

BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

- - -

In the Matter of the :
Application of Ohio Edison:
Company, The Cleveland :
Electric Illuminating :
Company, and The Toledo :
Edison Company for : Case No. 14-1297-EL-SSO
Authority to Provide for :
a Standard Service Offer :
Pursuant to R.C. 4928.143 :
in the Form of an Electric:
Security Plan. :

- - -

DEPOSITION

of Raymond L. Evans, taken before me, Karen Sue
Gibson, a Notary Public in and for the State of Ohio,
at the offices of FirstEnergy Corporation, 76 South
Main Street, Akron, Ohio, on Thursday, July 2, 2015,
at 9 a.m.

- - -

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- - -

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11 On behalf of the Applicants.

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16 On behalf of the Northeast Ohio Public
17 Energy Council.

18 Earthjustice
19 By Mr. Shannon Fisk
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23 Earthjustice
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On behalf of the Sierra Club.

IGS Energy
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On behalf of IGS Energy.

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1 APPEARANCES: (Continued)

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6 On behalf of the Environmental Law &
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13 On behalf of the Residential Consumers of
14 Ohio Edison Company, The Cleveland
15 Electric Illuminating Company, and The
16 Toledo Edison Company.

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Deposition Exhibit	Identified
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1	9-20-13 Letter to U.S. Environmental Protection Agency from Mr. Evans with Attachments	81
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Thursday Morning Session,

July 2, 2015.

- - -

MR. LANG: Jim Lang and Jim Burk for the
companies.

MR. FISK: Shannon Fisk on behalf of
Sierra Club.

MR. SOULES: Michael Soules on behalf of
Sierra Club.

MR. LANG: And who are the intervenor
counsel on the line who would like to make an
appearance?

MR. OLIKER: On behalf IGS Energy, Joseph
Oliker.

MR. SAUER: Larry Sauer with the Office
of the Ohio Consumers' Counsel.

MS. FLEISHER: Madeline Fleisher on
behalf of the Environmental Law & Policy Center.

MR. BORCHERS: Dylan Borchers on behalf
of NOPEC.

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RAYMOND L. EVANS

being by me first duly sworn, as hereinafter
certified, deposes and says as follows:

CROSS-EXAMINATION

By Mr. Fisk:

Q. Good morning, Mr. Evans.

A. Good morning.

Q. How are you doing today?

A. Good, thank you.

Q. Good. If you could just state your name
for the record.

A. Yes. It's Raymond L. Evans.

Q. Okay. And what is your business address?

A. My business address is 76 South Main
Street, Akron, Ohio, 44308.

Q. Great. And who are you employed by?

A. I am employed by FirstEnergy Service
Corp.

Q. Okay. And what is your title at
FirstEnergy Service Corporation?

A. My title is Vice President Environmental
and Technologies.

Q. Okay. And what are your basic job duties
as vice president?

1 A. I'm responsible for developing
2 environmental programs and strategies that comply
3 with laws and regulations pertaining to our
4 facilities owned or operated by subsidiaries of
5 FirstEnergy Corporation. In addition, I have
6 responsibility for development of new technologies
7 across the corporation.

8 Q. Okay. And when you say new technologies,
9 you are referring to environmental technologies or?

10 A. No. I am referring to all types of
11 technologies.

12 Q. All types, okay. And who do you report
13 to?

14 A. I report to Jim Lash.

15 Q. And who -- who is Jim Lash?

16 A. He is the president of generation.

17 Q. Generation, okay. And does anybody
18 report to you?

19 A. Yes.

20 Q. Okay. About how many people?

21 A. Five.

22 Q. Five direct?

23 A. Five direct.

24 Q. Okay. And do people report to them?

1 A. Yes.

2 Q. Okay. Is that -- how many people would
3 be in your -- in your group as a whole?

4 A. Current number is 77.

5 Q. 77, okay. And do you know, are any of
6 your direct reports also witnesses in this
7 proceeding?

8 A. Could you repeat the question?

9 Q. Do you know if any of your direct
10 reports, the five people you mentioned, are any of
11 them witnesses in this proceeding?

12 A. No.

13 Q. Okay. And have you ever been deposed
14 before?

15 A. Yes.

16 Q. Okay. About how many times?

17 A. Once.

18 Q. Once. What proceeding?

19 A. It was a litigation matter.

20 Q. Okay. Was it for your work or personal
21 life?

22 A. It was work.

23 Q. Okay. Do you know what case?

24 A. It was a litigation proceeding.

1 Q. Okay. And in what -- what proceeding?

2 A. I don't recall the exact legal title of
3 the proceeding.

4 Q. Okay. Do you recall what it was about?

5 A. It was regarding emissions from a power
6 plant.

7 Q. Okay. Which power plant?

8 A. Bruce Mansfield.

9 Q. Okay. And do you recall approximately
10 when this was?

11 A. Could you restate the question.

12 Q. Do you recall approximately when you were
13 deposed? Like what year or?

14 A. 2009.

15 Q. 2009, okay. And do you know, was this
16 proceeding in federal court or?

17 A. Federal court.

18 Q. Federal court, okay. And have you ever
19 been cross-examined in a hearing before?

20 A. No.

21 Q. No, okay. And have you ever submitted
22 written testimony in a court proceeding before?

23 A. Yes.

24 Q. Okay. What proceeding?

1 A. It involved the -- I believe it was a
2 rate case involving Centerior and compliance with the
3 Clean Air Amendments of 1990.

4 Q. Okay. So you said it was a rate
5 proceeding so this was in the public utilities
6 commission?

7 A. It was a public utilities commission.

8 Q. Okay. Have you had any -- have you
9 submitted any written testimony in any sort of
10 federal or state court proceeding?

11 A. No.

12 Q. Okay. And then the rate proceeding that
13 you referred to, do you know approximately when that
14 testimony was?

15 A. 1993.

16 Q. Okay. And is that the only time you have
17 submitted written testimony in a public utilities
18 commission proceeding?

19 A. Yes.

20 Q. Okay. When were you -- well, strike
21 that.

22 When did you become aware that you would
23 need to submit testimony in this proceeding?

24 A. I believe it was late winter.

1 Q. Of this year?

2 A. 2015, yes.

3 Q. Okay. And who informed you that you
4 would need to submit testimony?

5 A. Counsel.

6 Q. Counsel, okay. And did you personally
7 draft your entire testimony?

8 A. Yes.

9 Q. Okay. And did anyone work with you on
10 your testimony?

11 A. Yes.

12 Q. And who?

13 A. Mike Jirousek.

14 Q. And who is Mr. Jirousek?

15 A. He reports to me.

16 Q. And what is his role?

17 A. He is a manager.

18 Q. A manager of what?

19 A. Environmental.

20 Q. Okay. So he's in your department?

21 A. Yes.

22 Q. Okay. And so is he also an employee of
23 FirstEnergy Service Company?

24 A. Yes.

1 Q. Anyone else who worked with you on your
2 testimony?

3 A. Michele Somerday.

4 Q. Okay. And anyone else?

5 A. Counsel.

6 Q. Okay. Anyone else besides counsel?

7 A. No.

8 Q. Okay. And who is Michele Somerday?

9 A. She's a manager.

10 Q. Okay. In what department?

11 A. Energy policy.

12 Q. Okay. Does she report to you or?

13 A. No.

14 Q. Okay. Do you know who she reports to?

15 A. Yes.

16 Q. And who is that?

17 A. Vice president.

18 Q. Of?

19 A. Federal governmental affairs --

20 Q. Okay. And who is that?

21 A. -- and energy policy.

22 Q. And who is that?

23 A. Marty Hall.

24 Q. Marty Hall, okay. And what -- going back

1 to Mike Jirousek, what did he do with regards to your
2 testimony?

3 A. He reviewed my drafts.

4 Q. Okay.

5 A. He just reviewed my drafts.

6 Q. Okay. So that was his only role?

7 A. Yes.

8 Q. Okay. And how about Michele Somerday,
9 what did she do with regard --

10 A. She reviewed my drafts.

11 Q. Okay. Any other role?

12 A. She provided some detail numbers.

13 Q. What numbers did she provide?

14 A. Excerpts from the Clean Power Plan.

15 Q. Okay. So you are referring to your
16 discussion starting on page 9 of your supplemental
17 testimony; is that right?

18 A. Yes.

19 Q. Okay. And portions of that discussion
20 is -- in your testimony have been deemed
21 confidential, so we'll probably discuss that in the
22 afternoon session. Okay. And you are providing
23 testimony here today on behalf of the Ohio Edison
24 Company, Cleveland Electric Illuminating Company, and

1 The Toledo Edison Company; is that right?

2 A. Yes.

3 Q. And can we agree to refer to those three
4 entities collectively as the companies?

5 A. Yes.

6 Q. Okay. And do you know what FirstEnergy
7 Solutions is?

8 A. Yes.

9 Q. Okay. What is that?

10 A. It is the retail arm of FirstEnergy.

11 Q. Okay, okay. And in your current position
12 do you provide any services to FirstEnergy Solutions?

13 A. Yes.

14 Q. Okay. And what do you do for FirstEnergy
15 Solutions?

16 A. For the generation plants I provide
17 environmental services in terms of compliance of the
18 plants.

19 Q. Anything else you do for FirstEnergy
20 Solutions?

21 A. Provide reporting.

22 Q. Okay. Anything else?

23 A. Provide technical expertise.

24 Q. Okay. Anything else?

1 A. Provide guidance documents.

2 Q. Okay. Anything else?

3 A. That's it.

4 Q. Okay. And are you compensated by
5 FirstEnergy Solutions in any way?

6 A. No.

7 Q. Okay. And do you report to anybody at
8 FirstEnergy Solutions?

9 A. No.

10 Q. Okay. And does anyone at FirstEnergy
11 Solutions report to you?

12 A. No.

13 Q. Okay. And at a general level, are you --
14 are you familiar with the proposed transaction under
15 which FirstEnergy Solutions would sell certain
16 capacity, energy, and ancillary services to the
17 companies?

18 A. In general, yes.

19 Q. Okay. And are you aware that the
20 generating assets that are the subject of that
21 proposed transaction are the Sammis plant, the
22 Davis-Besse plant, and FirstEnergy Solutions' share
23 of the OVEC plants?

24 A. Could you restate the question.

1 Q. That proposed transaction, are you aware
2 that the generating assets that are the subject of
3 that transaction are the Sammis plant, the
4 Davis-Besse plant, and the FirstEnergy Solutions'
5 share of the OVEC plants?

6 THE WITNESS: Could you repeat the
7 question, please.

8 (Record read.)

9 A. Yes.

10 Q. Okay. And if I -- can we agree to refer
11 to that as the proposed transaction?

12 A. Yes.

13 Q. Okay. Did you have any role in
14 evaluating the proposed transaction?

15 A. Could you restate the question.

16 Q. Well, are you aware that -- are you aware
17 as to whether individuals working for FirstEnergy
18 evaluated, you know, the merits of the proposed
19 transaction?

20 A. Could you restate the question.

21 Q. What part do you find confusing?

22 A. You used the term "FirstEnergy."

23 Q. Okay. Do you know if anyone evaluated
24 the proposed transaction on behalf of the companies?

1 THE WITNESS: Could you repeat the
2 question back, please.

3 (Record read.)

4 A. In general, yes.

5 Q. Okay. And did you have any role in
6 evaluating the proposed transaction on behalf of the
7 companies?

8 A. Could you restate the question.

9 Q. Were you personally involved in any way
10 in evaluating the proposed transaction on behalf of
11 the companies?

12 A. No.

13 Q. And were you involved in any way in
14 evaluating the proposed transaction on behalf of
15 FirstEnergy Solutions?

16 A. No.

17 Q. Okay. And did you have any role in any
18 negotiations regarding the proposed transaction?

19 A. No.

20 Q. Okay. So are you offering any opinions
21 in this proceeding regarding the proposed
22 transaction?

23 MR. LANG: Object to the extent that you
24 have his direct testimony in front of you so you know

1 what opinions he is offering. Quite frankly the
2 question was vague to the extent that, I don't know,
3 you know -- his testimony has some relationship to
4 the proposed transaction since it relates to the
5 plants but you know that.

6 MR. FISK: Right.

7 THE WITNESS: Can you repeat the
8 question, please.

9 (Record read.)

10 THE WITNESS: Could you repeat it one
11 more time, please.

12 (Record read.)

13 A. The opinion in my testimony relates to
14 the compliance of these plants with environmental
15 regulations of the state of Ohio and USEPA.

16 Q. Okay. So beyond -- beyond what's in your
17 testimony you are not offering any other opinions
18 regarding the proposed transaction; is that correct?

19 A. Yes.

20 Q. Okay. And do you have any knowledge as
21 to whether the Sammis plant would be retired if the
22 proposed transaction were not entered into?

23 A. I don't know.

24 Q. Okay. And do you have any knowledge as

1 to whether the Davis-Besse plant would retire if the
2 proposed transaction were not entered into?

3 A. I don't know.

4 Q. Okay, okay. And so you are -- well, if
5 you turn to page 1, lines -- starting at line 20 of
6 your testimony, you say you are responsible for
7 developing -- developing environmental programs and
8 strategies that comply with the laws and regulations
9 pertaining to all facilities owned or operated by
10 subsidiaries of FirstEnergy Corporation; is that
11 correct?

12 A. That's correct.

13 Q. Okay. And the plants for which you are
14 responsible include any generating plants owned by
15 subsidiaries of FirstEnergy Solutions; is that right?

16 A. Yes.

17 Q. Okay. Do you know how many generating
18 plants in Ohio you are responsible for developing
19 environmental programs and strategies?

20 A. I believe the number is eight.

21 Q. Okay. And are you responsible for
22 developing environmental programs and strategies for
23 the Sammis plant?

24 A. Yes.

1 Q. Okay. And how about for the Clifty Creek
2 plant?

3 A. No.

4 Q. Okay. Do you have any role in
5 environmental programs and strategies for Clifty
6 Creek?

7 A. No.

8 Q. How about for Kyger Creek, do you have
9 any role in developing environmental programs and
10 strategies?

11 A. No.

12 Q. And how about for Davis-Besse?

13 A. Yes.

14 Q. And your testimony on page 1, line 23,
15 you refer to "facilities of" and then you list the
16 companies; is that correct?

17 A. Yes.

18 Q. Okay. And what -- what facilities are
19 you referring to that you are responsible for
20 developing environmental programs and strategies for?

21 A. Could you repeat the question, please.

22 MR. FISK: Could you read it back.

23 (Record read.)

24 A. Could you restate the question.

1 Q. So the facilities that you reference in
2 line 23 on page 1 of your supplemental testimony,
3 what -- what facilities are those?

4 A. Could you restate the question, please.

5 Q. What do you find confusing about it?

6 A. There are two types of companies listed
7 in line 23 so are you referring to FirstEnergy or are
8 you referring to the companies?

9 Q. Well, you use -- you say facilities of
10 the companies, correct?

11 A. Yes.

12 Q. Okay. So I am asking about those
13 facilities.

14 A. Okay. Substations.

15 Q. Okay. Anything else?

16 A. Transmission facilities.

17 Q. Okay. Anything else?

18 A. Distribution facilities.

19 Q. Anything else?

20 A. Diesel generators.

21 Q. Okay. Anything else?

22 A. Office facilities.

23 Q. Okay. And are you responsible for
24 developing environmental programs and strategies for

1 FirstEnergy Solutions itself?

2 A. No.

3 Q. Okay. Do you know who is responsible for
4 doing so for FirstEnergy Solutions?

5 A. Could you restate the question.

6 Q. Do you know whether there is someone at
7 FirstEnergy Solutions who is responsible for
8 developing environmental programs and strategies?

9 A. No.

10 Q. No, you don't know or, no, there isn't?

11 A. No, there isn't.

12 Q. Okay. I believe you testified earlier
13 you do provide services to FirstEnergy Solutions; is
14 that right?

15 A. Yes.

16 Q. Okay. And those services are with
17 regards to environmental programs and strategies; is
18 that right?

19 A. Yes.

20 Q. Okay. And who at FirstEnergy Solutions
21 do you provide that information to?

22 A. It's subsidiaries.

23 Q. Okay. So you don't provide anything
24 directly to FirstEnergy Solutions itself.

1 A. That's correct.

2 Q. Okay. And just generally how do you go
3 about developing environmental programs and
4 strategies for, say, the Sammis plant?

