

BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

- - -

In the Matter of the 2018 :  
Long-Term Forecast Report : Case No. 18-501-EL-FOR  
of Ohio Power Company and :  
Related Matters. :

In the Matter of the :  
Application of Ohio Power :  
Company for Approval to :  
Enter Into Renewable : Case No. 18-1392-EL-RDR  
Energy Purchase :  
Agreements for Inclusion :  
in the Renewable :  
Generation Rider. :

In the Matter of the :  
Application of Ohio Power : Case No. 18-1393-EL-ATA  
Company for Approval to :  
Amend its Tariffs. :

- - -

PROCEEDINGS

before Ms. Sarah Parrot and Ms. Greta See, Attorney  
Examiners, at the Public Utilities Commission of  
Ohio, 180 East Broad Street, Room 11-A, Columbus,  
Ohio, called at 9:00 a.m. on Monday, January 28,  
2019.

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VOLUME IX

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1 Monday Morning Session,  
2 January 28, 2019.

3 - - -

4 EXAMINER PARROT: Let's go back on the  
5 record.

6 Good morning, everyone. This is the  
7 continuation of the hearing in Case No.  
8 18-501-EL-FOR, et al.

9 Let's start with brief appearances.  
10 We'll start with the Company and work our way around  
11 the table.

12 MR. NOURSE: Thank you, your Honor. On  
13 behalf of AEP Ohio, Steven T. Nourse, Christen M.  
14 Blend; and the law firm Porter Wright with Eric B.  
15 Gallon, L. Bradford Hughes; the law firm Ice Miller  
16 with Christopher L. Miller.

17 MS. WILLIS: Thank you, your Honor. On  
18 behalf of the residential consumers of Ohio Power  
19 Company, Bruce Weston, Consumers' Counsel, by Maureen  
20 Willis, Christopher Healey, and William Michael.

21 MR. McNAMEE: For the Staff of the PUCO,  
22 Tom McNamee.

23 MR. OLIKER: Good morning, your Honors.  
24 On behalf of Interstate Gas Supply, Inc. and IGS  
25 Solar, LLC, Joe Olikier and Michael Nugent.



1 MR. KURTZ: Good morning, your Honors.  
2 For OEG, Mike Kurtz.

3 MS. BOJKO: Good morning, your Honors.  
4 For the Ohio Manufacturers' Association Energy Group,  
5 Kimberly W. Bojko and Brian W. Dressel.

6 MS. WHITFIELD: Good morning, your  
7 Honors. On behalf of The Kroger Company, Angie Paul  
8 Whitfield and Stephen E. Dutton.

9 MR. COLLIER: On behalf of the Ohio Coal  
10 Association, Orla Collier and John Stock, with the  
11 law firm of Benesch Friedlander Coplan & Aronoff.

12 MR. DARR: On behalf of IEU-Ohio, Frank  
13 Darr.

14 MS. GLOVER: On behalf of the Retail  
15 Energy Supply Association and Direct Energy, Mark  
16 Whitt and Rebekah Glover.

17 EXAMINER PARROT: All right.

18 Ms. Willis.

19 MS. WILLIS: Thank you, your Honor. At  
20 this time, OCC would call to the witness stand,  
21 Ramteen Sioshansi.

22 (Witness sworn.)

23 EXAMINER PARROT: Please have a seat.

24 - - -

25

1                   RAMTEEN SIOSHANSI, PH.D.

2   being first duly sworn, as prescribed by law, was  
3   examined and testified as follows:

4                   DIRECT EXAMINATION

5   By Ms. Willis:

6           Q.    Good morning, Mr. Sioshansi.

7           A.    Good morning.

8           Q.    Can you please state your name and your  
9   business address for the record.

10          A.    My name is Ramteen Sioshansi. My  
11   business address is 60 East Spring Street, Columbus,  
12   Ohio 43215.

13          Q.    And, Mr. Sioshansi, for purposes of this  
14   proceeding, by whom are you employed and in what  
15   capacity?

16          A.    Can you repeat that?

17          Q.    By whom are you employed and in what  
18   capacity?

19          A.    I am employed full time at the Ohio State  
20   University as a Professor in the Department of  
21   Integrated Systems Engineering and as Associate Chair  
22   of that department.

23          Q.    And for purposes of this engagement, who  
24   have you been retained by?

25          A.    For purposes of this engagement, I've

1     been retained by the Office of the Ohio Consumers'  
2     Counsel.

3                 MS. WILLIS:   Now, your Honor, at this  
4     time, I would ask to have marked as OCC Exhibit No.  
5     25, the direct testimony of Ramteen Sioshansi, filed  
6     with the Commission January 2, 2019.

7                 EXAMINER PARROT:   So marked.

8                 (EXHIBIT MARKED FOR IDENTIFICATION.)

9                 Q.    Mr. Sioshansi, do you have before you the  
10    document which has just been marked OCC Exhibit No.  
11    25?

12                A.    I do have a copy of it, yes.

13                Q.    Can you identify that document?

14                A.    Can I identify it?

15                Q.    Yes.

16                A.    Yes, I can identify it as written  
17    testimony I prepared.

18                Q.    And it was prepared by you or under your  
19    direct supervision and control, correct?

20                A.    Yes, it was.

21                Q.    Now, do you have any additions,  
22    corrections, or deletions to that testimony?

23                A.    I have two corrections to the written  
24    testimony.  Both on page 11.  On page 11, line 5, the  
25    word "will" should be replaced with the word "may."

1           Also on page 11, line 8, the word "will"  
2       should be replaced with the word "may."

3           Q.    Do you have any other additions or  
4       corrections?

5           A.    No, I do not.

6           Q.    Mr. Sioshansi, if I were to ask you the  
7       questions that were posed in this testimony today,  
8       would your answers be the same as what is contained  
9       in OCC Exhibit No. 25?

10          A.    Yes, they would.

11          MS. WILLIS: Your Honor, at this time, I  
12       would move for the admission of OCC Exhibit 25,  
13       subject to cross-examination by the parties.

14          EXAMINER PARROT: Thank you, Ms. Willis.

15          MR. GALLON: Your Honor, would you  
16       entertain a motion to strike at this point or would  
17       you rather I wait my turn?

18          EXAMINER PARROT: Go ahead, Mr. Gallon.

19          MR. GALLON: Thank you, Attorney  
20       Examiners.

21          Your Honor, there are several portions of  
22       the testimony that I would move to strike but the  
23       reasons for the motion will be the same for all of  
24       them, so I will focus on two that are representative,  
25       and then, if necessary, we can go through page by

1 page.

2 On page 3, between lines 4 and 11 of  
3 Dr. Sioshansi's testimony, he says that he's  
4 testifying with an evaluation of whether AEP Ohio's  
5 proposal to have solar-energy projects procured and  
6 their full costs guaranteed through  
7 customer-subsidized arrangements by AEP Ohio is  
8 prudent, reasonable, and economically efficient; and  
9 then he goes on to explain he is talking about the  
10 use of REPAs with cost recovery guaranteed through  
11 the Renewable Generation Rider.

12 And if you turn to page 8 and scan the  
13 question and answers between page 8 and page 15, you  
14 will see that he is discussing what he believes would  
15 be the impact on the long-run efficiency of PJM if  
16 AEP Ohio is allowed to procure energy and capacity  
17 from solar or wind projects, sell those into PJM, and  
18 flow the revenues or costs of those projects through  
19 the RGR.

20 This testimony resembles and, in some  
21 cases, copies from the testimony Dr. Sioshansi  
22 offered in the PPA Rider case in opposition to  
23 establishing a PPA Rider. And generally it gets to  
24 the question of whether he believes establishing an  
25 RGR and allowing the benefits of these REPAs to flow

1 through the RGR is a good idea.

2 For this reason, I would move to strike  
3 this testimony and the other parts of the testimony  
4 that relate to this same topic on the grounds it's  
5 outside the scope of this proceeding. The RGR has  
6 already been established in the ESP IV case. The  
7 Commission set it at zero. The purpose of this  
8 proceeding is to determine whether AEP Ohio can  
9 demonstrate need generically, demonstrate need for  
10 the specific projects to be discussed in Phase II.

11 The question of whether the RGR is a good  
12 idea, whether it's lawful and prudent, has been  
13 determined by the Commission and is currently pending  
14 before the Ohio Supreme Court. So I think it would  
15 be inappropriate for OCC to offer testimony on a  
16 topic that's already been decided by the Commission  
17 in another proceeding and is outside the scope of  
18 this one.

19 EXAMINER PARROT: Mr. Gallon, I'm sorry,  
20 you said pages 8 through 15?

21 MR. GALLON: Correct.

22 EXAMINER PARROT: It's kind of mid  
23 sentence, so I am not sure what you are proposing to  
24 strike exactly.

25 MR. GALLON: Your Honor, page 8, line 1

1 is the title.

2 EXAMINER PARROT: Right.

3 MR. GALLON: And then it goes on to ask  
4 Dr. Sioshansi to explain what is meant by long-run  
5 efficiency in an electric power system, and he goes  
6 through and discusses long-run efficiency and then  
7 offers the opinion that allowing REPAs with an RGR  
8 will interfere with the long-run efficiency of PJM  
9 so. It runs through, on page 15, line 12.

10 EXAMINER PARROT: Line 12.

11 MR. GALLON: It would end before Question  
12 13 about the existence of market-based solutions to  
13 meet the needs of the utility's customers.

14 EXAMINER PARROT: That's what I was  
15 looking for. Thank you.

16 Anything else, Mr. Gallon?

17 MR. GALLON: Your Honor, the explanation  
18 would remain the same for a number of other smaller  
19 portions of his testimony that relate to the same  
20 topic, but at this point I would hold off on listing  
21 them one by one, unless the Attorney Examiners grant  
22 the motion to strike.

23 EXAMINER PARROT: Okay. Ms. Willis.

24 MS. WILLIS: Thank you, your Honor.

25 First, I would indicate that I actually

1 seek clarification. Is this a motion to strike or  
2 motion to defer the testimony to page 2 -- page 2? I  
3 think that the grounds, that have been enunciated by  
4 Counsel, really go to deferring the testimony to  
5 Phase II.

6 But, in any event, that's beside the  
7 point. What this testimony does, your Honors, is  
8 give the witness's expert opinion and views on how  
9 the market works, how PJM market -- how the PJM  
10 market is working and how a utility-subsidized REPA  
11 would affect the utility market. I think we've had a  
12 lot of testimony, throughout this proceeding, about  
13 PJM, what is happening in the PJM market, how the PJM  
14 market works, and subsidies, the effect of subsidies  
15 on PJM. So this is a high-level view of the effect  
16 of subsidies, be it an RGR or other generation  
17 subsidies, would have on a competitive market.

18 So I think it's perfectly appropriate, I  
19 think it's consistent to allow this testimony to be  
20 presented with the earlier rulings of the Bench in  
21 terms of allowing overview testimony of the PJM  
22 subsidies and the competitive market.

23 MR. GALLON: May I respond briefly, your  
24 Honor?

25 EXAMINER PARROT: Sure. Go ahead.



1 MR. GALLON: I think Ms. Willis'  
2 explanation proves my point. What she has explained  
3 is that Dr. Sioshansi believes that any  
4 utility-subsidized REPA would interfere with the PJM  
5 market. That's an attack on the RGR Rider, itself,  
6 because the only thing that would be flowing through  
7 the RGR, under the rulings of this Commission in the  
8 PPA Rider case and the ESP IV case, are REPAs. If  
9 this is his opinion, there is no project that would  
10 qualify under the RGR, which means he believes the  
11 RGR itself is imprudent, and that prudence has been  
12 ruled upon by this Commission and is currently before  
13 the Ohio Supreme Court.

14 Your Honors, we also have the Notice of  
15 Appeal from the Ohio Supreme Court if you would find  
16 that useful.

17 EXAMINER PARROT: The Company's motion is  
18 denied, Mr. Gallon.

19 MS. WILLIS: Thank you, your Honor.

20 EXAMINER PARROT: Ms. Glover, any  
21 questions?

22 MS. GLOVER: No questions, your Honor.

23 EXAMINER PARROT: Mr. Darr.

24 MR. DARR: No questions.

25 EXAMINER PARROT: Mr. Collier.

1 MR. COLLIER: No questions.

2 EXAMINER PARROT: Ms. Whitfield.

3 MS. WHITFIELD: No questions.

4 EXAMINER PARROT: Ms. Bojko.

5 MS. BOJKO: No questions, thank you.

6 EXAMINER PARROT: Mr. McNamee.

7 MR. McNAMEE: No questions, your Honor,  
8 thank you.

9 EXAMINER PARROT: Mr. Kurtz.

10 MR. KURTZ: No questions.

11 EXAMINER PARROT: Mr. Gallon.

12 MR. GALLON: Thank you, your Honor.

13 EXAMINER PARROT: I'm sorry, Mr. Olikier.

14 MR. OLIKER: No, thank you, your Honor.

15 EXAMINER PARROT: I forgot you were back  
16 there.

17 Go ahead, Mr. Gallon.

18 - - -

19 CROSS-EXAMINATION

20 By Mr. Gallon:

21 Q. Dr. Sioshansi, you state in your  
22 testimony on page 1, in answer to Question 2, that  
23 you have had academic and consulting experience  
24 within the electric power industry dating back to  
25 1999; is that correct?

1           A.   Where specifically in the testimony are  
2 you referring?

3           Q.   It's page 1, line 11.

4           A.   Okay.

5           Q.   What were you doing in 1999?

6           A.   In '99, if I remember correctly, I had --  
7 I had a position with Pacific Gas & Electric Company  
8 which is a gas and electric utility in northern  
9 California.

10          Q.   You were also an undergraduate student in  
11 California at that time; is that correct?

12          A.   That is correct, yes.

13          Q.   You received your Bachelor's in 2001?

14          A.   That is correct.

15          Q.   And Master's degrees in 2002 and 2004,  
16 correct?

17          A.   2002 and, yes, I believe 2004.

18          Q.   So your position with PG&E in 1999 was an  
19 internship when you were in college?

20          A.   Yes, it was.

21          Q.   Dr. Sioshansi, you testified in AEP's PPA  
22 Rider case back in 2015; is that correct?

23          A.   I believe so, yes.

24          Q.   Okay. Have you reviewed your written  
25 testimony from that case since you filed it?

1           A.    I have not reviewed it recently, no.

2           Q.    Is it fair to say that you relied upon  
3 your written testimony in that case in preparing your  
4 testimony in this case?

5           A.    What do you mean by "relied upon" it?

6           Q.    Portions of your testimony in this case  
7 are either copied from your prior testimony or  
8 revised versions of your prior testimony,  
9 particularly on long-run efficiency in energy  
10 markets, correct?

11          A.    Some portions of the testimony I used  
12 that previous testimony as a template and I modified  
13 it as appropriate to the particulars of this case.

14          Q.    So you reviewed your testimony, at least  
15 as recently as last fall, when you prepared your  
16 testimony for this case, correct?

17          A.    Again, in using it as a template, yes.

18          Q.    And in that case, you were asked to  
19 evaluate the effect of the proposed PPA and PPA Rider  
20 on the efficiency of the PJM-operated markets,  
21 correct?

22          A.    That's roughly my recollection.  Not  
23 having a copy of the testimony in front of me, I  
24 can't exactly characterize the scope of what I  
25 covered in that.

1 MR. GALLON: Your Honors, I would ask to  
2 mark as Exhibit AEP Exhibit 22, Dr. Sioshansi's  
3 testimony for the PPA Rider case.

4 EXAMINER PARROT: So marked.

5 (EXHIBIT MARKED FOR IDENTIFICATION.)

6 Q. (By Mr. Gallon) Dr. Sioshansi, do you  
7 have a copy of what's been marked as AEP 22 in front  
8 of you?

9 A. I have a copy of it in front of me, yes.

10 Q. If you would turn to page 3, lines 12  
11 through 14.

12 A. Which lines?

13 Q. Lines 12 through 14, sir. On lines 12  
14 through 14, you say you were asked to evaluate the  
15 effect of the proposed PPA and PPA Rider on the  
16 efficiency of the PJM-operated markets; is that  
17 correct?

18 A. I see that on the document in front of  
19 me, yes.

20 Q. Okay. And if you would -- do you recall  
21 that you testified that the PPA and the PPA Rider  
22 would directly subsidize the operating and capital  
23 costs of the PPA units which could potentially  
24 destroy the short- and long-run efficiency benefits  
25 of the price signals provided by the PJM market?

1 MS. WILLIS: Objection. I would ask that  
2 the witness be given a chance to review the testimony  
3 and I would ask for a reference to the quote that  
4 Mr. Golden is making -- Gallon. I'm sorry.

5 MR. GALLON: That's okay.

6 Q. Dr. Sioshansi, if you turn to page 6.  
7 And on lines 1 through 2, you state "The PPA and PPA  
8 Rider directly subsidize the operating and capital  
9 costs of the PPA Units"; is that correct?

10 A. I see that in this document, yes.

11 Q. And on lines 11 through 14, you say,  
12 "Furthermore, allowing subsidized generators to  
13 participate in a wholesale market against  
14 unsubsidized assets can potentially destroy the  
15 short- and long-run efficiency benefits of the price  
16 signals provided by the market." Do you see that  
17 too?

18 A. I do.

19 Q. Did I read those both correctly?

20 A. You did.

21 Q. And on page 10, lines 1 through 3,  
22 Question 11 of your PPA Rider testimony asked you to  
23 "explain how the PJM-operated wholesale markets are  
24 intended to ensure long-run efficiency of the  
25 electric power system for the benefits of customers";

1 is that correct?

2 A. That is.

3 Q. Okay. You cover many of the same topics  
4 in your testimony in this case, correct?

5 A. Well, without reviewing the testimony in  
6 this prior case in detail, I couldn't tell you  
7 exactly how much of the testimony in terms of topics  
8 that are covered.

9 Q. This particular topic, the question of  
10 long-run efficiency in the PJM markets is one that  
11 you also touched upon in your testimony in this case,  
12 correct?

13 A. Yes. My recollection is that in that  
14 testimony there was discussion of long-run  
15 efficiency; however, again, I have not reviewed this  
16 testimony in detail since that case, so without  
17 reviewing it, I couldn't -- I couldn't give you a  
18 clear-cut comparison between the issues covered there  
19 and the issue covered in this case.

20 Q. Understanding that you haven't had an  
21 opportunity to review your PPA Rider testimony in  
22 detail in a while, would you take a moment to review  
23 your response to Question 11 in the PPA Rider case.  
24 Dr. Sioshansi, please let me know when you are done  
25 with your review.

1           A.    All right.  I've read my response.

2           Q.    Your response to Answer 11 in the PPA  
3 Rider case in your prefiled testimony was revised and  
4 slightly rewritten into Answer 8 in your testimony in  
5 the current case; is that correct?

6           MS. WILLIS:  Objection.  Relevance, your  
7 Honor.  I am not sure -- you know, we have PPA -- we  
8 have a PPA in the prior case.  We have a PPA here.  
9 The issues are -- are related, so I'm not sure how  
10 the fact that he may have had some testimony  
11 previously that he used again in this proceeding has  
12 any relevance or significance whatsoever.

13          MR. GALLON:  Your Honor, I am simply  
14 trying to establish that the positions that  
15 Dr. Sioshansi offered in the PPA Rider case on  
16 long-run efficiency in the PJM market are effectively  
17 the same ones he is offering again here in this case.

18          EXAMINER PARROT:  The objection is  
19 overruled.

20          A.    What was the question?

21          Q.    Your answer to Question 11 in your  
22 prefiled testimony in the PPA Rider case was revised,  
23 rewritten, and provided as the answer to Question 8  
24 in your prefiled testimony in this case, correct?

25          A.    The responses are similar by virtue of



1 the fact that the same issues or some of the same  
2 issues are in play here with regards to the Company's  
3 proposal compared to the PPA case. I don't recall  
4 the exact detail of how the wording in my response to  
5 Question 8 came about.

6 Q. If you would turn to your testimony in  
7 this case, page 8, lines 12, through 4 -- 12 through  
8 14, pardon me.

9 A. Did you say page 8?

10 Q. Yes, sir. You state in your testimony in  
11 this case that "To achieve long-run efficiency,  
12 assets should be added to or removed from the power  
13 system to serve customer demands while maximizing  
14 social welfare and meeting customers' reliability and  
15 resilience needs"; is that correct?

16 MS. WILLIS: Your Honor, I'm sorry.  
17 Mr. Gallon, I am not following which testimony you  
18 are referring to and what the page and lines are. If  
19 you could repeat that, I would appreciate it.

20 MR. GALLON: Certainly.

21 Q. We are looking at your testimony in this  
22 case, Dr. Sioshansi, and we are on page 8, and we are  
23 looking at lines 12 through 14.

24 MS. WILLIS: Thank you.

25 Q. So just to repeat the question, you opine

1 that long-run efficiency can be achieved in an  
2 electric power system by adding or removing assets  
3 from the power system to serve customer needs while  
4 maximizing social welfare and meeting customers'  
5 reliability and resilience needs, correct?

6 A. You didn't read the -- you didn't read  
7 the written testimony verbatim but you summarized it.

8 Q. Thank you, Dr. Sioshansi.

9 Would you turn to your testimony in the  
10 PPA Rider case at page 8. And turn your attention to  
11 lines 17 through 19. In your prior testimony you  
12 said that long-run efficiency can be achieved in an  
13 electric power system by adding or removing assets  
14 "to serve customer demand reliably and at minimum  
15 cost," correct?

16 A. Yes, I see that in the document in front  
17 of me.

18 Q. Do you still stand by your prior comments  
19 regarding the relationship between long-run  
20 efficiency in PJM and minimizing cost to customers?

21 A. Broadly speaking, yes. The primary  
22 reason that the testimony I have prepared for this  
23 case I refer to maximizing social welfare is that  
24 characterizing the market as maximizing social  
25 welfare provides a more accurate characterization of

1 market efficiency when you have a nontrivial amount  
2 of demand response resources participating in the  
3 wholesale market.

4 Q. Thank you for that clarification,  
5 Dr. Sioshansi.

6 May I turn your attention to page 11 in  
7 your testimony, please, sir.

8 A. Which case?

9 Q. This case, 18-501. On lines 20 through  
10 22 of page 11, and the beginning of page 12, you say  
11 "the guaranteed recovery of the projects' costs by  
12 captive customers may distort the Utility's  
13 incentives to offer the energy, ancillary services,  
14 and capacity that are produced by the  
15 Utility-procured renewable-energy projects into the  
16 PJM-operated wholesale markets." Do you see that?

17 A. I do.

18 Q. Can you explain how guaranteeing the  
19 recovery of the projects' costs by captive customers  
20 would distort -- or could distort the Utility's  
21 incentives to offer the energy, ancillary services,  
22 and capacity into PJM?

23 A. Well, one clear example would be if the  
24 arrangement allows the Utility to recover the cost of  
25 the REPAs from captive customers through a

1 nonbypassable charge, then, from the Utility's  
2 perspective, it doesn't matter how much revenue the  
3 products that are associated with the REPAs earned in  
4 the wholesale market because, at the end of the day,  
5 they have captive customers who are on the hook to  
6 cover the full cost of the REPAs.

7 Q. So your contention is that AEP Ohio would  
8 not attempt to maximize its revenues from the sale of  
9 energy, capacity, or ancillary services because it  
10 knows it can rely on its customers to make up the  
11 difference?

12 A. What I am saying is, as I state in my  
13 testimony, the guaranteed recovery of the projects'  
14 costs by captive customers may distort the Utility's  
15 incentives to offer the energy and ancillary services  
16 and capacity that are produced by the  
17 Utility-procured renewable energy projects into the  
18 PJM-operated wholesale markets.

19 Q. Dr. Sioshansi, do you consider yourself  
20 an expert on the PJM's rules regarding bidding  
21 capacity into PJM?

22 A. Can you repeat that question?

23 Q. Do you consider yourself an expert on the  
24 PJM's rules regarding bidding capacity into PJM?

25 A. I would consider myself as having a

1 high-level knowledge of wholesale market design in  
2 the United States and internationally.

3 Q. So that suggests you would not consider  
4 yourself an expert on PJM's capacity bidding rules  
5 specifically; is that correct?

6 A. I do not have expertise in the particular  
7 details of PJM's market rules.

8 Q. Would your answer be the same regarding  
9 the PJM's rules for bidding energy into PJM?

10 A. Again, I would characterize myself as  
11 having broad, high-level expertise in market design  
12 in the United States and internationally.

13 Q. Are you familiar with the rules governing  
14 energy market participants' ability to bid energy  
15 into PJM above or below cost?

16 A. Can you repeat the question?

17 MR. GALLON: Would the court reporter  
18 mind reading that back.

19 (Record read.)

20 A. My understanding is that the PJM rules  
21 do, in some circumstances, allow resources to  
22 participate in the market as a price taker. My  
23 understanding as well is that there are  
24 market-mitigation rules which are used by the Market  
25 Monitor in the energy and the capacity markets. I am

1 not intimately familiar with the details of those  
2 rules. But, again, I would characterize myself as  
3 having a high level and broad expertise in  
4 electricity market design in the United States and  
5 internationally.

6 Q. Dr. Sioshansi, you mentioned the Market  
7 Monitor. Are you aware that all offers in the PJM  
8 market for energy are monitored by the PJM Market  
9 Monitor?

10 A. I don't know the detail -- I don't know  
11 the detail to which the Market Monitor examines every  
12 single offer into the market, however, my  
13 understanding is that there is a Market Monitor who  
14 does do -- that does do ex-ante and ex-post analysis  
15 of market outcomes.

16 Q. Are you familiar with the criteria the  
17 Market Monitor applies in analyzing those outcomes?

18 A. I don't know the details of all of the  
19 mechanisms that the Market Monitor employs for  
20 ex-ante and ex-post analysis of market outcomes.

21 Q. Specifically regarding the energy  
22 markets, you understand typically for a wind or solar  
23 project that when the wind is blowing or the sun is  
24 shining, energy will be produced?

25 A. That depends.

1 Q. What does it depend on?

2 A. There could be circumstances, for  
3 instance, in which the output of a wind or solar  
4 plant is curtailed.

5 Q. Typically the output of a wind or solar  
6 plant is bid into the energy market, correct?

7 A. Pardon me?

8 Q. Typically, the output of a wind or solar  
9 facility is bid into the energy markets, correct?

10 A. I don't know for certain the detailed  
11 contracting arrangements of every wind and solar  
12 facility in the country.

13 Q. So your high-level knowledge of the  
14 energy markets does not allow you to opine on whether  
15 the energy produced by wind or solar facilities is,  
16 more often than not, bid into energy markets?

17 A. No, I am simply stating that in some  
18 cases, wind or solar facilities may have bilateral  
19 contracts that bypass the wholesale market.

20 Q. Dr. Sioshansi, are you familiar with this  
21 Commission's prior rulings on the Renewable  
22 Generation Rider?

23 A. My --

24 MS. WILLIS: Objection, your Honor. The  
25 Renewable Generation Rider is a Phase II issue, and I

1 am not sure -- certain how getting into details of  
2 the -- what the Commission has said about that are  
3 helpful to the record. I think it's Phase II.

4 MR. GALLON: Your Honors, as we said at  
5 the top, the validity of the RGR is not a Phase II  
6 issue; in fact, it's not an issue in this case at  
7 all. If OCC would like to defer Dr. Sioshansi's  
8 testimony on the impacts of the RGR on the PJM market  
9 to the second phase of this proceeding, we can  
10 discuss that, but Dr. Sioshansi is, at this point,  
11 discussing the effects of the Renewable Generation  
12 Rider on the PJM market, and I am asking him if he  
13 understands the Commission's prior rulings on the  
14 RGR, just to get a sense of his knowledge of how the  
15 RGR will work.

16 EXAMINER PARROT: Anything else?

17 MS. WILLIS: No.

18 EXAMINER PARROT: The objection is  
19 overruled.

20 THE WITNESS: Can you repeat the  
21 question, please?

22 MR. GALLON: If the court reporter would  
23 repeat the question, that would be appreciated.

24 (Record read.)

25 A. My recollection is that the Renewable



1     Generation Rider was established but initially set at  
2     a rate of zero in the PPA case that we were  
3     previously discussing. Other than that, I do not  
4     recall any details regarding prior decisions  
5     pertaining to the RGR.

6             Q.    Do you understand that the cost under the  
7     RGR will be subject to an annual audit for prudence?

8             A.    I believe at some point I read a  
9     reference to auditing of costs under the RGR,  
10    although I do not recall in what context I read about  
11    that.

12            Q.    Do you also understand Staff of the  
13    Commission will have full audit rights over the cost  
14    of the renewable energy and revenue obtained from  
15    selling it in the wholesale market?

16            MS. BOJKO: Your Honor, may I have that  
17    question reread, please?

18                   (Record read.)

19            MS. BOJKO: I am going to object to  
20    vague. I am not sure what "full audit rights" means.

21            EXAMINER PARROT: The objection is  
22    overruled. To the extent you understand the  
23    question, please respond and if you need  
24    clarification, you may ask.

25            THE WITNESS: Can you reread the

1 question?

2 (Record read.)

3 A. I recall at some point having seen a  
4 reference to the Commission reviewing costs and  
5 revenues under the RGR. However, I don't remember  
6 the -- I don't remember details regarding the level  
7 of review of data that the Commission will be able to  
8 carry out.

9 Q. Given your uncertainties regarding  
10 Staff's audit rights for the RGR, would it be fair to  
11 say you have undertaken no analysis to the extent to  
12 which Staff's review and auditing of the sales of  
13 energy and/or capacity under the RGR would mitigate  
14 the potential market distortions you discuss in your  
15 testimony?

16 MS. WILLIS: Your Honor, may I have that  
17 question reread, please.

18 (Record read.)

19 MS. BOJKO: Objection. I think it  
20 mischaracterizes his prior answer and I also think  
21 the answer is misleading and mischaracterizes the  
22 record in this case.

23 MR. GALLON: I don't believe it does,  
24 your Honor.

25 MS. WILLIS: I would also add, your

1 Honor, that the witness has several times said he is  
2 not familiar with what the Staff's audit rights are,  
3 having only a familiarity that there may be some  
4 information collected. So I don't think that this  
5 is -- I think he has asked and answered it. He has  
6 indicated what he knows and what he doesn't know and  
7 I don't see the purpose of this question.

