

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 Wednesday, January 23,
2019.

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VOLUME VI

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20
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22
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24
25

1	INDEX	
2	- - -	
3		
4	WITNESS	PAGE
5	John F. Torpey	
6	Redirect Examination by Ms. Blend	1208
7	Recross-Examination by Mr. Oliker	1237
8	Recross-Examination by Mr. Michael	1240
9	Recross-Examination by Ms. Bojko	1245
10	Recross-Examination by Mr. Collier	1259
11	Jonathan A. Lesser, Ph.D.	
12	Direct Examination by Ms. Willis	1280
13	Cross-Examination by Mr. Mendoza	1288
14	Cross-Examination by Mr. Kurtz	1324
15	Cross-Examination by Mr. Whitt	1366
16	Cross-Examination by Mr. Nourse	1373
17	Redirect Examination by Ms. Willis	1411
18	Recross-Examination by Mr. Mendoza	1414
19	Recross-Examination by Mr. Kurtz	1416
20	Recross-Examination by Mr. Darr	1419
21	Recross-Examination by Mr. Nourse	1420
22	Frank Lacey	
23	Direct Examination by Mr. Whitt	1430
24	Cross-Examination by Mr. Healey	1433
25	Cross-Examination by Mr. Kurtz	1434
26	Cross-Examination by Mr. Gallon	1442
27	Katie Bolcar Rever	
28	Direct Examination by Mr. Oliker	1461
29	Cross-Examination by Ms. Leppla	1470
30	Cross-Examination by Mr. Miller	1471
31	Redirect Examination by Mr. Oliker	1516
32	Recross-Examination by Mr. Miller	1518
33	Kevin Murray	
34	Direct Examination by Mr. Darr	1522
35	Cross-Examination by Mr. Kurtz	1524
36	Cross-Examination by Mr. Hughes	1525
37	Redirect Examination by Mr. Darr	1546
38	Recross-Examination by Mr. Hughes	1548
39	- - -	
40		

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX (Continued)

- - -

COMPANY EXHIBITS IDENTIFIED ADMITTED

1	Long-Term Forecast Report of AEP Ohio Filed April 16, 2018	I-11	1274
2	Amendment to the 2018 Long-Term Forecast Report of Ohio Power Company Filed September 19, 2018	I-12	1274
7	Survey Responses	1274	1274
14	Direct Testimony of John F. Torpey on Behalf of Ohio Power Company	V-979	1263
15	Case No. 17-0894-E-PC Appalachian Power Company & Wheeling Power Company Public Prepared Direct Testimony by Randall R. Short, Utilities Division, on Behalf of the Staff of the Public Service Commission of West Virginia	1227	--
16	Jonathan A. Lesser's Biography on the Manhattan-Institute Website	1376	1429
17	Second Entry on Rehearing Case Nos. 14-1693-EL-RDR and 14-1694-EL-AAM	1540	--

- - -

OCA EXHIBIT IDENTIFIED ADMITTED

1	In the Matter of the Application of Hecate Energy Highland LLC for a Certificate of Environmental Compatibility and Public Need, Case No. 18-1334-EL-BGN Application	V-1164	--
---	--	--------	----

1200

INDEX (Continued)		IDENTIFIED	ADMITTED
- - -			
IGS/IGS SOLAR EXHIBITS			
7	IGS-INT-01-011	V-1017	1263
8	Integrated Resource Planning Report to the Arkansas Public Service Commission Excerpt 12-14-2018	V-1048	1263
9	Direct Testimony of Katie Bolcar Rever on Behalf of Interstate Gas Supply, Inc. and IGS Solar, LLC	1461	1521
- - -			
OMAEG EXHIBITS			
5	OCC-RFA-10-007	V-1076	1264
6	Direct Testimony of Benjamin M. Mears on Behalf of Appalachian Power Company and Wheeling Power Company Before the Public Service Commission of West Virginia Case No. 17-0894-E-PC	V-1089	--
7	Rebuttal Testimony of John F. Torpey on Behalf of Appalachian Power Company and Wheeling Power Company Before the Public Service Commission of West Virginia in Case No. 17-0894-E-PC	V-1089	--
8	Supplemental Testimony of John F. Torpey on Behalf of Appalachian Power Company and Wheeling Power Company Before the Public Service Commission of West Virginia in Case No. 17-0894-E-PC	V-1089	--

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX (Continued)

- - -

OMAEG EXHIBITS	IDENTIFIED	ADMITTED
9 Direct Testimony of Benjamin M. Mears for Appalachian Power Company in Virginia S.C.C. Case No. PUR-2017-00031	V-1098	--
10 Rebuttal Testimony of John F. Torpey for Appalachian Power Company in Virginia S.C.C. Case No. PUR-2017-00031	V-1098	--
11 Public Service Commission of West Virginia, Charleston Commission Order in Case No. 17-0894-E-PC	V-1100	--
12 Commonwealth of Virginia State Corporation Commission at Richmond, Final Order, Case No. PUR-2017-00031	V-1106	--

- - -

OCC EXHIBITS	IDENTIFIED	ADMITTED
18 Public Version Direct Testimony of Jonathan A. Lesser, Ph.D.	1281	1427
18A Confidential Version Direct Testimony of Jonathan A. Lesser, Ph.D. (Confidential)	1281	1427