5 A. It begins with following the development
6 of regulations and laws.

7 Q. Okay. And then what's the next step?

8 A. The next step is understanding if there
9 is an impact.

10 Q. Okay. And then what's the next step?

11 A. Discussion with I will use the term
12 client or the impacted entity.

13 Q. Okay. And then after that?

14 A. Advising on compliance strategies.

15 Q. Okay. And then after that?

16 A. Depending on the regulation we may
17 perform additional studies.

18 Q. Okay. And then after that?

19 A. After that, we will develop a compliance
20 plan.

21 Q. Okay. And then after that?

22 A. It will go to a budgeting cycle.

23 Q. Okay. And then after that?

24 A. We will monitor performance.

1 Q. Okay. And then after -- anything after
2 that?

3 A. We'll submit the necessary reports,
4 documentation.

5 Q. Okay, okay. And so for the Sammis plant
6 you are involved in all -- all of those steps that
7 you just listed; is that correct?

8 A. Depending on the environmental
9 regulation, each step may or may not be done
10 depending on the circumstances of the regulation and
11 the equipment installed at a facility.

12 Q. Okay. But if a step is done, you have
13 some involvement?

14 A. Yes.

15 Q. Okay, okay. And in your normal course of
16 business, do you document the results of any of those
17 steps?

18 A. Depending on the regulation.

19 Q. Okay.

20 A. Some steps may be documented.

21 Q. Okay. With -- you referred to the
22 development of a compliance plan; is that correct?

23 A. Uh-huh.

24 Q. And then that plan is submitted to --

1 into a budgeting cycle; is that right?

2 A. Yes.

3 Q. Would that compliance plan be put in a
4 document?

5 A. Could you rephrase the question, please.

6 Q. So the compliance plan that is developed
7 and then put into a budgeting cycle, is there a
8 document that goes into the budgeting cycle that
9 reflects what the compliance plan is?

10 A. No.

11 Q. Okay. So how do you -- what gets put
12 into the budgeting cycle then?

13 A. The cost.

14 Q. So just a number?

15 A. Yes.

16 Q. With no backup or explanation where that
17 number came from or how it was developed?

18 A. No.

19 Q. No, there is no documentation or, no, my
20 question was incorrect?

21 A. Could you rephrase the question.

22 Q. So I believe you -- am I correct you
23 testified that the -- there is simply a number of the
24 costs that's put into the budgeting cycle; is that

1 right?

2 A. Yes.

3 Q. Okay. And is there any explanation of
4 how that number was derived that is created?

5 A. Yes.

6 Q. Okay. And is that a written explanation?

7 A. There is a descriptor.

8 Q. Okay. And what is -- what does that look
9 like?

10 A. Basically it is a line -- basically it's
11 an identifier so it will say -- an example would be
12 316(b).

13 Q. Okay. So you'll just -- so it will be,
14 you know, X cost number and then description for
15 316(b) or something like that.

16 A. Yes.

17 Q. So outside of that descriptor, is there
18 any other written documentation of the numbers that
19 go into the -- into the budget for the environmental
20 compliance?

21 A. No.

22 Q. Okay. And the compliance plan that I
23 believe you've testified gets developed, what -- what
24 does that compliance plan look like?

1 A. Could you rephrase the question.

2 Q. So in what form does this compliance plan
3 take? You know, is it a written document? Is it
4 just a verbal report to someone?

5 A. Could you rephrase the question.

6 Q. What part is confusing to you?

7 A. You just said either/or.

8 Q. Okay. Well, let's break it down into
9 sections. The compliance plan, what form does it
10 take?

11 A. It could take several forms depending
12 upon the scope and magnitude of the compliance.

13 Q. Okay. And what -- what possible forms
14 are there?

15 A. It could be verbal.

16 Q. Okay. Any others?

17 A. It could be a permit.

18 Q. Okay.

19 A. Could be written.

20 Q. Okay. Anything else?

21 A. No.

22 Q. Okay. And when you say it could be a
23 permit, the permit would be issued by a state or
24 federal agency, right?

1 A. Yes.

2 Q. Okay. So that wouldn't be developed by
3 the company, correct?

4 A. Let me amend my previous comment. It's a
5 permit application.

6 Q. Okay, okay. And do you know of any
7 written compliance plans that have been developed for
8 the Sammis plant?

9 A. Could you rephrase the question.

10 Q. Have you developed compliance --
11 environmental compliance plans for the Sammis plant?

12 A. Yes.

13 Q. Okay. And did any of those compliance
14 plans take -- take a written form?

15 A. Yes.

16 Q. Okay. And what -- what environmental
17 compliance plans for the Sammis plant were done in a
18 written form?

19 A. Consent agreement.

20 Q. Okay. Any others?

21 A. MATS.

22 Q. Okay. Any others?

23 A. 316(b).

24 Q. Okay. Any others?

1 A. No.

2 Q. Okay. And the consent agreement that you
3 referred to, is that the agreement with the U.S.
4 Department of Justice regarding compliance with New
5 Source Review Standards?

6 A. Yes.

7 Q. Okay. And from MATS which MATS is the
8 Mercury and Air Toxics Standards; is that right?

9 A. Yes.

10 Q. So is there a -- some sort of a written
11 compliance plan regarding how Sammis would comply
12 with MATS?

13 A. Yes.

14 Q. Okay. And do you know when that was
15 created?

16 A. I don't recall.

17 Q. Okay, okay. Were you involved in
18 creating that?

19 A. Yes.

20 Q. Okay. And for 316(b) there's a -- some
21 sort of a written compliance plan regarding
22 compliance?

23 A. There was a proposal that I believe was
24 turned over in interrogatories or deposition.

1 Q. A proposal, what do you mean by a
2 proposal?

3 A. A study scope.

4 Q. Study scope, okay. Is that study scope
5 regarding the studies that you refer to on page 4,
6 lines 5 to 11, of your supplemental testimony?

7 THE WITNESS: Could you repeat the
8 question, please.

9 (Record read.)

10 A. Yes.

11 Q. Okay. Any other written compliance plan
12 for 316(b) for the Sammis plant retirement?

13 A. No.

14 Q. Okay, okay. And going back to the steps
15 that you listed for the development of environmental
16 strategies and programs, is there any written
17 documentation that occurs before the development of
18 the compliance plan?

19 A. Could you rephrase the question.

20 Q. What part was confusing?

21 A. "Written documentation."

22 Q. Okay. You identified steps that are
23 taken in developing environmental strategies before
24 the development of the compliance plan, correct?

1 A. Yes.

2 Q. Okay. Do you generate any written
3 documentation of any of those steps?

4 A. If the situation requires, we will
5 generate a document that lays out the requirements,
6 either regulatory or law or a permit condition.

7 Q. Okay. Any other written documentation?

8 A. No.

9 Q. And do you know any -- for any
10 environmental regulations have any such written
11 documentation been created for the Sammis plant
12 retirement?

13 A. No.

14 Q. No, it hasn't or, no, you don't know?

15 A. No, it hasn't been created for Sammis.

16 Q. Okay, okay. If you could turn to page 2
17 of your supplemental testimony.

18 MR. LANG: Shannon, I was thinking before
19 you get into substance he does have two
20 corrections --

21 MR. FISK: Okay.

22 MR. LANG: -- which might affect your
23 questions throughout the day.

24 MR. FISK: Why don't we cover that now.

1 MR. LANG: Yeah. Why don't we get those
2 in.

3 THE WITNESS: Okay. Page 8, line 1.

4 Q. Okay.

5 A. Strike "turbines."

6 Q. Okay.

7 A. Insert "diesel generators."

8 Q. Okay. So it would say "except for diesel
9 generators at Davis-Besse"?

10 A. Yes.

11 Q. Okay. And what else?

12 A. Page 17, line 9.

13 Q. Okay.

14 A. In the sentence that ends "2013 to 2015,"
15 strike '13 to '15 and enter "2012 to 2014."

16 Q. Okay. Took care of one of my questions.
17 Okay. Any other corrections?

18 A. No.

19 Q. Okay. So your testimony page 2, starting
20 at line 7, you describe the purposes of your
21 testimony, and you include a reference on line -- on
22 line 10 to "pertinent environmental regulations." Do
23 you see that?

24 A. Yes.

1 Q. And then you say "and to describe the
2 plan for compliance with pending environmental
3 regulations."

4 A. Yes.

5 Q. Okay. Are pertinent regulations and
6 pending regulations, are those two different
7 categories in your mind?

8 A. Yes.

9 Q. And what's the difference there?

10 A. Pertinent regulations are regulations
11 that have been on the books --

12 Q. Okay.

13 A. -- for some period of time where we've
14 already implemented compliance with those
15 regulations.

16 Q. Okay. And pending?

17 A. Pending regulations are those regulations
18 that are final --

19 Q. Okay.

20 A. -- where the compliance date is in the
21 future.

22 Q. Okay. And when you say final, you mean
23 that a state or federal agency has issued the rule in
24 a final form?

1 A. The state or agency has published the
2 rule.

3 Q. Published the rule, okay, okay. So if a
4 rule is still -- is undergoing court challenge, it
5 could still be final for purposes of this discussion?

6 A. Yes.

7 Q. Okay. And over on page 3, line 6, of
8 your testimony, you have a reference there to
9 "Additional environmental regulations may be issued
10 in the future." Do you see that?

11 THE WITNESS: Could you repeat the
12 question, please.

13 MR. FISK: If you could read it back.

14 (Record read.)

15 A. Yes.

16 Q. Okay. So is that essentially a third
17 category on top of applicable and -- or on top of,
18 I'm sorry, pertinent and pending?

19 A. Yes.

20 Q. Okay. And for the additional
21 environmental regulations would that be any
22 regulations that are not yet in final form?

23 A. That would be any regulation that has not
24 been published.

1 Q. Published in final form.

2 A. In final form.

3 Q. Okay. So a draft regulation that hasn't
4 been published in final form would be under the
5 category of additional environmental regulations?

6 A. Yes.

7 Q. Okay. And -- okay. So on page 3,
8 starting at line 7, you state "Until an environmental
9 regulation is final for implementation, we do not
10 attempt to speculate what form that regulation will
11 take and what compliance measures may be required."
12 Do you see that?

13 A. Yes.

14 Q. Okay. And that's your testimony?

15 A. That's my testimony.

16 Q. Okay. What do you mean by you do not
17 attempt to speculate?

18 A. We do not attempt to speculate what the
19 final outcome of the regulation will be.

20 Q. Okay. Do you undertake any evaluation of
21 those additional regulations before they're published
22 in final form?

23 A. Could you rephrase the question?

24 Q. Do you -- when there's a -- when there's

1 a proposed regulation, say that's been issued in
2 draft form, do you evaluate potential compliance
3 plans for that proposed regulation in any -- in any
4 way?

5 A. No.

6 Q. Okay, okay. So you don't do any
7 evaluation of a -- of an environmental regulation
8 until it is published in final form; is that correct?

9 A. That's not what I said.

10 Q. Okay. Do you do any evaluation of an
11 environmental regulation before it is published in
12 final form?

13 A. Could you rephrase the question.

14 Q. What part do you find confusing?

15 A. You used the term "evaluation."

16 Q. Okay. Do you know what the word
17 "evaluation" means?

18 A. It can have several meanings.

19 Q. Okay. Do you -- if a regulation
20 issued -- is issued in draft form, do you do anything
21 to consider what that regulation might require?

22 A. We consider the regulation.

23 Q. Okay. And what do you do to consider a
24 regulation before it's in final form?

1 A. We read it.

2 Q. Anything else?

3 A. We do a summary.

4 Q. A written summary?

5 A. Sometimes.

6 Q. Okay. Anything else?

7 A. No.

8 Q. Okay. So do you do anything to consider
9 what the proposed regulation issued in draft form
10 might mean for any of your generating units?

11 THE WITNESS: Could you repeat the
12 question, please.

13 (Record read.)

14 A. Could you rephrase the question, please.

15 Q. Okay. When a regulation has been
16 proposed, do you take any steps to consider how that
17 regulation may end up affecting your generating
18 units?

19 A. Yes.

20 Q. Okay. And what do you do?

21 A. Depending on the significance of the
22 regulation, we will -- may do a study.

23 Q. Okay. What else?

24 A. We will consult with technical experts.

1 Q. Okay. Anything else?

2 A. We will collect relevant data.

3 Q. Okay. Anything else?

4 A. No.

5 Q. Okay. And the study that you referred
6 to, does that take a written form?

7 A. Sometimes.

8 Q. Okay. How do you decide whether it
9 should take a written form or not?

10 A. It's a case-by-case decision.

11 Q. Okay. And based on -- based on what?

12 A. Typically what we know about an emissions
13 profile of a unit.

14 Q. Okay. And your consultation with
15 technical experts, is that documented in any written
16 form?

17 A. Sometimes.

18 Q. Okay. And when would it be documented in
19 written form?

20 A. Based on a case-by-case evaluation.

21 Q. Okay. So the same evaluation as to
22 whether the study is in written form?

23 A. Yes.

24 Q. Okay. Has the study -- has a study such

1 as what you referred to been done regarding the
2 proposed Clean Power Plan?

3 A. No.

4 Q. Has -- have you done anything to
5 consider -- outside what is in your supplemental
6 testimony, have you done anything to consider the
7 proposed Clean Power Plan?

8 A. Could you rephrase the question.

9 Q. So the USEPA has issued a proposed Clean
10 Power Plan, correct?

11 A. Yes.

12 Q. And that came out I believe in July of
13 2014; is that right?

14 A. Yes.

15 Q. Okay. Have you done anything to
16 evaluate -- I'm sorry. Strike that.

17 Have you done anything to consider the
18 impacts of the proposed Clean Power Plan -- what
19 those impacts might be on the Sammis plant?

20 A. No.

21 Q. Okay. How about in any of -- any other
22 plants owned by one of the FirstEnergy Solutions'
23 subsidiaries?

24 A. No.

1 MR. LANG: Just objection, beyond the
2 scope of his testimony but he gave his answer.

3 Q. Okay. And do you know, have you
4 consulted any technical experts regarding the impacts
5 the proposed Clean Power Plan may have on the Sammis
6 plant?

7 A. Only legal counsel.

8 Q. Okay. And how about you refer on line 12
9 on page 3 of your testimony to the revisions to the
10 ELG regulations. Do you see that?

11 A. Yes.

12 Q. And ELG is effluent limitation
13 guidelines?

14 A. Yes.

15 Q. Have you done any study of the impact
16 that the revisions to the ELG regulations may have on
17 the Sammis plant retirement?

18 A. No.

19 Q. Okay. And have you consulted with any
20 technical experts regarding the impacts of the
21 revisions to the ELG regulations may have on the
22 Sammis plant?

23 A. Only legal counsel.

24 Q. Okay.

1 MR. LANG: We appreciate you thinking of
2 legal counsel as technical experts.

3 Q. Okay. And page 3 -- wait a minute. Oh,
4 yes, okay. Lines 3 to 5 of your testimony, you state
5 that "Any costs that the plants may incur to comply
6 with these regulations are included in the Companies'
7 cost forecast provided by Company witness Lisowski";
8 is that correct?

9 A. Yes.

10 Q. Okay. And have you spoken with
11 Mr. Lisowski?

12 A. Yes.

13 Q. Okay. About this proceeding?

14 A. Yes.

15 Q. Okay. And your reference there on line 4
16 on page 3 to "these regulations," is that referring
17 just to the pending or pertinent regulations?

18 A. Yes, it refers to pertinent and pending.

19 Q. Okay. So you're not offering any
20 testimony that any costs to comply with any
21 additional environmental regulations are included in
22 the companies' cost forecast; is that right?

23 A. Could you restate the question.

24 Q. So we discussed earlier, I believe, that

1 there's -- that there's three categories of
2 environmental regulation, there's pending, pertinent,
3 and additional; is that right?

4 A. Proposed.

5 Q. Or proposed, okay. Proposed is what you
6 refer to on line 6 on page 3 as additional; is that
7 right?

8 A. Yes.

9 Q. Okay. And so I'm -- I am wondering your
10 statement on lines 3 to 5 of page 3 that "costs to
11 comply with these regulations," are you including in
12 those costs any cost related to additional or
13 proposed regulations?