8 EXAMINER PARROT: The objections are  
9 overruled. Go ahead and respond.

10 THE WITNESS: Do you mind rereading the  
11 question?

12 (Record read.)

13 A. I would say it was not within the scope  
14 of my testimony to examine the impacts of Staff  
15 review and audit of the REPAs and RGR.

16 Q. And, Dr. Sioshansi, you recognize that  
17 AEP Ohio regularly appears before the Public  
18 Utilities Commission, seeking approval for new rates  
19 or rate changes, correct?

20 A. That would depend on what you  
21 characterize as "regularly," but my understanding is  
22 that the Company does come before the Commission on  
23 occasion.

24 Q. So would you agree that the fact that AEP  
25 Ohio is regularly appearing before the Public

1 Utilities Commission would also mitigate any  
2 incentives it might theoretically have to offer  
3 energy, ancillary services, or capacity into PJM at  
4 levels that would not optimize revenues?

5 MS. WILLIS: May I have that question  
6 reread, your Honor?

7 (Record read.)

8 MS. WILLIS: Your Honor, I think the  
9 witness indicated he would not say that AEP is  
10 regularly before the Commission. He said "on  
11 occasion." So I would ask the question be rephrased.

12 EXAMINER PARROT: Go ahead and rephrase.

13 Q. (By Mr. Gallon) Dr. Sioshansi, would you  
14 agree that the fact that AEP Ohio is occasionally  
15 before the Public Utilities Commission of Ohio, would  
16 also mitigate any incentive it might theoretically  
17 have to offer energy, ancillary services, or capacity  
18 into PJM at levels that would not optimize revenues?

19 A. No, I would not.

20 MR. GALLON: Just a moment, your Honor.

21 Q. Dr. Sioshansi, just one more question for  
22 you. Do you believe that a 300-megawatt solar  
23 facility would likely be built in PJM absent the REPA  
24 and Renewable Generation Rider construct previously  
25 approved in the ESP IV case?

1 MS. WILLIS: Your Honor, I would object  
2 on relevance. Counsel may have meant to say  
3 400-megawatt project. I don't think there's a  
4 300-megawatt project in play. In total, there is  
5 300 -- there are combined 400-megawatt projects.

6 EXAMINER PARROT: The objection is  
7 overruled.

8 Go ahead, Dr. Sioshansi.

9 A. Can you repeat the question?

10 Q. Certainly. Do you believe that a  
11 300-megawatt solar facility would likely be built in  
12 PJM absent the REPA and Renewable Generation Rider  
13 construct previously approved in the ESP IV case?

14 A. I'm not clear on which facility you are  
15 referring to.

16 Q. I am referring to a generic 300-megawatt  
17 solar facility.

18 A. Are you asking me whether a generic  
19 300-megawatt solar facility would be built in PJM  
20 absent a REPA and RGR?

21 Q. Yes, sir.

22 A. Yes, I believe a 300-megawatt solar  
23 facility could be built.

24 MR. GALLON: We have no more questions at  
25 this time, sir. Thank you.

1 EXAMINER PARROT: Any redirect?

2 MS. WILLIS: Your Honor, if we could have  
3 just several minutes, that would be great.

4 EXAMINER PARROT: Sure.

5 MS. WILLIS: Thank you.

6 (Pause in proceedings.)

7 MS. WILLIS: Thank you, your Honor. OCC  
8 has no redirect. At this point we would again move  
9 for the admission of OCC Exhibit No. 25.

10 EXAMINER PARROT: Are there any  
11 objections?

12 MR. GALLON: Your Honor, just for the  
13 record, I would like to list the portions of  
14 Dr. Sioshansi's testimony that we would have moved to  
15 strike in total.

16 EXAMINER PARROT: Okay. Go ahead.

17 MR. GALLON: Thank you.

18 Page 3, lines 4 through 11; page 4, lines  
19 13 through 18; page 5, line 2 to page 6, line 15;  
20 page 6, line 21, starting with "in an unfettered  
21 manner" to page 7, line 1, the word "megawatts";  
22 page 7, lines 6 through 9; page 8, line 1 to page 15,  
23 line 12; page 24, lines 2 through 11; page 25, line 1  
24 to page 26, line 9; page 27, lines 1 through 5, and  
25 page 27, line 22 to page 28, line 3.

1 EXAMINER PARROT: It is noted for the  
2 record.

3 MR. GALLON: Subject to that motion to  
4 strike which has been ruled upon, we have no further  
5 objections.

6 EXAMINER PARROT: All right. With that,  
7 OCC Exhibit 25 is admitted into the record.

8 (EXHIBIT ADMITTED INTO EVIDENCE.)

9 MS. WILLIS: Thank you, your Honor.

10 EXAMINER PARROT: Go ahead, Mr. Gallon.

11 MR. GALLON: We would move to enter into  
12 evidence, AEP Exhibit No. 22, Dr. Sioshansi's  
13 testimony from the PPA Rider case.

14 EXAMINER PARROT: Are there any  
15 objections?

16 All right. Hearing none, Company Exhibit  
17 22 is admitted as well.

18 (EXHIBIT ADMITTED INTO EVIDENCE.)

19 MR. OLIKER: Mr. White will be ready in  
20 one minute, your Honor. My apologies, your Honor.  
21 While Mr. White is getting ready, do you have copies,  
22 your Honor, of the testimony?

23 EXAMINER SEE: Yes, but the pagination is  
24 off.

25 MR. OLIKER: Pagination, your Honor?

2446

1 EXAMINER SEE: So I'll take another copy.

2 (Witness sworn.)

3 EXAMINER SEE: Thank you. Have a seat.

4 Cut your microphone on.

5 - - -

6 MATTHEW WHITE

7 being first duly sworn, as prescribed by law, was

8 examined and testified as follows:

9 DIRECT EXAMINATION

10 By Mr. Olikar:

11 Q. Good morning, Mr. White.

12 A. Good morning.

13 Q. Have you prepared direct testimony in  
14 this proceeding?

15 A. Yes, I have.

16 Q. And was that testimony on behalf of  
17 Interstate Gas Supply, Inc. and IGS Solar, LLC?

18 A. Yes.

19 MR. OLICKER: Your Honor, at this time, I  
20 would like to mark, I believe it's Interstate Gas  
21 Supply, Inc. and IGS Solar's Exhibit is it 10? I  
22 believe? 11?

23 EXAMINER SEE: 11.

24 (EXHIBIT MARKED FOR IDENTIFICATION.)

25 Q. Mr. White, does Exhibit 11 contain your



1     prefiled testimony?

2             A.     Yes, it does.

3             Q.     And this was testimony prepared by you or  
4     under your direction?

5             A.     Yes, it was.

6             Q.     And do you have any changes to your  
7     testimony?

8             A.     No, I do not.

9             Q.     If asked these same questions today,  
10     would your answers be the same?

11            A.     Yes.

12                   MR. OLIKER:   With that, your Honor, I  
13     would move the admission of the exhibit and tender  
14     the witness for cross-examination.

15                   MR. NOURSE:   Your Honor.

16                   EXAMINER SEE:  Mr. Nourse.

17                   MR. NOURSE:   I would like to ask a couple  
18     voir dire questions if I could.

19                   EXAMINER SEE:  Okay.

20                                 - - -

21                                 VOIR DIRE

22     By Mr. Nourse:

23             Q.     Good morning, Mr. White.

24             A.     Good morning, Mr. Nourse.

25             Q.     You are not testifying today in your

1 capacity as an attorney, licensed to practice in  
2 Ohio, correct?

3 A. I'm testifying on the totality of my  
4 experiences.

5 Q. Are you offering legal conclusions and  
6 arguments in your testimony?

7 A. I'm offering commonsense conclusions, I  
8 would say.

9 Q. So you are not offering legal conclusions  
10 in your testimony?

11 A. I'm offering a conclusion on -- on the  
12 definition of need which is -- it doesn't take a law  
13 degree to know what the definition -- definition of  
14 need is.

15 MR. NOURSE: Okay. Thank you, your  
16 Honor. That's helpful. I will wait my turn for  
17 cross.

18 EXAMINER SEE: Okay. Ms. Glover.

19 MS. GLOVER: No questions, your Honor.

20 EXAMINER SEE: Mr. Darr.

21 MR. DARR: No questions.

22 EXAMINER SEE: Mr. Collier.

23 MR. COLLIER: No questions, thank you.

24 EXAMINER SEE: Ms. Whitfield.

25 MS. WHITFIELD: No questions, your Honor.

1 EXAMINER SEE: Ms. Bojko.

2 MS. BOJKO: No questions, thank you.

3 EXAMINER SEE: Ms. Willis.

4 MS. WILLIS: No questions, your Honor.

5 EXAMINER SEE: Mr. Kurtz.

6 MR. KURTZ: No questions.

7 EXAMINER SEE: Mr. McNamee.

8 MR. McNAMEE: No questions, your Honor.

9 Thank you.

10 EXAMINER SEE: And we are back to you,

11 Mr. Nourse.

12 MR. NOURSE: Thank you. Back to me.

13 Okay. Thank you.

14 - - -

15 CROSS-EXAMINATION

16 By Mr. Nourse:

17 Q. Mr. White, I do have some questions about  
18 your testimony. Could you turn to page 3. In line  
19 25, you say you've submitted written testimony in  
20 front of numerous regulatory bodies. I just want to  
21 clarify what you mean by "submitted written testimony  
22 in front of." Is that -- is that filed testimony  
23 that wasn't admitted into evidence or filed where you  
24 did not stand for cross-examination or can you  
25 clarify that?

1           A.    Sure.  It was all filed testimony,  
2   admitted into evidence.  In some instances, I was  
3   cross-examined; some instances, cross was waived.  
4   But in all instances cross-examination was made  
5   available.

6           Q.    Okay.  So all the testimony filed in all  
7   those jurisdictions is in the same category?

8           A.    Yes.

9           Q.    Okay.  Down on the same page, down on  
10  line 32, you say you are "submitting testimony on  
11  behalf of IGS Energy and IGS Solar."  Do you see  
12  that?

13          A.    Yes.

14          Q.    Okay.  And so those two entities, if you  
15  can call them "IGS and IGS Solar," did they have  
16  different interests in this case?

17          A.    I would say interests are similar in that  
18  there's common ownership.

19          Q.    Okay.  And has IGS Solar intervened in  
20  other PUCO cases or is this the first time in a PUCO  
21  proceeding they've intervened?

22          A.    I believe we have but I'm not sure  
23  100 percent.  I believe that IGS Solar has been a  
24  party to a proceeding but I am not 100 percent sure.

25          Q.    Okay.  Turn to page 4.  I'll give you a

1 couple references but -- for context, but I just want  
2 to talk to you about your understanding of Senate  
3 Bill 221 and the Ohio regulatory construct for  
4 electric utilities. So -- so, for example, on page  
5 4, line 66, you make a claim that the Company's  
6 proposal is contrary to Senate Bill 221. Do you see  
7 that?

8 A. Yes.

9 Q. And I think later in your testimony you  
10 kind of make a similar claim. I'll direct you to  
11 page 17 where on line 337 you say the "proposal is a  
12 throwback to regulated vertically integrated monopoly  
13 construct...." Do you see that?

14 A. Can you point to it again?

15 Q. Sure. It's page 17, line 337. Do you  
16 see the "throwback" comment there?

17 A. Yes, I do.

18 Q. Okay. And then the third one I was going  
19 to point you to for this part of the discussion, it's  
20 on page 8, down in lines 152 and following, you say  
21 "we live in a democracy, and the state of Ohio has  
22 settled on a statutory construct," et cetera. Do you  
23 see that?

24 A. Page 8, what line are you referring to?

25 Q. Page 8, that was starting on line 152.

1           A.    Yes.

2           Q.    Okay.  Now, I just want to ask you now,  
3   that's one of the themes of your testimony, I  
4   believe, right, that our proposal is not -- does not  
5   fit within the current regulatory structure for  
6   electric utilities; is that fair?

7           A.    I think it's fair to say that my  
8   testimony was designed to indicate that it goes  
9   against the legislative intent in the statutory  
10   construct.  That the proposal, AEP's proposal goes  
11   against Ohio legislative intent set forth in SB 221.

12          Q.    Okay.  So -- and would you agree or  
13   disagree with the statement that the Commission has  
14   statutory authority, under the ESP statute, to  
15   approve ownership or operation of a new generation  
16   resource by AEP Ohio, subject to the other conditions  
17   in that statute?

18          A.    Can you provide the statute you are  
19   referring to, please?

20          Q.    I didn't bring it with me, Mr. White.  
21   But I am asking you -- like I said, I want to have a  
22   general discussion of your understanding of the -- of  
23   the regulatory construct including the ESP or  
24   Electric Security Plan.  So for purposes of these  
25   questions, I just want you to rely on your

1 understanding. So with that in mind again, I am  
2 asking you whether the -- again, I am not asking you  
3 a legal question. I am asking about your  
4 understanding of the regulatory construct including  
5 the ESP. So my question there, I will repeat it, do  
6 you agree that the Commission has authority, under  
7 the ESP statute, to approve ownership or operation of  
8 a new generation resource for AEP Ohio, subject to  
9 the other conditions in the statute?

10 MR. OLIKER: Your Honor, I would simply  
11 object. The witness asked for a copy of the statute  
12 and counsel has not provided it to him, and if the  
13 witness needs that information, then I think we have  
14 a problem with the cross-examination.

15 MR. NOURSE: Well, your Honor, if that's  
16 his answer that he doesn't know and he would have to  
17 look at the statute, he doesn't recall, that's fine.  
18 But I don't think I am required to give him a copy of  
19 a statute when he is talking about the ESP construct  
20 in his testimony.

21 EXAMINER SEE: The objection is  
22 overruled. The witness can answer the question.

23 A. Without looking at the statute, generally  
24 speaking at a high level, I believe there is a  
25 carve-out, if the Company is able to establish a need

1 to -- there is a carve-out for them to build  
2 generation.

3 Q. Okay. Now, is it your understanding that  
4 Ohio utilities can only provide generation service  
5 based on competitively-procured market generation?

6 MR. OLIKER: Objection. That's a very  
7 ambiguous question and I am not sure how it relates  
8 to the testimony.

9 Q. I can rephrase, but Mr. -- Mr. White,  
10 again, as I have stated repeatedly, I want to talk  
11 about the regulatory construct for electric utilities  
12 in the ESP and MRO options. This -- so it is your  
13 understanding that AEP Ohio in this case is  
14 attempting to show need under part of the ESP statute  
15 that we just talked about, right?

16 A. Without knowing the specific statute or  
17 having it in front of me, yes.

18 Q. Okay, okay. Now, my question was whether  
19 under the ESP and MRO options is a utility like AEP  
20 Ohio required to supply nonshopping load with  
21 competitively-procured generation?

22 MR. OLIKER: Objection. What is the  
23 relevance?

24 MR. NOURSE: I think I have already  
25 explained the context several times, your Honor.



1                   EXAMINER SEE: The objection is  
2                   overruled.

3                   A. My understanding, under the law, is that  
4                   the utility is required to have a Standard Service  
5                   Offer. How that is supplied, many have different  
6                   opinions.

7                   Q. Okay. And, again, I am talking about  
8                   requirements and your understanding of the regulatory  
9                   construct. So let me ask you this way, is it  
10                  permissible, to your understanding, under the ESP  
11                  statute, to have a utility use a cost-based  
12                  generation supply?

13                  A. Again, without having any statute or even  
14                  know what specific statute you are referring to, you  
15                  are not citing to a statute, from a high level, my  
16                  understanding of how Ohio regulatory law works is  
17                  that no longer is the utility using a cost-based  
18                  model to -- to procure electricity for Standard  
19                  Service Offer customers.

20                  Q. Okay. And would you agree that the ESP  
21                  specifically is a hybrid of market and cost-based  
22                  solutions?

23                  A. I think the ESP is a statute that was  
24                  designed to transition away from cost-based into more  
25                  market-based solutions.

1           Q.    Do you know what the overall standard is  
2   for an ESP, the so-called MRO test?

3           A.    Without having the statute in front of  
4   me, from a high level, it's is the ESP more favorable  
5   in the aggregate than a market rate offer which is  
6   also defined in the statute.

7           Q.    Okay.  So is it fair to, again, to  
8   restate your understanding of the ESP, that using  
9   market and cost, can you beat an MRO; is that a fair  
10  summary?

11          A.    I don't necessarily think that's a fair  
12  summary.

13          Q.    Okay.  Do you know whether AEP Ohio has  
14  been approved for using any cost-based generation in  
15  connection with their ESP plan?

16          MR. OLIKER:  Objection.  What is the  
17  relevance to other elements not in this application  
18  regarding cost-based elements?  We are here to talk  
19  about 900 megawatts of solar and wind.

20          MR. NOURSE:  Yeah, your Honor.  I am  
21  starting with the regulatory construct, so these are  
22  some of my questions about his understanding to help  
23  test his credibility.  I think we've talked about  
24  that case many times throughout this proceeding with  
25  various witnesses.

1 MS. BOJKO: Your Honor, I am going to  
2 object because it's almost like Mr. White is being  
3 punished for being an attorney because he is not  
4 being shown the statutory provisions. All other  
5 witnesses that will -- were AEP witnesses, that were  
6 nonlawyers, Mr. Nourse actually objected and said it  
7 was only fair, if we were going to be talking about  
8 the statute, to put the statute in front of the  
9 witness.

10 Now, Mr. Nourse wants to do the opposite  
11 and not put the statute in front of an attorney in an  
12 alleged apparent credibility attack because lawyers  
13 can't remember every single statutory provision of  
14 every single law. This is unfair and prejudicial.  
15 If he asks about a statute, he should put it in front  
16 of a witness, just as we were required to do in front  
17 of his witnesses.

18 MR. NOURSE: Well, your Honor, I think  
19 that is not an accurate description of what we have  
20 done in this hearing, but I will say my current  
21 question relates to his knowledge about our ESP plan  
22 and not the statute at all.

23 MR. OLIKER: And there is no other  
24 provisions in the current ESP, your Honor, that  
25 involve (B)(2)(c) or (B)(2)(b) which is what is at

1 issue in this case.

2 MR. NOURSE: Sure. But Mr. White is  
3 talking generally about what's permitted in Ohio and  
4 what's not, and whether we're throwing back to, you  
5 know, traditional regulation, et cetera.

6 EXAMINER SEE: The objections are  
7 overruled and the witness can answer the question  
8 with any other clarification the witness deems  
9 necessary.

10 THE WITNESS: Can you repeat the  
11 question, please?

12 MR. NOURSE: Please read it back.

13 (Record read.)

14 A. I believe OVEC was a cost-based provision  
15 approved in their ESP plan.

16 Q. Okay. And if you recall, Mr. White, that  
17 OVEC cost recovery came about as a result of a  
18 settlement that was signed by, among other parties,  
19 IGS?

20 MR. OLIKER: Objection. The settlement  
21 specifically precludes citation to that document in  
22 any other context and I believe Mr. Nourse is  
23 exceeding the scope of his obligations under that  
24 settlement if he is offering IGS's signature as  
25 support for that provision.

1                   MR. NOURSE: I asked him a factual  
2 question, your Honor.

3                   MR. OLIKER: And it's objectionable. It  
4 should not be in this record, your Honor.

5                   MR. NOURSE: Your Honor, I'll move on.

6                   EXAMINER SEE: Okay.

7                   Q. (By Mr. Nourse) Mr. White, let me ask you  
8 next about the topic you described and discussed  
9 extensively in your testimony, the Ohio Alternative  
10 Energy Portfolio Standard.

11                  A. Yes.

12                  Q. Okay. And can you give me your  
13 understanding of the Alternative Energy Portfolio  
14 Standard statute?

15                  A. Sure. I describe it in my testimony.  
16 However, from a high level, in Ohio, load-serving  
17 entities, such as ESP or IGS, are required to procure  
18 a certain percentage of their electricity through  
19 renewable energy and also, in particular, there's a  
20 percentage required of solar energy.

21                  Q. Okay. Are you finished?

22                  A. Yes.

23                  Q. And just for the record, I think you said  
24 entities "such as ESP or IGS"; were you referring to  
25 AEP Ohio there?

1           A.    Sure.  If I said "ESP" that should have  
2   been AEP Ohio.

3           Q.    Okay.  And would you agree, under the  
4   Alternative Energy Portfolio statute, that the levels  
5   that are required to be procured of renewable are  
6   minimums?

7           A.    There are minimums subject to cost caps  
8   as well.

9           Q.    Okay.  Can you explain what you mean by  
10   that?  Does the cost cap apply to going above the  
11   minimum?  Is that what you meant?

12          A.    Meaning they're a minimum assuming they  
13   don't exceed the cost cap.

14          Q.    Okay.  So there's a minimum requirement  
15   subject to an off ramp if the cost cap kicks in?

16          A.    Yes.

17          Q.    Okay.  And is -- if you know, does IGS or  
18   other CRESs go above the current, I think it's around  
19   5-percent minimum mandate in providing products and  
20   services to customers?

21          A.    IGS satisfies its minimum requirement to  
22   procure renewable energy for Ohio and also offers  
23   voluntary renewable products to customers that wish  
24   to exceed the minimum requirement for renewable  
25   energy.

1           Q.    Okay.  Now, again, I am just trying to  
2 understand your perspective and your arguments and  
3 conclusions in your testimony.  But so with respect  
4 to the Alternative Energy Portfolio Standard, is it  
5 your position that that statute trumps the ESP  
6 statute that we're talking about in this case  
7 involving a need showing?

8           MR. OLIKER:  Objection.  The question is  
9 vague.  It hasn't been identified by counsel what in  
10 that statute is trumping something in the ESP  
11 statute.  I don't believe the witness can answer the  
12 question.

13           MR. NOURSE:  I have faith that Mr. White  
14 can answer that question and he talks extensively  
15 about the portfolio standard in his stat -- in his  
16 testimony as it relates to the need question, your  
17 Honor.

18           MR. OLIKER:  If Mr. White understands the  
19 question, I will withdraw my objection.

20           EXAMINER SEE:  You can answer the  
21 question, Mr. White.

22           A.    I don't know what you mean by "trump."

23           Q.    Okay.  Do you -- is it your understanding  
24 and your position that the -- as advanced in your  
25 testimony, that the portfolio standard minimum

1 requirement affects the question of need under the  
2 ESP statute that we're discussing here today?

3 A. I think the portfolio standard is  
4 indicative of what the state legislature has  
5 determined the need in Ohio to be to procure  
6 renewable portfolio -- renewable resources.

7 Q. Okay. And let me -- let me ask you, I  
8 guess, the flip question, flip side. When you look  
9 at the ESP statute and the need question that we're  
10 talking about in this case, is it your interpretation  
11 that -- that that statute does not contemplate  
12 renewable generation resources at all or would  
13 exclude them?

14 MS. BOJKO: Objection, your Honor. Now,  
15 he is asking him about the specific statute and he is  
16 asking him to draw a legal conclusion, I believe,  
17 about the statute and he doesn't have the statute in  
18 front of him.

19 MR. NOURSE: Your Honor, I am asking him  
20 his position in his testimony that I think he has  
21 already reached a conclusion on.

22 EXAMINER SEE: And the objection is  
23 overruled.

24 A. Can you repeat the question?

25 Q. Yeah. When we look at the ESP statute



1 and the need question that we are talking about in  
2 this case, is it your interpretation when you look at  
3 the ESP statute and the alternative portfolio  
4 standard together that the -- that renewable  
5 generation resources are beyond the scope of the ESP  
6 statute?

7 A. My interpretation is the General Assembly  
8 set forth the amount of renewable energy that's  
9 needed in Ohio in the RPS statute, therefore, any  
10 other provision in the law that attempts to say  
11 additional resources are needed is beyond what was  
12 intended by the General Assembly when establishing  
13 the amount of resources that were needed in the RPS  
14 statute.

15 Q. Okay. And is that -- are you generally  
16 affirming-- I'm sorry. With the caveats and  
17 explanation you gave, are you generally affirming the  
18 question that I asked you?

19 A. Can you repeat the question?

20 Q. That's okay. Let me ask you a new topic.

21 Do you agree that the Commission in -- in  
22 this case can consider and promote the policy of  
23 supply diversity?

24 A. I can't answer that question without  
25 providing some law or statute that you're referring

1 to. The Commission is a creature of statute, so it  
2 can do within the statute. If you are able to  
3 provide the statute that you're referring to, then I  
4 would be happy to answer the question.

5 Q. Yeah. Well, that's -- that's fine but I  
6 am not going to do that. I want to ask you a  
7 question based on your understanding. So do you know  
8 whether the codified energy policy includes supply  
9 diversity?

10 A. I don't know off the top of my head, but  
11 I would be happy to look at the statute and let you  
12 know if you have it available.

13 Q. Okay. Let's turn to page 6 of your  
14 testimony. So the answer -- the Question and Answer  
15 on the bottom of page 6, under the "Senate Bill 221"  
16 topic. Do you see that?

17 A. I'm sorry, what are you referring to?

18 Q. Page 6, the Q and A, at the bottom of  
19 page 6, under the heading "Senate Bill 221."

20 A. Yes.

21 Q. And that line, in line 113, you say you  
22 are about to list the relevant portions of Senate  
23 Bill 221. Do you see that?

24 A. They're relevant for purposes of my  
25 testimony, yes.

1           Q.    Okay.  And you did not list any  
2   provisions within the ESP in that -- in those bullet  
3   points that are on page 7?

4           A.    Those bullet points primarily discuss the  
5   RPS standard, not to say that the ESP is not  
6   relevant, I was focusing on the RPS for my testimony.  
7   There was a lot of different portions in the SB 221.

8           Q.    Okay.  And your testimony primarily talks  
9   about the RPS standard and what the implications are  
10  of that, correct?

11          A.    That was the focus of that portion of my  
12  testimony was the RPS.

13          Q.    Okay.  Let me ask you to turn to page 9.  
14  So in the answer at the top of page 9, starting on  
15  line 159, you discuss the 3 percent cost cap as part  
16  of the portfolio statute, correct?

17          A.    Yes.

18          Q.    And is it your opinion that the 3 percent  
19  cost cap applies to this case?

20          A.    I think the 3 percent cost cap is  
21  relevant to this case.

22          Q.    Are you saying that if the Commission  
23  finds that AEP can provide solar generation for less  
24  than 3 percent above nonsolar generation, that that's  
25  a material fact the Commission should weigh in making

1 a decision here?

2 A. No, that's not what I testified to.

3 Q. Okay. But you said the 3 percent cost  
4 cap is relevant. What did you mean by that?

5 A. It's relevant in that the State  
6 legislature has thought through thoroughly what is  
7 needed in Ohio for -- with respect to renewable  
8 energy. They've even done so such that they've  
9 identified the amount that they are willing to spend  
10 to procure renewable energy. They've revisited the  
11 bill to establish the RPS. So the fact that the  
12 State legislature has set forth a detailed policy on  
13 renewable energy is evidence that that policy  
14 determines the need and not necessarily another  
15 policy for renewable energy.

16 Q. So the RPS statute trumps the RPS  
17 statute, is that what you are saying?

18 A. That's not what I am saying. What I am  
19 saying is it's indicative of the legislature's intent  
20 that they have already set forth a policy for  
21 renewable energy and specifically identified how much  
22 renewable energy is required to be delivered into the  
23 State in order to meet that policy.

24 Q. Okay. But my question here was how the  
25 3 percent cost cap applies or can you tie that up

1 too?

2 MR. OLIKER: Your Honor, objection. I  
3 believe he answered that question within his prior  
4 answer two answers ago.

5 MR. NOURSE: I didn't see any reference  
6 to the 3 percent cost cap, your Honor. That's what  
7 my question was, how does it apply here.

8 MR. OLIKER: I believe it was when he  
9 said something to the effect of how much is going to  
10 be spent for the beginning of his answer two answers  
11 ago.

12 Q. (By Mr. Nourse) Okay. Let me ask the  
13 follow-up question then. What do you mean by that,  
14 what your counsel said if that's what you meant, can  
15 you explain that?

16 A. I don't know what the question --

17 Q. How does the 3 percent cost cap apply in  
18 this case?

19 A. Well, if you read my testimony,  
20 effectively I discuss the 3 percent cost cap in the  
21 context of the fact that the legislature set forth  
22 the cost cap, and -- my knowledge, no company has in  
23 the recent -- recent history, no company has applied  
24 to say that they can't meet the requirements because  
25 they are exceeding the cost cap that Ohio is meeting

1 the need of renewable energy below the cost cap.

2 That's the relevance to my testimony.

3 Q. Okay. And staying on page 9, you talk --  
4 you -- you use the term load-serving entities a  
5 couple of times on line 166 and line 174. Are you  
6 using that term as a PJM term, load-serving entity?

7 A. It's an industry term.

8 Q. Is it a term that's created and defined  
9 in the PJM tariff if you know?

10 A. I don't know if it's specifically defined  
11 in the PJM tariff, but it's a commonly-understood  
12 term in the industry.

13 Q. Okay. And on lines 173 and 174, you're  
14 saying electric utilities are no longer the  
15 load-serving entity. Do you see that?

16 A. Can you point to that again, please?

17 Q. Page 9, line 173, 174, "electric  
18 utilities are no longer the load serving entity...."  
19 Do you see that?

20 A. I say for the -- I say "electric  
21 utilities are no longer the load serving entity for  
22 the majority of load in Ohio."

23 Q. So are you saying that for shopping load,  
24 the utilities are not the load-serving entity?

25 A. Yes. In my testimony I'm referring to

1 the utilities as a load-serving entity if they are a  
2 receiver of Standard Service Offer service. If  
3 they're shopping, the utility is not the load-serving  
4 entity.

5 Q. Okay. And conversely, if they are taking  
6 SSO service, then the utility is the load-serving  
7 entity for that customer, correct?

8 A. Yes.

9 Q. Okay. Turn to page 10, if you would.  
10 Down on line 197, you say that 200 megawatts of solar  
11 resources have been constructed in Ohio to date. Do  
12 you see that?

13 A. Yes.

14 Q. And that's followed up by your chart that  
15 I guess shows, by year, the megawatts constructed on  
16 page 11, correct?

