwater quality
15 standards based or referencing the Board's groundwater
16 quality standard rules at 35 Illinois Administrative Code
17 620. From there, several related details were negotiated
18 to the resolution found in the agreed proposal for --
19 filed jointly. The Agency acknowledges and appreciates
20 the spirit of cooperation in which Ameren approached the
21 task, and in particular we'd like to thank Susan Knowles
22 and Mike Bollinger of Ameren and outside counsel Josh
23 More. With that, we're ready to proceed as well.

24 HEARING OFFICER FOX: Thank you very much,

1 Mr. Wight. Why don't we -- You used the term
2 housekeeping, which seems apt. Why don't we have our
3 court reporter swear in as a panel Mr. Bollinger on
4 behalf of Ameren and Mr. Cobb, Mr. Buscher, Mr. Dunaway,
5 Mr. Liebman and Mr. Nightingale so that when we are
6 absolutely ready to do so, we can proceed to the
7 follow-up questions or any other questions. Is the court
8 reporter ready to do that? Very good. Please go ahead.

9 (Witnesses sworn.)

10 HEARING OFFICER FOX: Thank you very much.

11 Mr. Wight, you had referred to a number of documents that
12 you had brought copies of. In the interest of a complete
13 hearing record, are those documents copies of which you
14 would wish to move into the record as hearing exhibits?

15 MR. WIGHT: Yes, we certainly could. I
16 noticed that the joint statement and proposal were
17 entered into the record as public comments, and it
18 probably would be a good idea to go ahead and admit them
19 as exhibits, and we're also prepared to introduce our
20 testimony as exhibits with foundation if that's required
21 by the rules.

22 HEARING OFFICER FOX: Why don't we do this.
23 We could entertain a motion to admit those as hearing
24 exhibits, and certainly the foundation is included, the

1 CVs, resumes and other data that ought to provide that,
2 and certainly those have been filed with the Board and
3 posted to its web site and is capable of public review
4 for some time now. If you have copies that you can
5 submit and have me mark, we can certainly entertain a
6 motion, and, Mr. More, I don't mean to look over your
7 shoulder, so to speak, but it appears you have some
8 companion documents that you might wish to make the
9 subject of a motion as well for a complete record.

10 MR. MORE: Yes, and I would just note in
11 your opening you commented that all the testimony was
12 going to be admitted as if read.

13 HEARING OFFICER FOX: As if read, and that's
14 by operation of the Board's procedural rules, and this is
15 intended, as I said, simply to provide a complete record
16 for the hearing in the form of exhibits.

17 MR. MORE: That's fine.

18 HEARING OFFICER FOX: If you have documents,
19 I'd certainly entertain a motion, Mr. More, and mark
20 those with appropriate numbers.

21 MR. MORE: I move to have admitted as
22 Exhibit 1 prefiled testimony of Michael Bollinger.

23 HEARING OFFICER FOX: And did you have any
24 additional documents that you wish to make subject to the

1 motion?

2 MR. MORE: I don't.

3 HEARING OFFICER FOX: Very good. Thank you
4 for providing a copy. The motion before the Board by
5 Mr. More on behalf of Ameren is to admit as Hearing
6 Exhibit No. 1 the prefiled testimony of Michael
7 Bollinger, which was filed with the Board on August 18.
8 Is there any objection to the motion to admit it as
9 Exhibit No. 1? Neither seeing nor hearing any, the
10 motion is granted, Mr. More, and this will be admitted as
11 Hearing Exhibit No. 1. And, Mr. Wight, without meaning
12 to rush you, we would be ready for any motion you might
13 wish to bring before the Board.

14 MR. WIGHT: I am ready.

15 HEARING OFFICER FOX: Very good.

16 MR. WIGHT: Must we do these individually or
17 may we do them jointly, the testimony?

18 HEARING OFFICER FOX: Individually would be
19 the clearest, although slower, so we would have unique
20 numbers, of course, for each of the separate documents.

21 MR. WIGHT: Okay. First of all, I'd move
22 that the testimony of Richard P. Cobb be admitted to the
23 record as if read and marked as an exhibit.

24 HEARING OFFICER FOX: And that would be

1 Exhibit No. 2?

2 MR. WIGHT: Yes.

3 HEARING OFFICER FOX: Very good.

4 MR. WIGHT: I'd also move that the testimony
5 of Stephen F. Nightingale be marked as Exhibit 3 and
6 admitted to the record as if read.

7 HEARING OFFICER FOX: Very good. Mr. Wight,
8 thank you very much.

9 MR. WIGHT: I move that the testimony of
10 Christian J. Liebman be marked as Exhibit 4 and admitted
11 to the record as if read.

12 HEARING OFFICER FOX: Thank you, Mr. Wight.

13 MR. WIGHT: I move that the testimony of
14 William E. Buscher be marked as Exhibit 5 and admitted to
15 the record as if read.

16 HEARING OFFICER FOX: Very good.

17 MR. WIGHT: And I'd also move that the
18 testimony of Lynn E. Dunaway be marked as Exhibit 6 and
19 entered into the record as if read.

20 HEARING OFFICER FOX: Very good.

21 MR. WIGHT: I also have copies of the joint
22 statement. I'll give Mr. More an opportunity to observe
23 it. Okay. I'd like to move that the joint statement in
24 support of proposed revisions filed by Ameren and the

1 Agency be marked as Exhibit 7 --

2 HEARING OFFICER FOX: Very good. Thank you.

3 MR. WIGHT: -- and moved into the record.

4 And finally, I'd also move that the joint proposal of
5 Ameren and the Agency also filed on September 22 be
6 marked as Exhibit 8 and moved into the record.

7 HEARING OFFICER FOX: Mr. Wight, thank you
8 very much.

9 MR. WIGHT: Sure.

10 HEARING OFFICER FOX: The motion of course
11 as made by Mr. Wight is to introduce as Exhibit No. 2
12 Mr. Cobb's prefiled testimony; as Exhibit No. 3
13 Mr. Nightingale's prefiled testimony; as Exhibit No. 4
14 Mr. Liebman's prefiled testimony; as Exhibit 5
15 Mr. Buscher's prefiled testimony; as Exhibit 6
16 Mr. Dunaway's prefiled testimony; as No. 7 the joint
17 statement by Ameren and the Agency in support of their
18 joint proposal; and as No. 8 the joint proposal itself.
19 Is there any objection to the motion to admit those seven
20 documents as described and numbered? Neither seeing nor
21 hearing any, the motion is granted. Mr. Wight, again, I
22 thank you for your help in preparing and submitting
23 those --

24 MR. WIGHT: Sure.

1 HEARING OFFICER FOX: -- and they will be
2 marked and admitted according to the numbers that I have
3 just recited. We now have our witnesses sworn in and our
4 housekeeping settled, with which I appreciate your
5 patience. Mr. Wight and Mr. More, would we be ready to
6 proceed with any follow-up questions that Ms. Barkley may
7 have?

8 MR. WIGHT: We're ready.

9 HEARING OFFICER FOX: Very good.

10 MR. MORE: We are as well.

11 HEARING OFFICER FOX: Ms. Barkley, I might
12 suggest this in the interest of the most effective
13 questions. If there -- If you would not object to having
14 a chair perhaps to my right here, I think you would be
15 able to face people and be most audible to the folks that
16 you may wish to pose questions to and most audible to the
17 court reporter as well, so I'm sorry to disrupt you, but
18 that might work out well in the long run.

19 MR. MORE: Right here?

20 HEARING OFFICER FOX: Or even further back.
21 I appreciate your help, Mr. More. Ms. Barkley, you had
22 filed -- and I need to flip through the end to see
23 precisely the number -- 15 questions, each of which was
24 directed either generally to Ameren or the Agency or

1 specifically to I believe Mr. Bollinger on behalf of
2 Ameren or Mr. Nightingale on behalf of the Agency. Does
3 it make the most sense simply to begin with question
4 number 1 and see if you have any follow-ups for the
5 person --

6 MS. BARKLEY: Sure.

7 HEARING OFFICER FOX: -- to whom you posed
8 those questions? Very good. Question number 1 was
9 directed to Ameren on the basis of its statement of
10 reasons, and if you have any follow-up or clarification,
11 Ms. Barkley, please go ahead.

12 MS. BARKLEY: Actually, I don't. This is --
13 I think their responses given is complete and acceptable,
14 so --

15 HEARING OFFICER FOX: Very good. Let's
16 proceed to number 2, which was likewise posed to Ameren
17 on the basis of its statement of reasons.

18 MS. BARKLEY: And the information I asked
19 for in this question is provided as part of the technical
20 support document.

21 HEARING OFFICER FOX: And it sounds as if
22 that's a satisfactory --

23 MS. BARKLEY: That's acceptable, yes.

24 HEARING OFFICER FOX: Very good. If that's

1 satisfactory, let's proceed to number 3, which pertains
2 to the City of Hutsonville's public water supply wells,
3 Ms. Barkley.

4 MS. BARKLEY: Okay. So question 3, I guess
5 I had one clarifying question about the temporary wells
6 that were installed in Indiana. I wondered how deep
7 those wells were.

8 MR. BOLLINGER: I do not have that off the
9 top of my head, but I can certainly get that information.

10 MS. BARKLEY: Okay.

11 MR. BOLLINGER: I believe the boring logs
12 for those wells are in the technical support document. I
13 think we can find them or we can just follow up.

14 MR. MORE: We'll follow up with a written
15 comment.

16 HEARING OFFICER FOX: Very good. If,
17 Mr. More, you could supply either a citation to the -- by
18 page number in the technical support document or submit
19 them, that would be very helpful.

20 MR. MORE: We will do so.

21 MS. BARKLEY: And I also -- the response
22 that was given to question 3 really doesn't answer the
23 question. I understand that class I groundwater quality
24 standards are being met, but the question was whether

1 there is any impact, because I'm looking for trend
2 data -- we talked about that on the phone -- and I'm
3 not -- I guess I'd be looking for, you know, over time
4 how the quality of the groundwater has changed during the
5 time period that ash pond D has been in operation, not
6 just from the temporary wells, because that to me shows a
7 snapshot of where we're at right now, but it doesn't show
8 what the impact of ash pond D has been in adjacent
9 groundwater.

10 MR. MORE: Can I -- Let me ask a question.
11 Are you looking for trending analysis on Hutsonville
12 drinking water supply well data?

13 MS. BARKLEY: I think most -- the wells have
14 been installed to determine, you know, anything
15 downgradient towards the river or across the river,
16 downgradient towards the City of Hutsonville's drinking
17 water supply. I understand the snapshot right now of
18 kind of where they're at, but that doesn't really paint
19 the picture of the impact that ash pond D has had on
20 groundwater over time.

21 MR. BOLLINGER: We can certainly calculate
22 that. We have done and looked at trends in specific
23 wells for specific purposes, and of course the proposed
24 rule would have us do the annual trend analysis on all

1 the monitoring wells included in the monitoring package
2 that will be submitted as part of the closure plan. We
3 could do something in advance if that's helpful, but that
4 trend analysis is embodied in the monitoring plan and the
5 compliance plan that will be incorporated in the closure
6 plan. I can certainly add that we have no indications
7 whatsoever that the deep wells have been impacted and are
8 trending upward. We are -- We have reviewed that
9 earlier, that there's not an upward trend in these wells.

10 MS. BARKLEY: Okay. Over what time period?

11 MR. BOLLINGER: I would have to go back to
12 the analysis we've conducted and look at the precise
13 monitoring dates. I can't say off the top of my head.

14 MS. BARKLEY: Okay. Yeah, I -- and this is
15 something that I think we'll ask for in our final
16 comments, but I think that's something that in terms of
17 looking at degradation that may have occurred because of
18 the operation of ash pond D, I think it's important to
19 show what data is available closer to the beginning of
20 the operation of ash pond D at some sort of regular
21 interval to now, because many of the constituents are
22 naturally based and some of them could be arising from
23 the local geology, but I think it's important to
24 characterize fully what's happened over the time of the

1 operation of ash pond D.

2 MR. BOLLINGER: I would just note for the
3 record, though, that the groundwater monitoring did not
4 begin until some number of years well after operation of
5 pond D, so we do not have groundwater information that
6 predates or even during the first many years of
7 operation. Pond D went into service in the I believe mid
8 1960s, '68 or -- to my recollection, and monitoring --
9 groundwater monitoring was not initiated on the site
10 until 1984, so there's a number of years where we would
11 not have data with which to trend from pre-operational
12 conditions or early operation.

13 MS. BARKLEY: Okay. Let's move on to
14 question 4.

15 HEARING OFFICER FOX: Please go ahead,
16 Ms. Barkley, if you're ready.

17 MS. BARKLEY: Let's see. My concern with
18 the response to question 4 was eight lines down, the
19 discussion about coal combustion material being used for
20 helping to build up the final slope and grade of the
21 impoundments, and the -- one of the statements in the
22 response was if such material is used, it would be placed
23 well above the water table, covered with a synthetic
24 capping material and isolated from precipitation or

1 groundwater, and I can understand with the cap how you'd
2 be isolating from precipitation, but with groundwater,
3 can you explain exactly what will be in place to make
4 sure the groundwater won't come in contact with these
5 materials?