- - -

SIERRA CLUB EXHIBITS	IDENTIFIED	ADMITTED
2 Natural Gas & Electricity, Energy and the Environment, "Goldilocks and the Three Climates"	1288	1428

INDEX (Continued)			
- - -			
	SIERRA CLUB EXHIBITS	IDENTIFIED	ADMITTED
1			
2			
3			
4	3 Natural Gas & Electricity, Energy and the Environment, "As the Global Climate Turns: The Saga Continues"	1292	1428
5			
6			
7	4 Natural Gas & Electricity, Energy and the Environment, "Global Warming, Climate Change, Er, Climate Volatility: 2012 and Beyond"	1299	1428
8			
9			
10	5 Natural Gas & Electricity, Energy and the Environment, "The Devil and the EPA"	1301	1428
11			
12	6 Natural Gas & Electricity, Energy and the Environment, "Outlook-Sunspot Data May Indicate End of Global Warming Trend"	1305	1428
13			
14			
15	7 Natural Gas & Electricity, Energy and the Environment, "Talk is Cheap: The UN's Doha Conference Strikes Out...Again"	1308	1428
16			
17			
18	8 Natural Gas & Electricity, Energy and the Environment, "Rethinking Green Energy Mandates"	1310	1428
19			
20	9 Natural Gas & Electricity, Energy and the Environment, "Goldilocks Chills Out"	1315	1428
21			
22			
23	DIRECT ENERGY EXHIBIT	IDENTIFIED	ADMITTED
24	2 Direct Testimony of Frank Lacey on Behalf of Direct Energy, L.P.	1430	1460
25			

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX (Continued)

- - -

IEU EXHIBIT

IDENTIFIED ADMITTED

1	Direct Testimony of Kevin M. Murray on Behalf of Industrial Energy Users-Ohio	1522	1549
---	---	------	------

- - -

1
2
3
4
5
6
7
8
9
10
11
12
13
14
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21
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Wednesday Morning Session,
January 23, 2019.

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

This is the continuation of the hearing in Case No. 18-501-EL-FOR, et al.

Let's start with brief appearances. Go ahead, Ms. Blend or Mr. Nourse. Start with you and work our way around.

MR. NOURSE: Thank you, your Honor. On behalf of Ohio Power Company, Steven T. Nourse, Christen M. Blend, Christopher L. Miller, L. Bradford Hughes, and Eric B. Gallon.

MS. WILLIS: Thank you, your Honor. On behalf of the residential customers of the Ohio Power Company, Maureen Willis, Christopher Healey, and William Michael.

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

MR. NUGENT: On behalf of Interstate Gas Supply, Inc. and IGS Solar, LLC, Michael Nugent and Joe Olikier.

MR. KURTZ: Good morning, your Honors. For OEG, Mike Kurtz and Jody Kyler Cohn.

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

4 MS. WHITFIELD: Good morning, your
5 Honors. On behalf of The Kroger Company, Angie Paul
6 Whitfield and Steven E. Dutton.

7 MR. STOCK: On behalf of the Ohio Coal
8 Association, John Stock and Orla Collier.

9 MS. LEPPLA: Good morning, your Honors.
10 On behalf of the Ohio Environmental Council, Miranda
11 Leppla.

12 MR. MENDOZA: Good morning, your Honors.
13 On behalf of the Sierra Club, Tony Mendoza.

14 MR. DOVE: On behalf of the Natural
15 Resources Defense Council, Robert Dove.

16 MR. DARR: For IEU-Ohio, Frank Darr and
17 Matt Pritchard.

18 MS. GLOVER: On behalf of the Retail
19 Energy Supply Association and Direct Energy, Mark
20 Whitt and Rebekah Glover.

21 EXAMINER PARROT: Good. Thank you,
22 everyone.

23 Mr. Torpey, call you back to the stand if
24 you're ready.

25 MR. NUGENT: Your Honors, if I may.

1 Mr. Oliker should be here in the next 3 to 5 minutes.
2 Would you mind if we waited to start redirect until
3 he arrives? I apologize for not addressing that
4 before.

5 MR. NOURSE: We can offer a brief
6 procedural diversion, if you would like, your Honor.

7 EXAMINER PARROT: Well, I guess I can
8 offer one as well. I do see that the Bench has
9 copies of AEP Exhibit 7.

10 MR. NOURSE: That's what I was going to
11 address. Yeah, we've distributed by e-mail and then
12 distributed paper copies to all the parties that
13 wanted them, but it does represent the raw data for
14 the open-ended comment section supporting the last
15 section of the Navigant report, Exhibit TH-1. You
16 can see there is labels that separate the sections of
17 data. The first section being residential non-PIPP
18 and then the second section was residential PIPP.
19 The third section is small commercial. And then each
20 of the -- the right column for each page indicates
21 the classification that it was -- each comment was
22 put in as reflected in the tables in the last section
23 TH-1.

24 So that's, I believe, what the Bench had
25 requested. It's consistent with the data that was

1 provided in discovery. We did make our best attempt
2 to redact expletives and things that might identify
3 the customer. So, again, best attempt and hopefully
4 there is no profanity remaining but that's what the
5 redactions reflect. On that basis, the Company would
6 move for admission of AEP Company Exhibit 7.