17 A. Yes.

18 Q. And do you know how much of the 200 is  
19 utility-scale solar?

20 MR. OLIKER: Objection. To the extent  
21 we've used multiple definitions of utility solar in  
22 this proceeding.

23 Q. Sure. Mr. White, do you have a view on  
24 what -- where you draw the line for utility-scale  
25 solar?

1           A.    Utility-scale is solar that's built in  
2 front of the meter.

3           Q.    Regardless of size? Or do you have a  
4 threshold?

5           A.    I think, generally speaking, utility --  
6 utility-scale is in front of the meter. It's not  
7 designated specifically for self-consumption by a  
8 customer. Distributed generation is behind the meter  
9 and is designated for self-consumption by a customer.

10          Q.    Okay. And my question then is, of the  
11 200 in the data you include in the table, how much of  
12 that is utility-scale solar? If you know?

13          A.    I don't think that includes  
14 behind-the-meter generation. That's data we got from  
15 the PUCO. I believe that's just  
16 in-front-of-the-meter generation.

17          Q.    Okay. And so, the proposal for need in  
18 this case, on the solar side, is for 400 megawatts of  
19 solar, correct?

20          A.    Yes, AEP's asking to establish a need to  
21 build 400 megawatts of solar.

22          Q.    All right. And that would triple the  
23 level of solar that you are saying has been deployed  
24 to date or since Senate Bill 21, correct?

25          A.    Yeah. And just to clarify, I think



1 that's actually the amount of solar that's been  
2 applied for at the PUCO for renewable energy credits;  
3 so I don't think it takes into account solar that's  
4 not submitted an application for renewable energy  
5 credits.

6 Q. Okay. Well, the -- you are referring to  
7 an EL-REN case as it's known at the Commission?

8 A. I don't know the exact.

9 Q. Okay. All right. Let me ask you this  
10 since you mention it. Is it your understanding that  
11 those renewable energy credit applications are  
12 limited to Ohio resources? Or do they include  
13 resources that are deliverable into Ohio from  
14 elsewhere in PJM or MISO?

15 A. I don't know off the top of my head.

16 Q. Okay. But you think the table on the top  
17 of page 11 is based on those renewable energy  
18 certificate cases?

19 A. It's data that was provided by the PUCO.  
20 But I'm not 100 percent sure where the PUCO got that  
21 data.

22 Q. Okay. Now, on page 11, you have a Q and  
23 A that starts in the middle of the page and you are  
24 talking about Senate Bill 310. Do you see that?

25 A. Yes.

1           Q.   And you conclude that Ohio does not wish  
2   to require additional construction of renewable  
3   generation in Ohio above what's being developed,  
4   right?

5           A.   Yes, I -- with the enactment of 310, the  
6   Ohio legislature determined that there is no specific  
7   requirement to develop in-state generation beyond  
8   what is already required in the broader renewable  
9   portfolio statute.

10          Q.   Okay.  And specifically in line -- well,  
11   lines 210 and 211, you say "beyond what is already  
12   being developed in the market."  Do you see that?

13          A.   Yes.

14          Q.   So are you saying that as of 2014, those  
15   projects that were being developed at that time are  
16   the only ones that can go forward?

17          A.   No.

18          Q.   Okay.  What does the phrase "beyond what  
19   is already being developed in the market" refer to?

20          A.   It's referring to beyond what is being  
21   developed based on the incentives that are available  
22   through the Ohio RPS and federal incentives or any  
23   other incentives that are available.

24          Q.   So during 2014 or any time after?

25          A.   Is that a question?  I'm sorry.

1           Q.    Yeah.  I am trying to clarify what you  
2   are saying because part of my question was whether it  
3   was as of 2014 and you said beyond what was already  
4   being developed in the market.  So let me rephrase,  
5   try to be clear.

6                    You're saying that the -- you're  
7   interpreting 310, Senate Bill 310, to mean that the  
8   legislature has made its intent clear, it does not  
9   wish to require additional construction beyond what  
10  is already being developed in the market.

11           A.    What I am saying is it does not wish to  
12  provide additional incentive to develop in-state  
13  renewable resources.

14           Q.    Okay.  Is there any specific language  
15  that you recall in Senate Bill 310 that supports that  
16  view?

17           A.    I think just commonsense that they  
18  repealed a requirement that no longer -- to make it  
19  so it is no longer requiring a specific percentage of  
20  generation be built in Ohio.  They repealed that  
21  requirement.  So I think it's a fair statement to say  
22  that they no longer intend to provide additional  
23  incentive to build in Ohio for renewable resources.

24           Q.    Well, since you are talking about  
25  legislative intention, let me ask you this:  You were

1 involved in some of the discussions around Senate  
2 Bill 310, back in 2014; is that correct?

3 A. Me personally?

4 Q. You or somebody that works for you or  
5 IGS.

6 A. Yes. We were involved in 310 in some  
7 capacities.

8 Q. And do you recall one of the issues being  
9 the latent commerce clause challenge or the potential  
10 for the prior version of the Alternative Energy  
11 Portfolio Standard as being a burden on interstate  
12 commerce?

13 A. So I do recall one of the rationales for  
14 enacting SB 310 which is to eliminate the --  
15 eliminating the in-state renewable requirement was  
16 potentially it could trigger a commerce clause  
17 violation which effects would make the in-state  
18 requirement unlawful. Since that time, as I discuss  
19 in my testimony, we've -- we've gotten guidance from  
20 courts to effectively say that in-state requirements  
21 are lawful; so although, you know, nothing is final  
22 on that matter, I think at least some of that concern  
23 has been ameliorated.

24 Q. Okay. Let me ask you to turn to page 14  
25 of your testimony. And down -- down in line 278

1 starting in 277, "the reliability needs for electric  
2 generation have been turned over to competitive  
3 markets...." Do you see that statement?

4 A. Yes.

5 Q. Okay. Is that a reference to -- to PJM  
6 or is it a reference to how the utilities procure  
7 generation?

8 A. It's a reference to generally the  
9 construct of generation in Ohio.

10 Q. Okay. When you say "turned over," I just  
11 want to clarify what you mean by that. Are you  
12 saying that utilities are required to procure SSO  
13 supply, for example, from competitive markets or is  
14 that not what you were talking about here?

15 A. What I am talking about is effectively  
16 the fact that PJM sets the capacity requirement for  
17 the region which includes Ohio and that is what's  
18 determined is needed for a lot -- reliability  
19 purposes to ensure the lights remain on in Ohio and  
20 it's no longer within the purview of the local  
21 distribution utility.

22 Q. That reliability is no longer within the  
23 purview, is that what you meant?

24 A. Generation reliability.

25 Q. Okay.

1           A.   Obviously distribution reliability sure  
2   is.

3           Q.   All right. Good clarification. So do  
4   you know when AEP Ohio joined PJM?

5           A.   I don't know the date.

6           Q.   Do you know if joining an RTO was a  
7   requirement of Senate Bill 3?

8           A.   Without seeing the statute, I don't know  
9   off the top of my head.

10          Q.   Do you recall whether joining an RTO is  
11   part of either Senate Bill 3 or Senate Bill 221?

12          A.   I know that every utility in Ohio --  
13   every investor-owned utility is a member of an RTO  
14   but I don't know if it's a requirement.

15          Q.   Okay. On page 15, line 295, you have a  
16   sentence, "In fact, IGS makes available a competitive  
17   renewable electric product that is sourced from  
18   all-Ohio electric generation resources." Do you see  
19   that?

20          A.   Yes.

21          Q.   And is this product available to  
22   residential customers in AEP's Ohio service  
23   territory?

24          A.   Yes, I believe so.

25          Q.   And when was this product made available

1 to customers in AEP Ohio's service territory?

2 A. I don't know the exact date.

3 Q. Was it recently?

4 A. I don't know the exact date.

5 Q. You don't recall if it was within the  
6 last six months?

7 A. I believe it was within the last six  
8 months.

9 MR. NOURSE: Okay. I would like to mark  
10 an exhibit, your Honor. AEP Ohio Exhibit 23.

11 (EXHIBIT MARKED FOR IDENTIFICATION.)

12 Q. Mr. White, I will give you a moment to  
13 take a look at this and I don't know if you are  
14 already aware, excuse me, but there has already been  
15 an exhibit in this case that includes the -- a weekly  
16 batch download from the Apples to Apples website of  
17 CRES offers, including IGS, but also for all CRES as  
18 listed on the Apples to Apples. What I have done  
19 here is pull out some data relating to IGS, so I  
20 wanted to discuss that with you.

21 A. Sure.

22 Q. Okay. So again, you can take your time  
23 and look at this but I believe, according to my  
24 review, that if you look at the -- actually look at  
25 the last page on this exhibit, the second item at the

1 top which relates back to the January 4, 2019, Entry,  
2 is the first time that I was able to find a reference  
3 to Ohio wind energy so that the renewable offering  
4 from IGS Energy, that is the first one I found that  
5 includes Ohio-based RECs.

6 MR. OLIKER: Objection. Your Honor.  
7 There has been no foundation for this document which  
8 appears to be, a phrase I'll take from Mr. Nourse  
9 from many years ago, a homemade exhibit.

10 MR. NOURSE: Okay, your Honor. Are you  
11 done? Go ahead.

12 MR. OLIKER: Unless there is foundation  
13 established, as I understand, Mr. Nourse is trying to  
14 show when certain IGS products may or may not have  
15 come about, but this is simply from snippets that  
16 allegedly have been taken from the Apples to Apples  
17 website, which may or may not show when products were  
18 on the Apples to Apples website, but is not  
19 indicative of when a CRES provider may have a certain  
20 product. And as Mr. White already indicated, he  
21 simply does not know, and trying to get that evidence  
22 into the record, when he's already said he doesn't  
23 know, based upon information he has no familiarity  
24 with or there has been no foundation, would be  
25 improper.



1                   MR. NOURSE: Well, your Honor, I think  
2 Mr. White did say it was within the last six months  
3 and he did say, I asked him about whether he was  
4 familiar with what's on Apples to Apples, and if I  
5 could ask him some questions about it, I am trying to  
6 save time here, your Honor. We can pass out, we can  
7 show him AEP Ohio Exhibit 21 that's already in the  
8 record that has the -- as I represented earlier, has  
9 all the CRES information including IGS. I was trying  
10 to save time by pulling IGS out so I could discuss  
11 with Mr. White just the IGS portions.

12                   EXAMINER SEE: Start with some foundation  
13 for Mr. -- with Mr. White and we'll go from there.

14                   Q. (By Mr. Nourse) Well, additional  
15 foundation, Mr. White, I already asked you that you  
16 are saying it was within the last six months that IGS  
17 offered an Ohio renewable project -- product,  
18 correct?

19                   A. I believe so.

20                   Q. And was it -- to zero in a little bit  
21 further was, it right around the same time you filed  
22 your testimony in this case which was January 2,  
23 2019?

24                   A. I don't know.

25                   Q. Okay. And you are familiar with the

1 Company's decisions to offer new products in Ohio,  
2 right? IGS's decision?

3 A. At a high level, yes; although, I am not  
4 aware of every single product or price change we have  
5 in the market.

6 Q. But you are aware as a new step, IGS  
7 decided to make an Ohio renewable offering for the  
8 first time, correct?

9 A. Yes, I am aware we have available an Ohio  
10 renewable offering.

11 Q. Okay. So I'm going to give you AEP Ohio  
12 Exhibit 21 in case you want to refer to this. It's  
13 already in the record and it contains the weekly  
14 downloads for, you know, the same period that's in  
15 the exhibit I handed you a few minutes ago. If you  
16 need to refer to that, feel free. Otherwise, this  
17 Exhibit 23, the one I handed you a couple of minutes  
18 ago, is pulling information out of that larger stack  
19 of data. Do you understand? Are you with me?

20 A. Sure.

21 Q. Okay. So, and again take your time if  
22 you need to look through this, but I am trying to  
23 expedite things here. On the last page, the second  
24 entry at the top, that says 100 percent Ohio wind  
25 energy as part of the January 4, 2019, batch, is the

1 first time I could locate an Ohio-specific renewable  
2 project -- product from IGS Energy. Do you see that  
3 and agree with my conclusion?

4 A. No.

5 Q. You don't see it or you don't agree with  
6 my conclusion?

7 A. I don't agree with your conclusion.

8 Q. Okay. So could you tell me, even though  
9 this is what's stated on the Apples to Apples  
10 website, when the first time was that IGS Energy  
11 offered an Ohio renewable product?

12 A. Sure. So there's a couple of ways a  
13 customer -- as I mention in my testimony, there is a  
14 couple of ways a customer can receive a renewable  
15 product from a retail provider or provider of  
16 renewable energy.

17 One is on-site distributed generation and  
18 IGS has made available that product to customers and  
19 does have on-site distributed generation customers in  
20 Ohio for over a year. So, you know, we've made  
21 on-site -- and it's been a product that's available  
22 to customers for over a year.

23 As far as whether or not our product,  
24 which is a product that's offered through the PUCO  
25 Apples to Apples website, that -- I think you are

1 correct that it became available, that specific  
2 product became available on the PUCO Apples to Apples  
3 website that day.

4 But that being said, all our products and  
5 services aren't required to be listed on the Apples  
6 to Apples website. There is a number of CRES  
7 products that are available in the market that aren't  
8 on the Apples to Apples website. So I can't say that  
9 the date it was put on the Apples to Apples website  
10 is indicative of the date it became available to  
11 customers.

12 Q. Okay. A couple of follow-ups to what you  
13 just said. So the on-site distributed generation  
14 option that you said has been available for more than  
15 a year, that requires a customer to become a net  
16 metering customer, correct?

17 A. I think, yes, they have to have some kind  
18 of interconnection agreement.

19 Q. That product that you're talking about  
20 that has been available for a year or so, does  
21 involve some transaction to -- for the customer to  
22 acquire behind-the-meter generation, correct?

23 A. That particular product requires you to  
24 have distributed generation.

25 Q. Okay. And so in terms of the -- the --

1 just the 100-percent renewable energy offering that's  
2 based on Ohio RECs, the January 4, 2019, time frame,  
3 is more accurate for that product, right?

4 MR. OLIKER: Objection.

5 A. That I don't know because, again --  
6 sorry.

7 EXAMINER SEE: Go ahead, Mr. White.

8 MR. OLIKER: Go ahead.

9 A. I don't know because I don't -- just  
10 because it's on -- when it's posted on the Apples to  
11 Apples is not always when it's made available to the  
12 customers, and I would say that most products listed  
13 are not listed on the Apples to Apples, so I can't --  
14 I don't know whether that dates the date or if it was  
15 before that.

16 Q. Okay. All right. So, now, whenever the  
17 exact date was within the last few months that IGS  
18 began offering this 100-percent renewable product for  
19 retail customers without distributed generation and  
20 based on Ohio RECs, I want to ask you a couple more  
21 questions about that. So here it says 100-percent  
22 Ohio wind energy and that's your understanding of  
23 this product, right?

24 A. Can you point to which one you are  
25 referring to?

1           Q.    Yeah.  The last page, the second entry  
2   from the top.  Under the January 4, 2019, batch.  Do  
3   you see where it says 100-percent Ohio wind energy?

4           A.    Yes.

5           Q.    And do you know what wind project this is  
6   based on?

7           A.    I don't know.

8           Q.    Do you know whether the project existed  
9   prior to IGS, you know, buying the RECs and making  
10  this product offering available?

11          A.    I don't know.

12          Q.    So -- all right.  That's fine.  Okay.

13                Also on page 15, a little further down,  
14  line 300, you make a statement "that a customer can  
15  meet all, or a portion of, its electric needs through  
16  solar power."  In this sentence you are talking about  
17  a behind-the-meter customer of generation, right?

18          A.    Yes.

19          Q.    Okay.  And do you -- do you have  
20  customers that completely offset their power usage?  
21  I am focusing on the "all" portion here.  If you  
22  know.

23          A.    We do -- I don't know specifically in  
24  Ohio.  I know that we make a product available that  
25  they can -- the customer can offset 100 percent of

1     their -- their need.

2             Q.     So do those customers go off the grid?

3             A.     No.   I am referring they are generating  
4     as much as they are consuming.

5             Q.     At different times of the day or  
6     different times of the month or different times of  
7     the year, correct?

8             A.     Yes.   Unless they want to put in a  
9     battery and I suppose we would probably provide that  
10    to a customer if it was available -- if they wanted  
11    to pay for the cost to completely go off the grid,  
12    but.

13            Q.     Okay.   But the customers you're talking  
14    about here, still are connected to the grid and rely  
15    on the grid for -- for -- to draw power when they  
16    need it, correct?

17            A.     Yes.

18            Q.     Okay.   All right.   Page 16.   Now, at --  
19    in lines 308 and 309, you're saying that it's your  
20    understanding that the Company's proposal is to sell  
21    all the RECs generated by the generation facilities  
22    into the wholesale REC market; is that correct?

23                   MR. OLIKER:   Could I have the page and  
24    line number again?

25                   MR. NOURSE:   Sure.   Page 16, and I am

1 asking him about the sentence that's lines 307 to  
2 309.

3 A. Can you repeat the question?

4 Q. Is it your understanding that the Company  
5 would sell the RECs generated by the generation  
6 facilities into the wholesale REC market?

7 A. Yes, that's my understanding of AEP's  
8 proposal.

9 Q. Okay. Is that based on reading the  
10 Company's Application and testimony?

11 A. Yes.

12 Q. Okay. By the way, you did -- is it  
13 correct you did read the Application and testimony in  
14 this case?

15 A. Yes.

16 Q. And by the way, you refer to "AEP"  
17 throughout your testimony. I think you are referring  
18 to AEP Ohio; am I correct about that?

19 A. Yes.

20 Q. Okay. And then right after that sentence  
21 we were just talking about on line 309, you say "By  
22 law, a customer is not being supplied by renewable  
23 generation unless the REC or SREC from the facility  
24 is retired by the customer, or an entity acting on  
25 the customer's behalf." Do you see that?



1           A.    Yes.

2           Q.    Can you tell me the -- when you say "by  
3 law," what are you referring to there?

4           A.    I'm referring to there is some federal  
5 requirements that say that if -- if you're offering a  
6 renewable product or you claim to be offering a  
7 renewable product, the -- the renewable energy  
8 credits have to be retired on behalf of the customer  
9 in order to claim -- for the customer to claim the  
10 renewable benefit.

11          Q.    So is it your understanding, under the  
12 Company's proposal, that AEP Ohio would supply  
13 renewable energy to all of its customers, shopping  
14 and nonshopping?

15          A.    My understanding is that AEP would not be  
16 able to supply renewable -- this proposal is not  
17 supplying renewable energy to Ohio customers.

18          Q.    Okay.

19          A.    AEP can't claim the renewable benefit and  
20 arguably shouldn't be, in my testimony, to the  
21 public, because they are retiring the RECs. Or, they  
22 are not retiring the RECs.

23          Q.    That's your understanding of the  
24 proposal.

25          A.    Yes.

1           Q.    Okay.  Down at the bottom of page 16 or  
2   toward the bottom, you make a reference to I believe  
3   you're starting to talk about the Navigant Voice of  
4   the Customer survey in that answer.  Am I correct?

5           A.    Can you please point to that again?

6           Q.    The answer that begins on line 318.

7           A.    Yes.

8           Q.    Okay.  And you state there on line 323,  
9   "there are over 400 comments in opposition to AEP's  
10  proposal."  Do you see that?

11          A.    Yes.

12          Q.    And that's referring to your Exhibit  
13  MW-2, correct?

14          A.    Yes.

15          Q.    And those -- those, I guess, negative or  
16  opposing comments that you've included in your  
17  exhibit were part of the open-ended comments that  
18  were supplied in discovery in this case; is that your  
19  understanding?

20          A.    Yes.

21          Q.    And so, customers were given an  
22  opportunity, at the end of the survey, if they wanted  
23  to make open-ended comments they could, it was  
24  optional, correct?

25          A.    Yes.

1           Q.   And then in the Navigant report, they had  
2   a section at the end that summarized and categorized  
3   the open-ended comments as supportive, neutral,  
4   opposing, et cetera?

5           A.   Yes.

6           Q.   Okay. And is it your recollection that  
7   there's -- there were more than 1,200 supporting  
8   comments contained in that report?

9           A.   I don't know how many supporting  
10   comments. I think there's differing opinion on what  
11   means "supporting" and what doesn't.

12          Q.   Okay. Well, did you review -- did you  
13   only review the opposing comments?

14          A.   Yes.

15          Q.   Okay. And so, you didn't review any  
16   supporting comments and conclude that they were  
17   inappropriately classified, correct?

18          A.   I did not review all the comments.

19          Q.   You didn't review any of the supporting  
20   comments, you said earlier, correct?

21          A.   I didn't say "any" but I did not review  
22   all of the comments.

23          Q.   Okay. All right. So did -- by the way,  
24   you are an AEP Ohio wires customer, correct?

25          A.   Yes. My wife is.

1           Q.    I am going to assume you shop for your  
2 power.

3           A.    I do.

4           Q.    But I won't get into that. Did you  
5 get -- did you or your family get the survey? Did  
6 you receive it?

7           A.    I don't recall receiving it. It probably  
8 would have been sent to my wife because the bill is  
9 in her name.

10          Q.    She would have handled it?

11          A.    Yes.

12          Q.    Okay. That's fair. Good for you.

13                All right. Let me move on to the topic  
14 of net metering. And you talk about net metering and  
15 make some what I will call policy arguments in your  
16 testimony in the latter part of your testimony,  
17 correct?

18          A.    Yes.

19          Q.    By the way, let me -- I'm sorry, let me  
20 go back to the survey just to make sure the record is  
21 clear. Mr. White, do you have any training or  
22 education relating to the design or implementing of  
23 mass market consumer surveys?

24          A.    Outside -- outside of some marketing  
25 classes I took in business school, no.

1           Q.    Okay.  And is there anything  
2   substantively or technically supported in your  
3   testimony today that addresses the survey design, the  
4   sampling method, or any other aspect of the Navigant  
5   survey?

6           A.    I do not go into detail in my testimony  
7   regarding the survey design.

8           Q.    Okay.  Thank you.

9                    So then back to net metering, so part of  
10   your -- part of your, I guess, policy argument is --  
11   correct me if I misstate this, but your -- you are  
12   saying that behind-the-meter generation and net  
13   metering options are a better alternative than the  
14   Company's solar proposal, correct?

15          A.    Can you please point to the testimony you  
16   are referring to?

17          Q.    I am just asking you for a summary of  
18   your points here.  Did you -- do you advance that  
19   position that you think behind-the-meter solar is a  
20   better alternative than the Company's  
21   in-front-of-the-meter utility-scale solar --

22          A.    I think my point in my testimony is that  
23   competitively-neutral incentives available to all  
24   customers that wish to -- all customers or entities  
25   that wish to deploy solar is a far better means to

1     incent solar development in a state than the way AEP  
2     is proposing to develop solar.

3             Q.     In making that statement, are you talking  
4     about the current net metering rules or some future  
5     state if the Commission makes changes that IGS would  
6     like to advocate there?

7             A.     Can you please -- again, can you please  
8     refer to the testimony you are referring to?

9             Q.     No. I was asking a follow-up question on  
10    your statement you just made. Are you -- when you  
11    say that solar is a better means to incent solar  
12    development, behind-the-meter net metering solar is a  
13    better means, are you talking about the current net  
14    metering in Ohio, or if, as you talk about and your  
15    other IGS witnesses talk about, additional reforms to  
16    the net metering rules are adopted?

17            MR. OLIKER: Objection. I'm sorry, I  
18    think the confusion is related to whether the  
19    question relates to his answer, his testimony,  
20    because I think his prior answer referenced  
21    competitively-neutral incentives not necessarily for  
22    behind the meter, and we have kind of shifted focus  
23    to that area, so I don't know it's clear what  
24    question is being asked to the witness.

25            MR. NOURSE: I will try again. I will

1 try again, your Honor.

2 Q. So if you would turn to page 21 of your  
3 testimony. The question at the top of the page, "Is  
4 there any policy changes" or I guess it should be  
5 "Are there any policy changes the Commission can make  
6 if it wishes to facilitate the development of  
7 solar...?" Do you see that?

8 A. Yes.

9 Q. And you get into annual netting, for  
10 example, in that and the following answers.

11 A. Yes. Yes.

12 Q. And annual netting is not currently part  
13 of the net metering regime in Ohio as we sit here  
14 today, correct?

15 A. Correct.

16 Q. Okay. And so, in your opinion about the  
17 net metering option being a better means to achieve  
18 solar generation in Ohio than AEP's proposal, is  
19 that -- is that position referring to the current net  
20 metering rules or the future state of net metering  
21 rules if additional reforms are adopted?

22 A. Okay. So I just -- first, I would like  
23 to clarify what my testimony was because I think it  
24 was misstated. I think my testimony was that  
25 competitively-neutral incentives is -- is a better

1 means to -- to incent renewable development in Ohio  
2 than AEP's proposal.

3 One of the competitively-neutral  
4 incentives or modifications that could be made, I  
5 cited to was the net metering rules, that if the  
6 Commission and the State of Ohio wanted to increase  
7 the development of solar, a far more efficient means  
8 to do so would be to modify the net metering rules to  
9 allow for annual netting rather than monthly netting  
10 as it's currently operating under.

11 Q. Okay. So to restate what you've just  
12 said, the Commission should modify the net metering  
13 rules to create a better alternative than the  
14 Company's proposal in this case?

15 A. I said that if the Commission -- the  
16 Commission -- if the Commission wished to incent  
17 solar, one of the ways it could do so is modify the  
18 net metering rules. It doesn't have to approve AEP's  
19 proposal if it is the Commission's desire to increase  
20 the deployment of solar in Ohio.

21 Q. And if you know, under the current rules,  
22 can AEP Ohio provide rooftop solar, behind the meter,  
23 to retail customers?

24 A. AEP Ohio, the distribution company, is  
25 not allowed to, but its competitive affiliate is



1 allowed to.

2 Q. Okay. And under current rules, is AEP  
3 Ohio required to provide net metering to all  
4 customers including shopping and nonshopping  
5 customers?

6 MR. OLIKER: Objection. To the extent  
7 that calls for a difficult legal conclusion but if  
8 the witness understands.

9 MR. NOURSE: I asked him about current  
10 rules as we sit here today.

11 A. So I think the current rules require it,  
12 although I don't know if every utility is doing it.

13 Q. Now, would you maintain that rooftop  
14 solar is available to all customers?

15 A. Theoretically, absent some -- something  
16 wrong with a roof, any customer could get a rooftop  
17 solar panel. Now, it is not always economical or  
18 make sense for them, given, you know, positioning of  
19 their roof and other factors.

20 Q. And would you agree that whether you  
21 control -- whether the customer controls the property  
22 or the building is one -- one factor as well?

23 A. Sure. A customer, though, could also  
24 move to a house that has the ability to install  
25 solar. You know, they have an option.

1           Q.    Okay.  And speaking of moving, a customer  
2 would have to intend or plan to stay at that location  
3 for quite a while if they are going to make an  
4 investment in rooftop solar as well, correct?

5           A.    Not necessarily.  No.

6           Q.    Okay.  And would you agree that there's a  
7 capital investment or there is an upfront investment  
8 as part of, at least part of one method for getting  
9 rooftop solar?

10          A.    No.  Because, like, IGS offers a power --  
11 what we call a power purchase agreement where there  
12 is no capital investment to the customer.  The  
13 customer pays -- enters into a contract for a period  
14 of years to receive that power but they do not have  
15 to pay any upfront costs to install the solar panel.

16          Q.    And what's the term of that agreement?

17          A.    It depends on the customer, anywhere from  
18 10 to 25 years.

19          Q.    Okay.  What happens if they move after  
20 they sign the contract?

21          A.    Generally speaking, the panel -- the  
22 power purchase agreement is transferred to the next  
23 property owner or the customer buys out the contract.

24          Q.    Okay.  I want to talk about your annual  
25 netting proposal that you advance in the testimony

1 here. So can you give me your understanding of how  
2 annual netting works as compared to the current net  
3 metering rules?

4 A. Yeah. Annual netting allows for the  
5 customers to bank net metering credits for up to a  
6 year. Currently, under the current rules, which are  
7 monthly netting, any production offsets consumption  
8 on a monthly basis, but anything above that monthly  
9 production, that monthly -- any production above the  
10 monthly consumption is paid out to the customer in  
11 the form of a monetary net metering credit. The  
12 production is not carried over into the next month.  
13 So annual netting would allow the customer to carry  
14 the production into the next month and offset its  
15 consumption for previous -- for prior -- for future  
16 months up to a year.

17 Q. Okay. Thank you. That's very close to  
18 what I wanted to cover. Let me restate a few things  
19 to make sure we are saying the same thing.

20 A. Sure.

21 Q. So under the current rules, if there is  
22 a -- let's first, I guess, define what a net negative  
23 billing period is. Do you know what I'm referring to  
24 there?

25 A. I would imagine you mean a period where

1 the customer produces more than they consume in a  
2 month.

3 Q. Yes. In a billing period more  
4 specifically but, yes. Okay. And so when that  
5 happens, I believe you said earlier, under the  
6 current rules, there's a bill credit that's issued,  
7 correct?

8 A. Yes.

9 Q. And that bill credit currently is for, in  
10 AEP Ohio's service territory, it's the SSO energy  
11 rate that gets credited, correct?

12 A. Yes.

13 Q. And then that bill credit, which is a  
14 dollar amount, carries forward to offset a future  
15 billing period, correct?

16 A. Yes.

17 Q. All right. And then under the annual  
18 netting proposal, by contrast, it's -- it's a kWh  
19 credit that happens when there is a net negative  
20 situation for a billing period, correct?

21 A. Yes.

22 Q. And the kWh level is what carries forward  
23 to offset usage in a future billing period, correct?

24 A. Yes.

25 Q. Okay. So then when -- one of the

1 differences, which I believe you had perceived as an  
2 improvement or reform with the annual netting is that  
3 the kWh credit -- pardon me -- the kWh credit that  
4 carries to a future -- to offset future usage in a  
5 future bill, actually offsets generation,  
6 transmission, and distribution charges in that future  
7 bill, correct?

8 A. Yes.

9 Q. And one other thing, if we go back to the  
10 current -- switching back to the current rules that I  
11 forgot to clarify, in the net negative situation that  
12 we talked about, the wires charges, transmission and  
13 distribution charges, the offset only goes down to  
14 zero, right? It doesn't go negative. Is that your  
15 understanding?