6 MR. BOLLINGER: I think the -- what we are
7 addressing there is the fact that the existing materials
8 are at depth, and since the additional materials would be
9 used to establish that final contour of the top of the
10 pond, that that would be well above the materials that
11 may be subject to groundwater impact or groundwater
12 infiltration. Groundwater depth below ash pond D is
13 dependent upon river stage, but the materials that we'd
14 be placing as part of this final contour will be the
15 uppermost layers. It would be well above that.

16 MS. BARKLEY: And I guess a follow-up within
17 this discussion of this question, are you still adding
18 coal combustion material to ash pond D?

19 MR. BOLLINGER: Not currently. Since the
20 pond was closed, then essentially wastewater was diverted
21 around pond D when two new ponds were constructed in the
22 early 2000s, and since that time we have not sent any
23 wastewater there for treatment, but twice since that
24 occurred we sought approval from the water program in

1 accordance with our permit conditions to allow us to
2 transfer ash from pond A to pond D in anticipation of
3 closure similar to what we are asking for or asked for as
4 part of this rulemaking. Both of those were approved, so
5 materials have been moved over there in two different
6 transfers since 2000.

7 MS. BARKLEY: And who approved moving that
8 material to ash pond D?

9 MR. BOLLINGER: The wastewater permitting
10 program.

11 MS. BARKLEY: Through NPDES permitting?

12 MR. BOLLINGER: Yes. Well, there are two
13 permits -- two different permitting regimes that are
14 subject to -- that Hutsonville is subject to for
15 wastewater, one which I will refer to as a Subpart B
16 permit for ponds that do not have a direct discharge to
17 the river -- that would include pond A, B and C -- and
18 then the actual wastewater discharge permit under the
19 NPDES program is also from pond B, and so we've actually
20 worked with the same division of the water program that
21 manages both those permits.

22 MS. BARKLEY: So Subpart B covers ponds A, B
23 and C, and through the NPDES program, that covers --

24 MR. BOLLINGER: The discharge from pond B as

1 well as other outfalls from the power plant itself.

2 MS. BARKLEY: Do you have any permit that
3 covers pond D?

4 MR. BOLLINGER: Pond D is currently not
5 subject to permitting. That's why we are trying to close
6 it.

7 MS. BARKLEY: Okay. I'm not sure if this is
8 a question for the Agency or if this is a question for
9 Ameren, but I understand that a third of the material
10 lies below the water table and I understand that
11 groundwater moves extremely slowly, but I wonder if with
12 the pond or the pile being kept and a third of it being
13 under the water table if -- as groundwater flows through
14 the material that's under the water table, if that will
15 cause settling of the material above the water table so
16 that over time you're essentially -- that water would be
17 processing and carrying pollutant from the entire million
18 cubic yards?

19 MR. BOLLINGER: Who would like -- I mean,
20 I -- we will conduct as part of the final closure plans a
21 stability analysis of the berms, and it would be my
22 expectation that the settling that has occurred during 30
23 plus years of operation would not be exacerbated by
24 additional cap and cover materials. There will be some

1 additional loads on top of the basin because of the
2 actual cap itself and the three foot of soil cover. We
3 will evaluate that as part of the final closure plan, but
4 I would not anticipate that that would change the
5 consolidation of ash at depth in the pond because of the
6 duration that it's been there. I don't know if anybody
7 would like to --

8 MR. LIEBMAN: Yeah, we would have the same
9 expectation. There would -- We would not expect much, if
10 any, settlement due to the groundwater flowing through
11 the lower ash.

12 MS. BARKLEY: So when you characterized what
13 will be coming off of the site over time, did you just
14 look at that material that's -- that would be under
15 the -- below the water table?

16 MR. LIEBMAN: Could you repeat --

17 MS. BARKLEY: I guess I should ask, has
18 modeling been done to look at the quality of the water
19 that will be coming from the waste material that's in ash
20 pond D? I guess that's the first question. Has modeling
21 been completed?

22 MR. BOLLINGER: He can speak to that
23 additionally, but the modeling work that our contractors
24 did on our behalf looked at essentially two components of

1 leaching that could occur. One is a vertical migration
2 of water both contained within the pond when it was
3 operational and as might collect there from precipitation
4 before it's closed. That would be the vertical component
5 where water would be migrating downward through the ash,
6 and then we also looked at the horizontal component of
7 groundwater moving through a portion of ash that is below
8 the water table. The closure plan and closure
9 alternatives that we evaluated -- excuse me. Not the
10 closure plan, but the alternatives that we evaluated as
11 part of our consideration of options looked at
12 substantial reductions in the vertical migration and did
13 not assume any significant change in the horizontal
14 migration.

15 MR. COBB: Rick Cobb. I just had an add-on.
16 The vertical-component model that they use is called a
17 HELP model, which is used in every kind of landfill type
18 setting, and the contaminant transport model was MT3D,
19 and on page 20 of my prefiled testimony, attachment IV is
20 the result of the modeling that's conducted after the
21 interceptor trench runs for a period of years. That's
22 another component of the -- obviously the groundwater
23 flow here and capturing any contaminated groundwater
24 before it moves off-site and pulling back groundwater

1 that's moved off-site. So, Traci, that's on -- did I
2 state my name, Richard Cobb? It's on page 20 of my
3 prefiled testimony and it's in page 534 of the --
4 Ameren's technical support document.

5 MS. BARKLEY: And can you just remind me how
6 deep the groundwater trench will be?

7 MR. COBB: Pardon me?

8 MS. BARKLEY: How deep the groundwater
9 trench will be?

10 MR. BOLLINGER: I think it ranges -- it --
11 to the east -- excuse me -- to the west is about eight
12 feet deep, is my recollection, and it goes to a depth of
13 about twenty. I would have to confirm those numbers, but
14 approximately twenty feet. As it proceeds eastward, it
15 gets deeper.

16 MS. BARKLEY: I guess to follow up on an
17 earlier question, if you -- does Ameren have any plans to
18 add any additional material except for the waste that
19 will be used for final grading of the slope? Do you plan
20 on storing --

21 MR. BOLLINGER: Additional material?

22 MS. BARKLEY: Do you plan on storing any
23 additional waste before the final cap is put in place?

24 MR. BOLLINGER: No. At this point, any

1 additional ash that would be transferred would be
2 transferred as part of a final closure activity. There
3 will be additional materials insofar as soils placed
4 above the synthetic line.

5 MS. BARKLEY: Okay. Question 5 was about
6 landfill regs and how they don't apply -- asking why they
7 don't apply to the situation, and I guess I just -- I'm
8 not -- I don't fully understand the answer, because it
9 seems to me that even though this wasn't designed as a
10 landfill and it wasn't permitted as a landfill, that now
11 that the waste material has been deposited there and it's
12 been dewatered, it seems like effectively in practice now
13 it is very similar to a landfill.

14 MR. MORE: Let me just -- I think the
15 question really is kind of like a legal conclusion, so
16 let me -- if you don't mind, I would reference the
17 approach that it might fall under the landfill
18 regulations was the approach that Ameren initially took,
19 and then as you noted, it's similar but it's not exact,
20 and therefore we asked for an adjusted standard -- yes --
21 of the existing landfill regulations -- in essence, a
22 modification of those regulations to make it fit this
23 scenario -- and the Agency submitted comments to that,
24 then the Board came back and said, you know, we see where

1 you're going, but this seems so dissimilar given all of
2 these deviations from the landfill regulations that will
3 be necessary, come forward with a unique site-specific
4 rule, and so that's the approach we've taken.

5 MS. BARKLEY: And what's -- from the joint
6 proposal and the way it's laid out, it looks like the
7 Agency's preparing for possibly additional site closures
8 of ash ponds, which I know there are several that are
9 being looked at for closure, and Subpart A would be
10 Hutsonville. I mean, I don't know if we want to get into
11 this now or if we should save this for later, but I guess
12 I'd be interested in what the Agency sees -- or maybe
13 even within Ameren and the ash ponds that you have, are
14 you preparing or are you considering using similar
15 language for additional ash impoundment for closure in
16 the near term?

17 MR. BOLLINGER: Certainly within Ameren's
18 system we have a number of ponds, but the design and
19 construction of those vary depending on the circumstances
20 of the -- those sites and also to a range that -- the
21 timing with which those ponds were constructed. We have
22 two other facilities that have wastewater treatment ponds
23 that are unlined that we are -- we would like to close,
24 we hope to close in the near future. Both of those

1 facilities -- There are actually two ponds at two
2 different facilities that we hope to close in probably
3 the next 12 to 18 months or at least initiate the
4 process, as we are doing here. Both of those locations,
5 those basins have been -- other facilities have been
6 built, constructed, in order to manage the wastewater
7 that would otherwise have been sent to these facilities,
8 and both of those operate under permits that will expire
9 next year. At one site permits will expire at the end of
10 January, at another location they will expire at the end
11 of June, and so we are working to develop closure --
12 along these lines, we are working to develop a proposal
13 for a closure and a site-specific rule at both of those
14 sites.

15 MS. BARKLEY: Okay. Thank you.

16 MR. RAO: I have just a follow-up question.
17 Mr. Bollinger, you just mentioned that you are in the
18 process of preparing site-specific rules for these other
19 ponds. Do you see this site-specific rule to be
20 significantly different from what you have proposed here
21 in the joint proposal?

22 MR. BOLLINGER: Let me just clarify that we
23 are working towards development of site-specific rules.
24 I don't believe -- We've just begun to draft for one of

1 those sites the actual text of a rule. We have not got
2 that far on the other site. I think both of the other
3 locations have certain similarities with Hutsonville, but
4 they have some unique geologic circumstances, and so
5 there will be differences, although the framework I think
6 will be similar insofar as we would attempt to set up a
7 rulemaking that would allow us to develop closure plans
8 for submittal to the Agency for review and approval prior
9 to implementation of those strategies.

10 MR. MORE: And we would reach out, as we did
11 in this instance, to the Agency, and we're not at that
12 stage yet.

13 MR. RAO: The reason I asked that question
14 is the joint proposal is drafted in such a way that a lot
15 of evaluation and the Agency input happens after the
16 closure plan is submitted, so the rule is fairly broad in
17 general, so I was just wondering -- you know, it almost
18 seems like the framework is set up in this proposal and
19 any site-specific issue would be handled as part of the
20 closure plan. It almost seems like this proposal is a
21 general rule that may apply to closing other
22 impoundments.

23 MR. COBB: Rick Cobb responding to that. We
24 really -- You know, we are looking at the hydrogeology of

1 each of these difference sites, and we specifically kind
2 of went a different direction on that. We wanted this to
3 be ash pond D, and then, you know, we may certainly learn
4 certain things from this and -- obviously capping and
5 groundwater monitoring and corrective action, but there
6 may be different circumstances that would, you know,
7 require some deviation, so we specifically want -- you
8 know, I assume Ameren did too, but that was our
9 philosophy, so --

10 MR. BOLLINGER: I would certainly just add,
11 an example, for instance, would be this rulemaking for
12 Hutsonville clearly envisions the use of this interceptor
13 drain trench, and that technology may not be appropriate
14 for either of these other locations, so it's those
15 evaluations that we are still in the process of
16 developing.

17 MR. RAO: Okay. And maybe -- I had this
18 question, so I'll ask it since it's related. It looks
19 like some general requirements may apply to -- apply
20 generally to closure of ash ponds, but there are other
21 requirements proposed not really specific to ash pond D,
22 and the way you proposed it as ash pond D comes under
23 Subpart A of this Part 840. I was wondering if it would
24 be possible to put in some general requirements, like

1 definitions, incorporations by reference under Subpart A
2 and have ash pond D under Subpart B like we have for the
3 Board's -- I think the groundwater rules for certain
4 site-specific, we have general requirements and then we
5 have, you know, specifics in the other subpart. Is that
6 going to be too much work for you? You know, I know
7 you're --

8 MR. MORE: I would note some of those
9 definitions might be general, but some might be
10 site-specific. It's something we can discuss.

11 MR. RAO: Yeah, just think about it, if you
12 think that's doable.

13 MR. WIGHT: Excuse me.

14 MR. RAO: Yeah.

15 MR. WIGHT: I might add that if anyone has
16 had a chance to read through all of the filings that have
17 led up to this, including the motion for expedited review
18 and the response to that motion, there's another subtext
19 here, which is what's happening at the federal level, and
20 at some point, although we don't expect that to move
21 rapidly, but I think we do expect a proposal to be
22 published in the Federal Register at some point this
23 fall, so perhaps by the end of the year we'll at least
24 see what direction they're going, but the shadow of that

1 sort of falls over everything we're doing here to some
2 extent, and then the resource questions, which the Agency
3 has highlighted more than once, we're still at the policy
4 level, the last I knew, still struggling with how to
5 approach this entire situation we know, and there may be
6 some differences to the count of ash ponds that may need
7 closure at some point in the future, but from our
8 perspective, it's not about the actual number. It's
9 about the resources required to do it on a site-specific
10 basis. So we have the federal rule; we have the question
11 of whether we should proceed with a more general rule
12 rather than a site-specific approach. You're very right
13 about some of the things that are in proposed Subpart A
14 probably could apply across the board, would be
15 applicable to most. We haven't come to grips with the
16 site-specific aspect, but these discussions are
17 continuing within the Agency about what is the best
18 approach and where to allocate the resources.

