

IN 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 Sarah Murley, 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 Wednesday, January 14, 2015,  
at 8 a.m.

- - -

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- - -

APPEARANCES:

FirstEnergy Corp.  
By Ms. Carrie M. Dunn  
76 South Main Street  
Akron, Ohio 44308

Calfee, Halter & Griswold LLP  
By Mr. N. Trevor Alexander  
The Calfee Building  
1405 East Sixth Street  
Cleveland, Ohio 44114

On behalf of the Applicants.

Bruce E. Weston, Ohio Consumers' Counsel  
By Ms. Maureen R. Grady(via speakerphone)  
Assistant Consumers' Counsel  
10 West Broad Street, Suite 1800  
Columbus, Ohio 43215-3485

On behalf of the Residential Consumers of  
Ohio Edison Company, The Cleveland  
Electric Illuminating Company, and The  
Toledo Edison Company.

Earthjustice  
By Mr. Shannon Fisk  
Northeast Office  
1617 John F. Kennedy Boulevard, Suite 1675  
Philadelphia, Pennsylvania 19103

Earthjustice  
By Mr. Michael Soules  
1625 Massachusetts Avenue NW, Suite 702  
Washington, D.C. 20036

On behalf of the Sierra Club.

Ohio Partners for Affordable Energy  
By Ms. Colleen Mooney(via speakerphone)  
231 West Lima Street  
Findlay, Ohio 45846

On behalf of the Ohio Partners for  
Affordable Energy.

APPEARANCES: (Continued)

McNees, Wallace & Nurick LLC  
By Mr. Frank Darr (via speakerphone)  
21 East State Street, 17th Floor  
Columbus, Ohio 43215

On behalf of the Industrial Energy Users  
of Ohio.

Vorys, Sater, Seymour & Pease, LLP  
By Mr. M. Howard Petricoff (via speakerphone)  
52 East Gay Street  
Columbus, Ohio 43215

On behalf of PJM Power Providers Group,  
Electric Power Supply Association, and  
Retail Energy Supply Association.

Carpenter Lipps & Leland LLP  
By Ms. Rebecca Hussey (via speakerphone)  
280 North High Street, Suite 1300  
Columbus, Ohio 43215

On behalf of the Ohio Manufacturers'  
Association Energy Group.

Environmental Law & Policy Center  
By Ms. Madeline Fleisher (via speakerphone)  
1207 Grandview Avenue, Suite 201  
Columbus, Ohio 43212

On behalf of the Environmental Law &  
Policy Center.

Bricker & Eckler, LLP  
By Mr. Dylan Borchers  
100 South Third Street  
Columbus, Ohio 43215

On behalf of the Northeast Ohio Public  
Energy Council.

ALSO PRESENT:

Mr. William Allen, AEP Ohio (via speakerphone).

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Wednesday Morning Session,

January 14, 2015.

- - -

(Witness sworn.)

MR. ALEXANDER: Good morning. My name is Trevor Alexander. I am one of the lawyers representing the companies in this case.

Could everyone appearing via telephone this morning please identify themselves.

MR. PETRICOFF: This is Howard Petricoff and I am here representing the Retail Energy Supply Association, the Electric Power Supply Association, and P3.

MR. DARR: Frank Darr on behalf of the Industrial Energy Users of Ohio.

MS. HUSSEY: Rebecca Hussey on behalf of Ohio Manufacturers' Association Energy Group.

MS. GRADY: Maureen Grady on behalf of the industrial customers of FirstEnergy.

MS. MOONEY: Colleen Mooney on behalf of OP&A.

MR. BORCHERS: Dylan Borchers on behalf of Northeast Ohio Public Energy Council.

MR. FISK: This is Shannon Fisk on behalf

1 of Sierra Club.

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

4 MS. DUNN: Carrie Dunn on behalf of the  
5 Ohio Edison Company, The Cleveland Electric  
6 Illuminating Company, and The Toledo Edison Company.

7 - - -

8 SARAH MURLEY  
9 being by me first duly sworn, as hereinafter  
10 certified, deposes and says as follows:

11 CROSS-EXAMINATION

12 By Mr. Fisk:

13 Q. Good morning, Ms. Murley.

14 A. Good morning.

15 Q. How are you today?

16 A. Good, thank you.

17 Q. Could you just please state your name for  
18 the record.

19 A. Sarah Murley.

20 Q. Okay. And what is your business address?

21 A. 11209 North Tatum Boulevard, Suite 225,  
22 Phoenix, Arizona 85028.

23 Q. Okay. And who is your employer?

24 A. Applied Economics LLC.

1 Q. Okay. And what is your title there?

2 A. Principal.

3 Q. Principal, okay. And have you ever been  
4 deposed before?

5 A. No.

6 Q. And as a principal in Applied Economics,  
7 what -- what does that job position involve?

8 A. I'm involved in marketing and managing  
9 staff and oftentimes working on projects on my own.  
10 I put together contracts for the projects that I am  
11 working on, and I am involved in billing for those  
12 projects.

13 Q. Okay, okay. And does anyone report to  
14 you?

15 A. Yes. I have two employees that report to  
16 me directly and two others that indirectly report to  
17 me.

18 Q. Okay, okay. Great. And who do you  
19 report to?

20 A. I don't report to anyone.

21 Q. Wow. Lucky. And with regards to this  
22 proceeding today, did anyone at Applied Economics  
23 work with you on this case?

24 A. No, just me.

1           Q.    Just you, okay. Okay. And have you ever  
2    filed written testimony in a Public Utilities  
3    Commission proceeding before?

4           A.    Other than this, no.

5           Q.    Other than this, okay. And how about in  
6    any court proceeding?

7           A.    No.

8           Q.    No, okay. And have you ever testified in  
9    a hearing before?

10          A.    No.

11          Q.    Okay. When did you first become involved  
12   in this proceeding?

13          A.    In July of 2014.

14          Q.    Okay. And do you recall how you became  
15   involved?

16          A.    I was contacted by Sharon Noewer.

17          Q.    And do you know who she is?

18          A.    Could you clarify that?

19          Q.    Like does she -- do you know who she  
20   works for or?

21          A.    I know that she works under the umbrella  
22   of FirstEnergy.

23          Q.    Okay, okay. And what -- when she  
24   contacted you, what was the communication?



1           A.    She wanted me to draft the reports that  
2   are in my testimony.

3           Q.    Okay, okay.  And did she give you any  
4   instructions about those reports?

5           A.    She asked me what data I would need.

6           Q.    Okay.  Any other instructions?

7           A.    I don't recall that she gave me any other  
8   specific instructions.

9           Q.    Okay, okay.  And have you spoken with  
10   anyone else at FirstEnergy regarding this proceeding?

11          A.    I have spoken with Scott Casto.

12          Q.    Anyone else?

13          A.    I have corresponded with Jim Burk.

14          Q.    Okay.  And anyone else besides that?

15          A.    I have had communications with Mark  
16   Hayden.

17          Q.    Okay.  Anyone else?

18          A.    Well, Trevor but he's not FirstEnergy so.

19          Q.    Anyone else besides that?

20          A.    Not that I recall.

21          Q.    Okay.  And do you know, have you spoken  
22   with anyone who is employed by Cleveland Electric  
23   Illuminating?

24          A.    Not that I recall.

1           Q.    And how about have you spoken with anyone  
2    who is employed by Ohio Edison?

3           A.    Not that I recall.

4           Q.    Okay.  And how about Toledo Edison?

5           A.    Not that I recall.

6                   MR. FISK:  Okay.  Mark this as Exhibit 1  
7    and this is labeled confidential but I am not going  
8    to ask about rates so let me know if there is  
9    anything else that's confidential.  If we can mark  
10   this as Exhibit 1.

11                   (EXHIBIT MARKED FOR IDENTIFICATION.)

12           Q.    So you have been handed a document  
13    labeled Confidential Exhibit 1; is that correct?

14           A.    Correct.

15           Q.    Okay.  And this is the Attachment 1 to  
16    the company's response to Sierra Club Set 7-RPD-109.  
17    Does that appear to be correct?

18           A.    Uh-huh.

19           Q.    Okay.  And is this a copy of the contract  
20    between Applied Economics and FirstEnergy Service  
21    Company --

22           A.    Yes.

23           Q.    Okay.  Covering your work in this  
24    proceeding?

1 A. Yes.

2 Q. Okay. Great. Okay. And so to your  
3 knowledge, this contract is not with any of the  
4 companies who are applicants in this proceeding,  
5 correct?

6 A. Correct.

7 Q. Okay. And if you could look at the first  
8 bullet point, it says "The original W.H. Sammis  
9 impact report." Do you see that?

10 A. Uh-huh.

11 Q. And it references a June, 2014, report.

12 A. Yes.

13 Q. Is that different than the report that  
14 you filed here?

15 A. The report that I filed in June, 2014,  
16 was for a -- that I created, I didn't file it, that I  
17 created in June, 2014, was originally completed for a  
18 different purpose, and it -- some of the numbers were  
19 updated prior to the version that is in my testimony.

20 Q. Okay.

21 A. Those were updated in July.

22 Q. Okay. And but did you use the 2000 --  
23 June, 2014, report in creating your report that you  
24 filed in this proceeding?

1           A.    I updated the numbers and rewrote through  
2   the report.

3           Q.    Okay.  Do you know if that June, 2014,  
4   report has ever been produced to any of the parties  
5   in this proceeding?

6           A.    I don't know.

7           Q.    Okay.  Would you say you relied on that  
8   report in creating your report in this proceeding?

9           MR. ALEXANDER:  Objection.  She testified  
10   she updated all the numbers.  Go ahead.

11          A.    I updated the numbers and changed the  
12   text to reflect those updated results.

13          Q.    Okay.  And there's also a report from  
14   November, 2014, regarding Davis-Besse; is that  
15   correct?

16          A.    That's correct.

17          Q.    And what was that report done for?

18          A.    I'm sorry.

19          Q.    What was that report done for?

20          A.    I had previously completed that report  
21   for economic development people at FirstEnergy  
22   Service Company.

23          Q.    Okay.  And do you know what -- how that  
24   report was used?

1           A.    No, I don't.

2           Q.    Okay.  And you say these reports were  
3 originally prepared at the request of another entity.  
4 What entity?

5           A.    The economic development department at  
6 FirstEnergy Service Company.

7           Q.    Okay.  So the same company as your  
8 contract is with, correct?

9           A.    Just a different person, yes.

10          Q.    Different person, okay.  And so for this  
11 current proceeding you say that you -- you estimate  
12 that it would take you five hours to update those two  
13 reports; is that correct?

14          A.    Uh-huh.

15          Q.    Okay.  So what did you -- what did you do  
16 to update them?

17          A.    So I was provided with different numbers  
18 by FirstEnergy that were more current and I ran those  
19 through in my model and updated my table and updated  
20 the testing to be consistent with those numerical  
21 results.

22          Q.    Okay, okay.  And who provided those  
23 numbers to you?

24          A.    Sharon Noewer.

1           Q.    Okay.  And how were those provided to  
2    you?

3           A.    Via e-mail.

4           Q.    Okay.  And what numbers did she provide  
5    to you?

6           A.    As I included in my testimony on  
7    Attachment 1 at the end of each report, so on page 11  
8    of the Sammis report and page 13 of the Davis-Besse  
9    report.

10          Q.    Okay.  So you're referring to Attachment  
11   SM-1 and SM-2?

12          A.    Yes.

13          Q.    So all of the data on Attachment 1 for  
14   Sammis came from FirstEnergy?

15          A.    That's correct.

16          Q.    Okay.  Was there any other data that came  
17   from FirstEnergy?

18          A.    On the Davis-Besse I was also provided  
19   with the amount of property tax that they paid in  
20   2014.

21          Q.    Okay.

22                MR. ALEXANDER:  Just to clarify was your  
23   question previously related to just Sammis and SM-1?

24                MR. FISK:  Yes.

1 MR. ALEXANDER: Let's take them one at a  
2 time.

3 A. No. That's all the information I was  
4 provided.

5 Q. And then for Davis-Besse it's page 13 of  
6 Attachment SM-2; is that right?

7 A. Yes, that's correct.

8 Q. Is there any data besides what is  
9 included on Attachment 1 to SM-2 that you were  
10 provided by FirstEnergy?

11 A. I was provided with an estimate of 2014  
12 property taxes paid.

13 Q. Okay. Which is not included on  
14 Attachment 1, correct?

15 A. Uh-huh.

16 Q. Any other data?

17 A. No.

18 Q. Okay.

19 THE WITNESS: I apologize. Could I have  
20 a tissue?

21 MR. FISK: Let's go off for a second.

22 (Discussion off the record.)

23 Q. Okay. Going back for a minute to the  
24 November, 2013, Davis-Besse report, do you know

1       what -- what the purpose of that report was?

2               A.    No.

3               Q.    Do you -- who -- who at FirstEnergy were  
4       you working with on that report?

5               A.    Patrick Kelly.

6               Q.    Patrick Kelly, okay.  And when -- it was  
7       Mr. Kelly that contacted you about doing that report?

8               A.    Yes.

9               Q.    And he didn't say any reason why he  
10      wanted that report?

11              A.    He did not discuss with me what he was  
12      going to do with the report.  We talked about what  
13      he -- you know, the nature of the report that he  
14      needed.

15              Q.    Okay.  And what did he say the nature of  
16      the report was he needed?

17              A.    He needed an economic impact analysis of  
18      the operation of the Davis-Besse plant.

19              Q.    Okay.  And how do you -- how do you  
20      define an economic impact analysis?

21              A.    The jobs, direct and indirect, induced  
22      jobs, and income and output that are created by the  
23      plant.  And then we also include the state and local  
24      revenue impacts.



1           Q.    Okay, okay.  And with regards to the  
2   June, 2014, Sammis report, who at FirstEnergy  
3   contacted you about that report?

4           A.    Patrick Kelly.

5           Q.    Patrick Kelly, okay.  And did he say what  
6   the purpose of that report was?

7           A.    No.

8           Q.    Okay.  And when he contacted you, what  
9   did he request in that -- with regards to that  
10  report?

11          A.    An economic impact report of the  
12  operations of the Sammis plant.

13          Q.    Okay.  And do you know about how long it  
14  took you to create those reports, November -- the  
15  June, 2014, November, 2013, reports?

16          A.    I don't recall exactly how many hours I  
17  spent.

18          Q.    Okay.  More than five?

19          A.    Yes.

20          Q.    Okay.  And you said that the data with  
21  regards to the reports that you filed in this  
22  proceeding came from Sharon Noewer; is that right?

23          A.    That's correct.

24          Q.    Okay.  Anyone else in FirstEnergy?

1           A.    Not that I directly had communication  
2   with.

3           Q.    Okay.

4           A.    I don't know where Sharon, you know, got  
5   the data.

6           Q.    Okay. And did you do anything to verify  
7   the accuracy of the data she provided you?

8           A.    I did look at profiles of the plants that  
9   are available on the FirstEnergy website and the data  
10   was -- to the extent the data matched, you know, that  
11   I had similar data, it was consistent with those  
12   profiles.

13          Q.    Okay. Anything else?

14          A.    No.

15          Q.    Okay. And you have not provided any  
16   evaluation of the economic impacts of the OVEC  
17   plants; is that correct?

18          A.    I'm sorry. Could you clarify?

19          Q.    The OVEC plants.

20          A.    No.

21          Q.    And do you know what the OVEC plants are?

22          A.    No.

23          Q.    Oh, okay. And so do you know, have you  
24   ever heard of the Clifty Creek plant?

1           A.    No.

2           Q.    Okay.  How about Kyger Creek?

3           A.    No.

4           Q.    So you're not offering any testimony  
5 regarding those plants, correct?

6           A.    That's correct.

7           Q.    And besides issues related to the  
8 economic impacts analysis of Sammis and Davis-Besse,  
9 are you offering any other opinions in this  
10 proceeding?

11          A.    No.

12          Q.    So I guess walk me through the process.  
13 You received various input data from Ms. Noewer.  
14 What did you do then?

15               MR. ALEXANDER:  Objection, broad.  Go  
16 ahead, if you can.

17          A.    Can you be more specific?

18          Q.    Well, what's the -- what's the next step  
19 in your analysis once you get the inputs from  
20 Ms. Noewer?

21          A.    Well, the subject geography is important  
22 because the economic multipliers are specific to a  
23 particular geography.  And so once we determined the  
24 geography, I had purchased multiplier data from

1 IMPLAN and used that to create the multipliers in the  
2 economic impact model. And then I selected the  
3 appropriate industry categories from the model to use  
4 in this analysis. And then I created -- calculated  
5 the economic impacts using the multipliers and the  
6 input data.

7 Q. Anything else?

8 A. And then I estimated the revenue impacts  
9 that are direct revenues that were provided to me in  
10 the case of Sammis, and I estimated the indirect  
11 revenues generated by employees.

12 Q. Okay.

13 A. And those were based on information about  
14 tax rates and state and local tax structures that I  
15 collected as part of my analysis.

16 Q. Okay. Anything else?

17 A. I prepared the tables and wrote the  
18 analysis.

19 Q. Okay, okay. And did you say the  
20 estimated revenue impacts that were provided to you?

21 A. The direct revenues, the property taxes  
22 paid by FirstEnergy, were provided to me.

23 Q. Okay, okay. So starting at the top, the  
24 geography, you -- had you determined that as part of

1       working on the June, 2014, and November, 2013,  
2       reports?

3             A.    Yes.

4             Q.    Okay.  So that didn't change in terms of  
5       the new --

6             A.    It did not.  I confirmed with Sharon that  
7       was still an appropriate geography.

8                   MR. ALEXANDER:  Make sure you let him  
9       finish the questions.

10            Q.    And the multiplier data from IMPLAN, was  
11       that -- did you obtain that as part of doing the  
12       June, 2014, and November, 2013, reports?

13            A.    Yes.  I had to obtain data to complete  
14       those reports.

15            Q.    Did you just use the same multiplier data  
16       in the report in this proceeding?

17            A.    Yes.

18            Q.    Okay.  And then the industry categories,  
19       you determined that for the November, 2013, and June,  
20       2014, reports?

21            A.    Yes.

22            Q.    And that just stayed the same with  
23       regards to the reports in this proceeding?

24            A.    Yes.  There was no reason to change the

1 industry categories.

2 Q. Okay, okay. And then you said you  
3 calculated the impacts --

4 A. Yes.

5 Q. -- from the spending on the plants; is  
6 that right?

7 A. I calculated the impacts using the  
8 multipliers and using the inputs that I had in  
9 Attachment 1.

10 Q. Okay, okay. So for the November, 2013,  
11 and June, 2014, reports, you used different inputs.

12 A. Yes.

13 Q. Okay. All right. And then once you were  
14 finished with your analysis what did you do with the  
15 results of that?

16 A. I created tables to display the results,  
17 and then I wrote up the explanation and the text of  
18 the report.

19 Q. Did you discuss your results with anyone  
20 before you drafted your report?

21 A. No, not that I recall.

22 Q. Okay. And did you -- did you personally  
23 draft the reports?

24 A. Yes, I did.

1 Q. Did you personally draft your testimony?

2 A. Yes, I did.

3 Q. Okay. And who did you send the results  
4 to once you were done?

5 A. I sent the results to Trevor Alexander.

6 Q. Okay. Anyone else?

7 A. Not that I recall.

8 Q. Okay. Do you recall discussing your  
9 results with anyone else?

10 A. No.

11 Q. No? Okay, okay. And if you turn to your  
12 testimony page 10, lines 13 to 14, so am I correct  
13 that it's your testimony that the total economic  
14 impact associated with the Sammis and Davis-Besse  
15 plants is \$1.06 billion a year?

16 A. Yes.

17 Q. Okay. And is that the -- what geographic  
18 scope is that economic impact for?

19 A. So that is the combined impacts of those  
20 plants on the local areas where they are located.

21 Q. Okay. All right. And would that also be  
22 the impact on the state of Ohio as a whole?

23 A. No, not necessarily. I would estimate --  
24 we did not look at the impacts of Sammis on the state

1 of Ohio, and so I would certainly expect the impact  
2 on the state of Ohio to be greater than the impacts  
3 on the six-county region that we looked at.

4 Q. Okay. Why would you expect those to be  
5 greater?

6 A. Because the impacts measure the amount of  
7 purchasing that can occur locally based on the types  
8 of industries that are present in that local economy  
9 and certainly there are more industries and a broader  
10 spectrum of industries that are located within the  
11 state of Ohio than are specifically located in the  
12 six-county area where we were looking at for Sammis.

13 Q. Okay, okay. And then you testified that  
14 the plants also directly and indirectly support 2,921  
15 jobs?

16 A. Yes.

17 Q. And is that again in the local areas?

18 A. Yes.

19 Q. Okay. And so that number does not  
20 reflect the overall impact in Ohio as a whole?

21 A. Correct, for those two plants combined,  
22 yes.

23 Q. Okay. For Davis-Besse you did look at  
24 the state of Ohio as a whole.



1           A.    That's correct.

2           Q.    And why did you not look for Sammis as  
3   the state as a whole?

4           A.    When we purchased that analysis, we just  
5   didn't discuss needing impacts for the state as a  
6   whole.