16 A. I'm sorry. Can you please repeat the  
17 question?

18 Q. Sure. In a net negative, and I am  
19 talking about the current rules, current net metering  
20 situation, if there is a net negative usage, let's  
21 say 500 kWh, they produced 500 kWh more than they  
22 used for that billing period, there is a negative 500  
23 kWh, and we talked about how the customer will get a  
24 credit for the SSO energy charge for the 500, that's  
25 generation charge, but on the wires portion it

1 doesn't go negative. It only goes down to zero. So  
2 you can offset your usage but you can't create a  
3 negative wires credit, correct?

4 A. Yes.

5 Q. Okay. But by contrast in the -- in the  
6 annual netting proposal, there could be a negative  
7 kWh that gets applied to a future bill's usage and  
8 that can offset transmission, distribution, and  
9 generation, correct?

10 A. To the extent there are volumetric  
11 charges, yes.

12 Q. All right. And that was a good segue to  
13 my next question. When we talk about wires charges  
14 or transmission and distribution charges, would you  
15 agree that those charges are volumetric or based on  
16 kWh and strictly by rate design in that they are not  
17 necessarily related to generation at all, correct?

18 MR. OLIKER: Can I have that question  
19 reread?

20 (Record read.)

21 MR. OLIKER: Objection to the extent the  
22 question is vague, but if the witness understands the  
23 question, I will withdraw.

24 A. I would say the intent of a wires charge,  
25 transmission and distribution charge, is to -- to pay

1 for transmission and distribution service, and a  
2 generation charge is to pay for generation service.

3 Q. So the fact that it's based  
4 volumetrically or based on kWh usage is merely a rate  
5 design and does not change the underlying costs being  
6 recovered to generation costs, does it?

7 A. Not generation, but it could change how  
8 much costs for transmission and distribution.

9 Q. Okay. And so let me just ask you about a  
10 couple of AEP Ohio's charges and wires charges. So  
11 one is the kWh tax. Would you expect that would be  
12 one of the charges on our bill?

13 A. Yes.

14 Q. Okay.

15 A. Subject to not having a bill, I am  
16 assuming -- I'll take your word that's a charge on  
17 the bill.

18 Q. All right. So a net metering customer,  
19 under today's rules, can reduce the T and D charges,  
20 including the kWh tax, down to zero, based on  
21 offsetting their usage during the billing period,  
22 correct?

23 A. Well, not necessarily. Again, I think  
24 that's a dispute that's currently being settled at  
25 the legislature, in the Department of Tax, as to, for

1 instance in an instance like IGS's business model  
2 which is a power purchase agreement for on-site  
3 generation that I believe that the Department of Tax  
4 still levies a kWh charge for self-consumed  
5 electricity.

6 Q. Yeah. And that's -- that's a fair  
7 clarification, that is not what I am talking about.  
8 I am talking about a -- and I think what you are  
9 referring to is a commercial/industrial setting?

10 A. I don't know if that would apply. So the  
11 net metering rule changes I am proposing would apply  
12 for commercial and industrial and residential.

13 Q. Okay. But let me ask you this way, is it  
14 your understanding today, under the current rules,  
15 for an AEP Ohio net metering customer, that the kWh  
16 tax is exempted from the wires charges that could be  
17 reduced to zero?

18 A. Again, I don't know. There are -- there  
19 are instances, for instance, when a customer has  
20 on-site generation that they do have to pay the kWh  
21 tax if they are under the PPA model. I don't know if  
22 they are exempted if they are a residential customer  
23 or not. I'm not -- I don't know.

24 Q. Okay. What about the Universal Service  
25 Fund, which is also collected on a volumetric basis,



1 is that one of the charges that a net metering  
2 customer can reduce to zero through behind-the-meter  
3 generation?

4 A. I don't know how the universal service  
5 charge is administered or collected, so I don't know.

6 Q. Okay. But I thought you said earlier  
7 your understanding was that volumetric charges, that  
8 are not generation charges, can be reduced down to  
9 zero through net metering.

10 A. Sure. But I don't know what the  
11 universal -- I don't know if it's a volumetric  
12 charge, is it a fixed charge? I am not familiar with  
13 the Universal Service Fund charge.

14 Q. Okay. Now, is it your understanding,  
15 with respect to the annual netting proposal, could  
16 CRES providers do that today or offer that today as a  
17 retail program if they wanted to?

18 A. You are asking can CRES providers net the  
19 customers' bills?

20 Q. Yeah. If IGS wanted to make a net  
21 metering offering involving annual netting, do you  
22 think you could do it today?

23 A. The issue you have is that currently the  
24 way most of the utilities are set up is that the CRES  
25 providers don't get any actual credit for the energy

1     that's being delivered back onto the system, so that  
2     if the customers actually delivering energy back into  
3     AEP Ohio's system, it's getting -- the SSO is being  
4     reduced. The demand for the SSO is being reduced.  
5     So right now, and I know this is supposed to be  
6     changing, in the PUCO Order that it be changing, but  
7     it requires upgrades from the utility which haven't  
8     occurred yet in many instances, the CRES does not get  
9     an offset for the consumption -- or the production  
10    that's being produced by the -- by the customer.

11           Q.    Well, when you say delivered back to the  
12    grid or to the system, are you talking about the  
13    instances where a customer is producing more than  
14    they are using at that moment?

15           A.    Yes.

16           Q.    Okay. That would require a, I guess a  
17    realtime interval meter or a short-term interval  
18    meter for short increments of time, right?

19           A.    Yes.

20           Q.    And that's the, sort of the polar  
21    opposite of annual netting, right?

22           A.    Yeah.

23           Q.    Okay. And -- but back to this idea that  
24    you agreed to that the volumetric charges could get  
25    reduced to zero for wires charges, do you know who

1 pays those -- those credits? Who funds the -- makes  
2 up the difference for the cost of those credits?

3 MR. OLIKER: Objection. Your Honor, I  
4 think that it's assuming facts not in evidence and  
5 there has been no foundation regarding the cost of  
6 those credits.

7 MR. NOURSE: Well, I think we've come  
8 this far. Mr. White can explain his answer without  
9 the assistance from counsel.

10 EXAMINER SEE: The objection is overruled  
11 and Mr. White can answer with any caveat he deems  
12 necessary.

13 A. So to the extent there are fixed costs  
14 that should be recovered through fixed transmission  
15 and distribution costs by customers if there are  
16 volumetric costs, the presumption would be that  
17 those -- those costs are incurred because of  
18 volumetric consumption. So to the extent that  
19 volumetric consumption is being reduced, there would  
20 be no additional cost.

21 Q. So if AEP Ohio has a specific dollar  
22 amount responsibility that it has to pay for the  
23 Universal Service Fund during a period, and a net  
24 metering customer's kWh charges, including the USF  
25 Rider, are offset during that period, wouldn't you

1 agree that other customers pick up the tab for that?

2 A. If -- if the current -- again, I don't  
3 know how the Universal Service Fund is being  
4 recovered. To the -- so -- and I don't really know  
5 what -- I don't know the mechanics behind the  
6 Universal Service Fund, so I can't answer that  
7 question.

8 Q. But I posed a hypothetical to you.

9 A. But I don't know where -- like where the  
10 dollars are coming from, who is paying the dollars of  
11 the Universal Service Fund. How they would get  
12 flowed back.

13 Q. Okay.

14 A. Is it -- I don't know if it's a fixed  
15 amount.

16 Q. Let me repeat my hypothetical for you,  
17 Mr. White. So assume that AEP Ohio has a specific  
18 dollar amount for -- for a calendar year that it has  
19 to pay into the Universal Service Fund. And also  
20 assume that we collect the USF Rider on a volumetric  
21 basis. So my question then, assuming those -- those  
22 parts of the hypothetical, is if a net metering  
23 customer offsets its usage and reduces the amount  
24 they would otherwise have to pay for the Universal  
25 Service Fund Rider, would you agree that AEP Ohio's

1 other customers pick up that cost?

2 A. Just like if a customer turns down their  
3 thermostat when they go on vacation and use less,  
4 then there would be more dollars needed to be  
5 recovered through that reduced consumption amount,  
6 assuming everything you said was factual.

7 Q. Yeah. Let me ask you to turn to page 20.  
8 Are you there?

9 A. Yes.

10 Q. And let's see, in this answer which takes  
11 the full page, you're talking about whether allowing  
12 AEP to build solar would actually harm the market for  
13 private renewable resources. Excuse me. That -- is  
14 that what you are answering on page 20?

15 A. I'm sorry, can you please repeat the  
16 question?

17 Q. Yeah. I am just -- I just read your  
18 question on the bottom of page 19 and asked you to  
19 confirm that your answer on page 20 answers that  
20 question.

21 A. Yes.

22 Q. Okay. Then on line 405 as part of that  
23 answer, you're saying that -- and actually I will  
24 just say this is the whole sentence that goes from  
25 404 to 406, that you are saying that all of the SRECs

1 generated in PJM and MISO states are being retired to  
2 meet the portfolio standards in those states, not in  
3 Ohio. Do you see that?

4 A. I'm sorry, can you please point to the  
5 lines that you are referring to?

6 Q. 404 to 406. Okay. Can you reread that  
7 sentence and let me know when you are ready.

8 A. "Because many states in PJM and MISO have  
9 an in-state solar requirement, all the SRECs  
10 generated in those states are being retired to  
11 meet the SRPS in those states, not in Ohio." I  
12 want -- I should have clarified "all" is probably not  
13 accurate. Many, many of the SRECs being retired in  
14 those states are being retired to meet the SREC  
15 requirements for the states that have in-state solar  
16 requirements.

17 Q. Okay. Do you -- do you know how many  
18 states are in the PJM region?

19 A. Let me do a count. I mean, I don't know  
20 off the top of my head.

21 Q. I believe it's 13.

22 A. 13, okay.

23 Q. I will ask you that. So do you know, of  
24 those states, how many have in-state solar  
25 requirements?

1           A.    I know Maryland does. I know  
2   Pennsylvania does. I believe D.C. does. Jersey  
3   does. Illinois does. The competitive states mainly,  
4   yes, are the ones that I am aware of.

5           Q.    Okay. So about half.

6           A.    I don't know all of the requirements.  
7   I'm familiar with the competitive -- the competitive  
8   generation states and my understanding is all the  
9   competitive generation states in Ohio -- in PJM,  
10   absent Ohio, have an in-state requirement.

11          Q.    And how about MISO? Do you know how many  
12   states are in MISO?

13          A.    I don't know.

14          Q.    Okay. Do you know how many states in  
15   MISO have an in-state solar requirement?

16          A.    I don't know the exact number.

17          Q.    Okay. All right. But you do agree, now  
18   that you've discussed it again, that it's -- it's  
19   certainly not all the SRECs that get used for  
20   in-state solar requirements in PJM and MISO, correct?

21          A.    Yes, that was a misstatement. It should  
22   have been many of the SRECs will be retired to meet  
23   the in-state requirements.

24          Q.    Okay. And I guess similarly, when we  
25   talk about in the State of Ohio, is it true that all

1 the solar projects built in Ohio are strictly limited  
2 to Ohio's Alternative Energy Portfolio Standard  
3 requirement?

4 A. No.

5 Q. Okay. It would be some portion of those  
6 SRECs, correct?

7 A. Yes, presumably.

8 Q. And you haven't quantitatively studied or  
9 projected what portion that would be, correct?

10 A. Yes.

11 Q. And here you are also stating that -- for  
12 example, in line 412, that you're characterizing AEP  
13 Ohio's proposal as flooding the Ohio market with  
14 SRECs as AEP is proposing to do. Do you see that?

15 A. Yes.

16 Q. And as we talked about earlier, you  
17 really don't know whether the Company's proposal  
18 involves liquidation of all the RECs that are  
19 produced by the projects being proposed, do you?

20 A. Eventually the SRECs will be liquidated.  
21 They are not going -- they are going to be sold by  
22 AEP, right? So -- but some other off-taker will take  
23 those RECs and retire those RECs.

24 Q. Now, as part of your answer here, you are  
25 also saying -- well, what you are saying is this



1 proposal by AEP Ohio would have a negative impact  
2 on -- I believe you are saying this, please confirm,  
3 both rooftop solar and I guess merchant or private  
4 development of solar projects, correct?

5 A. Yeah. To the extent that SREC values are  
6 part of the economics that incent folks to develop  
7 solar, when you add an abundance of SRECs into a  
8 market, it's going to suppress the market for those  
9 SRECs and take away the incentive of other  
10 individuals to build solar outside of AEP.

11 Q. Do rooftop solar owners typically sell  
12 the RECs?

13 A. Oftentimes, yes, if -- like IGS has a  
14 power purchase agreement with a customer, even  
15 residential customers, we take those customers' SRECs  
16 and monetize those and they are part of the economic  
17 value of the -- of the -- of the project even for  
18 residential customers.

19 Q. And those customers can't take credit for  
20 using renewable power then, right?

21 A. Under the current construct, if the -- if  
22 the customer is -- if the RECs are not being retired  
23 on behalf of the customer, then the customer is  
24 not -- we can't say that they are using the renewable  
25 energy.

1           Q.    Okay.  And, Mr. White, you are not an  
2 economist, correct?

3           A.    I do not believe so, no.

4           Q.    I know you have many talents but that's  
5 not one of them, right?

6           A.    No, I would not characterize myself as an  
7 economist.

8           MR. NOURSE:  Thank you, Mr. White.  
9 That's all I have.

10          THE WITNESS:  Okay.  Thank you.

11          EXAMINER SEE:  Mr. Olikier.

12          MR. OLIER:  Can we have just a few  
13 minutes, your Honor?

14          EXAMINER SEE:  Sure.

15          (Off the record.)

16          EXAMINER SEE:  Go back on the record.

17          MR. OLIER:  Thank you, your Honor.  Just  
18 a question or two in redirect.

19                               - - -

20                               REDIRECT EXAMINATION

21          By Mr. Olikier:

22               Q.    Mr. White, do you remember when you  
23 received questions from counsel for AEP about the  
24 impact on other customers from reducing volumetric  
25 charges to net metering customers?

1           A.    Yes.

2           Q.    Do you have any other testimony on the  
3 benefits associated with net metering for all  
4 customers?

5           A.    Yes.  I do.  I would like to just clarify  
6 that there's many benefits to distributed generation  
7 that -- that justify any offset of annual netting.  
8 One of them being it has the ability to reduce  
9 distribution costs, lower the amount of distribution  
10 build needed.  It creates more reliability and then,  
11 in that, it creates a more diverse and dispersed  
12 generation mix.  It -- so there's a lot of additional  
13 benefits to -- it also produces transmission build in  
14 that it takes -- it requires less electricity to be  
15 delivered through the transmission system.  It  
16 reduces generation and capacity needed at PJM in the  
17 RTO level.

18           MR. OLIKER:  Thank you, your Honor.  
19 Those are all my questions.

20           EXAMINER SEE:  Ms. Glover.

21           MS. GLOVER:  No questions.

22           EXAMINER SEE:  Mr. Darr.

23           MR. DARR:  No questions.

24           EXAMINER SEE:  Mr. Collier.

25           MR. COLLIER:  No questions.

1 EXAMINER SEE: Ms. Whitfield.

2 MS. WHITFIELD: No questions.

3 EXAMINER SEE: Ms. Bojko.

4 MS. BOJKO: No questions, thank you.

5 EXAMINER SEE: Ms. Willis.

6 MS. WILLIS: No questions, thank you.

7 EXAMINER SEE: Mr. Kurtz.

8 MR. KURTZ: No questions.

9 EXAMINER SEE: Mr. McNamee.

10 MR. MCNAMEE: No questions, your Honor.

11 Thank you.

12 EXAMINER SEE: Mr. Nourse.

13 - - -

14 RECROSS-EXAMINATION

15 By Mr. Nourse:

16 Q. Mr. White, just on the answer that you  
17 just gave regarding the benefits or potential  
18 benefits of net metering, you have not tried to  
19 quantify those benefits, have you?

20 A. Me, personally, no. But there are  
21 ongoing proceedings throughout the country that are  
22 actually trying to -- to specifically nail down on  
23 the benefits of distributed generation and net  
24 metering.

25 Q. So it's fair to say that's a debate for

1 another case?

2 A. I'm very much looking forward to it.

3 MR. NOURSE: All right. Thank you,  
4 Mr. White.

5 EXAMINER SEE: Mr. Olikier, I believe you  
6 already moved for the admission of IGS and IGS Solar  
7 Exhibit 11?

8 MR. OLIKER: Yes, I did, your Honor.

9 EXAMINER SEE: Are there any objections  
10 to the admission of IGS and IGS Solar Exhibit 11?

11 MR. NOURSE: No, your Honor.

12 EXAMINER SEE: IGS and IGS Solar Exhibit  
13 11 is admitted into the record.

14 (EXHIBIT ADMITTED INTO EVIDENCE.)

15 EXAMINER SEE: Mr. Nourse.

16 MR. NOURSE: Yes. AEP moves for Exhibit  
17 23.

18 MR. OLIKER: And --

19 EXAMINER SEE: Are there any objections  
20 to the admission of AEP Exhibit 23?

21 MR. OLIKER: Your Honor, IGS and IGS  
22 Solar would object. There were questions raised  
23 regarding the foundation for the exhibit. When  
24 Counsel was given the opportunity to establish a  
25 foundation, he did not refer to the exhibit or

1 identify whether Counsel was familiar with the rates  
2 that were on it. Instead he relied upon the existing  
3 -- or currently-admitted Apples to Apples product  
4 that was previously admitted into the record which  
5 contained different information and, therefore, there  
6 has been insufficient foundation for the admission of  
7 Exhibit 23.

8 MR. NOURSE: Your Honor, I disagree. I  
9 had shown foundation, and I did additional foundation  
10 questions. As I stated, this exhibit is an excerpt  
11 from the larger exhibit we talked about, and I was  
12 trying to save time, so obviously the record will  
13 show if there is any differences in the --  
14 substantive differences, which there are not.

15 MR. OLIKER: Your Honor, I would also add  
16 it's an excerpt. It would be cumulative.

17 MR. NOURSE: Well, look, we asked a bunch  
18 of questions about it. He made reference to things.  
19 I made reference to things in that exhibit. So if it  
20 is not in the record, that's going to confuse the  
21 discussion we had about it, I think, or at least make  
22 it less than 100-percent clear. So, you know, I  
23 don't -- I am not going to nitpick any further on  
24 this.

25 EXAMINER SEE: AEP Exhibit 23 is admitted

1 into the record.

2 (EXHIBIT ADMITTED INTO EVIDENCE.)

3 EXAMINER SEE: Let's take a -- let's take  
4 a brief recess for about 5 minutes.

5 We are off the record.

6 (Recess taken.)

7 EXAMINER PARROT: Let's go back on the  
8 record.

9 Ms. Bojko.

10 MS. BOJKO: Thank you, your Honor. At  
11 this time, Ohio Manufacturers' Association Energy  
12 Group calls Mr. John Seryak to the stand.

13 (Witness sworn.)

14 EXAMINER PARROT: Thank you.

15 - - -

16 JOHN SERYAK

17 being first duly sworn, as prescribed by law, was  
18 examined and testified as follows:

19 DIRECT EXAMINATION

20 By Ms. Bojko:

21 Q. Mr. Seryak, could you please state your  
22 name and business address for the record.

23 A. John A. Seryak. Business address, 3709  
24 North High Street, Columbus, Ohio.

25 Q. Did you file or cause to be filed

1 testimony regarding AEP's request to develop at least  
2 900 megawatts of renewable generation in this  
3 proceeding?

4 A. Yes.

5 MS. BOJKO: Your Honor, at this time, I  
6 would like to mark as OMAEG Exhibit 16, a document  
7 entitled "Direct Testimony of John Seryak," filed on  
8 January 2, 2019, in this proceeding.

9 EXAMINER PARROT: So marked.

10 (EXHIBIT MARKED FOR IDENTIFICATION.)

11 Q. Mr. Seryak, do you have in front of you  
12 what has been marked as OMAEG Exhibit 16?

13 A. Yes.

14 Q. Do you recognize this document as your  
15 testimony?

16 A. Yes.

17 Q. Was this testimony prepared by you or  
18 under your direction?

19 A. Yes.

20 Q. On whose behalf are you testifying today,  
21 sir?

22 A. The OMA Energy Group.

23 Q. Since the filing of your testimony, do  
24 you have any changes to your testimony?

25 A. Yes. I would like to correct the



1 citation on page 13. It is citation 12, I believe.

2 Q. Footnote 12?

3 A. Footnote 12, yes. And I would like to  
4 correct what says "Exhibit TF-1" to "Exhibit TH-1".  
5 And also where it says "at 26" to "at 33."

6 Q. And is the change to recognize a page  
7 number of the attachment of Trina Horner?

8 A. Yes.

9 Q. And is the page differential alluding to  
10 the fact of referring to the bottom page numbers or  
11 the top of the exhibit page numbers under the heading  
12 Exhibit TH-1?

13 A. Yes.

14 Q. And it's your understanding that new  
15 page 33 is not consistent with how that document has  
16 been utilized in reference throughout the Commission  
17 proceeding?

18 A. Yes.

19 Q. Do you have any additional revisions to  
20 your testimony?

21 A. No.

22 Q. And if I were to ask you the same  
23 questions today as they appear in your testimony,  
24 would your answers be the same?

25 A. Yes.

1 MS. BOJKO: At this time, your Honor, I  
2 would like to move OMAEG Exhibit 16, subject to  
3 cross-examination, and I tender Mr. Seryak for cross.

4 EXAMINER PARROT: Thank you, Ms. Bojko.  
5 Ms. Glover.

6 MS. GLOVER: No questions.

7 EXAMINER PARROT: Mr. Darr.

8 MR. DARR: No questions.

9 EXAMINER PARROT: Mr. Collier.

10 MR. COLLIER: No questions.

11 EXAMINER PARROT: Ms. Whitfield.

12 MS. WHITFIELD: No questions.

13 EXAMINER PARROT: Ms. Willis.

14 MS. WILLIS: No questions.

15 EXAMINER PARROT: Mr. McNamee.

16 MR. MCNAMEE: No questions.

17 EXAMINER PARROT: Mr. Kurtz.

18 MR. KURTZ: No questions.

19 EXAMINER PARROT: Mr. Nourse.

20 MR. NOURSE: Oh, I'm sorry.

21 EXAMINER PARROT: Oh, I am sorry.

22 Ms. Blend.

23 MS. BLEND: Thank you.

24 - - -

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CROSS-EXAMINATION

By Ms. Blend:

Q. Good afternoon, Mr. Seryak.

A. Good afternoon.

Q. My name is Christen Blend, and I represent AEP Ohio in this case.

Mr. Seryak, you are not an attorney, correct?

A. That's correct.

Q. And the opinions you present in your testimony are not legal opinions, correct?

A. Correct.

Q. And did you write your testimony?

A. Yes.

Q. And on page 3 of your testimony, you indicate, and this is where you were asked if you previously testified, you testified in Commission proceedings, correct?

A. Yes.

Q. It's accurate that none of your prior testimony addressed utility applications in forecast proceedings like this one?

A. I don't recall if they had any references to load forecast in them.

Q. You've never testified in an ER-FOR

1 forecast proceeding, correct?

2 A. No.

3 Q. No, you have never testified? Or no,  
4 that's not correct?

5 A. Sorry. No, I have never testified in an  
6 EL-FOR case to my recall.

7 Q. And you have no specific expertise,  
8 training, or experience in preparing utility resource  
9 planning forecasts, correct?

10 A. No, I disagree with that. I have  
11 several, I think, skill sets that can be -- could be  
12 part or give me understanding and knowledge.

13 Q. Sure. Have you ever prepared a utility  
14 resource forecast?

15 A. I have not prepared a utility resource  
16 forecast.

17 Q. Do you have prior experience with  
18 long-term forecast reporting in Ohio?

19 A. I have some experience with long-term  
20 forecasting in Ohio, with understanding some of the  
21 basic underlying elements, but I haven't prepared any  
22 myself. If that was your question. I forget the  
23 question already.

24 Q. Do you have experience with Chapter  
25 4935.04 of the Revised Code, other than in this case?

1           A.    Could you read the sentence to that?  I  
2   don't keep the chapter -- chapter numbers memorized.

3           Q.    Sure.  Chapter 4935.04 relates to  
4   long-term forecast reporting.

5           A.    Okay.  And can you -- I'm sorry.  Can you  
6   go back and ask your question again?

7           Q.    Sure.  Do you have any prior experience  
8   with that chapter of the Revised Code other than this  
9   case?

10          A.    No.

11          Q.    Do you have prior experience with the  
12   application of the Commission's rules regarding  
13   Long-Term Forecast Reporting and integrated resource  
14   planning, prior to this case?

15          A.    No, I don't.

16          Q.    Mr. Seryak, on page -- I would like you  
17   to turn toward the end of your testimony on page 15.

18          A.    I am there.

19          Q.    Beginning on line 9 of page 5, you  
20   reference a Grounds for Optimism report that you and  
21   your team were contributing authors to, correct?

22          A.    Yes.

23          Q.    And you state on line 13, beginning on  
24   line 13, continuing through to line 16, that none of  
25   the modeling scenarios you used in that report were

1 for utility ownership or operation or cost recovery  
2 from ratepayers; is that correct?

3 A. Correct.

4 Q. And that -- would it be fair to say that  
5 the choice not to model those scenarios was a choice  
6 that the authors of the report made at the time the  
7 report was prepared?

8 A. We were testing various levels of  
9 renewable and energy efficiency standard amounts for  
10 the State of Ohio and as that was the policy question  
11 in the state. We didn't see a need, really, to  
12 consider utility ownership nor did we think it was  
13 allowed in the state, so we saw that as irrelevant.  
14 We saw it as a bound on what to look at with  
15 renewable energy and efficiency development in this  
16 state.

17 Q. Fair enough. But there is no reason  
18 you -- that you could not have looked at that in the  
19 report. I understand, you know, what you just said  
20 in your last answer. There is no reason you couldn't  
21 have looked at utility ownership.

22 A. I think there's a good reason to not look  
23 at that which is that's not the -- utility cost  
24 recovery of renewables isn't really in accordance  
25 with the policy of the state. And so, if you are

1 modeling renewable energy and efficiency deployment  
2 in the state, you want to stick to state policy. I  
3 think if we would have made that choice, it would  
4 have made the report somewhat irrelevant to the  
5 policy question at hand.

6 Q. Okay. And do you have a copy of that  
7 report with you today?

8 A. I don't have a copy of that report with  
9 me.

10 MS. BLEND: May I approach?

11 EXAMINER PARROT: You may.

12 MS. BLEND: I would like to mark AEP Ohio  
13 Exhibit 24.

14 (EXHIBIT MARKED FOR IDENTIFICATION.)

15 Q. Mr. Seryak, do you have before you what's  
16 been marked AEP Ohio Exhibit 24?

17 A. Yes.

18 Q. Is this the Grounds for Optimism report  
19 that is referenced and discussed on page 15 of your  
20 testimony?

21 A. It is.

22 Q. If you'll turn to page 1 of your  
23 Executive Summary which is actually the fourth page  
24 of the document.

25 A. Yes.

1           Q.   Beginning about halfway down the page,  
2   there is a summary of the results of the -- of three  
3   cases that you modeled in this report, correct?

4           A.   Yes.

5           Q.   And the three cases that you modeled for  
6   purposes of this report were the Accelerated  
7   Efficiency case which placed an emphasis on energy  
8   efficiency over renewables, the Intermediate Pathway  
9   which placed an equal emphasis on energy efficiency  
10   and renewable development in Ohio, and the Expanded  
11   Renewables case which places an emphasis on expansion  
12   of renewables over EED; is that correct?

13          A.   Yes.

14          Q.   Okay. And your modeling results section  
15   on page 1 that continues on to page 2, is it fair to  
16   describe this as summarizing, at a high level, the  
17   range of results that you -- that you modeled in each  
18   of those cases?

19          A.   That's fair.

20          Q.   Okay. And under each of the cases that  
21   you modeled, there was an increase in Ohio job  
22   creation, correct?

23          A.   Yes, that's correct.

24          Q.   And under each of the cases that you  
25   modeled, there was an increase in payroll in Ohio,



1 correct?

2 A. Yes, that's correct.

3 Q. And also an increase in GDP?

4 A. Yes.

5 Q. And in each scenario modeled, there was  
6 an avoidance of pollution and, therefore, a reduction  
7 in health care costs, right?

8 A. Yes.

9 Q. And also a reduction in electric bill  
10 impacts?

11 A. Yes.

12 Q. And each of those -- each of those  
13 findings in your report, you would agree, is  
14 summarized beginning on pages 1 and 2 that we are  
15 looking at?

16 A. Sure.

17 Q. Okay. If you'll turn to page 7 of your  
18 testimony. You state, beginning on line 13, that AEP  
19 Ohio has not shown that there is a -- or that AEP  
20 Ohio has shown there's no resource planning need for  
21 renewable energy generation in its service territory,  
22 correct?

23 A. Correct.

24 Q. Mr. Seryak, do you define "resource  
25 planning need" to mean only a capacity, energy, or

1 reliability need?

2 A. I think "resource planning" in this  
3 context depends highly on if the resource planning  
4 is -- to go to AEP's Amended Long-Term Forecast, if  
5 the resource planning is not a traditional analysis  
6 of integrated resource planning and is a wires  
7 utility function.

8 I'm confused by the use of the term  
9 "resource planning" in this case because it's often  
10 used -- AEP says they don't have a traditional  
11 integrated resource planning need, but then also puts  
12 forth an integrated resource plan and so -- and we're  
13 supposed to be talking about, according to AEP, a  
14 wires utility function.

15 So I guess my opinion on resource  
16 planning would be to first define are we talking  
17 about resource planning for the wires only  
18 distribution utility or not, and that's not clear to  
19 me in this case.

20 Q. Let me -- maybe let's back up and ask a  
21 different question. How do you define "resource  
22 planning need"?

23 A. Again, I think the definition of, you  
24 know, if I were to create a scope of work, you are  
25 asking me as an engineer and business person to

1 define, we would do that through a scope of work.  
2 First thing we would do is bound which part of the  
3 electrical system we are talking about. Are we  
4 talking about generation, transmission, or  
5 distribution? And my understanding here is we are  
6 talking about a resource planning need for a wires  
7 utility function.