7 EXAMINER PARROT: Are there -- well,
8 let's start here. Have the parties had time to
9 review Company Exhibit 7? Does anyone need more
10 time? Everyone agrees with Mr. Nourse's assessment
11 of what the document includes?

12 MS. WILLIS: Your Honor, I think we would
13 like a little bit more time with the document since
14 we received it yesterday evening.

15 EXAMINER PARROT: All right. We will
16 take this exhibit then when we deal with Mr. Torpey's
17 testimony and the other exhibits. Thank you,
18 Mr. Nourse.

19 MR. NOURSE: Thank you.

20 EXAMINER PARROT: All right. Let's go
21 off the record.

22 (Discussion off the record.)

23 EXAMINER PARROT: Let's go back on the
24 record.

25 Ms. Blend, redirect.

1 MS. BLEND: Thank you, your Honor. Yes,
2 the Company has some redirect for Mr. Torpey.

3 EXAMINER PARROT: And I would just remind
4 you, Mr. Torpey, you are still under oath.

5 THE WITNESS: Yes.

6 EXAMINER PARROT: Have a seat.

7 - - -

8 JOHN F. TORPEY
9 being previously duly sworn, as prescribed by law,
10 was examined and further testified as follows:

11 REDIRECT EXAMINATION

12 By Ms. Blend:

13 Q. Good morning, Mr. Torpey.

14 A. Good morning.

15 Q. Do you have before you what's been marked
16 AEP Ohio Exhibit 14, your direct testimony?

17 A. I do.

18 Q. Would you please turn to page 21 of
19 Exhibit JFT-1 to your testimony.

20 A. I'm there.

21 Q. Thank you.

22 Do you recall questions yesterday
23 regarding Column L of Table 5 on page 21 and Table 6
24 on page 22 of Exhibit JFT-1?

25 A. I do.

1 Q. You testified yesterday that the change
2 in net revenue requirement, reflected in Column M of
3 each of those tables, is calculated by summing
4 Columns G, I, and L, correct?

5 A. I did.

6 Q. Can you remind us again what Column L
7 reflects?

8 A. It represents the Company's expectations
9 for monetizing the capacity value of the renewable --
10 the wind and solar REPAs.

11 Q. And it reflects -- would it be fair -- a
12 fair characterization that it reflects the capacity
13 credit value that the Company expects to receive for
14 each resource if the resource is bid into and clears
15 the PJM capacity market in the amount specified in
16 Column K on each table?

17 A. Yes.

18 MR. DARR: Objection, leading.

19 MR. OLIKER: IGS joins, your Honor.

20 MS. BLEND: I'm just -- I can appreciate
21 the objection, your Honor. I am just trying to lay a
22 foundation for my next question.

23 EXAMINER PARROT: Overruled.

24 Go ahead, Mr. Torpey.

25 A. Yes. The capacity value was calculated

1 based on an assumption for capacity credit for each
2 of the REPA's, times an assumed capacity price in the
3 PJM market.

4 Q. Thank you, Mr. Torpey.

5 Could one take your analyses, contained
6 in Tables 5 and 6 of Exhibit JFT-1, to determine what
7 the impact to customers of the generic solar and wind
8 projects would be without reliance on revenues from
9 the PJM capacity markets?

10 A. Yes. It's just a simple mathematical
11 calculation. If you look at Column M and the second
12 row from the bottom, the "Present Worth" of the sum
13 of the change in revenue requirements currently shows
14 for Table 5, the generic solar REPA, currently shows
15 a benefit of \$88 million. If there was no capacity
16 credit or we reduced -- we eliminated the capacity
17 credit, we would reduce that amount by \$33.9 million
18 which would give us \$54.1 million of benefit as
19 opposed to the \$88 million of benefit.

20 Q. Thank you.

21 And could you walk us through that
22 analysis for the generic wind that's reflected on
23 Table 6 of JFT-1?

24 A. Yes. Likewise, on Table 6, the second
25 row from the bottom, "Present Worth," if we look at

1 that value in Column M is a credit of \$54 million or
2 a benefit of \$54 million. If we eliminated the
3 benefit associated with the capacity credit value of
4 \$5.6 million, that would be a benefit of
5 \$48.4 million.

6 Q. And just to clarify, Mr. Torpey, I think
7 this was clear yesterday, your testimony in this case
8 in this need phase of the proceeding is for two
9 generic projects. You are not offering any testimony
10 regarding the impact of specific projects or the
11 impacts of specific proposals the Company is making
12 in Phase II of this proceeding when we talk about
13 your -- the analysis, your economic analysis just
14 discussed, correct?

15 MS. BOJKO: Objection.

16 MS. WHITFIELD: I would join in that
17 objection as well.

18 MS. BOJKO: It's misleading, your Honor,
19 and it mischaracterizes the testimony. Mr. Ali,
20 which is an input to Mr. Torpey, did, in fact, rely
21 on specific projects and Mr. Torpey uses that data to
22 create his own analysis; so some assumptions and data
23 are, in fact, related to the specific projects.