7           Q.    Okay.  But you did discuss it for  
8   Davis-Besse?

9           A.    Uh-huh, yes, that's correct.

10          Q.    Okay.  And the numbers, that \$1.06  
11   billion and 2,921 jobs, am I correct that those  
12   numbers are the combined totals of the Sammis data  
13   that's provided at the top of page 6 of your  
14   testimony and the Davis-Besse data that's provided at  
15   the bottom of page 8?

16          A.    Yes.

17          Q.    Okay.  So if you -- in looking at the top  
18   of page 6, the -- the column that says total  
19   output --

20          A.    Yes.

21          Q.    -- that figure and then on page 8 at the  
22   bottom, the total output for the state of Ohio, if  
23   you add those two together, you get the 1.06 billion?

24          A.    Yes.

1           Q.    Okay.  So let's turn to page 6, the data  
2           at the top of the page for Sammis.  For direct  
3           output, what -- there is a figure of \$502.32 million.  
4           What does that figure represent?

5           A.    Output in general represents the value of  
6           production.

7           Q.    Okay.  And what do you mean by that?

8           A.    It can be defined as wages plus the cost  
9           of inputs plus profits.

10          Q.    Okay.  And that -- and for wages, that's  
11          just wages of the people actually working in a plant,  
12          correct?

13          A.    Yes.

14          Q.    The cost of inputs, what would be  
15          included in that?

16          A.    Whatever -- for the subject business  
17          whatever types of supplies they have to purchase in  
18          order to create their product.

19          Q.    Okay.  So for a coal plant like the coal  
20          they burn?

21          A.    That would be included.

22          Q.    Okay, okay.  And pollution control  
23          sorbents, things like that would be included?

24          A.    I don't know in detail exactly what

1 purchases are made by coal plants, by this particular  
2 coal plant.

3 Q. Okay, okay. And where did you get the  
4 \$502.32 million figure?

5 A. I used the IMPLAN multipliers for  
6 electric utility generation in this region. Using  
7 the personal income information and the multipliers,  
8 I was able to estimate direct output.

9 Q. Okay. So the cost of inputs to the  
10 plant, where did that -- where did those costs come  
11 from?

12 A. So using the indirect multipliers, it's  
13 possible to estimate indirect output and that is  
14 representative of local purchases of goods and  
15 services.

16 Q. Okay. So the indirect multiplier, you  
17 are referring to the 1.17 figure that's on line 12 of  
18 page 6?

19 A. No. That's the total output to  
20 multiplier so there are separate IMPLAN multipliers  
21 for direct, indirect, and induced impacts and  
22 specifically direct, indirect, and induced  
23 multipliers for output jobs and personal income.

24 Q. Okay.

1           A.    And those are industry and geographically  
2 specific, of course.

3           Q.    Okay.  So what -- so you have an indirect  
4 multiplier.

5           A.    Indirect output multiplier.

6           Q.    Output multiplier.  And what are you  
7 multiplying that by to get the \$502.32 million  
8 figure?

9           A.    The 502.32 is the direct output.  It's  
10 not related to the indirect output multiplier.

11          Q.    Okay.  Well, let me take a step back  
12 then.  How did you calculate the 502.32 million  
13 figure?

14          A.    So all of the multipliers are in terms of  
15 direct output, and so if you take the direct personal  
16 income multiplier which is dollars of personal income  
17 per dollar of output, and you divide by direct  
18 personal income, the result is direct output.

19          Q.    Okay.  And the personal income is the  
20 \$45.9 million figure?

21          A.    That's correct.

22          Q.    Okay.  So you have a 45.9 million figure.  
23 You put that into IMPLAN?

24          A.    I used IMPLAN to create the multipliers

1       that I used to make this calculation.

2               Q.    Okay.  And then that -- and so then that  
3       49 -- 45.9 million figure, there's a multiplier that  
4       then gets you the 502.32 million?

5               A.    Yes.

6               Q.    So where, for example, does the cost of  
7       the coal that's burned in the plant figure into that  
8       equation?

9               A.    So the IMPLAN model includes assumptions  
10       about the types of supplies that are purchased by  
11       electric power generation facilities and what can be  
12       purchased within the specific geographic area that we  
13       are looking at.  And so I relied on the IMPLAN model  
14       and that information about that industry and that  
15       geography to estimate the indirect impacts which  
16       represent supplier purchases in the local area.

17              Q.    Okay.  So the 502.32 million doesn't --  
18       isn't based on any estimate of actual spending by the  
19       plant; is that correct?

20              MR. ALEXANDER:  Objection.  Go ahead.

21              A.    It's not specific to data about the  
22       Sammis plant specific -- particularly.  It is based  
23       on IMPLAN estimates for that industry and that  
24       geography.

1           Q.    Okay, okay.  And do you know how that --  
2           how consistent that 502.32 million figure is with  
3           actual costs for the Sammis plant?

4           A.    I did not have information on actual  
5           costs for the Sammis plant.

6           Q.    Okay.  Did you ever ask for it?

7           A.    No.

8           Q.    Okay.  Do you think that would be  
9           relevant in determining the economic impact of the  
10          Sammis plant with money, actually spending?

11          A.    It could be.

12          Q.    And why did you not ask for it?

13          A.    I relied on the IMPLAN assumptions in  
14          this case.

15          Q.    Okay.  Is that what you typically do if  
16          you are doing an economic impact analysis?

17          A.    It varies depending on the type of  
18          industry I am looking at and the types of results  
19          that we're looking to create.

20          Q.    Okay.  Have you ever done an analysis of  
21          the Sammis plant that relied on actual data from the  
22          Sammis plant rather than --

23          A.    Not for the statement --

24               MR. ALEXANDER:  Objection.  Actual data,

1 are you referring to something beyond the inputs she  
2 identified and testified previously?

3 MR. FISK: Yeah. I am referring to she  
4 just testified she didn't use actual data regarding  
5 the plant. She used data derived by IMPLAN.

6 MR. ALEXANDER: She did testify she used  
7 some actual data which is the inputs it provided. I  
8 think what you are asking her about is the cost data  
9 compared to the direct outputs.

10 MR. FISK: Yes.

11 MR. ALEXANDER: I am just trying to  
12 clarify the question.

13 Q. So start over. Did you -- have you ever  
14 done an analysis of the economic impacts of the  
15 Sammis plant that looked at actual cost data for the  
16 Sammis plant as opposed to data derived through the  
17 IMPLAN model?

18 A. No.

19 Q. Okay, okay. And do you know whether any  
20 of the coal used by the Sammis plant comes from  
21 outside of Ohio?

22 A. I do not know exactly where the coal  
23 purchases occur for the Sammis plant.

24 Q. Okay. If there were coal that would

1       come -- came from outside of Ohio, am I correct that  
2       would -- that spending would not have a direct  
3       benefit to the state of Ohio?

4               A.    To the extent the coal was purchased from  
5       outside of the state, the actual coal purchase would  
6       not have a direct benefit to the state of Ohio.  If  
7       it was transported, for example, by a transporter  
8       within the state of Ohio, that portion of the cost  
9       for transporting could benefit the state of Ohio but  
10      the coal purchase specifically, no.

11             Q.    Okay.  And do your estimates of the  
12      economic impacts of the Sammis plant factor in  
13      whether the Sammis plant is burning coal that's being  
14      purchased outside of Ohio?

15             A.    The IMPLAN model makes estimates about  
16      how much and what types of purchases can occur in the  
17      local area for that particular type of industry, and  
18      so we relied on those assumptions.

19             Q.    Okay.  And do you know what those  
20      assumptions are with regards to where the coal for  
21      the plant comes from?

22             A.    No, I did not specifically look into that  
23      particular factor input.

24             Q.    Okay.  So you haven't adjusted your



1 numbers in any way to reflect the actual sourcing of  
2 coal at the Sammis plant?

3 A. That's correct, because I didn't have  
4 specific information on where the coal is sourced.

5 Q. Okay. Did you ever ask for it?

6 A. I don't recall that I did.

7 Q. Okay. And assuming you didn't, why did  
8 you not ask for it?

9 A. Because I believe that the IMPLAN model  
10 provides valid assumptions.

11 Q. Okay. How long have you worked with the  
12 IMPLAN model?

13 A. I first began using the IMPLAN model in  
14 1993.

15 Q. Okay. And have you used the IMPLAN model  
16 to evaluate the economic impacts of any coal-fired  
17 power plant not owned by FirstEnergy?

18 MR. ALEXANDER: Could I have that  
19 question reread, please.

20 (Record read.)

21 MR. ALEXANDER: Go ahead.

22 A. Not that I recall.

23 Q. Okay. Have you ever done an economic  
24 impact analysis regarding a coal plant not owned by

1 FirstEnergy?

2 A. Not that I recall.

3 Q. Okay, okay. So looking back to page 6,  
4 at the top of page 6 of your testimony, you then have  
5 a header that says "Indirect Supplier Impacts." Do  
6 you see that?

7 A. Yes.

8 Q. Okay. And then there is an output figure  
9 there of \$50.85 million.

10 A. Yes.

11 Q. And where does that figure come from?

12 A. That's based on the indirect output  
13 multipliers.

14 Q. Okay. And am I correct that -- so you  
15 take the personal income figure of \$15.82 million and  
16 then put it into IMPLAN that has various multipliers  
17 and that gets you to 50.85 million?

18 A. No.

19 Q. Okay. How do you do it?

20 A. So once you have direct output all of the  
21 multipliers are in terms of direct output.

22 Q. Okay.

23 A. So there is a multiplier for indirect  
24 output per dollar of direct output.

1           Q.    Okay, okay.  So you have your \$502.32  
2 million figure.  You have a multiplier that gets you  
3 the 50.85 million.

4           A.    Correct.

5           Q.    And then the -- where does the indirect  
6 jobs figure come from?

7           A.    There is an indirect jobs multiplier for  
8 a number of jobs per million dollars of direct  
9 output.

10          Q.    Okay.

11          A.    The number of indirect jobs per million  
12 dollars of direct output.

13          Q.    Okay.  And then the personal income under  
14 the indirect?

15          A.    So there is an indirect personal income  
16 multiplier that tells -- that provides the amount of  
17 personal income per dollar of indirect output.

18          Q.    Okay.

19          A.    I'm sorry, of direct output.

20          Q.    Okay.  So, once again, the \$15.82 million  
21 figure is tied to the 502.32 million?

22          A.    That's correct.

23          Q.    Okay.  And do you know what those  
24 multipliers are?  Like there is a specific figure

1       that you use or?

2             A.    I don't have the multipliers memorized.

3             Q.    Okay.

4             A.    But, you know, you could divide and infer  
5       them.

6             Q.    So it's just direct division?

7             A.    Multiplication in this case.

8             Q.    Multiplication, sure. Okay. So, for  
9       example, direct output of 502.32 million leading to  
10      indirect output of 50.85 million, so it's  
11      approximately a 1 to 10 ratio?

12            A.    The multiplier would be in the range of  
13      .1 something, yes.

14            Q.    Okay, okay. Great. Okay. And if you  
15      could turn to Attachment GM-1 -- I'm sorry, SM-1,  
16      page 5.

17            A.    Yes.

18            Q.    Figure 2 it says "Typical Local Supplier  
19      Purchases." Do you see that?

20            A.    Yes.

21            Q.    Okay. Those are -- are those the types  
22      of economic spending that is reflected in the  
23      indirect output figure?

24            A.    Yes. And there are other industries.

1 That's not a comprehensive list.

2 Q. Okay, okay. Certainly. And did you  
3 evaluate with regards to these types of purchases  
4 what percentage of them -- what percentage of them  
5 would be spending outside of Ohio?

6 A. By using multipliers for a specific  
7 geography, the IMPLAN model's controls for what  
8 industries are available and what purchases could be  
9 made within that geography, that's the purpose of  
10 using geographically specific multipliers. In this  
11 case we weren't looking at Ohio. We were looking at  
12 a six-county region that actually included counties  
13 outside of Ohio.

14 Q. Okay. So, for example, legal services,  
15 IMPLAN includes some assumption about how much legal  
16 services you could get in this six-county area versus  
17 elsewhere?

18 A. Yes, and how much would be needed by this  
19 particular type of industry.

20 Q. Okay. And did you do anything to verify  
21 whether that was -- those assumptions were consistent  
22 with actual practice with regards to the Sammis  
23 plant?

24 MR. ALEXANDER: Objection. An actual

1 practice? Answer if you can.

2 A. Could you clarify?

3 Q. Okay. Did you do anything to evaluate  
4 whether the assumptions in the IMPLAN regarding, for  
5 example, legal services are consistent with where  
6 legal services for the Sammis plant are -- are  
7 actually being obtained?

8 A. No. I did not have access to data on  
9 where exactly legal purchases -- legal services are  
10 purchased by the Sammis plant.

11 Q. Okay. Did you ever ask for that data?

12 A. I don't recall that I did.

13 Q. Okay. And why not?

14 A. I felt that it was sufficient to rely on  
15 the IMPLAN model for that particular type of  
16 assumption.

17 Q. Okay. And with regards to any of the  
18 purchases identified in Figure 2, did you evaluate  
19 whether the IMPLAN model assumptions are consistent  
20 with where purchases for the Sammis plant are being  
21 made in actual practice?

22 A. I did not have data on specifically what  
23 types of purchases are made where by the Sammis  
24 plant.

1           Q.    Okay.  And on Figure 2, coal is listed  
2           under Figure 2 as a local indirect output, I guess;  
3           is that correct?

4           A.    As a typical supplier purchase of a  
5           utility generation facility.

6           Q.    Okay.  So I guess I'm interested in I  
7           believe we had discussed that coal would also be a  
8           factor in the direct output figure; is that correct?

9           A.    Only in the cost of all inputs are  
10          reflected in the value of what's produced.

11          Q.    Okay.  So I guess I am just curious why  
12          if there's -- if the value of -- or the cost of the  
13          coal is included in the direct output, is the  
14          reference to coal being included in the indirect  
15          output some other factor or?

16          A.    I'm sorry.  I don't understand the  
17          question.

18          Q.    So the value of the coal is part of  
19          calculating the direct output figure, correct?

20          A.    It's not part of calculating it.  It's  
21          just that the price of your product includes the cost  
22          of labor and the cost of inputs in general.

23          Q.    Okay.

24          A.    For any -- any operation.

1           Q.    Okay.  And so if one of those inputs were  
2   coal, that would be reflected in the direct output  
3   figure, correct?

4           A.    The cost of coal would be part of the  
5   overall cost of what you produce.

6           Q.    Okay.  And so then if I'm reading Figure  
7   2 correctly, the cost -- there is some cost to coal  
8   that could also be reflected in the indirect outputs;  
9   is that correct?

10          A.    Coal would be one of the indirect outputs  
11   that's reflected.

12          Q.    Okay.  And is there -- so what is the  
13   difference between reflecting it in the direct output  
14   figure and reflecting it in the indirect output  
15   figure?

16          A.    The direct output includes the cost of  
17   all factors that go into creating electricity.  
18   Whether it was purchased locally or not, the final  
19   product was produced at that plant.

20          Q.    Okay.

21          A.    So it's part of the value of that plant.  
22   To the extent that there are local purchases made of  
23   any type, those are reflected in the indirect output.

24          Q.    Okay.  So -- so that's not -- I guess I



1 am just wondering how that -- how that doesn't end up  
2 double counting the cost of the coal purchases.

3 A. So the cost -- the way the economic  
4 impacts work the cost of what Sammis produces is --  
5 is reflected in the direct outputs. There are also  
6 what becomes sales to other companies, suppliers, and  
7 so those are -- those are a part of the value of what  
8 you produce, but they are also sales to that other  
9 company. This would be the case for any type of  
10 operation, not just utilities. And those sales  
11 support jobs and income at those other supplier  
12 businesses.

13 Q. Okay, okay. That makes sense. Okay,  
14 okay. And do you know of the indirect output figure  
15 of 50.85 million, do you know what portion of that  
16 would be purchases of coal?

17 A. No, I don't know that without looking it  
18 up in the IMPLAN model.

19 Q. Okay, okay. And then going back to  
20 your -- to the data at the top of page 6 of your  
21 testimony, we have induced impacts; is that correct?

22 A. Yes.

23 Q. And what are those?

24 A. So --

1 MR. FISK: Did you want --

2 MR. ALEXANDER: Please. There's a  
3 question pending.

4 Q. Okay. Why don't you answer that  
5 question.

6 MR. ALEXANDER: Could we have the  
7 question reread, please.

8 (Record read.)

9 A. Induced impacts are created by employee  
10 spending so the income from the employ -- the direct  
11 employees as well as the indirect employees, a  
12 portion of that is respent within the local economy  
13 on retail and services and other items that  
14 households buy and that is what is reflected in the  
15 induced impacts.

16 Q. Okay.

17 MR. ALEXANDER: Did someone join the  
18 call?

19 MS. FLEISHER: Yes. This is Madeline  
20 Fleisher from EPLC.

21 MR. ALEXANDER: Good morning, Madeline.  
22 Go ahead.

23 Q. Okay. So the -- you have an induced  
24 output for Sammis of 32.45 million; is that correct?

1           A.    Yes.

2           Q.    Okay.  And that -- is that figure --  
3   well, ask it the other way, how is that figure  
4   derived?

5           A.    So there is an induced output multiplier  
6   so I take that times the direct output to get induced  
7   output.

8           Q.    Okay.  And then the induced jobs, how is  
9   that figure derived?

10          A.    There is an induced jobs multiplier for  
11   the number of jobs per million dollars of direct  
12   output.

13          Q.    Okay.  And then they induce personal  
14   impacts?

15          A.    The induced personal income impacts are  
16   based on an induced personal income multiplier per  
17   dollars of direct output.

18          Q.    Okay.  I am seeing a trend.  Okay.  And  
19   then on lines 11 to 12 of page 6, there is a  
20   reference to an output multiplier of 1.17.

21          A.    Yes.

22          Q.    What is that figure?

23          A.    So if you took total output of 585.62  
24   million and derived -- divided by direct output of

1       502.32 million, you would get 1.17.

2               Q.    Okay.  So the 1.17 figure is a -- is not  
3       an input into the model, correct?

4               A.    No.  I simply used that in the text as a  
5       way to explain the outputs.

6               Q.    Okay, okay.  But the other multipliers  
7       that we have been talking about that get you from the  
8       direct output figure to the indirect and induced,  
9       those are inputs into the model or?

10              A.    Those are multipliers created by the  
11       IMPLAN model using the IMPLAN data for this industry  
12       in this specific geography.

13              Q.    Okay, okay.  And then at the bottom of  
14       page 6, lines 14 to 15, it says "For every direct job  
15       retained at Sammis, one additional job is supported  
16       at other businesses in the region."  Do you see that?

17              A.    Yes.

18              Q.    Okay.  So is that a -- is that another  
19       multiplier or?

20              A.    I used the result -- I'm using that as a  
21       way to explain the results that was -- that fact is  
22       effectively part of the multipliers, but I was not  
23       using that as an input.  I was using the multipliers,  
24       and after I finished the analysis, I went back and --

1 and drew that conclusion as a way to explain the  
2 results.

3 Q. Okay. So that's almost like an output  
4 rather than an input.

5 A. Yes.

6 Q. Okay. Great. So this approach, I guess,  
7 of getting your direct output and then using  
8 multipliers to come up with indirect impacts and  
9 induced impacts, am I correct that's an approach  
10 you've used to calculate the economic impacts of  
11 other types of projects, not just a coal plant,  
12 correct?

13 A. Yes. That is a standard approach for  
14 calculating economic impacts.

15 Q. Okay, okay. So if the spending for the  
16 Sammis plant were instead spent, you know, building a  
17 car factory in Cleveland, you could do a similar  
18 calculation to determine the economic impacts of  
19 that.

20 A. Using different multipliers but, yes.

21 Q. Sure, okay, okay. And if you could turn  
22 over to page 9 of your testimony, starting on line 8,  
23 you say "The resulting output multiplier for the  
24 on-going operations of the nuclear power station is

1       1.31 for Ottawa County and 1.50 for the State of  
2       Ohio"?

3             A.    Yes.

4             Q.    And the nuclear station being  
5       Davis-Besse; is that correct?

6             A.    Yes.

7             Q.    Okay. And those output multipliers are  
8       derived from the data that you are reporting at the  
9       bottom of page 8; is that right?

10            A.    Yes, that's correct.

11            Q.    Okay. And the data at the bottom of page  
12       8, you went through a similar process that we just  
13       walked through for the purposes of the Sammis data;  
14       is that right?

15            A.    That's correct, using different --  
16       different IMPLAN data for different geography.

17            Q.    Okay, okay. So the IMPLAN multipliers  
18       that are used, you start with a general multiplier  
19       for the electric power generation industry; is that  
20       right?

21                   MR. ALEXANDER: Could I have that  
22       question reread, please.

23                   (Record read.)

24                   MR. ALEXANDER: Objection. Go ahead.

1           A.    No.

2           Q.    Okay.  So on let's say line 4 on page 9,  
3   you say "Multipliers for the electric power  
4   generation industry were used to estimate direct  
5   output."  What are you referring there to the  
6   multipliers for the industry?