19 Specifically to your question about separating
20 out definitions, I guess that could be done, especially
21 in the context if it looked like we were going to use
22 this process going forward, but since even that is
23 uncertain, I sort of like the idea of it remaining
24 self-contained for now, and possibly then if a second one

1 were to come along, that we might maybe propose more
2 general amendments to the part that would break some of
3 that stuff out and create an initial subpart that was
4 more general in nature and apply it to subparts, but
5 right now I like -- I just like the self-contained nature
6 of it, and as was pointed out, some of the definitions do
7 apply specifically to ash pond D, so in that sense we'd
8 still need a small definitional section.

9 MR. RAO: I appreciate that, yeah, and you
10 also kind of answered -- you know, my other question was
11 about the federal rulemaking and if you had any updates
12 about whether you think there will be a proposal by the
13 end of the year or not.

14 MR. WIGHT: I believe that's what we're
15 anticipating, but that's simply from published sources.
16 We have no inside information, and unless anybody has
17 heard anything new -- believe me, we've been trying to
18 get some hints, but it's very close-lipped at the federal
19 level. We haven't been able to find out much at all.

20 MR. MORE: And while we appreciate the
21 resource issues that the Agency's facing and the concern
22 over a federal proposal, we don't necessarily share the
23 optimism that such a proposal will be enacted and become
24 effective in the near future. While we are hearing

1 discussions of a proposal coming down, as you all know,
2 rules take a long time to develop, and this rule
3 probably -- any federal proposal will probably undergo
4 tremendous scrutiny both from environmentalists and from
5 the stakeholders, and I suspect we would have appeals and
6 detailed discussion. So with that in mind -- and we
7 don't even know the scope of it, so I would ask that we
8 not allow that to kind of cloud over the objective here,
9 which is to close an unregulated site that is not subject
10 to a permit that does need to be closed, and we have a
11 joint proposal here that is protective of the environment
12 and it's economically reasonable and technically
13 feasible.

14 BOARD MEMBER JOHNSON: And at this juncture
15 you're not intending to make this a template for future
16 closures.

17 MR. MORE: Well, we wouldn't object to that.
18 We think that's -- Personally, we think that's an
19 efficient way from our perspective of moving forward if
20 that were to work, and I agree with Mark. If this
21 process turns out to be the appropriate way, if the
22 Agency does come to that conclusion as well and we can
23 move forward with the joint proposal and subsequent
24 amendment, if that is more agreeable, we can always do

1 what you were suggesting, amend Subpart A to put in a
2 general and then get some general definitions and move
3 from there. We're -- We have no objection to looking at
4 that, you know, concept, and we would hope that this
5 could be a process to allow for formal closure of sites
6 that are sitting idle right now.

7 MR. RAO: Thank you.

8 BOARD MEMBER MOORE: Do we have an idea of
9 just exactly how many of these kinds of ash ponds exist
10 in Illinois and are looking to be -- looking forward to
11 be -- for closure?

12 MR. MORE: Well, one thing I would point out
13 is while many facilities have large number of ash ponds,
14 many of those ash ponds are designed and operated such
15 that they don't -- there's no intention of closing them
16 during the life of the permit, during the life of the
17 plant.

18 BOARD MEMBER MOORE: They are permitted,
19 you're saying?

20 MR. MORE: They're permitted, uh-huh. For
21 the Ameren system, I can't speak as to how many are in
22 this system that he suspects will undergo closure in the
23 near term.

24 BOARD MEMBER MOORE: Right.

1 MR. BOLLINGER: In the -- There's -- in --
2 testimony on behalf of IEPA that identified a number of
3 ponds throughout Illinois. Depending how one does the
4 counting that's -- approximately there are -- twenty-six
5 or twenty-eight ponds were identified per Ameren. As I
6 mentioned, there are a total of four ponds at two sites
7 that we would hope to close in the next twelve to
8 eighteen months or begin the process of closing in that
9 period because permits are expiring. Beyond that, I'm
10 aware of another pond, a single pond at a site that's
11 probably about two years out, and beyond that, I'm not
12 aware that -- the remainder of those ponds when the
13 closure would really be anticipated. As Josh said, we
14 have ponds that are functioning and intend to function
15 throughout the entire life of a number of plants. We
16 have built and in just the last few years we are
17 currently building some basins that will be regulated as
18 ponds. They are of course in a much more current design
19 than these older facilities that we're currently trying
20 to close.

21 BOARD MEMBER MOORE: Does the Agency have
22 any idea?

23 MR. COBB: We're working from the same list,
24 and -- Rick Cobb -- and, Bill, if you were getting ready

1 to say something, but -- oh, Steve, did you want to --

2 MR. NIGHTINGALE: Yeah. Well, we
3 basically -- we're working off a list that the Bureau of
4 Water came up with, and they identified 24 facilities --
5 power facilities in Illinois, and of those 24 facilities,
6 there were 70 ash ponds that were identified in there,
7 so --

8 BOARD MEMBER MOORE: That's where I got that
9 number.

10 MR. NIGHTINGALE: -- I think those are the
11 numbers. It's a conservative number that we're looking
12 at, and so it's a potential amount of facilities that
13 could come in to the Agency to ask for a site-specific
14 rule, so -- and that's what concerns us at this point.

15 MR. COBB: I just -- Rick Cobb. I just
16 wanted to follow up. The reason we put the list together
17 is that we're working actively with each of those
18 facilities on their groundwater monitoring systems, their
19 statistical-based monitoring programs and corrective
20 actions that may be necessary or not. We're taking a
21 pretty aggressive approach and working with those
22 existing impoundments, so -- if you have anything further
23 to add, Bill, or --

24 MR. MORE: I would like to add some context

1 to what Mr. Nightingale said when he talked about 70
2 facilities and the information coming from the Bureau of
3 Water. The information that Ameren submitted in response
4 to that request contained a listing of not just ash ponds
5 but of ponds that are being constructed to manage
6 scrubber waste, for example --

7 MS. GALLAGHER: Stormwater.

8 MR. MORE: -- stormwater -- thank you --
9 recycling ponds, so water that's used for -- during the
10 processing that are really not just stored in an ash
11 pond, and as Mr. Bollinger has testified, out of --
12 there's probably fifteen ponds or so that Ameren
13 identified in that list. There's only a hand -- not even
14 a handful -- there's really two that they're considering
15 closing within the next eighteen months, and maybe a
16 third and fourth, you know, in two years or three years.
17 The remaining ponds, as I've initially indicated, are
18 designed and intended to be operated for a much longer
19 period of time.

20 HEARING OFFICER FOX: And, Mr. Nightingale,
21 if I may clarify, I believe you had referred to 24 sites
22 and approximately 70 ponds. Is that the attachment 1 to
23 your prefiled testimony at page 7, the document that
24 lists --

1 MR. NIGHTINGALE: That's correct.

2 HEARING OFFICER FOX: Very good. Thank you
3 for clarifying, and forgive me for interrupting.

4 MR. RAO: Just a question based on what you
5 were saying and Mr. Cobb was saying about the Agency's
6 oversight and -- in regulating these ponds. Has the
7 Agency had a chance to as part of your objective check
8 with these owners or operators of these ponds to see how
9 many of these ponds are going to close in the maybe next
10 five years or so or --

11 MR. COBB: No. Our focus has been to get a
12 handle on the groundwater monitoring system and if
13 they -- and this was our beginning list, and, you know, I
14 would agree, as we're digging more into -- you know, we
15 wanted to put that letter -- that strategy together
16 quickly and move aggressively, so indeed, you know, we
17 may have different types of waste streams in some of
18 those and they may or may not be, but that still doesn't
19 change our objective in getting a handle on the
20 monitoring well system and what's going on there with the
21 groundwater. So, no, we're not -- you know, we're more
22 what's going on with the activity right now, what's the
23 status of the groundwater, you know, what impacts are
24 there.

1 MR. RAO: The reason I asked is as part of
2 your testimony, there was also an issue of placing a
3 moratorium on closure of these ponds and to get an angle
4 in the record about what are we talking about, how many
5 ponds, you know, that are getting close to closure or
6 things like that, so any information that you may have
7 would be helpful to the Board.

8 MR. NIGHTINGALE: I guess the point that I'd
9 like to make is that whether you end up with 15 or we
10 have 50 or 70 ponds, the Agency has a real concern about
11 trying to deal with these as a site-specific rule. We
12 also have a concern about trying to deal with them under
13 a general rule. It's extremely work intensive for us and
14 we pretty much -- we have to deal with a board rule
15 rather than our regular day-to-day administrative
16 procedures, you know, of issuing permits, and with the
17 reduced agency staff and the potential for additional
18 reductions, we have a real concern -- even if we ended up
19 getting, you know, five of these in the next two years,
20 it would really be a difficult issue to deal with within
21 the Agency. So again, you know, whether we have 70 or
22 the number is 15, you know, that do come in under
23 closure, we have a real concern about trying to deal with
24 those.

1 MR. RAO: Thank you.

2 MR. MORE: We'll be more than happy to
3 provide you with the table that we had submitted to the
4 Illinois EPA explaining the types of ponds, the
5 facilities, their status. These would be when we
6 anticipate closure of those ponds.

7 MR. RAO: Thanks. That would be helpful.
8 Ms. Barkley, thank you for allowing us to go off track.

9 MS. BARKLEY: Sure.

10 BOARD MEMBER MOORE: Save some questions for
11 later.

12 MS. BARKLEY: I will.

13 HEARING OFFICER FOX: And, Ms. Barkley, it
14 was very gracious of you to let us address some of those
15 legal and policy questions. Those had arisen under your
16 question number 5 in effect about the nature of the
17 surface impoundments in the scheme of land and water
18 regulations. Did you have any further follow-ups
19 relating specifically to question number 5?

20 MS. BARKLEY: I don't.

21 HEARING OFFICER FOX: Why don't we move on,
22 then, if you don't object, to number 6, which also
23 addresses landfill regulations generally.

24 MS. BARKLEY: Actually, I have a few -- just

1 a few follow-up questions, this last discussion.

2 HEARING OFFICER FOX: Sure, sure.

3 MS. BARKLEY: I wondered about the closure
4 plan, if that will be up for public notice and comment
5 when it's submitted to the Agency.

6 MR. NIGHTINGALE: The closure plan would not
7 be subject to public notice and opportunity for that.

8 MS. BARKLEY: So the public's opportunity to
9 review anything proposed as part of an ash pond closure
10 would be in a setting like this for a site-specific?

11 MR. NIGHTINGALE: That's correct.

12 MS. BARKLEY: Okay.

13 MR. RAO: Would the closure plan be part of
14 a permit amendment, like an NPDES permit?

15 MR. NIGHTINGALE: Well, that -- at this
16 point it would be done just through -- the regulation
17 requires that it be submitted and approved by the Agency,
18 so it would not be a part of a permit.

19 MR. MORE: Currently the NPDES permits or
20 state operating permits don't address closure, so we're
21 in this kind of regulatory uncertainty, and I think this
22 gets to Mr. Nightingale's concern about resources. From
23 the stakeholders' perspective, our concern is what do we
24 do, you know, and so we need to take steps to address

1 these to be protective of the environment. That's the
2 position we're taking and that's why we're here today.

3 MR. RAO: So in effect, in terms of, you
4 know, what Ms. Barkley was asking about, opportunities
5 for public to evaluate the information, and for ash pond
6 D, this hearing and this rulemaking is the venue for
7 doing it, and I had a question based on this, you know,
8 whether the Agency has completely evaluated the adequacy
9 of Ameren's technical support document to kind of support
10 their contention that the proposal is protective of human
11 health and environment.

12 MR. COBB: Absolutely. You know, one of the
13 key things that we did, sort of working cooperatively,
14 was to look at a tight integration with the Board's
15 groundwater quality standards and -- under the central
16 tenet that the board regulations and the Environmental
17 Protection Act treat groundwater as a resource, and in
18 looking at the monitoring trend analysis -- which if you
19 go to pages 50 through 52 of Ameren's TSD document, there
20 are trend analyses for each of the monitoring wells that
21 range from the year 2000 to 2008. They're summarized in
22 the form of statistical box plots, and that -- all that
23 does is it -- the box plot just simply takes the summary
24 statistics and shows you in graphical format, you know,

1 the top of it is at 95 percent, the bottom is the lower
2 25 percentile, the mid point is the median, and then
3 there's a whisker on -- I often refer to it as box and
4 whisker plots. The whisker then shows outliers beyond
5 the 95th percentile. So that information combined with
6 the hydrogeologic analysis that was done and the detailed
7 groundwater flow modeling, the predictive modeling and
8 contaminant transport modeling, the capping and the
9 interceptor trench, are, you know, extremely effective in
10 remediating this groundwater on-site and off-site and
11 protecting the two different zones in the aquifer, so
12 we've -- we, you know, thank Ameren's team for working
13 cooperatively with us on that, because we feel that that
14 is going to achieve our objectives, which are -- is to
15 treat the groundwater as a resource and be in compliance
16 with the Board's regulations, the groundwater quality
17 standards, so yes.