14 A. My statement reads "Any costs that the
15 Plants may incur to comply with these regulations are
16 included in the Companies' cost forecast provided by
17 Company witness Lisowski."

18 Q. Right. And we've -- and I believe you
19 testified that "these regulations" does refer to and
20 includes the pertinent and pending regulations,
21 correct?

22 A. Yes.

23 Q. And I am wondering does it also -- the
24 phrase "these regulations," does that also refer to

1 the additional or proposed environmental regulations?

2 A. It does not.

3 Q. Okay. And with regards to the pending
4 environmental regulations, do you know how
5 Mr. Lisowski included costs for those regulations in
6 his cost forecasts?

7 THE WITNESS: Could you repeat the
8 question, please.

9 (Record read.)

10 A. I don't know.

11 Q. Okay. Have you reviewed any of
12 Mr. Lisowski's files regarding cost forecasting?

13 A. Could you rephrase the question.

14 Q. Have you reviewed any of Mr. Lisowski's
15 documentation of his cost forecasting?

16 A. Yes.

17 Q. And what did you review?

18 A. His forecasts.

19 Q. Okay. So just the bottom line numbers.

20 A. Yes.

21 Q. Okay. So do you -- how do you know that
22 he included costs to comply with pending regulations
23 in those -- in that forecast?

24 A. I previously answered I didn't know.

1 Q. Okay.

2 MR. FISK: Can we go off?

3 (Recess taken.)

4 MR. LANG: When we started, we had
5 appearance from Larry Sauer, Madeline Fleisher, and
6 Dylan Borchers. Are there any folks that joined the
7 phone afterwards that would like to make an
8 appearance?

9 MS. HUSSEY: This is Rebecca Hussey for
10 OMAEG.

11 MR. LANG: Rebecca, good morning.

12 MS. HUSSEY: Good morning. Thank you.

13 (Record read.)

14 MR. LANG: Did you have -- yes, since he
15 said "pending," did you have a change?

16 THE WITNESS: Yes. As I stated earlier,
17 pending regulations and pertinent regulations costs
18 are included in Mr. Lisowski's forecast. In
19 addition, as we've looked at some of the proposed
20 regulations, our view is some of those proposed
21 regulations the costs may be immaterial, and I'll
22 discuss that further in my testimony.

23 Q. Okay. So it's now your testimony that
24 the pertinent and pending regulations are included in

1 Mr. Lisowski's cost forecast?

2 A. Yes.

3 Q. Okay. And what is your basis for knowing
4 that they are -- those costs are included?

5 A. My discussions with Mr. Lisowski.

6 Q. Okay. Verbal discussions?

7 A. Yes.

8 Q. Anything else?

9 A. I reviewed his spreadsheet of the
10 forecast.

11 Q. Okay. But that spreadsheet, I believe
12 you already testified, was just the bottom line
13 numbers?

14 A. Yes. But in my questioning of him he
15 said he had included those costs.

16 Q. Okay. Do you know if he included
17 specific capital costs for individual environmental
18 regulations?

19 A. Yes.

20 Q. Yes, you do know or, yes, he did?

21 A. He did.

22 Q. Okay. Do you know what costs he
23 included?

24 A. He included costs of 316(b) studies.

1 Q. Okay.

2 A. He included the costs of the 316(b)
3 screens should they be needed.

4 Q. Okay. Anything else?

5 A. He included that as we've reviewed the
6 coal combustion residual rule, and I will discuss
7 that, it's in my testimony, the costs are immaterial,
8 so they are included as a lump sum of all
9 environmental costs.

10 Q. A lump sum, okay. Anything else?

11 A. And the cost of CSAPR and CSAPR is an O&M
12 cost.

13 Q. Any other costs that he included?

14 A. All pertinent environmental requirements
15 under existing permits and the consent agreement.

16 Q. Okay. Pertinent being those are rules
17 that are in effect and are already being complied
18 with, right?

19 A. Yes.

20 Q. Okay. Any other pending regulations that
21 he included costs for in his cost forecast?

22 A. Those are the pending regulations.

23 Q. Okay. And just so we're clear he did --
24 did he, Mr. Lisowski, include any costs for proposed

1 regulations in his cost forecast?

2 A. Only those that I will discuss as being
3 immaterial further in my testimony.

4 Q. Okay, okay. And when you refer to the
5 CCR costs, you refer to them in a lump sum; is that
6 correct?

7 A. I refer to it as rolled into all the
8 total costs of the facility.

9 Q. Okay. So you are saying any capital
10 costs for CCR compliance is just simply rolled into
11 the overall costs of the plant retirement.

12 A. Capital costs for the plant, yes.

13 Q. Okay. So there isn't a specifically
14 designated line item for CCR capital costs.

15 A. No.

16 Q. Okay. And are any other environmental
17 compliance costs for pending regulations rolled in,
18 just rolled into the overall cost?

19 A. As I stated previously, CSAPR is rolled
20 in as an O&M cost.

21 Q. Okay. And then the 316(b) costs are a
22 separate line item, or are they just rolled in?

23 A. I don't recall in my review of his
24 spreadsheet how he broke it out.

1 Q. Okay. And when you referred to that you
2 will discuss other things in your testimony, you
3 just -- you mean you have already discussed them in
4 your testimony that you filed, and we can talk about
5 them when we get to those specific rules?

6 A. Yes.

7 Q. Okay. So for 316(b) I believe you
8 discuss that starting on page 3, line 16, of your
9 testimony; is that right?

10 A. Yes.

11 Q. Okay. And the 316(b) rule, this applies
12 to cooling water intake structures at the Sammis
13 plant; is that right?

14 A. Yes.

15 Q. Okay. And what's your understanding of
16 the purpose of the 316(b) rule?

17 A. The purpose of the 316(b) rule is to
18 reduce, if necessary, impingement and entrainment
19 mortalities of aquatic species.

20 Q. Okay. And those mortalities can occur
21 when aquatic life is pulled into the plant through
22 the water intake system; is that right?

23 A. Could you rephrase the question.

24 Q. So entrainment of aquatic life, that

1 occurs when some sort of aquatic species is
2 essentially pulled into the plant as part of the
3 water intake; is that right?

4 A. Could you rephrase the question.

5 Q. What part is confusing to you?

6 A. "Pulling into the plant" is a very broad
7 term.

8 Q. Okay. You have your cooling water intake
9 structure is bringing water into the plant, correct,
10 for cooling purposes?

11 A. It's bringing it into an intake forebay.

12 Q. An intake what?

13 A. Forebay.

14 Q. Forebay, okay. And that water is then
15 used in the plant for cooling purposes, correct?

16 A. Yes.

17 Q. Okay. And in that process fish can be
18 entrained; is that right?

19 THE WITNESS: Could you repeat the
20 question, please.

21 (Record read.)

22 A. Fish of a certain size can be entrained.

23 Q. Okay. Do you know how much water -- how
24 many millions of gallons per day of water the cooler

1 intake structure at Sammis can pull into the forebay?

2 A. Greater than 125 million gallons per day.

3 Q. That's the regulatory cutoff, correct?

4 A. That's correct.

5 Q. But do you know how much it actually is
6 capable of pulling in?

7 A. I don't recall.

8 Q. Okay. And Sammis has a once through
9 cooling system, correct?

10 A. Yes.

11 Q. Okay. So it does not have closed-cycle
12 cooling, right?

13 A. Could you rephrase the question.

14 Q. Do you know what closed-cycle cooling is?

15 A. Could you rephrase the question.

16 Q. What's confusing about that?

17 A. There are many iterations of closed-cycle
18 cooling. What are you referring to?

19 Q. Closed-cycle cooling system for a coal
20 plant. Does it have any iteration of a closed-cycle
21 cooling system?

22 A. Yes.

23 Q. And how so?

24 A. There are certain systems that are closed

1 loop within the plant.

2 Q. Okay. The primary cooling system that
3 pulls in over 125 million gallons a day, is that a
4 closed-cycle system?

5 A. No.

6 Q. And does the plant -- the Sammis plant
7 currently take any steps to reduce entrainment of
8 aquatic life?

9 A. Yes.

10 Q. What does it do?

11 A. They use the screens.

12 Q. Okay. Anything else?

13 A. Fish return systems.

14 Q. Okay. Anything else?

15 A. Cooling water design intake is
16 perpendicular to the flow of the river.

17 Q. Okay. Anything else?

18 A. No.

19 Q. Okay. And does the Sammis plant
20 currently take any steps to reduce impingement of
21 aquatic life?

22 A. Yes.

23 Q. And what does it to?

24 A. Screens.

1 Q. Okay. Anything else?

2 A. Fish return systems.

3 Q. Okay. Anything else?

4 A. The intake being perpendicular to the
5 flow of the river.

6 Q. Okay. Anything else?

7 A. No.

8 Q. Okay. And so am I correct that the --
9 that you are now undertaking studies to determine
10 whether any further steps to reduce entrainment and
11 impingement of aquatic life might be needed; is that
12 right?

13 A. Yes.

14 Q. Okay. And do you know when you expect
15 those studies to be completed?

16 A. Three years from the date of the
17 effective date of the regulation.

18 Q. Okay. So three years from October 14,
19 2014?

20 A. Yes.

21 Q. Okay. And then after those studies are
22 completed, then Ohio EPA will have to decide whether
23 to require additional steps to reduce impacts to
24 aquatic life; is that right?

1 A. Yes.

2 Q. Okay. And it's your testimony that the
3 cost of those studies has been factored into
4 Mr. Lisowski's cost forecast; is that right?

5 A. Yes.

6 Q. Okay. And do you know how -- how the
7 cost of those studies was estimated?

8 A. Based on solicitations of proposals from
9 consultants.

10 Q. Okay. And then is it your testimony that
11 costs for any further requirements that may be
12 established for the Sammis plant for 316(b) are also
13 already factored into Mr. Lisowski's cost forecast?

14 A. Yes.

15 Q. Okay. And what costs are those?

16 A. The costs to upgrade the screens to a
17 more current design.

18 Q. Any other costs?

19 A. No.

20 Q. Okay. And what's the basis for the
21 estimate of the costs for upgrading the screens?

22 A. Work we have done in our Bay Shore plant.

23 Q. Okay, okay. Any other basis?

24 A. No.

1 Q. And those -- besides the actual number of
2 what those costs are, is the -- are those costs
3 documented in any way?

4 A. Could you rephrase the question.

5 Q. Do you have any written documentation
6 describing how those costs were developed?

7 A. Could you rephrase the question.

8 Q. What's confusing about that?

9 A. What's your question regarding?

10 Q. The costs for upgrading the screens that
11 you just testified to.

12 A. I'm trying to understand whether you are
13 referring to my earlier comment at Bay Shore or
14 whether you are referring to Sammis.

15 Q. We are talking about Sammis.

16 A. Thank you. No.

17 Q. Did you personally develop the cost
18 estimate for upgrading the screens at Sammis?

19 THE WITNESS: Could you repeat the
20 question, please.

21 MR. FISK: Read it back.

22 (Record read.)

23 A. I had my staff prepare the estimate based
24 on the Sammis -- or based on the Bay Shore cost, and

1 I reviewed the final number.

2 Q. Okay. And do you know how they prepared
3 the estimate?

4 A. They reviewed the project costs from Bay
5 Shore, counted the number of screens at Bay Shore,
6 and itemized what a per-unit cost was, and then
7 multiplied it times the cost of the number of screens
8 at Sammis -- or times the number of screens at
9 Sammis.

10 Q. Okay, okay. So you have not included in
11 the cost forecast any costs for if you needed to do
12 closed-cycle cooling for the primary cooling water
13 intake at Sammis; is that correct?

14 A. No.

15 Q. No, you haven't or, no, that's not
16 correct?

17 A. No, we haven't.

18 Q. Okay. If you could turn to page 4, line
19 16, of your testimony, there is discussion there
20 regarding the CCR rule; is that correct?

21 A. Yes.

22 Q. Okay. And CCR stands for coal combustion
23 residuals; is that right?

24 A. Yes.

1 Q. Okay. They're also known as coal ash; is
2 that right?

3 A. No.

4 Q. It's not?

5 A. No.

6 Q. So when you state on line 20 that coal
7 combustion residuals are commonly known as coal ash,
8 that's not correct?

9 A. Coal combustion residuals include other
10 components besides ash so I make the distinction.

11 Q. Okay.

12 A. Coal combustion ash is a component of
13 that, so CCR covers the broader universe.

14 Q. Okay. So you were incorrect when you
15 said commonly known as coal ash.

16 A. Some people in the public consider it
17 coal ash.

18 Q. Okay. And the CCR rule has been
19 finalized, correct?

20 A. Yes.

21 Q. Okay. But it is not -- it's in the
22 process of being implemented; is that right?

23 A. Yes.

24 Q. So under the three categories of rules

1 that we discussed earlier, it would be considered a
2 pending rule; is that right?

3 A. Yes.

4 Q. Okay. And I believe you testified
5 earlier that there was a capital cost for CCR
6 compliance that was -- that was included in the lump
7 sum capital costs for Mr. Lisowski's cost forecast;
8 is that right?

9 A. Yes.

10 Q. Okay. And do you know how that capital
11 cost estimate was developed?

12 A. Could you rephrase the question, please.

13 Q. What part is confusing?

14 THE WITNESS: Could you repeat the
15 question.

16 (Record read.)

17 A. Yes.

18 Q. Okay. And how was it developed?

19 A. On projects that are small capital
20 including small capital environmental, there's some
21 undesignated capital. We call them small projects.
22 This money would be used for implementation of the
23 CCR rule and something else on the plants, wish
24 capital, or list of capital, I shouldn't say wish,

1 list of capital projects would not be performed.

2 Q. Okay. So let me see if I understand
3 this. There's a -- an undesignated capital fund
4 essentially?

5 A. Line item.

6 Q. Line item, okay. And from that line item
7 various capital -- small capital projects can be
8 performed.

9 A. Yes.

10 Q. Okay. And the CCR rule capital
11 compliance was considered to be one of those small
12 capital projects?

13 A. Based on the release of the rule this
14 May, yes, they would fall into that category.

15 Q. Okay. And so if that -- if that money is
16 spent for CCR rule compliance, then that money would
17 not be available for some other small capital
18 project?

19 A. Yes.

20 Q. Okay. So the undesignated capital budget
21 line item wasn't increased to reflect CCR compliance;
22 is that right?

23 A. Yes.

24 Q. Okay. Do you know -- so was there a

1 specific CCR capital cost amount that was identified?

2 A. Yes.

3 Q. Okay. And how was -- and how was that
4 amount developed?

5 A. After review of the rule by my staff,
6 they identified additional groundwater monitoring
7 wells that needed to be installed.

8 Q. Okay. Any other steps that they
9 identified?

10 A. Implementation of a publicly available
11 website.

12 Q. Okay. Any other steps?

13 A. On the O&M side it would be the ongoing
14 cost of monitoring groundwater samples.

15 Q. Okay. Any other steps?

16 A. No.

17 Q. Okay. And so -- and so then there was a
18 cost developed for those steps you just listed.

19 A. Yes.

20 Q. Okay. And then you just determined that
21 that cost could fit into the undesignated capital
22 budget.

23 A. Yes.

24 Q. Okay. And was that evaluation of the

1 steps needed to comply with the CCR rule put into any
2 sort of written form?

3 A. Could you rephrase the question.

4 Q. What part is confusing?

5 A. What are you referring to?

6 Q. Well, you testified that there was a
7 handful of steps that you -- that your staff
8 identified that would be needed to comply with the
9 CCR rule, correct?

10 A. Yes.

11 Q. And they developed the cost estimate for
12 those steps, correct?

13 A. Yes.

14 Q. Okay. Was that -- is the identification
15 of those steps documented in written form in any way?

16 A. Could you rephrase the question.

17 Q. Did they put it in writing in any way,
18 their -- their determination of what steps would be
19 needed to comply with the CCR rule?