7           A.    So I am referring to the multipliers for  
8   that industry in Ottawa County or Ohio, depending on  
9   which results you are looking at, so when you use  
10   IMPLAN software, you also must purchase data for a  
11   specific geography and use the IMPLAN software to  
12   process that data for that geography and that data  
13   includes multipliers for all industries present in  
14   that geography.

15               And so once you've created those  
16   multipliers, then you need to select out the relevant  
17   industries.  But the geographic specificity is part  
18   of buying the data for that specific geographic area.

19           Q.    Okay.  That makes sense.  And who do you  
20   buy the IMPLAN data from?

21           A.    IMPLAN.

22           Q.    Okay.  IMPLAN is just a company?

23           A.    Yes, it is.

24           Q.    Okay.  Is it -- do you know, is it a

1 government agency or is it a private company or?

2 A. It's a private company.

3 Q. Private company, okay. And the -- the  
4 resulting output multipliers for Davis-Besse that are  
5 identified on lines 8 to 9 of page 9 of your  
6 testimony, those multipliers are higher than the ones  
7 for Sammis, correct?

8 A. Correct.

9 Q. Okay. So does that mean that, you know,  
10 a dollar of spending on Davis-Besse creates more  
11 economic output than a dollar of spending at Sammis?

12 A. A dollar of spending on Davis-Besse  
13 creates more economic output within that local  
14 geography, not necessarily in general everywhere but  
15 within that local geography, than a dollar of  
16 spending creates within the specific geography that  
17 we chose for the Sammis analysis.

18 Q. Okay, okay. But we don't know whether  
19 the dollar spending on Davis-Besse creates greater  
20 impacts for the state of Ohio as a whole than it  
21 would for Sammis?

22 A. We don't know that because we didn't look  
23 at the Ohio impacts for Sammis.

24 Q. Okay, okay. And then for lines 12



1 through 14 on page 9, you say that "for every direct  
2 job retained at Davis-Besse, an additional 1.4 jobs  
3 are supported at other businesses in Ottawa County,"  
4 correct?

5 A. Yes.

6 Q. That figure is also higher than for  
7 Sammis, correct?

8 A. I didn't use that exact measure for  
9 Sammis, I don't believe.

10 Q. Lines 14 to 15 on page 6.

11 A. Okay.

12 MR. ALEXANDER: Are you referring to the  
13 county-specific number or six-county number?

14 MR. FISK: I am referring to the direct  
15 jobs retained at Sammis versus the direct jobs  
16 referred to on lines 12 and 13 of page 9 for  
17 Davis-Besse.

18 A. The -- so for every one direct job at  
19 Sammis, one additional direct job is supported at  
20 other businesses in the region. And for every direct  
21 job at Davis-Besse, an additional 1.4 jobs are  
22 supported at other businesses in Ohio -- in Ottawa  
23 County; so, yes, the jobs multiplier is higher for  
24 Davis-Besse within that local area.

1           Q.    Okay, okay.  And then the 1 point -- for  
2           Davis-Besse you also referred to 1.7 jobs in  
3           businesses throughout the state of Ohio, correct, for  
4           every --

5           A.    Correct.

6           Q.    For every one job?

7           A.    Uh-huh.

8           Q.    And you -- you did not calculate the  
9           similar number with regards to Sammis for the state  
10          of Ohio as a whole, correct?

11          A.    Correct.

12          Q.    Okay.  If you look at Attachment SM-1,  
13          Figure 3, on page 6, this is -- this figure is  
14          labeled "W.H. Sammis Employees by County of  
15          Residence"; is that correct?

16          A.    Yes.

17          Q.    Okay.  And doing the math here, it  
18          appears about 17 percent of the employees for Sammis  
19          are located in West Virginia or Pennsylvania; is that  
20          correct?

21          A.    Yes.

22          Q.    Okay.  So if you were evaluating the  
23          economic impacts of Sammis for Ohio, would you reduce  
24          the numbers that you had calculated by approximately

1 17 percent to reflect that those employees are  
2 located out of state?

3 MR. ALEXANDER: Which numbers?

4 MR. FISK: The numbers reported on  
5 page -- on the top of page 6 of your testimony.

6 MR. ALEXANDER: Objection. The numbers  
7 at the top of page 6 relate to the six-county region.

8 Q. Right. And I am asking which portion of  
9 those -- if you wanted to calculate just the benefits  
10 to Ohio.

11 A. So Figure 3 shows where the employees  
12 live --

13 Q. Right.

14 A. -- which has no relationship to where a  
15 supplier's purchases are made.

16 Q. Okay.

17 A. It may or may not dictate where those  
18 employees spend their income, where they shop. So,  
19 no, if I were just looking at the impacts of these  
20 specific counties in Ohio, the multipliers would be  
21 different, but I would not expect that they would be  
22 17 percent. How they would impact the indirect  
23 impacts is -- depends on the specific suppliers that  
24 are located in those counties which I don't know off

1 the top of my head.

2 Q. Okay, okay. So you would have to do a  
3 different model run essentially to look at just the  
4 Ohio counties?

5 A. That's correct.

6 Q. Okay. So the data you've presented at  
7 the top of page 6 with regards to indirect supplier  
8 impacts can't be used to determine what the indirect  
9 economic impacts for Ohio are for the Sammis plant,  
10 correct?

11 A. That's correct.

12 Q. Okay. For the induced impacts, that  
13 represents employee spending, correct?

14 A. That's correct.

15 Q. Okay. Would it be fair to assume that  
16 given that 17 percent of the employees live in West  
17 Virginia or Pennsylvania, at least some of that --  
18 some of the \$32.45 million of induced output would be  
19 in states other than Ohio?

20 A. At least some of it but how much is  
21 unclear because where you live and where you shop  
22 isn't always the same.

23 Q. Okay, okay. So you would have to do a  
24 new -- a new modeling run to determine how much of

1 the induced impacts is actually beneficial to  
2 counties in Ohio versus other states; is that right?

3 A. That's correct.

4 Q. Okay. The economic impacts of the  
5 Davis-Besse and Sammis plants, you would expect them  
6 to continue if those plants continue operating; is  
7 that right?

8 A. Yes.

9 Q. Okay. And those -- those impacts would  
10 cease only if those plants were to be retired, right?

11 A. Certainly the impacts could change over  
12 time depending on the level of operations, but if the  
13 plants were to close all together, then I would  
14 expect the operations impact to go away.

15 Q. Okay. And do you know if the Commission  
16 were to deny FirstEnergy's application in this  
17 proceeding, do you know, would the plants close?

18 A. I did not evaluate whether the plants  
19 would close in that case.

20 Q. Okay, okay. So you are not offering any  
21 opinion as to whether they would close.

22 A. I'm not offering an opinion on that.

23 Q. Okay.

24 MR. ALEXANDER: Could you speak up,

1       please.

2               A.    I'm sorry.  I am not offering an opinion  
3       on that.

4               Q.    Did anybody at FirstEnergy tell you it  
5       would close --

6               A.    No.

7               Q.    Okay.  -- if this application were  
8       denied?

9               A.    No.

10              MR. ALEXANDER:  Could we have the  
11     question redone?

12              Q.    Did anyone at FirstEnergy tell you the  
13     plants would close if the application were denied?

14              A.    No.

15              Q.    If the plants were to -- strike that.

16                     If other spending were needed to allow  
17     for the retirement of, say, the Davis-Besse plant,  
18     would you agree that such spending would -- would  
19     lead to some economic impacts?

20              A.    Are you referring to decommissioning?

21              Q.    Yes.

22              A.    Decommissioning typically does create  
23     temporary impacts after a nuclear plant is closed.

24              Q.    Okay.  Temporary being because it only

1 occurs for a set period of time; is that right?

2 A. That's correct.

3 Q. Okay. So as long as that spending for  
4 decommissioning is occurring, you are going to get  
5 some economic benefit?

6 A. That's correct. It may be -- I would  
7 expect it would be less than the operations of the  
8 plant but.

9 Q. Okay. And so along those lines, is that  
10 similar to in your testimony I believe you talk about  
11 a specific project that occurred at the Davis-Besse  
12 plant; is that right?

13 A. Yes.

14 Q. Okay. I believe it's the -- discussed on  
15 page 6 of your Attachment SM-2, the steam generator  
16 placement and refueling impacts?

17 A. Yes.

18 Q. Okay. And so that was a one-time project  
19 that you estimated at one time impacts would be of  
20 that.

21 A. Correct.

22 Q. And so you can do a similar analysis  
23 looking at decommissioning costs?

24 A. Yes.

1 Q. Okay. But you did not do that, right?

2 A. That's correct.

3 Q. And none of the numbers that you have  
4 provided regarding the impacts of continued operation  
5 of Davis-Besse factors in any economic impacts of  
6 decommissioning, correct?

7 A. That's correct.

8 Q. Okay. Do you know -- and do you know,  
9 would there be decommissioning costs for the Sammis  
10 plant if it were to retire?

11 A. I don't know what is involved in closing  
12 a coal plant.

13 Q. Okay. But, similarly, if there were  
14 decommissioning costs for closing Sammis, there would  
15 be some economic benefit from that?

16 A. That's correct.

17 Q. Okay. And you did not evaluate that,  
18 correct?

19 A. That's correct.

20 Q. Okay. And do you know the  
21 decommissioning of the Davis-Besse plant, is that --  
22 are you aware as to whether there is a  
23 Decommissioning Trust Fund from which such  
24 decommissioning would be financed?



1 MR. ALEXANDER: Objection, beyond the  
2 scope of her testimony. Go ahead.

3 A. I am not aware of that.

4 Q. Okay. Are you aware as to whether -- if  
5 the Davis-Besse plant were to retire, whether there  
6 would be any transmission grid upgrades needed to  
7 allow for such retirement?

8 A. I did not look at that in my analysis.

9 Q. Okay. Are you aware of whether such  
10 upgrades could be needed?

11 A. I'm not aware.

12 Q. Okay. If there were spending on  
13 transmission grid upgrades, would you agree with me  
14 that would also create some economic impact?

15 A. It would create some economic impact.

16 Q. Okay. And you could evaluate that  
17 similar to the process you've done to evaluate the  
18 operation of the Sammis plant?

19 A. I could use an economic impact analysis  
20 to evaluate that depending on the geography where it  
21 occurred.

22 Q. Okay. But you haven't done so, right?

23 A. That's correct.

24 MR. FISK: We can go off.

1 (Recess taken.)

2 Q. Okay. So getting back to the question  
3 of, you know, if the Davis-Besse or Sammis plants  
4 were to retire, would you agree with me if they were  
5 to retire, they would presumably be replaced with  
6 other energy sources?

7 A. I assume that the energy demand would  
8 have to be met in some way. I assume that would most  
9 likely not occur in the exact same location as where  
10 these plants were.

11 Q. Sure. Okay, okay. Fair enough. Would  
12 you agree that, I mean, if money were spent on other  
13 energy resources, that would also have an economic  
14 impact?

15 A. It would not have an economic impact in  
16 the location where these plants were located unless  
17 that's where the money was spent.

18 Q. Okay. But wherever the money is spent,  
19 you know, so if you built a new gas plant, you know,  
20 somewhere in Ohio to help replace, say, Davis-Besse,  
21 that would generate economic impact, correct?

22 A. A new gas plant would generate economic  
23 impact in the location where it was.

24 Q. Okay. And that would also provide

1 benefit to the state as a whole?

2 A. To the extent that other supplier  
3 purchases for that plant occurred in other places in  
4 Ohio, that would provide potential benefits to those  
5 locations.

6 Q. Okay. Similar to how Davis-Besse  
7 provides according to your -- your testimony provides  
8 benefits to not just Ottawa County but also the state  
9 of Ohio.

10 A. Yes. In what proportion I don't know  
11 but, yes, there would presumably be other purchases  
12 in Ohio if the plant was located somewhere in Ohio.

13 Q. Okay. And that, again, you would have to  
14 run that through some sort of IMPLAN model to come up  
15 with the specifics?

16 A. That's correct.

17 Q. And you did not look at that, correct?

18 MR. ALEXANDER: Look at --

19 A. Correct.

20 MR. ALEXANDER: Objection. Look at what?  
21 Go ahead, if you can.

22 A. Could you clarify what?

23 Q. Sure. You did not look at the potential  
24 economic impacts of any sort of replacement

1 generation if Davis-Besse were to shut down?

2 A. That's correct.

3 Q. Okay. And you also did not look at any  
4 economic impacts of any replacement generation if the  
5 Sammis plant were to shut down; is that correct?

6 A. That's correct.

7 Q. Okay. And do you know if, for example,  
8 the Davis-Besse plant were to shut down, could that  
9 create opportunities to redevelop the site where the  
10 plant is?

11 MR. ALEXANDER: Objection, beyond the  
12 scope of her testimony. Go ahead, if you can.

13 A. I don't really know having not seen the  
14 site what the redevelopment potential would be for  
15 that site.

16 Q. Okay. Would you agree if it were  
17 redevelopment of that site, that would create some  
18 economic impact for the local community?

19 MR. ALEXANDER: Same objection.

20 A. It would really depend on how -- what the  
21 site was redeveloped with.

22 Q. Okay. So you would need -- you would  
23 need to have details about what the redevelopment is  
24 and that you could then put into the IMPLAN model?

1           A.    That's correct.

2           Q.    Okay.  So the -- the economic impact  
3   that's created by, say, the Sammis plant, would you  
4   agree that that does come at cost also?

5           A.    Could you clarify what you mean?

6           Q.    Well, people purchasing electricity have  
7   to pay money for it, correct?

8           A.    Yes, people pay money to purchase  
9   electricity.

10          Q.    And that money is being used to, for  
11   example, keep the Sammis plant operating, correct?

12          A.    I assume that revenues from selling  
13   electricity support the generation of electricity.

14          Q.    Okay.  And if that money were not being  
15   spent on keeping the Sammis plant -- by buying the  
16   power from the Sammis plant, that is money that could  
17   be spent elsewhere, correct?

18          A.    Could you clarify spent elsewhere by  
19   whom?

20          Q.    By the -- by the customers who are paying  
21   for the electricity being produced by the Sammis  
22   plant.

23          A.    So if the customers were spending less  
24   money on electricity, they would presumably spend

1       that money on something else but the direct  
2       connection to the Sammis plant is -- is unclear to  
3       me.

4               Q.    Okay, okay. Well, so if -- if customers  
5       who are currently buying electricity that's produced  
6       by the Sammis plant -- and those customers they are  
7       located in Cleveland, which is not one of the  
8       counties that you have estimated any economic  
9       benefits for from Sammis, correct?

10              A.    Correct.

11              Q.    Okay. If those -- if Sammis were retired  
12       and replacement power were built in Cleveland, then  
13       that -- this money would go to economic development  
14       in Cleveland instead, correct?

15                   MR. ALEXANDER: Objection, beyond the  
16       scope of her testimony. It would require her to  
17       understand the workings of the electric grid  
18       distribution systems. Answer, if you can.

19              A.    I'm not able to answer that question. I  
20       didn't analyze that.

21              Q.    Okay. If -- I believe you said a minute  
22       or 2 ago that if people were paying less money for  
23       electricity, they would presumably spend that money  
24       somewhere else; is that right?

1           A.    In general as a household.

2           Q.    Okay.

3           A.    Yes, they may reallocate their spending.

4           Q.    That reallocated spending would also have  
5 indirect and induced economic impacts; is that right?

6           A.    They are spending a certain amount of  
7 money. The amount of money they spend, their  
8 spendable income, didn't change unless their income  
9 changed. How they allocate their spending to  
10 utilities or other types of goods and services could  
11 generally change the total impact because what you  
12 spend your money on matters not. You know, buying  
13 pencils and buying legal services doesn't necessarily  
14 create an equivalent impact, but beyond that I  
15 couldn't really comment how the redistribution of  
16 their spending may or may not create an impact.

17          Q.    Okay. But you would agree that spending  
18 on electricity from, say, the Sammis plant, that is  
19 money that those ratepayers can't spend somewhere  
20 else, correct?

21          A.    So they are spending money on utilities  
22 from wherever it came.

23          Q.    Right.

24          A.    And if they are spending that money on

1       utilities, then they are not spending that particular  
2       money on some other good or service.

3               Q.     Okay, okay.   So if there were a lower  
4       cost way to get power than purchasing it from, say,  
5       the Sammis plant, that would free up more money for  
6       those customers to spend in other areas of the  
7       economy, correct?

8               A.     If the retail rates for the customers  
9       went down because of any reason, that would allow  
10      them to reallocate their spending to something else.

11              Q.     Okay.   And so your -- you have not  
12      evaluated as part of your testimony in this  
13      proceeding whether there is the potential for greater  
14      economic development if the money were being spent  
15      on -- somewhere else in the economy rather than on,  
16      say, power from the Sammis plant, correct?

17              A.     Correct.

18                     MR. ALEXANDER:   Objection.   What money?  
19      Go ahead and answer, if you can.

20              A.     Can you clarify the money you are talking  
21      about?

22              Q.     The money that the rate -- the customers  
23      are paying for power from the Sammis plant, if that  
24      money were spent elsewhere, you haven't evaluated



1       what economic impacts that would have on the state of  
2       Ohio, correct?

3             A.    That's correct, I have not evaluated  
4       that.

5             Q.    Okay. And do you know the estimated cost  
6       to customers of this -- of the proposal that's  
7       pending before the Commission in this proceeding?

8             A.    No, I am not familiar with the estimated  
9       costs to customers.

10            Q.    Okay. If there were a net loss to  
11       customers over the next three years from this  
12       proposal, would you agree that could have an adverse  
13       impact to economic spending in other parts of the  
14       economy?

15                   MR. ALEXANDER:  Objection, vague.  Go  
16       ahead.

17            A.    Could you explain -- could you repeat the  
18       question first?

19                   MR. FISK:  Sure.  Can you read it back.

20                               (Record read.)

21            A.    Could you explain what you mean by net  
22       loss to customers?

23            Q.    Sure.  So do you -- so the proposal --  
24       the proposed transaction between the companies and

1 FirstEnergy Solutions is to -- that the customers of  
2 the companies -- well, the companies will be  
3 purchasing all of the power from the Sammis plant and  
4 then that power would then be sold on the  
5 marketplace. And if there is a -- if that leads to a  
6 profit, then the customers would get that profit; and  
7 if that leads to a loss, the customers would pay that  
8 loss. Is that --

9 A. You mean --

10 MR. ALEXANDER: Hold on. There is no  
11 question pending.

12 Q. Is that -- does that fit with your  
13 general understanding of the proposal at issue in  
14 this proceeding?

15 A. Could you be more -- could you explain  
16 when you're talking about the gain that the customers  
17 receive and what -- and what form do you mean they  
18 receive the gain?

19 Q. If the revenues from selling the power  
20 were more than the costs of buying that power, the  
21 customers, my understanding, would receive some sort  
22 of a credit through the rider being proposed in this  
23 proceeding.

24 A. Okay.

1           Q.    Okay.  And would you agree with me that  
2           if they receive that credit, that presumably that  
3           would create some -- that would be money they could  
4           then spend elsewhere in the economy and that would  
5           create some economic benefit, correct?

6           A.    If they spent the money, this would  
7           create an economic impact.  If they saved the money,  
8           which is a viable possibility, it would not create an  
9           economic impact.

10          Q.    Fair enough.  But most of that money  
11          would presumably get spent, correct?

12          A.    I really can't comment on whether people  
13          would save the money or spend the money.

14          Q.    Does any of your -- your analyses in this  
15          proceeding assume that employees are going to spend  
16          at least some of what they earned, correct?

17          A.    Yes, employees will spend at least some  
18          of what they earned.

19          Q.    Okay.  And so similarly wouldn't it be  
20          fair to assume if customers received a credit to the  
21          transaction being proposed in this proceeding, they  
22          would spend at least some of that?

23          A.    I don't know.

24               MR. ALEXANDER:  Objection.  It's beyond

1 the scope of her testimony. She hasn't done the  
2 analysis so answer, if you can.

3 A. I don't know.

4 Q. So how do you know that employees will  
5 spend the money that they earned but you don't know  
6 if customers will spend money that they are getting?

7 A. I believe that spending the money that  
8 you work for to earn is a different assumption than  
9 that you received a credit that wasn't part of your  
10 normal income that you maybe weren't expecting and  
11 how you might choose to spend that.

12 Q. Okay. If you receive -- if instead of a  
13 credit the power that you have purchased from the  
14 Sammis plant leads to a loss, you know, that you get  
15 less revenue when you sell it back into the market,  
16 would you expect that loss to reduce the amount of  
17 spending those customers can make in other areas of  
18 the economy?

19 MR. ALEXANDER: Same objection, beyond  
20 the scope of her testimony. Go ahead.

21 A. I didn't evaluate that.

22 Q. Okay. And you have no opinion on that?

23 A. Correct.

24 Q. Okay. Do you know -- do you know what

1 the phrase opportunity costs means?

2 A. Yes.

3 Q. Okay. What is that?

4 A. If you are giving up, say, activity A to  
5 do activity B, there is an opportunity cost to doing  
6 activity B because you had an alternative.

7 Q. Okay. And your -- would you agree that  
8 if you are spending money to purchase power from the  
9 Sammis plant, that there is an opportunity cost to  
10 that -- those purchases?

11 A. Could you define who -- who the subject  
12 is?

13 Q. The electric customers.

14 A. So how are the electric customers  
15 impacted by -- by this -- I mean, they are paying a  
16 retail rate for their electricity. Could you explain  
17 how they are impacted by this?