24 MS. BLEND: I can rephrase my question,
25 your Honor.

1 Q. (By Ms. Blend) Mr. Torpey, your analysis
2 doesn't address retail bill impacts that customers
3 will see; that's a Phase II issue.

4 A. I do not address bill impacts.

5 Q. Thank you.

6 Do you recall questions from Ms.
7 Whitfield, counsel for Kroger, about whether you
8 included other costs in your analyses, such as the
9 debt equivalency costs?

10 A. Yes.

11 Q. And you testified -- what was your answer
12 to that question yesterday?

13 A. I believe it was I did not include the
14 debt equivalency.

15 MS. WHITFIELD: Your Honor, I am going to
16 object to this. I wasn't allowed to pursue this
17 yesterday. They objected and said it was Phase II.

18 MS. BLEND: I am, again, just laying
19 foundation to my question.

20 MS. WHITFIELD: Whether she was laying
21 foundation or not, I was not entitled to ask him
22 about the debt equivalency.

23 EXAMINER PARROT: I think you did ask the
24 question that Ms. Blend is using to get us back into
25 this, so let's see where it goes.

1 Go ahead, Mr. Torpey.

2 A. I did not include the debt equivalency
3 costs in my analysis.

4 Q. Did you quantify the benefit of the hedge
5 that solar or wind projects would provide in your
6 analyses?

7 A. I did not quantify that benefit.

8 Q. In your opinion, is it appropriate to
9 address cost recovery or retail rate treatment
10 associated with a specific project or proposal in
11 your generic IRP?

12 A. When we do IRP analyses, we use proxy or
13 generic resources, so all the IRPs we file in every
14 jurisdiction, we do not address the rate treatment of
15 the generic resources. That's usually in a future
16 proceeding where the actual resources are being
17 considered for approval.

18 Q. And, Mr. Torpey, could you now turn to
19 page 23 and 24 of your JFT-1, your break-even
20 analysis for solar and wind.

21 A. Yes.

22 Q. Table 7. Do you recall questions from
23 Mr. Collier, counsel for OCA, regarding the
24 break-even analysis, yesterday evening?

25 A. I do.

1 Q. Just take a minute to step back or step
2 up. Can you explain how you conducted your
3 break-even analysis and what its purpose was?

4 A. Yes. The break-even analysis is
5 performed to look at what the maximum cost of a REPA,
6 the 20-year fixed price REPA would be, that would
7 arrive at a net benefit to customers of zero. So it
8 would be basically how much could you -- at what
9 price would the customer or the Company be
10 indifferent to entering into a REPA. So for Table 7
11 what we're looking at for the solar REPA is what
12 number do we put in Column F which would then yield a
13 value of zero at the bottom of Column N.

14 Q. And that's also the case on Table 8 with
15 respect to the wind REPA?

16 A. That's the same as Table 8, yes.

17 Q. And you testified yesterday and your
18 Exhibit JFT-1 reflects that the break-even price for
19 solar that you calculated was higher than the
20 break-even price for wind. Can you explain what that
21 means?

22 A. Yes. It basically means that the solar
23 project -- because you could have a higher break-even
24 price, it means the solar project brings more -- more
25 value. There's -- you can afford to spend more on a

1 solar REPA before your -- at the point of
2 indifference than you could on a wind REPA.

3 Q. And I believe you testified yesterday
4 that that relates to on-peak versus off-peak. Can
5 you provide some other discussion around that?

6 A. Yes. There was a discussion on why it
7 would cost, for the solar energy price at market in
8 Column H of the solar exhibit, different than the
9 numbers in Column H of the wind exhibit. And the
10 reason is that the solar projects are generating
11 energy during the day which is generally the on-peak
12 time for PJM pricing. Prices are higher during the
13 day.

14 Wind, on the other hand, is more of an
15 around-the-clock resource, but generally the wind
16 blows more at night, it blows more in the winter and,
17 during those periods of time, the PJM prices are
18 generally lower.

19 So -- so what we are looking at in Column
20 H is the PJM price at the time that the resources are
21 generating energy. Therefore, the solar -- the
22 expected solar -- when we look at the PJM price when
23 the solar resources are generating, those prices are
24 higher than they are when the wind resources are
25 generating.

1 Q. Thank you.

2 Mr. Collier asked you, yesterday, if you
3 used the Base Fundamentals Forecast solely for PJM
4 capacity value, and your answer was yes. Did you
5 mean that -- in that answer did you mean that the
6 Base Fundamentals Forecast was the sole -- your sole
7 source for PJM capacity value or that you used the
8 Base Fundamentals Forecast solely for that value in
9 your overall analysis?

10 A. Right. What I meant was when we looked
11 at estimating the -- the values in Column J of either
12 the wind or the solar exhibit, the values we relied
13 on were from the Fundamentals Forecast, so we didn't
14 rely on other values to -- for the projections in
15 that column. We also used the Fundamental Forecast,
16 as stated in my testimony, for -- to calculate values
17 in Column H as well. The market price -- the PJM
18 market price of energy.

19 Q. And you were also asked, yesterday,
20 whether a delay in implementing a REPA could result
21 in lower costs. Do you remember those questions?