18 MR. RAO: The reason I asked the question is
19 the way the rules are drafted, you know, number of items
20 in this rule, like the hydrogeologic site investigation
21 and groundwater modeling and all the, you know, things
22 that would have to be done and submitted as part of the
23 closure plan for your approval, so I was just wondering
24 whether -- it may have been the rules were adopted before

1 you reviewed them or --

2 MR. COBB: We had many discussions about
3 that. In essence, you know, we're working off of a
4 site-specific rule and you have to draft certain things,
5 but much of what you're talking about that would come in
6 the post of -- after the post effective date of the rule
7 has already been completed prior to the rule being
8 drafted, so in essence, we know the answer. We're in a
9 very good position of knowing what's -- you know, the
10 HELP model showed what the infiltration's going to be
11 with the cap, the groundwater flow model showed us what's
12 going to happen with the -- so in essence, all of this
13 has already been done prior to the effective date, so
14 that's why we feel very, very confident ahead of time,
15 and we'll just simply be maybe calibrating or tweaking
16 what we think is going to happen based on review of the
17 technical information that we have in hand.

18 MR. RAO: Okay. Yeah, that's why I
19 wanted --

20 MR. COBB: Yes.

21 MR. RAO: -- to have that on the record,
22 because --

23 MR. COBB: Yes.

24 MR. RAO: -- what we have looked at now in

1 the proposal is pretty much what you evaluated and you
2 feel comfortable with the information.

3 MR. COBB: Exactly.

4 MR. RAO: Thank you.

5 MS. BARKLEY: I just want to follow up. The
6 trend analysis covers eight years, but you stated
7 earlier, Mr. Bollinger, that if -- groundwater monitoring
8 data from 1984, which if that data were used
9 through 2008, that would triple the number of years and
10 the amount of data -- and I don't know how much data was
11 taken, but it seems like you would have twenty-six years'
12 worth of data from which you could then predict future
13 trends as opposed to eight years.

14 MR. BOLLINGER: The clarification is that
15 the groundwater monitoring that was initiated in 1984 was
16 a very limited set of five wells, and it was targeted at
17 pond A at the site and it was part of the construction
18 permit for pond A, and what's referred to and is included
19 in these box and whisker plots have to do with a much
20 larger set of wells that was predominantly installed in
21 '99 and later as part of the efforts to close pond D
22 specifically.

23 MR. COBB: Statistically, you have an
24 accurate picture here. In my prefiled testimony,

1 attachment I really gives the current extent of the
2 plume, so, I mean, that's -- that is reflective of what's
3 been happening since the ash impoundment was there. I
4 mean, that is the cumulative effect, and the monitoring
5 data that's there is statistically reflective of the
6 conditions in the upper zone and the lower zone, so I
7 don't -- those -- in my opinion, I don't think those
8 would change even if you had -- those would just be
9 averaged into the plot, and then in fact they are
10 represented in attachment I of my prefiled testimony, and
11 then the statistical information is in attachment II and
12 III of my prefiled testimony.

13 MS. BARKLEY: Okay. Thank you. And I guess
14 another question about -- you were talking about the time
15 line of possible federal -- changes to the federal regs
16 and what's going on with the site-specific change. I
17 wondered if Ameren could speak a little bit about the
18 immediacy, your sense of why this needs to be done in the
19 short-term, and I understand that, you know, there's some
20 concern about how long the process could take and it
21 might not -- it would take a while to get it enacted, but
22 I wonder if there are things that Ameren's anticipating
23 in the future that would require this to be handled
24 within the next 12 months.

1 MR. BOLLINGER: Well, again, for Hutsonville
2 pond D, when -- this pond has been excluded from coverage
3 under wastewater treatment regulations since 2000, and so
4 we have been working since then to try and close it. At
5 the two other sites that I mentioned, we have wastewater
6 permits that will expire, and through discussions with
7 the IEPA's wastewater programs, they do not intend --
8 they have told us that those permits will be terminated,
9 so they are not -- to date they have not been at all
10 willing to extend those permits, and I -- as I had
11 mentioned, the actual operations that previously utilized
12 those ponds are no longer routing any wastewater to those
13 ponds, so in our opinion, we have both the -- we're going
14 to -- the permits are going to expire and therefore leave
15 those in this kind of regulatory uncertainty area and
16 they were no longer serving a function as an ongoing
17 wastewater treatment operation. It just seems prudent to
18 close them expeditiously.

19 MS. BARKLEY: I think it was in IEPA's
20 response to my prefiled questions that there was -- that
21 Ameren has stated a desire to sell the facility? Is
22 that --

23 MR. MORE: At one point that was the case,
24 yes.

1 MR. BOLLINGER: For Hutsonville.
2 MR. MORE: For Hutsonville.
3 MS. BARKLEY: Is that no longer the case?
4 MR. MORE: It's no longer for sale.
5 MS. BARKLEY: Question 7 --
6 HEARING OFFICER FOX: Ms. Barkley, if you're
7 moving ahead to number 7, number 6, you had --
8 MS. BARKLEY: Number 6, I --
9 HEARING OFFICER FOX: Those are all the
10 follow-ups that you were anticipating?
11 MS. BARKLEY: Yes.
12 HEARING OFFICER FOX: Very good. Surely.
13 MS. BARKLEY: Okay. And actually, number 7
14 I think we've already covered, and that concerns
15 compliance with class I groundwater quality standards
16 instead of looking at degradation over time. Question 8,
17 this was about removing material and placing it in other
18 sites with controls, and one -- I guess I would like to
19 ask about what sort of -- you know, if there's been an
20 affordability analysis or an economic analysis, the
21 affordability of an option of dredging up material and
22 moving it to a lined facility, and I understand that it's
23 considered economically unreasonable, but I wonder if you
24 have anything supporting that.

1 MR. BOLLINGER: The cost estimates were
2 developed as part of the alternatives analysis, and I can
3 cite the section of that. It's in spreadsheet -- looking
4 for the technical support document. Page 73. It's Table
5 3-1, Closure Alternatives Screening Summary, and we have
6 cost estimates for -- for instance, you mentioned
7 actually removing it, taking it to an off-site facility,
8 and those ranged from 23 to 34 million dollars depending
9 on the evaluation or the -- excuse me -- the assumptions
10 you make of whether are you going to dig it up and be
11 able to utilize it in some capacity or recycle it or
12 whether you're actually transporting it off-site to a
13 disposal facility, and those costs were just compared in
14 contrast to the other alternatives presented.

15 MS. BARKLEY: Okay. Other than comparing
16 and contrasting, have you done any -- looked at and
17 compared to other operating expenses on-site or over a
18 period of time how ash waste being created right now --
19 what the cost over time of that is? I think it would
20 provide some context if you could -- instead of just
21 showing cost estimates of different options and, you
22 know, which one is the least expensive or most expensive,
23 if there was an affordability analysis and if it was
24 looked at and compared to what you're spending right now

1 on waste disposal and treatment.

2 MR. MORE: Well, there is no waste disposal
3 going on at this point at ash pond D.

4 MS. BARKLEY: Not at that pond D. Great.

5 MR. MORE: So since that's the case, we
6 compared closure to closure in essence. One way of
7 closing ash pond D was as proposed, a cap, trench;
8 another way of closing ash pond D would be digging up the
9 material and disposing of it off-site. So we didn't look
10 at an affordability analysis because there is no really
11 ongoing disposal cost or maintenance cost associated with
12 the pond.

13 MR. BOLLINGER: The cost to manage --

14 MR. MORE: Operating cost.

15 MR. BOLLINGER: -- ash as it's being
16 generated now and into the future would really not be a
17 comparable cost because this ash is already in situ or in
18 place, unlike an analysis one might conduct for a
19 long-term ash management plan. We have a division within
20 our company that does look at long-range ash management
21 plans for each facility and evaluates the cost and
22 feasibility of alternatives, and we certainly have built
23 landfills at some locations and are continuing to do so,
24 but that's a case-by-case evaluation and analysis, and

1 again, that's a forward -- and that's for ash we are
2 generating today in the predicted life of the plant
3 versus a circumstance such as pond D where we're really
4 trying to address the cumulative assemblage of ash from
5 that operation for '68 through 2000.

6 MS. BARKLEY: I'm not an economist, but I --
7 it seems to me that that's a cost of doing business that
8 should be looked at not just as a sum at the end of the
9 life of that ash pond but really looked at over the years
10 of service that it's provided, so to just give a number
11 of, you know, X number of million dollars really looks
12 like -- I know you'd be paying it in this time period,
13 but if you look at it over time of generation of that
14 waste material, it might look like a more reasonable
15 option or it might help paint the picture differently
16 when you're looking at this chosen alternative as opposed
17 to others.

18 MR. BOLLINGER: I'm not an economist either.
19 I was just trying to distinguish between ongoing planning
20 for ash as it's generated today or tomorrow versus the
21 historic backlog of ash that is present in pond D. I
22 mean, that was my point, but I can't speak to what would
23 be an appropriate economic analysis.

24 MS. BARKLEY: One of the other things I'd

1 like to raise is folks I work with over in Indiana -- and
2 I will -- I don't have any documentations right now, but
3 I'd like to put it in the record as part of my final
4 comments. I understand that there are power generating
5 facilities, cogen power generating facilities in Indiana
6 that regularly dredge material out of ash impoundments
7 and move it to other disposal sites. The reason I know
8 about this is because our counterpart in Indiana has
9 opposed this practice because the waste that's generated
10 has been put in abandoned mines without any controls, so
11 I guess I'd just say that's not what I would offer as an
12 alternative, but it seems like if that's a practice
13 that's happening in Indiana, that shows that it is
14 technically feasible and it's economically reasonable to
15 use large equipment to remove ash waste and dispose of it
16 at another site, which then I would offer should be in a
17 lined facility like anything you're building right now.

18 So I guess I would like to see it flushed out
19 as -- you know, I know it -- your response makes it seem
20 like it's, you know, the unconventional excavation
21 techniques and, you know, the expense, moving such a
22 large volume of material is too expensive and
23 economically infeasible, but I'm not sure there's any --
24 I guess I haven't seen anything to show that that is the

1 case.

2 MR. MORE: Well, I'd ask that you consider
3 that when this is closed, you're looking at a million
4 tons of ash at once, saturated ash.

5 MR. BOLLINGER: At other Ameren facilities,
6 we do remove ash from existing basins, whether that's for
7 utilization or for disposal at some locations at
8 landfills, but the feasibility of that is very much
9 dependent upon the physical configuration of the pond,
10 and at pond D, the challenge is in order to get all the
11 material, including this approximately one-third that is
12 down and mixes with the water table, would require
13 substantial materials handling that would include
14 dewatering that at some location or at some facility, and
15 the site itself at Hutsonville is very limited. You
16 would have to construct those facilities or bring in a
17 temporary dewatering infrastructure in order to make that
18 happen, and that's part of what makes this cost so
19 extraordinary. At other locations, part of even a very
20 modern pond that's fully lined that's utilized for wet
21 sluicing of ash, part of the economy that is evaluated if
22 those impacts are evaluated is that a pond's usable
23 capacity is consumed and the pond serves a purpose of
24 settling ash from the water, and as that ash builds up, I

1 mean, we do in some locations remove that ash for any
2 number of either beneficial uses or other disposal
3 alternatives, but that is very much dependent upon
4 evaluating a facility and its usable capacity and
5 ensuring that you continue to maintain compliance with
6 water quality limitations that affect the actual
7 operation of the pond, and again, what I'm suggesting is
8 that's a very different scenario and a very different
9 evaluation than managing the cumulative materials in a
10 pond that's fully out of service, so --

11 MS. BARKLEY: Has there been at any time
12 removal of ash material for beneficial use from pond D?

13 MR. BOLLINGER: I'm not aware that we
14 have -- I'm not aware of any significant project where
15 that has occurred in pond D. The company has a fairly
16 good -- I believe there's a good track record of ash
17 utilization, but that depends on the facility. At the
18 Hutsonville site, there is not a market that there is
19 elsewhere. In order to utilize large quantities of ash
20 at many locations, the company has invested in dry ash
21 handling systems that facilitate the transport of dry ash
22 and the utilization in other products, but again,
23 that's -- there's not a -- we have not found a market nor
24 beneficial use options for Hutsonville, and again, that's

1 not something that we deal with in environmental
2 services, but there is a department within the company
3 that works with fuels and evaluates beneficial use
4 opportunities.

5 MS. BARKLEY: I'd like to follow up on that
6 just a little bit. I asked about beneficial reuse from
7 pond D. Is there any beneficial reuse from ponds A, B or
8 C?

9 MR. BOLLINGER: None that I would state of
10 any significance. The other pond that you didn't mention
11 in that was we have a bottom ash pond at Hutsonville, and
12 we do essentially consider all of the bottom ash
13 generated by its use as typically for icing control by
14 local counties and municipalities, so bottom ash is
15 utilized in that regard, but fly ash, I don't believe
16 there's been any significant off-site utilization from
17 any of those basins. And again, I think I stated
18 previously that's because we haven't found opportunities.
19 There's not a market available that our fuel group has
20 been able to identify within a reasonable transport
21 perimeter around the plant. I mean, part of the economy
22 of that is how far we'd have to transport something to
23 make it available to someone who's going to utilize it,
24 and some of those challenges simply have not allowed us

1 to reutilize ash from Hutsonville.