18 Q. They are paying a retail rate to the  
19 electricity and then there's a rider being proposed  
20 by which they would pay to purchase all of the power  
21 produced by the Sammis plant.

22 A. Uh-huh.

23 Q. Would you agree that that -- that money,  
24 there is an opportunity cost to that money of

1 purchasing the power from the Sammis plant?

2 MR. ALEXANDER: Objection. She testified  
3 she is not familiar with the rider or proposal so  
4 this is well beyond the scope of her testimony. Go  
5 ahead, if you can.

6 A. I didn't look at that. I really can't  
7 answer that.

8 Q. So you can't tell me if there is an  
9 opportunity cost of spending money on purchasing  
10 something?

11 MR. ALEXANDER: Objection. She's  
12 testified she is not familiar with the proposal you  
13 are asking her about. Go ahead.

14 A. I really can't answer that without having  
15 done more analysis.

16 Q. So does any part of your analysis factor  
17 in any opportunity costs at all?

18 A. Opportunity costs aren't the subject of  
19 my analysis. Household spending is based on typical  
20 patterns for people in certain income levels. But I  
21 don't -- I don't understand how that relates to  
22 opportunity cost.

23 Q. Well, all the impact -- all the direct,  
24 indirect, and induced impacts of -- that you talk

1 about in your testimony comes at some cost, correct?

2 A. I don't understand the question.

3 Q. Is it free? I mean, is this money --  
4 money just falls out of the sky and there is no cost  
5 to it to generate the direct, indirect, and induced  
6 impacts that you are talking about from the  
7 Davis-Besse and Sammis plants?

8 A. There's certainly a cost to producing  
9 electricity. That's part of what's represented in  
10 the wages and the supplier purchases.

11 Q. Okay. And that is money that could  
12 otherwise be spent elsewhere, correct?

13 A. You have to purchase certain supplies to  
14 create electricity and in certain proportion, and I  
15 don't think you are choosing between things you don't  
16 need and things you need. There's certain production  
17 functions for electricity.

18 Q. Okay. So -- so you can't identify  
19 anywhere in your analysis that you considered any  
20 opportunity costs, correct?

21 A. Correct. Opportunity costs, that concept  
22 is not related to economic impacts.

23 Q. Okay. We talked earlier about the  
24 November, '13, and June, 2014, reports; is that

1 correct?

2 A. Correct.

3 Q. Did you rely on those in any way in  
4 your -- the reports that you did for your current  
5 testimony?

6 A. Some of the text that is not specific to  
7 the numerical results may be the same in both sets of  
8 reports.

9 Q. Okay. Any other ways you relied on it?

10 A. I had set up a general system of models  
11 that I could adjust the inputs in and use that  
12 structure.

13 Q. Okay. Any other ways?

14 A. Not that I recall.

15 Q. Okay. And then all you -- and then so  
16 after having set up that general structure and  
17 system, you then just simply update those two reports  
18 to create what you provided here in this proceeding?

19 A. I put in the new numbers and I reran the  
20 model and I updated the numbers and then I revised  
21 the text in the reports.

22 Q. Okay. And I believe you testified  
23 earlier you received the inputs for your reports in  
24 this proceeding by an e-mail from Sharon Noewer; is



1       that right?

2             A.    That's correct.

3             Q.    Okay.  Did you receive any other written  
4       communications from anyone at any of the FirstEnergy  
5       companies about your work in this proceeding?

6             A.    Could you be specific about what time  
7       period you're talking about?

8             Q.    From the day you started working on -- on  
9       this project.

10            MR. ALEXANDER:  What is this project?  
11       What do you mean?

12            Q.    The work that you did for this  
13       proceeding, the day you started doing that, did you  
14       receive any other written communications from anybody  
15       at FirstEnergy?

16            A.    Other than Sharon Noewer?

17            Q.    Other than the specific e-mail from  
18       Sharon Noewer that you have referenced.

19            A.    I received multiple e-mails from Sharon.

20            Q.    Okay.  Any other communications, written?

21            A.    I am sure there were, but I don't  
22       remember exactly.

23            Q.    And do you know if any of those multiple  
24       e-mails from Sharon Noewer were produced in this

1 proceeding?

2 A. I don't recall if they were included in  
3 discovery motions.

4 Q. Okay. Do you know if they were  
5 requested?

6 A. I don't recall.

7 MR. FISK: Okay. Could you mark this as  
8 Exhibit 2.

9 (EXHIBIT MARKED FOR IDENTIFICATION.)

10 Q. Okay. I have handed you a document  
11 marked Exhibit 2; is that correct?

12 A. Yes.

13 Q. Okay. And this is the company's response  
14 to Sierra Club Set 7 Interrogatory 134; is that  
15 correct?

16 A. Yes.

17 Q. And you are identified as the witness  
18 providing the response on this document; is that  
19 correct?

20 A. Yes.

21 Q. Okay. And do you see the request asks  
22 for "identification of all documents relating to your  
23 testimony including documents, correspondence, or  
24 communications exchanged between the Companies and

1 Ms. Murley"? Do you see that?

2 A. I see where that is written.

3 Q. And your response does not identify any  
4 communications with Ms. Noewer, does it?

5 MR. ALEXANDER: Objection. Do you have a  
6 definition of the companies?

7 MR. SOULES: I do if you want me. Here.  
8 That's what we used in all of our.

9 MR. FISK: Yes. It says "Term  
10 FirstEnergy, Applicants, or Companies means the Ohio  
11 Edison Company, Cleveland Electric Illuminating  
12 Company, Toledo Edison Company including any  
13 affiliated companies such as but not limited to  
14 FirstEnergy Solutions Corporation, American  
15 Transmission Services Corporation and their  
16 affiliates, predecessors, and interests, employees,  
17 and representatives."

18 MR. ALEXANDER: And so you are asking her  
19 to not provide a legal opinion as to the objections  
20 but to simply state whether this response says what  
21 it says.

22 MR. FISK: Well, I am asking her to  
23 confirm that she did not identify any written  
24 communications with Ms. Noewer in this response.

1 MR. ALEXANDER: We are willing to  
2 stipulate the response is what it is. She is not a  
3 lawyer. I am not sure how she can answer with regard  
4 to the objections.

5 MR. FISK: Well, I am not talking about  
6 the objections. I am talking about did she identify  
7 any e-mail communications with Ms. Noewer. She  
8 provided the response saying that her testimony  
9 identifies all facts and data provided by the  
10 companies which Ms. Murley considered in creating her  
11 testimony.

12 Q. You did not, however, identify any e-mail  
13 communications with Ms. Noewer, correct?

14 MR. ALEXANDER: There is a work product  
15 objection here so that's what I am sensitive to. We  
16 are willing to stipulate she did not specifically  
17 identify communications with Ms. Noewer including the  
18 e-mail she just testified to. Does that resolve your  
19 issue?

20 MR. FISK: So you are claiming an e-mail  
21 sending facts is work product?

22 MR. ALEXANDER: The assumptions were  
23 provided, and she identified them both earlier today  
24 and in her prefiled written testimony.

1 MR. FISK: And you are claiming the  
2 e-mails from Ms. Noewer that are providing factual  
3 inputs are somehow work product?

4 MR. ALEXANDER: I would have to go back  
5 and check those, which I am willing to do with you  
6 offline. We're not going to have a discovery dispute  
7 in the middle of the deposition. I am certainly  
8 willing to have this conversation with you after  
9 this, but we are not going to do it now.

10 MR. FISK: Okay.

11 Q. Okay. And with regards to Subsection B,  
12 it asks for the identification of all documents  
13 received, generated, or relied upon by Ms. Murley.  
14 Do you see that?

15 A. I see that.

16 Q. Okay. And your written response does not  
17 reference or identify the June, 2014, Sammis report  
18 or the November, '13, Davis-Besse report, correct?

19 A. It refers to these specific attachments.

20 Q. Okay. To your knowledge did those  
21 attachments include any of those -- either of those  
22 previous reports that you had done?

23 A. I don't know.

24 Q. Okay.

1 MR. FISK: Can we get 2 minutes?

2 MR. ALEXANDER: Sure.

3 (Recess taken.)

4 Q. When you talked in your report about the  
5 economic -- the total economic impact associated with  
6 the plants, are you essentially -- would it be fair  
7 to characterize that as the -- the economic benefits  
8 of keeping the plants open?

9 A. Could you be specific in where the  
10 reference is?

11 Q. Sure. On page 10, lines 13 to 14, I  
12 think -- am I correct that's where you kind of give  
13 the top line summaries of the -- of the economic  
14 impact of the plants?

15 A. That is the top line summary.

16 Q. So it's the \$1.06 billion each year and  
17 the 2,921 jobs, correct?

18 A. That is the output on jobs associated  
19 with the plants combined.

20 Q. Okay. And would you -- would you --  
21 would it be fair to characterize that as your  
22 identification of the benefits -- of the economic  
23 benefits of keeping the plants open?

24 A. Output and jobs are one way to quantify

1 economic benefits.

2 Q. Okay. And those -- those figures  
3 referenced in lines 13 to 14 on page 10, are those  
4 the net economic benefit of the plants?

5 A. What do you mean by "net economic  
6 benefit"?

7 Q. Well, the -- the benefits of the plants  
8 outweighing -- compared to the costs of the plants.

9 A. This is simply the benefits of the plant.

10 Q. Okay. So it's not -- it's not a net  
11 benefit calculation, correct?

12 MR. ALEXANDER: Could we explain what  
13 "benefit" means? I'm lost.

14 MR. FISK: I gave an explanation she  
15 responded to.

16 MR. ALEXANDER: Okay. Let's go off for  
17 just one moment.

18 (Discussion off the record.)

19 MR. ALEXANDER: Objection. Define the  
20 word "benefit." The explanation earlier was  
21 explaining the term "net" versus the term "benefit"  
22 so objection to the question as vague.

23 Q. Which you've already answered the  
24 question, correct?

1           A.    Which question?

2           MR. FISK:  Let's go off for a second.

3           MR. ALEXANDER:  She did already answer,  
4    yeah.

5                   (Discussion off the record.)

6           Q.    Okay.  So the pending question, I  
7    believe, is that your economic -- economic impact  
8    estimates of the \$1.06 billion and 2,921 jobs, that  
9    does not reflect a net economic benefit from the  
10   plants, correct?

11           MR. ALEXANDER:  Same objection.

12           A.    I'm sorry.  I just don't know what you  
13   mean by "net economic benefit."

14           Q.    Of course.  Do you understand what I mean  
15   by "economic benefit"?

16           A.    What I am showing is the economic impact.

17           Q.    Okay.  And is that a benefit?

18           A.    The economic impact is positive.  I don't  
19   know how you define "benefit."

20           Q.    Okay.  Are you showing the net economic  
21   impact or just the economic impact?

22           A.    I'm not familiar with the term "net  
23   economic impact."

24           Q.    How many years have you done economic



1       analyses?

2                   MR. ALEXANDER:  Objection, argumentative.

3       Go ahead.

4           A.     Over 20.

5           Q.     Okay.  And you have never heard the term  
6       "net economic impact."

7           A.     Not as related to multiplier impacts.

8           Q.     Well, if you were going to compare the  
9       economic benefits of an activity to the economic  
10      costs of an activity, what would you describe that  
11      analysis as?

12                  MR. ALEXANDER:  Objection once again to  
13      the phrase "economic benefit."  Are you again  
14      identifying it as economic impact?

15                  MR. FISK:  Yes.

16           A.     So could you restate the question?

17           Q.     The economic -- if you were to compare  
18      the economic benefits of an activity with the  
19      economic costs of an activity --

20                  MR. ALEXANDER:  Objection again to the  
21      phrase.

22           A.     Benefits aren't a technical term.

23           Q.     Okay.  You -- you have calculated an  
24      economic impact that is positive for the plants,

1 correct?

2 A. Yes.

3 Q. And did you include any economic --  
4 strike that.

5 Is your -- your calculation of economic  
6 impact, does it include any negative impacts?

7 A. There are not relevant negative economic  
8 impacts in this situation. Negative impacts would be  
9 related to, say, the loss of an activity.

10 Q. Okay. So -- so you just testified a  
11 minute ago that the phrase economic benefits isn't a  
12 technical term; is that right?

13 A. That's right.

14 Q. So if you could turn to page 2 of Exhibit  
15 SM-1, page 2. Are you there?

16 A. Yes.

17 Q. It says "Impact Summary" at the top; is  
18 that correct?

19 A. Yes.

20 Q. Okay. So the very first line it says  
21 "The economic benefits shown here depict the on-going  
22 operations of the power plant." Do you see that?

23 A. Yes.

24 Q. So do you not know what economic benefits

1 means?

2 A. It's still not a technical term, but it's  
3 a general word that I have used.

4 Q. Okay. So you do know what it means now.

5 A. It is a word that I have used.

6 Q. Okay. In fact, in your report in this  
7 proceeding you used it.

8 A. Uh-huh.

9 Q. Okay. And then in the next paragraph you  
10 say "The operations of W.H. Sammis detailed in this  
11 analysis provide substantial economic benefits to the  
12 region," correct?

13 A. That is what the text says.

14 Q. So do you normally use nontechnical  
15 phrases in your reports?

16 A. Not when I'm referring to specific  
17 numbers but when I am introducing a general concept.

18 Q. Okay, okay. So what in your mind is  
19 substantial -- what in your mind does economic  
20 benefits mean?

21 A. Something positive that occurs in the  
22 economy.

23 Q. Okay. And your -- and would the opposite  
24 of that be something negative that occurs in the

1 economy?

2 A. Sure.

3 Q. Okay. And would you -- could we agree  
4 that's an economic cost?

5 A. It's a negative economic impact.

6 Q. Okay. And do you -- in your mind is  
7 there any negative economic impacts of the operation  
8 of the Sammis plant?

9 A. Given the methodology we use to measure  
10 the impacts, no.

11 Q. Okay, okay. So, for example, any -- any  
12 impacts of pollution from the Sammis plant, would  
13 those factor into your analysis at all?

14 A. That is outside of the scope of this type  
15 of economic impact analysis.

16 MR. FISK: Okay, okay. That concludes my  
17 questions as of now but we are -- we are reserving  
18 the right to ask further questions because we believe  
19 that the response to SC Set 7 Interrogatory 134 that  
20 was Exhibit 2 was incomplete. We have not been  
21 provided with any of the e-mails from Ms. Noewer, and  
22 we have not been provided with the previous reports  
23 that -- from November, '13, and June, 2014, that  
24 Ms. Murley said she relied in part upon in this

1 proceeding. So once we have settled that, which we  
2 can do off -- outside of this deposition, we reserve  
3 the right on the record to ask further questions.

4 MR. ALEXANDER: Sure. And for the record  
5 I understand you taking that position. I am willing  
6 to talk to you about that after the deposition  
7 offline, but the companies do not at this point agree  
8 to make Ms. Murley available again at a later date,  
9 although we are willing to talk about that again  
10 after the deposition.

11 MR. FISK: Okay. Fair enough.

12 MR. ALEXANDER: So with that,  
13 Mr. Petricoff, would you like to go next?

14 MR. PETRICOFF: Yes, thank you, Trevor.

15 - - -

16 CROSS-EXAMINATION

17 By Mr. Petricoff:

18 Q. Good morning, Ms. Murley.

19 A. Good morning.

20 Q. Can you hear me?

21 A. Yes.

22 Q. Yeah. That's one of the difficulties of  
23 a -- of a telephone deposition is sometimes it's hard  
24 as we lose the visual communication.

1 I want to start by talking, if you would  
2 turn to page 10 of your testimony, and I am looking  
3 at lines 13 to 15, and this is where you give the  
4 total -- the total economic impact for the plants.

5 A. Okay. I see that.

6 Q. Okay. And I assume that -- that  
7 information comes from your -- your attached studies  
8 attached to the testimony, 1 and 2; is that correct?

9 A. That's correct.

10 Q. Okay. And the studies were basically  
11 historic studies. You looked at data that was given  
12 to you at -- sometime in 2013, 2014 in order to  
13 conduct the studies?

14 A. That's correct.

15 Q. Okay. So the figures that we have here  
16 are basically based on those -- those historic  
17 figures, this is what the impact is at the time that  
18 we look at these variables that we put into the  
19 model.

20 A. That's correct.

21 Q. All right. So in the year, for example,  
22 2017, the -- the economic impact for the plants may  
23 not be the same numbers that we see on page 10, line  
24 13 to 15.

1           A.    If the employment or payroll or those  
2           sorts of things change, the impact would change also.

3           Q.    Right.  And you would expect that over  
4           time there would be changes to not only the payrolls  
5           but also the purchasing of -- of products and  
6           supplies.

7           A.    That could change over time.

8           Q.    Right.  And, likewise, the -- the inputs  
9           that you bought from Impact, does Impact update  
10          their -- their regional inputs on a regular basis?

11               MR. ALEXANDER:  Objection.  Did you mean  
12          IMPLAN?

13          Q.    I'm sorry, yes, IMPLAN.

14          A.    Could you restate the question?

15          Q.    Sure.  Let's talk about -- about IMPLAN.  
16          Why did you use IMPLAN?

17          A.    Because I believe it provides a good  
18          amount of industry detail as well as local geographic  
19          detail.

20          Q.    All right.  And do they update their --  
21          their databases on the -- on geographic economic  
22          information -- with geographic -- more recent  
23          geographic -- I'm sorry.  Let me start over.

24               Does IMPLAN regularly update their

1 database for geographic economic information?

2 A. IMPLAN does issue a new set of local data  
3 files each year.

4 Q. Okay. So if you were going to do this  
5 report in 2017, you would probably go back to them  
6 and get the most current inputs?

7 A. Correct.

8 Q. Okay. Now, if you will turn to page 6 of  
9 your -- of your testimony, let's assume now we are  
10 looking forward to the year 2017.

11 A. Okay.

12 Q. And we're looking at the -- actually  
13 before we get that, let me go back and ask a -- an  
14 underlying question. On this chart at the top of  
15 page 6 of your testimony, under the output, that  
16 first number, output \$502 million.

17 A. Yes.

18 Q. Do you see that? Okay. My understanding  
19 from your testimony earlier today was that was a  
20 figure that was derived by using the data you  
21 received from the companies on the Sammis plant  
22 and -- and running it through the -- your model using  
23 the -- the multiplier inputs from IMPLAN; is that  
24 correct?



1           A.    Yes.

2           Q.    Okay.  And basically that output has  
3           implicit assumptions in it including the  
4           profitability of the Sammis plant.

5           A.    Output by definition includes profit.

6           Q.    Okay.  And do you know if the Sammis  
7           plant was profitable during the historic period in  
8           which you collected the data?

9           A.    No.  I am just giving you the definition  
10          of output based on IMPLAN's definition.

11          Q.    Okay.  Well, let's assume that you --  
12          that you knew or that you had the data.  The company  
13          supplied you with -- with the data on -- on what the  
14          profitability was of the Sammis plant and it was --  
15          it was a loss.  Let's say it was a \$500 million loss.  
16          How would that affect the output number that's on  
17          page 6?

18          A.    I don't know without analyzing more data  
19          than just profits.

20          Q.    Okay.  Well, let's talk about the general  
21          trend.  If there -- if there -- if the plant could  
22          only be run if there was a \$500 million subsidy that  
23          was paid by the people in the local community, how  
24          would that affect the outcome of your study, all else

1       being equal?

2               A.    I don't know without analyzing that.

3               Q.    Is it possible that you could end up with  
4       negative numbers?

5                   MR. ALEXANDER:  Objection to the  
6       incomplete hypothetical.  Go ahead.

7               A.    I really don't know without analyzing  
8       that.

9               Q.    Theoretically can you have negative  
10      multipliers?

11              A.    In the case of a plant closure, you could  
12      have a negative economic impact, but the multipliers  
13      that come out of the IMPLAN model are all positive  
14      numbers.

15              Q.    Well, but if -- if, in fact, the output  
16      numbers was a negative number, wouldn't the  
17      multipliers be negative?

18              A.    The multipliers that come out of the  
19      IMPLAN model are all positive numbers.

20              Q.    Okay.  So the model that you used could  
21      not calculate then the -- the -- the impact to the  
22      local region if, in fact, there was a required  
23      subsidy that was larger than the output?

24              A.    I think an entirely different approach

1 would be required, and I didn't look at that.

2 Q. Okay. That's fair enough. Fair enough.  
3 I've got -- I have just a couple small -- small  
4 questions for you so I can get a better  
5 understanding, I think, of your -- of your testimony.

6 If you would, turn to page 5, line 17.  
7 And there you use the term a regional -- yeah, on  
8 line 17 talking about the region. What -- what was  
9 the region?

10 A. So the region is a six-county region. If  
11 you give me a minute, I can find a definition of what  
12 that region is. I believe in the report in the  
13 Attachment SM-1, page 1, the last sentence in the  
14 first paragraph lists those six counties.

15 Q. Okay. That's exactly what I was looking  
16 for. One other clarification question, on page 6 on  
17 line 13, okay, the third word in is "power." This  
18 means that for every \$1 million of power produced how  
19 did you -- how did you calculate a million dollars of  
20 power? Is that a million dollars' worth of revenue  
21 or a million dollars in cost? What is the reference  
22 there to a million dollars of power?