8 Q. Mr. Seryak, is it your testimony there  
9 could never be a need for additional generation  
10 resources, such as those that the Company is  
11 proposing in this case, so long as there's sufficient  
12 capacity to satisfy minimum reserve requirements?

13 A. Could you ask that again? Sorry.

14 Q. Sure. Could there be a need for  
15 additional generation resources, like those the  
16 Company is proposing in this case, if there is also  
17 sufficient capacity to satisfy minimum reserve  
18 requirements?

19 A. I wouldn't use the word "need," no.

20 Q. If the renewable generation resources  
21 would provide savings and rate stability for  
22 customers, would your opinion change?

23 A. I think if it provides savings and rate  
24 stability to customers, and if we are talking about  
25 not a wires utility function but a generation issue,

1 the customers have the choice to pursue that.

2 Q. So are you saying that, yes, that  
3 could -- that savings and rate stability could show  
4 need --

5 A. No.

6 Q. -- for renewable resources?

7 A. No, not in the context of this case.  
8 That's a -- that could be a customer want or desire  
9 which they can pursue on their own.

10 Q. So it's your position that utility  
11 resource planning cannot address customer  
12 preferences. That that's something that customers  
13 should pursue on their own.

14 A. I don't think utility resource planning  
15 for a wires utility function should address customer  
16 preferences for generation.

17 Q. Mr. Seryak, do you think fuel diversity  
18 is a valid factor for consideration in utility  
19 resource planning?

20 A. Again, I'll take you back to AEP's  
21 description of what they describe as a nontraditional  
22 integrated resource plan where the intent is a wires  
23 utility function, and a wires utility function would  
24 not take resource diversity into account. It's a  
25 different part of the electrical system.

1           Q.    On page 8 of your testimony, Mr. Seryak,  
2    you discuss Renewable Portfolio Standards, beginning  
3    on line 7.

4           A.    Yes.

5           Q.    Do you see that?

6           A.    Oh, I'm sorry.   Which page?

7           Q.    I'm on page 8.

8           A.    Okay.   And where -- I am sorry, can you  
9    repeat what you are referring to?

10          Q.    Sure.   In this page you talk about  
11   Renewable Portfolio Standards and renewable energy  
12   supply within the SSO, right?

13          A.    Sorry.

14          Q.    Beginning with the answer on line 7.

15          A.    Yes.

16          Q.    And actually just to back up, you've used  
17   the term "wires utility function" several times.

18          A.    Yes.

19          Q.    Are you -- when you use that term, are  
20   you saying that electric distribution utilities only  
21   provide wires function?

22          A.    Wires function is, you know, the  
23   functions and responsibilities dictated to the -- or  
24   allowed for the distribution utility and there's  
25   probably a lot of things that fit under wires

1 function.

2 Q. Okay. So it's your understanding that an  
3 electric distribution utility can only provide wires  
4 functions?

5 A. As defined by state policy and  
6 regulations, yes.

7 Q. Okay. Turning back to page 8 of your  
8 testimony, Renewable Portfolio Standard, you  
9 understand AEP Ohio is not contending there is an RPS  
10 compliance need for renewable energy resources in  
11 this case, right?

12 A. That's my understanding.

13 Q. And you talk here -- you talked this  
14 afternoon and also you are talking in this -- on page  
15 8 of your testimony about state policy considerations  
16 with respect to renewables. Is it your opinion,  
17 Mr. Seryak, that the state policy of Ohio is to  
18 support renewable energy only up to the level  
19 required by the RPS mandates?

20 A. No.

21 Q. So you would agree that the state policy  
22 of Ohio could support renewable energy beyond those  
23 levels?

24 A. Yes.

25 Q. If you'll turn to page 9 of your

1 testimony. Lines 1 through 12, you discuss the  
2 economic benefits of the Company's 900-megawatt  
3 renewable generation proposal, as supported by  
4 Company witness Torpey, as being speculative. Is  
5 that a fair summary?

6 MS. BOJKO: I am sorry. Could I have the  
7 question reread, please?

8 MS. BLEND: Sure. I can just restate it.

9 Q. On page 9, lines 1 through 12,  
10 Mr. Seryak, you discuss your opinion that the  
11 economic benefits of the Company's 900-megawatt  
12 proposal, as supported by Company witness Torpey, are  
13 speculative, correct?

14 A. Well, I am looking at -- on page 9 of my  
15 testimony, lines 5, 6, 7, and 8, I am not referencing  
16 Torpey's testimony. I'm referencing the Company's  
17 amendment, and I quote the amendment to say that AEP  
18 Ohio makes the statement "Provided the projects can  
19 be developed within a reasonable price range." That,  
20 to me, I interpret that as speculative. It's not a  
21 known.

22 Q. Okay. And then you'll agree that on  
23 page 9, line 11, later in that answer you reference  
24 Mr. Torpey's testimony which you also call  
25 speculative or the analysis that he provides?

1           A.    Yes.

2           Q.    You have not presented a competing  
3 economic analysis of the Company's proposal, correct?

4           A.    No, I haven't.

5           Q.    And you have not presented any competing  
6 forecast of future market prices, correct?

7           A.    No, I have not.

8           Q.    Do you have experience analyzing  
9 locational marginal price?

10          A.    I have experience analyzing wholesale  
11 market prices. I can't recall exactly if those are  
12 LMP prices.

13          Q.    Do you know how LMP prices are  
14 calculated?

15          A.    Not exactly.

16          Q.    And you're not holding yourself out as an  
17 expert on LMP analysis in this case.

18          A.    I would say I'm experienced. I would not  
19 qualify myself as an expert.

20          Q.    Do you have any experience with the  
21 PROMOD model?

22          A.    I do not.

23          Q.    And you did not run your own LMP analysis  
24 for this case, correct?

25          A.    I did not.



1           Q.    Mr. Seryak, you state on page 10 of your  
2 testimony, beginning on line 17, that market forces  
3 should be sufficient to see utility-scale renewable  
4 energy projects through development, correct?

5           A.    Can you say that again? Page 10, line  
6 17?

7           Q.    Beginning on line 17, at the end of that  
8 line. The word "If" is the first word of the  
9 sentence.

10          A.    Oh, yes, I see that.

11          Q.    How did you define "utility-scale  
12 renewable energy projects"?

13          A.    Can you point out where I use the term  
14 "utility-scale"?

15          Q.    I'm sorry, that was a word that I added  
16 in my paraphrase. I apologize. Let me ask a  
17 different question. When you say "these renewable  
18 energy projects" on line 18, page 10.

19          A.    Yes.

20          Q.    You are referring to the Company's  
21 400 megawatts of solar and 500 megawatts of wind  
22 generic projects that are proposed in this case; is  
23 that fair?

24          A.    I think by "these renewable projects," I  
25 am referring to the generic -- it's a little bit

1 confusing. I am inclusive of the generic  
2 900 megawatts, the 650 that were modeled, the  
3 specific 400 megawatts between the two projects and.  
4 When I say "these," I am including all potential  
5 categories of renewables that the Company is asking  
6 approval -- for approval for here.

7 Q. Okay. But, so generally, you are talking  
8 about the sized projects that are at issue in this  
9 proceeding and the consolidated 18-1392 and 93 cases.

10 A. I do not know what the size of the  
11 projects is between the 400 megawatts and the  
12 900 megawatts. There's 500 other megawatts of  
13 projects there.

14 Q. Does whether a utility signs the PPA  
15 affect the economics?

16 A. Affect the economics of what?

17 Q. Does it affect whether the projects are  
18 economical?

19 A. Which projects? The 400 or the 500 that  
20 we don't know about?

21 Q. Well, you just said -- I am talking about  
22 the projects you refer to on page 10, lines 17  
23 through 19 of your testimony.

24 A. Yes, and I had to use the term "these"  
25 because the amendment in this application is for

1 900 megawatts, but there's -- then there's two  
2 projects that specifically you referred to where  
3 there is a certain size and, in my understanding,  
4 those are to be discussed in Phase II, and then  
5 what's modeled is 650. So, you know, I am using the  
6 blanket term "these" because the Company didn't  
7 define the size of the projects that are being put  
8 into this amendment.

9 Q. So again, you know, speaking generally,  
10 projects of the sizes that you've just indicated or a  
11 project of the size you just indicated, does a  
12 utility counterparty on a REPA affect whether such  
13 projects are economical?

14 MS. BOJKO: Objection, your Honor. He's  
15 already said he is struggling because of the  
16 multitude of different projects the Company has put  
17 forth, and nobody is really clear about what they're  
18 asking for, so maybe if Counsel could just say a  
19 size, instead of keep saying of this size, it might  
20 be helpful to the question.

21 Q. Sure. That's fine. We can use  
22 400 megawatts of solar. I was trying to respect the  
23 way that you have described the projects in your  
24 testimony but I understand your explanation. So same  
25 question, assuming a project of 400 megawatts, a

1 solar project of 400 megawatts?

2 MS. BOJKO: Objection. That question  
3 further begs the issue is that there's not one  
4 project for 400, there's two projects that total 400.  
5 So I think if you are asking him about a 400 project,  
6 that's different than your prior question.

7 MS. BLEND: Your Honor, I think -- I am  
8 asking him a hypothetical about a generic  
9 400-megawatt solar project.

10 EXAMINER PARROT: I'm fine with that, so  
11 go ahead.

12 MS. BOJKO: That was a clarification of  
13 the question, thank you.

14 A. So the project we are talking about is a  
15 hypothetical generic 400-megawatt solar project.

16 Q. Yes.

17 A. Okay. And then now I know what we are  
18 talking about.

19 Q. Okay.

20 A. And then the question again was?

21 Q. Does having a utility counterparty to a  
22 REPA for that project affect whether the project is  
23 economical?

24 A. I think it depends on the specific  
25 project and it would be one factor among many to

1 determine whether it's economical including who it's  
2 economical for. I also think it could go -- it could  
3 provide benefits. It could also provide costs.  
4 There's a pretty lengthy, you know, regulatory --  
5 expense here. It's not clear to me that a utility  
6 PPA makes a project of that size -- that that one  
7 variable, alone, makes a project of that size  
8 economical or not economical.

9 Q. Okay. Would having a utility  
10 counterparty to a REPA for a 400-megawatt solar  
11 project lower the financing costs associated with  
12 that project?

13 MS. BOJKO: Objection, assumes facts not  
14 in evidence.

15 MS. BLEND: I am asking him as an expert,  
16 your Honor, whether, in his opinion, utility  
17 participation in a REPA would have that effect.

18 EXAMINER PARROT: Overruled. Go ahead  
19 and answer.

20 A. I'm not sure.

21 Q. Have market forces seen the development  
22 of renewable projects similar to those the Company is  
23 proposing here, to date, in Ohio?

24 MS. BOJKO: I'm sorry. May I have that  
25 question reread?

1 (Record read.)

2 MS. BOJKO: I guess I would ask for  
3 clarification of the projects that counsel is  
4 referring to. Are we back to the two projects that  
5 equal 400, the 650 that was modeled, or the 900?

6 MS. BLEND: Your Honor, Mr. Seryak -- the  
7 statement in Mr. Seryak's testimony that I am asking  
8 this question about says "If indeed these renewable  
9 energy projects are economical, then market forces  
10 should be sufficient to see these or other renewable  
11 projects through development." So my question is  
12 paraphrasing back to him the language that he used in  
13 his testimony on page 10, line 17 through 19.

14 EXAMINER PARROT: If you need  
15 clarification at any point, don't hesitate to ask for  
16 it.

17 A. Okay. I understand we are now talking  
18 about these. Can you ask the question again?

19 Q. Have market forces seen the development  
20 of renewable projects similar to those the Company is  
21 proposing here, to date, in Ohio?

22 A. With my understanding, again, that you  
23 clarified we are talking about these, yes. And I  
24 should clarify in the Company's amendment that these  
25 can also include reasonable arrangements and other

1 projects. There have been large-scale renewable  
2 energy projects that have gone on on customer sites.  
3 And as far as development, there are projects, my  
4 understanding, I don't have a full comprehensive list  
5 of what is being considered and developed, but there  
6 are increasingly -- increasing and ever-larger  
7 renewable projects that are being put into the  
8 planning process.

9 Q. What's the largest solar project that you  
10 are aware of that's been constructed in Ohio to date?

11 A. I don't -- I am -- I don't have that  
12 number in front of me. I would have to look.

13 Q. Do you know whether there are any solar  
14 projects that have been constructed that are larger  
15 than 100 megawatts?

16 A. Constructed? I'm not sure. I would have  
17 to check.

18 Q. I have a question for you about a  
19 statement on page 11 of your testimony. On lines 4  
20 and 5, you state that if the projects create costs,  
21 there's no need for them. When you refer to "costs"  
22 in that statement, are you referring to net costs  
23 over the life of a project or any costs?

24 A. Neither. I'm referring -- certainly not  
25 any costs, but I am also not referring to net costs

1 over the life of a project.

2 Q. Okay. So then what are you referring to  
3 when you talk about project costs in this sentence?

4 A. I am referring to a project that produces  
5 net costs to customers over a period of time.

6 Q. Over any period of time? Or over a  
7 specific period of time?

8 A. I think over a specific period of time.  
9 For example, I would not say if there is a net cost  
10 for an hour. That would not be what I am referring  
11 to. However, if the net cost is for several years, I  
12 would refer to that as a net cost to customers.

13 Q. Thank you for that clarification.

14 Beginning on page 12 of your testimony,  
15 Mr. Seryak, you offer an assessment of a survey that  
16 Navigant performed on behalf of AEP Ohio, correct?

17 A. Yes.

18 Q. Do you have any specialized training or  
19 expertise with respect to customer surveys?

20 A. I have experience working with customer  
21 surveys on energy matters where I worked with  
22 academics that have that specialized expertise and  
23 experience interpreting those results to understand  
24 needs, wants, and policy preferences of customers.

25 Q. You are not holding yourself out as an



1 expert in survey design for this case, correct?

2 A. Not in survey design.

3 Q. And you are not holding yourself out as  
4 an expert in survey methodology in this case; is that  
5 correct?

6 A. I don't think that's -- I wouldn't  
7 include within the method what questions are asked,  
8 and if questions are being asked to make sure that  
9 the survey respondents fully -- sorry, fully  
10 understand the questions that are being asked.

11 Q. Are you holding yourself out as an expert  
12 in survey implementation?

13 A. No.

14 Q. And you are not presenting any competing  
15 survey of customer preferences as part of your  
16 testimony, correct?

17 A. Correct.

18 Q. And on page 13 of your testimony, lines 5  
19 and 6, you state that -- actually, the sentence  
20 beginning on line 4, because OMAEG is comprised of  
21 manufacturing customers of all sizes, you can state  
22 that business customers are fulfilling their wants or  
23 desires for renewable energy with other mechanisms  
24 and through other sources.

25 A. I see that.

1 Q. How many members does OMAEG have?

2 A. I don't -- I don't recall the specific  
3 number of OMAEG members there is.

4 Q. Are you, in this testimony or in that  
5 statement, are you speaking on behalf of every OMAEG  
6 customer?

7 MS. BOJKO: Objection. Your Honor, he's  
8 here as an expert witness representing the  
9 association or the group. His views are that of the  
10 association and group.

11 MS. BLEND: Your Honor, Mr. Seryak is  
12 stating unequivocally, it would seem, that business  
13 customers are fulfilling their wants or desires  
14 because OMAEG is comprised of manufacturing customers  
15 of all sizes, so I am asking him whether he is  
16 offering that opinion or that statement on behalf of  
17 all OMAEG members. I think it's a fair question.

18 MS. BOJKO: That's actually not what the  
19 statement says. It says given that OMA is comprised  
20 of all different sizes, I can state that business  
21 customers are fulfilling their wants and desires for  
22 renewable energy. That's different.

23 MS. BLEND: I don't think it actually is  
24 different.

25 EXAMINER PARROT: The objection is

1 overruled. Please answer, and if you need to expand  
2 on your answer as you need to, go ahead.

3 A. Each member of the OMAEG understands that  
4 myself and my staff's technical expertise in regards  
5 to energy efficiency, load management, renewable  
6 energy, on-site generation is available for them to  
7 answer questions. Quite a few of them approach us to  
8 discuss their Company's interim goals or  
9 requirements. And -- but not everyone has. And it's  
10 an open-ended offer to us. So we have not had any  
11 customer -- or sorry, member of the OMAEG come to us  
12 and say that they haven't had their wants or desires  
13 filled, and each one that we have talked to has been  
14 satisfied with meeting their -- their internal goals  
15 and requirements.

16 Q. It would be fair, though, to state that  
17 this statement on page 13 of your testimony relates  
18 to the portion of OMAEG customers with whom you have  
19 spoken.

20 MS. BOJKO: Objection, mischaracterizes,  
21 and he also asked -- he already answered it the best  
22 he could.

23 A. When we ask the members --

24 EXAMINER PARROT: Hold on just a second.

25 The objection is overruled. Go ahead.

1           A.    We'll ask the members in an open setting  
2   on these issues, and I will ask does anyone else have  
3   any question -- any questions, any needs, please come  
4   see me if you need any help. They do not approach me  
5   with that. So my understanding, based on who I have  
6   talked to and that no one else has requested  
7   assistance, is that they are getting their wants and  
8   desires met.

9           Q.    Okay. So your understanding is based, at  
10   least in part, on the silence of OMAEG members in  
11   response to your offer to help them with respect to  
12   this issue?

13           MS. BOJKO:  Objection, your Honor.  
14   Ms. Blend is not understanding the distinctions that  
15   Mr. Seryak is making. He is saying he has had the  
16   discussion with all of the members in group settings  
17   and then has had individual discussions. He said it  
18   three times now.

19           EXAMINER PARROT:  Overruled. Go ahead,  
20   Mr. Seryak.

21           A.    Yes, I am basing my statement on the many  
22   members who have reached out with questions and how  
23   we've worked with them; and those that haven't, that  
24   they've had the offer for assistance or help and  
25   indicated that they don't have an issue and they

1 don't seek out additional assistance from us.

2 Q. And some OMAEG members are also customers  
3 of AEP Ohio, correct?

4 A. Yes.

5 Q. And it's possible that members of OMAEG,  
6 who are also customers of AEP Ohio, could contact AEP  
7 Ohio directly for assistance with respect to their  
8 desires or wants or needs for renewable energy?

9 A. From our discussions, most of our members  
10 contact -- for renewable energy needs or desires or  
11 wants, they will contact a retail electric supplier.  
12 They will work with a third party for REC purchases.  
13 They will reach out to developers who might develop  
14 on-site generation. Is there -- these are large  
15 companies. Is there a possibility that someone  
16 inside the company reaches out to AEP Ohio, the  
17 distribution company, because they misunderstand the  
18 distribution company's role? Yes, there is a  
19 possibility with that.

20 Q. Do you know whether OMAEG has ever  
21 surveyed its constituent members about their  
22 positions regarding renewable energy or their needs  
23 for renewable energy?

24 MS. BOJKO: Objection, your Honor. I  
25 think that has now been answered four times. That

1 was the exact situation Mr. Seryak was discussing.

2 MS. BLEND: I don't think I have asked  
3 that question before, your Honor.

4 MS. BOJKO: Are you talking about a  
5 formal written survey?

6 MS. BLEND: I think I am asking the  
7 question that I am asking.

8 EXAMINER PARROT: Overruled. Go ahead,  
9 Mr. Seryak.

10 A. Could you repeat the question?

11 Q. Has OMAEG ever surveyed its constituent  
12 members about their positions regarding renewable  
13 energy or their needs for renewable energy?

14 A. Technically, no. However, the OMA, which  
15 is the parent entity to the OMAEG, has issued a  
16 survey to its full OMA member on attitudes toward  
17 energy. I don't recall specifically if there were  
18 questions on renewable energy in that case. There  
19 were some questions about different forms of  
20 generation.

21 Q. And to take a step back, with respect to  
22 OMAEG members who are also customers of AEP Ohio,  
23 some of those OMAEG may be nonshopping customers,  
24 correct?

25 A. Yes.

1           Q.    Earlier, you discussed some large  
2 projects, large renewable projects in Ohio, of which  
3 you are aware. Do you recall that discussion that we  
4 had?

5           A.    I generally recall us talking quite a bit  
6 about it. You might have to be specific.

7           Q.    Sure. I think you said something  
8 specific about you were aware there were -- that you  
9 are generally aware there were projects in Ohio that  
10 were being developed, either on-site, through on-site  
11 generation or otherwise, when I asked you about  
12 market forces in Ohio and developing utility -- or  
13 developing renewable energy projects.

14          A.    I mean, I would -- I would want what I  
15 said read back so I could confirm if I -- the  
16 specifics of what you are talking about here.

17          Q.    Well, let's do it this way, are you  
18 aware -- you are aware, I believe you testified  
19 earlier, that there are renewable generation projects  
20 that are under construction or have been constructed  
21 in Ohio; is that accurate?

22          A.    I think I was saying I'm aware of  
23 renewable energy projects under development.

24          Q.    Under development. So not yet in  
25 construction?

1           A.    There's a number of projects, I am aware  
2 of, in development that are not yet in construction.

3           Q.    Do you know, if those projects are  
4 constructed, how many customers they would serve?

5           A.    I mean, there's -- it depends really on  
6 the project. Some of these large projects are  
7 customer-sited. Others are significantly-sized  
8 amounts of renewable energy that might serve one  
9 customer with many buildings. Others feed directly  
10 to the transmission system. They are on the  
11 wholesale market, and so they affect all customers in  
12 that -- in that region. Effectively they serve Ohio  
13 customers and all of PJM.

14          Q.    And, Mr. Seryak, you would agree just  
15 because a project is in development does not mean it  
16 will be constructed.

17          A.    There are some projects in development --  
18 like if you took all projects in development, it  
19 would be reasonable to expect that some will be  
20 developed and some may not be developed. Some may be  
21 constructed and some others may not be constructed.

22          Q.    There's no guarantee a project will be  
23 constructed simply because it's being developed.

24          A.    Sure.

25               MS. BLEND: I have no further questions.



1 Thank you.

2 EXAMINER PARROT: Mr. Olikier, you left  
3 the counsel table again. I assume from that you had  
4 no questions for this witness; is that correct?

5 MR. OLIER: That's correct, your Honor.

6 EXAMINER PARROT: Any redirect,  
7 Ms. Bojko?

8 MS. BOJKO: Could we just have a few  
9 minutes?

10 EXAMINER PARROT: You may.

11 EXAMINER SEE: Let's go off the record.  
12 (Discussion off the record.)

13 EXAMINER PARROT: Let's go back on the  
14 record.

15 Any redirect, Ms. Bojko?

16 MS. BOJKO: Yes, I do, your Honor.  
17 Briefly.

18 - - -

19 REDIRECT EXAMINATION

20 By Ms. Bojko:

21 Q. Mr. Seryak, do you recall some questions  
22 regarding your Grounds for Optimism report, and  
23 specifically pages 1 through 2, where you listed out  
24 the model results and the benefits of those?

25 A. I recall those questions.

1           Q.    The scenarios that you went through and  
2   the benefits that Ms. Blend referenced with regard to  
3   those -- to that list on pages 1 and 2, those  
4   benefits were without utilities owning and operating  
5   or receiving cost recovery -- cost recovery from  
6   ratepayers; is that correct?

7           A.    That's correct.  In fact, we go on, later  
8   in the document, to make a number of market  
9   based-policy recommendations including to not favor  
10  incumbents in regulation or policy.

11          Q.    And just for the record, would those  
12  policy recommendations be listed on page 58 of the  
13  report?

14          A.    Yes.  Page 58.

15          Q.    Mr. Seryak, do you recall Ms. Blend and  
16  you having a discussion about wires function and what  
17  that means?

18          A.    Yes.

19          Q.    Do you recognize that the Senate Bill  
20  221, the State of Ohio's regulatory regime, allows  
21  for the distribution utility to do functions that are  
22  beyond the utility wires-only functions?

23               MS. BLEND:  Objection, your Honor,  
24  leading.  Ms. Bojko has been objecting to our  
25  redirect on that basis all week.

1 MS. BOJKO: Sure. I'll rephrase, your  
2 Honor. Fair enough.

3 Q. (By Ms. Bojko) Mr. Seryak, do you believe  
4 that the regulatory regime lends itself to a strict  
5 wires function regulatory scheme?

6 A. I think it's in the definition of wires  
7 only. It includes things that are not physical  
8 electric wires; so energy efficiency programs would  
9 be an example of that.

10 Q. And you weren't trying to imply it was  
11 purely providing distribution service to customers,  
12 were you?

13 A. No. I was trying to imply it was the  
14 stated functions of the wires utility.

15 Q. In Ohio, what is the market trend with  
16 regard to renewable projects and the size of those  
17 projects?

18 A. Yes. We've seen, as renewable energy  
19 prices have come down, we have seen a trend for more  
20 projects, month diverse types of projects and  
21 choices, and also a trend towards larger projects.

22 Q. And where do you expect those projects to  
23 go into the future, what's the size you would expect  
24 in the future?

25 A. We are currently involved with customers

1 with project sizes that get up to 100 megawatts,  
2 potentially over that. And we expect, as renewable  
3 energy technology costs come down, as customers  
4 become more familiar with the technology, and as  
5 businesses expand their offerings and services and  
6 the market expands, we would expect that  
7 market-driven renewable energy project sizes will go  
8 up as has been the trend.

9 Q. And you have -- have you had the pleasure  
10 of actually working with OMAEG members or OMA members  
11 to develop on-site renewable generation in many  
12 forms?

13 A. Yes.

14 Q. Could you maybe describe a couple of  
15 those projects?

16 A. Sure. With on-site generation, members  
17 are interested in a full suite of choices. So they  
18 may look at technology such as combining power. They  
19 also look at wind turbines that are large scale, and  
20 they also look at behind-the-meter solar projects  
21 that are -- that have -- that are also of large  
22 scale, in addition to looking at other types of  
23 agreements, say SREC or REC purchases.

24 Q. Ms. Blend asked you about OMAEG members  
25 and whether they are shopping or nonshopping

1 customers of AEP Ohio or other utilities. Why would  
2 OMAEG members be nonshopping customers?

3 A. There are some members that may do an  
4 analysis and, for some period of time, decide to be a  
5 nonshopping customer, but they've shopped, so to  
6 speak, their way to become a nonshopping customer.  
7 It's a choice.

8 MS. BOJKO: Thank you. I have no further  
9 questions.

10 EXAMINER PARROT: Ms. Glover?

11 MS. GLOVER: No questions.

12 EXAMINER PARROT: Mr. Darr?

13 MR. DARR: No questions.

14 EXAMINER PARROT: Mr. Collier?

15 MR. COLLIER: No questions.

16 EXAMINER PARROT: Ms. Whitfield?

17 MS. WHITFIELD: No questions.

18 EXAMINER PARROT: Mr. Olier?

19 MR. OLIER: No questions, your Honor.

20 EXAMINER PARROT: Ms. Willis?

21 MS. WILLIS: No questions, your Honor.

22 EXAMINER PARROT: Mr. McNamee?

23 MR. MCNAMEE: No questions, your Honor.

24 EXAMINER PARROT: Mr. Kurtz?

25 MR. KURTZ: Just a couple.

1

- - -

2

## RECROSS-EXAMINATION

3

By Mr. Kurtz:

4

Q. Your counsel asked you questions about the type of solar projects that you do for OMAEG members. Do you recall that?

7

A. I recall her question about OMAEG members' interests in solar projects. We don't actually do the project for the members.

10

Q. Do you advise them?

11

A. Yes, if they request us to advise, we can do that. That's our role.

13

Q. Do you charge for that advice?

14

A. If it's -- it depends on the type of advice. If it's within the bounds of our service to OMAEG, there are some types of advice we can give to the members that come as part of their dues payment. But if it requires more -- more time, that would be something we would charge separately for.

20

Q. So do you have a personal financial interest in the outcome of this case?

22

MS. BOJKO: Objection, your Honor. First of all, it's argumentative. Secondly, these questions should have and could have been asked on cross-examination, not recross. It's beyond the

25

1 scope. I didn't talk anything about his role in the  
2 projects as a paying consultant.

3 MR. KURTZ: Well, I think she did. She  
4 asked him what he does for OMAEG members regarding  
5 solar, and I was just inquiring one level deeper,  
6 does he make money off of that role.

7 EXAMINER PARROT: Maybe rephrase your  
8 question, Mr. Kurtz.

9 Q. (By Mr. Kurtz) It's true, isn't it, you  
10 have a personal financial interest in the outcome of  
11 this case?

12 MS. BOJKO: No. Objection. It's  
13 argumentative. And as a consultant, I guess  
14 technically he could have a financial interest in  
15 every issue before this Commission.

16 MR. KURTZ: We all expect professional  
17 witnesses and consultants to get paid, but it's  
18 another thing -- it's another thing to have a  
19 personal financial interest in the outcome of the  
20 case.

21 MS. BOJKO: He already said, your Honor,  
22 on behalf of OMAEG, he provides certain services for  
23 nonpayment. He is representing OMAEG in this  
24 proceeding.

25 EXAMINER PARROT: When I asked you to

1 rephrase, Mr. Kurtz, I meant let's direct it toward  
2 his capacity in this case as a consultant for OMAEG,  
3 rather than his personal interest --

4 MR. KURTZ: Okay.

5 EXAMINER PARROT: -- is what I was  
6 getting at.

7 Q. (By Mr. Kurtz) Are you being paid out of  
8 your general OMAEG funding relationship, or are you  
9 being paid separately today?

10 MS. BOJKO: Objection, your Honor. This  
11 goes way beyond the scope. This is something he  
12 should have asked on --

13 MR. KURTZ: I don't care. I will drop  
14 that whole thing.

15 Q. I do want to ask this, though: You were  
16 asked by counsel about the role of the wires company  
17 and whether they're purely distribution and you used  
18 the example of energy efficiency. Do you recall  
19 that?

20 A. I want to clarify because I think there  
21 is some confusion on the term "distribution" and  
22 "wires utility function." And so what I am referring  
23 to is AEP's use of the term "wires utility function"  
24 which can be distribution service but can be defined  
25 for other things that don't -- that aren't limited to



1 distribution service of the electrons but might be a  
2 wires utility function such as energy efficiency  
3 programs.