20 A. In reference to Sammis it is documented
21 in a line item.

22 Q. Okay. Any other documentation besides
23 the line item?

24 A. No.

1 Q. Okay.

2 A. And the item was just completed in June
3 of 2015.

4 Q. Okay. When was Mr. Lisowski's cost
5 forecast?

6 A. I am unaware of when he produced his
7 document.

8 Q. Okay. Do you -- would sometime in 2014,
9 subject to check, seem right?

10 A. I'm sure he's testified to what his date
11 of preparation was.

12 Q. Do you know if the June, 2015, cost
13 estimate was included in Mr. Lisowski's cost
14 forecast?

15 A. As I explained earlier, we consider it to
16 be part of the dis -- part of the money in the
17 blank -- what we call the blanket --

18 Q. Okay.

19 A. -- of unidentified projects.

20 Q. Okay. If you could go down to line 18 on
21 page 5 of your testimony. You have a discussion
22 there of one-hour SO-2 National Ambient Air Quality
23 Standards; is that correct?

24 A. Yes.

1 Q. And the National Ambient Air Quality
2 Standards, that's commonly referred to as the acronym
3 NAAQS; is that right?

4 A. Yes.

5 Q. Okay. And with regards to the one-hour
6 SO-2 NAAQS, do you consider that to be a pertinent,
7 pending, or proposed regulation?

8 THE WITNESS: Could you read back the
9 question, please.

10 (Record read.)

11 A. Pending.

12 Q. Pending, okay. And has -- have you done
13 any -- strike that.

14 Have you done any air quality modeling of
15 SO-2 emissions from Sammis?

16 A. No.

17 Q. Okay, okay. Do you know whether air
18 quality modeling would be a way to determine whether
19 emissions of SO-2 from Sammis caused exceedances of
20 the one-hour SO-2 NAAQS?

21 A. Could you rephrase the question, please.

22 Q. What part do you find confusing?

23 A. That you would model.

24 Q. That you would model?

1 A. That you would model.

2 Q. And why is that confusing?

3 A. In combination with the term
4 "exceedance."

5 Q. So are you saying you don't believe you
6 can do modeling to determine whether there is an
7 exceedance in the NAAQS?

8 A. Modeling is done to determine if there is
9 compliance.

10 Q. Okay. We will use compliance. Do you
11 know if air quality modeling can be used to determine
12 whether SO-2 emissions from the Sammis plant caused
13 noncompliance with the one-hour SO-2 NAAQS?

14 A. Again, I go back to the use of the word
15 "noncompliance."

16 Q. Okay. Does it cause -- is air quality
17 modeling in any way relevant to evaluating whether
18 the S -- one-hour SO-2 NAAQS is being complied with?

19 A. It is a tool.

20 Q. Okay. And it is a tool you have decided
21 not to use; is that correct?

22 A. No.

23 Q. That's not correct?

24 A. That's not correct.

1 Q. Okay. So did you use it?

2 A. No.

3 Q. Okay. And why not?

4 A. Because the requirements of how to
5 designate unclassifiable areas in the state of Ohio
6 have not been set forth by Ohio EPA.

7 Q. Have they been set forth by USEPA?

8 A. There is a proposed rule.

9 Q. Okay, okay. So you do not have any
10 modeling -- strike that.

11 Is it your opinion that the SO-2
12 emissions from Sammis are in compliance with the
13 one-hour SO-2 NAAQS?

14 THE WITNESS: Could you repeat the
15 question, please.

16 (Record read.)

17 THE WITNESS: One more time, please.

18 (Record read.)

19 A. Yes.

20 Q. And do you have any air quality modeling
21 to support that position?

22 A. No.

23 Q. And if you turn over to page 7, lines 5
24 through 7, of your testimony, you state "Sammis has

1 existing capability to make further reductions in
2 SO-2 emission rates to accommodate changes to the
3 one-hour SO-2 NAAQS." Do you see that?

4 A. Yes.

5 Q. And that's your testimony?

6 A. Yes.

7 Q. And what are those existing capabilities?

8 A. The existing scrubbers have the
9 capability of making further reduction in SO-2.

10 Q. Any other existing capabilities?

11 A. No.

12 Q. And would using the existing scrubbers to
13 make further reductions in SO-2 emissions involve
14 increased O&M costs?

15 A. Yes.

16 Q. Okay. And were any such increased O&M
17 costs factored into Mr. Lisowski's cost forecast?

18 THE WITNESS: Could you repeat the
19 question.

20 MR. FISK: Could you read it back.

21 (Record read.)

22 A. Could you restate the question.

23 Q. What do you find confusing about it?

24 A. Whether you are referring to a pending

1 regulation under the data requirements rule or
2 whether you are referring to the one-hour SO-2 NAAQS
3 itself.

4 Q. Well, let's do both. One-hour SO-2 NAAQS
5 itself.

6 A. It has no requirements for FirstEnergy.

7 Q. Okay. How about the pending regulation
8 in the data requirements rule?

9 A. It is a projected. It is not pending.
10 It is a proposed regulation.

11 Q. Okay. So if that were to require any
12 additional costs for the Sammis plant, those have not
13 been factored into Mr. Lisowski's cost forecast; is
14 that correct?

15 A. It is my opinion that those costs are
16 insignificant.

17 Q. Okay. But that -- that wasn't my
18 question. My question was have those costs been
19 factored into Mr. Lisowski's cost forecast.

20 A. If required, I would say they are in --
21 within the tolerance of his forecast.

22 Q. And how would they be within tolerance?

23 A. Because of the way you estimate future
24 costs.

1 Q. How so?

2 A. I'm not the expert in that area.

3 Q. So how do you know that it's in there?

4 A. Because the costs is adding additional
5 limestone out of already known fixed costs.

6 Q. Okay. So there is an O&M cost for that,
7 correct?

8 A. Yes.

9 Q. Okay. And do you know if that O&M cost
10 has been added to the O&M costs that Mr. Lisowski
11 used in his cost forecast?

12 A. In terms of a specific line item, no.

13 Q. No, it wasn't.

14 A. No, it wasn't.

15 Q. Okay, okay. Starting on page 7, line 8,
16 you have a discussion of the ozone NAAQS, correct?

17 A. Yes.

18 Q. Okay. And there's a current ozone NAAQS,
19 correct?

20 A. Yes.

21 Q. Okay. And that would be considered a
22 pertinent regulation?

23 A. Yes.

24 Q. And then towards the end of your

1 testimony starting on page 16, line 17 --

2 A. Excuse me?

3 Q. Page 16, line 17, there you discuss ozone
4 NAAQS revisions; is that right?

5 A. Yes.

6 Q. Okay. And those revisions, would that
7 fall within the proposed category?

8 A. Yes.

9 Q. Okay. And so EPA is proposing to reduce
10 the ozone NAAQS level below its current level; is
11 that correct?

12 A. Yes.

13 Q. Okay. And it is your -- am I correct it
14 is your opinion that the Sammis plant will not need
15 to make any additional capital investments to comply
16 with any ozone NAAQS revision?

17 A. Yes.

18 Q. Okay. And what is your basis for that
19 opinion?

20 A. As stated in my testimony, NAAQS would be
21 addressed as a transport issue by USEPA as they have
22 done historically for the past 20 years.

23 Q. Okay.

24 A. And that program is based on a system of

1 emission allowances.

2 Q. So ozone NAAQS compliance, are you saying
3 it has not required capital investments on coal
4 plants in the past?

5 THE WITNESS: Could you repeat the
6 previous question, please. Not the one he just asked
7 but the previous one to that, please.

8 (Record read.)

9 THE WITNESS: And then read the next two
10 and my response to all of them.

11 (Record read.)

12 THE WITNESS: Thank you.

13 A. Prior NAAQS transport rules and -- did
14 require capital investment by the industry. The
15 belief is the incremental change will not require at
16 Sammis additional installation of capital investment
17 because of the existing equipment and availability of
18 emission allowances.

19 Q. Okay. And when you say "the belief,"
20 whose belief are you referring to?

21 A. My own based on my knowledge of the
22 equipment.

23 Q. Okay. And do you have any written
24 documentation of that belief?

1 A. I have the performance guarantees for the
2 equipment from the installation of the NAAQS control
3 equipment during the consent decree.

4 Q. Okay. Any other written documentation?

5 A. No.

6 Q. Okay. So you're saying essentially, am I
7 correct, that if the NOx is -- NOx NAAQS is reduced,
8 Sammis will be able to comply with its existing
9 controls and purchases of allowances, correct?

10 A. Could you restate the question, please.

11 Q. If the NOx NAAQS is reduced, is lowered,
12 you believe that Sammis can comply with its existing
13 controls in purchasing allowances?

14 A. Could you restate the question, please.

15 Q. What's confusing about the question?

16 A. You switched from ozone NAAQS to NOx
17 NAAQS.

18 Q. I'm sorry, ozone NAAQS, I apologize. So
19 if the ozone NAAQS is reduced, it's your opinion that
20 Sammis can comply through use of its existing
21 controls and purchasing of allowances?

22 A. Yes.

23 Q. And do you know whether Sammis would need
24 to purchase more allowances than it currently

1 purchases?

2 A. I do not.

3 Q. Okay. The purchase of allowances would
4 be in O&M costs; is that right?

5 A. Yes.

6 Q. Okay. And do you know if any increased
7 O&M costs for the purchase of allowances to comply
8 with any change to the ozone NAAQS has been factored
9 into Mr. Lisowski's cost forecast?

10 THE WITNESS: Could you repeat the
11 question, please.

12 (Record read.)

13 A. I do not know.

14 While you are looking could we take a
15 break, please?

16 MR. FISK: Certainly. Let's go off.

17 (Recess taken.)

18 Q. I just wanted to go back and clarify
19 something. Earlier I believe you testified you had
20 reviewed Mr. Lisowski's cost forecast spreadsheet; is
21 that correct?

22 A. I believe it is the document he submitted
23 as his testimony, yes.

24 Q. Okay. So you were referring to the

1 exhibit to his testimony?

2 A. Yes.

3 Q. Okay. Outside of that you haven't
4 reviewed any other documents from Mr. Lisowski?

5 A. As it relates to Mr. Lisowski's
6 testimony, no.

7 Q. Okay, okay. And with regards to 316(b)
8 that also applies to the Davis-Besse plant; is that
9 correct?

10 A. Yes.

11 Q. Okay. And are you -- is -- are you
12 expecting any compliance costs at Davis-Besse from
13 316(b)?

14 A. Yes.

15 Q. And what sort of costs?

16 A. The costs associated with Davis-Besse and
17 the final rule relate to filing a set of documents
18 describing the design standards for the Davis-Besse
19 cooling water intake system.

20 Q. Okay. What sort of cooling water intake
21 system does Davis-Besse have?

22 A. It has cooling towers associated with it,
23 so in your context it would be a closed-loop cooling
24 water system.

1 Q. Okay, okay. Back to the Sammis plant,
2 how is the coal combustion residuals from that plant
3 currently handled?

4 A. Could you restate the question.

5 Q. What part is confusing?

6 A. Use of the term "CCR."

7 Q. What's confusing about coal combustion
8 residuals?

9 A. Because there are certain different
10 systems of handling.

11 Q. Right. And I am asking whatever you
12 qualify as CCRs, how are they handled at Sammis?

13 A. Okay. Let's begin with the bottom ash.

14 Q. Okay.

15 A. Bottom ash is withdrawn from the bottom
16 of the boilers.

17 Q. Okay.

18 A. Bottom ash is coarse material. It falls
19 from the boiler down to the -- its bottom into the
20 bottom ash hoppers.

21 Q. Okay.

22 A. That material is sluiced to a device
23 called a hydrobin where that material is dewatered.
24 That material is then either recycled or hauled

1 offsite for disposal.

2 Q. Okay. And what else do you consider a
3 part of the coal combustion residuals?

4 A. Fly ash.

5 Q. Fly ash, okay. How is that handled?

6 A. Fly ash is collected in precipitators.

7 Q. All right.

8 A. Precipitators and baghouses, I'm sorry.
9 The material is intermittently removed via hopper
10 system using conveying air.

11 Q. Okay.

12 A. That material is loaded into silos for
13 storage and then that material is trucked to an
14 offsite disposal site.

15 Q. Okay. And what else is included in coal
16 combustion residuals?

17 A. At the Sammis plant the final product is
18 gypsum from the scrubbing process. Gypsum is removed
19 from the scrubbers to a series of tanks and then put
20 through a wet drum.

21 Q. I'm sorry, a wet what?

22 A. It's known as a -- it's a wet drum filter
23 belt.

24 Q. Okay.

1 A. Or vacuum filter is the shorthand we use.
2 That vacuum filter dewateres the material.

3 Q. Okay.

4 A. The material is then put on a conveyor
5 belt, and the material is transported via the
6 conveyor belt to a lined captive landfill for the
7 Sammis plant. That landfill was a completely dry
8 facility permitted under the standards of Ohio EPA as
9 residual waste.

10 Q. Okay, okay. So bottom ash, fly ash, and
11 the FGD gypsum is all the components of coal
12 combustion residuals from Sammis?

13 A. Yes.

14 Q. And the -- so the FGD gypsum is
15 ultimately disposed of in a lined dry landfill?

16 A. Yes, correct.

17 Q. And the water that is de -- that is
18 gotten through the dewatering process, what happens
19 to that water?

20 A. That water is recirculated --

21 Q. Okay.

22 A. -- back to the scrubber.

23 Q. Okay. Is there any discharge of that
24 water?

1 A. That water is just a low downstream of --
2 that water is discharged via the existing NPDES
3 permit after treatment.

4 Q. Okay. And what's the treatment?

5 A. It is a physical chemical treatment.

6 Q. Okay. Anything besides the physical
7 chemical treatment?

8 A. No.

9 Q. Okay. And the fly ash process you say
10 it's -- ultimately it's trucked to an offsite
11 disposal; is that correct?

12 A. Yes.

13 Q. Is that the same offsite disposal as
14 where at least some of the bottom ash goes?

15 A. Yes.

16 Q. Okay. And is that offsite disposal, is
17 that a dry disposal or wet disposal?

18 A. Dry.

19 Q. Dry, okay. And is that disposal owned by
20 some FirstEnergy subsidiary?

21 A. No.

22 Q. No, okay. Do you know who owns it?

23 A. I don't recall the exact name of the
24 facility.

1 Q. Okay. And is there any water produced
2 through the fly ash process, any wastewater?

3 A. No.

4 Q. Okay. And for the bottom ash there is a
5 dewatering process there, correct?

6 A. Yes.

7 Q. Okay. And what happens to that water?

8 A. That water is used either for makeup in
9 the plant or it is sent to a pond for settling --

10 Q. Okay.

11 A. -- so physical treatment and discharge
12 under the existing NPDES permit.

13 Q. Okay. So when you say physical
14 treatment, you are referring to a settling pond?

15 A. Yes.

16 Q. Is that the same for I believe you
17 referred to physical treatment of the FGD gypsum
18 wastewater?

19 A. No. It's a different system.

20 Q. Different system, okay. For the bottom
21 ash, the settling pond, is there any other treatment
22 of that wastewater?

23 A. We have the capability to add
24 flocculants.

1 Q. Flocculants?

2 A. Yes.

3 Q. Okay. Anything else?

4 A. And acids and bases to correct for pH.

5 Q. But you don't currently do that?

6 A. We do as needed.

7 Q. As needed, okay. And for the FGD gypsum
8 wastewater, is that a settling pond?

9 THE WITNESS: Could you repeat the
10 question, please.

11 (Record read.)

12 A. As I stated previously, it is not. It's
13 a series of tanks and vessels.

14 Q. Oh, okay. And that water is then treated
15 before it's --

16 A. That water is treated.

17 Q. Okay. And how is it treated?

18 A. It's treated with flocculants and acids
19 and bases as needed --

20 Q. Okay.

21 A. -- to adjust the pH to maximize settling
22 or removal of particulate.

23 Q. Okay. And on page 5 starting at line 9
24 of your testimony, there is a reference there to ELG

1 regulations. Do you see that?

2 A. Yes.

3 Q. Okay. And I believe we have already
4 determined that ELG is effluent limitation
5 guidelines; is that right?

6 A. Yes.

7 Q. And the discussion there from lines 9 to
8 17, you are referring to the current ELG regulation,
9 correct?

10 A. Yes.

11 Q. As opposed to the revisions that are in
12 process?

13 A. According to the proposed standards are
14 what I would call an additional regulation, yes.

15 Q. Okay. So your discussion from lines 9
16 through 17, that's with regards to what would be
17 considered a pertinent regulation?