23 A. Direct output.

24 Q. Okay. I guess I am asking how did you

1       quantify the output? Was it the cost of producing,  
2       or was it the revenue from it, from producing the  
3       power?

4               A.    In this case I wasn't using specific  
5       numbers from the Sammis plant. I estimated direct  
6       output using the multipliers and using data on  
7       personal income.

8               Q.    Okay. So this is -- you use this term  
9       here just to show a relationship.

10              A.    Yes, between total output and direct  
11       output in the table at the top of that page.

12              MR. PETRICOFF: Okay. Now, I understand.

13              Okay. Thank you. That's all the  
14       questions that I have.

15              MR. ALEXANDER: Ms. Fleisher, would you  
16       like to go next?

17              MS. FLEISHER: Sorry. I have like --  
18       okay. I can get started. There is going to be  
19       coughing a little bit. I am getting over a cold  
20       here.

21                               - - -

22                               CROSS-EXAMINATION

23       By Ms. Fleisher:

24              Q.    Ms. Murley, my name is Madeline Fleisher.

1 I represent the Environmental Law & Policy Center.

2 Let me know if you have any trouble hearing me.

3 A. Okay.

4 Q. I just have a few quick questions for  
5 you, I think. I want to confirm my understanding  
6 that when you looked at the IMPLAN multipliers for  
7 the plants you were analyzing, you did not look at  
8 multipliers for any other regions that might also  
9 have power plants; is that correct?

10 A. I only looked at the data for the  
11 specific areas that we analyzed in these two studies.

12 Q. And do you have any way of knowing  
13 whether multipliers in other regions or for other  
14 plants might show a greater economic impact?

15 A. They may be greater. They may be lesser.  
16 It depends on the amount of supplier businesses of  
17 the right type that are located within the specific  
18 geographic area that you are looking at.

19 Q. But that was not part of your analysis.

20 A. That's correct.

21 Q. And are there -- scratch that. Give me  
22 one minute here. Sorry.

23 And did you consider in terms of impacts  
24 profit to the shareholders in FirstEnergy Solutions?

1           A.    I simply used the multipliers to derive  
2    direct output which by definition includes profit,  
3    but I did not look at specific components of profit  
4    for Sammis.

5           Q.    I'm not sure I understood that answer.  
6    So are you saying part of the economic impact you are  
7    describing here does include profit to FirstEnergy  
8    Solutions' shareholders for Sammis --

9           MR. ALEXANDER:  Objection.

10          Q.    -- and Davis-Besse?

11          MR. ALEXANDER:  Objection, asked and  
12    answered.  Go ahead.

13          A.    I don't think I can improve on my  
14    previous answer.

15          Q.    I guess can you give me a "yes" or "no"  
16    as to whether this -- the economic impact you  
17    described here includes profit to FirstEnergy  
18    Solutions' shareholders?

19          MR. ALEXANDER:  Objection.  Could you  
20    clarify are you asking for direct -- whether direct  
21    output includes profits?

22          MS. FLEISHER:  That economic impact  
23    described in Ms. Murley's report.

24          MR. ALEXANDER:  Is there a reference?

1           Q.    Maybe it's better to ask this backwards  
2    then.  Am I correct in understanding that the  
3    economic impact in your report does not include  
4    profit to FirstEnergy Solutions' shareholders?

5           A.    I guess I don't understand which specific  
6    number you're referring to.

7           Q.    Any of the numbers.  I mean.

8           A.    Output by definition includes wages plus  
9    supply costs plus profits.

10          Q.    Okay.  And would that profit necessarily  
11   be received by shareholders in Ohio?

12          A.    I don't know.  That is beyond the  
13   definition -- detail of the definition here.

14          Q.    And do you -- in considering the revenues  
15   created by -- the revenue impacts created by these  
16   plants, did you consider what portion of FirstEnergy  
17   Solutions' revenue that represents?

18          A.    So --

19               MR. ALEXANDER:  Could I have that  
20   question reread, please.

21               (Record read.)

22               MR. ALEXANDER:  Objection to form.  Go  
23   ahead.

24          A.    So could you give me a reference in the

1 document as to where you are looking at?

2 Q. Sure. Give me one second. I'm looking  
3 at page -- well, I guess just to pick out one plant  
4 but per Davis-Besse on page 8.

5 A. Of the testimony or the report?

6 Q. Sorry of the testimony.

7 A. Okay. Hang on.

8 Q. Looking at the table at the bottom, and  
9 just repeat the question, did you look at how those  
10 impacts compare to any of the -- any other plants run  
11 by FirstEnergy Solutions?

12 A. Well, of course, we have the Sammis  
13 implant -- Sammis impacts but otherwise not any other  
14 plants beside Sammis and Davis-Besse.

15 MS. FLEISHER: Okay. All right. That's  
16 it. Thank you.

17 MR. ALEXANDER: Thank you. At this point  
18 let's go off the record and take a break.

19 (Recess taken.)

20 MR. ALEXANDER: Let's go back on the  
21 record. Ms. Hussey, would you like to go?

22 MS. HUSSEY: I would. Thank you very  
23 much.

24 - - -



CROSS-EXAMINATION

By Ms. Hussey:

Q. Hi, Ms. Murley.

A. Yes. Hi.

Q. I wonder if you could turn to page 1 of your testimony.

A. Okay.

Q. And beginning at line 17, you testify that you performed many custom studies to quantify economic and physical impacts of utility generation facilities, and then in parentheses you list traditional and solar.

A. Yes.

Q. What do you mean by "traditional"?

A. Something other than solar.

MR. ALEXANDER: Did someone just join the call?

MR. DARR: Yes. This is Frank Darr. I just returned.

MR. ALEXANDER: Okay. Thank you.

A. Such as coal or nuclear or natural gas.

Q. Okay. Thank you. And I believe you spoke with Mr. Fisk a bit about your coal electric

1 generation plants and economic analyses. For the  
2 sake of clarification, have you previously conducted  
3 economic impact analysis for a coal-generation  
4 facility?

5 A. Other than Sammis?

6 Q. Yes, other than Sammis.

7 A. No, not a coal-generation facility.

8 Q. Okay. What about a nuclear-generation  
9 facility?

10 A. Yes.

11 Q. Okay. And are you able to tell us what  
12 the facility may have been?

13 A. I'm sorry, can you repeat that?

14 Q. Are you able to tell us what facility  
15 that was?

16 A. Palo Verde nuclear plant.

17 Q. Okay. Any other nuclear plants?

18 A. Other than Davis-Besse, no.

19 Q. Okay. Great. And what about natural  
20 gas-generation facilities?

21 A. What's the question?

22 Q. What about natural gas-generation  
23 facilities, electric generation facilities?

24 A. Do you mean -- what are you -- could you

1 repeat the question?

2 Q. Combined cycle type of a plant.

3 MR. ALEXANDER: Is the question has she  
4 done an economic impact analysis for a natural gas  
5 facility?

6 MS. HUSSEY: Correct.

7 A. Yes.

8 Q. Okay. And how many such analyses have  
9 you performed?

10 A. For natural gas?

11 Q. Yes.

12 A. Two.

13 Q. And what about renewables, have you  
14 performed economic impact analysis for renewable  
15 generation?

16 A. For solar, yes.

17 Q. Okay. Any others?

18 A. Not that I recall.

19 Q. Thank you. And when you are asked to  
20 perform an economic impact analysis, do you always  
21 use the IMPLAN model?

22 A. Yes, I do.

23 Q. Okay. You explained a bit about how  
24 IMPLAN can take industry-specific information into

1 account earlier.

2 A. Yes.

3 Q. And I wondered what -- what category of  
4 industry-specific information you obtained from  
5 IMPLAN when conducting the study.

6 A. Do you mean which industry category in  
7 IMPLAN I used?

8 Q. Correct.

9 A. Electric power generation is a category  
10 in IMPLAN. I believe that it may not be the exact  
11 name but.

12 Q. Okay. And do you happen to know if  
13 IMPLAN breaks that information down into categories  
14 of electric generation, or is it all within the same  
15 umbrella?

16 A. In the IMPLAN model I used all types of  
17 electric generation are included in a single industry  
18 category.

19 Q. Okay. Thank you. If I could talk to you  
20 a bit about regional impacts. It appears that under  
21 your analysis for Sammis you considered the impact on  
22 a six-county regional area. And then for Davis-Besse  
23 you regionally looked only at Ottawa County, and I  
24 wondered why the regions that you analyzed for those

1 two plants were different. Would the scope -- it  
2 appears to be the scope was larger for Sammis than it  
3 was for Davis-Besse.

4 A. The geographic area covered by the six  
5 counties is probably larger than the single area of  
6 Ottawa County.

7 Q. Correct. And is there a reason that you  
8 selected a larger geographic region for the Sammis  
9 plant, for your analysis of the Sammis plant, than  
10 for Davis-Besse?

11 A. The region for the Sammis plant was  
12 primarily based on where the employees lived.

13 Q. Okay. And for Davis-Besse, did you  
14 decide just to isolate it to Ottawa County because of  
15 the location specifically?

16 A. Yes.

17 Q. Okay. And did you make the determination  
18 of what regional geographics to look at, or was that  
19 something that was asked of you by FirstEnergy?

20 A. I presented my ideas about what geography  
21 we should look at to FirstEnergy and they agreed.

22 Q. Okay. So developing this six-county area  
23 for Sammis, you took the impact in the counties where  
24 the individuals that work at Sammis live; is that

1 correct?

2 A. That was how I selected the area.

3 Q. Okay. And are all those counties  
4 contiguous to Jefferson County where Sammis is  
5 located?

6 A. I don't know without looking at a map.

7 Q. You said that you typically use the  
8 IMPLAN model when asked to perform an economic impact  
9 analysis. Are you familiar with any criticisms of  
10 the IMPLAN model?

11 A. I'm familiar with how the IMPLAN model  
12 differs from certain other models like REMI.

13 Q. Okay. And can you explain that?

14 MR. ALEXANDER: Objection, overbroad. Go  
15 ahead.

16 Q. Can you explain the differences -- my  
17 apologies. Can you explain the differences between  
18 IMPLAN and REMI and the sort of inputs that they  
19 examine?

20 A. With regard to the inputs that they  
21 examine, do you mean the inputs that would be  
22 required to do an analysis?

23 Q. Sure.

24 A. Those aren't really different. It's the

1 underlying structure of the models that is different.

2 Q. Okay. And would you consider an  
3 IMPLAN -- IMPLAN to be a more specific model, or  
4 would REMI in your estimation be a more specific  
5 model?

6 A. What do you mean by specific?

7 Q. In terms of specific results, yielding  
8 specific results.

9 A. Specific to what? I'm sorry.

10 Q. The economic impact of the -- whatever  
11 plant you're looking at or whatever other -- the  
12 impetus would be for the analysis.

13 A. Both models yield results in terms of the  
14 same variables, jobs, income, output, value added  
15 which I didn't include here.

16 Q. Okay. So did you consider using any  
17 model other than IMPLAN for the economic impact  
18 analysis for both Sammis and Davis-Besse?

19 A. No. I generally use the IMPLAN model  
20 because that is the model with which I have  
21 expertise.

22 Q. Okay. And FirstEnergy did not ask you to  
23 use any specific type of model? That was your  
24 decision?

1           A.     Correct.

2           MS. HUSSEY:   Okay.   Those are all my  
3     questions.   Thank you very much.

4           MR. ALEXANDER:   Did someone just join the  
5     call?

6           MR. ALLEN:   This is Bill Allen with AEP  
7     Ohio.

8           MR. ALEXANDER:   Good morning, Bill.

9           Ms. Grady, would you like to go next?

10          MS. GRADY:   Yes.   That would be great.

11                               - - -

12                               CROSS-EXAMINATION

13     By Ms. Grady:

14           Q.     Good morning, Ms. Murley.

15           A.     Good morning.

16           Q.     I'm going to probably jump around a bit.

17     We'll pick up with areas that others have gone to so  
18     I will -- but I will try to not ask repetitive  
19     questions.   My name is Maureen Grady, and I represent  
20     the residential customers of the FirstEnergy  
21     utilities.

22                       Now, on page 1 you were asked about  
23     your -- you gave testimony about your educational  
24     background and your experience, and you indicated



1       that you constructed a large number of economic and  
2       fiscal impact models. You mentioned to the counsel  
3       for OMA that you had done some economic impact  
4       modeling for natural gas facilities. Do you recall  
5       that?

6             A.    Yes.

7             Q.    Can you identify what natural gas  
8       facilities you would have done the economic impact  
9       model for?

10            A.    My client for that was Salt River Project  
11       in Arizona and there were several natural gas  
12       facilities located around -- in and around the  
13       Phoenix metro area.

14            Q.    Okay. Would that have been --

15                   MR. ALEXANDER: Hold on just one --  
16       Maureen, hold on. We are getting a feedback thing  
17       that just stopped, so if someone could mute their  
18       line if they are listening, we would really  
19       appreciate it.

20                   And with that, I'm sorry, Maureen. I  
21       didn't want to interrupt, but we were having a hard  
22       time hearing so please repeat your last question.

23                   MS. GRADY: Okay, sure.

24            Q.    You had mentioned that you had two

1 natural gas facilities you had done impacts --  
2 economic impact analysis for and I was trying to  
3 determine which those were and you mentioned the Salt  
4 River Project. Is that one project or two?

5 A. I looked at two different facilities for  
6 the Salt River Project which is a utility in Arizona.

7 Q. Okay. Thank you. I appreciate that.  
8 Now, you also indicate that -- that you had done  
9 economic impact studies for renewable -- renewable  
10 energy; is that correct?

11 A. For solar specifically, yes.

12 Q. And can you identify the -- the project  
13 that would have involved the solar facility?

14 A. I have looked at solar facilities for  
15 Arizona Public Service Company and also planned solar  
16 facilities for a private Spanish solar company that  
17 was looking at putting facilities in the Central  
18 Valley of California.

19 Q. Okay. Thank you. Now, you also indicate  
20 on page 1 of your testimony, and specifically I am  
21 looking at line 16, that you constructed economic  
22 impact models for utilities in Ohio. And I wanted to  
23 make sure I understood what those would have been.  
24 Are there any other economic impact models that you

1 have constructed for Ohio utilities other than the  
2 economic impact model that you present in the  
3 testimony in this proceeding?

4 A. Yes. So --

5 Q. And can you --

6 A. Go ahead.

7 Q. Can you identify those projects, please?

8 A. So by constructing a model, I mean that I  
9 built a structure, a model in Microsoft Access that I  
10 provided to my client, and my client, in turn, could  
11 use that model to run their own economic impact  
12 analyses so these were not specific reports on  
13 specific projects.

14 Q. Okay. So what clients would you have  
15 done that particular work for that are utilities in  
16 Ohio?

17 A. Just for FirstEnergy. The phrase is  
18 "economic development organizations and utilities in  
19 Ohio," and I have built models for economic  
20 development organizations in Ohio as well.

21 Q. Okay. Yes. I was just really focusing  
22 on the work you had done for utilities in Ohio.

23 A. Uh-huh. So I just want to make sure that  
24 I understand that the work that -- the work you have

1       done has been entirely on behalf of FirstEnergy or a  
2       FirstEnergy affiliate. In terms of building economic  
3       impact models for utilities, that is true in Ohio.

4             Q.    Has there been any other activities with  
5       respect to the economic impact model that you have  
6       done -- let me strike that.

7             Are there any other economic impact  
8       modeling that you have done for utilities in Ohio  
9       other than what you present in this case and the  
10      building of the economic models you just referred to?

11            A.    I have done other custom economic studies  
12      for FirstEnergy Services Company that were related to  
13      projects in Ohio.

14            Q.    Is there anything beyond that particular  
15      project or projects that you've indicated?

16            A.    Do you mean in Ohio or for utilities?  
17      Can you be more specific?

18            Q.    Yes. I'm sorry. I am trying to focus in  
19      exactly on utilities and utilities within Ohio.

20            A.    Okay.

21            Q.    What work have you done related to  
22      economic impact modeling, whether it is constructing  
23      the model or presenting a study for electric  
24      utilities in Ohio?

1           A.    I have done numerous projects for  
2   FirstEnergy Services Company for --

3           Q.    Beyond the -- I'm sorry. Beyond the  
4   projects that you mentioned for FirstEnergy Services  
5   Company, have you done any other economic impact  
6   modeling or construction of economic impact models  
7   for utilities in Ohio?

8           A.    Not for utilities in Ohio.

9           Q.    Thank you. Now, when you refer on line  
10   15 to "fiscal impact models," can you -- is that  
11   different than an economic impact model?

12          A.    Yes. A fiscal impact model concerns the  
13   revenues and expenditures for a -- usually a local  
14   government.

15          Q.    And that -- and you are drawing a  
16   distinction between that and the economic impact  
17   model.

18          A.    Yes.

19          Q.    And in your testimony you present an  
20   economic impact model and not a fiscal impact model.

21          A.    That is correct.

22          Q.    Now, on page 2 of your testimony, I want  
23   you to look at line 9, and you indicate there that an  
24   economic impact analysis determines the impact that a

1 specific project may have on a region's economy. Do  
2 you see that --

3 A. Yes.

4 Q. -- reference?

5 A. Yes.

6 Q. Would you consider the economic impact  
7 analysis that you have presented to be a  
8 forward-looking approach?

9 A. Could you define what you mean by that?

10 Q. Well, I'm focusing on the fact that you  
11 said that your analysis looks at what a project or  
12 program may have on a -- on a region's economy, so  
13 I'm wanting to understand whether the economic  
14 analysis you present is -- is -- although it's based  
15 on historic information is to present what may happen  
16 in the future, what the impact may be into the  
17 future.

18 A. No. This is simply a point in time, sort  
19 of a snapshot of the operations of these particular  
20 plants.

21 Q. Thank you. Now, can an economic impact  
22 analysis determine the impact that increased utility  
23 rates paid by customers will have on the economy?

24 A. I'm sure it's possible to do an economic

1 impact analysis of that question.

2 Q. But you have not done that for purposes  
3 of this proceeding, correct?

4 A. That's correct.

5 Q. Would you agree with me generally with  
6 increased utility rates paid by customers will have  
7 economic impacts that affect the regional economy?

8 A. I didn't analyze that question.

9 Q. But just as a principal, would you agree  
10 with me that increased utility rates paid by  
11 customers will have economic impacts that affect the  
12 regional economy?

13 MR. ALEXANDER: Objection, asked and  
14 answered. Go ahead.

15 A. I guess you would have to -- I would need  
16 you to be more specific about what you mean by  
17 economic impacts that would affect the regional  
18 economy.

19 Q. Well, you present, do you not, economic  
20 impacts that affect the regional economy associated  
21 with the Davis-Besse and the Sammis plants continuing  
22 in operation, correct?

23 A. Yes.

24 Q. I'm talking about in -- or, similarly,

1       whether or not the -- you would see economic impacts,  
2       negative economic impacts, on the regional economy  
3       from increased utility rates paid by customers.

4               MR. ALEXANDER:  Objection, asked and  
5       answered.  Go ahead.

6               A.  I really wouldn't know without having  
7       done that analysis.

8               Q.  Would you agree as a concept or the  
9       principle that it is likely that if you increase the  
10      utility rates that are paid by customers, there will  
11      be a negative impact on the regional economy?

12              MR. ALEXANDER:  Objection, asked and  
13      answered.  Go ahead.

14              A.  I couldn't say whether it would be  
15      negative or positive without having done that  
16      analysis.

17              Q.  Have you -- Ms. Murley, have you ever  
18      constructed an economic impact model that considers  
19      the costs associated with increased expenses to  
20      customers and their effect on the economy?

21              A.  No, I have not constructed that type of  
22      model.

23              Q.  Would you agree with me that an economic  
24      impact study by its nature does not consider the



1 costs borne by the community?

2 A. In general economic impact analysis does  
3 not rely on inputs regarding costs.

4 Q. Okay. Now, if the costs were  
5 incorporated into -- into the study, it would change  
6 the study from an economic impact study to a  
7 cost/benefit study; is that correct?

8 A. I don't know if that's really the term  
9 that I would use to describe it.

10 Q. Would you agree that the monetary costs  
11 and the nonmonetary negative impacts that are  
12 inflicted on a community are not generally considered  
13 in the economic impact analysis?

14 MR. ALEXANDER: Objection, compound.  
15 Could we split that?

16 Q. Yes. That's not a problem. Would you  
17 agree with me that, Ms. Murley, that monetary costs  
18 associated with -- let me strike that.

19 Did you consider in your economic impact  
20 analysis presented in this proceeding the monetary  
21 costs of keeping Davis-Besse and Sammis running?

22 A. I only considered the amount of jobs and  
23 payroll and taxes paid by the facility.

24 Q. So you did not consider the monetary

1 costs of keeping the facilities running, correct?

2 A. I guess you would have to be more  
3 specific about what you mean by "costs of keeping the  
4 facility running."

5 Q. Did you consider the expenses that  
6 customers will pay for keeping Davis-Besse and Sammis  
7 running as part of your economic impact analysis?

8 A. We simply looked at the value of what was  
9 produced by the plant and their supplier purchases  
10 and spending by their employees.