2 MS. BARKLEY: When that happens, either at
3 your site or other Ameren facilities, does the user of
4 that coal waste pay Ameren for that product or are you
5 paying for them to haul it off-site?

6 MR. BOLLINGER: I am not -- Again, I'm not
7 personally familiar with that to the extent to state that
8 with certainty, but it is my understanding that it is
9 usually at no cost or actually is subsidized, but I'm
10 not -- I think -- yeah, again, it is unique, and I think
11 in certain circumstances where probably my understanding
12 is the highest use would be for a fly ash that is of
13 adequate quality and is available dry, there may actually
14 be a market where we are paid for that -- for instance,
15 in cement manufacturing and concrete manufacturing -- but
16 for a lot of other lower quality uses, I think it would
17 be subsidized or provided for free, but again, I'm
18 speculating there. I'm just not familiar with the
19 economics for ash utilization.

20 MS. BARKLEY: Could Ameren quantify the
21 reports on the record of instances of beneficial reuse
22 from any of the ponds, any of the five ponds, I guess?

23 MR. BOLLINGER: Hutsonville, I thought --

24 MS. GALLAGHER: I think we tried that.

1 MR. BOLLINGER: I thought we tried to do
2 that.

3 MS. GALLAGHER: I'm Susan Gallagher. We can
4 certainly provide you with those numbers.

5 MS. BARKLEY: Any follow-up response after
6 the --

7 MS. GALLAGHER: I think she sent you --

8 MR. MORE: I want to go off the record.

9 MS. GALLAGHER: Sorry.

10 HEARING OFFICER FOX: If we may go off the
11 record just for a moment.

12 (Discussion held off the record.)

13 HEARING OFFICER FOX: We do need to go back
14 on the record. Thank you very much.

15 MS. BARKLEY: I know we have a joint
16 proposal from IEPA and Ameren, but I'm still looking for
17 alternatives, and it seems like one alternative that
18 maybe hasn't been flushed out is recovering materials in
19 ash pond D, at least some of them, to reduce the burden
20 on underlying groundwater supplies, and that's where I'm
21 going with the question, is if there's -- if there is a
22 market out there, if it's possible to remove some of
23 those materials, or if beneficial reuse from ash ponds A,
24 B or C is happening, then it could be happening from pond

1 D. That's --

2 MR. BOLLINGER: Let me just offer one
3 thought in that regard. I mean, to try and remove
4 significant quantities of ash from pond D and then close
5 the basin doesn't have a gain in terms of improving
6 groundwater impact unless one's able to get all the way
7 down to the stuff at depth, so my point is that unless
8 you're successful in getting all the way down to what's
9 deep, then the value of that exercise is not significant,
10 and to get what's deep is what the cost figures show to
11 be most challenging. I mean, if you can envision a
12 scenario where you empty the top half of the pond and
13 then you wanted to bring the rest up but you'd have to
14 excavate it all, face the challenges you explained, place
15 something at depth and then place some materials back on
16 top, so it's a partial cleanout of the pond.
17 Particularly, a partial cleanout that would be the
18 surface materials would not be a very efficient means of
19 trying to reduce the potential for leachate that we're
20 facing with the ash at depth.

21 MR. COBB: Conceptually, too, I -- you know,
22 I don't have an exact answer, but in theory, I think I
23 might be a little bit concerned with potentially right
24 now we have somewhat of a steady -- in groundwater

1 terminology a steady state condition in terms of
2 geochemistry and equilibrium with the hydrology. If we
3 go digging up that, stirring things up similar to, say,
4 sediments in Lake Michigan, we may actually see some
5 further degradation beyond what the current trends have
6 shown. So I don't have an exact answer, but I do have
7 some concerns theoretically on using that approach versus
8 leaving things in a steady state condition and not
9 further stirring up the pot, so to speak, and possibly
10 releasing more contaminants than were there already in
11 the contamination plume, which is something that hasn't
12 been assessed by the groundwater flow modeling and the --
13 we have a pretty good handle on, I think, what the
14 dynamics of the hydrology are right now, but that would
15 sort of potentially upset the apple cart.

16 HEARING OFFICER FOX: Ms. Barkley, if I may
17 interrupt you, we have been at it for a little over an
18 hour and a half, and I certainly appreciate everyone's
19 diligence. Why don't we take a break and come back at
20 10:15. I'll note that we are in the middle of follow-ups
21 or perhaps at the end of follow-ups on question number 8,
22 and we can begin by checking with you to see if we have
23 in fact wrapped that up.

24 MS. BARKLEY: Okay.

1 HEARING OFFICER FOX: If so, we can move on
2 to number 9, which refers to the final grading and slope.
3 But if we could go off the record and come back at -- did
4 I say 10:15? 10:15, and if everyone would just hold on
5 just for a short announcement about procedures. Thank
6 you very much.

7 (Brief recess taken.)

8 HEARING OFFICER FOX: I wanted to make one
9 minor housekeeping announcement. As I mentioned at the
10 top of the hearing, at the entrance to this room with a
11 pen is a sheet on which anyone who has not prefiled
12 testimony may indicate that they would like to do so
13 today. I noticed that that was empty at or near the
14 conclusion of the break, but I want to be on the record
15 as making sure that that opportunity is known to the
16 people who are present here. Having said that,
17 Ms. Buckley, we were -- Barkley -- my apologies for
18 misstating your name -- we were addressing your follow-up
19 questions to number 8 of your prefiled questions and we
20 had left it that if you had additional follow-ups, we
21 could turn to those. If you did not on number 8, we can
22 move on to question number 9, and I will let you indicate
23 where you are.

24 MS. BARKLEY: Okay. I think I'm done with

1 question 8.

2 HEARING OFFICER FOX: Very good. Question
3 number 9 dealt with the final grading and slope. Have we
4 addressed that to your satisfaction --

5 MS. BARKLEY: Yes.

6 HEARING OFFICER FOX: -- or do you have some
7 follow-ups?

8 MS. BARKLEY: No, that's been addressed.

9 HEARING OFFICER FOX: Very good. Why don't
10 we move on to number 10.

11 MS. BARKLEY: Question 10 was about how the
12 groundwater quality standards and non-degradation
13 standards are being applied, and I wondered -- I saw the
14 joint proposal explanation of what would be applied to
15 the upper zone and what would be applied to the lower
16 zone, but I wondered if the Agency could respond with an
17 explanation or justification for how those are being
18 applied, and then you can reference under what authority
19 or in what regulation that would be applied.

20 MR. COBB: Sure. I -- You know, this site,
21 although it's, you know, not the most complex, it
22 certainly does kind of have some challenges because you
23 have on-site and off-site impacts; you have two different
24 zones within one aquifer and you have two different

1 levels of impact. So under Section 840.116(a), the
2 on-site groundwater quality standards follow the
3 correct -- following the corrective action are based on
4 the groundwater management zone procedures in 35 Illinois
5 Administrative Code Part 620.450(a)(4), and under
6 Section 840.116(b), the off-site groundwater quality
7 standards following corrective action are based on the
8 numeric standards of Section 620.410 in the upper zone of
9 the underlying aquifer, and on the non-degradation
10 standard of Section 620.401 and Section 620.301(a) in the
11 lower zone of the underlying aquifer.

12 So however regardless of the complexities, both
13 the on-site and the off-site compliance can be determined
14 at the Hutsonville property boundary downgradient of ash
15 pond D using wells that are screened at different depths
16 to assess the upper and the lower zones. Earlier I had
17 referred to some attachments in my prefiled testimony,
18 and the key thing that we're looking at there in terms of
19 monitoring well 14, which is in the lower zone, which has
20 not got -- which has some nominal impacts there, but --
21 some degradation, but yet below the numerical standard,
22 we -- in looking at the modeling, which is going to pull
23 the plume back in the upper zone, that is also the source
24 under certain conditions for some of the nominal

1 degradation that we've seen in the lower zone, so not
2 only will that remediation pull back that plume, it will
3 also diminish the source, so we feel that, you know,
4 steady state, no increasing trends, that we don't want to
5 see pollution up to the numerical standard. We feel
6 convinced by what's proposed here that it's going to do
7 that.

8 MS. BARKLEY: I guess what I was looking at,
9 the section on determination of compliance, 840.118,
10 within the proposed rule change, I was thinking a
11 demonstration of compliance -- my question was going to
12 be how long will the Agency allow before compliance is
13 reached, but I guess you're saying that they will be in
14 compliance as long as there's no increasing trend of
15 contamination. Is that correct?

16 MR. COBB: Well, going to my prefiled
17 testimony again and on page 20, attachment IV, or if you
18 go to the technical support document, in the Ameren TSD
19 on page 534, you see the predictive modeling of the
20 effects of the interceptor trench, and those are done
21 relative to time scales, so for example, on -- in
22 figure 17C-D, you see the plume has been pulled on --
23 back on site within 12 years, and then in example D,
24 figure D, the time frame within 25 years, so this has

1 been bracketed by a time frame, but during this process
2 we'll be using a statistical -- or I shouldn't say we --
3 the -- Ameren will be using a statistical monitoring
4 approach, which is very good for seeing, you know, what
5 kind of trends are going to happen, so we're being
6 conservative with saying no increasing trend in the lower
7 zone. In fact, you know, it may decrease, but I think
8 we -- the appropriate approach is to say no increasing
9 trend over that time period in the lower zone, whereas in
10 the upper zone we're going to see a significant decrease
11 over time, and if you look at those figures as compared
12 to figures A and B in the technical support document,
13 you'll see that variation. In fact, you could graph that
14 if -- those concentrations over time, to show a decrease.

15 MS. BARKLEY: And so for the no increasing
16 trend, is that for all of the class I groundwater
17 standards?

18 MR. COBB: That's the lower zone as it moves
19 off-site.

20 MS. BARKLEY: That's -- okay.

21 MR. COBB: Downgradient of pond A at the
22 Hutsonville property boundary. I'm sorry. Strike that.
23 Pond D. I apologize. We've gone through naming so many
24 ponds today that --

1 MS. BARKLEY: For the lower zone
2 downgradient of pond D.

3 MR. COBB: Correct.

4 MS. BARKLEY: Okay.

5 MR. RAO: May I ask a follow-up question?
6 Mr. Cobb, regarding the groundwater quality standards for
7 the lower zone off-site --

8 MR. COBB: Yes.

9 MR. RAO: -- in Subsection (b) of 840.116,
10 it says that the non-degradation standard under 620
11 applies.

12 MR. COBB: Correct.

13 MR. RAO: Will there be any numerics and
14 numbers attached to that lower zone?

15 MR. COBB: In fact, yes. If you go to my
16 prefiled testimony again and turn to attachment II, that
17 takes us back to the box and whisker plots.

18 MR. RAO: Yeah.

19 MR. COBB: And so those by default have
20 become sort of the new background.

21 MR. RAO: Okay.

22 MR. COBB: And I'm using that term loosely,
23 so -- but it becomes the condition that exists right now,
24 and we're seeing that as -- in a statistical snapshot

1 from that monitoring that was done from 2002 to 2008, so
2 we will be looking at ongoing monitoring --

3 MR. RAO: Yeah.

4 MR. COBB: -- at monitoring well 14 to see
5 is that still steady state.

6 MR. RAO: Okay.

7 MR. COBB: So that's -- they'll be our
8 measurements right there.

9 MR. RAO: Okay. And along the same line,
10 you know, for the on-site groundwater quality standard
11 after the completion of closure, I think the rule states
12 that the existing concentrations will be the standard
13 on-site.

14 MR. COBB: Exactly, and that's very
15 consistent with the groundwater management zone --

16 MR. RAO: Yeah.

17 MR. COBB: -- provisions. In essence, as
18 that corrective action is going on, which they're --

19 MR. RAO: Yeah.

20 MR. COBB: -- they'll be actively pulling
21 the plume back --

22 MR. RAO: Yeah.

23 MR. COBB: -- you know, we don't want them
24 to be out of compliance with the numerical standards as

1 that process is going on, so we take that into account
2 and typically look at the existing concentrations. Now,
3 as you look on -- back at attachment IV of my prefiled
4 testimony, you'll see what we think the plume
5 diminishment is going to be, so there's actually going to
6 be some decreasing trends off-site, and as long as that
7 is maintained and we feel after this period with a cap
8 and the equilibrium that exists there that it's going to
9 pretty well keep maintaining this position.

10 MR. RAO: And will there be numeric
11 standards set for that on-site based on the existing
12 concentration at some point?

13 MR. COBB: Going to the Board's groundwater
14 quality standards, we're using the alternative
15 groundwater quality standards after a corrective action
16 has been completed. Let me find that, if you will, here,
17 just a second. That's in Section 620.450, and Subsection
18 (a) (4), so -- (a) (4) (B), and maybe it would help if I
19 read that. After completion of a corrective action as
20 described in Section 620.250(a) -- which are the
21 groundwater management zone provisions -- and we said
22 we'd modeled this after that -- the standard for such
23 released chemical constituent is: A concentration as
24 determined by groundwater monitoring, if such

1 concentration exceeds the numerical standards in the
2 appropriate class of groundwater -- and then it lays out
3 the specifics, in this case Section 620.410 -- would
4 apply, and to the extent practicable, the exceedance has
5 been minimized and beneficial use as appropriate for the
6 class of groundwater has been returned, and any threat to
7 public health or the environment has been minimized.
8 This is what we -- This was our guidance and why we
9 applied the existing concentrations, and we feel that
10 given what we've seen, the predictive modeling, the
11 monitoring, that there will be no problem meeting this
12 board standard.