18 A. Yes.

19 Q. Okay. And then it's your understanding
20 that EPA has proposed revisions to those -- to the
21 ELG regulations?

22 A. Could you restate the question?

23 Q. The pertinent regulations that you are
24 discussing on page 5 with regards to ELGs, those are

1 the standards that I believe were last updated in
2 1982; is that correct?

3 A. I believe the date was 1983.

4 Q. Okay. Are you aware as to whether the
5 EPA has proposed any revisions to the ELGs?

6 A. Yes.

7 Q. Okay. And those revisions have not been
8 finalized yet, correct?

9 A. Correct.

10 Q. Okay. And have you evaluated -- strike
11 that.

12 Have you considered whether the proposed
13 revisions to the ELGs could require any capital
14 investments at the Sammis plant?

15 A. No.

16 Q. Okay. And why not?

17 A. Because the ELG proposed eight scenarios.

18 Q. Okay. And the ELG -- the proposed ELG
19 revisions would -- could apply to the wastewater from
20 the bottom ash and the FGD gypsum; is that correct?

21 A. Potentially under several of the
22 scenarios.

23 Q. Okay, okay. And do you know if any of
24 those scenarios under the proposed ELG revisions

1 could require dry or closed-loop bottom ash handling?

2 A. EPA discussed those technologies in the
3 preamble. I don't know if that will be the final.

4 Q. Okay. And do you know whether
5 Mr. Lisowski's cost forecast included any costs
6 related to the proposed ELG revisions?

7 A. I do not.

8 Q. Okay.

9 MR. FISK: We can mark an Exhibit 1.

10 (EXHIBIT MARKED FOR IDENTIFICATION.)

11 Q. Okay. Mr. Evans, you have been handed an
12 exhibit marked Exhibit 1; is that correct?

13 A. Yes.

14 Q. Okay. And this exhibit is a comment
15 letter from FirstEnergy to USEPA regarding the
16 proposed effluent limitation guidelines; is that
17 correct?

18 A. Yes.

19 Q. Okay. And it is dated September 20,
20 2013; is that correct?

21 A. Yes.

22 Q. Okay. And you are the signatory on this
23 letter; is that right?

24 A. Yes.

1 Q. Okay. So you've seen this letter before?

2 A. Yes.

3 Q. Okay. And this letter is with regarding
4 the proposed ELG revisions that we were just
5 discussing a minute ago; is that right?

6 A. Yes.

7 Q. Okay. And if you see the last paragraph
8 on the first page, it says "FirstEnergy participated
9 in the development of and concurs with comments on
10 the proposed ELG revisions submitted to your Agency
11 by the Utility Water Act Group ('UWAG')." Do you see
12 that?

13 A. Yes.

14 Q. Okay. Is that accurate?

15 A. Yes.

16 Q. Okay. And did you participate in the
17 development of -- of the comments on the proposed ELG
18 revisions submitted by UWAG?

19 A. Could you restate the question, please.

20 Q. What part are you -- is confusing?

21 A. Use of the term "participate."

22 Q. Well, do you know what the word
23 "participate" means in the letter that you wrote?
24 Paragraph -- the last paragraph on page 1,

1 "FirstEnergy participated."

2 A. It refers to FirstEnergy. FirstEnergy
3 did participate.

4 Q. Okay. And what do you mean when you
5 wrote "FirstEnergy participated"? What did you mean
6 by "participated"?

7 A. We participated with legal counsel --

8 Q. Okay.

9 A. -- with UWAG in the preparation of
10 comments.

11 Q. Okay. And did you participate in the
12 preparation of comments?

13 A. Could you restate the question one more
14 time.

15 Q. What's confusing about the question?

16 A. Are you asking did I participate
17 personally?

18 Q. Let's start with you personally, yes.

19 A. I did not.

20 Q. Okay. Did anybody from your team?

21 A. I believe so.

22 Q. Okay. Do you know who?

23 A. Scott Brown.

24 Q. Okay. Anyone else?

1 A. Joe Lapceovich.

2 Q. Okay. Anyone else?

3 A. Mike Jirousek.

4 Q. Okay. Anyone else?

5 A. Doug Weber.

6 Q. Okay.

7 A. He's counsel for FirstEnergy.

8 Q. Okay. Anyone else?

9 A. No.

10 Q. Okay. And did you oversee any of your
11 staff's participation in the UWAG comments?

12 A. Could you restate the question.

13 Q. What's confusing?

14 A. "Oversee."

15 Q. Do you oversee your employees?

16 A. I do.

17 Q. Okay. And what -- what do you think the
18 word "oversee" means?

19 A. Oversee could be as broad as are you
20 going to a meeting. Oversee could be I want you to
21 review these comments and provide these comments,
22 yada, yada, yada.

23 Q. And did you do any oversight of your
24 staff's participation in the development of the UWAG

1 comments?

2 A. Given the general definition, I approved
3 their budgets for travel.

4 Q. Okay. Any other way you oversaw their
5 participation in the UWAG comments?

6 A. No.

7 Q. Okay. Does --

8 MR. FISK: Could somebody go on mute?
9 Thank you.

10 Q. Does FirstEnergy still concur with the
11 comments UWAG submitted?

12 A. Yes.

13 MR. FISK: I would like to mark
14 Exhibit 2.

15 (EXHIBIT MARKED FOR IDENTIFICATION.)

16 Q. Okay. Mr. Evans, you have been handed an
17 exhibit marked 2; is that correct?

18 A. Yes.

19 Q. Okay. And this exhibit is the cover
20 letter and then comments from UWAG on the EPA's
21 proposed ELG revisions; is that correct?

22 A. Yes.

23 Q. Okay. And are these the comments that
24 are referred to in the last paragraph on page 1 of

1 Exhibit 1?

2 A. Yes.

3 Q. Okay. And have you seen these comments
4 before?

5 A. I don't recall.

6 Q. Okay. If you could turn to page 71.
7 It's numbered at the bottom.

8 Okay. There's a subheading J there. Do
9 you see that?

10 A. Yes.

11 Q. Okay. And it says "UWAG's
12 Cost-Effectiveness Analysis for Bottom Ash." Do you
13 see that?

14 A. Yes.

15 Q. Okay. And the second paragraph under
16 that subheading J says "To analyze the cost
17 effectiveness of dry or closed-loop bottom ash
18 retrofits." Do you see that?

19 A. Yes.

20 Q. Okay. And then turning over to pages 72
21 and 73, there's a Figure 4 "UWAG Capital Cost Curve
22 for Bottom Ash Retrofits." Do you see that?

23 A. Yes.

24 Q. Okay. And Table 3 on page 73 says "UWAG

1 Bottom Ash Retrofit Annualized Capital Costs." Do
2 you see that?

3 A. Yes.

4 Q. Okay. And that Table 3 then lists
5 "Bottom Ash Retrofit Total Capital Costs" for various
6 sizes of plants; is that right?

7 A. Yes.

8 Q. Do you know whether those -- the capital
9 costs identified in Table 3 would provide a -- a
10 reasonable basis for estimating the potential capital
11 costs the Sammis plant could face under the proposed
12 ELG revisions?

13 A. I don't know because I'm -- I haven't
14 studied the document.

15 Q. Okay. Would you like to take a minute.

16 A. It's not a study I would complete in a
17 minute.

18 Q. Okay. What would you need -- would you
19 need to read? There is a section here that describes
20 how they did the cost effectiveness analysis, right?

21 A. Could you restate the question again,
22 please.

23 MR. FISK: Could you read that question
24 back.

1 (Record read.)

2 A. Could you restate the question.

3 Q. Okay. I think my question had been
4 looking at the capital costs identified on Table 3,
5 would those provide a reasonable basis upon which to
6 estimate the costs the Sammis plant could face under
7 the proposed ELG revisions?

8 A. No.

9 Q. And why not?

10 A. Because it doesn't consider the site
11 specifics of the Sammis plant is one scenario and
12 EPA's rule that requires it. This is not all eight
13 scenarios that EPA had. I don't view this
14 necessarily as applicable to the Sammis plant for
15 those reasons.

16 Q. Okay. Do you view it as applicable to
17 any FirstEnergy plants?

18 MR. LANG: Objection, beyond the scope of
19 his testimony.

20 Q. You can answer.

21 A. No.

22 Q. Okay. But you concur these -- these cost
23 estimates that UWAG provided to EPA about what their
24 ELG revisions could cost coal plants.

1 A. Go back to our statement in the comments
2 we concurred with the comments as prepared by UWAG.

3 Q. Can you identify any site-specific reason
4 related to Sammis that the capital costs identified
5 in Table 3 of the UWAG comments would not provide at
6 least its basis for estimating the costs that the
7 Sammis plant could face under the proposed ELG
8 revisions?

9 A. Not from this document.

10 Q. Okay.

11 MR. FISK: If I could take one minute, I
12 think I am done with the public session.

13 MR. LANG: Okay.

14 MR. FISK: If we could just go off.

15 (Recess taken.)

16 MR. FISK: I have nothing further for the
17 public session. I will have confidential questions
18 later.

19 MR. LANG: Okay. And then you would
20 like -- is this good?

21 THE WITNESS: Food break time.

22 MR. LANG: We will do that. Folks on the
23 phone, let's do 45 minutes and it's 12:35. And then
24 the first up on my list would be Joe Olikier when we

1 get back from lunch.

2 (Thereupon, at 11:53 a.m., a lunch recess
3 was taken.)

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1 Thursday Afternoon Session,
2 July 2, 2015.

3 - - -

4 MR. LANG: This is Jim Lang back on in
5 Akron. We are ready to keep going in the public
6 version of Mr. Evans' deposition, and we will start
7 this afternoon with Joe Olikier.

8 MR. OLIKER: Thank you, Jim.

9 - - -

10 CROSS-EXAMINATION

11 By Mr. Olikier:

12 Q. Mr. Evans, good afternoon. My name is
13 Joe Olikier, and I represent IGS Energy. I have a few
14 questions for you today, and I am going to try to
15 tread lightly because some of these are sort of on
16 the cusp of confidential, but I don't think all the
17 background questions are. But just before you answer
18 just make sure that your response isn't confidential
19 to keep the record clean.

20 Looking at your testimony there are
21 several figures, Figures 1, 2, and 3. Are you
22 familiar with those figures in your testimony? Also
23 Figure 4.

24 A. I'm at Figure 1.

1 Q. Looking at these -- these various figures
2 it's my understanding that the information that --
3 the specific information in these figures is
4 confidential; is that correct?

5 A. Yes.

6 Q. The source of this information, is this
7 the EPA Option 1 State analysis?

8 A. Yes.

9 Q. And, now, if I look -- there is something
10 I would like you to help me understand. If you look
11 at Footnote 1 -- I'm sorry, that's not the correct
12 location. It may be -- Footnote No. 2, please.

13 A. Yes.

14 Q. It says "EPA Option 1 State IPM Model
15 Outputs." Is that the source of all the information
16 in Figure 1 through 4?

17 A. Yes.

18 Q. Isn't that link a public link?

19 A. Yes.

20 Q. So I guess my question is -- and I am
21 trying to follow what you did in your Figures 1
22 through 4. I've clicked on the link, and then it
23 brings me to a zip file on the EPA's website that has
24 several documents located within it. Are you

1 familiar with that process?

2 A. Yes.

3 Q. Okay. And let me pull it up and you
4 would agree there are several spreadsheets that you
5 can access by clicking the link in Footnote No. 2?

6 A. Yes.

7 Q. Can you identify the title of the
8 spreadsheet that provides the source information in
9 your confidential testimony?

10 A. Assuming I had the spreadsheet sitting in
11 front of me and the link, I could do that. But
12 without that as a reference point, I can't by name of
13 the spreadsheet, no.

14 Q. Okay. And that's -- that's part of the
15 reason why I wanted to go into that here.

16 MR. OLKER: Can we go off the record for
17 a second?

18 MR. LANG: Sure.

19 (Discussion off the record.)

20 Q. Mr. Evans, would you agree that all of
21 the information in the EPA link in Footnote 2 is
22 public?

23 A. Yes.

24 Q. Does -- can -- so I guess I am asking why

1 is the information in your testimony confidential?

2 MR. LANG: Objection to the extent that
3 it gets into legal issues. But to the extent that
4 you have an answer outside of legal, legal
5 discussion, you can provide.

6 A. I don't know.

7 Q. Okay. And let's take it a step further.
8 If I were to click on the link in Footnote 2, where
9 in those spreadsheets would I be able to find the
10 information in Figure 1?

11 A. Could you restate the question, please.

12 Q. What part of my question don't you
13 understand?

14 A. The use of the term "information."

15 Q. What about that term don't you
16 understand?

17 A. The specific information you are looking
18 for.

19 Q. Okay. What I am referring to is
20 specifically Figure 1 and I won't talk about the
21 numbers that are on there but are the numbers that
22 are contained in Figure 1 listed on any of the
23 spreadsheets that I can access through Footnote 2?

24 A. Yes.

1 Q. And is the Sammis plant specifically
2 delineated on that spreadsheet regarding its location
3 on the dispatch curve for 2020?

4 Did I miss your response?

5 A. Could you restate the question, please.

6 Q. Okay. If I were to click on link --
7 Footnote 2 and open the spreadsheet to that link it
8 brings me to, could I look within those spreadsheets
9 and find Sammis's location on the dispatch curve of
10 PJM in 2020 under EPA Option 1?

11 THE WITNESS: Could you repeat the
12 question, please.

13 MR. LANG: He is asking to read it back,
14 Joe.

15 MR. OLIKER: Sure. The court reporter
16 can read it to him, please.

17 (Record read.)

18 A. No.

19 Q. Then can you tell me what the actual
20 source for Figure 1 is?

21 A. Is the data in that spreadsheet that's in
22 the reference.

23 Q. So is Figure 1 a curve that FirstEnergy
24 created, or is it something EPA created?

1 A. The curve was created by FirstEnergy, by
2 the companies.

3 Q. Okay. Using the information provided by
4 the EPA.

5 A. Yes.

6 Q. And can you explain how FirstEnergy did
7 that?

8 A. Yes.

9 Q. Please do so.

10 A. We sat down, looked at all the
11 spreadsheets the EPA put out as inputs and outputs,
12 correlated that information, extracted that
13 information out for the curve, and then compiled it
14 into an Excel spreadsheet, and that data was graphed
15 as a chart, i.e., the dispatch curve.

16 Q. Okay. So -- so I understand, you took
17 things like the EPA made several assumptions about
18 things like, for example, natural gas prices,
19 correct?

20 A. Yes.

21 Q. The costs of emissions, correct?

22 A. Yes.

23 Q. And you took those inputs and you
24 utilized the heat rates in the EPA's spreadsheets and

1 you came up with the dispatch curve, correct?

2 A. Yes, based on the dispatch costs that EPA
3 identified from their model.

4 Q. Okay. Are the heat rates for the seven
5 Sammis units confidential?

6 A. Yes.

7 Q. And those heat rates are not listed in
8 the EPA's spreadsheets contained in Footnote 2?

9 A. The heat rate assumptions by EPA would be
10 public information. I understood your question to be
11 Sammis heat rates; therefore, I said that was
12 confidential.

13 Q. Okay. So you are distinguishing -- and
14 maybe you can help me understand this. Did the EPA
15 use a general heat rate for all units, or did it use
16 unit-specific heat rates?

17 A. They used unit-specific heat rate data
18 that they had available to them.

19 Q. And did the EPA have Sammis's actual heat
20 rates available to them?

21 A. No.

22 Q. Okay. And moving to Figure 2 did you
23 produce Figure 2 in the same way you produced Figure
24 1, by extrapolating data from the EPA's analysis?

1 A. Yes.

2 Q. Is your answer the same for Figure 3?

3 A. Yes.

4 Q. And also Figure 4?

5 A. Yes.

6 Q. So -- and so this whole time we have been
7 referring to the EPA's analysis also known as EPA
8 Option 1, would you agree that the EPA did several
9 different analyses, not just Option 1?

10 THE WITNESS: Could you repeat the
11 question, please.

12 (Record read.)

13 A. It is our understanding that EPA did
14 multiple analyses and they chose certain analyses to
15 post publicly and others were never disclosed.

16 Q. Did the EPA also run an Option 2?

17 A. EPA ran an Option 2 based on a scenario
18 that CSAPR would have different -- I'm sorry, Clean
19 Power Plan would have different compliance dates.