11 Q. So you did not look at the cost that  
12 customers pay to keep the facility running.

13 A. We looked at the supplier purchases which  
14 are costs of producing electricity but that was all  
15 that we looked at in terms of the impact of the plant  
16 and the employee purchases and.

17 Q. Would you agree with me, Ms. Murley, the  
18 costs to customers of increased utility rates can be  
19 translated into economic values?

20 A. I'm sure it's possible to run an economic  
21 impact analysis of changes in utility prices.

22 Q. And can you qualitatively or  
23 quantitatively assess the costs of increased utility  
24 rates and include that in an analysis to evaluate the

1 net benefits a project --

2 MR. ALEXANDER: Objection, compound.

3 Q. Let me try to break that down. Can you  
4 as part of an economic analysis, impact analysis,  
5 qualitatively assess the -- let me strike that.

6 Now, you discuss the IMPLAN model on page  
7 3 and 4 of your testimony, and I am going to direct  
8 you to lines 10 and 11 on page 4 where you indicate  
9 that you -- that IMPLAN software combined with data  
10 files purchased from IMPLAN for a particular  
11 geographic region can be used to create multipliers.

12 A. Yes.

13 Q. Now, you state that -- that -- let me  
14 strike that.

15 The multipliers that you are referring to  
16 here are then used to measure the total impact of a  
17 change on all the other industries within the region  
18 study; is that correct?

19 A. The mod -- the IMPLAN software can be  
20 used to create multipliers for any industry for a  
21 specific geography.

22 Q. As a general, the multipliers are used to  
23 measure the total impact of a change on all the other  
24 industries within the region studied?

1           A.    The multipliers measure the  
2           interrelationships between the subject industry and  
3           other industries from which they make purchases and  
4           from which their employees may make purchases.

5           Q.    And then the multipliers feed into the  
6           total economic impact; is that correct?

7           A.    Multipliers can be used to quantify the  
8           total economic impact.

9           Q.    And, in fact, in the study that you  
10          present the multipliers have been used to quantify  
11          the total economic impact, correct?

12          A.    Correct.

13          Q.    Now, would you also agree with me that  
14          the multipliers estimate three components and that  
15          would be the direct effect, the indirect effect, and  
16          the induced effect, correct?

17          A.    Yes, that's correct.

18          Q.    And the multipliers that you set -- that  
19          you used in this economic impact study did estimate  
20          these three components, correct?

21          A.    Yes.

22          Q.    Now, for purposes of your analysis, you  
23          purchased data files for the Ohio region, correct?

24          A.    Yes.

1           Q.    And did you also purchase a data file for  
2           the tri-state region for purposes of your economic  
3           impact on -- of Sammis?

4           A.    I purchased individual county files for  
5           each of the six counties.

6           Q.    And part of the six counties would have  
7           been in -- within a tri-state region, correct?

8           A.    Those six counties are in three different  
9           states.

10          Q.    Would you agree with me that the larger  
11          the geographic area being studied the larger the  
12          multipliers will be?

13          A.    Assuming that geographic area translates  
14          into more industries, yes, generally the larger the  
15          economy the larger the multipliers.

16          Q.    And would you also agree that the larger  
17          the multipliers the greater the total economic impact  
18          created from the economic impact analysis?

19          A.    The greater the economic impact within  
20          that local area.

21          Q.    Now, on page 5 of your testimony, lines  
22          12 through 13, you state that Sammis supports an  
23          estimated 140 full-time equivalent contractors on a  
24          seasonal basis during major maintenance projects. Do

1       you see that reference?

2             A.    Yes.

3             Q.    What do you mean by "seasonal basis"?

4             A.    Sammis employs contractors for one or  
5 multiple months per year to perform certain  
6 maintenance tasks.

7             Q.    And do you know -- can you identify what  
8 months and the maintenance tasks associated with  
9 these seasonal contractors?

10            A.    I was provided with -- I'm sorry.

11            Q.    I'm sorry. I was just making sure you  
12 understood it was for Sammis.

13            A.    Okay. I was provided with information on  
14 the full-time equivalent number of contractors based  
15 on the number of person months and what their  
16 estimated payroll was.

17            Q.    So the person months would tell you what  
18 the seasonal basis of the maintenance project was?

19            A.    I know how -- how many effectively  
20 full-time equivalent people which was, I'm sure,  
21 computed based on how many months each person was  
22 there.

23            Q.    Now, for purposes of the economic impact  
24 study -- let me strike that.

1           For purposes of your economic impact  
2           analysis, did you assume that there were any  
3           constraints on Sammis operating throughout the year?

4           A.    I assumed that the output was based on  
5           the amount of income and that the income and the  
6           number of employees reflected the amount of hours  
7           that those people worked and what amount of work was  
8           required.

9           Q.    And perhaps I am not making myself clear.  
10          For purposes of this study, did you assume that  
11          Sammis was -- what did you assume about Sammis  
12          operations? Were you making an assumption that  
13          Sammis is operating at 100 percent for the entire  
14          study period?

15          A.    I relied on the IMPLAN model as to the  
16          normal level of operations for utility generation  
17          plants.

18          Q.    And do you know what the normal level of  
19          operations or -- for utility plants, in particular  
20          for a coal-burning plant, is in IMPLAN?

21          A.    I do not know the specific assumptions  
22          about the level of operations that they are assuming,  
23          but it is inherent in those output multipliers.

24          Q.    And we established earlier that -- or I

1 believe we established earlier, did we not, that the  
2 assumptions made in IMPLAN related to the electric  
3 generation were not plant specific?

4 A. That's correct.

5 Q. Or industry specific?

6 A. They are specific to the electric  
7 generation industry.

8 Q. Right. But they are not specific by type  
9 of plant, for instance, they do not delineate between  
10 a coal-burning plant versus a gas-fired plant,  
11 correct?

12 A. Correct.

13 Q. Also they would not delineate between a  
14 coal-coal-burning plant and a solar facility,  
15 correct?

16 A. Correct.

17 Q. For purposes of the economic impact  
18 study, does the IMPLAN model assume full employment  
19 is maintained?

20 A. I'm not sure I understand the question.

21 Q. With respect to -- you indicate that --  
22 that as part of the economic impact analysis, there  
23 are certain job assumptions made, correct?

24 A. The direct number of jobs are actual jobs



1       that were provided to me.

2               Q.    Okay.  And those actual number of jobs  
3       are assumed that full -- full employment is  
4       maintained throughout the study period; is that  
5       right?

6               A.    It's based on the actual number of jobs  
7       in 2013.

8               Q.    Now, on page 5, line 17 of your  
9       testimony, you indicate that "Sammis creates a total  
10      economic impact of 585.6 million in the regional  
11      economy each year."  Do you see that?

12              A.    Yes.

13              Q.    And that figure comes from an estimate  
14      for the year 2013?

15              A.    Yes, implying that that's an annual  
16      number, not a number that covers multiple years or  
17      parts of a year.

18              Q.    Okay.  Just to be clear it's an estimate;  
19      it is not an actual figure, correct?

20              A.    Absolutely.  All economic impacts are  
21      estimated.

22              Q.    Thank you.  Now, on page 8 of your  
23      testimony, you indicate that "Statewide, the regular  
24      operations of Davis-Besse generate an annual economic

1       impact of \$473.3 million." Do you see that?

2             A.    Yes.

3             Q.    And that figure also comes from an  
4       estimate for the year 2013?

5             A.    Yes, yes.

6             Q.    Now, when you use the term "regular  
7       operations," what do you mean there?

8             A.    I'm excluding the steam generator  
9       placement and refueling project which is included in  
10      later results for Davis-Besse.

11            Q.    And the employment numbers that were used  
12      for Davis-Besse, were those also based on actual  
13      employment numbers?

14            A.    For the direct, yes.

15            Q.    And those employment numbers would have  
16      corresponded to the year 2013, if you know?

17            A.    Yes.

18            Q.    And going back for a moment, when we  
19      talked about the Sammis economic impact analysis, you  
20      indicated those were actual employee numbers. Would  
21      those also have been based on the actual year 2013?

22            A.    The direct jobs were based on information  
23      for 2013.

24            Q.    Thank you. Now, can you tell me why you

1       looked at the statewide impact of Davis-Besse instead  
2       of just looking at the FirstEnergy service  
3       territory's impact?

4             A.    When I discussed the scope of work with  
5       FirstEnergy Services Company, they chose to look at  
6       the state of Ohio as well.

7             Q.    And do you know what the basis for  
8       looking at the state of Ohio was?

9             A.    No.

10            Q.    And when you say they chose, would that  
11       have been Ms. Noewer of FirstEnergy Solutions; is  
12       that correct?

13            MR. ALEXANDER:  Objection, assumes facts  
14       not in evidence.  Go ahead.

15            A.    I don't recall exactly.

16            Q.    Who would you have talked to about the  
17       scope of the Davis-Besse geographic area?

18            A.    I don't recall exactly who was involved  
19       in that conversation.

20            Q.    Do you know the economic impact from the  
21       regular operations of Davis-Besse that come solely  
22       from the FirstEnergy service territory?

23            A.    No.

24            Q.    Now, on page 10 of your testimony, lines

1       13 and 14, you -- and you have been asked some  
2       questions about this, but I just want to ask some  
3       clarifying questions. You state that the economic  
4       impact is 1.06 billion each year.

5             A.    Yes.

6             Q.    That -- now, does that figure -- the  
7       \$106 billion figure is a -- is a composite figure for  
8       both Sammis and Davis-Besse, correct?

9             A.    It's a combination of the impacts of both  
10       plants.

11            Q.    Okay. And for Sammis we have 585.6  
12       economic impact for the tri-state or the six-county  
13       region, correct?

14            A.    Yes.

15            Q.    And then for Davis-Besse, we have 473.3  
16       million for the ongoing operations on a statewide  
17       basis?

18            A.    Yes.

19            Q.    Now, on page 10 of your testimony at the  
20       very -- at the very bottom, I believe, you state that  
21       "The effects on local communities would be  
22       devastating if these Plants closed." Do you see  
23       that?

24            A.    Yes.

1 Q. I guess that's actually lines 14 and 15.

2 A. Uh-huh.

3 Q. Now, what is your understanding about  
4 whether or not these plants will or will not close?

5 A. I have -- I have no specific information  
6 about that. I was simply making a comment about the  
7 importance of the plants to these local communities.

8 Q. Okay. Now, on page 10, lines 21 through  
9 23, you state that "If additional levies were passed  
10 to make up for some of the lost property tax  
11 revenues, that would increase the amount of money  
12 that residents and businesses spend on taxes and"  
13 then that would "correspondingly decrease the amount  
14 that was available for other types of purchases." Do  
15 you see that?

16 A. Yes.

17 Q. If additional dollars are collected from  
18 customers to support these two plants, would you also  
19 agree that there would be a corresponding decrease in  
20 the amount of money that residents and businesses  
21 have available for other types of purchases?

22 MR. ALEXANDER: Objection, asked and  
23 answered in Mr. Fisk's examination. Go ahead.

24 A. Assuming that the amount of money that

1 the residents had to spend remained the same, there  
2 would be a reallocation of their spending.

3 Q. Would you agree with me, Ms. Murley, that  
4 a positive economic impact coming out of an economic  
5 impact study does not necessarily mean that a product  
6 should be supported?

7 MR. ALEXANDER: Could I have that  
8 question reread.

9 (Record read.)

10 MR. ALEXANDER: Objection to the phrase  
11 "product" as vague.

12 Q. I'm sorry, project. Let me restate that  
13 just to be clear. Would you agree, Ms. Murley, that  
14 a positive economic impact coming out of an economic  
15 impact study does not necessarily mean that a project  
16 such as the Davis-Besse or Sammis project should be  
17 supported?

18 A. I can't really comment on how people  
19 should use the information from the economic impact  
20 study to make those kinds of judgments.

21 Q. Are you presenting any recommendation to  
22 the PUCO about how it should use the results of your  
23 economic impact study?

24 A. I'm presenting the economic impacts.

1           Q.    But you are not making a recommendation  
2           to the Public Utilities Commission of Ohio that the  
3           results should be used in any particular way.

4           MR. ALEXANDER:  Objection to the extent  
5           it calls for a legal conclusion.  Go ahead.

6           A.    I'm not making a specific recommendation  
7           about how the results should be used.

8           Q.    Are you making a recommendation,  
9           Ms. Murley, by presenting your economic impact  
10          studies that the Commission approve the company's  
11          application in this case?

12          A.    I'm presenting my testimony on behalf of  
13          the companies.

14          Q.    Should the PUCO base its decision in this  
15          case upon the results presented by your economic  
16          impact study?

17          MR. ALEXANDER:  Objection.  Calls for a  
18          legal conclusion.  Go ahead.

19          A.    I'm sure there are many factors that they  
20          will consider.

21          Q.    In your -- let me strike that.

22                  Under the study that you present, the  
23          economic impact analysis of Sammis and Davis-Besse,  
24          can we tell whether or not the spending proposed for

1       those plants stimulates the economy more than any  
2       other kind of investment?

3             A.     That question is outside the scope of  
4       what I analyzed.

5             Q.     So you did not examine or compare the  
6       benefits that could be obtained from using customers'  
7       resources for other activities, correct?

8             A.     That's correct.

9             Q.     And did you examine in your benefit -- in  
10      your cost -- in your economic impact analysis who  
11      benefits and who pays for the Davis-Besse and Sammis  
12      plant?

13            A.     Those types of questions are outside of  
14      the scope of economic impact analysis.

15            Q.     And did you not consider the transfer of  
16      money between customers and the utility as part of  
17      your analysis?

18            A.     That's a different type of analysis.

19            Q.     Does your economic impact analysis  
20      consider that support for these plants may displace  
21      other investments that might otherwise occur?

22            A.     I didn't look at that in my analysis.

23            Q.     So you did not study the displacement  
24      costs or consider whether other options may have



1 brought in even more positive economic impact?

2 MR. ALEXANDER: Objection, asked and  
3 answered. Go ahead.

4 A. I don't believe I can improve upon my  
5 answer.

6 Q. Can you tell me what the report that you  
7 present -- let me strike that.

8 Let's go to your Attachment SM-1. And as  
9 we've testified, the Sammis -- the economic impact  
10 analysis for Sammis involved the tri-state region,  
11 correct?

12 A. It involved six specific counties in  
13 three states.

14 Q. Yes. And you also testified that you do  
15 not know the Ohio-specific revenue and economic  
16 impact of Sammis.

17 A. I didn't look at that.

18 Q. Now, you indicate that Sammis employs  
19 close to 400 people. Do you see that reference?

20 A. No. Where are you looking?

21 Q. In the second paragraph on page 1, I'm  
22 sorry.

23 A. Yes.

24 Q. Do you know whether that is full- or

1 part-time employees?

2 A. I assumed that's total employment.

3 Q. So that would be full- as well as  
4 part-time?

5 A. Yes.

6 Q. Do you know the breakdown between full-  
7 and part-time employees?

8 A. Not off the top of my head, no.

9 Q. Okay. And do you know as of what date  
10 that 400 people figure is -- is related to?

11 A. That's 2013 data.

12 Q. Okay. Do you know the current amount of  
13 employees at Sammis?

14 A. What do you mean by "current"?

15 Q. As we sit here today, can you tell me  
16 what -- what amount of employees there are at Sammis?

17 A. No.

18 Q. Do you know how that number compares to  
19 the 2013 400 employee number?

20 A. Since I don't know current employment,  
21 no, I can't comment on how it compares.

22 Q. And do you know as you sit here today the  
23 breakdown of employees between Ohio employees and the  
24 Pennsylvania and West Virginia employees?

1           A.    For what time period?

2           Q.    As we sit here today, can you tell me  
3           what -- what the breakdown is between the Ohio  
4           employees versus Pennsylvania and West Virginia  
5           employees of Sammis?

6           A.    No.

7           Q.    Are you aware of any changes in the  
8           percentages of employees from 2013 to the current  
9           date?

10          A.    I didn't --

11          Q.    That comes from -- I'm sorry. That comes  
12          from the tri-state region.

13          A.    I don't have data on the current today  
14          distribution of where employees live.

15          Q.    Now, can you tell me -- you have listed  
16          that the annual payroll is \$34 million and that's  
17          mentioned again in connection with the 400 employees.  
18          Do you know how much of the employee payroll is Ohio  
19          payroll alone and not related to West Virginia or  
20          Pennsylvania?

21          A.    I do not know how much payroll is  
22          associated with employees that live in Ohio versus  
23          those that live in other states.

24          Q.    Do you know, Ms. Murley, whether the

1 employment numbers vary with the production of energy  
2 coming out of Sammis?

3 A. I haven't looked at a time series of  
4 employment relative to production levels.

5 Q. Do you know whether -- let me strike  
6 that.

7 Do you know whether planned or unplanned  
8 outages at Sammis affect the employment numbers of --  
9 at Sammis?

10 A. I haven't specifically looked at that  
11 issue.

12 Q. Does your model assume that -- let me  
13 strike that.

14 Does the economic impact analysis in your  
15 study assume that production will not vary coming out  
16 of Sammis?

17 A. It's simply a snapshot for a particular  
18 point in time.

19 Q. So that snapshot would assume a static  
20 level of production?

21 A. Over what time period?

22 Q. Over the entire study period.

23 A. I don't think it matters whether the  
24 actual level of production is exactly equivalent on

1 every day in the year.

2 Q. But under your model you're assuming that  
3 production is the equivalent of that snapshot for the  
4 entire period, correct?

5 A. For the whole year I'm assuming that is  
6 the amount of production.

7 Q. And, in turn, you are also making -- the  
8 economic impact analysis also makes the assumption  
9 that 100 percent of the employees will be constant or  
10 that 100 percent of the employees will be constant  
11 throughout the entire year, correct?

12 A. The analysis assumes that this amount of  
13 employees would work there all year.

14 Q. Thank you. Now, on page 1 of your --  
15 your SM-1 attachment, you state that the estimates  
16 made in your analysis are based on hypothetical  
17 assumptions, among other things. Do you see that?

18 A. Uh-huh.

19 MR. ALEXANDER: You have to answer -- you  
20 have to answer orally.

21 A. Yes.

22 Q. Okay. And we're referring to the last  
23 sentence on page -- on page 1, correct?

24 A. Yes.

1           Q.    Now, the hypothetical assumptions, those  
2   are made by IMPLAN, correct?

3           A.    Yes.  These are assumptions about  
4   spending patterns that are made by IMPLAN.

5           Q.    And have you examined or do you know of  
6   each of those hypothetical assumptions that are made  
7   by IMPLAN for purposes of the economic impact  
8   analysis you present in this proceeding?

9           MR. ALEXANDER:  Objection, overbroad.  Go  
10   ahead.

11          A.    IMPLAN is a very complex model, and I  
12   can't comment on every specific assumption.

13          Q.    So you don't know what -- what specific  
14   assumptions are made by IMPLAN for purposes of your  
15   net impact analysis presented in this proceeding?

16          MR. ALEXANDER:  Again, objection,  
17   overbroad.

18          A.    Could you be more specific about what  
19   types of assumptions?

20          Q.    Well, Ms. Murley, I am trying to explore  
21   the statement that you made on page 1 of the SM-1  
22   where you refer to hypothetical assumptions, so I am  
23   just trying to understand what hypothetical  
24   assumptions there are made by IMPLAN and what your

1 knowledge is of those assumptions.

2 A. IMPLAN --

3 Q. So -- go ahead.

4 A. IMPLAN makes assumptions about the types  
5 of goods and services that are required by industries  
6 in the electric utility generation sector, and it  
7 makes assumptions about what share of those purchases  
8 can be made locally. And it makes assumptions about  
9 household spending patterns of employees based on  
10 their income level, what particular goods and  
11 services they buy and what quantities as an  
12 aggregate.

13 Q. Can you tell me how many hypothetical  
14 assumptions are made by IMPLAN? Are we talking about  
15 hundreds of assumptions?

16 A. I couldn't quantify exactly how many  
17 assumptions IMPLAN makes in building their software.

18 Q. A lot of assumptions, would you agree?

19 A. It's a very complex model.

20 Q. Now, you indicate on footnote 1 that  
21 "This analysis," and I assume you are referring to  
22 the economic impact analysis there?

23 A. Yes.

24 Q. "Is based on the best available

1 information." Do you see that reference?

2 A. Yes.

3 Q. And can you tell me the best available  
4 information -- where that best available information  
5 comes from?

6 A. It's referring to the information that  
7 was provided to me by FirstEnergy Services Company.

8 Q. Okay. You're not referring to  
9 information -- the data files on geographic  
10 information; is that right?

11 A. I would say that the IMPLAN data is also  
12 based on the best available assumptions.

13 Q. But when you refer to "the best available  
14 information" there in that footnote, you are  
15 referring to the information from FirstEnergy  
16 Solutions, correct?

17 A. I am.

18 MR. ALEXANDER: Objection, misstates  
19 prior testimony. I believe she testified FirstEnergy  
20 Service Company but go ahead.

21 A. I'm referring to all of the assumptions  
22 and information that I used in the analysis.

23 Q. Now, the information and assumption that  
24 was provided to you by FirstEnergy Services Company,



1       you've identified that -- that information and that  
2       information is found on Attachment 1 for Sammis; is  
3       that right?