13 MR. RAO: Okay.

14 MR. COBB: But that was the basis.

15 MR. RAO: Okay. And as drafted, the rule
16 allows Ameren to seek a groundwater management zone.

17 MR. COBB: Absolutely.

18 MR. RAO: And is it the Agency's expectation
19 they are going to seek a management zone and that you're
20 going to evaluate it under 620 to see whether they
21 qualify for it?

22 MR. COBB: It's possible they could avail
23 themselves of that. The complication with the
24 groundwater managements -- and they can do that on-site.

1 It gets more complicated off-site because we've always,
2 you know, insisted upon obtaining permission from the
3 off-site landowner to extend that, but they certainly
4 could avail themselves of that on-site.

5 MR. RAO: I had a question about this agency
6 policy about getting permission from off-site owners. Is
7 that part of the groundwater management zone provisions
8 under Part 620 or is it agency policy that it's required?

9 MR. COBB: That's more of a legal --

10 MR. WIGHT: I -- It's not part of 620. It
11 doesn't provide that. It's an agency policy. If you
12 have to conduct certain activities as part of that, like
13 extend your monitoring and so on, you're going to need
14 that permission to do those things off-site, so the way
15 we're set up here is to make -- and I know Ameren has had
16 contacts with a lady off-site, which -- well, I won't try
17 to characterize those, but it's not clear that she would
18 agree to a groundwater management zone. Let's just leave
19 it that way. And they may want to attempt that again.
20 But in any case, it's set up so that they can demonstrate
21 compliance at the property boundary for that reason, and
22 the standard that we have established both for the upper
23 and lower zone for the off-site contamination, for the
24 upper zone, it's a return to the numeric standards of 410

1 while demonstrating a decreasing trend, then the lower
2 zone, as Rick just explained, is the non-degradation
3 concept, but those can be demonstrated to property
4 boundary, in any case probably would have to be
5 demonstrated to the property boundary. If they were to
6 obtain an off-site GMZ, it would just give them a little
7 more flexibility with regard to the standard, and it may
8 be beneficial to do so, but if they can't get that
9 agreement, what we need them to do can be done on-site.

10 MR. RAO: Okay. So as far as the Agency's
11 concerned, in terms of allowing these groundwater
12 management zones, it's always been your policy to require
13 permission from off-site owners.

14 MR. COBB: As long as I've been involved and
15 in any way that I might have an influence on
16 administering, that's been my approach, and I think that
17 the Agency overall --

18 MR. RAO: The reason I ask, the Board has an
19 ongoing groundwater rulemaking. You know, we have a --

20 MR. COBB: Part 620, the amendment?

21 MR. RAO: Yeah, yeah.

22 MR. COBB: Correct.

23 MR. RAO: When I saw the Agency's policy was
24 not in the GMZ provisions, just want to make you aware

1 that the rulemaking is going on.

2 MR. COBB: The policy is formed primarily,
3 in my -- I'm not a lawyer, but it becomes -- flows from a
4 legal rationale, so I think we'd want to maintain that
5 the way we've always done it.

6 MR. RAO: All right. Thanks.

7 MR. COBB: But thank you.

8 MR. RAO: And one last question on the
9 groundwater quality standards was regarding demonstration
10 of compliance under 840.118. In response to Miss
11 Barkley's question, you were talking about how the
12 Agency's going to focus on the trend analysis to see
13 whether ash pond D is in compliance. Under
14 840.118(a)(2)(iii) -- or what is it -- (a)(2)(A),
15 (a)(2)(A)(iii), this provision also requires that the
16 concentration of constituents monitored in accordance
17 with 840.114 should also be at or below the applicable
18 groundwater quality standards of 840.116(b), so is it
19 just the trend analysis the Agency's going to rely on or
20 are you going to focus on all the concentrations of the
21 constituents that are being monitored to see whether
22 they're below the standards?

23 MR. COBB: Well, typically, as you would
24 do -- you would do a trend analysis similar to what was

1 presented in the box and whisker plots. Instead of that
2 being a trend line, it was broken down into a box plot,
3 but you could pull that out and look at that, and on the
4 same graph, you just show -- for example, on page 18 of
5 my prefiled testimony, you see where the concentrations
6 are of boron in monitoring well 14 and then you see the
7 numerical standard up above that, so you're always going
8 to -- it's just a simple line on the graph to determine
9 where you are with respect to the numerical standard, and
10 then you have to tie that back, then, with the -- where
11 you're at with respect to the remediation and the
12 corrective action, you know, in certain cases. Not
13 necessarily this case, because they're pulling a --
14 pulling it all the way back on-site, but in certain cases
15 with the remediation, you may reach a point where it's
16 almost asymptotic, you know, you're not getting a change
17 so you're not going to, you know, bring it down to the
18 standard. But that's how that would be done.

19 MR. RAO: Okay.

20 MR. COBB: So you're always looking at both
21 things.

22 MR. RAO: All of these listed under
23 (a) (2) (A) apply.

24 MR. COBB: Correct.

1 MR. RAO: Yeah. Thank you. Thank you,
2 Miss Barkley.

3 MS. BARKLEY: As far as the -- pulling the
4 plume back, is the reasoning behind that that you're
5 stopping vertical -- with the cap that you're preventing
6 rainfall from preventing -- contributing to any more
7 vertical migration?

8 MR. COBB: Yeah. The -- With the cap on
9 it -- With groundwater, you're always looking at what we
10 call head elevations or from a higher head elevation to a
11 lower head elevation, and then without the cap you're
12 always adding water at a higher elevation than the lower
13 elevation downgradient, so we're going to reduce that
14 head, and then the water that's there, much of it will be
15 captured by the interceptor trench, as well as the
16 off-site will be coming back on the other side of the
17 interceptor trench, so it's an excellent corrective
18 action, and the volume of water they're taking out, I
19 mean, you see the results from the modeling, and in our
20 opinion, the modeling was done sufficiently and done well
21 to -- so we expect that's going to be pretty successful.

22 MS. BARKLEY: Is there any pumping of
23 groundwater either from shallow wells or deep wells on
24 the property, and if so, where in relation to the plume?

1 MR. COBB: There is a non-community public
2 well on-site. On-site, though, there -- it appears from
3 the data that we've seen that it's under a semi-confined
4 condition between the upper and the lower. Somewhere
5 between there on-site and off-site we see that they
6 appear to be together, because we had asked Ameren -- not
7 only did we have other data where we thought that, but we
8 also asked them to do some tritium analysis, and the
9 tritium is a very good tracer for determining when you're
10 getting contemporary recharge, and in monitoring well 14,
11 we feel that's relevant, because we had four tritium
12 units, which means that we're getting some communication
13 from the surface, whereas other parts of the site, the
14 tritium could actually be coming in from the river into
15 the -- because of the changing elevation of the river
16 stage. Monitoring well 14, at least it's our opinion, we
17 feel that's far enough away from the influence of the
18 river that we're actually seeing that as evidence of what
19 we had in our prefiled testimony.

20 MS. BARKLEY: Did Ameren consider pumping
21 contaminated groundwater as a corrective action to
22 further pull the plume back?

23 MR. BOLLINGER: We did look at that in a
24 prior evaluation of alternatives. We believe the drain

1 interceptor trench is more effective technology for the
2 circumstances there. In particular, as one goes
3 eastward, to try and use a pumping mechanism would be
4 challenging in that particularly when you get in the
5 deeper zone, the aquifer is -- would take a considerable
6 amount of pumping to actually draw down because it's a
7 highly permeable aquifer on the eastern end of the --

8 MS. BARKLEY: It's closer to the river?

9 MR. BOLLINGER: Right.

10 MS. BARKLEY: Okay.

11 MR. RAO: I had a follow-up question
12 regarding the tritium analysis.

13 MR. COBB: Yes.

14 MR. RAO: It's just, you know, about the
15 data. Has Ameren performed that analysis yet or --

16 MR. BOLLINGER: Yes.

17 MR. COBB: We received the results.

18 MR. RAO: Would it be possible for you to
19 enter the information into the record?

20 MR. BOLLINGER: Yeah. We received just last
21 Friday an e-mail version of those results, and we
22 forwarded that on to IEPA for their review. We have not
23 received the formal report from the lab. We can either
24 forward the e-mail -- I mean, the e-mail came directly

1 from the lab, but it's not a formal lab report, so either
2 we can forward that to you --

3 MR. RAO: A complete lab report would be
4 more helpful.

5 MR. BOLLINGER: Then we will wait until we
6 actually receive that at the plant, which we have not got
7 it yet. The results were actually completed last
8 Thursday, I believe.

9 MR. RAO: Thank you.

10 MR. BOLLINGER: We'll forward it.

11 MS. BARKLEY: Going back to the
12 demonstration of compliance, I just wondered if what's
13 written in 840.118 conflicts at all with what's in the
14 groundwater quality standards at 620.505.

15 MR. COBB: 840 point --

16 MS. BARKLEY: 118.

17 MR. COBB: 118.

18 MS. BARKLEY: Compared to --

19 MR. COBB: Oh, the whole --

20 MS. BARKLEY: If there's any difference
21 between what's needed to demonstrate compliance at this
22 particular site versus, you know, general groundwater
23 quality standards.

24 MR. COBB: No. I mean, we were -- all of --

1 everything that I was looking at in terms of informing
2 how I responded to this was really coming from my
3 experiences with Part 620, so, yeah, like I said, I think
4 we have tight integration with the Board's groundwater
5 quality standards, including the non-degradation
6 provisions. We feel very comfortable with the remedy.
7 Not always the case.

8 MS. BARKLEY: Okay. So that's it for
9 question 10.

10 HEARING OFFICER FOX: Very good. Let me, if
11 I may, check with Mr. Rao. Did you have any further
12 follow-ups on Ms. Barkley's question 10?

13 MR. RAO: No.

14 HEARING OFFICER FOX: Very well. Your
15 question number 11, Ms. Barkley, was directed to the
16 Agency generally, and if you have any follow-ups, please
17 go ahead.

18 MS. BARKLEY: You'll probably be pleased to
19 know that I don't have any follow-ups for 11, 12, 13 or
20 14.

21 HEARING OFFICER FOX: Which brings us to
22 your final question, number 15, which was directed
23 specifically to Mr. Nightingale and -- regarding some
24 potential future action by USEPA. If you have

1 follow-ups, please go ahead.

2 MS. BARKLEY: I don't have any follow-ups
3 for that question either, but I do have some additional
4 questions beyond the scope of questions I prefiled.

5 HEARING OFFICER FOX: Why don't we proceed
6 to those while we've taken care of the follow-ups to your
7 specific written questions.

8 MS. BARKLEY: Okay. I apologize if this is
9 in the technical support document or in prefiled
10 testimony. I just hadn't thought about this when I was
11 going through the materials, but in terms of surface
12 waters in the area -- I'm thinking about the Wabash River
13 and then across the Hutson Creek on the way here -- I
14 wondered if the Agency or Ameren looked at whether those
15 surface waters are being impacted at all during low flow
16 situations when they'd be recharged by groundwater.

17 MR. BOLLINGER: We addressed the potential
18 impacts on the Wabash River as part of the risk
19 assessment and found that there were no threat -- no
20 adverse impacts on the ecology. That was the overall
21 findings of that risk assessment. We did look
22 specifically at the flow of contaminants to the Wabash
23 River and resulting concentrations that the public or the
24 environment would be exposed to. That was all embodied

1 in the risk assessment.

2 MS. BARKLEY: Was that done within the
3 context of both Illinois designated uses and accompanying
4 standards and Indiana designated uses and standards?

5 MR. BOLLINGER: I would have to confirm that
6 by reviewing information. I'm not sure that -- I'm not
7 aware that there are higher use standards in Indiana than
8 Illinois. I would have to confirm whether the Indiana
9 standards differ than -- are different than the Illinois
10 and whether they were evaluated as part of the risk
11 assessment.

12 HEARING OFFICER FOX: And for the sake of
13 clarity, Mr. Bollinger, the risk assessment you're
14 referring to is Chapter 7 of the technical support
15 document, pages 331 to 492?

16 MR. BOLLINGER: That is correct.

17 HEARING OFFICER FOX: Very good. Thank you
18 for clarifying.

19 MS. BARKLEY: And was Indiana Department of
20 Environmental Protection -- or Environmental
21 Management -- IDEM, Indiana Department of Environmental
22 Management, have they been consulted at all?

23 MR. BOLLINGER: Not to my knowledge.

24 MS. BARKLEY: And what about -- I would ask

1 the same question for other surface waters, other small
2 streams other than the Wabash.

3 MR. BOLLINGER: The only other surface water
4 that I'm aware of is -- I believe it is Raccoon Creek,
5 and it is upstream of the Hutsonville Power Plant site.

6 MS. BARKLEY: Okay. Then I wonder if Ameren
7 could explain the arrangement with the landowner to the
8 south whose groundwater is currently contaminated by ash
9 pond use.