4 Q. So wires company is broader than  
5 distribution utility? Or is it the other way around?  
6 I don't understand. Is distribution company a subset  
7 of wires company? Is wires company broader? Are you  
8 making a distinction between the two phrases? I  
9 thought you were.

10 A. Wires utility function is a phrase that's  
11 used in the amendment. I did not see a definition  
12 for wires utility function. What I am saying is  
13 wires utility functions are going to be prescribed by  
14 policy. And for clarification for those in this  
15 room, the physical electrical lines and delivering  
16 electrons through those lines would be one wires  
17 function.

18 There are other wires utility functions  
19 including the operation of efficiency programs. Now,  
20 I am not conflating and saying a distribution utility  
21 function is different than a wires utility.

22 Q. Okay. Tell me -- tell me where I am  
23 misunderstanding your testimony on the need question  
24 here. You seem to be saying a wires utility can  
25 never qualify for that part of state law that allows

1 a wires company to own generation because it's a  
2 wires company.

3 MS. BOJKO: Objection.

4 Q. Where is the flaw -- where -- how is that  
5 logical?

6 MS. BOJKO: Object. First of all, it  
7 mischaracterizes his testimony; and, secondly, it's  
8 beyond the scope of redirect.

9 EXAMINER PARROT: Overruled. Go ahead.

10 A. Can you repeat the question?

11 Q. Explain the logic behind the argument  
12 that says a wires company can never access that part  
13 of state law that allows a wires company to own  
14 generation simply because it's a wires company.

15 A. I'll repeat to you what is in AEP's  
16 amendment where AEP says the wires utility function,  
17 that this mechanism is intended as part of a  
18 post-corporate separation of wires utility function,  
19 and it does not require a traditional analysis of  
20 integrated resource planning need.

21 Now, a traditional analysis of integrated  
22 resource planning need is what one would do to look  
23 at a generation asset. It is AEP saying and defining  
24 that the wires utility function -- that the wires  
25 utility function, it is AEP saying that they are not

1 to look at the traditional integrated resource  
2 planning need.

3 MR. KURTZ: Okay. Thank you, your Honor.

4 EXAMINER PARROT: Ms. Blend?

5 MS. BLEND: Thank you, your Honor.

6 - - -

7 RECROSS-EXAMINATION

8 By Ms. Blend:

9 Q. Just a couple more questions, Mr. Seryak.  
10 First, your counsel just asked you some questions  
11 about Exhibit 24, the Grounds for Optimism survey  
12 that we talked about earlier?

13 A. Yes.

14 Q. Do you stand behind everything in this  
15 report?

16 A. I think everything is overly broad. I am  
17 sure there's some typos in there that, if I read  
18 through the report again, I probably would correct.

19 Q. Okay. Fair enough. You stand by the  
20 analysis contained in this report?

21 A. I peer reviewed the analysis and talked  
22 with Dr. Cox who prepared the analysis while it was  
23 being prepared. So it went through multiple levels  
24 of peer review. And based on the information and  
25 data we had at the time, I thought it was a sound

1 analysis. There was -- as with any analysis,  
2 there's -- we tested three options on a complicated  
3 matter and there could be more options that would be  
4 tested. So it depends on -- it depends on the  
5 specific question you are asking me, but in general I  
6 thought it was a good study.

7 Q. Your counsel asked you some questions  
8 about the policy recommendations at the end of the  
9 report. I just want to confirm that you -- you are  
10 not -- by discussing those policy recommendations,  
11 you're not saying that we should ignore the analysis  
12 that preceded the policy recommendations? You still  
13 stand by that analysis that led up to the policy that  
14 was included before the policy recommendation?

15 A. Yes, I thought the analysis was valid.

16 Q. And during cross-examination, when you  
17 used the term "wires utility function," were you  
18 using that term to include generation?

19 A. Can you be specific or can you refer --  
20 there was a lot of discussion about wires utility.  
21 Can you maybe be specific with your question?

22 Q. Yes. So my specific question is you used  
23 the term "wires utility function" a lot during  
24 cross-examination, and then on redirect you used it  
25 in a way different than you used it on cross. So for

1 clarity of the record, when you were talking about  
2 wires utility function during cross-examination, my  
3 question is did that term include generation?

4 A. I do not believe in the way AEP uses the  
5 term "wires utility function" and by saying that it  
6 doesn't require a traditional analysis of integrated  
7 resource planning need which is for generation, then  
8 I think it is -- the wires utility, we would exclude  
9 generation from that, except for the specific  
10 exceptions.

11 Q. What do you mean when you -- what did you  
12 just mean when you said "except for the specific  
13 exceptions?"

14 A. The exception we're debating in this case  
15 and the finding of need.

16 Q. You recall some questions that Ms. Bojko  
17 asked you about future projects that you are aware of  
18 or involved with for future renewable projects  
19 including OMAEG members? Do you recall those  
20 questions?

21 A. Yes.

22 Q. And you talked about future projects of  
23 up to 100 megawatts. Do you recall that discussion  
24 that you had with your counsel?

25 A. Yes.

1           Q.    Counsel for OMAEG.  None of those  
2 projects that you discussed on redirect are currently  
3 under construction, correct?

4           A.    Not the one up to 100 megawatts.  
5 However, there are many OMAEG members that are  
6 pursuing large-scale utility projects that are under  
7 construction behind the meter or that they are  
8 involved in with a contract, a RECs purchase  
9 contract, and some of those do get up to the size.  
10 I'm not intimately familiar with the numbers though.

11          Q.    Okay.  When you say "large-scale utility  
12 projects," what size do you mean?

13          A.    Oh, "large" is a colloquial term, you  
14 know, and I think it's relative to -- relative to  
15 past history.

16          Q.    What's the smallest you would consider a  
17 large-scale utility project that is under  
18 construction by OMAEG members?

19          A.    I think people are going to generally  
20 refer to "large" as anything between, you know, 1  
21 megawatt and 500 megawatts, people will use the term  
22 "large."

23                MS. BLEND:  I have no further questions.  
24 Thank you.

25                EXAMINER PARROT:  All right.  I believe

1 Ms. Bojko has already moved for the admission of  
2 OMAEG Exhibit 16. Are there any objections?

3 Hearing none, it will be admitted.

4 (EXHIBIT ADMITTED INTO EVIDENCE.)

5 EXAMINER PARROT: Ms. Blend?

6 MS. BLEND: Yes, your Honor. I would  
7 like to move for the admission of AEP Ohio Exhibit  
8 24.

9 EXAMINER PARROT: Are there any  
10 objections?

11 MS. BOJKO: No, your Honor.

12 EXAMINER PARROT: Okay. Company  
13 Exhibit 24 is also admitted.

14 (EXHIBIT ADMITTED INTO EVIDENCE.)

15 EXAMINER PARROT: Thank you very much,  
16 Mr. Seryak.

17 At this point, let's take a lunch recess.  
18 We will reconvene at 2:10.

19 (Thereupon, at 1:21 p.m., a lunch recess  
20 was taken.)

21 - - -  
22  
23  
24  
25

2566

Monday Afternoon Session,  
January 28, 2019.

- - -

EXAMINER SEE: Let's go back on the  
record.

Mr. Oliker, your next witness.

MR. OLIKER: Thank you, your Honor.  
Interstate Gas Supply, Inc. and IGS Solar, LLC, would  
call Christopher Rengstorf.

(Witness sworn.)

EXAMINER SEE: Thank you. Have a seat.  
And cut your microphone on, please.

THE WITNESS: Okay.

EXAMINER SEE: Mr. Oliker.

(Witness sworn.)

- - -

CHRISTOPHER RENGSTORF  
being first duly sworn, as prescribed by law, was  
examined and testified as follows:

DIRECT EXAMINATION

By Mr. Oliker:

Q. Good afternoon, Mr. Rengstorf.

A. Good afternoon.

Q. Did you prepare testimony in this  
proceeding?



1           A.    I did.

2           Q.    And is that testimony on behalf of  
3 Interstate Gas Supply, Inc. and IGS Solar, LLC?

4           A.    It is.

5           Q.    And do you have a copy of that document  
6 in front of you?

7           A.    I do.

8                   MR. OLIKER: Your Honor, I would like to  
9 mark the direct testimony of Chris Rengstorf as  
10 Interstate Gas Supply, Inc. and IGS Solar, LLC,  
11 Exhibit 12.

12                   EXAMINER SEE: So marked.

13                   (EXHIBIT MARKED FOR IDENTIFICATION.)

14           Q.    And am I correct, Mr. Rengstorf, that the  
15 testimony was prepared by you or under your  
16 direction?

17           A.    You are correct.

18           Q.    And do you have any changes to make to  
19 your testimony?

20           A.    Not at this time.

21           Q.    If you were asked these same questions  
22 today, would your answers be the same?

23           A.    They would.

24                   MR. OLIKER: With that, your Honor, I  
25 would move for the admission of the exhibit and

1 tender the witness for cross-examination.

2 EXAMINER SEE: Any cross-examination for  
3 this witness? Ms. Glover.

4 MS. GLOVER: No questions, your Honor.

5 EXAMINER SEE: Mr. Darr.

6 MR. DARR: No, thank you.

7 EXAMINER SEE: Mr. Collier.

8 MR. COLLIER: No questions, your Honor.

9 EXAMINER SEE: Ms. Whitfield.

10 MS. WHITFIELD: No, thank you, your  
11 Honor.

12 EXAMINER SEE: Ms. Bojko.

13 MS. BOJKO: No, thank you, your Honor.

14 EXAMINER SEE: Ms. Willis.

15 MS. WILLIS: No, your Honor.

16 EXAMINER SEE: Mr. Kurtz.

17 MR. KURTZ: No questions.

18 EXAMINER SEE: Mr. McNamee.

19 MR. MCNAMEE: No questions, thank you.

20 EXAMINER SEE: Mr. Hughes.

21 MR. HUGHES: Thank you, your Honor.

22 - - -

23 CROSS-EXAMINATION

24 By Mr. Hughes:

25 Q. Good afternoon, Mr. Rengstorf.

1           A.    Good afternoon.

2           Q.    My name is Brad Hughes, and I am on  
3   behalf of AEP Ohio today.  Is it okay with you if, in  
4   my questions, I refer to Interstate Gas Supply, Inc.  
5   as IGS?

6           A.    It is.

7           Q.    And is it okay if I refer to IGS Solar,  
8   LLC as IGS Solar?

9           A.    It is.

10          Q.    Okay.  Thanks.

11                On page 26 of your testimony, you state  
12   that you have a Bachelor of Science in business  
13   administration from Ohio State; is that correct?

14          A.    That's correct.

15          Q.    And when did you obtain that degree?

16          A.    2007.

17          Q.    Okay.  Any graduate degrees?

18          A.    No, sir.

19          Q.    Do you have any professional  
20   certifications or licenses?

21          A.    None that are current, no.

22          Q.    Okay.  Did you previously have some  
23   professional certifications or licenses?

24          A.    I did.  I was certified as a Distributed  
25   Generation Certified Professional, but that has

1       lapsed.

2               Q.     Okay.  And can you tell me what body you  
3       obtained that certification from?

4               A.     It was the AEE, I believe.

5               Q.     I'm sorry, I couldn't hear you.

6               A.     It was the -- I'm sorry -- the acronym is  
7       the Association of Energy Engineers.

8               Q.     And have you previously testified before  
9       the Public Utilities Commission?

10              A.     I have not.

11              Q.     Okay.  Have you testified before any  
12       other regulatory commission?

13              A.     I have not.

14              Q.     Okay.  In the time since you graduated  
15       from Ohio State, have you published any peer-reviewed  
16       studies of the competitive market for renewable  
17       energy products?

18              A.     No, I have not.

19              Q.     And did you immediately begin working for  
20       IGS Energy as a software business analyst when you  
21       graduated from OSU?

22              A.     I did not.

23              Q.     What was your first position after you  
24       graduated from OSU?

25              A.     I started my career as a consultant for

1 an organization here in Columbus, Ohio, called  
2 ComResource. Most of their work is nationwide, but I  
3 was actually traveling full time, doing mostly  
4 process analysis and business requirements gathering.

5 Q. And when was it you became the Director  
6 of Commercial Solar Operations for IGS Solar?

7 A. I believe that I became the Director of  
8 Commercial Solar Operations, I want to say right  
9 around the December of 2016 to January of 2017 time  
10 frame.

11 Q. And when was it that IGS Solar first came  
12 into existence?

13 A. IGS Solar, I would have to double-check  
14 without the actual certificate in front of me, but it  
15 should have been around the 2015 time frame.

16 Q. Okay. And also at the top of page 2, you  
17 refer to construction across a national footprint.  
18 Do you know how many states IGS Solar has projects in  
19 right now?

20 A. I do. We have operational  
21 distribution -- generation resources today in 18  
22 states.

23 Q. Okay. And are any of the projects in  
24 those 18 states that you mentioned utility-scale  
25 under your definition of utility-scale?

1           A.    I think it's a difficult question to  
2    answer, but following the definition of utility-scale  
3    is a project that produces power in front of the  
4    meter which I believe is a good definition.  Then,  
5    yes, we do have projects that produce power and sell  
6    directly into the grid outside of behind the  
7    customer's meter.

8           Q.    And are any of those projects in Ohio?

9           A.    Yes.

10          Q.    And where are those projects in Ohio  
11   located?

12          A.    We have one operational facility in Ohio  
13   that I think we would consider utility-scale by that  
14   definition and it's located in Cuyahoga County.

15          Q.    And what is the output and megawatts of  
16   that facility?

17          A.    That facility is a roughly 4-megawatt DC  
18   nameplate capacity so that's the maximum output.

19          Q.    And then besides the one facility in Ohio  
20   that you've just described, do you know how many  
21   other projects you have in other states that are in  
22   front of the meter under your definition of  
23   utility-scale?

24          A.    Again, without the portfolio statistics  
25   for everything that we have developed, built, and own

1 and operate, it's difficult to be exact, but  
2 following that definition, across our portfolio of  
3 some-odd 80 operational assets nationwide, something  
4 in the range of maybe 40 percent would be considered  
5 in front of the meter.

6 Q. And of the approximately 80 operational  
7 assets you just described, how many of them have an  
8 output greater than 20 megawatts? Do you know?

9 A. I do. None of our individual operating  
10 assets have an output greater than 20 megawatts.

11 Q. You mentioned in your testimony that your  
12 current responsibilities include a couple of things,  
13 system design, financial review, construction,  
14 maintenance, and operation, correct?

15 A. Yes.

16 Q. And as part of your responsibilities at  
17 IGS Solar, do you have any involvement with the sale  
18 of output from solar facilities into the PJM  
19 wholesale market?

20 A. No, I do not have any direct involvement  
21 with the sell of wholesale power into the PJM  
22 markets. PJM markets.

23 Q. And as part of your work at IGS Solar, do  
24 you have occasion to review any of the content that's  
25 accessible to the public on the IGS.com website?

1           A.    Yes, I believe so.

2           Q.    Do you tend to review the information on  
3 the IGS.com website that relates to solar?

4           A.    I should be more familiar with those  
5 figures, yes.

6           Q.    Okay. You said, at the bottom of page 2  
7 of your testimony, that the purpose of your testimony  
8 is to dispute AEP's claim that there is an  
9 insufficient amount of renewable distributed  
10 generation in Ohio to meet customer preferences,  
11 correct?

12          A.    That's correct.

13          Q.    But your written testimony does not  
14 present any actual study or survey of customer  
15 preferences, does it?

16          A.    No. My testimony does not present any  
17 third-party studies. Sorry.

18          Q.    And have you ever personally performed a  
19 quantitative analysis of current market demand for  
20 renewable distributed generation?

21          A.    No. I have not performed a quantitative  
22 study of distributed energy renewable demand on any  
23 kind of footprint.

24          Q.    And you are not an economist by training,  
25 correct?



1           A.    No.  I wouldn't consider myself an  
2   economist by training.  I do hold a Bachelor's Degree  
3   of business administration from Ohio State; we  
4   covered economic topics.  And more importantly, I  
5   think as it pertains to this case, I do operate, day  
6   in and day out, within the solar industry and I'm  
7   exposed to a wide kind of breadth of different market  
8   factors in that capacity.

9           Q.    When you say, at the bottom of page 2,  
10  that to the extent there is a desire to obtain  
11  electricity from renewable resources, you believe  
12  that the market is well situated to meet customer  
13  preference, correct?

14          A.    That's correct.

15          Q.    And how do you define "the market" for  
16  the purposes of that assertion?

17          A.    Generally I think in this capacity and in  
18  this point here, I'm considering the market for  
19  customer-demanded and retail-market-response-provided  
20  energy solutions.  And so to expand on the point  
21  there, what I believe is that the Ohio market is well  
22  positioned to facilitate willing buyers and willing  
23  sellers to consummate generation deals of all scales.

24          Q.    So the definition of "the market" that  
25  you are using there at the bottom of page 2, excludes

1     electrical distribution utilities that may obtain  
2     permission to own or operate renewable generation?

3             MR. OLIKER: I'm sorry, could I have that  
4     question read again.

5             (Record read.)

6             A. I wouldn't say that it necessarily  
7     excludes a regulated utility, the distribution  
8     company that was granted permission to own  
9     generation. If that were the case, I think it would  
10    potentially fit into that market, but the matter at  
11    hand is whether this case falls into that scenario.  
12    I think that's what we are debating today.

13            Q. Okay. And at the top of page 3, to  
14    support your assertion about the market, you discuss  
15    some options that customers currently have available  
16    to obtain electricity from renewable products,  
17    correct?

18            A. At the top of page 3? Sorry.

19            Q. Yeah, I believe so. It's not paginated,  
20    so I am doing my best here. Yeah, top of page 3.

21            A. Yes, that's correct.

22            Q. Okay. And one of the options you discuss  
23    is customers can procure commodity products coupled  
24    with renewable energy; is that right?

25            A. That's correct.

1           Q.    And the second option you discuss here,  
2   with some specific examples, is that customers can  
3   procure on-site distributed generation, correct?

4           A.    That's correct.

5           Q.    Okay. I have a couple of questions about  
6   each of those options that I'll turn to. So I'll  
7   start with the first option that you discussed which  
8   is the procurement of commodity products. How long  
9   has IGS Solar offered commodity products coupled with  
10   renewable energy to Ohio consumers?

11           MR. OLIKER: Objection. I believe that  
12   misstates the testimony which doesn't reference IGS  
13   Solar specifically.

14           MR. HUGHES: I'll rephrase.

15           EXAMINER SEE: Okay.

16           Q.    Does IGS Solar currently offer commodity  
17   products coupled with renewable energy to Ohio  
18   customers?

19           A.    No, it does not, but IGS Solar is not a  
20   certified electric reseller within the State of Ohio,  
21   nor any other state, so commodity products are not a  
22   product we sell within the company of IGS Solar. As  
23   previously mentioned by Matt White in his testimony,  
24   IGS, the energy company, does offer such a product.

25           Q.    And how long has IGS offered commodity

1 products that are coupled with renewable energy?

2 A. I don't know the specifics for how long  
3 IGS has offered a renewable product in the commodity  
4 space. I believe it's been a while. But I don't  
5 know the specifics.

6 Q. Do you know how many 100-percent  
7 renewable commodity products from IGS are available  
8 to customers?

9 MR. OLIKER: I'm sorry, I just object to  
10 the extent counsel is not asking for customer  
11 accounts but products. Because I'm okay with the  
12 products, but if you are asking about customer  
13 accounts, I would want to go to a confidential  
14 session if the witness knows.

15 MR. HUGHES: My apologies. I am asking  
16 the offerings on the Apples to Apples website.

17 EXAMINER SEE: Go ahead. The witness can  
18 answer the question.

19 A. So, again, I don't know the precise  
20 number of products. I believe that there are both  
21 national wind and solar products that are available  
22 through IGS Energy as a commodity retailer, and I  
23 believe there are also Ohio-specific energy products  
24 that are available now as well.

25 Q. But you don't know how many of those

1 products are available currently?

2 A. To clarify, you mean like if we were --  
3 if a customer were to go to the IGS website, how many  
4 could they choose from to go into their rate base, to  
5 sign up for that product, you mean?

6 Q. I'm sorry I, couldn't hear what you were  
7 saying.

8 A. Yes, I guess I am asking for  
9 clarification on the question. Are you asking in  
10 which markets behind which utilities do we provide  
11 this product or the total number that there are in  
12 general? I guess I am not entirely sure how to  
13 answer.

14 Q. I'll try to ask a more specific question.  
15 Do you know, Mr. Rengstorf, for the  
16 100-percent solar commodity product that's offered by  
17 IGS to Ohio consumers, how long that product has been  
18 available?

19 A. I do not.

20 Q. And I'll ask the same question with  
21 respect to a 100-percent wind commodity product, do  
22 you know how long that product has been available to  
23 Ohio customers?

24 A. Again, I don't know the specific time  
25 frame. I believe that both of those products have

1       existed for some time. I don't know.

2               Q.     Okay. I would like to move on to the  
3       second option for customers that you discuss at the  
4       top of page 3 of your testimony. And you mention the  
5       possibility of customers procuring on-site  
6       distributed generation from several different  
7       channels in the Ohio solar market; is that correct?

8               A.     I made reference in my written testimony  
9       to some examples of Ohio solar, direct behind the  
10      meter that -- or distribution generation, excuse me,  
11      that IGS has provided. I'm not entirely clear on the  
12      meaning of the word "channels" in your question.

13              Q.     The word "channels" appears in your  
14      testimony, the fourth line down on page 3, so I  
15      just -- how do you define the term?

16              A.     Oh, I see. So in the context of that  
17      sentence, "sales channels" is referring to different  
18      avenues by which IGS and the customer may be  
19      connected. So it's a broader term applied to  
20      different ways that we find opportunities, and so  
21      they may be an organic opportunity, maybe part of our  
22      sales team reached out to that customer and started  
23      that conversation. Or perhaps it was through a  
24      broker or some other type of avenue that this  
25      customer found its way to IGS for communication.

1           Q.   And the first specific example you list  
2   there on page 3 of your testimony, is that the same  
3   Cuyahoga County project that you mentioned earlier in  
4   your testimony today?

5           A.   Yes, that's correct.

6           Q.   Okay. And then you also mention a  
7   rooftop site in northern Ohio, correct?

8           A.   That's correct.

9           Q.   And do you know how much energy is  
10  produced at the rooftop site?

11          A.   I do. The rooftop site is located on the  
12  roof of a single building and the nameplate capacity,  
13  again in DC, current measurements, is right around  
14  300 kilowatts.

15          Q.   And am I right that both the landfill and  
16  the rooftop sites are behind-the-meter resources?

17          A.   Well, I believe -- no. I believe that we  
18  were considering the Cuyahoga County project by the  
19  definition of in front of the meter and then that  
20  project falls into that category.

21          Q.   Does PJM consider the landfill site a  
22  generation resource? Do you know?

23               MR. OLIKER: Objection. The question is  
24  vague in whether PJM considers it a generation  
25  resource. In what fashion? For example, in the

1 capacity market or?

2 EXAMINER SEE: The objection is -- the  
3 objection is overruled. The witness can answer the  
4 question or request clarification if needed.

5 A. Could you please repeat the question?

6 Q. When I asked whether PJM would consider  
7 these resources to be generation resources, I would  
8 be referring to the capacity market.

9 MR. OLIKER: And I would again object.  
10 It doesn't matter whether PJM considers it for the  
11 capacity market, what counts is whether it's a  
12 resource that's bid or cleared. It's very ambiguous  
13 and misleading.

14 MR. HUGHES: Well, your Honor, I am just  
15 asking a question about a particular project that the  
16 witness has identified as an option for customers in  
17 his testimony. I think we are entitled to learn more  
18 about the scope of the project.

19 EXAMINER SEE: The objection is  
20 overruled.

21 A. So the project is registered with the EIA  
22 and FERC as a qualifying facility. All of the power  
23 that that project produces goes into the grid system  
24 of Cleveland Public Power who handles, as best I  
25 understand it, any clearing that would be done within



1 the PJM markets; and I imagine, in that capacity,  
2 they also take the capacity value.

3 Q. Okay. Thank you.

4 And you mention on page 3 of your  
5 testimony that IGS Solar is developing a third  
6 project in southern Ohio that would provide on-site  
7 solar to two schools, correct?

8 A. That's correct.

9 Q. And how much energy do you expect to be  
10 produced at the school project?

11 A. So both of those projects, again in DC  
12 nameplate capacity, are somewhere in the 100- to  
13 150-kilowatt range --

14 Q. Okay.

15 A. -- each.

16 Q. So based on the definition of  
17 utility-scale that you gave me earlier, would any of  
18 the three projects that you just described at the top  
19 of page 3 of your testimony qualify as utility-scale  
20 projects under that definition?

21 A. I believe the Cuyahoga County project  
22 would still qualify as an in-front-of-the-meter asset  
23 because our power goes directly into the CBD grid.

24 Q. Okay. So turning to the bottom of page 3  
25 of your testimony, you were asked whether the

1 construction of 900 megawatts of subsidized renewable  
2 resources would discourage market-based renewable  
3 energy and stifle job growth, correct?

4 A. Correct.

5 Q. And you answered yes, correct?

6 A. Correct.

7 Q. Wouldn't you agree, though, that the  
8 construction of large utility-scale solar projects  
9 will result in construction jobs for the individuals  
10 that are hired to build them?

11 A. I would agree that the individual project  
12 would, in fact, result in construction jobs. I think  
13 the overarching points to the answer in the way I  
14 answered no, I believe on the larger scale this  
15 project would be bad for the job markets is that this  
16 project could potentially stifle additional projects  
17 in the future across the whole spectrum of different  
18 types of solar assets, and for us that's residential,  
19 C&I commercial and utility and small-scale utility.  
20 And it's our belief that while this job, you know,  
21 perhaps it would create jobs, the potential projects  
22 that would not be developed as a result of this  
23 project being developed would have more jobs.

24 Q. Okay. But wouldn't you agree, though,  
25 that large utility-scale solar project jobs have

1 certain advantages over rooftop solar jobs?

2 A. I'm not sure that I agree.

3 Q. Have you reviewed the Energy 101 pages on  
4 the IGS.com website?

5 A. Not recently, no.

6 MR. HUGHES: Okay. Your Honor, may we  
7 approach?

8 EXAMINER SEE: Yes.

9 (EXHIBIT MARKED FOR IDENTIFICATION.)

10 Q. I will give you a minute to review what's  
11 been marked as AEP Ohio Exhibit 25, Mr. Rengstorf,  
12 and after you have had an opportunity to review it,  
13 can you identify it for me?

14 A. It looks to be a -- an article on the IGS  
15 Energy 101 website, though I am not familiar with  
16 this article before now.

17 Q. Turning to page 2 of the article,  
18 Mr. Rengstorf, under "Types of Solar Jobs." Do you  
19 see that?

20 MR. OLIKER: Objection.

21 EXAMINER SEE: Go ahead, Mr. Olikar.

22 MR. OLIKER: The witness just said he has  
23 never seen this article. No foundation for any of  
24 these questions.

25 MR. HUGHES: Your Honor, we believe this

1 website is admissible as an admission of a party  
2 opponent. We believe that the information on this  
3 page goes directly to testimony we've heard from  
4 witnesses regarding the definition of utility-scale  
5 as well as testimony that we've just heard from  
6 Mr. Rengstorf about advantages or disadvantages of  
7 utility-scale jobs vis-a-vis rooftop solar jobs.

8 MR. OLIKER: Your Honor, there is still  
9 no foundation for the exhibit. The proper way for  
10 establishing foundation for something like this is to  
11 serve a discovery request with a request for  
12 admission to validate the authenticity of a document.  
13 They didn't do that. And now that they have tried to  
14 establish a foundation with a witness that is simply  
15 unfamiliar with it, they aren't able to establish its  
16 authenticity and, therefore, it should not be the  
17 subject of cross-examination. And even if they  
18 could, it still wouldn't be the proper subject of  
19 cross-examination because he's never seen it.

20 MS. BOJKO: Your Honor, I would agree to  
21 the lack-of-foundation objection, and I would also  
22 object to counsel's statements that this goes to  
23 somehow counter-indict or counteract testimony that's  
24 been by previous witnesses when there's no foundation  
25 and those previous witnesses cannot testify to this

1 document. And I also note that there seems to be  
2 some kind of mischaracterization when we are talking  
3 about the benefits of solar with regard to  
4 utility-owned, -operated, -developed solar versus  
5 market-based solar.

6 MR. HUGHES: Your Honor, may I respond?

7 EXAMINER SEE: Sure.

8 MR. HUGHES: I think that the document --  
9 we have met the requirements to present this document  
10 as an admission of a party opponent. When Mr. Oliker  
11 referred to discovery, we did not receive the  
12 testimony until after the discovery deadline had  
13 passed. So that's not a legitimate -- a legitimate  
14 objection.

15 MR. OLIKER: The document preexisted,  
16 your Honor. They could have asked at any point in  
17 time and they knew what our positions would be in the  
18 case. Nothing prevented them from authenticating,  
19 through discovery, this document, to the extent it is  
20 on the IGS website.

21 MR. HUGHES: Your Honor, the witness  
22 has --

23 EXAMINER SEE: Hold on at the end of that  
24 tradeoff. Just a second. Okay. Go ahead.

25 MR. HUGHES: Your Honor, the witness has

1 testified in his written testimony that approval of  
2 these renewable resources would stifle job growth,  
3 and because the renewable projects at issue here are  
4 utility-scale projects, it's proper impeachment to  
5 address a document on IGS's own website that talks  
6 about the benefits of utility-scale solar jobs.

7 MR. OLIKER: And, your Honor, just  
8 briefly, there is nothing in this document that says  
9 utility-scale, through a PPA such as this one, is a  
10 good thing.

11 MS. BOJKO: Your Honor, again, I am going  
12 to object to the mischaracterization of counsel.  
13 This is not proper impeachment because we're talking  
14 about apples to oranges. The market-based solar, as  
15 in the IGS document, is different than utility-owned,  
16 -operated, -developed solar with cost recovery from  
17 customers. Apples and oranges. No impeachment  
18 possible.