20 Q. Okay. And the EPA also ran an Option 1
21 Regional, correct?

22 A. Yes.

23 Q. And you haven't modeled Option -- also
24 just to close the loop the EPA also ran an Option 2

1 Regional, Option 2 State, correct?

2 A. That's my recollection.

3 Q. And the only EPA analysis that you have
4 extrapolated for purposes of your testimony is EPA
5 Option 1 State, correct?

6 A. Yes.

7 Q. Would you agree that the EPA's analysis,
8 and we are talking about EPA Option 1 State, was
9 derived from something called the integrated planning
10 model?

11 A. Yes.

12 Q. Okay. And much of your testimony
13 regarding the Clean Power Plan relies upon the
14 analysis performed by the EPA and the IPM. Are you
15 comfortable with that terminology for the integrated
16 planning model?

17 A. Could you repeat the question, please.

18 (Record read.)

19 MR. LANG: Objection to form.

20 Q. Let's just take it one step at a time.
21 Are you comfortable referring to the integrated
22 planning model as the IPM?

23 A. Yes.

24 Q. Okay. Your testimony relies upon the IPM

1 and EPA analysis for Option 1 State, correct?

2 MR. LANG: Objection.

3 A. Yes.

4 Q. And would you agree that the figures
5 in -- scratch that.

6 Would you agree that the statistics in
7 Figures 1 through 4 are all based upon certain
8 assumptions regarding the four building blocks for
9 the Clean Power Plan?

10 A. Could you restate the question, please.

11 Q. What part of my question didn't you
12 understand?

13 A. The use of the word "statistics."

14 Q. Would you agree that the information that
15 FirstEnergy extrapolated in Figures 1 through 4 is
16 largely dependent on assumptions that the EPA made
17 about the four building blocks in the Clean Power
18 Plan?

19 A. Yes.

20 Q. Would you agree that one of those
21 assumptions is heat rate improvements?

22 A. Yes.

23 Q. Would you agree that, all else being
24 equal, the greater a generator's ability to improve a

1 unit's heat rate, the more competitive the unit will
2 be in the market?

3 THE WITNESS: Could you repeat the
4 question, please.

5 (Record read.)

6 A. Yes.

7 Q. Would you agree that the ability of a
8 generator to improve a unit's heat rate may depend on
9 whether the unit operates in a regulated or
10 deregulated market?

11 MR. LANG: Objection, pretty far beyond
12 the scope of the testimony. You can answer if you
13 have an answer.

14 A. I don't have an answer.

15 Q. Have you evaluated the cost of improving
16 the heat rates for the seven Sammis units?

17 A. Could you restate the question, please.

18 Q. What part of my question don't you
19 understand?

20 A. Your initial reference to what.

21 Q. Have you evaluated the cost of improving
22 the heat rates for the seven Sammis units relative to
23 their existing levels?

24 MR. LANG: Objection.

1 A. Once again, will you please restate the
2 question.

3 Q. And what is it with my question you don't
4 understand? I'm sorry, I am having trouble following
5 you.

6 A. I am having trouble following you, sir,
7 so I'm trying to figure out what my starting point is
8 of what you are referring to.

9 Q. Would you agree that the Clean Power Plan
10 assumes that generators can improve their heat rates
11 by 4 to 6 percent?

12 THE WITNESS: Could you repeat the
13 question, please.

14 (Record read.)

15 A. EPA made assumptions in their analysis
16 that generators could improve their heat rates by 4
17 to 6 percent.

18 Q. And have you evaluated the cost of
19 improving the heat rates for the seven Sammis units
20 by 4 to 6 percent?

21 A. No.

22 Q. Have you evaluated the cost of improving
23 the heat rates of the seven Sammis plants by any
24 amount?

1 A. No.

2 Q. Now, earlier, you spoke with Mr. Fisk
3 about the projections that Mr. Lisowski performed in
4 his testimony. Do you remember that discussion?

5 A. Yes.

6 Q. Would you agree that Mr. Lisowski's
7 testimony does not assume any additional capital
8 expenditures related to improving the heat rates of
9 any of the Sammis units?

10 THE WITNESS: Could you repeat the
11 question, please.

12 (Record read.)

13 A. I don't know.

14 Q. You do, however, disagree with the EPA's
15 assumption that heat rates can be improved by
16 6 percent, correct?

17 A. Could you restate the question.

18 Q. Earlier we established that the EPA
19 assumes that generators can improve the heat rates by
20 4 to 6 percent, correct?

21 A. Yes.

22 Q. You don't agree with the EPA, do you?

23 A. Restate the question, please.

24 Q. What part of my question don't you

1 understand?

2 A. Your reference to I don't agree. What's
3 the context?

4 Q. You think the EPA is wrong in that
5 generators cannot improve the heat rates of their
6 generating units by 4 to 6 percent.

7 THE WITNESS: Can you repeat the
8 question, please.

9 (Record read.)

10 A. I don't know.

11 MR. OLIKER: You know what? There is an
12 easier way to do this. Karen, you have a set of
13 documents. I believe they are folder 1, folder 2.
14 Could you please open envelope No. 1.

15 (EXHIBIT MARKED FOR IDENTIFICATION.)

16 Q. Mr. Evans, do you see the document that
17 has been marked as Deposition Exhibit 3?

18 A. Yes.

19 Q. Can you please identify that document.

20 A. "Docket ID No. EPA-HQ-OAR-2013-0602,
21 FirstEnergy Corporation Comments on EPA's Proposed
22 Carbon Pollution Emission Guidelines for Existing
23 Stationary Sources: Electric Utility Generating
24 Units."

1 Q. And in the top left-hand corner does it
2 say Raymond L. Evans?

3 A. No.

4 Q. What does the document say in the top
5 left-hand corner?

6 A. Oh, I thought you were referring to my
7 signature. I apologize, sir. It says Raymond L.
8 Evans.

9 Q. Is that you?

10 A. Yes.

11 Q. Are those a set of comments that
12 FirstEnergy filed regarding the Clean Power Plan on
13 December 1, 2014?

14 A. Yes.

15 Q. And does this appear to be a true and
16 accurate copy of the set of comments that you filed
17 on behalf of FirstEnergy?

18 A. It appears to be complete, sir.

19 Q. Okay. Now, this document used an acronym
20 HRI. Would you agree that refers to heat rate
21 improvement?

22 A. Could you please provide me a reference.

23 Q. If you look at page 7 on the document.
24 Under Building Block No. 1, do you agree that it says

1 "Building Block #1 assumes that all affected units
2 can achieve a 6% heat rate improvement" and HRI in
3 parentheses?

4 A. Yes.

5 Q. And then does this refresh your memory,
6 if you look at the next sentence, that "FirstEnergy
7 believes that the methods used to establish the 6%
8 HRI are flawed and set an unrealistic target"?

9 A. Yes.

10 Q. And would you agree that FirstEnergy
11 believes that a more realistic target for a merchant
12 unit is 1-1/2 percent?

13 A. "FE's analysis concludes a total heat
14 rate improvement up to 1-1/2% from current operating
15 parameters is the maximum attainable at an
16 economically justifiable cost for a merchant unit."

17 Q. Okay. Would you agree these comments are
18 focused on the EPA analysis that you rely upon in
19 your testimony?

20 A. No.

21 Q. Why do you disagree?

22 A. The comments were directed at the entire
23 body of work by EPA, not just one specific area.

24 Q. Would you agree that they also refer to

1 the IPM and the EPA's analysis in Option 1?

2 A. Yes.

3 Q. And would you agree you are largely
4 critical of the EPA's analysis regarding all four
5 building blocks?

6 MR. LANG: Objection.

7 A. No.

8 Q. Why do you disagree?

9 A. I disagree with the use of the word
10 "critical."

11 Q. Do your comments criticize the EPA's
12 analysis, Mr. Evans?

13 A. Our comments reflect comments meant to
14 improve the rule.

15 Q. Sticking with the issue of heat rate,
16 would you agree that you believe the Clean Power Plan
17 will lead to a degradation of current heat rate for
18 coal-fired power plants?

19 A. Could you restate the question, please,
20 sir.

21 Q. What part of my question don't you
22 understand?

23 A. Please restate the question.

24 Q. What part of my question do you not

1 understand so that I may restate it?

2 A. Use of the term "heat rate and
3 degredation."

4 Q. Give me one second.

5 Do you agree that increasing the
6 utilization of natural gas among several plants will
7 displace coal-fired generation and actually increase
8 coal-fired generation heat rates?

9 MR. LANG: Objection to the extent it's
10 an incomplete hypothetical and calls for speculation.
11 You can answer if you can.

12 THE WITNESS: Could you repeat the
13 question.

14 (Record read.)

15 A. I would cite back to our comments on
16 pages 9 and 10.

17 Q. And which -- which comments can you refer
18 to me? Can you read them?

19 A. Yes, I will refer back to the December 1,
20 2014, comments submitted on the Clean Power Plan,
21 pages 9 and 10, our statement is "This shifting of
22 generation will reduce the average efficiency of
23 coal-fired units. EPA has shown a strong
24 relationship between lower capacity factors and lower

1 coal plant efficiency. Therefore, one of the impacts
2 of Building Block #2 will be to offset some of the
3 efficiency improvement efforts taken by coal-fired
4 power plants to meet Building Block #1, thereby
5 making Building Block #1 even harder to achieve."

6 Q. Okay. And when you reviewed
7 Mr. Lisowski's projections regarding the Sammis
8 plant, do you know if Mr. Lisowski used less
9 efficient heat rates in the years that the Clean
10 Power Plan was in effect for the Sammis units?

11 MR. LANG: Objection, assumes facts.

12 A. I don't know.

13 Q. Would you agree you should have?

14 A. I don't know.

15 Q. And why is that?

16 A. I don't know.

17 Q. Mr. Evans, you also take issue with the
18 total emission reductions target established by the
19 EPA for Ohio, correct?

20 A. Could you restate the question, please?

21 Q. Would you agree that under the Clean
22 Power Plan the EPA establishes state-specific
23 reductions?

24 A. Yes.

1 Q. Do you agree that you believe the EPA
2 incorrectly calculated Ohio's reduction market?

3 THE WITNESS: Could you repeat the
4 question back for me, please.

5 (Record read.)

6 A. Well, we stated on page 15 under Building
7 Block --

8 MR. LANG: Just go ahead and answer the
9 question.

10 THE WITNESS: Repeat the question,
11 please.

12 (Record read.)

13 THE WITNESS: One more time, please.

14 (Record read.)

15 A. Yes.

16 Q. And that is because the EPA did not
17 account for Senate Bill 310, correct?

18 A. Yes.

19 Q. Going back to our earlier statement, our
20 earlier discussion about whether the deterioration of
21 heat rates when there is increased natural gas-fired
22 generation being utilized, would you agree that there
23 is a two-fold impact from the deterioration of the
24 deteriorating heat rate? The first impact, would you

1 agree, is that there is increased CO-2 output?

2 MR. LANG: Joe, everything that you are
3 asking about is speculation and is not related to
4 Sammis and is beyond the scope of his testimony. Do
5 you have questions that are focused on his testimony?

6 MR. OLKER: This is on his testimony,
7 Jim.

8 MR. LANG: Where?

9 MR. OLKER: He's testifying regarding
10 the units' compliance with EPA regulations, and he
11 talks about pending regulations. I am talking about
12 one of those.

13 MR. LANG: Actually Clean Power Plan is
14 not pending.

15 MR. OLKER: Proposed, sorry. He talks
16 about it in his testimony, so he can talk about it
17 now.

18 MR. LANG: He talks about Sammis with
19 regard to the Clean Power Plan. Do you have
20 questions specific to Sammis?

21 MR. OLKER: We can ask it that way, but
22 it doesn't really -- it's a coal-fired power plant.

23 MR. LANG: If you could ask questions
24 about Sammis's -- the potential impact of the

1 proposed Clean Power Plan on Sammis which is
2 discussed in his testimony, he's -- I am sure he will
3 try to answer those questions.

4 Q. (By Mr. Olikar) Mr. Evans, your comments
5 here at the EPA, is there any reason why Sammis would
6 be distinguishable from all of the other coal-fired
7 power plants you are referencing in these comments?

8 A. Could you restate the question.

9 Q. What about my question didn't you
10 understand?

11 THE WITNESS: Could you repeat the
12 question, please.

13 (Record read.)

14 A. I cannot answer the question as worded.

15 Q. Why is that? What would you need to
16 understand?

17 THE WITNESS: Could you repeat the
18 second -- the next to last question.

19 (Record read.)

20 A. When we prepared our comments, we were
21 not evaluating Sammis.

22 Q. Do your comments apply to all coal-fired
23 power plants?

24 A. The comments apply to the fleet of

1 FirstEnergy.

2 Q. And is there any reason why these
3 comments would not apply to Sammis?

4 A. We have not done a unit-by-unit
5 evaluation of Sammis.

6 Q. Can you think of a reason today why these
7 comments would not apply to Sammis?

8 A. Not without additional detailed study.

9 Q. Hypothetically speaking if Sammis's heat
10 rate were to be higher than its existing level, would
11 you agree that it would emit more CO-2 relative to
12 existing levels?

13 MR. LANG: Objection, assumes facts.

14 THE WITNESS: Could you repeat the
15 question.

16 (Record read.)

17 A. Could you restate the question.

18 Q. Very simply if you leave everything else
19 equal and you increase Sammis or any other unit's
20 heat rate, it will emit more CO-2, correct?

21 MR. LANG: Objection.

22 THE WITNESS: Repeat the question one
23 more time, please.

24 Q. Maybe you can just turn to page 5 of your

1 comments, the very first sentence. "In regard to
2 Building Block #2, increasing the utilization of
3 natural gas combined cycle units will displace
4 coal-fired EGU output and coal-fired EGU heat rates
5 will actually increase as a result, increasing their
6 CO-2 emission rate."

7 A. That is what we stated.

8 Q. Could you explain what you meant by that
9 sentence?

10 A. That we prepared the comments we believe
11 certain units will have certain adjustments in heat
12 rate.

13 Q. And those adjustments will increase their
14 CO-2 output, correct?

15 A. I don't agree with that comment.

16 Q. And why do you disagree?

17 THE WITNESS: Could you repeat back my
18 previous answer, please.

19 (Record read.)

20 A. That is my response to your question,
21 sir.

22 MR. OLIKER: And could you read my next
23 question.

24 (Record read.)

1 Q. Could you answer that question, please?

2 A. I don't know.

3 Q. Okay. Earlier you mentioned -- I think
4 we agreed that in your comments you indicated that
5 the maximum possible heat rate improvement that is
6 achievable for a merchant unit is 1-1/2 percent.
7 Could you identify what the cost of that heat rate
8 improvement would be?

9 A. I don't --

10 Q. I'm sorry. Go ahead.

11 A. I don't recall.

12 Q. How did you determine that the maximum
13 that FirstEnergy could improve the heat rate of a
14 merchant unit was 1-1/2 percent?

15 A. We looked at the documentation USEPA
16 provided in the public record, the docket. We
17 reviewed in particular the Sammis -- I'm sorry. We
18 reviewed in particular the Sargent & Lundy study that
19 EPA references in their preamble, and we took those
20 costs and for purposes of preparing comments and
21 compared those costs to -- to market and this -- and
22 we just compared that to market and that's all I
23 recall.

24 Q. Was the cost of the 1-1/2 percent heat

1 rate improvement in the millions of dollars?

2 MR. LANG: Objection, asked and answered.

3 A. I don't know. I don't recall.

4 Q. Okay.

5 THE WITNESS: Could we take a break?

6 MR. OLIKER: I'm almost done actually. I
7 just prefer to -- if you don't mind. I mean, if you
8 really need one, of course, you can have one, but if
9 we can, I think I can finish in 5 minutes.

10 MR. LANG: It's up to you.

11 THE WITNESS: I'm good for 5 minutes, but
12 I will call a break then.

13 Q. Okay. Sure. Let's try to wrap up
14 quickly. Would you agree that the IPM that we've
15 referred to was created by ICF International?

16 A. Yes.

17 Q. Okay. Have you provided any analysis
18 to -- scratch that.

19 Have you performed any analysis of the
20 cost of a carbon tax?

21 A. We have not performed any analysis of a
22 cost of a carbon tax.

23 Q. Okay. Let me -- did you take issue with
24 my use of the word "tax"?

1 A. Yes.

2 Q. Okay. Have you performed any analysis of
3 a cost of carbon that would be paid for emissions
4 from generating stations?