10 MR. BOLLINGER: We secured an agreement with
11 the landowner that she agreed not to utilize shallow
12 groundwater in the first 500 foot south of the property
13 boundary. The property boundary's essentially an
14 east-west boundary, and based on modeling results, we
15 looked at a zone 500 feet to the south and secured her
16 agreement not to utilize or install shallow wells in the
17 first -- 50 feet? I'll find it. I think it might be the
18 first 25 feet or something. Let me verify that number.

19 MR. MORE: It's Chapter 9 of the technical
20 support document.

21 MR. BOLLINGER: And it's the first 25 feet.

22 MR. WIGHT: If Ameren's finished with their
23 response, I might offer an additional comment. We had
24 looked at that agreement. We have questions about the

1 enforceability of that agreement. I think we would
2 question the efficacy of it. However, we didn't pursue
3 it as part of the hearing because the -- it ended up
4 being more or less peripheral to the set of standards in
5 compliance with the property boundary that we ended up
6 with, so we haven't really pursued the issue to a
7 resolution with Ameren because it seemed that the
8 proposal went a different direction, so I just wanted to
9 mention that for the record. If it does become an issue
10 later, we would probably raise those same objections.

11 MS. BARKLEY: I guess that was -- that's my
12 concern, is the legality of that agreement. I understand
13 the groundwater is -- law is -- or rights are tied to
14 land ownership, but knowing that that groundwater crosses
15 boundaries, I just wonder if an agreement between two
16 parties for, you know, use on-site can be supported
17 knowing that there could be other adjacent water users.
18 It would take -- You know, it would take, I think, a
19 large user, but if someone was pumping at an extremely
20 high rate, isn't it possible that that contaminated
21 groundwater could cross that landowner's boundaries,
22 opening -- I mean, opening up -- Ameren up maybe to --

23 MR. COBB: There currently is a large user
24 of groundwater; however, it's very transient in nature,

1 in the lower zone, the irrigation well, and of course in
2 my prefiled testimony I got into that a little bit. I
3 believe that during the growing season and up to the end
4 of it, you finally see an effect, but it's not there all
5 the time, and I think the reason for that is that lower
6 zone is highly transmissive, there's abundant water, and
7 you really don't see, in my opinion, an effect on the
8 upper water conditions until a full -- after a full
9 growing season, and then it flips back when the -- you
10 know, the irrigation is done. So I think currently,
11 right now, with the bounding of the property that's to
12 the downgradient of ash pond D, there is some high-use
13 pumping there right now that certainly appears to be
14 meeting irrigation needs, so -- the interceptor trench is
15 also taking out a significant amount of groundwater.
16 I'll defer to Ameren, but I thought that was around 1.9
17 million gallons per day. I could be wrong.

18 MR. BOLLINGER: I don't have that number off
19 the top of my head.

20 MR. COBB: From memory, I think it's around
21 1.9 MGD, but -- so we did assess that, and once again, we
22 feel that the remedy that's there will take care of that.
23 It's a pretty strong influence where you're pulling the
24 plume all the way back, and that's in the upper zone,

1 remember. If they're going to put in wells, it would be
2 my opinion that they would put it in the more highly
3 transmissive lower zone, and once again, if they're using
4 it for a private drinking water system, the demand from
5 that well would be minimal, whereas what we currently
6 have is a high-capacity irrigation well, but yet that's
7 very transient in nature and we see a minimal effect, and
8 that's why we've seen a nominal impact to the lower zone,
9 in my opinion, because of that transient nature; that
10 there's only certain times under certain time frames
11 where the flow direction is switched around that
12 direction and you're able to -- so I think we've assessed
13 that.

14 MR. WIGHT: Just to address your other issue
15 about whether property owners can make such agreements
16 when other property owners may be affected by them, we
17 have at the Agency about a 12-year history of using the
18 institutional control concept in other types of
19 remediations, and of course they have to establish and
20 demonstrate a foundation that makes that acceptable, but
21 in fact individual property owners do make those types of
22 agreements in those programs. Part of the remediation,
23 however, is that the Agency project managers are to
24 make -- that modeling is involved, and Agency project

1 managers have to make certain assessments in accordance
2 with the criteria set forth in the Part 742 rules, so if
3 it looks like contamination will be a problem on multiple
4 properties, then all properties have to be accounted for,
5 and -- but there's still a series of individual
6 agreements that are put together -- piggybacked, if you
7 will -- to cover the entire nature of the problem. I
8 think based on Rick's comment, that's not what we're
9 seeing here, at least under current circumstances, and
10 it's clear that whether the agreement is enforceable or
11 not, the off-site property owner is well aware of the
12 circumstances, so -- and the other point, then, is in
13 addition to the institutional controls used under the
14 TACO rules, we now have a statutory institutional
15 control, the Uniform Environmental Covenant, which we
16 have referenced in this rule as an instrument that might
17 be needed on-site at the close of the remediation, but
18 that's also a site-specific instrument and would require
19 multiple property owners to sign on, but it's -- it would
20 be done on that individual basis.

21 MS. BARKLEY: Okay. Thank you.

22 MR. RAO: I had a follow-up question
23 regarding the institutional control under new Uniform
24 Environmental Covenants Act. We are not familiar with

1 this act since it was recently enacted. Could you
2 explain a little bit briefly for the record what are the
3 requirements for getting an institutional control in
4 place under this act?

5 MR. WIGHT: Well, I -- it's not something
6 that I've worked with, so I have read the statute a few
7 times. We do have people at the Agency who are working
8 on some of those now, but I don't happen to be one of
9 them, so I'd be reluctant to say too much more for fear
10 that I would misguide you.

11 MR. RAO: Okay. That's fine. And if you
12 can take a look at it and, you know, even if you address
13 it in your comments, that's fine, but the specific
14 question I had was, like you, I took a look at the
15 statute, and there's something called environmental
16 response project, which is defined, to which the -- this
17 act applies, and they have listed, I think, a bunch of
18 different environmental response projects that are
19 covered in this act. I just wanted to get a
20 clarification from the Agency whether the remediation
21 that Ameren would be required to do under this closure
22 plan, would that fall under any of those response
23 projects?

24 MR. WIGHT: I can speak to that briefly,

1 because we did take a look at that, and I believe the
2 last one of those examples of environmental response
3 projects is a reference to board or court orders, and we
4 felt that because this is a site-specific rule and there
5 will be an order establishing this regulation, that that
6 could fall within the purview of that last example. If
7 the Board reached a different conclusion, then you might
8 not want to adopt what we've proposed, but we thought
9 that it was reasonable within those examples that this
10 would be a board order, and it doesn't specify that it
11 has to be an order arising from a contested case, so we
12 thought it would be appropriate in this site-specific
13 rule.

14 MR. RAO: Okay. Thank you for the
15 clarification.

16 MR. WIGHT: Would you still want some
17 responsive comments about --

18 MR. RAO: No. When I was going through
19 those list of projects, I was wondering where --

20 MR. WIGHT: Right.

21 MR. RAO: -- this remediation would fall
22 under, so that's helpful to know.

23 MR. WIGHT: Okay.

24 MR. RAO: And I think in your joint proposal

1 now, it also provides additional flexibility to get
2 institutional controls under different programs other
3 than this Uniform Environmental Covenants Act?

4 MR. WIGHT: I'm sorry.

5 MR. RAO: Under the revisions proposed in
6 the joint proposal, it allows for flexibility for Ameren
7 to seek institutional controls under different programs
8 other than this new act?

9 MR. WIGHT: Yes, although those may not have
10 been developed yet. I'm not sure that the TACO
11 institutional controls are available in this particular
12 situation, and that's why we singled out the Uniform
13 Environmental Covenant, but as we've had testimony
14 already this morning, this would be a period of several
15 years before we turn to compliance, and normally the way
16 that institutional controls get applied in agency
17 programs is that those are almost always established at
18 the end of the corrective action, so if that were the
19 case here, it's very possible that other environmental
20 institutional controls might be developed over the
21 duration that would create options at that point in the
22 future that are not available now, and we just wanted to
23 leave the door open for that possibility.

24 MR. RAO: Thanks: I'm done.

1 MS. BARKLEY: Okay. I'm not sure who
2 mentioned it, but there's -- it was mentioned there would
3 be up to 1.9 million gallons of -- per day of water
4 coming through the groundwater trench?

5 MR. COBB: Right.

6 MS. BARKLEY: Is that what would be sent to
7 pond B and permitted through the NPDES permit?

8 MR. BOLLINGER: Yes.

9 MS. BARKLEY: So what's being proposed for
10 closure of this pond assumes -- you're relying on the
11 NPDES permit, then, to be able to carry that --

12 MR. BOLLINGER: Well, we're relying on
13 authorization of a wastewater permit. Right now we
14 believe the most efficient means of doing that would be
15 for transfer through pond B and discharge with that
16 existing outfall in the plant's NPDES permit, but we --
17 the -- we could evaluate a separate discharge for that
18 if -- with the evaluation of compliance with the water
19 quality standards for the Wabash River, but right now
20 we -- it seems like the most efficient means would be to
21 go through pond B where we have an existing outfall and
22 existing limitation on boron and other parameters.

23 MS. BARKLEY: And where does pond B
24 discharge to?

1 MR. BOLLINGER: I'm sorry. I said pond B?

2 MS. BARKLEY: Pond B.

3 MR. BOLLINGER: And that is to the Wabash
4 River.

5 MS. BARKLEY: To the Wabash. Okay. And can
6 you give us an idea of the time line when you'd be
7 seeking a modified NPDES permit to handle that additional
8 waste stream?

9 MR. BOLLINGER: I'd have to check on the
10 timetable in the rule in terms of how quickly. I'll let
11 Josh dig for that a little bit, but --

12 MR. WIGHT: 840.132.

13 MR. BOLLINGER: Thank you. All right. So,
14 I mean, the -- per that section, within 180 days of the
15 effective date of Subpart A, we must submit to the Agency
16 an application to revise the state operating permit or
17 the NPDES permit.

18 MS. BARKLEY: Okay. And that will open up
19 antideg regulations to be applied on that new waste
20 stream going to the Wabash River?

21 MR. BOLLINGER: I assume that
22 antidegradation review would be conducted by the Agency
23 as part of that permit review.

24 MR. RAO: May I ask a follow-up question?

1 Regarding this modification of the NPDES permit --

2 MR. BOLLINGER: Yes.

3 MR. RAO: -- has Ameren had any -- you know,
4 as part of your discussions with the Agency, have you had
5 any discussion specifically related to this NPDES permit
6 modification to allow the discharge from the groundwater
7 trench?

8 MR. BOLLINGER: I don't believe we've had
9 specific discussions relative to the modification of the
10 Hutsonville permit. On the other hand, our calculations
11 show that we should be comfortably able to comply with
12 the existing limitations in the permit, and insofar as
13 overall impacts relative to boron as the indicated
14 parameter to the Wabash River, we have looked at the
15 discharge of boron through the ash pond system and the
16 ongoing reduction in the boron loading to the Wabash
17 River that would be associated with the pond closure, so
18 we have looked at those things. We believe that we can
19 fully comply with both our existing permit limits and
20 with the water quality standards for the Wabash River,
21 but we have not engaged in specific discussions in that
22 regard with the wastewater permitting group.

23 MR. RAO: If for any reasons if you
24 encounter any problems in getting a modification of your

1 permit, have you evaluated any other options for managing
2 water from the collection trench?

3 MR. BOLLINGER: I don't believe we've done
4 so specifically for Hutsonville. We have at other
5 facilities evaluated the technologies and the costs
6 associated with removal of boron from wastewater, and it
7 is an extremely expensive and complicated technology. In
8 many coal-fired facilities, boron limits have been
9 established based on water quality standards that allow
10 concentrations at or above the limits that are
11 established in the Hutsonville permit, and so we think,
12 again, since we have an existing permit that allows --
13 that has limits and we believe we can stay within that,
14 that we have reason to believe that it will be permissible
15 and that the Agency will modify to incorporate this
16 discharge.

17 MR. RAO: Thank you.

18 MR. COBB: I had just a couple follow-ups.

19 MR. RAO: Yeah.

20 MR. COBB: Internally, we have been -- our
21 workgroup has been interacting with the division of water
22 pollution control, Sanjay Sofat, the division manager, as
23 well as Al Keller, the permit section manager, and even
24 over to Bob Mosher to look at the water quality section,

1 anticipating non-deg questions and analysis, and
2 furthermore, in terms of evaluation of the different
3 alternatives, that's something that is required under the
4 NPDES permit, so in fact we're -- we kind of talked about
5 that and felt that that would probably have to be done
6 anyway under that versus spelling out some different
7 alternatives, so that's --

8 MR. RAO: Now, I was --

9 MR. COBB: -- not particularly in the
10 drafting here of -- because we had that -- I just wanted
11 to emphasize we had that conversation, so that's part of
12 the process to look at those other alternatives.