4             A.     That's correct.

5             Q.     And was there any other information that  
6       was specifically provided for by FirstEnergy Services  
7       Company?

8             A.     No.

9             Q.     Now, you also indicated in SM-1 even if  
10      the assumptions were to occur, there would usually be  
11      differences between the estimates and actual results.  
12      Do you see that?

13            A.     Yes.

14            Q.     Is that based on your experience from  
15      running the economic impact model?

16            A.     Yes, in that we don't know exactly who  
17      their suppliers are and who the suppliers to their  
18      suppliers are, and so we are making assumptions about  
19      that.

20            Q.     And has your experience been there are  
21      differences between the estimates and actual results  
22      that you present on -- in economic impact analysis in  
23      general?

24            A.     I'm making assumptions about their

1 purchasing patterns. I have to assume that there may  
2 be differences in actual purchasing patterns and my  
3 assumptions.

4 Q. Do you ever have to -- after you conduct  
5 the economic impact analysis, do you ever go back and  
6 look at the differences between the estimates and the  
7 actual result?

8 A. Because the estimates, for example, for  
9 the induced impacts include not only the supplier  
10 purchases made by FirstEnergy Services Company or the  
11 operate -- or the operating entity for Sammis but  
12 also the suppliers to their suppliers, it would be  
13 impossible to verify all of that information using  
14 actual data and isolate those specific activities  
15 because, you know, lots of things are happening in  
16 the economy at the same time. This isn't all  
17 happening in isolation.

18 Q. So it's not -- would you agree with me  
19 it's not something that you generally do after you  
20 conduct an economic impact analysis? You don't look  
21 at what you estimated and what actually occurred?

22 A. It would be impossible to look at what  
23 exactly actually occurred.

24 Q. Can you quantify the -- what the

1 difference is that you refer to, what percentage  
2 difference you would expect between the estimated  
3 results of an economic impact analysis and the actual  
4 results variance, what the variance would likely be?

5 A. There are many variables involved in that  
6 question. I can't give you an exact percentage.

7 Q. Can you give me a general percentage  
8 where -- can you tie it to a general percent what the  
9 difference would be likely between the economic  
10 impact analysis estimate and the actual economic  
11 impact?

12 MR. ALEXANDER: Objection. She testified  
13 the actual can't be calculated so asked and answered.  
14 Go ahead.

15 A. I don't believe I can improve on that  
16 answer.

17 Q. Now, your footnote you also indicate that  
18 events or circumstances frequently do not occur as  
19 expected. Do you see that?

20 A. Yes.

21 Q. Can you tell me by -- what you are  
22 referring to there?

23 A. Things can change in the actual course of  
24 operations and this is looking at many iterations

1 of -- of buyers and suppliers.

2 Q. So any event or circumstances -- let me  
3 strike that.

4 So you could be referring to any number  
5 of factors, or you could be referring to any number  
6 of factors that are looked at in the impact analysis;  
7 is that fair?

8 A. Yes.

9 Q. Could be something like customer  
10 spending, correct?

11 MR. ALEXANDER: There's no question  
12 pending.

13 Q. You could be referring to, for instance,  
14 customer spending would be something that frequently  
15 does not occur as expected?

16 A. No, I wouldn't think of that as what I  
17 would typically be looking at.

18 Q. Can you tell me what you would think of  
19 as typically being looked at then?

20 A. Suppose, for example, that a supplier or  
21 a supplier to a supplier went out of business and had  
22 to be replaced with someone in a different location.

23 Q. Okay. Can you give me any other  
24 instances that -- that you would refer to as that

1 relates to events or circumstances that frequently do  
2 not occur as expected?

3 A. Suppose that some particular employee  
4 household changed their spending pattern because of  
5 some particular personal event that happened in their  
6 family.

7 Q. Can you give me any other factors that  
8 would equate to events or circumstances that  
9 frequently do not occur as expected?

10 A. I'm sure there are plenty of other  
11 examples but those are the examples I can come up  
12 with at this moment.

13 Q. Would you agree with me that perhaps  
14 employment levels might be something that would fit  
15 as an event or circumstances that frequently did not  
16 occur as expected?

17 A. In this case I was using employment data  
18 for a period that had already occurred.

19 Q. Understood. Now, you state that "The  
20 information and the observations," and I am still in  
21 the footnote, "The information and observations are  
22 based on our present knowledge of components of  
23 development and the current conditions of the  
24 effected area." Do you see that?

1           A.    Yes.

2           Q.    Can you define for me what you mean for  
3 "present knowledge"?  What period of time you are  
4 talking about?

5           A.    What is currently known about the  
6 activities about the plant and the economic base of  
7 the area as of the time of the report being  
8 completed.

9           Q.    And that would be based upon the -- the  
10 IMPLAN data purchased?

11          A.    As well as the data provided to me by  
12 FirstEnergy Services Company.

13          Q.    Okay.  And then when you refer to the  
14 current conditions of the affected area, current  
15 would be a reference to the timeframe that the  
16 analysis was undertaken?

17          A.    In this case the timeframe that the  
18 IMPLAN data applies to.

19          Q.    And that would be 2013?

20          A.    The data is always delayed one year, and  
21 so the IMPLAN data is for 2012.

22          Q.    Okay.  Would you -- do you believe it's  
23 appropriate to consider the nonrecurring impacts of  
24 activities undertaken at a plant in your net --

1 net -- in your economic impact analysis?

2 A. Yes, as long as it's clear that they are  
3 nonrecurring activities.

4 Q. Should the nonrecurring activities be  
5 looked at in a different light than the recurring  
6 activities in determining the economic impact that  
7 results from your study?

8 A. For the specific year we looked at the  
9 one-time activities really did occur in that year and  
10 really did contribute to the economic impacts in that  
11 particular year. We're not suggesting that they  
12 would occur again in the next year.

13 Q. Does it depend on what use you want to  
14 make of the economic study when the nonrecurrent  
15 activities should be included?

16 A. I think it's just important to be clear  
17 about what's recurring and what's nonrecurring. I  
18 suppose you may refer to one or the other depending  
19 on what you were looking at.

20 Q. And to be clear the Davis-Besse  
21 nonrecurring activity was separate from the recurring  
22 activities and was identified separately in the  
23 economic impact analysis that you conducted?

24 A. It's identified here separately in the

1 tables.

2 Q. Now, on page 2 of your study, SM-1, still  
3 on the Sammis issue, you've identified the  
4 \$585.6 million effect on the region, the economy in  
5 Ohio, West Virginia, and Pennsylvania. Is that the  
6 same as the annual economic impact on the regional  
7 economy for Sammis's regular operation that's  
8 described on page 4?

9 A. Are you referring to the first paragraph  
10 on page 4?

11 Q. Yes.

12 A. Yes. Those numbers are the same.

13 Q. And that's the figure that's identified  
14 as total output on page 3 under Figure 1?

15 A. That's correct.

16 Q. Does that \$585.6 million figure include  
17 the regular operations impact that's shown on the top  
18 portion of Figure 1?

19 A. I'm sorry. I am not seeing where you are  
20 looking.

21 Q. I've got -- I've got page 3 of SM-1 for  
22 Sammis, Figure 1, and I am looking at the 585.62  
23 figure called total output. And my question is does  
24 that 585.62 figure include the impacts that are shown



1 in the top portion of Figure 1 as the W.H. Sammis  
2 regular operation?

3 A. So economic impacts are expressed in  
4 terms of their variable output, income, and jobs. In  
5 this case there's no output number that's listed in  
6 that top section.

7 Q. But the 582.62, that's the total economic  
8 impact, correct?

9 A. Total output.

10 Q. Total output and that is the figure you  
11 have presented as the economic impact of -- of the  
12 Sammis plant on the region -- on the geographic  
13 region you identified as the tri-state region,  
14 correct?

15 A. Total output is routinely referred to as  
16 the total economic impact.

17 Q. And that's how you've referred to it in  
18 your testimony, correct?

19 A. Yes.

20 Q. Now, I am looking at Figure 1, and I am  
21 looking at the total jobs 1,059 in Figure 1. Do you  
22 see that?

23 A. Yes.

24 Q. Is that the 1,100 jobs that are

1       referenced on page 2 that the operations of the power  
2       plant directly and indirectly support?

3             A.    Yes.  I round.

4             Q.    In the first -- you've rounded up or  
5       rounded down?  The 1,100 is rounding up?

6             A.    Yes.

7             Q.    And that figure was derived as an input  
8       of IMPLAN?

9             A.    Yes.

10            Q.    Does IMPLAN have 1,100 jobs that are Ohio  
11       specific versus West Virginia and Pennsylvania?

12            A.    No.

13            Q.    Could it have provided that information  
14       had you set the parameters differently?

15            A.    No, because when you create the  
16       multipliers, you have to combine those -- the data  
17       for all of those regions, the IMPLAN model, that  
18       data, and it becomes one region, and you cannot go  
19       back and break out the impact in a particular county  
20       using that regional data.

21            Q.    But if you -- it started with the  
22       regional data being Ohio specific; it would have  
23       related in Ohio-specific jobs being created, correct?

24            A.    I could have created multipliers for a

1 specific area in Ohio, and then I would have gotten  
2 the economic impacts for that specific area.

3 Q. Yes, that was my question. Now, with  
4 regard to the revenue impact, you indicate there is a  
5 5.5 million in annual property tax revenues. Do you  
6 see that?

7 A. Yes.

8 Q. Is that the Ohio-only effect, or does  
9 that include any other area affected?

10 A. That's the amount of property tax paid by  
11 the plant and since the plant is located in Ohio, all  
12 of those property taxes are paid in Ohio.

13 Q. And the same would go for the 5.6 million  
14 in indirect state and local revenues? Is that  
15 related to Ohio only?

16 A. No. That's based on where those  
17 employees live and have a residence.

18 Q. In Figure 6 on page 8 that would break  
19 that figure down with the state information; is that  
20 correct?

21 A. That's correct.

22 Q. So if we wanted to isolate the Ohio-only  
23 revenue impact, we would just subtract out the  
24 Pennsylvania and West Virginia portion for that

1 particular -- that particular factor?

2 A. Are you referring to the \$5.6 million  
3 number on figure 6?

4 Q. Yes.

5 A. Yes, you could subtract out the  
6 Pennsylvania and West Virginia information.

7 Q. Now, on page 4 of SM-1, going back, you  
8 state that the \$585.6 million impact on the regional  
9 economy includes the impact of production activity at  
10 the plant. Do you see that, the very first  
11 paragraph?

12 A. Oh, okay. Yes.

13 Q. Can you tell me what you mean by  
14 production activity?

15 A. Direct output.

16 Q. And you do not necessarily mean how many  
17 megawatts of energy or capacity are being produced,  
18 correct?

19 A. No. I am referring to direct output.  
20 The total output includes direct output.

21 Q. Okay. Now, on page 7, you indicate --  
22 you have a multiplier of 1.17.

23 A. Yes.

24 Q. Do you see that?

1           A.    Yes.

2           Q.    Does that figure include the tri-state  
3 impacts; is that correct?

4           A.    That multiplier is specific to the  
5 six-county region.

6           Q.    Okay. And you do not know what the  
7 multiplier effect would be if it was Ohio only?

8           A.    No, I do not.

9           Q.    Would you expect that the employer impact  
10 would be less if it was Ohio only instead of the  
11 tri-state region?

12          A.    What do you mean by Ohio only?

13          Q.    Ohio counties, Ohio counties and Ohio  
14 employees only considered as opposed to counties that  
15 include West Virginia and Pennsylvania.

16               MR. ALEXANDER: I guess to clarify, are  
17 you asking all Ohio counties or just for the Ohio  
18 counties included in the six-county area?

19          Q.    Let me -- let me be more specific.  
20 Instead of using the tri-county area we limited the  
21 economic impact study to the Ohio counties, the four  
22 Ohio counties, would you expect that the multiplier  
23 impact would be less than the multiplier impact  
24 produced by using a six-county area?

1           A.   Typically if there are fewer businesses  
2           and employees within the Ohio counties listed there  
3           versus all of the counties combined, then the  
4           multipliers would be less.

5           Q.   And if the multipliers are less, the  
6           economic impact coming out of your economic impact  
7           study would be less, correct?

8           A.   Yes. In what proportion is very unclear.

9           Q.   Yes. I understand that. Now, on page 5  
10          of SM-1 you talk about local vendor purchases  
11          creating an impact of \$50.9 million per year. Do you  
12          see that reference under Section 3.2? And you refer  
13          to suppliers within the region. Are you talking  
14          about the tri-state region there?

15          A.   Yes.

16          Q.   So we do not know from your economic  
17          analysis what the Ohio impact would be, correct?

18          A.   Correct.

19          Q.   And do we know -- you indicate under  
20          Figure 2 "the typical local supplier purchases." Do  
21          you know -- let me strike that.

22                 Now, you state on page 5 that an  
23          estimated 94 percent of employees live in the  
24          seven -- in the seven-county region. Do you see

1       that?

2               A.    Yes.

3               Q.    Where did the remaining 6 percent live?

4               A.    In Figure 3 on page 6.

5               Q.    Yes.

6               A.    They live in other counties not listed in  
7       Ohio, West Virginia, and Pennsylvania.

8               Q.    Do you know what -- where those counties  
9       would be indicated?

10              A.    I don't recall exactly which counties  
11       those were.

12              Q.    Do you know, were they non-Ohio counties?

13              A.    Well, in --

14                   MR. ALEXANDER:  Objection, vague.  Are  
15       you referring to the phrase "Ohio counties" on Figure  
16       3?

17                   MS. GRADY:  Well, I wasn't referring to  
18       that.  I was asking the witness about that.

19              A.    So if you look at Figure 3, you can see  
20       the breakdown of -- by state of people who did not  
21       live in the selected counties.

22              Q.    Yes.  And I'm still having trouble seeing  
23       where the 6 percent is.  You -- you indicate that  
24       there is 94 percent living in the seven-county

1 region. That leaves 6 percent. So where is the  
2 6 percent shown on Figure 3?

3 A. Since the total on Figure 3 adds to  
4 100 percent, they are in other counties in those  
5 states that aren't specifically listed.

6 Q. So would I add up the other Ohio  
7 counties, other West Virginia counties, and other  
8 Pennsylvania counties?

9 A. Yes.

10 Q. Is that what you are suggesting?

11 A. Yes. And there's --

12 Q. And I get 7 percent.

13 A. There's a rounding difference there.

14 Q. Okay. Thank you. Now, when you were  
15 counting the employee and contractor spending, do the  
16 numbers produced show spending in the tri-state area  
17 versus the Ohio area?

18 A. Yes.

19 Q. And the 540 regular employees and  
20 contractors listed on page 5, those are tri-state  
21 numbers?

22 A. Which numbers?

23 Q. 540 regular employees and contractors on  
24 the bottom of page 5 that you indicate.



1           A.    The 540 is the number of people that work  
2           at the plant.

3           Q.    And so that would involve -- that would  
4           be from the tri-state area versus the Ohio-only area.  
5           That's my question.

6           A.    In terms of where those people live?

7           Q.    Yes.

8           A.    Yes.

9           Q.    And on page 6 the \$32.5 million output  
10          is -- shows induced impact that is for the tri-state  
11          region, correct?

12          A.    Yes.

13          Q.    And the job support of the 160 local jobs  
14          reflects the tri-state impact again, correct?

15          A.    Yes.

16          Q.    And the 1,100 jobs shown on page 6 is a  
17          figure related to the tri-state impact, correct?

18          A.    Correct.

19          Q.    And the 67.3 million also is the annual  
20          payroll related to the tri-state impact.

21          A.    Yes.

22          Q.    With respect to page 8, at the bottom of  
23          page 8, you've got a figure of \$295 million that  
24          employees could generate in local sales revenues. Do

1       you see that?

2               A.     295,000.

3               Q.     Yes.   Do you see that figure?

4               A.     Yes, I do.

5               Q.     Is that related to the tri-state impact?

6               A.     Yes, it is.

7               Q.     Now, you indicate on page 9 you assume  
8       local employees spend 31 percent of their wages on  
9       goods that are subject to sales tax.   Do you see  
10      that?

11              A.     Yes.

12              Q.     And that data is based on the Census  
13      Annual Consumer Expenditure Study?

14              A.     Yes.

15              Q.     Do you know what date that Census Annual  
16      Consumer Expenditure Study was?

17              A.     I believe that would have been 2013 data  
18      because it was available in 2014 and there is a  
19      slight delay.

20              Q.     And this is an annual study as far as you  
21      know?

22              A.     Yes, it is.

23              Q.     And do you have a copy of the 2013 -- do  
24      you have a copy of the census that you used to derive

1 the 31 percent figure?

2 A. It's available on the census website.

3 Q. Thank you. Do you know if they have  
4 published a 2014 study --

5 A. I doubt it.

6 Q. -- or later study than that which was  
7 used by you in your economic impact analysis?

8 A. I don't know.

9 Q. Now, on page 9 of your testimony, you  
10 refer to the Sammis employees and local contractors  
11 that could generate approximately 1.1 million in  
12 local taxes. Do you see that?

13 A. Yes.

14 MR. ALEXANDER: Ms. Murley, one point of  
15 clarification. You said of her testimony. Did you  
16 actually mean of the exhibit?

17 Q. I'm sorry, of the exhibit. We are still  
18 on SM-1, and I am referring to page 9 of that  
19 exhibit.

20 A. Yes.

21 Q. So is that 1.1 million in local tax, is  
22 that -- is that the tri-state area effect?

23 A. Yes.

24 Q. And the 2.2 million in state taxes

1 referred to on page 9, is that state taxes for Ohio  
2 and Pennsylvania?

3 A. Yes, but in both cases this is specific  
4 to income taxes.

5 Q. So it relates to the income of the  
6 employees.

7 A. Yes.

8 Q. Correct?

9 A. Yes, that's correct.

10 Q. And the employees will be coming from  
11 Ohio residing in Ohio, Pennsylvania, and West  
12 Virginia.

13 A. That's correct.

14 Q. Now, on page 10 of Attachment SM-1, under  
15 the summary, you refer to capital investments  
16 associated with this plant. Do you see that?

17 A. Yes.

18 Q. Can you tell me what you're referring to  
19 there?

20 A. Any capital investments would translate  
21 into additional assessment value that would  
22 subsequently generate property taxes.

23 Q. And so when you make that reference, you  
24 are not talking about any specific Sammis capital

1 investments that you are aware of, correct?

2 A. Correct.

3 Q. Have you reviewed the capital investments  
4 associated with Sammis that are to be made or have  
5 been made in the past?

6 A. No.

7 Q. Are there any future capital investments  
8 that you are aware of at -- as we sit here today  
9 with -- related to Sammis?

10 A. No. I am not aware of any specific  
11 investment.

12 Q. Okay.

13 MR. ALEXANDER: Let's go off the record  
14 for just one moment.

15 (Discussion off the record.)

16 (Thereupon, a lunch recess was taken at  
17 12:03 p.m.)

18 - - -

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Wednesday Afternoon Session,

January 14, 2015.

- - -

SARAH MURLEY

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

CROSS-EXAMINATION (Continued)

By Ms. Grady:

Q. Good afternoon.

A. Hello.

Q. I'm going to go back to page 10 of SM-1  
under the section entitled "Summary."

A. Okay.

Q. And I've got more questions to follow up  
with you on there. You indicate in that particular  
paragraph that cutbacks at this plant would not only  
impact FirstEnergy employees at the facility but also  
impact surrounding businesses. Do you see that  
reference?

A. Yes.

Q. What do you mean by cutbacks?

A. If the plant were to reduce its  
employment and operations and assumably supplier  
purchases, that those supplier businesses would be

1       impacted and also businesses that sell to the  
2       employees.

3               Q.    And is it your understanding if the  
4       company doesn't get what it wants through the -- in  
5       its application, that there had been cutbacks at the  
6       plant?

7               A.    I don't really know.

8               Q.    Are you aware of what the reasons there  
9       would be cutbacks at the plant?

10              A.    No.   This was just a general statement.

11              Q.    Was this particular -- was this  
12       particular paragraph, was this a paragraph that you  
13       prepared on your own, or were you provided some  
14       assistance with the drafting of this paragraph?

15              A.    I wrote this myself.

16              Q.    Let's go now to SM-2.   And this  
17       attachment, correct, refers to the economic impact  
18       analysis for the Davis-Besse nuclear power station,  
19       correct?

20              A.    Yes.

21              Q.    Now, that study you looked at the ongoing  
22       operations of Davis-Besse plus looked at a steam  
23       generator -- or generator placement and refueling  
24       project that took place over the last six months; is

1       that correct?

2               A.    Yes.

3               Q.    And would you agree with me this differs  
4       from the approach taken to the economic impact study  
5       of Sammis?

6               A.    I would not say the approach differs.

7               Q.    But we -- in Sammis you were not looking  
8       at any nonrecurring event, correct?

9               A.    Correct.

10              Q.    And what is the reason for looking at the  
11       nonrecurring event, the steam generator placement and  
12       refueling project for Davis-Besse?

13              A.    It created a very significant economic  
14       impact in that year.

15              Q.    Do you know how often the stem generator  
16       placement and refueling will take place for  
17       Davis-Besse? Do you know what the schedule for that  
18       would be?