22 A. I did.

23 Q. And, in your opinion, could a delay also
24 result in higher costs?

25 A. A delay -- it could if the -- what we

1 assumed in our analysis was that the REPA, the
2 development of the REPA would be using the full
3 benefit of the tax credits. So in the case of the
4 solar, it would be the Investment Tax Credit, and in
5 the case of the wind REPA, it would be the Production
6 Tax Credit. So as those credits expire or -- or they
7 go down in value over time, a project in the future
8 that could not take advantage of those full tax
9 credits could be at a higher price than the projects
10 we are assuming here.

11 Q. And do you recall questions yesterday,
12 Mr. Torpey, regarding your analysis of -- your wind
13 analysis being for 250 megawatts of wind resources?

14 A. I do.

15 Q. Is that 250-megawatt analysis scalable to
16 500 megawatts of wind?

17 A. Yes. This is a generic assumption. The
18 analysis that we did, we assumed a generic wind
19 facility. We just happened to pick 250 megawatts
20 because we thought we had good performance data for
21 that, but clearly you could make this -- from an
22 analysis standpoint, this could just have readily
23 been a 500-megawatt wind facility or represented a
24 500-megawatt wind facility.

25 Q. And if you could turn to Table 6 of

1 Exhibit JFT-1 which is on page 22, could you walk
2 through how you would -- how the analysis would
3 change in your table?

4 A. On Table 2, if, instead of a 250-megawatt
5 facility, we had a 500-megawatt facility, basically
6 any of the columns that had a -- a dollar per
7 megawatt value would stay the same. However, all the
8 other columns that had values for megawatts and
9 energy generated would double.

10 So, for instance, Column C would be 500.
11 Column G would be two times 678.9 for 2021. The
12 capacity factor would be the same, 31 percent. The
13 wind energy cost would be the same at \$40 per
14 megawatt-hour. The wind total cost would double, so
15 it would be 27.2 times 2. The wind energy price at
16 market would be the same because it's a dollar per
17 megawatt-hour number. The avoided energy cost would
18 double. The capacity price would be the same because
19 it's a dollar per megawatt-day number. The capacity
20 credit would double. The wind capacity credit value
21 would double. And the change in net revenue in
22 Column M would also double. The number in Column N,
23 which is a dollar per megawatt number -- dollar per
24 megawatt-hour number, would remain the same.

25 So the bottom line would be if you look

1 at the present worth line for Column M, second line
2 from the bottom, that number would be a \$108 million
3 credit or benefit as opposed to \$54 million.

4 However, the 8.4 on the levelized line, the bottom
5 line of Column N, would stay the same.

6 Q. Thank you for that explanation.

7 Would using 500 megawatts of wind in the
8 break-even analysis that you performed, and that's
9 reflected on page 24 of Exhibit JFT-1, Table 8,
10 change?

11 A. Again, it wouldn't change the -- on the
12 break-even analysis, the wind break-even cost would
13 be the -- it could be slightly different because the
14 way we take into account the capacity value, but it
15 would basically be the same order of magnitude. The
16 \$48 range.

17 Q. And if you'll turn now to IGS Exhibit 8.
18 I believe you have that at the stand with you as
19 well.

20 A. Yes.

21 Q. If you'll turn to the third page of the
22 document which is numbered page 51 at the bottom of
23 the document.

24 A. Yes.

25 Q. Do you recall counsel for IGS,

1 Mr. Oliker, asked you questions about Figure 12 in
2 this document yesterday?

3 A. Yes.

4 Q. And remind us again, what was the source
5 for the information that's reflected in Figure 12?

6 A. This is from the SWEPCo, Southwestern
7 Electric Power Company, Integrated Resource Plan,
8 filed on December 14, 2018, in the State of Arkansas.

9 Q. In looking specifically at Figure 12,
10 there's a note at the bottom of the figure that
11 reflects the source of that -- of the information
12 that the figure is --

13 A. Yes.

14 Q. -- portraying? What was that source?

15 A. It's "AEP Based on Bloomberg New Energy
16 Finance H1 2018 U.S. Renewable Energy Market
17 Outlook." And for this figure specifically, as
18 described in the figure legend, it's residential and
19 commercial forecasted solar installed costs, nominal
20 dollars per watt-AC, for the SWEPCo States.

21 Q. Does -- is the data that was used in
22 Figure 12 simply one year more recent than the data
23 used in Figure 2 to JFT-1 --

24 A. Yes.

25 Q. -- in your testimony?

1 A. Yes.

2 Q. Are there any other differences
3 between -- besides the year in which the data was
4 published?

5 A. This data is for the SWEPCo States;
6 Arkansas, Louisiana, and Texas. The data in Figure 2
7 in JFT-1 is for the PJM region.

8 Q. So there's a geographic difference in the
9 information portrayed on Figure 2 of your testimony
10 and that which is portrayed in Figure 12 of IGS
11 Exhibit 8?

12 A. There is.

13 Q. What conclusion from the Arkansas IRP
14 does Figure 13 reflect?

15 A. That's stated in the -- on page 51 in the
16 bottom paragraph, and I can read it. "While the cost
17 to install residential solar continues to decline,
18 the economics of such an investment are not favorable
19 for the customer for a number of years. Figure 13
20 below" -- which is the next figure -- "illustrates,
21 by SWEPCO state jurisdictional residential sector,
22 the equivalent value a customer would need to
23 achieve, on a dollar per watt-AC basis, in order to
24 breakeven on their investment, assuming a 25-year
25 life of the installed solar panels based on the

1 customer's avoided retail rate. Also included is the
2 average cost of solar residential installations in
3 SPP. Figure 13 below shows that the current cost of
4 residential solar exceeds the cost which would allow
5 a customer to breakeven on an investment over a
6 25-year period."