19 EXAMINER SEE: The objection is  
20 overruled. The objections are overruled.

21 You can answer the question,  
22 Mr. Rengstorf.

23 A. Can you ask the question again? I lost  
24 it.

25 Q. It looks like Mr. Olikier objected.

1 Turning to page 2 of the article, under "Types of  
2 Solar Jobs," do you see that?

3 A. I do.

4 Q. And do you see, under point No. 1 under  
5 "Utility Scale," there are two bullet points?

6 A. Uh-huh.

7 Q. And what does the first bullet point say?

8 A. It says "Large utility-scale (greater  
9 than 20 megawatts) solar farms that sell wholesale  
10 electricity to energy providers."

11 Q. And, Mr. Rengstorf, doesn't the second  
12 bullet point state "Utility scale jobs will have more  
13 versatility with their skills"?

14 A. The second bullet point does reference a  
15 study that I'm not familiar with, and it does state  
16 that, but that's not actually the intent of my  
17 written testimony. It was not to try to compare the  
18 merits of utility-scale solar jobs versus any other  
19 type of solar job. It was merely to point out that  
20 the quantity numbers of jobs created in one scenario  
21 versus the other will be different, and we believe  
22 that moving forward with this project will ultimately  
23 net fewer jobs.

24 Q. And in terms of the quantity that you  
25 just described, your written testimony does not

1 present any quantitative analysis of jobs gained or  
2 lost as a result of AEP's Ohio application in this  
3 case, correct?

4 A. That is correct.

5 Q. On page 3 of your testimony you state  
6 that you're optimistic that the future of  
7 competitively-developed solar will be bright,  
8 correct?

9 A. That's correct.

10 Q. Do you predict that IGS Solar will stop  
11 developing solar projects in Ohio if the Commission  
12 determines, after Phase I of this proceeding, that  
13 there is a need for an additional 900 megawatts of  
14 renewable resources in Ohio?

15 A. Well, it's a difficult question to answer  
16 for a lot of reasons, but it really starts with the  
17 long lead time it takes to develop any solar asset.  
18 In our experience, it takes anywhere from 12 to 24  
19 months to produce any solar project; and with a long  
20 lead time like that, we rely on stability in markets  
21 to make investments as any investor would do. We  
22 currently have 6 to 7 other projects in our pipeline  
23 in Ohio that are in early stages of development. And  
24 I don't believe that those projects would go away if  
25 this project moved forward.



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1           What I can say is that there is potential  
2   that, while evaluating markets to target for solar in  
3   the future, this could call into question the  
4   stability of some of the overall macro factors in the  
5   Ohio solar market.

6           Q.   And would you agree, Mr. Rengstorf, that  
7   stability is not only an important issue for  
8   investors but also for customers?

9           MR. OLIKER:  Objection.  The question is  
10   extremely vague.  There's no reference to what type  
11   of stability we are talking about.

12           EXAMINER SEE:  The objection is  
13   overruled.  Mr. Rengstorf, you can ask for whatever  
14   clarification you need.

15           A.   Okay.  In my previous statement I  
16   referred to stable markets and free markets behaving  
17   the way you would expect them to, and that this  
18   potential project could call into question normal  
19   behaviors, perhaps.  In which regards were you  
20   referring to "stability" in your question?

21           Q.   Mr. Rengstorf, for example, do you  
22   believe that rate stability is an important issue for  
23   customers?

24           A.   I certainly do believe that rate  
25   stability is an important issue for customers.  I

1 also believe that it's the function of the free  
2 markets and deregulated states to set that stability.

3 Q. Do you believe that customers who want  
4 access to solar resources should have the opportunity  
5 to obtain those resources from the provider of their  
6 choosing?

7 A. I certainly do believe that because  
8 customers have the choice to obtain solar from any  
9 entity -- any entity that is allowed to provide solar  
10 to them and there's a whole suite of different  
11 capacities in which you can provide solar, so I am  
12 not entirely sure how to answer your question without  
13 clarification in that regard.

14 Q. At the bottom of page 3 and the top of  
15 page 4 of your testimony, Mr. Rengstorf, you say that  
16 subsidies for renewable generation assets, of the  
17 scale at issue in these proceedings, could flood the  
18 Ohio REC market, correct?

19 A. That's correct.

20 Q. And do you know how many RECs are  
21 currently available in the Ohio REC market?

22 A. As in the total number of RECs traded in  
23 a time frame or from a capacity standpoint?

24 Q. On an annual basis, Mr. Rengstorf.

25 MR. OLIKER: Objection. His question is

1 still vague and doesn't identify the location of the  
2 facilities.

3 EXAMINER SEE: Overruled. You can the  
4 answer, Mr. Rengstorf.

5 A. I don't have the exact figures in front  
6 of me for REC availability. But as previously  
7 presented by IGS, this project is more than the total  
8 capacity of solar generation developed in the last, I  
9 forget the exact time frame of the slide, which is  
10 the foundation of the point that this will be a  
11 drastic increase of RECs in the market, in a market  
12 that is, by and large, driven by supply and demand;  
13 and if you have an increase of any sort of supply  
14 without an increase of demand, you are going to see a  
15 price adjustment.

16 Q. Thank you, Mr. Rengstorf.

17 And do you know whether Ohio has an  
18 in-state renewable requirement?

19 A. I do. I believe that Senate Bill 310  
20 removed it, so it does not.

21 Q. Isn't it correct, Mr. Rengstorf, that the  
22 REC market is actually -- you refer to the Ohio REC  
23 market. But isn't it true that RECs can be purchased  
24 from anywhere within PJM?

25 A. I don't know that it's anywhere in PJM.

1 I don't believe that's accurate but it is possible to  
2 buy RECs from other states within the PJM market.  
3 But that doesn't address the main point which is that  
4 any increase in supply, without an increase in  
5 demand, especially in the nature of this project,  
6 will ultimately drive down the prices of the RECs  
7 which will affect future projects' ability to compete  
8 on a level playing field.

9 Q. So would you also object to additional  
10 RECs being made available from Texas or New Jersey?

11 MR. OLIKER: Objection. What's the  
12 relevance for these markets being the same as these  
13 ones?

14 MR. HUGHES: Your Honor, the witness has  
15 testified that what he describes as subsidy for  
16 generation assets of this scale, would flood the Ohio  
17 REC market, so I am just trying to establish the  
18 basis for the phrase "Ohio REC market" and whether  
19 RECs available from other states impact his  
20 testimony.

21 EXAMINER SEE: The objection is  
22 overruled. The witness can answer the question.

23 MS. BOJKO: Your Honor, may I hear the  
24 question again, please?

25 EXAMINER SEE: Sure.

1 (Record read.)

2 MS. BOJKO: Your Honor, I am going to  
3 object now. Additional RECs be made available from  
4 Texas or New Jersey? That -- Texas is irrelevant  
5 because it is not in the PJM market and, thus, RECs  
6 cannot be made available in the regional GATS system  
7 through Texas.

8 EXAMINER SEE: And the witness can answer  
9 the question.

10 MR. HUGHES: Your Honor, if I may?

11 EXAMINER SEE: Yes.

12 MR. HUGHES: Oh, okay. I'm sorry, I  
13 couldn't hear.

14 A. No worries. So I want to make sure we  
15 understand the question and the answer that I put in  
16 my written testimony. The concern is not more RECs  
17 in the market. The markets are designed to be able  
18 to withstand the increases in supply and demand, and  
19 that's why the RPS, which is the demand side, goes up  
20 every single year or depending on whether it's frozen  
21 or not. That's the whole purpose of the escalating  
22 RPS standards.

23 The concern that is really the root of  
24 that statement is that this project is receiving what  
25 we believe to be potentially an unlawful subsidy in

1 the new proposed tariff that could then position this  
2 project to have an advantageous position in the  
3 market. It could afford to sell RECs for less than  
4 the economics may otherwise have demanded because of  
5 the nature of the PPA. The REPA, sorry.

6 Q. Mr. Rengstorf, I don't think the  
7 Commission would approve an unlawful subsidy, do you?

8 A. I don't. Perhaps I overstated things a  
9 bit there with that classification, but I do believe  
10 that's why we are here talking today.

11 Q. Mr. Rengstorf, to what extent does IGS  
12 Solar depend on revenue from sales of RECs when it  
13 prices solar projects for customers?

14 A. That's a very complicated answer and a  
15 very complicated question, and to answer it I would  
16 need more specifics regarding which market. As I  
17 mentioned earlier, we're in multiple markets.

18 Q. For the rooftop solar market, is it zero  
19 or nonzero?

20 A. Well, that still doesn't zero in on the  
21 question enough to be able to really adequately  
22 answer it. It's more of a which state type of --  
23 type of clarification. New Jersey RECs are a bigger  
24 part of the financial equation than some other  
25 states, for example.

1           Q.    And what about Ohio for rooftop, in the  
2    rooftop solar market, to what extent does IGS Solar  
3    depend on revenue from sales of RECs when it prices  
4    the projects?

5           A.    The sale of REC revenue is factored into  
6    every single Ohio project that we build, and  
7    dependent on the time that the project was built and  
8    the forward curve for Ohio SRECs or Ohio RECs at that  
9    time, the number could be different, but they are an  
10   important piece of the economic equation for each  
11   project that we build.

12          Q.    Okay.  And, Mr. Rengstorf, when you  
13   prepared your written testimony in this case, were  
14   you operating under the assumption that AEP Ohio  
15   would be liquidating RECs from the renewable  
16   resources?

17          A.    From the renewable resources under  
18   question today?

19          Q.    Correct.

20          A.    No.  We were not anticipating the RECs  
21   from these projects to be in the market.

22          Q.    So then I guess I'm confused.  If you are  
23   not assuming that AEP Ohio is going to be liquidating  
24   the RECs associated with these renewable projects,  
25   how are you predicting a flood in the Ohio REC

1 market?

2 A. I see. I see. Yeah, I think there is  
3 some confusion. We priced it as if supply and demand  
4 grew on a normal scale. We didn't price in the  
5 additional flow of these RECs which we view would  
6 suppress pricing, so we have not begun to do that.

7 Q. Okay. Thank you, Mr. Rengstorf, but just  
8 to be clear, you didn't conduct any quantitative  
9 analysis of price impacts related to the Ohio REC  
10 market, did you?

11 A. We haven't performed quantitative  
12 analysis to determine precisely the impacts, but what  
13 I can say is that Ohio is a burgeoning market for  
14 Ohio solar -- for solar, and within that economic  
15 model every single fraction of a penny that we can  
16 model out for projected revenues is important and  
17 that includes the REC revenues that we projected  
18 which do not include the increased supply for these  
19 RECs.

20 MR. HUGHES: No further questions.

21 EXAMINER SEE: Any --

22 MR. OLIKER: 2 or 3 minutes, please?

23 EXAMINER SEE: Certainly.

24 (Pause in proceedings.)

25 EXAMINER SEE: Mr. Oliker.



1                   MR. OLIKER: Thank you, your Honor. Just  
2 a few questions on redirect.

3                   - - -

4                   REDIRECT EXAMINATION

5 By Mr. Oliker:

6               Q. Mr. Rengstorf, do you remember being  
7 asked questions about the differences between  
8 utility-scale jobs and rooftop solar jobs?

9               A. I do.

10              Q. Do you have any opinion on whether  
11 rooftop or utility-scale solar jobs provides more  
12 economic development benefits?

13              A. Well, if we are defining economic  
14 development benefits by the number of jobs created on  
15 a project, which is a fair definition, then I think  
16 it's also fair to state that residential  
17 installations of solar, and commercial- and  
18 industrial-scale solar which is kind of in that  
19 mid-range, produce more jobs per project and per  
20 megawatt installed than utility-scale.

21              Q. Okay. Mr. Rengstorf, do you remember  
22 questions you received about additional projects that  
23 IGS is in the process of developing?

24              A. I do.

25              Q. And regarding those six or seven

1 projects, can you give an estimate of how many  
2 megawatts they entail?

3 A. I can. So those opportunities were in  
4 reference to Ohio DG projects within the development  
5 pipeline of IGS Solar, and those six or seven  
6 projects, including some RFPs we are responding to,  
7 total somewhere in the range of around 50 megawatts.

8 Q. And regarding IGS's development of solar  
9 over the next three years, how much money does IGS  
10 intend to spend? And when I say "IGS," I mean IGS  
11 Solar, LLC.

12 A. Our budgeted projections over the next  
13 three years is referenced in my written testimony,  
14 shake out somewhere in the range of \$450 million in  
15 capital we would deploy nationwide and in Ohio  
16 through that time period.

17 MR. OLIKER: Okay. Thank you. Those are  
18 all the questions I have.

19 EXAMINER SEE: Ms. Glover?

20 MS. GLOVER: No questions, your Honor.

21 EXAMINER SEE: Mr. Darr?

22 MR. DARR: No questions.

23 EXAMINER SEE: Mr. Collier?

24 MR. COLLIER: No questions.

25 EXAMINER SEE: Ms. Whitt?

1 MS. WHITFIELD: "Whitfield." No  
2 questions.

3 EXAMINER SEE: I'm sorry.

4 MS. WHITFIELD: Mr. Whitt and I used to  
5 be partners, but don't share the last name.

6 EXAMINER SEE: Ms. Bojko?

7 MS. BOJKO: No, thank you.

8 EXAMINER SEE: Ms. Willis?

9 MS. WILLIS: No questions, your Honor.

10 EXAMINER SEE: Mr. Kurtz?

11 MR. KURTZ: No questions.

12 EXAMINER SEE: Mr. McNamee?

13 MR. McNAMEE: No questions, thank you.

14 EXAMINER SEE: Mr. Hughes?

15 MR. HUGHES: Just two quick questions.

16 Sorry about that. Two quick questions.

17 - - -

18 RECROSS-EXAMINATION

19 By Mr. Hughes:

20 Q. So on redirect you were asked if you had  
21 an opinion on whether rooftop or utility-scale solar  
22 jobs provided more economic development benefits. Do  
23 you remember that question?

24 A. I do.

25 Q. But you have not personally conducted an

1 economic benefit analysis comparing utility-scale  
2 project jobs to rooftop solar jobs, have you?

3 A. I have not personally conducted such a  
4 study, no.

5 Q. Okay. And for the six or seven projects  
6 that you described in the range of around  
7 50 megawatts, do you remember that discussion on your  
8 redirect?

9 A. I do.

10 Q. The 50-megawatt figure you provided was a  
11 total for all six or seven of those projects?

12 MR. OLIKER: Objection. Did counsel say  
13 15 or 50?

14 MR. HUGHES: 50.

15 MR. OLIKER: Withdraw, your Honor.

16 A. So the question was that's an aggregate?

17 Q. Correct.

18 A. Yes, that's correct.

19 Q. Okay. And those six or seven projects,  
20 are those all behind-the-meter projects?

21 A. The portfolio will be a representation of  
22 behind-the-meter projects and some multimeter  
23 projects potentially as well.

24 Q. Sitting here today, Mr. Rengstorf, with  
25 respect to the six or seven projects you just

1 described on redirect, do you -- you can't say  
2 whether all those projects will be completed,  
3 correct?

4 A. Those projects are all in the phase of  
5 our life cycle we would call "development," so it  
6 holds true that projects within that phase are either  
7 successfully completed or not, so yes.

8 MR. HUGHES: Okay. Thank you.

9 EXAMINER SEE: Mr. Olikier.

10 MR. OLIKER: Thank you, your Honor.  
11 Interstate Gas Supply, Inc. and IGS Solar, LLC would  
12 move for the admission of Exhibit 12.

13 EXAMINER SEE: Are there any objections  
14 to the admission of IGS and IGS Solar Exhibit 12?

15 Hearing none, IGS and IGS Solar Exhibit  
16 12 is admitted into the record.

17 (EXHIBIT ADMITTED INTO EVIDENCE.)

18 EXAMINER SEE: Mr. Hughes, you had an  
19 exhibit you had marked as AEP Exhibit 25?

20 MR. HUGHES: Yes. We would move for the  
21 admission of AEP Ohio Exhibit 25 into evidence.

22 EXAMINER SEE: Are there any objections?

23 MR. OLIKER: IGS would renew its  
24 positions there was insufficient foundation  
25 established regarding the exhibit.

1 MS. BOJKO: OMAEG renews that same  
2 objection.

3 EXAMINER SEE: So noted.

4 AEP Exhibit 25 is admitted into the  
5 record.

6 (EXHIBIT ADMITTED INTO EVIDENCE.)

7 EXAMINER SEE: Thank you, Mr. Rengstorf.

8 EXAMINER PARROT: Go ahead, Mr. Oliker.

9 MR. OLIKER: I promised clean copies of  
10 Mr. Leanza's testimony.

11 Interstate Gas Supply and IGS Solar, LLC,  
12 would call Paul Leanza.

13 (Witness sworn.)

14 EXAMINER PARROT: Thank you.

15 MR. OLIKER: And can we go off the record  
16 one second?

17 EXAMINER PARROT: Yes.

18 (Discussion off the record.)

19 EXAMINER PARROT: Back on the record.

20 MR. OLIKER: Thank you, your Honor.

21 - - -

22

23

24

25

1 PAUL LEANZA

2 being first duly sworn, as prescribed by law, was  
3 examined and testified as follows:

4 DIRECT EXAMINATION

5 By Mr. Olikier:

6 Q. Mr. Leanza, did you prepare direct  
7 testimony in this case?

8 A. Yes, I did.

9 Q. And is that testimony in front of you?

10 A. Yes, it is.

11 MR. OLIER: Your Honor, I would like to  
12 mark the revised direct testimony of Paul Leanza on  
13 behalf of Interstate Gas Supply, Inc. and IGS Solar,  
14 LLC, as Exhibit 13.

15 EXAMINER PARROT: So marked.

16 (EXHIBIT MARKED FOR IDENTIFICATION.)

17 Q. Mr. Leanza, this testimony was prepared  
18 by you or under your direction, correct?

19 A. Yes, it was.

20 Q. And do you have a clarification regarding  
21 Figure 3 in your testimony on page 10 on the source  
22 of what it contains, the blue line, and says "AEP  
23 2015 Forecast"?

24 A. Yes. So in 2015, I did testify in an  
25 earlier case, and I believe that the figures used

1 were from a 2013 forecast. I inadvertently put  
2 "2015" down.

3 Q. So to be clear, where it says "AEP 2015  
4 Forecast" that was the forecast AEP filed around 2015  
5 but represents the 2013 fundamental forecast?

6 A. I believe. I believe there were two  
7 forecasts filed in that case but that was one of the  
8 two.

9 Q. But if you look at Figure 4, that graph  
10 identifies all of the forecasts that AEP filed and  
11 correctly labeled each forecast?

12 A. Yes.

13 Q. Okay. Thank you.

14 Now, with that clarification, if you were  
15 asked all of the same questions in your testimony,  
16 would your answers be the same?

17 A. Yes, they would.

18 MR. OLIKER: With that, your Honor, I  
19 would tender the witness for cross-examination and  
20 move the exhibit.

21 EXAMINER PARROT: Thank you, Mr. Olikier.

22 Ms. Glover.

23 MS. GLOVER: No questions.

24 EXAMINER PARROT: Mr. Darr.

25 MR. DARR: No, thank you, your Honor.



1 EXAMINER PARROT: Mr. Collier.

2 MR. COLLIER: No questions.

3 EXAMINER PARROT: Ms. Whitfield.

4 MS. WHITFIELD: No questions, your Honor.

5 EXAMINER PARROT: Ms. Bojko.

6 MS. BOJKO: No questions.

7 EXAMINER PARROT: Ms. Willis.

8 MS. WILLIS: No questions, your Honor.

9 EXAMINER PARROT: Mr. McNamee.

10 MR. MCNAMEE: No questions, thank you.

11 EXAMINER PARROT: Mr. Kurtz.

12 MR. KURTZ: Just a couple. Good  
13 afternoon.

14 MR. GALLON: Pardon me, your Honor. If  
15 we could start with motions to strike before we get  
16 to cross-examinations?

17 MR. KURTZ: Please.

18 MR. GALLON: Thank you.

19 The first motion to strike relates to the  
20 testimony that begins on page 14, line 1, and  
21 continues to page 18, line 11.

22 In these questions and answers,  
23 Mr. Leanza opines that an affiliate of AEP, as it  
24 says at the top of page 14, that an affiliate of AEP  
25 "could purchase natural gas futures at current market

1 prices and collect all the associated profits once  
2 the natural gas price reaches their forecasted  
3 price." He then goes on to quantify the profit  
4 opportunity and discuss other ways that AEP  
5 affiliates could make money.

6 The ability of AEP's affiliates to  
7 speculate in the NYMEX market is not an issue in this  
8 case. It's not relevant to any of the issues in this  
9 case. This testimony also assumes, without  
10 foundation, that AEP's affiliates are not speculating  
11 on natural gas futures. Mr. Leanza doesn't offer an  
12 opinion on that and there has been no testimony on  
13 that issue in this hearing thus far.

14 MR. OLIKER: May I respond, your Honor?

15 EXAMINER PARROT: You may.

16 MR. OLIKER: Your Honor, as Mr. Leanza  
17 sets forth in his testimony, the purpose of these  
18 sections is to show that clearly AEP Ohio and its  
19 family of companies doesn't place a lot of stock in  
20 its own forecasts because, if it did, this is the  
21 kind of profits that they could have available  
22 because Mr. Leanza has identified that you can buy  
23 these NYMEX prices today and if the market was truly  
24 rising, like AEP claims, there would be a profit  
25 opportunity in every single year and to the extent

1     that AEP truly believed that this forecast was  
2     accurate, nothing would stop AEP's affiliate from  
3     entering into the exact same deal that they are  
4     describing today. It provides context and quantifies  
5     how -- how big this potential profit opportunity is  
6     and it really provides a lot of light on whether AEP  
7     really believed it to be true.

8                 MR. GALLON: To respond briefly, your  
9     Honors. How big this profit opportunity is is  
10    entirely irrelevant to this proceeding. And, again,  
11    there is no foundation for the assumption by  
12    Mr. Leanza that AEP's affiliates are not engaging in  
13    this kind of NYMEX market speculation. Without that  
14    foundation, even with Mr. Oliker's explanation, this  
15    testimony is entirely irrelevant.

16                MR. OLIKER: Your Honor, I would also add  
17    there are some FCC filings attached to the testimony.  
18    I don't think you will find any of those statements  
19    to the AEP investors, reflecting that an affiliate  
20    is, in fact, taking positions in the market based  
21    upon the fundamental forecast.

22                MR. GALLON: Again, I don't believe  
23    that's evidence on the record in this hearing, your  
24    Honors.

25                EXAMINER PARROT: Mr. Gallon, the Bench

1 is going to allow the testimony to stand. We will  
2 give the Commission the opportunity to determine  
3 whether and to what extent to give this portion of  
4 Mr. Leanza's testimony any weight in this proceeding.

5 MR. GALLON: Second motion to strike,  
6 your Honor, and a request for an additional  
7 correction from IGS. On the bottom of page 12, lines  
8 7 through 19, they reference a -- an attachment,  
9 Exhibit PL-3, and between lines 15 and 19 they list a  
10 quotation that they assert is from AEP's CEO Nick  
11 Akins. I think if counsel for IGS will check Exhibit  
12 PL-3, they will see the first quoted sentence is not  
13 asserted to be a quote from Mr. Akins in the  
14 attachment to their testimony, so I would ask them if  
15 they would be willing to strike that first sentence  
16 from the testimony to correct the record.

17 MR. OLIKER: I'm sorry, I am not  
18 following.

19 MR. GALLON: Let me repeat. On page 12,  
20 between lines 15 and 19, Mr. Leanza discusses an  
21 alleged statement from AEP's CEO Nick Akins, at a  
22 recent Global Energy Forum, and he quotes two  
23 sentences which he asserts are both statements from  
24 Nick Akins. If you turn to the attachment to  
25 Mr. Leanza's testimony, Exhibit PL-3, you will see

1     that the first is a statement from the reporter and  
2     not a quoted statement by Nick Akins.  So I am asking  
3     IGS if they would be willing to correct the record by  
4     either removing the quotation mark or just simply  
5     deleting the first sentence on lines 15 and 16.

6             MR. OLIKER:  So am I clear, Counsel, you  
7     are saying on line 16, Nick Akins did not say "There  
8     is nothing more risky for us to make in our industry  
9     today than a generation-related investment."  Is that  
10    what you are saying?

11            MR. GALLON:  No.  The statement that  
12    begins "The power generation resource rebalancing  
13    occurring today at AEP...."  If you look at Exhibit  
14    PL-3, you will see that's merely a statement from the  
15    article for the S&P Global Inc.  It isn't a quote  
16    from Mr. Akins.

17            MR. OLIKER:  I think we are willing to  
18    consider that.  I think the difficulty you see there  
19    is no -- I am not finding the first quotation in the  
20    article, so I don't know if I can concede your point  
21    that that is not true.

22            MR. GALLON:  It's his last sentence on  
23    the second page of the exhibit.

24            MR. OLIKER:  I understand what you are  
25    saying, Counsel.  I am looking for -- can we -- I

1 think we can agree to change the quote. I just want  
2 to confirm. If we can take a break at some point?

3 MR. GALLON: That would be fine with AEP.  
4 Thank you.

5 Moving on with the motion to strike,  
6 assuming we can reach agreement on that, the  
7 statement from Mr. Akins, quoted on line 16 and 17 at  
8 the bottom of page 12 of Mr. Leanza's testimony is  
9 taken from an article off of S&P Global Market  
10 Intelligence. We don't believe this is a reliable  
11 source. There is no reason to trust they accurately  
12 describe Mr. Akins' statements or the context in  
13 which they were made. And it's clear on the face of  
14 the testimony, in lines 13 through 19 on page 12,  
15 that Mr. Leanza is engaging in speculation.

16 The only clear statement from Mr. Akins  
17 are the words "There is nothing more risky for us to  
18 make in our industry today than a generation-related  
19 investment." Mr. Leanza interprets that to mean that  
20 AEP, as a company, does not support its Fundamentals  
21 Forecast. We would move to strike this as  
22 speculative.

23 MR. OLIKER: Your Honor, S&P Global is a  
24 source that witnesses cite in Commission proceedings  
25 all the time. I mean, this is a respected authority

1 that compiles data, interviews CEOs of companies such  
2 as AEP Ohio's, FirstEnergy's, AES, it's the type of  
3 thing that's cited to all the time. It's not -- it's  
4 publicly available as well.

5 I mean, there may be some wiggle room on  
6 where the quotation mark goes, but the fact that Nick  
7 Akins said this, I mean it's publicly available.

8 MR. GALLON: Your Honor, I am not  
9 familiar with the website, and Mr. Olikier hasn't  
10 cited any prior proceedings in which S&P Global  
11 articles have been admitted into evidence. He also  
12 hasn't addressed the fact that the alleged connection  
13 between Mr. Akins' statement and AEP as a company's  
14 faith in its Fundamentals Forecast is entirely  
15 speculative.

16 MR. OLIKER: Your Honor, it goes to the  
17 point of AEP is unwilling to construct generation  
18 without a ratepayer backstop or venture into a PPA  
19 without a ratepayer backstop. That is based on  
20 uncertainty that future market prices will recover  
21 costs.

22 MR. GALLON: Your Honor, one brief reply.  
23 None of that is in Mr. Akins' statement. All of it  
24 has been read into that statement by Mr. Leanza and  
25 Mr. Olikier.

1 MR. OLIKER: And I would also add,  
2 regardless of whether the basis for it, he is saying  
3 generation is a risky investment and that's what this  
4 case is about. This is the head of their company  
5 saying generation is risky. So it's relevant.

6 EXAMINER PARROT: The Bench is also going  
7 to deny this motion to strike, Mr. Gallon, and allow  
8 the Commission to evaluate the weight of the  
9 testimony.

10 MR. GALLON: Thank you, your Honor.  
11 That's all the motions to strike we have.

12 EXAMINER PARROT: Mr. Kurtz.

13 MR. KURTZ: Thank you.

14 - - -

15 CROSS-EXAMINATION

16 By Mr. Kurtz:

17 Q. Good afternoon, Mr. Leanza.

18 A. Good afternoon.

19 Q. As I understand your testimony, you say  
20 that future electric energy prices are correlated to  
21 natural gas; is that correct?

22 A. Yes. I say that, and Mr. Bletzacker from  
23 AEP says that also.

24 Q. Yes, because the marginal -- the marginal  
25 unit, often in the PJM energy market, is



1 natural-gas-fired generation.

2 A. Yes. And -- yes, I agree with you.

3 Q. So if you overstate gas prices, you've  
4 overstated forecasted electric prices, therefore,  
5 you've overstated the economics in this generic  
6 Phase I of the case.

7 A. Yes, generally speaking, I agree with  
8 that.

9 Q. Okay. And you do an analysis that says,  
10 hey, if AEP really believed its forecast, they could  
11 put their money where their mouth is and make a  
12 fortune buying and selling natural gas futures  
13 essentially.

14 A. I would say maybe a little bit of that  
15 and maybe a little bit of -- of why use such high  
16 natural gas expectations in your forecast. To me,  
17 they are both one and the same a little bit.

18 Q. Okay. Just a couple of questions about  
19 your tables on page 16 and 17 if you could, sir.  
20 From year 2031 to 2040, that 10-year period, you have  
21 the NYMEX price of gas the same, exactly the same.  
22 \$3.23 per, I guess, MMBtu.

23 A. Yes, you're right.

24 Q. Is that because there is no contracts  
25 traded that far out in the future?

1           A.    Yes.  So what generally happens in a  
2 commodities market, when the capital expenditure of a  
3 process or of a project expands past the life of the  
4 contract, we kind of operate under the "stack and  
5 roll" procedure which is on the last year the  
6 contract is traded, you allocate the future years  
7 that the contract is not traded into that last year.

8                    So, for example, if you have a contract  
9 that only goes out three years, and you have a  
10 five-year time horizon on the project, and for  
11 purposes let's say that's a bcf per year, you go out  
12 to the third year and you buy the third year, the  
13 fourth year, and the fifth year.  Then, as you move  
14 forward in time, you roll the third year to the  
15 fourth and fifth year.  The direct portion of that.

16           Q.    Okay.  Maybe you misunderstood my  
17 question.

18           A.    I'm sorry.

19           Q.    I asked if you kept the price constant in  
20 nominal dollars --

21           A.    Yes.

22           Q.    -- for the last 10 years, that's because  
23 there is no -- no trading activity for that last 10  
24 years.