19              A.    No.

20              Q.    Are you assuming or do you know whether  
21       or not refueling will occur for the Davis-Besse  
22       nuclear power station in the future?

23              A.    I'm sure refueling would occur in the  
24       future. If the plant --



1 Q. Can you say -- I'm sorry. Go ahead.

2 A. If the plant continues to operate,  
3 refueling on a periodic basis is a regular part of  
4 nuclear plant operations.

5 Q. Do you know how often refueling in  
6 general is done at a nuclear power station?

7 A. No.

8 Q. Do you know with respect to the  
9 Davis-Besse nuclear power station how often refueling  
10 occurs?

11 A. No.

12 Q. With respect to the steam generator  
13 placement portion of the project, do you know whether  
14 that is a one-time event or that would be a recurring  
15 event?

16 A. I'm sure at some point in the future the  
17 steam generator would need to be replaced. Again,  
18 I'm sure it doesn't last forever, but I don't know  
19 what the exact timing would be.

20 Q. And -- let me strike that. And were you  
21 directed under your economic impact analysis to do  
22 this additional analysis related to the  
23 nonrecurring -- let me strike that.

24 Were you directed by the service company

1 to study the generator placement refueling project  
2 for purposes of your economic impact analysis?

3 A. They requested that I include that, yes.

4 Q. And with respect to the other projects  
5 that you have worked on or -- let me strike that.

6 In other economic impact analyses that  
7 you have conducted, have you as a matter of course  
8 looked or done an analysis which would encompass  
9 nonrecurring events related to a facility or event?

10 A. Yes, I commonly look at nonrecurring  
11 events.

12 Q. Now, let's go to page 1 of your  
13 testimony. I'm sorry, page 1 of SM-2. And there you  
14 refer to an estimated 2,290 additional local and  
15 nonlocal contractors that were employed over the last  
16 six months. Do you see that?

17 A. Yes.

18 Q. Can you tell me what -- how you define  
19 nonlocal contractors?

20 A. Someone that had alternate living -- that  
21 lived far enough away that they did not go home at  
22 night. They lived in some sort of, you know, hotel  
23 or apartment or temporary rental in the region while  
24 they were working there.

1           Q.   And those could be -- could possibly be  
2   contractors that are outside of Ohio?

3           A.   Sure.

4           Q.   Is it likely that they are outside of  
5   Ohio or can you not -- can you tell?

6           A.   I really don't know.

7           Q.   Do you know how many of the 2,290 were  
8   nonlocal contractors?

9           A.   Yes. Well, the nonlocal contractors  
10   worked a total of 2,737 person weeks based on  
11   information on page 6 of SM-2.

12          Q.   So you just know the hours they worked,  
13   not the number of nonlocal.

14          A.   Right, because many of them were there  
15   for just a short period of time.

16          Q.   Okay. Now, in -- in footnote 1 on page  
17   1, you refer to Attachment A. Is that the same as  
18   Attachment 1?

19          A.   Yes.

20          Q.   Now, on page 2 you have an estimate of  
21   1,900 jobs shown on -- as an economic impact of  
22   ongoing operations under the first bullet point. Do  
23   you see that?

24          A.   Yes.

1           Q.    Was that the same -- does that refer to  
2           the same figure as the 1,862 jobs shown in Figure 1  
3           on page 4?

4           A.    Yes.  It's just rounded.

5           Q.    Okay.  Now, on page 2 you also indicate  
6           that Davis-Besse creates an annual economic impact of  
7           473.3 million from ongoing operations, correct?

8           A.    Yes.

9           Q.    Is that an Ohio-only impact?

10          A.    Everything in this report is Ohio only  
11          but some things are specific only to Ottawa County.

12          Q.    Okay.  And Ottawa County is where  
13          Davis-Besse is located, correct?

14          A.    Correct.

15          Q.    Okay.  Now, the 689 employees referenced  
16          in the second bullet with annual payroll of 64.7  
17          million, do you see that reference?

18          A.    Yes.

19          Q.    Do you know how much of the payroll is  
20          Ottawa County?

21          A.    I do not know where --

22          Q.    Okay.

23          A.    No.

24          Q.    And in -- do you understand why you

1       were -- the geographic area was defined as the entire  
2       state of Ohio for Davis-Besse for purposes of your  
3       economic impact study?

4             A.    I don't recall exactly why we chose the  
5       whole state of Ohio.

6             Q.    As you sit here today, do you know a  
7       reason why you would want to choose the entire state  
8       of Ohio to look at the economic impact of  
9       Davis-Besse?

10            A.    Not specifically.

11            Q.    What about generally why you would want  
12       to look at the entire state of Ohio to determine the  
13       economic impact of the Davis-Besse?

14            A.    Versus Ottawa County, I am sure there are  
15       a number of purchases and employees' spending  
16       activity that occurs outside of Ottawa County.

17            Q.    I guess I'm also trying to understand why  
18       you would look at the state of Ohio for Davis-Besse  
19       and not look at the state of Ohio for the economic  
20       impact analysis for Sammis. Can you explain why --  
21       what the difference is and why you chose the  
22       different geographic areas for Sammis versus  
23       Davis-Besse?

24            A.    Because of the location of the Sammis

1       plant close to the borders of other states, we chose  
2       to look at the area where most of the employees live.

3               Q.     And for Davis-Besse you chose the entire  
4       state because of the location of the Davis-Besse  
5       plant?

6               A.     In part.

7               Q.     And what is the other part?

8               A.     I don't remember the complete  
9       conversations that I had about why we chose that  
10      particular geography.

11              Q.     Who would those conversations have been  
12      with, if you recall?

13              A.     I don't recall exactly who all was  
14      included in those conversations.

15              Q.     Would it have been with -- included  
16      Sharon Noewer?

17              A.     It's likely that Sharon was included.

18              Q.     Is there anyone else that comes to mind  
19      that would have been included in the conversations  
20      about what geographic area to -- to study for  
21      purposes of Davis-Besse?

22              A.     I don't recall.

23              Q.     Now, on page 2 of SM-2, you indicate  
24      that -- under the "Impacts of the Steam Generator

1 Placement and Refueling Project" that an additional  
2 2,290 contract employees were used. Do you see that?

3 A. Yes.

4 Q. And that those contract employees had a  
5 \$219.4 million in payroll effect?

6 A. Yes.

7 Q. Do you know how many of the contractors  
8 were Ohio businesses or residents of Ohio?

9 A. Well, as I stated previously, I know the  
10 number of person weeks because the issue with these  
11 contractors is that most of them were not there for  
12 the entire year.

13 Q. But so you wouldn't -- you may know  
14 person weeks but you may not know how -- how many of  
15 the contractors were Ohio contractors alone, correct?

16 A. That's correct.

17 Q. Now, on page 2 you state that 930 of the  
18 contractors -- of the 2,290 contractors are from the  
19 local area. How do you define "local area" there?

20 A. People who live in Ottawa County or close  
21 enough to the border of Ottawa County that they  
22 commute home to their primary residence every night.

23 Q. And when you -- when you use the Figure  
24 2 -- on page 3 when you use the figure \$219 million

1 of local contractor spending and local supplier  
2 purchases, how do you define "local"?

3 A. I'm sorry. Can you say where you are  
4 looking at one more time?

5 Q. I'm sorry, that is on page 3 you use the  
6 figure 219 million. It's up at the top, I believe.

7 A. Okay. Uh-huh.

8 Q. You use -- you say these are impacts from  
9 local supplier purchases and local contractor  
10 spending. I'm asking you how do you define local as  
11 you used it there?

12 A. Just give me a minute.

13 Q. Thank you.

14 A. I believe there we are referring to  
15 Ottawa County.

16 Q. Okay. Now, on page 4 I want you to look  
17 at Figure 1 where you show the total jobs under steam  
18 generation re -- generation placement and refueling  
19 project, and you see a figure -- you indicate a  
20 figure 3,954. Do you see that?

21 A. Yes.

22 Q. Do you know how many of the total jobs  
23 are temporary jobs, or are they all temporary jobs?

24 A. This is all temporary situations. They



1       could be someone who is employed on an ongoing basis  
2       at a supplier company but during the impact period  
3       that we are measuring is just related to what they  
4       are doing relative to the steam generator placement  
5       and refueling project.

6               Q.    Now, on Figure 1 under "Annual Direct and  
7       Indirect Revenue Impacts," is that limited to the  
8       regular operations and -- and -- let me strike that.

9               Where you indicate the "Annual Direct and  
10      Indirect Revenue Impacts," was that solely related to  
11      the regular operation?

12              A.    No.  You can see in the last section I  
13      have indirect revenues from contract employees.

14              Q.    Yes.  That would include -- where you  
15      have indirect contract employees, that would include  
16      the impacts of the steam generator placement and  
17      refueling?

18              A.    Yes.

19              Q.    And how do you ensure that for purposes  
20      of the economic impact analysis that you are not  
21      double counting?

22              A.    Could you be more specific?

23              Q.    I'll try.  You have two different -- you  
24      have an economic impact analysis associated with the

1 steam generator placement and refueling project,  
2 correct?

3 A. Uh-huh.

4 Q. And that was separate and apart from the  
5 economic impact analysis done with respect to the  
6 regular on -- excuse me, regular ongoing operations  
7 of Davis-Besse, correct?

8 A. Right.

9 Q. And where you have the annual and direct  
10 revenue impacts of Davis-Besse on an ongoing basis,  
11 you have just indicated that you include some impact  
12 of the steam generator placement and refueling  
13 project by including indirect contract employee  
14 data --

15 A. Yes.

16 Q. -- as shown on Figure 1. Can you tell me  
17 why that would not be double counting the impact of  
18 the steam generator placement and refueling project  
19 as part of the ongoing operation impact shown on  
20 Figure 1?

21 A. So referring specifically to the revenue  
22 impact; is that correct?

23 Q. Yes.

24 A. Okay. So the indirect revenue impacts

1       for the regular employees is based on the number of  
2       regular employees and their payroll, and the indirect  
3       revenue impacts for the contract employees is based  
4       on the number of contract employees and their payroll  
5       and their length of stay in the region relative to  
6       lodging taxes, so it's two different groups of  
7       people. There really wouldn't be any potential for  
8       double counting.

9               MS. GRADY: May I have a moment, please?

10              (Discussion off the record.)

11              Q. Now, on page 6 of your analysis, and I am  
12       looking at SM-2, page 6, you say under the "Steam  
13       Generator Placement and Refueling Impact," you state  
14       that 41 percent of the employees were from the  
15       Northern Ohio region while the remaining workers were  
16       from outside the area. Can you tell me what you mean  
17       by "outside the area"? Are you talking about outside  
18       the state?

19              A. Not necessarily. They could be --

20              Q. Outside the --

21              MR. ALEXANDER: Yeah. We are getting  
22       that feedback. If someone could mute their phone, we  
23       would appreciate it. And could we have the question  
24       reread just because we got --

1 MS. GRADY: I can just restate it.

2 MR. ALEXANDER: That would be great.

3 Q. When you state that 41 percent of the  
4 employees were from Northern Ohio region and the  
5 remaining workers from outside the area, can you  
6 define "outside the area"?

7 A. It wouldn't necessarily mean outside  
8 Ohio. It could be just from somewhere else further  
9 away in Ohio but not necessarily in Northern Ohio.

10 Q. Okay. Are you saying outside Ottawa  
11 County?

12 A. I don't know what -- I don't have the  
13 exact counties that were included in the Northern  
14 Ohio region in -- in my head right now.

15 Q. Now, you indicate on page 6 that there is  
16 an estimated 1,700 more local jobs that could be  
17 supported in other businesses throughout the state  
18 over the next several months. Do you see that?

19 A. Yes.

20 Q. Are these temporary jobs or permanent  
21 jobs, if you know?

22 A. They could be temporary jobs. They could  
23 be permanent jobs. But during this time period they  
24 are being supported by additional demand created by

1 the steam generator placement and refueling project.

2 Q. So are you saying that they would be  
3 likely temporary because the temporary nature of  
4 the -- of the project?

5 A. Not necessarily. I could be a restaurant  
6 employee, and during that time period, I have people  
7 related to this project eating at my restaurant, and  
8 other times of the year I have other people. I don't  
9 necessarily lose my job after this project goes away.

10 Q. Do you know with respect to the 1,700  
11 more local jobs whether those are full- or part-time  
12 jobs?

13 A. I don't know.

14 Q. Now, on page 6 you also discuss nonlocal  
15 contractor impacts and that's at the bottom of the  
16 page.

17 A. Yes.

18 Q. Again, I am going to ask you to define  
19 what you mean there by nonlocal.

20 A. People that are staying overnight in some  
21 sort of facility that is not their primary residence.

22 Q. Now, you indicate that you -- you have --  
23 you base nonlocal contractor impacts on information  
24 from the Ohio Division of Travel and Tourism. Do you

1 see that?

2 A. Yes.

3 Q. Do you know how fresh the data is with  
4 that assumption that nonlocal contractors spent \$79  
5 per day?

6 A. The general per person per day tourism  
7 spending is 2012 data.

8 Q. Okay. And have you looked at the 2013 or  
9 2014 data?

10 A. I would not anticipate that 2014 data was  
11 necessarily available at this point because there is  
12 almost always a delay, but I have not looked at 2013  
13 data.

14 Q. So you don't know how the 2013 data  
15 compares to the 2012 data you used in your impact  
16 analysis?

17 A. No.

18 Q. Do you know if the \$79 per day figure  
19 that -- that -- that you derived from the -- let me  
20 strike that.

21 Is the \$79 per day figure that was  
22 derived through the \$105 figure adjusted due to  
23 working hours of the visitors?

24 A. It's adjusted due to the fact that they

1 are working while they are here as opposed to someone  
2 who is strictly here on a leisure visit.

3 Q. And going to page 7, we look at Figure 4,  
4 the estimated nonlocal contractor expenditures were  
5 through a period of January, '13, through April,  
6 2014; is that correct?

7 A. Yes.

8 Q. Going to page 7, Figure 4, you have a  
9 column called "Distribution." Can you tell me what  
10 that represents?

11 A. It just shows how spending breaks down by  
12 category between lodging, food and beverage,  
13 transportation, and retail.

14 Q. Now, on -- on page 7 you refer also to  
15 133,000 in personal income in the surrounding region.  
16 Can you define for me what the surrounding region is?

17 A. I see the reference. Just give me a  
18 minute.

19 So it could be anywhere in the state of  
20 Ohio, but we can assume that it's probably much  
21 closer to Ottawa County than that because we're  
22 talking about places where these nonlocal contractors  
23 spend money in their evening hours and weekend hours,  
24 but it's based on statewide multipliers.

1           Q.    Now, with respect to footnote 3 and  
2           that's at page -- I believe it's at page 10.  You say  
3           there that the average depreciation assumed was  
4           50 percent.  Do you see that?

5           A.    Yes.

6           Q.    Do you know where that figure comes from?

7           A.    Well, I looked at the actual depreciation  
8           schedules; and, of course, the number is different in  
9           every year, but I just took an average of multiple  
10          years.

11          Q.    When you say you looked at -- I'm sorry.  
12          Go ahead.

13          A.    At any given point in time, you know,  
14          some of your equipment stock may be new and some of  
15          it is aging at different -- you know, it's different  
16          ages and so this was an average to represent --

17          Q.    And you say -- you said you looked at  
18          actual depreciation schedules.  What schedules would  
19          those have been?

20          A.    The Ohio Department of Revenue has  
21          prescribed schedules for different types of  
22          equipment.

23          Q.    So it was not a specific FirstEnergy  
24          Service Company number, but it was derived from



1 aggregate data provided by the Ohio Department of  
2 Revenue?

3 A. These are required depreciation schedules  
4 that are used when property taxes are computed for  
5 utility personal property.

6 Q. Now, going to Attachment 1, Davis-Besse  
7 input data, can you pull to that page, page 13.

8 A. Yes.

9 Q. And the column there says October through  
10 April labor costs, 2013 to 2014. Do you see that?

11 A. Yes.

12 Q. Can you tell me why that particular  
13 timeframe was used?

14 A. That's when those contractors were  
15 present in the area. That's when the steam generator  
16 placement and refueling project took place.

17 Q. Can you tell me why the estimated  
18 nonlocal contractor expenditures that were examined  
19 were examined during a different period?

20 A. Can you give me a reference on that?

21 Q. If you go to page 7, Figure 4, it would  
22 indicate that the local -- nonlocal contractor  
23 expenditures were examined from a period of January,  
24 2013, through April, 2014.

1           A.    Yes.  I see that.

2           Q.    Can you tell me why -- if those are  
3 different time periods why they are different time  
4 periods?

5           A.    I do not believe they are different time  
6 periods.  I believe there's -- one of those things  
7 should have been labeled differently.

8           Q.    And which one should have been labeled  
9 differently?

10          A.    I would have to verify that before I  
11 answer.

12          Q.    Now, throughout the -- throughout this --  
13 your testimony throughout your study you talked about  
14 multipliers, and we talked about the role of  
15 multipliers.  Can you tell me for -- for the  
16 Sammis -- for the economic impact study conducted for  
17 Sammis how many multipliers were developed?

18          A.    Well, there are different multipliers for  
19 jobs, of course, and output and there are direct  
20 multipliers, indirect multipliers, induced  
21 multipliers, so I would have to count that.  I  
22 believe we only used multipliers for the electric  
23 power generation -- no, I also used multipliers for  
24 household spending so there are direct, indirect, and

1 induced multipliers for that as well. So quite a  
2 number of multipliers.

3 Q. If you had to put a number on it, what  
4 would you say?

5 A. Approximately 12.

6 Q. And with respect to the economic impact  
7 study conducted for Davis-Besse, could you tell me  
8 how many multipliers were used in that study?

9 A. Okay. Just give me a minute.  
10 Approximately 63.

11 MS. GRADY: Thank you. If I may have a  
12 moment, I think that may be the end of my cross, but  
13 I want to take 1 or 2 minutes just to look through my  
14 questions. Thanks.

15 (Discussion off the record.)

16 MS. GRADY: That's all the questions I  
17 have. Thank you very much, Ms. Murley.

18 MR. ALEXANDER: And so the record is  
19 clear Ms. Grady and I spoke prior to her conducting  
20 Ms. Murley's deposition, and Ms. Grady intends to  
21 file a notice of appearance in this proceeding, and  
22 the companies consented to allowing Ms. Grady to  
23 conduct this deposition on that basis; is that  
24 correct, Ms. Grady?

1 MS. GRADY: That's correct. And I would  
2 note that the conduct of a deposition does not amount  
3 to an appearance before the Commission; and,  
4 therefore, a notice of appearance is not required.

5 MR. ALEXANDER: Right. But you do intend  
6 to file a notice of appearance, correct?

7 MS. GRADY: I believe that I will be  
8 filing a notice of appearance in the case, yes. I do  
9 believe that.

10 MR. ALEXANDER: Okay. Thank you.

11 Anyone else with questions for  
12 Ms. Murley?

13 Hearing none that concludes and we will  
14 read.

15 (Thereupon, the deposition was concluded  
16 at 1:07 p.m.)

17 - - -

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1 State of ~~Ohio~~ AZ :  
2 County of Maricopa : SS:

3 I, Sarah Murley, do hereby certify that I have  
4 read the foregoing transcript of my deposition given  
5 on Wednesday, January 14, 2015; that together with  
6 the correction page attached hereto noting changes in  
7 form or substance, if any, it is true and correct.

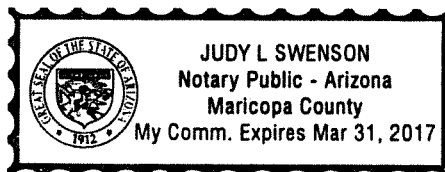
8 Sarah Murley Bramer  
9 Sarah Murley

10 I do hereby certify that the foregoing  
11 transcript of the deposition of Sarah Murley was  
12 submitted to the witness for reading and signing;  
13 that after she had stated to the undersigned Notary  
14 Public that she had read and examined her deposition,  
15 she signed the same in my presence on the 27  
16 day of January, 2015.

17 Judy L Swenson  
18 Notary Public

19 My commission expires 3-31, 2017.

20 - - -



## 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 14 day of January, 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
6	8	<sup>Should be</sup> Sarah Murley Brammer	omission
13	20	change "testing" to "text"	transcription error
25	4	change "purchased" to "discussed"	transcription error
63	12	omit word "not"	transcription error
107	23	insert Q. after "Uh-huh"	transcription error

Date 1-26-15 Signature: Sarah Murley Brammer

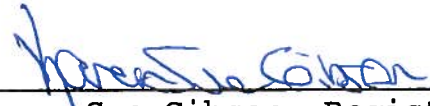
## 1 CERTIFICATE

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 Sarah Murley was by me  
7 duly sworn to testify to the whole truth in the cause  
8 aforesaid; that the testimony was taken down by me in  
9 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,  
15 on this 20th day of January, 2015.

16   
17 Karen Sue Gibson, Registered  
18 Merit Reporter and Notary Public  
19 in and for the State of Ohio.

20 My commission expires August 14, 2015.

21 (KSG-5987)

22 - - -

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Summary: Deposition (Public) of Sarah Murley electronically filed by Mr. Tony G. Mendoza on behalf of Sierra Club