5 THE WITNESS: Could you repeat the
6 question, please.

7 (Record read.)

8 A. Yes.

9 Q. And I assume those results are
10 confidential, correct?

11 A. That would be my belief.

12 Q. Did you provide that information to Jason
13 Lisowski?

14 A. Could you repeat the question, please.

15 Q. I can do it. Did you provide the results
16 of your carbon analysis to Jason Lisowski or another
17 person in the generation group?

18 A. No.

19 Q. Who did you provide the information to or
20 what purpose was it used for?

21 MR. LANG: I will object to form.
22 Obviously think about it.

23 A. I believe I misunderstood your question
24 to be did I versus we, FirstEnergy, have a carbon

1 price. I answered for FirstEnergy. I did not create
2 a carbon price.

3 Q. Who in FirstEnergy created the carbon
4 price?

5 A. Dave Pinter.

6 Q. Could you spell his last name for me,
7 please?

8 A. I believe it's P-I-N-T-E-R.

9 Q. Okay. Have you reviewed his analysis?

10 A. Yes.

11 Q. And do you know how he determined the
12 carbon price?

13 A. No.

14 Q. Okay. Have you reviewed Judah Rose's
15 analysis of a price for carbon?

16 A. Yes.

17 Q. Okay. Going back to the EPA, and I think
18 this is my last set of questions before the break,
19 and then I'll review and see if I have any more, but
20 would you agree that for purposes of compliance with
21 the Clean Power Plan, FirstEnergy does not believe
22 there should be an expectation of reliance on nuclear
23 units that have a permit that expires before 2030?

24 MR. LANG: Well, objection. Joe, in

1 order to speed this up are you reading from the
2 comments again?

3 MR. OLIKER: Yes.

4 MR. LANG: Which page?

5 MR. OLIKER: I'll have to find it.
6 Sometimes when we try to speed things up, it works
7 the opposite way.

8 MS. FLEISHER: It's page 3.

9 MR. LANG: Thank you, Madeline, I think.
10 Could I have that read back, please. It
11 was kind of long.

12 (Record read.)

13 A. Quoting from page 3 the statement stands
14 as it says, the EPA cannot and then case 111(d).
15 Those are my responses.

16 Q. And would you agree Davis-Besse's permit
17 is set to expire in 2017?

18 A. Yes.

19 MR. OLIKER: Okay. This is probably a
20 good time for a break. I will look over my questions
21 during that break, and hopefully I will be done with
22 my public session.

23 MR. LANG: Okay.

24 (Recess taken.)

1 MR. LANG: Back on in Akron. Joe, are
2 you there?

3 MR. OLIKER: Jim, during the break was
4 the witness able to identify which one of the EPA
5 presented sheets he utilized to extrapolate Figures 1
6 through 4?

7 MR. LANG: He was not.

8 MR. OLIKER: Did he look?

9 MR. LANG: We did not look. We discussed
10 what would be required and the detail that would go
11 into it, and he did not do it during the break.

12 MR. OLIKER: Would it -- okay. Maybe
13 I'll just ask him a few follow-up questions on that.
14 And I do have two or three more questions and then
15 I'm done.

16 Q. (By Mr. Olikier) Mr. Evans.

17 A. Yes.

18 Q. I am sure you just overheard between
19 myself and Mr. Lang. Could you describe what you
20 would have to do to be able to extrapolate your
21 Figures 1 through 4.

22 A. I believe this -- my previous testimony
23 what I said we did is we looked at the summary sheet,
24 pulled the data, cost data, out of that summary

1 sheet, and then transferred it to an Excel sheet to
2 make into a chart for presentation in my actual
3 testimony.

4 Q. Okay. And one of the things in that
5 summary sheet is a 6 percent assumed heat rate
6 improvement, correct?

7 A. No.

8 Q. Was a heat rate improvement assumed in
9 Figure 1?

10 MR. LANG: Yeah. We are not sure if it's
11 getting into confidential at that point. You tell
12 us. I don't know what the answer is.

13 THE WITNESS: Could you restate the
14 question.

15 Q. And, again, listen to Mr. Lang's advice
16 if this does request confidential information.
17 Regarding Figure 1 which shows a dispatch curve for
18 2020, Sammis's location on that curve, does Figure 1
19 assume a heat rate improvement for Sammis?

20 A. Yes.

21 Q. Is the assumed heat rate improvement
22 6 percent?

23 A. Yes.

24 Q. Would you agree that, all else being

1 equal, if you did not put coal-fired power plants --
2 let me restate that question. That was a garble.

3 All else being equal, if you did not
4 assume that coal-fired power plants achieved a
5 6 percent heat rate improvement, the dispatch curve
6 in Figure 1 would look different.

7 MR. LANG: Objection to the incomplete
8 hypothetical. You can answer if you can.

9 THE WITNESS: Could you repeat back the
10 question, please.

11 (Record read.)

12 A. I don't know.

13 Q. Would you agree that if the heat rate
14 improvement for Sammis was actually a zero percent
15 improvement, that the variable dispatch costs of the
16 Sammis would be higher, all else being equal,
17 relative to what's on Figure 1 now?

18 THE WITNESS: Could you repeat the
19 question.

20 (Record read.)

21 THE WITNESS: One more time just to be
22 sure I understand the question.

23 (Record read.)

24 A. Yes.

1 Q. Okay. Thank you. And I think this is my
2 last question, you would agree -- well, two parts, of
3 course. You would agree that Figure 1 is a result of
4 the assumptions that the EPA made regarding the four
5 building blocks, correct?

6 A. Yes.

7 Q. And you would agree if you change the
8 EPA's assumptions regarding the four building blocks,
9 then the results in Figure 1 would change as well.

10 A. Yes.

11 Q. Okay. And your answer would be the same
12 for Figures 2 through 4, correct?

13 A. Yes.

14 MR. OLIKER: Okay. Thank you, Mr. Evans.
15 Those are all the questions I have for the public
16 session.

17 MR. LANG: Next on my list is Larry
18 Sauer. Are you there, Larry?

19 MR. SAUER: I am, Jim. Thank you.

20 - - -

21 CROSS-EXAMINATION

22 By Mr. Sauer:

23 Q. Good afternoon, Mr. Evans. My name is
24 Larry Sauer. I am an attorney with the Office of

1 Ohio Consumers' Counsel.

2 I would like to -- first, if you would
3 turn to page 3 of your testimony, I was looking at
4 lines 3 to 5 that you got some questions earlier
5 today about.

6 A. Yes.

7 Q. I believe you testified that you saw a
8 spreadsheet that Mr. Lisowski had that had bottom
9 line figures; is that correct?

10 A. Yes.

11 Q. And what time period was that forecast
12 for?

13 A. The forecast he showed me was the
14 forecast that supported his testimony.

15 Q. So was that a 15-year forecast?

16 A. That is my understanding.

17 Q. And did you or someone under your
18 supervision provide Mr. Lisowski the costs necessary
19 to develop a 15-year forecast?

20 A. No.

21 Q. Did you or someone under your supervision
22 provide Mr. Lisowski a cost for another time period
23 less than 15 years?

24 A. Let me go back to my first question. We

1 did provide Mr. Lisowski the cost for the 316(b)
2 study and the cost of screens. Those were the only
3 costs that we would have provided him.

4 Q. And with regard to the 316(b) studies, do
5 you recall what the -- what the actual costs were?

6 MR. LANG: I think it's confidential.

7 A. It's confidential.

8 Q. Okay. Is that the same with the screens,
9 the cost of the screens?

10 A. Yes.

11 Q. Okay. If you are considering a 15-year
12 forecast and the cost necessary to comply with any
13 pertinent or pending regulations as you understand
14 them, are there any capital investments necessary
15 during that -- during that 15-year period that would
16 be required in order to maintain that compliance?

17 A. Yes.

18 Q. And what capital costs or investments
19 would be necessary during that 15-year period to
20 address which pertinent regulations?

21 A. They are built into Mr. Lisowski's
22 forecast.

23 Q. So during the 15-year term of
24 FirstEnergy's proposal, there are going to be capital

1 investment requirements in order to continue
2 compliance with pertinent regulations; is that the
3 case?

4 A. Yes.

5 Q. And do you know which of the regulations
6 are going to require such capital investments and
7 when?

8 THE WITNESS: Could you repeat the
9 question, please.

10 MR. SAUER: Yes. Well, would you --
11 could you reread it, please.

12 (Record read.)

13 A. Could you restate the question, please.

14 Q. In your testimony, page 3, you have a
15 discussion of 316(b). Is that -- did you consider
16 that a pertinent regulation?

17 MR. LANG: Just objection, asked and
18 answered. This was 316(b) as an existing regulation
19 and the costs related to it we covered with Shannon
20 this morning.

21 MR. SAUER: I'm just -- I am trying to
22 set a foundation for him so he can answer my
23 questions.

24 Q. Would you agree that's a pertinent

1 regulation?

2 A. I would define that as a pending
3 regulation.

4 Q. Okay. The CCR rule you discuss on page
5 4, would you consider that a pertinent regulation?

6 A. That is a pending regulation.

7 Q. All right. On page 5, you have ELG
8 regulations that you discuss. Would you consider
9 those to be pertinent regulations?

10 A. That is a proposed regulation or
11 additional regulation that's not final.

12 Q. On page 7 you talk about ozone NAAQS. Do
13 you consider that to be a pertinent regulation?

14 A. I would not consider that a pertinent
15 regulation.

16 Q. Is it a pending regulation?

17 A. No.

18 Q. No? Page 8 you discuss the CSAPR. Do
19 you consider that to be a pertinent regulation?

20 A. Yes.

21 Q. Over the 15-year term of the FirstEnergy
22 proposal, do you anticipate there will be the need
23 for additional capital investment in order to
24 continue meeting compliance with this regulation?

1 MR. LANG: By "this regulation," do you
2 mean CSAPR?

3 MR. SAUER: I do.

4 A. Yes.

5 Q. And when would you anticipate starting a
6 15-year term or would you envision additional capital
7 investment would be required?

8 A. It's driven by the maintenance of the
9 equipment.

10 Q. Okay. Have you evaluated that
11 maintenance schedule and made a determination when --
12 let me restate that.

13 Driven by the maintenance schedule, are
14 you saying at some point the equipment will need to
15 be replaced?

16 A. Could you repeat the question.

17 Q. Yes. You say the capital investment is
18 driven by a maintenance schedule. Are you suggesting
19 that at some point the maintenance expense is going
20 to get to a level that it makes economic sense to
21 replace the equipment rather than continue to
22 maintain it?

23 A. Yes.

24 Q. And do you have an estimate as to when

1 that crossover point will take place and the
2 maintenance will become too expensive to maintain it
3 and the equipment will need to be replaced?

4 A. No.

5 Q. Based on your knowledge and experience,
6 how many years is the equipment generally -- what's
7 the useful life of the equipment?

8 A. It is component dependent.

9 Q. When the time comes that this equipment
10 would need to be -- well, can you tell me what
11 equipment exactly we are talking about?

12 A. We are talking about scrubber components.

13 Q. And when were the current scrubber
14 components installed?

15 A. They were installed between 2005 through
16 2011.

17 Q. And are the scrubber components on all
18 seven units at Sammis?

19 A. Yes.

20 Q. Okay. And is that the first time
21 scrubber components were ever installed on any of the
22 Sammis units?

23 A. Yes.

24 Q. And at what cost were those scrubber

1 components installed?

2 A. I don't recollect the exact number.

3 Q. I am just asking for a -- an order of
4 magnitude.

5 A. A billion dollars, greater than a billion
6 dollars.

7 Q. And do you know over what period of time
8 these units -- these scrubber units were being
9 depreciated?

10 A. I do not.

11 Q. When they were installed, did you have an
12 expectation of what their useful life would be?

13 A. It varies by component.

14 Q. Are there multiple components of a
15 scrubber unit?

16 A. Yes.

17 Q. And what are those various components?

18 A. At a very high level, pumps, headers,
19 ductwork, expansion joints, spray nozzles, feeders,
20 wastewater treatment, conveyor belts, hoppers,
21 storage bins, scrubber vessels. That's a
22 high level -- plus instrumentation.

23 Q. What would you estimate the annual
24 maintenance costs of these components to be?

1 A. That would be in the testimony of
2 Mr. Lisowski.

3 Q. As a separate line item?

4 A. I don't know.

5 Q. Do you -- you suggest that the
6 replacement and the capital investment for these
7 items would also -- for the 15-year term would be in
8 Mr. Lisowski's testimony, correct?

9 A. Yes.

10 Q. And how would he make that determination?
11 Did someone in your organization or yourself help
12 identify when and at what cost various components may
13 need to be replaced?

14 MR. LANG: Objection to form. Go ahead.

15 THE WITNESS: Could you read back the
16 question.

17 (Record read.)

18 A. No.

19 Q. No? No one in your organization provided
20 him any information to help estimate those timelines
21 and costs?

22 A. No.

23 Q. I am not sure I understand what you
24 answered "No" to.

1 A. I was answering "No" to your previous
2 question.

3 Q. How can you be sure that Mr. Lisowski has
4 included in his testimony during the 15-year term of
5 FirstEnergy's proposal that replacement capital
6 investment for these scrubber components have been
7 included?

8 A. As my recollection, Mr. Lisowski's
9 testimony is he received cost inputs from the people
10 responsible for the equipment.

11 Q. And who are those people that are
12 responsible for the equipment?

13 A. The individuals assigned to the Sammis
14 plant.

15 Q. What's your organization's responsibility
16 with regard to the operation of this equipment?

17 A. To ensure the equipment is operated in a
18 manner that complies with the permits and regulations
19 of Ohio EPA and USEPA.

20 Q. Were you involved in the engineering and
21 design of the scrubber component?

22 A. Yes.

23 Q. And were you -- was your -- you or your
24 organization involved in the -- in the construction

1 and installation of the equipment?

2 A. No.

3 Q. Are you or your organization consulted in
4 regards to the operation of the equipment?

5 A. Yes.

6 Q. And are you or someone in your
7 organization consulted with regards to the
8 maintenance of the equipment?

9 A. Yes.

10 Q. And when the time comes for the equipment
11 to be replaced, will you or someone in your
12 organization be consulted with regards to that?

13 A. It varies.

14 Q. It depends on the component?

15 A. That's one.

16 Q. What else?

17 A. Knowledge base of the plant.

18 Q. Anything else?

19 A. Those are the only two I recollect.

20 Q. And of the components you listed, what
21 are the most -- most expensive?

22 A. In very generic terms the foundation
23 system.

24 Q. And I guess my question would be are

1 pumps part of the foundation system?

2 A. No.

3 Q. Or is the foundation system a component
4 all unto itself?

5 A. Component all unto itself.

6 Q. You said some of these components have
7 been installed back to 2005. Have there been
8 replacements of these components already?

9 A. Yes.

10 Q. Between 2005 and 2011, can you give me an
11 estimate what the capital investment may have been to
12 replace some of these scrubber components that were
13 installed between 2005 and 2011?

14 THE WITNESS: Would you repeat the
15 question, please.

16 Q. Yes. I was trying to get an
17 understanding as to between 2005 and 2011 -- I guess
18 between 2005 and 2014, what's the capital
19 expenditures that have been made on the scrubber
20 components in addition to the \$1 billion you talked
21 about to actually install them initially?

22 A. I don't know.

23 Q. Have there been capital investments
24 between 2005 and 2014 to replace certain of these

1 scrubber components?

2 A. Yes.

3 Q. Can you kind of give me an order of
4 magnitude what the capital investment may have been
5 in addition to the initial investment to install them
6 to replace any components when necessary?

7 MR. LANG: Objection, asked and answered.
8 Answer him again.

9 A. I don't know.

10 Q. Mr. Olikier had asked you some questions
11 regarding the heat rate with the Sammis plants and
12 increasing that up to 1-1/2 percent. Do you recall
13 those questions?

14 A. Yes.

15 Q. Would the costs of increasing each of the
16 seven Sammis units to improve the heat rate by 1-1/2
17 percent be the same for each of the seven units?