7 Q. Mr. Torpey, do you recall questions from
8 Ms. Bojko, counsel for OMAEG, regarding proceedings
9 in which you filed or sponsored testimony in West
10 Virginia and Virginia?

11 A. I do.

12 Q. Those proceedings were proceedings on
13 behalf of Appalachian Power Company or APCo, correct?

14 A. They were.

15 Q. What type of entity is APCo in PJM?

16 A. Oh, in PJM? In terms of participating in
17 the capacity market, they are what's considered a
18 fixed-resource-requirement entity which basically
19 means they self-supply their own capacity.

20 Q. Did APCo have sufficient capacity for all
21 load and expected load growth in its service area at
22 the time that the West Virginia and Virginia cases,
23 that you discussed with Ms. Bojko yesterday, were
24 filed?

25 A. Yes, they did.

1 Q. And is West Virginia a regulated or
2 deregulated state?

3 A. It's regulated. Generation is regulated
4 in West Virginia.

5 Q. And in the West Virginia case, and as you
6 testified yesterday, you are familiar with the Order
7 the West Virginia Commission issued in the West
8 Virginia case.

9 A. I am.

10 Q. And in that case, all parties agreed that
11 the wind facilities, that were the subject of the
12 case, were a physical hedge against reliance on
13 market purchases; is that your understanding?

14 MS. BOJKO: Objection. First of all, it
15 goes beyond the scope of cross. I didn't talk about
16 parties in the case. I didn't talk about whether --
17 what other people said. And I think parties in the
18 case gets into inadmissible hearsay. We can talk
19 about AEP or APCo's position and Mr. Torpey's
20 testimony, but we can't talk about other parties in
21 the case and what those other parties may or may not
22 believe in the case. I am not sure if that was the
23 intent of Ms. Blend's question, but I think that also
24 misrepresents what the Order actually determined.

25 MS. BLEND: Well, your Honor, I disagree

1 that Ms. Bojko didn't talk about other parties to the
2 case. She asked Mr. Torpey questions about his
3 rebuttal testimony which responded to Staff witness
4 testimony from that case yesterday.

5 She also put the Order in front of him
6 yesterday and was asking him questions about the
7 Commission's -- the West Virginia Commission's
8 findings in that Order. One of the findings in that
9 Order is that the Commission notes, as I just
10 indicated, that the parties all agree that the wind
11 facilities were a physical hedge against reliance on
12 market purchases. She was allowed to ask those
13 questions over my objections, and I think it's fair
14 that on cross-examination I be allowed to make the
15 record more complete with respect to the documents
16 and the issues that she raised with Mr. Torpey.

17 MS. BOJKO: Your Honor, if I may respond,
18 it's completely different. I was asking about
19 Mr. Torpey's filed testimony. He is a witness. It's
20 not hearsay because he is present to testify. And he
21 is a witness. It's's an exception to hearsay under
22 803, Rule 803, if the witness is present, if it's the
23 witness making a prior out-of-court statement, it's
24 not hearsay.

25 MS. BLEND: And, Your Honor --

1 MS. BOJKO: What his testimony responded
2 to was my question. Not what other parties believed.
3 There is a complete distinction between the two
4 issues.

5 MS. BLEND: And I will address the
6 hearsay argument when we talk about admission of the
7 exhibits.

8 EXAMINER PARROT: We don't -- I've heard
9 enough on the hearsay issue. Do you have a page
10 reference for this, Ms. Blend? Let's go at it that
11 way.

12 MS. BLEND: Yes. Page 7 of OMAEG Exhibit
13 7. The last sentence under the "Need" paragraph that
14 Ms. Bojko asked Mr. Torpey about yesterday.

15 EXAMINER PARROT: The objection is
16 overruled. Go ahead, Mr. Torpey.

17 THE WITNESS: I'm sorry, can you repeat
18 the question?

19 Q. (By Ms. Blend) Is it your understanding
20 that the West Virginia Commission found in its Order
21 that you discussed with Ms. Bojko yesterday, OMAEG
22 Exhibit 1, that all parties in that case agreed that
23 the wind facilities were a physical hedge against
24 reliance on market purchases?

25 MS. BOJKO: Objection. That is not a

1 finding by the Commission. The Commission is
2 summarizing other parties' positions. The findings
3 are actually, as Mr. Torpey referred us to and
4 pointed to, are later in the document. Just as this
5 Commission here summarizes parties' positions, it
6 doesn't make it a Finding of Law. It's not a
7 finding.

8 MS. BLEND: I can restate my question,
9 your Honor.

10 Q. (By Ms. Blend) Mr. Torpey, is it your
11 understanding the West Virginia Commission noted in
12 its Order that you discussed with Ms. Bojko
13 yesterday, OMAEG Exhibit 11, that all parties in that
14 case agreed that the wind facilities were a physical
15 hedge against reliance on market purchases?