25           A.    So while there is no trading activity,

1 that doesn't discount the fact that there is a value  
2 out there. And you can do one of two things. You  
3 can roll the contract like we expected to. You lose  
4 your hedge at that point. Or you can take the pure  
5 profits on that last year.

6 Q. Again, I think you are missing my point.  
7 The reason the price is exactly the same to the penny  
8 is because there is no actual contracts traded.

9 MR. OLIKER: Objection.

10 Q. Isn't that true?

11 MR. OLIKER: The witness already answered  
12 Mr. Kurtz's question. I don't think that Mr. Kurtz  
13 was able to understand the answer and maybe that's  
14 the disconnect but it's been asked and answered now  
15 at least twice.

16 MR. KURTZ: Well, he said he kept the  
17 price exactly the same.

18 A. I've kept the profit the same.

19 Q. This is -- this is -- which implies the  
20 price is the same.

21 A. No, it doesn't. It implies the price is  
22 the same for the 12th year.

23 Q. If the 3.23 is held constant for the last  
24 10 years, actually then you have the real price of  
25 gas going down. You held the profit the same

1 nominally for the last 10 years.

2 A. I don't understand that.

3 Q. This is the first time we've seen natural  
4 gas hedging and trading in this case. Assuming your  
5 forecast of natural gas is right, what would it do to  
6 the future electric pricing in PJM in the AEP hub?

7 A. I don't have a forecast for natural gas.

8 Q. Okay. Well, if the natural gas prices  
9 that are in your Tables 2 and 3 are correct, what  
10 would be the future price of electric -- of energy be  
11 in the PJM market?

12 A. Again, I don't have natural gas prices.  
13 I do have the profit aspect of it.

14 Q. You have to assume a price to calculate a  
15 profit.

16 A. I am doing that on the 12th year, yes.

17 Q. Okay.

18 A. And in the 12th year, it's all there. I  
19 mean that is -- that is the price.

20 Q. Under your analysis, translate -- have  
21 you tried to translate that into what PJM electric  
22 on-peak and off-peak energy pricing would be?

23 A. I did not do that, no.

24 Q. Okay. And you recognize, under AEP's  
25 Application, they are proposing to buy electricity at

1 a fixed price for 20 years and then resell it and  
2 then credit back the profit or charge the deficit.  
3 Do you understand that?

4 A. I understand that there is a PPA involved  
5 with the generator and an allocation of funds to AEP  
6 Ohio.

7 Q. Okay. So do you understand that the  
8 future market price of electricity is central to  
9 AEP's proposal?

10 A. I definitely agree with that.

11 Q. Okay. But they are not proposing to get  
12 Commission approval to enter into some massive gas  
13 speculation program.

14 A. Well, you can look at it as speculation  
15 or you can look at it at just how far off AEP's  
16 forecast is. And I think they both apply in this  
17 case.

18 MR. KURTZ: Okay. Thank you, your Honor.

19 EXAMINER PARROT: Mr. Gallon.

20 MR. GALLON: Thank you, your Honor.

21 - - -

22 CROSS-EXAMINATION

23 By Mr. Gallon:

24 Q. Mr. Leanza, I would like to start by  
25 asking you a few questions regarding your testimony

1 at page 9.

2 A. Page 9?

3 Q. Yes. If we could look at your testimony  
4 between line 6 and 12.

5 A. Okay.

6 Q. And here you are talking about a  
7 statement in an AEP news release and an AEP Form 8-K  
8 regarding an economic impairment that AEP took,  
9 correct?

10 A. Yes, I am.

11 Q. And you note that according to the AEP  
12 news release, this impairment largely relates to  
13 AEP's ownership of 2,684 megawatts of competitive  
14 generation in Ohio, including four specific plants,  
15 correct?

16 A. Correct.

17 Q. And if we could turn, just for a second,  
18 to page 13, lines 7 and 8, you mention this same  
19 impairment again, correct?

20 A. 13, 7 and 8. Yes, I do, yes.

21 Q. And you say that the impairment related,  
22 in part, to owning coal plants, correct?

23 A. Correct.

24 Q. When you reference coal plants, are you  
25 referring to the four plants listed on page 9?

1           A.    Yes, I am.

2           Q.    Is there anything in the news release  
3           that indicates that AEP took this economic impairment  
4           because of deviations between AEP's past forecasts of  
5           commodity prices and actual commodity prices?

6           A.    Well, if I look at the news release --  
7           I'm sorry, I have got to take my glasses off here --  
8           on page 5, midway down, in the release it says  
9           "Volatility and changes in markets for capacity and  
10          electricity, coal, and other energy-related  
11          commodities, particularly changes in the price of  
12          natural gas and capacity auction returns." So I -- I  
13          do believe that there was some reference to  
14          especially particularly changes in the natural gas  
15          prices.

16          Q.    Mr. Leanza, this is a continuation of a  
17          very, very long sentence that starts on the prior  
18          page, correct?

19          A.    Yes, I am sorry. On mine it is page --  
20          well, it's in the disclaimers. It's in the really,  
21          really small print.

22          Q.    And just to be clear, in that disclaimer  
23          it begins "This report made by American Electric  
24          Power and its Registrant Subsidiaries --

25          A.    Correct.

1           Q.    -- contains forward-looking statements  
2 within the meaning of Section 21E of the Securities  
3 Exchange Act of 1934," correct?

4           A.    That is correct.

5           Q.    It goes on to say, "Although AEP and each  
6 of its Registrant Subsidiaries believe that their  
7 expectations are based on reasonable assumptions, any  
8 such statements may be influenced by factors that  
9 could cause actual outcomes and results to be  
10 materially different from those projected," correct?

11          A.    Correct.

12          Q.    And then it goes on to say, "Among the  
13 factors that could cause actual results to differ  
14 materially from those in the forward-looking  
15 statements are:....," correct?

16          A.    Correct.

17          Q.    And then the language you read from  
18 page 5 is among the numerous factors listed as those  
19 that could cause actual results to differ materially  
20 from those in the forward-looking statements in this  
21 news release, correct?

22          A.    I agree with that, but they specifically  
23 call out natural gas in this particular disclaimer,  
24 and I normally don't see that.

25          Q.    This disclosure is intended to be a



1 comprehensive statement of risks, correct?

2 A. I don't know.

3 Q. Let's turn our attention back to the main  
4 point of your testimony.

5 A. Okay.

6 Q. You mentioned in the clarification you  
7 provided to your testimony that you had testified in  
8 a related case, correct?

9 A. Yes.

10 Q. That was AEP's PPA Rider case back in  
11 October of 2015; is that right?

12 A. I believe it was 1693, 14-1693.

13 Q. And, in that case, you compared AEP's  
14 projections for natural gas prices to futures  
15 contract prices, correct?

16 A. Correct.

17 Q. And you concluded that AEP was predicting  
18 a substantially higher price for natural gas than  
19 NYMEX futures prices, correct?

20 A. Correct.

21 Q. And for that reason and others, you  
22 opined that AEP's forecasts were not accurate and  
23 that the Commission should not rely on AEP's  
24 predictions with respect to natural gas prices,  
25 correct?

1           A.    That is correct and it did kind of turn  
2 out that way.

3           Q.    We'll address that in a few minutes.

4                   In this case, again, you are opining that  
5 AEP's forecast is unreliable, correct?

6           A.    Correct.

7           Q.    And your main criticism of AEP's  
8 Fundamentals Forecast is that it does not place  
9 enough emphasis on existing market conditions and  
10 pricing. Do I have that right?

11          A.    Yes.

12          Q.    And then you go on to discuss NYMEX Henry  
13 Hub futures prices and compare them to the natural  
14 gas prices forecasted in AEP's Fundamentals Forecast,  
15 correct?

16          A.    Yes, I do.

17          Q.    You assert in your testimony that  
18 corporate decisions are made all the time based on  
19 NYMEX futures price, correct?

20          A.    Correct.

21          Q.    And as an example, on page 8, lines 2  
22 through 4, you say "Investor owned companies built  
23 and contracted for pipelines based on the price  
24 signal determined by the market; is that correct?

25          A.    That's correct, yes.

1           Q.   And is that a reference to the pipelines  
2   being constructed out of the Marcellus and Utica  
3   production region that you reference at the bottom of  
4   page 7?

5           A.   Yes.  You could use that for pipe  
6   construction out of the northeast.  You could use  
7   that reference also for what's happened in the  
8   Permian basin right now down in Texas.  You can use  
9   that for quite a few things actually.

10          Q.   Have any representatives of any  
11   investor-owned companies, that built or contracted  
12   for natural gas -- natural gas pipelines, told you  
13   personally that they did so based on NYMEX future  
14   prices?

15          A.   The people that have invested in that, so  
16   you are talking about capacity holders or the ones  
17   building the pipeline?

18          Q.   Well, on lines 2 and 3 you refer to  
19   investor-owned companies built and contracted for  
20   pipelines.  So has anybody from any of those  
21   investor-owned pipelines that built and contracted  
22   for pipelines told you that they did so based on the  
23   price signal in the NYMEX market?

24          A.   You could say that it's a combination of  
25   both because IGS has done that.  I mean, we have

1 purchased pipeline space, so to speak, and the NYMEX  
2 Hen basis, as a combination, does come into play.

3 Q. You also state, on page 18 of your  
4 testimony, lines 14 through 16, "many if not most  
5 privately held and investor owned corporations rely,  
6 at least in some part, on NYMEX market prices for  
7 planning purposes when natural gas is involved,"  
8 correct?

9 A. Correct.

10 Q. You've worked at IGS for the last 15 to  
11 16 years, correct?

12 A. Correct.

13 Q. So you don't have personal knowledge of  
14 the natural-gas-related planning of any  
15 privately-held or investor-owned corporations except  
16 IGS, do you?

17 A. No, that's incorrect. We deal with a lot  
18 of universities and large companies in Ohio and  
19 Michigan and Pennsylvania. We work with them to  
20 develop their plans and we are constantly using  
21 current-based NYMEX and current-based bases to  
22 formulate all of their decisions going on in the  
23 future. Not all their decisions, that's a bad  
24 statement, but it -- it drives their economics.

25 Q. So IGS is using NYMEX futures prices to

1 help them formulate their decisions; is that what you  
2 are saying?

3 A. IGS isn't using them. The customer is  
4 using them to formulate those decisions. It's kind  
5 of a universally-accepted practice. IGS doesn't do  
6 anything with the NYMEX other than use the data that  
7 comes from it.

8 Q. Mr. Leanza, I think you have to concede  
9 that no human person could testify that anything is a  
10 universally-accepted practice because the knowledge  
11 required to say that --

12 A. You're right.

13 Q. -- would be beyond any mortal man?

14 A. I'll concede that.

15 Q. Henry Hub natural gas futures prices are  
16 published by the Chicago Mercantile Exchange,  
17 correct?

18 A. Yes.

19 Q. Also known as the CME?

20 A. Yes.

21 Q. And futures contracts are financial  
22 instruments that allow market participants to offset  
23 or assume the risk of a price change of an asset over  
24 time; is that correct?

25 A. Yes.

1           Q.    And in particular, Henry Hub natural gas  
2 futures allow market participants to hedge or manage  
3 risk in the highly-volatile natural gas prices. Do  
4 you agree?

5           A.    I don't know about the "highly-volatile"  
6 but I agree that it does allow them to hedge.

7           Q.    Would you agree that natural gas prices  
8 are driven by weather-related demand?

9           A.    I believe in the short term, that's  
10 extremely true. In the long term, maybe not so much.

11          Q.    Would you agree that both speculators and  
12 hedgers are participants in the NYMEX market for  
13 Henry Hub natural gas futures?

14          A.    Yes, I would.

15          Q.    And a speculator is an individual or firm  
16 that accepts risk in order to make a profit, correct?

17          A.    Or a loss if they are not good at it.

18          Q.    And a hedger is a market participant that  
19 aims to offset or eliminate risk; is that correct?

20          A.    Correct.

21          Q.    Mr. Leanza, could we turn to page 6 of  
22 your testimony and take a look at Figure 2.

23          A.    Page 6?

24          Q.    Yes, sir.

25          A.    Okay.

1           Q.    Figure 2 in your testimony shows AEP  
2 nominal Henry Hub natural gas price forecasts from  
3 2019 to 2031 as a blue line, correct?

4           A.    That is correct.

5           Q.    And then you list NYMEX nominal natural  
6 gas prices at the Henry Hub as a green line, correct?

7           A.    That's correct.

8           Q.    And the explanation at the bottom of your  
9 Figure 2 says these are the NYMEX nominal prices as  
10 of December 4, 2018, correct?

11          A.    That's correct.

12          Q.    So these are the settlement prices  
13 published on the NYMEX website by CME on this  
14 particular date for the years 2019 to 2031?

15          A.    That's correct.

16          Q.    And you would agree, would you not, that  
17 the NYMEX Henry Hub settlement prices for future  
18 years may change day-to-day or week-to-week?

19          A.    Yes.  They can change day-to-day or  
20 week-to-week.

21          Q.    So if you were to go back to CME's  
22 website and look at the NYMEX Henry Hub settlement  
23 prices for this period of time, tomorrow, you  
24 probably wouldn't see the prices that are listed in  
25 Figure 2 on the green line, would you?

1           A.    So what you would see probably is the  
2 front part of that curve, the front part of the green  
3 line being lower, but the back part probably wouldn't  
4 be changing that much. Would it be different? It  
5 might be different. Would it be noticeably  
6 different? You probably wouldn't notice it.

7           Q.    Have you looked at the NYMEX Henry Hub  
8 settlement prices for this period of time in the last  
9 week or two?

10          A.    I have.

11          Q.    So having looked at the settlement prices  
12 in the last week or two, you'd agree that there are  
13 very few open transactions for Henry Hub natural gas  
14 futures trading more than about four years out from  
15 the present?

16          A.    Can you repeat the question.

17          Q.    Certainly. It's currently 2019, correct?

18          A.    Correct.

19          Q.    So if you've looked at the Henry Hub  
20 natural gas futures prices on CME in the last couple  
21 of weeks, you probably noticed there are practically  
22 no open transactions for Henry Hub natural gas  
23 futures after December 2024.

24          A.    I think if you look at just the futures  
25 alone and that's it, then yes, that is going to be



1     what you'll see.

2             Q.     And you would also see that there are  
3     absolutely no open transactions for Henry Hub natural  
4     gas futures after April 2027, correct?

5             A.     I do agree that on the futures exchange  
6     you will see that, but once you get out further in  
7     time, most of the transactions involved do not occur  
8     on the futures exchange. They occur on ICE or in the  
9     broker market or other liquid markets.

10            Q.     So those settlement prices are listed  
11     four years after -- let me rephrase the question.

12                    NYMEX and CME list futures prices for  
13     Henry Hub natural gas futures for years and months in  
14     which there are no open transactions, correct?

15            A.     Yes, that's correct.

16            Q.     But those settlement prices for those  
17     years are not based on market activity within the  
18     Henry Hub natural gas futures market.

19            A.     Can you repeat that? I'm sorry.

20            Q.     Those settlement prices for those years  
21     are not based on market activity within the NYMEX  
22     Henry Hub natural gas futures market.

23            A.     Well, you know what? If that was the  
24     case, then that back end of the curve you just  
25     described wouldn't have happened. It would be

1 never -- never changing. But the -- there is a  
2 process, that I believe I referenced it, for how  
3 NYMEX is settled past six months. Basically, in a  
4 nutshell, it has everything to do with spreads. So  
5 while the actual contracts themselves, future  
6 contracts, aren't trading; what is happening out in  
7 the marketplace every day is the calendar-year  
8 spreads are trading.

9 Q. If we could turn now to Figure 3 in your  
10 testimony on page 10, sir.

11 A. Okay.

12 Q. You've already corrected this with your  
13 counsel. What you are showing here are AEP's 2013  
14 Fundamentals Forecast projections of natural gas with  
15 the settlement prices for -- published on the NYMEX  
16 exchange, correct?

17 A. I'm sorry. Can you repeat that?

18 Q. Sure. In Figure 3, you are comparing the  
19 natural gas prices forecasted in AEP's 2013  
20 Fundamentals Forecast --

21 A. Yes.

22 Q. -- to the futures prices on NYMEX as of  
23 May 15, 2015.

24 A. Correct, yes.

25 Q. But you have not done a comparison in

1 this report of the NYMEX futures prices as of the day  
2 that AEP published its 2013 Fundamentals Forecast,  
3 correct?

4 A. Correct. There is no way to tell, at  
5 least that I could tell. Maybe there's a way to  
6 tell. There is no way to tell when AEP -- other than  
7 the year when they actually did the forecast. You  
8 know, I would love to do an apples-to-apples  
9 comparison with that; and, quite frankly, you will  
10 get the same result -- similar results, I'm sorry.

11 Q. You have not actually done the analysis,  
12 correct?

13 A. I have not done that analysis, no.

14 Q. You've reviewed Mr. Bletzacker's  
15 testimony in this case, correct?

16 A. Yes.

17 Q. So you are aware that the Fundamentals  
18 Forecast is a long-term, weather-normalized forecast?

19 A. I understand that's what AEP says, yes.

20 Q. And AEP also says that Mr. Bletzacker's  
21 modeling assumes that each forecast year experiences  
22 30-year average heating and cooling degree days,  
23 correct?

24 A. I didn't know that. I'll take your word  
25 for it though.

1           Q.   And actual weather can deviate  
2 dramatically from a 30-year average, correct?

3           A.   In the short term, yes.

4           Q.   So, in the long term, you think weather  
5 in the future will correspond with the 30-year  
6 average in the past?

7           A.   It should -- yes, I think there is some  
8 corresponding. It might get -- you know, with global  
9 warming, you might see some trends there, but  
10 generally speaking.

11          Q.   On pages 10 and 11 and in Figures 3 and 4  
12 of your testimony, you compare the Henry Hub natural  
13 gas prices projected in AEP's past Fundamentals  
14 Forecasts to the actual natural gas prices between  
15 2009 and late 2018, correct?

16          A.   Yes, and maybe for clarification that  
17 should be actual settlements; so when the contract  
18 month does settle, that was the price that was used.

19          Q.   So just to clarify, on Figure 4, the  
20 thick black line are actual settlements between 2009  
21 and late 2018?

22          A.   Correct.

23          Q.   Now, on pages 19 to 20 of your report,  
24 you disagree with Mr. Bletzacker regarding the warmth  
25 of the winters from 2015 to 2016 and 2016 to 2017,

1 correct?

2 A. I agree -- I disagreed with his  
3 characterization of his statement, yes.

4 Q. Beyond that, your testimony does not  
5 analyze the extent to which the weather between 2009  
6 and late 2018 deviated from 30-year averages, does  
7 it?

8 A. I did not do -- no, I did not do a  
9 normalized weather study, correct.

10 Q. So your comparison does not account for  
11 the effect of any deviations in the weather between  
12 2009 and late 2018 for the 30-year average, correct?

13 A. I did not do a weather-correlation study,  
14 no.

15 Q. So on page 10 and 11, and particularly in  
16 Figure 4, you are comparing AEP's weather-normalized  
17 forecasts to non-weather-normalized actual  
18 settlements for natural gas?

19 A. For the black line -- I'm sorry, can I  
20 ask you to repeat the question?

21 Q. Let's focus it on Figure 4 --

22 A. Okay.

23 Q. -- on page 11 of your testimony. In this  
24 figure, you are comparing AEP's past  
25 weather-normalized forecasts of natural gas prices to

1 non-weather-normalized actual gas prices between 2009  
2 and late 2018, correct?

3 A. Yes.

4 Q. Do you know whether Mr. Bletzacker  
5 developed his 2008, 2009, 2010, 2011, 2012, 2013,  
6 2015, and 2016 Fundamentals Forecasts in the same way  
7 he developed his 2018 Fundamentals Forecast?

8 A. Do I personally know if he developed it  
9 that way? You would have to ask him, I'm sorry.

10 Q. So the answer is "no," Mr. Leanza?

11 A. No.

12 Q. And do you know whether the assumptions  
13 underlying the pre-2018 Fundamentals Forecast were  
14 the same as the assumptions underlying the 2018  
15 Fundamentals Forecast?

16 A. As far as his natural gas projections go?

17 Q. All of the assumptions underlying those  
18 forecasts.

19 A. I don't know. I wouldn't know that.

20 Q. We do know the price projections in  
21 Mr. Bletzacker's pre-2018 Fundamentals Forecasts were  
22 different than the price projections in the 2018  
23 Fundamentals Forecast, correct?

24 A. I'm sorry. Could you --

25 Q. Certainly. We do know that natural gas

1 price projections in the pre-2018 Fundamentals  
2 Forecast are different than the natural gas price  
3 projections in the 2018 Fundamentals Forecast,  
4 correct?

5 A. So I don't know what pre-Fundamentals  
6 Forecast means. I'm sorry.

7 Q. I'm making a distinction, Mr. Leanza,  
8 between the 2018 Fundamentals Forecasts and --

9 A. That Mr. Bletzacker --

10 Q. That Mr. Bletzacker conducted.

11 A. I'm with you there.

12 Q. And the Fundamentals Forecast that AEP  
13 conducted before 2018; so the pre-2018 Fundamentals  
14 Forecasts and the 2018 Fundamentals Forecast.

15 A. I wasn't aware that there were two  
16 forecasts, so I don't know the answer to that.

17 Q. Mr. Leanza, in Figure 4, you list eight  
18 AEP Fundamentals Forecasts, right?

19 A. Oh, you are talking about the individual  
20 years that you are -- I'm sorry.

21 Q. Yes, sir.

22 A. Can you repeat your question? I think I  
23 see where you are going now.

24 Q. The projections of natural gas prices in  
25 Mr. Bletzacker's 2008, 2009, 2010, 2011, 2012, 2015,

1 2016, and 2018 Fundamentals Forecasts are not  
2 identical, are they?

3 A. They are not identical. There are some  
4 instances though, and I think I made mention to it,  
5 that in -- in 2012, 2015 -- this is on page 10 of my  
6 testimony, line 9 -- 2012, 2015, and 2016, the AEP  
7 prices further out the curve, basically from 2031 or  
8 2032, somewhere in there, tend to be pretty close, if  
9 not identical, if I remember correctly.

10 Q. So even if you were able to identify  
11 flaws in the natural gas projection methodologies in  
12 past Fundamentals Forecasts, that would not  
13 necessarily mean the 2018 Fundamentals Forecast's  
14 projections of natural gas prices were flawed, would  
15 it?

16 A. It's not a good track record, so I would  
17 discount it personally.

18 Q. Mr. Leanza, one more set of questions.  
19 Do you, yourself, undertake to prepare  
20 forecasts of Henry Hub natural gas prices?

21 A. I look at a bunch of different  
22 forecasting. Everyone has a different opinion what  
23 the Henry Hub forecast might be. There's really no  
24 need, in my position, to develop my own forecast. I  
25 take the Henry Hub natural gas prices, the



1 settlement, because in our marketplace that's all you  
2 have to work with. I can't -- I can't do anything  
3 with AEP's opinion of what a -- what the prices  
4 should be. That means nothing to me. It means  
5 nothing to the market. So I personally don't develop  
6 a Henry Hub forecast.

7 Q. To your knowledge, Mr. Leanza, does IGS  
8 engage in speculation in the NYMEX Henry Hub futures  
9 market?

10 A. Not to my knowledge.

11 MR. GALLON: We have no further  
12 questions, your Honor. Thank you.

13 EXAMINER PARROT: Any redirect?

14 MR. OLIKER: Just a few moments, your  
15 Honor?

16 EXAMINER PARROT: Go ahead.

17 (Pause in proceedings.)

18 EXAMINER PARROT: Any redirect?

19 MR. OLIKER: Your Honor, just briefly.

20 - - -

21 REDIRECT EXAMINATION

22 By Mr. Oliker:

23 Q. Mr. Leanza, do you remember a  
24 conversation you had with counsel for AEP regarding  
25 an economic impairment to certain coal-fired

1 generation resources?

2 A. Yes, I do.

3 Q. And do you remember when counsel asked  
4 you whether or not that information was referencing  
5 an AEP Fundamentals Forecast that may have been  
6 wrong?

7 A. Yes, I do.

8 Q. And do you have any reason to believe  
9 that AEP's forecast was incorrect?

10 A. I think if you look at it as a whole in  
11 what AEP, back in the PPA case, was referencing, were  
12 some fairly significantly-high gas prices which leads  
13 to a forecast of particularly-high power prices which  
14 led to potentially some mismanagement or  
15 misrepresentation on what the revenue aspect of those  
16 coal plants would be; and that was, in my opinion,  
17 the crux of why that writeoff occurred is because the  
18 revenue supposedly generated or projected to be  
19 generated from those plants just wasn't there.

20 MR. OLIKER: Thank you, your Honor.  
21 Those are all the questions I have.

22 EXAMINER PARROT: Ms. Glover?

23 MS. GLOVER: No questions, your Honor.

24 EXAMINER PARROT: Mr. Darr?

25 MR. DARR: No questions.

1 EXAMINER PARROT: Mr. Collier?

2 MR. COLLIER: No questions.

3 EXAMINER PARROT: Ms. Whitfield?

4 MS. WHITFIELD: No questions.

5 EXAMINER PARROT: Ms. Bojko?

6 MS. BOJKO: No questions.

7 EXAMINER PARROT: Ms. Willis?

8 MS. WILLIS: No questions.

9 EXAMINER PARROT: Mr. McNamee?

10 MR. McNAMEE: No questions. Thank you.

11 EXAMINER PARROT: Mr. Kurtz?

12 MR. KURTZ: No questions.

13 EXAMINER PARROT: Mr. Gallon?

14 MR. GALLON: No questions, your Honors.

15 Thank you.

16 EXAMINER PARROT: Are there any  
17 objections to the admission of IGS/IGS Solar Exhibit  
18 13?

19 MR. GALLON: Subject to our prior motions  
20 that have been ruled upon, no objections, your Honor.

21 EXAMINER PARROT: All right. With that,  
22 it is admitted into the record.

23 (EXHIBIT ADMITTED INTO EVIDENCE.)

24 MR. OLIKER: And, your Honor, we are  
25 willing to clarify simply that the quotation on

1 page 12 should match what the S&P Global quotation  
2 states, and the record will simply reflect that the  
3 quotation is where it is.

4 MR. GALLON: Just to clarify, Mr. Olikier,  
5 you would agree that the only part of the quotation  
6 on lines 15 through 17 that was actually stated by  
7 Nick Akins, according to Exhibit PL-3, was the  
8 sentence that begins "There is nothing more risky"?

9 MR. OLIKER: I think we are willing to --  
10 maybe the best way to address it would be to simply  
11 put a second quotation, given that it's citing to the  
12 article, and to move -- oftentimes there's a  
13 quotation within a quotation when you are citing to  
14 an article, so we would simply add another quotation  
15 before the word "There is nothing more."

16 MR. GALLON: Mr. Olikier, the concern with  
17 that is the lead up to that quotation is, on lines 13  
18 to 14, "Also, at a recent Global Energy Forum in New  
19 York, AEP's CEO Nick Akins stated that...."

20 MR. OLIKER: Well, if you look exactly  
21 where it says "Akins said," in the prior sentence on  
22 I believe it's page 2, he does say that. And I think  
23 you are getting a little -- in trying to strike that  
24 sentence, you are missing the context of the article  
25 where it said "Investment six or seven years ago was

1 about 65 percent centered on coal-fired power plant  
2 scrubbers and today 75 percent is centered on  
3 transmission and distribution, Akins said," and then  
4 it goes into "The power generation resource  
5 rebalancing occurring today at AEP is centered on  
6 less coal and moving toward other forms of energy."

7 MR. GALLON: Right. Because the article  
8 doesn't say whether that's the writer's own viewpoint  
9 or a statement directly attributed to Mr. Akins, it's  
10 misleading in the testimony to say that is a  
11 statement of Mr. Akins.

12 MR. OLIKER: And I think there is enough  
13 here in this article, attributed to Mr. Akins that,  
14 the Commission is not going to be confused, and they  
15 can tell if it is a direct quote versus an article  
16 and a quotation within an article. That was why I  
17 was trying to suggest the two different levels of  
18 quotation to attribute there is some difference,  
19 although the statements are attributed to Mr. Akins.

20 MR. GALLON: Your Honors, if we could  
21 work it out at this point, that would be great. If  
22 not, if there is any confusion about the providence  
23 of these statements, we can direct -- address that in  
24 the briefs.

25 MR. OLIKER: At the end of the day --

1           EXAMINER PARROT: I agree. The article  
2 is now part of the record, and you are both free to  
3 argue about what it says in your briefs. I agree.

4           MR. OLIKER: Thank you, your Honor.

5           EXAMINER PARROT: So let's leave it at  
6 that, I guess.

7           MR. OLIKER: Thank you, your Honor.

8           EXAMINER PARROT: Thank you for trying.

9           MR. NOURSE: Your Honor, I don't know if  
10 we could, whenever you are ready, go off the record  
11 and talk about a couple of procedural items.

12           EXAMINER PARROT: Yes. Let's do that.  
13 You read my mind.

14           (Discussion off the record.)

15           EXAMINER PARROT: We are going to adjourn  
16 for the evening. We will reconvene on Friday at 9:00  
17 a.m. I will notify the parties of which hearing room  
18 we will reconvene in.

19           At that time we will take up the issue of  
20 whether or not the Company will be permitted to file  
21 rebuttal testimony and, if so, on what schedule. We  
22 also have a pending motion that was filed today. We  
23 will deal with that on Friday at well. Thank you.

24           (Thereupon, at 4:44 p.m., the hearing was  
25 adjourned.)

## 1 CERTIFICATE

2 I do hereby certify that the foregoing is a  
3 true and correct transcript of the proceedings taken  
4 by me in this matter on Monday, January 28, 2019, and  
5 carefully compared with my original stenographic  
6 notes.

7  
8 \_\_\_\_\_  
Karen Sue Gibson, Registered  
Merit Reporter.

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10 \_\_\_\_\_  
Carolyn M. Burke, Registered  
Professional Reporter.

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12 (KSG-6684)

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**Case No(s). 18-0501-EL-FOR, 18-1392-EL-RDR, 18-1393-EL-ATA**

Summary: Transcript in the matter of the Long-Term Forecast Report of the Ohio Power Company hearing held on 01/28/19 - Volume IX electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.