18 A. Could you repeat the question, please.

19 Q. Yes. To increase each of the Sammis
20 units 1 through 7 by 1-1/2 percent, would the cost of
21 that heat rate improvement be the same for each of
22 the same seven units?

23 A. No.

24 Q. Would the older plants be more expensive

1 to improve the heat rate relative to the newer
2 plants?

3 A. I don't know.

4 Q. I think I asked you earlier the 316(b)
5 rules you talk about on page 3 are -- we discussed
6 them as pending, pending regulations?

7 A. I'm sorry. I didn't hear all the
8 question due to rustling of papers.

9 Q. I'm sorry. On page 3 you talk about the
10 316(b). I think you describe those as pending
11 regulations; is that correct?

12 A. Yes.

13 Q. And over the 15-year term of the FE
14 proposal, do you envision that there will be a need
15 for capital investment in order to maintain the
16 compliance of 316(b)?

17 MR. LANG: Objection, asked and answered.
18 Tell him again.

19 A. Yes.

20 Q. And can you estimate what that -- what
21 that capital investment will be?

22 MR. LANG: Larry, that would be in the
23 confidential portion.

24 MR. SAUER: Confidential.

1 MR. LANG: It was produced in discovery
2 marked as competitively sensitive confidential.

3 MR. SAUER: Okay.

4 Q. On page 8 of your testimony, you talk
5 about the CSAPR regulations, Phase 1 and Phase 2.
6 What are the time periods for Phase 1 and Phase 2?

7 A. Phase 1 began January 1, 2015, and goes
8 to December 31, 2016. Phase 2 begins January 1,
9 2017, and continues.

10 Q. And is Kyger Creek currently in
11 compliance with CSAPR Phase 1?

12 A. I don't know.

13 Q. Is there anyone testifying in this case
14 that you know of that would know that answer?

15 MR. LANG: Objection.

16 A. I don't know.

17 Q. Do you know if Clifty Creek is in
18 compliance with CSAPR Phase 1?

19 A. I don't know.

20 Q. Do you know if Kyger Creek is in
21 attainment with SO-2 regulations?

22 A. Could you restate the question.

23 Q. Do you know if Kyger Creek is in
24 compliance with SO-2 regulations?

1 A. I don't understand your use of the term
2 "SO-2 regulations."

3 Q. Do you know if Clifty Creek is in an
4 attainment or nonattainment air quality control
5 region?

6 MR. LANG: Page 6.

7 A. They are not in a nonattainment area for
8 the one-hour SO-2 standard.

9 Q. Do you know if Kyger Creek is in
10 attainment with any NOx regulations?

11 A. Kyger Creek and Clifty Creek are not
12 required -- are not in a nonattainment area.

13 Q. If a plant needs to purchase emission
14 credits in order to be in compliance with NOx or
15 SO-2, would the purchase of those credits for
16 compliance be considered an operating expense?

17 A. Yes.

18 Q. And as an operating expense, is it your
19 understanding that those costs or expenses would flow
20 through the rider, the PPA rider?

21 MR. LANG: Objection, beyond the scope of
22 his testimony. You can answer.

23 A. I don't know.

24 Q. Were the purchase of credits, compliance

1 credits, included in Mr. Lisowski's forecast that you
2 reviewed?

3 MR. LANG: Just objection to the extent
4 it assumes facts. You can answer if you follow his
5 question.

6 A. I believe that's confidential
7 information.

8 Q. With regards to the CO-2 regulations of
9 the Clean Power Plan, have you had any discussions
10 with Ohio -- Ohio EPA officials regarding compliance
11 requirements for the Clean Power Plan on Ohio
12 generating plants?

13 A. Yes.

14 Q. And what was the nature of those
15 discussions?

16 A. It was discussions regarding the
17 potential issues that both parties thought they saw
18 within the proposed legislation.

19 Q. And did you have these discussions
20 with -- did the discussions include compliance with
21 the Clean Power Plan for the Sammis plant in
22 particular?

23 A. No.

24 Q. Did it include discussions of Kyger

1 Creek?

2 A. No.

3 Q. Or Clifty Creek?

4 A. No.

5 Q. Do you agree that states will have one
6 year from the promulgation of the final regulation to
7 devise their plan of compliance?

8 MR. LANG: Objection. Calls for
9 speculation.

10 A. I do not know how the final regulation
11 will come out and what the established goals and
12 conditions will be for states to prepare compliance
13 plans.

14 Q. Does FirstEnergy have any programs to
15 install carbon capture and storage on any of the
16 plants?

17 MR. LANG: Objection to the extent it's
18 beyond the scope and requesting information other
19 than Sammis. You can answer with regard to Sammis.

20 A. No, with respect to Sammis.

21 Q. Is Sammis in compliance with Mercury and
22 Air Toxic Standards or MATS?

23 A. The compliance period has not begun yet
24 for Sammis.

1 Q. When does the compliance period begin
2 with regard to Sammis with regards to MATS?

3 A. April 16, 2016.

4 Q. Has there been any investment made in
5 order to comply with MATS even though the compliance
6 period hasn't begun yet?

7 A. Yes.

8 Q. Can you approximate what the capital
9 investment has been on the Sammis plants in order to
10 comply with MATS?

11 A. Could you repeat the question.

12 MR. SAUER: Yeah. Can you -- well, can
13 you read the question back, please.

14 (Record read.)

15 A. I believe the investment has been less
16 than a million dollars.

17 Q. What was the million dollars spent on?

18 A. Two main items, mercury analyzers and
19 precipitator control system.

20 Q. If the -- beginning April 16, 2016, if
21 the MATS compliance requirements were in place, what
22 would -- was the anticipated investment that would be
23 necessary to meet the compliance?

24 A. Could you restate the question, please.

1 Q. Come April, 2016, if the MATS compliance
2 requirements are in place, what's the estimated cost
3 for the Sammis plants in order to comply with that
4 regulation?

5 MR. LANG: And, Larry, are you asking for
6 any additional costs?

7 MR. SAUER: Additional costs beyond the
8 million dollars that was already spent, cap --
9 capital costs.

10 A. No additional capital costs for equipment
11 is required.

12 Q. Are there additional operations expenses
13 that would be required?

14 A. Yes.

15 Q. And what are those?

16 A. The costs of stack testing.

17 Q. Do you know a rough estimate of what that
18 operating cost would be on an annual basis?

19 MR. LANG: I don't know if you care if
20 it's confidential.

21 THE WITNESS: I do care it's confidential
22 because it goes on the public record it's --

23 MR. LANG: Yeah.

24 THE WITNESS: It puts me at a competitive

1 disadvantage with my testing contractors.

2 MR. LANG: Yeah. We have determined
3 that's confidential.

4 MR. SAUER: Okay. I think that may be
5 all the questions I have. Thank you, Mr. Evans. At
6 least for this session.

7 THE WITNESS: Could we take a break,
8 please?

9 MR. LANG: We are going to take a break,
10 and then on my list Madeline Fleisher is next up.

11 (Recess taken.)

12 MS. FLEISHER: I should be able to do
13 this quick hopefully.

14 - - -

15 CROSS-EXAMINATION

16 By Ms. Fleisher:

17 Q. Okay, Mr. Evans, my name is Madeline
18 Fleisher. I represent the Environmental Law & Policy
19 Center. I just had a couple of quick questions.
20 First, you were talking with Mr. Fisk about the
21 bottom ash settling pond at the Sammis facility, and
22 apologies if I missed this as you were talking about
23 it, but is that a lined settling pond?

24 A. It is not.

1 Q. Thank you. And you also discussed with
2 Mr. Fisk that part of compliance with a few of the
3 NAAQS would be through the purchase of allowances.
4 So I want to ask can you project what the costs of
5 those allowances will be in the future?

6 Did I lose you?

7 A. No. I'm thinking.

8 Q. Okay.

9 A. So there is a market for allowances.
10 Current prices are based on current availability of
11 prices. The market just started January 1, 2015. I
12 don't know at this point how far forward they are
13 projecting prices.

14 Q. Okay. And just to make sure we are
15 specific, you are referring to both NOx and SO-2
16 allowances?

17 A. That is correct. I am referring to the
18 requirements of CSAPR.

19 Q. Okay. And FirstEnergy -- has FirstEnergy
20 done any projections of future costs of those
21 allowances?

22 A. No.

23 Q. Is it possible that the costs of those
24 allowances could rise if the relevant SO-2 and NOx

1 allowances become more stringent in the future?

2 A. I don't know.

3 Q. And you were discussing -- I guess let's
4 go back a second. Am I correct in stating that you
5 concluded that the future costs of allowances -- or
6 that you believe the future cost of allowances was
7 incorporated in Mr. Lisowski's cost estimate?

8 A. Yes.

9 Q. Yes. And was that based on a presumption
10 that allowance prices would continue to be similar to
11 what they are today?

12 A. No.

13 Q. What assumptions did you make regarding
14 allowance pricing for purposes of that conclusion?

15 A. That we received sufficient allowances
16 from Ohio EPA to meet our compliance obligations
17 under CSAPR.

18 Q. Okay. I think at one point you said you
19 might need to go purchase additional allowances in
20 the future; is that correct?

21 A. I have to go back to my testimony.
22 Basically -- the testimony basically says on line 5
23 what the response is.

24 Q. Line 5 of which page?

1 A. Page 9.

2 Q. Okay. So I guess if we can turn to --
3 let me find the right place. I believe you have
4 cited on page 17, lines 17 and 19, "If needed, Sammis
5 can purchase allowances." And that's with respect to
6 a proposed lower ozone standard? Are you on that
7 page?

8 A. Yes.

9 Q. Okay. And is it your testimony that the
10 cost for that potential purchase of allowances is
11 incorporated in Mr. Lisowski's cost projections?

12 A. Yes.

13 Q. Okay. And is that based on any
14 particular assumptions about the future price of
15 those allowances?

16 A. I don't know.

17 Q. Okay. All right. And you were also
18 discussing with Mr. Sauer the applicability of your
19 testimony to the OVEC Kyger Creek and Clifty Creek
20 plants. And I just wanted to clarify so on page 2 of
21 your testimony, I will try not to be repetitive but I
22 just want to make sure the record is clear, on page 2
23 of your testimony, lines 13 to 15, you say "Portions
24 of my testimony, as noted below, also apply equally

1 to FES's entitlement to the output of," paraphrasing,
2 Kyger Creek and Clifty Creek. Do you specify which
3 portions of your testimony you believe apply to OVEC?

4 A. I'm sorry. Could you repeat the
5 question.

6 Q. Sure. Was there anything unclear or --

7 MR. LANG: I think --

8 Q. -- did you just want to hear it again?

9 MR. LANG: Yeah, I think he just wants to
10 hear it again.

11 Q. Okay. I was hoping you could specify
12 which portions of your testimony are meant to apply
13 to OVEC.

14 A. I don't know.

15 Q. Okay. Well, I will see if my
16 understanding is correct. So on page 7 and the
17 discussion of the ozone NAAQS, line 16, there's a
18 question and answer. And the question relates to
19 Kyger Creek and Clifty Creek. I am going to presume
20 that the answer to that question is meant to apply to
21 Kyger Creek and Clifty Creek; is that correct?

22 A. Yes.

23 Q. Okay. And as a general matter, are any
24 of your other answers in this testimony applicable to

1 Kyger Creek and Clifty Creek if it is not specified
2 in the question?

3 A. I believe it would be specified in the
4 question.

5 Q. That works for me. Okay. Last item, are
6 you familiar -- actually before I get into that are
7 you familiar with the term National Pollution
8 Discharge Elimination System?

9 A. Yes.

10 Q. And are you fine if I refer to that as
11 NPDES?

12 A. Sure.

13 Q. Okay. Great. And are you familiar with
14 Sammis's NPDES permit?

15 A. Yes.

16 Q. And are you aware that it contains final
17 limits for mercury discharges that are set to go into
18 effect in 2017?

19 A. Yes.

20 Q. And can you address what, if any, plans
21 Sammis has for compliance with those mercury limits?

22 A. Based on the available information in
23 terms of analysis we've done, no additional equipment
24 is required at this time.

1 Q. And is that conclusion based on a
2 presumption that you would be able to use NPDES zones
3 to determine compliance?

4 A. I don't have a recollection.

5 Q. Okay. Give me one minute here. I may be
6 done.

7 I guess just one follow-up question on
8 that last answer. Do you know whether the conclusion
9 that you won't need additional equipment to address
10 mercury discharges is based on a presumption that you
11 will be applying for a variance from the Ohio EPA?

12 A. I don't know at this time.

13 MS. FLEISHER: Okay. I'm all set for the
14 public session. Thank you.

15 MR. LANG: Next up Dylan Borchers.
16 Dylan, are you still there?

17 MR. FISK: Apparently not.

18 MR. LANG: Next -- next and last on my
19 list for the public session Rebecca Hussey. Rebecca,
20 are you there?

21 MR. OLIKER: We must be approaching the
22 holiday.

23 MR. LANG: We must be.

24 I think we will hang up and dial back in

1 to the confidential phone number, and then Shannon
2 will start his questions in the confidential session.
3 Just take a few minutes.

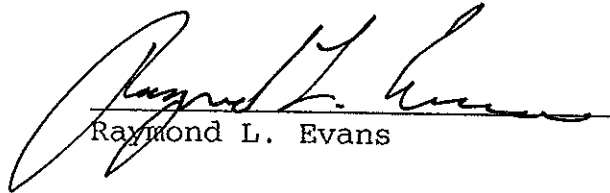
4 (Recess taken.)

5 (CONFIDENTIAL PORTION EXCERPTED.)

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1 State of Ohio :
2 County of Summit : SS:

3 I, Raymond L. Evans, do hereby certify that I
4 have read the foregoing transcript of my deposition
5 given on Thursday, July 2, 2015; that together with
6 the correction page attached hereto noting changes in
7 form or substance, if any, it is true and correct.

8 
Raymond L. Evans

9 I do hereby certify that the foregoing
10 transcript of the deposition of Raymond L. Evans was
11 submitted to the witness for reading and signing;
12 that after he had stated to the undersigned Notary
13 Public that he had read and examined his deposition,
14 he signed the same in my presence on the 20th day
15 of July, 2015.

16 
Notary Public

17 My commission expires April 7, 2020.



Terese M. Miller
Resident Summit County
Notary Public, State of Ohio
My Commission Expires: 04/07/2020

ERRATA SHEET

Please do not write on the transcript. Any changes in form or substance you desire to make should be entered upon this sheet.

TO THE REPORTER:

I have read the entire transcript of my deposition taken on the 2 day of July, 2015, or the same has been read to me. I request that the following changes be entered upon the record for the reasons indicated. I have signed my name to the signature page and authorize you to attach the same to the original transcript.

Page	Line	Change	Reason
30	12	Strike retirement; insert requirements	- Wrong word
31	12	" " " "	- Wrong word
40	17	" " " "	- Wrong word
47	11	" " " "	- Wrong word

Date 7/20/2015 Signature: [Signature]

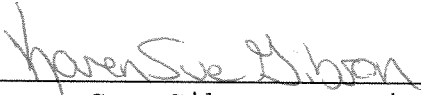
1 CERTIFICATE

2 State of Ohio :
3 County of Franklin : SS:

4 I, Karen Sue Gibson, Notary Public in and for
5 the State of Ohio, duly commissioned and qualified,
6 certify that the within named Raymond L. Evans was by
7 me duly sworn to testify to the whole truth in the
8 cause aforesaid; that the testimony was taken down by
9 me in stenotypy in the presence of said witness,
afterwards transcribed upon a computer; that the
foregoing is a true and correct transcript of the
testimony given by said witness taken at the time and
place in the foregoing caption specified and
completed without adjournment.

10 I certify that I am not a relative, employee,
11 or attorney of any of the parties hereto, or of any
12 attorney or counsel employed by the parties, or
financially interested in the action.

13 IN WITNESS WHEREOF, I have hereunto set my
14 hand and affixed my seal of office at Columbus, Ohio,
on this 9th day of July, 2015.

15 
16 Karen Sue Gibson, Registered
17 Merit Reporter and Notary Public
in and for the State of Ohio.

18 My commission expires August 14, 2015.

19 (KSG-6064)

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Case No(s). 14-1297-EL-SSO

Summary: Deposition (Public) of Raymond L. Evans electronically filed by Mr. Tony G. Mendoza on behalf of Sierra Club