16 A. I remember reading that sentence, yes.

17 Q. Do you recall Ms. Bojko's questions about
18 testimony you submitted in response to West Virginia
19 Staff witness Short's testimony in that case?

20 A. Yes.

21 Q. Did you read Staff witness Short's
22 testimony in that case?

23 A. I did.

24 MS. BLEND: Your Honor, at this time, I
25 would like to mark AEP Ohio Exhibit 15.

1 (EXHIBIT MARKED FOR IDENTIFICATION.)

2 Q. (By Ms. Blend) Mr. Torpey, is this -- can
3 you identify this document?

4 A. This document is the prepared direct
5 testimony by Randall R. Short of the Utilities
6 Division on behalf of the Staff of the Public Service
7 Commission of West Virginia.

8 Q. Is this testimony that you reviewed in
9 connection with your participation in the West
10 Virginia case that you discussed with Ms. Bojko
11 yesterday?

12 A. Yes, it is.

13 Q. And this testimony was filed on
14 December 1, 2017?

15 A. Correct, yes.

16 Q. Was that before or after the Tax Cuts and
17 Jobs Act was enacted?

18 A. It was before.

19 Q. It was filed before the tax -- I will
20 call that the tax reform legislation, it was filed
21 before tax reform legislation.

22 A. Yes.

23 Q. What did Staff witness Short recommend
24 with regard to the Beech Ridge project?

25 A. On page 23, there is a question starting

1 on line 15 --

2 MS. BOJKO: Objection, your Honor.

3 Again, Mr. Short -- I only asked about Mr. Torpey's
4 testimony and his responses in his testimony.

5 Mr. Short is not present here today to get
6 cross-examined and we cannot just read statements of
7 Mr. Short into the record. It does not fall within
8 one of the hearsay exceptions. It's an out-of-court
9 statement. Mr. Short is not a party opponent.

10 Mr. Short did not -- is not here as a party in this
11 proceeding as Mr. Torpey is. And it is clear
12 hearsay. And allowing her to read or Mr. Torpey to
13 read sections into the record is inadmissible hearsay
14 and inappropriate.

15 MS. BLEND: Your Honor, if I may respond.
16 First, this is not being offered for the truth of the
17 matter asserted. It's being offered to make a
18 complete record about what the parties'
19 recommendations in the case were.

20 Second, Mr. Short's testimony in that
21 case is either as much hearsay as Mr. Torpey's or it
22 is not hearsay like Mr. Torpey's is not hearsay.
23 Ms. Bojko can't have it both ways. Again, I'll
24 reserve arguments regarding the hearsay status of Mr.
25 Torpey's testimony, but if that testimony is going to

1 be allowed, then the Staff testimony, likewise,
2 should be allowed.

3 MS. BOJKO: Your Honor, I have not moved
4 to admit Mr. Torpey's testimony. That has nothing to
5 do with it. I think counsel misunderstands the
6 hearsay rule. If it's a prior statement by a
7 witness, a declarant that is here to testify, it is
8 not hearsay. Mr. Short is not here to testify.
9 Therefore, it constitutes hearsay. So then you have
10 to go to the exceptions to the hearsay. The
11 Commission Orders fall within an exception to the
12 hearsay under 803(8). Mr. Short's testimony does not
13 fall within the section of an exception to the
14 hearsay rule. They are totally different. And if
15 counsel doesn't understand the definition of hearsay,
16 she can't use it to say if one gets in, the other
17 gets in. That's not how it works.

18 MS. BLEND: Mr. Torpey --

19 EXAMINER PARROT: All right. Thank you.
20 And as this Commission has said many times, it's not
21 bound strictly by the hearsay rules. The objection
22 is overruled.

23 Go ahead, Mr. Torpey.

24 A. On page 23 of Mr. Short's testimony,
25 starting on line 15, Mr. Short was asked the

1 question: "Do you have a specific recommendation
2 consistent with your proposal to only acquire the
3 Beech Ridge II project?"

4 The response, starting on line 19: "Yes.
5 If both Commissions approve APCo's petition to
6 acquire Beech Ridge II, APCo should be provided a
7 means to recover its jurisdictional share of the cost
8 of the project. Should the Virginia Commission take
9 a different position on Beech Ridge II, then I
10 recommend APCo still pursue acquisition, and that
11 100 percent of cost and benefits derived from the
12 project be assumed by West Virginia customers."

13 MS. BOJKO: Your Honor, may I have the
14 question that Ms. Blend asked, leading up to that
15 response?

16 (Record read.)

17 MS. BOJKO: Thank you, your Honor.

18 Q. (By Ms. Blend) And, Mr. Torpey, is it
19 your understanding that Staff witness Short's
20 economic analysis for the Beech Ridge facility
21 indicated the net present value of costs for
22 acquiring and operating the facility was higher than
23 the net present value of the energy market purchases?

24 MS. BOJKO: Objection, your Honor. She
25 is so leading the witness right now.

1 MS. BLEND: I can point him to the page
2 in the testimony and we can do it that way if you
3 would like, your Honor.

4 EXAMINER PARROT: Let's do that. Go
5 ahead.

6 Q. (By Ms. Blend) Mr. Torpey, you are also
7 familiar with page 6 of Mr. Short's testimony which
8 has been marked AEP Ohio 15?