13 MR. RAO: Okay. And any modification of the
14 NPDES permit is -- goes to a public comment also, right?
15 Yes?

16 MR. COBB: I believe it does.

17 MR. WIGHT: Yes.

18 MR. NIGHTINGALE: Yes, it would be subject
19 to a public notice and opportunity for hearing.

20 MR. RAO: Thank you.

21 MS. BARKLEY: Are there any mixing zones
22 currently permitted in the NPDES permit for ash pond D?

23 MR. BOLLINGER: There is not a specified
24 mixing zone for ash pond D.

1 MS. BARKLEY: Is allowed mixing used under
2 the NPDES permit?

3 MR. BOLLINGER: Let me clarify your
4 question. In some circumstances a mixing zone analysis
5 is required to ensure or to set a limitation in a permit,
6 and I'm not aware that there has been a mixing zone
7 analysis conducted. That would be done by typically --
8 unless the studies required, it would be done by the
9 wastewater permitting personnel, and the established
10 limits in the NPDES permit are long-standing, and I'm not
11 aware of whether there was a mixing zone analysis
12 conducted by the Agency.

13 MS. BARKLEY: Okay. Thank you. I'm sorry
14 to change the order of the record, but I did notice when
15 I was going through my notes that I did have a question
16 about question number 12 that was directed to the Agency,
17 and I think that'll be my final question.

18 HEARING OFFICER FOX: Particularly if that's
19 the case, why don't we return to that.

20 MS. BARKLEY: Okay. Question 12 had to do
21 with the criteria that establishes that coal combustion
22 waste can be used beneficially as a coal combustion
23 by-product, and the response from the Agency states that
24 coal combustion waste can be used beneficially without

1 meeting metals standards established in 3.135(a-5) (B) if
2 the applicant demonstrates to the Agency that three
3 criteria will be met, and they go on and list the three
4 criteria, and I wondered if someone from the Agency could
5 explain how the applicant demonstrates that those
6 criteria have been met.

7 MR. LIEBMAN: Sure. We'll just do it
8 criteria by criteria?

9 MS. BARKLEY: Sure. That'd be great.

10 MR. LIEBMAN: The first one is the use of
11 the CCW will not cause, threaten or allow the discharge
12 of any contaminant into the environment. We think this
13 criteria or criterion will substantially be met by a
14 combination of the final cover system and the groundwater
15 trench. Do you have any follow-up on that response?

16 MS. BARKLEY: Just -- I guess I'd just ask
17 that if the material was submitted in support of the
18 petition, was it what was used for the determination or
19 was it something specifically prepared by Ameren to show
20 that they've demonstrated that criteria number one has
21 been met?

22 MR. LIEBMAN: No, it was not specifically
23 provided, and really, part of it's not done. I think
24 part of it would be -- part of these requirements were

1 satisfied during the development of the regulations, and
2 then it will be completely satisfied when Ameren provides
3 the closure and post-closure care plan and we review it
4 and then approve it. The second one, the use will
5 otherwise protect human health and safety. Again,
6 that's -- you know, we think through the development of
7 these proposed regulations and then Ameren's drafting the
8 closure and post-closure care plan, our review of it and
9 approval and their implementation of it will satisfy this
10 criteria. And three, the use constitutes a legitimate
11 use of CCW as a raw material that is an effective
12 substitute for analogous raw material. Yes, we think in
13 this case the CCW would be a substitute for clean soil or
14 perhaps some granular material, like sand or gravel.

15 MS. BARKLEY: And just to be clear, is the
16 only way that CCW will be used beneficially on-site is
17 for the final grading and sloping of the ash impoundment
18 before the cap is placed on top? Is that the only thing
19 that the Agency has been -- has reviewed in terms of a
20 beneficial reuse of coal combustion waste?

21 MR. LIEBMAN: As part of developing these
22 regulations, yes.

23 MS. BARKLEY: Okay. That's all of my
24 questions. Thank you.

1 HEARING OFFICER FOX: Very good. Thank
2 you --

3 MS. BARKLEY: Thank you.

4 HEARING OFFICER FOX: -- Ms. Barkley.

5 MS. BARKLEY: Thank you.

6 HEARING OFFICER FOX: Very good. We've got
7 some time before we need to break, and Mr. Rao has
8 indicated that he has some questions, and why don't we
9 turn to those at this point.

10 MR. RAO: Okay. Well, most of my questions
11 have already been answered. I just had a few I will go
12 through. I had these questions set up in order with the
13 section numbers of the rule, so my first question is
14 under the definitions, and the Agency had proposed to
15 delete the definition of "surface impoundment" which was
16 proposed initially by Ameren in the rules. This term is
17 used in the definition of ash pond D. Could you clarify
18 whether we need the term to be defined -- the term
19 "surface impoundment" to be defined in these rules?

20 MR. COBB: No.

21 MR. RAO: Do we have the definition
22 elsewhere or -- because there's been much discussion
23 about what's a landfill and what's a surface impoundment,
24 so would it be clearer to have a definition in the rule?

1 MR. COBB: Our thinking was that throughout,
2 not only did -- not only is it implicit that it's -- in
3 this particular rule that it's applied to ash pond D, but
4 it's explicit, and where it wasn't, Josh made sure it
5 was. Where we think that might make some sense is
6 potentially down the road if we get some more and expand,
7 but we think it's very clear at this point that this
8 applies to ash pond D.

9 MR. RAO: All right.

10 MR. COBB: So that was my basis for the no
11 response.

12 MR. RAO: Okay.

13 HEARING OFFICER FOX: No, that it should not
14 be restored.

15 MR. COBB: No, that it should not.

16 HEARING OFFICER FOX: Sorry to interrupt --

17 MR. COBB: That's okay.

18 HEARING OFFICER FOX: -- but I wanted to
19 make sure that was clear.

20 MR. COBB: No problem.

21 MR. RAO: Moving on to 840.112, the
22 groundwater monitoring system, in Subsection (a)(2), the
23 Agency proposed a change that requires wells must be
24 screened to allow sampling at specified interval instead

1 of the language Ameren had I think that proposed desired
2 intervals, so is the Agency going to specify the
3 intervals in the closure plan?

4 MR. COBB: Well, we'll certainly be
5 reviewing those. In fact, in this case we're blessed
6 with already knowing. This is here primarily in case
7 there's something we haven't -- something comes up that
8 we haven't already -- hasn't already been addressed by
9 the work that's already been done by Ameren. We think,
10 you know, it's a quality job that's already been done.

11 MR. RAO: Okay. And in the same section,
12 under Subsection (d), the Agency requires the groundwater
13 monitoring system to include a maintenance plan. Should
14 this maintenance plan be submitted along with the closure
15 plan or is that something that's outside of the closure
16 plan?

17 MR. DUNAWAY: That is what we would
18 anticipate, that it would be -- as part of the monitoring
19 plan, it would be submitted with the closure plan.

20 MR. RAO: Okay. You have spelled out all
21 the information that should be submitted in the closure
22 plan under the closure plan section, I think.

23 MR. WIGHT: It's 840.130.

24 MR. RAO: Yeah. Can you take a look at it

1 to make sure that the maintenance plan is part of the
2 closure plan?

3 MR. DUNAWAY: Yes.

4 MR. RAO: Thank you. And my next question
5 deals with 840.114, the groundwater monitoring program.
6 840.114(a) requires the owner or operator to monitor
7 groundwater for inorganic constituents and pH listed
8 under Part 620, and I know you have quite a few years'
9 worth of groundwater monitoring data. Was there any
10 monitoring done for organic chemicals to see if there's
11 any concern for organics in this -- --

12 MR. BOLLINGER: Not that I'm aware of. We
13 have no reason to suspect that there would be organic
14 contaminants present in pond D.

15 MR. RAO: And there's been no issues
16 involving organics in the Wabash River?

17 MR. COBB: (Shakes head back and forth.)

18 MR. MORE: I'm sorry. Can we maybe get a
19 verbal, Your Honor?

20 MR. COBB: Sorry about that. No, not that
21 we're aware of.

22 HEARING OFFICER FOX: Thank you for keeping
23 me honest.

24 MR. RAO: My next question is under 840.120.

1 That's the groundwater collection trench. This is just a
2 question to deal -- it deals with the drafting of the
3 rule. The requirements for groundwater collection trench
4 is proposed as one big paragraph, and the same thing with
5 groundwater discharge system. Would it be possible for
6 you to take a look at it and see if it could be broken
7 down into subsections? It would easier to refer to those
8 provisions.

9 MR. MORE: Sure, we'll look at that.

10 MR. RAO: Okay. Next question is under
11 840.124, the final cover system. Subsection (a)(1)
12 requires a geomembrane thickness of at least 40 mil.
13 Could you please comment on whether this proposed minimum
14 thickness is what's typically required for cover systems
15 for landfills or surface impoundments?

16 MR. LIEBMAN: Yes. On solid waste
17 landfills, we commonly see now the hydraulic barrier
18 being a 40-mil thickness of some type of geosynthetic.

19 MR. RAO: Thank you. And my last question
20 is regarding compliance costs, and in this regard, the
21 technical support document provides a preliminary
22 projected 30-year cost estimate of around 6 million
23 dollars for the closure alternative proposed by Ameren.
24 Has Ameren made any cost estimates that address the

1 installation of any additional monitoring wells and also
2 for post-closure care?

3 MR. BOLLINGER: I don't believe we've
4 projected post-closure care costs as yet, and it is our
5 expectation that the existing monitoring well network
6 will be adequate to address compliance end points
7 identified in the regulation.

8 MR. RAO: Thank you. That's all I have.

9 HEARING OFFICER FOX: Were there any
10 questions on the part of either of the board members
11 present today? Very good. And we do have at least one
12 gentleman in the audience. Sir, did you wish to pose any
13 questions on the basis of the joint proposal?

14 AUDIENCE MEMBER: No, I do not.

15 HEARING OFFICER FOX: Very good. We -- That
16 brings us to the conclusion of the testimony, the
17 follow-up questions and responses that are based upon the
18 joint proposal filed recently by Ameren and the Agency.
19 A short time ago I retrieved the sheet on which those who
20 had not prefiled might indicate that they wish to do so,
21 and that sheet is blank, indicating that no additional
22 participant wishes to offer testimony today, and I
23 believe, for the record, Ms. Barkley, you had indicated
24 that you had wrapped up your --

1 MS. BARKLEY: Yes.

2 HEARING OFFICER FOX: -- follow-up questions
3 and concluded those?

4 MS. BARKLEY: Yes. Thank you.

5 HEARING OFFICER FOX: Thank you very much.
6 That would bring us to, in the absence of any further
7 testimony or questions, a brief moment to address the
8 economic impact study issue. Since 1998, Section 27(b)
9 of the Environmental Protection Act has required the
10 Board to request that the department now known as the
11 Department of Commerce and Economic Opportunity conduct
12 an economic impact study of proposed rules. The Board
13 must then either make the study or the Department's
14 explanation for not conducting one available to the
15 public. In a letter dated June 30, 2009 -- and it is a
16 part of the record in this proceeding and viewable from
17 the Board's web site -- the Board did request that the
18 Department of Commerce and Economic Opportunity conduct
19 an economic impact study on this proposal, and to date,
20 the Board has received nothing from the Department
21 responding to that request.

22 Is there anyone who would like to testify or
23 offer comment on the request made by the Board to the
24 Department of Commerce and Economic Opportunity? Neither

1 seeing nor hearing any indication that there is any
2 interest in doing that, why don't we go off the record
3 for a moment just to discuss a procedural issue or two.

4 (Discussion held off the record.)

5 HEARING OFFICER FOX: In going off the
6 record, the participants discussed the procedural issue
7 of filing post-hearing comments. Section 102.108(b) of
8 the Board's procedural rules allows persons to file
9 written comments within 14 days after the Board receives
10 the transcript unless a hearing officer orders otherwise.
11 Based upon off-the-record conversations we have had on
12 that procedural issue, before it takes action on this
13 joint proposal, the Board had will hold open a period for
14 post-hearing comments of 21 days, and with the transcript
15 expected to be available on Friday, October 9, it is
16 expected that that 21-day comment period would expire on
17 Friday, October 30.

18 As I mentioned, a copy of the transcript should
19 be available by approximately Friday, October 9, and the
20 Board will waste no time after receiving it in posting it
21 to its web site at www.ipcb.state.il.us. You would need
22 to use this docket number, 9-21, to call that up, and as
23 I mentioned before, I will issue a hearing officer order
24 very quickly after we receive that transcript so that the

1 participants are clear on the actual duration of the
2 comment period. In addition, the comments, I should
3 note, may be made electronically through the Board's web
4 site through the Clerk's Office On-Line, although I ask
5 that those comments, as required by the Board's
6 procedural rules, to be filed with those participants who
7 are on the service list in this proceeding, and if you
8 would do so, please check through COOL to make sure that
9 you have the most current and up-to-date version of that
10 service list.

11 Does anyone have any questions at all before we
12 proceed to adjourn? Neither seeing nor hearing any, I
13 thank you for your diligence, for all of your work on
14 this proposal, and naturally we look forward to hearing
15 your post-hearing comments, and you'll be hearing from us
16 shortly on the deadline for filing those. Once again,
17 thank you for all of your labors and your efforts on this
18 project, and we are adjourned. Thanks.

19 (Hearing adjourned.)

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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 the
7 Crawford County Courthouse Annex, Robinson, Illinois, on
8 September 29, 2009, 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 9th day of October,
14 2009.

15

16

17

Karen Waugh

18

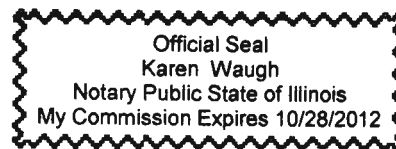
Notary Public--CSR

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