9 MS. BOJKO: Objection. I actually don't
10 think there was foundation that Mr. Torpey was
11 familiar. If you recall yesterday, he said he didn't
12 even recall his own testimony in all parts and now,
13 all of a sudden, he recalls Mr. Short's testimony.

14 MS. BLEND: He testified, in response to
15 my questions on redirect, your Honor, that he was
16 familiar with it and had reviewed this testimony in
17 connection with his work on that case.

18 MS. BOJKO: I don't believe you asked
19 that question.

20 MS. BLEND: Well, the transcript will
21 tell otherwise.

22 EXAMINER PARROT: Excuse me. The
23 objection is overruled.

24 MS. BOJKO: Thank you, your Honor.

25 So which page are you on?

1 MS. BLEND: I am on page 6.

2 EXAMINER PARROT: 6.

3 A. Line 22 of page 6, Mr. Short indicated
4 that his economic analysis indicated the NPV costs
5 for acquiring and operating a wind facility was
6 higher than the NPV of the market purchases for the
7 facility.

8 Q. In your opinion, Mr. Torpey, did the West
9 Virginia Staff use a strict resource adequacy screen
10 for the Beech Ridge project?

11 MS. BOJKO: Objection. She's leading the
12 witness again.

13 MS. BLEND: I asked him a question about
14 his opinion. I don't know how that's leading.

15 MS. BOJKO: You asked a yes or no
16 question. It's leading. "Did you." Just because
17 you say "In your opinion" before the question, it
18 doesn't make it non-leading.

19 EXAMINER PARROT: Overruled.
20 Go ahead, Mr. Torpey.

21 A. I mean, they look at resources I'll say
22 holistically. They will look at the benefit that the
23 resources provide. From -- from a cost perspective,
24 certainly in this case from what they considered a
25 hedging perspective, a fuel diversity perspective.

1 So they will take a more holistic view of resources,
2 resource need.

3 Q. Are the economics of a project a factor
4 that the West Virginia Staff considered?

5 A. They did consider the economics, yes.

6 Q. And what did they conclude based on the
7 economics of the Beech Ridge II wind facility?

8 A. They considered the project to be
9 basically a break-even or, you know, fairly -- in
10 their -- Mr. Short's analysis, Mr. Short concluded
11 that ratepayers or customers would be no better or no
12 worse off economically as a result of the project.
13 But given the other benefits of the project, he
14 recommended going ahead with it, with the Beech
15 Ridge, with acquiring the Beech Ridge project even if
16 Virginia didn't approve it.

17 Q. And Staff recommended approval of the
18 Beech Ridge project even though there was not a
19 capacity need for the project.

20 A. There was no capacity need and they were
21 aware of that, yes.

22 Q. And Staff's -- and then you testified,
23 yesterday, Staff's position regarding the project
24 changed. What was the impetus for the change in
25 Staff's position?

1 A. Yeah. Toward the end of December 2017,
2 the Tax Reform was passed, and because these projects
3 would have been owned by Appalachian Power Company,
4 the benefits of their Production Tax Credit, would
5 have approved the Appalachian Power Company.

6 When Tax Reform passed, the value --
7 because the tax rate went down, the value of those
8 Production Tax Credits decreased to the Company. And
9 it's -- it's funny math, but essentially instead of
10 getting, for instance, being able to offset a
11 36 percent tax rate, you are only offsetting -- and I
12 don't recall what the corporate tax rate is now, 20
13 percent or so, you are offsetting a lower tax rate.

14 So the benefit went down, and when you
15 factor that into the revenue requirement calculation,
16 the revenue requirements actually increase compared
17 to what the revenue requirements were before the Tax
18 Reform passed. Basically makes it -- you know, it's
19 not intuitive, but it wasn't intuitive to a lot of us
20 until we did the math. But it makes it more
21 expensive, from a revenue requirement standpoint,
22 post-Tax Reform than pre-Tax Reform.

23 So when we recalculated the cost and
24 benefits of the projects, they were less beneficial
25 than they were before the Tax Reform Act passed.

1 Q. Thank you.

2 And, Mr. Torpey, if you know, is the
3 levelized cost of the projects at issue in the West
4 Virginia case -- how does the levelized costs of the
5 projects in the West Virginia case compare to the
6 generic wind in your break-even analysis in this
7 case?

8 A. In the break-even?

9 Q. In the break-even.

10 A. Well, I think the levelized costs -- if I
11 recall, the levelized costs were lower than our
12 break-even wind costs. But I believe -- I don't
13 recall if they were a little higher than ours. I
14 don't recall. I think they were close to our generic
15 costs, but I don't recall the exact number.

16 MS. BLEND: Okay. Thank you, Mr. Torpey.
17 I have no further questions.

18 THE WITNESS: Okay.

19 EXAMINER PARROT: Mr. --

20 MS. BOJKO: Your Honor, may we have a few
21 minutes to review the new document that's hearsay and
22 the witness isn't here to testify to it, before
23 proceeding with the cross -- recross?

24 EXAMINER PARROT: Let's keep moving along
25 and when we get to folks that are preparing to ask

1 questions, we will see where we are at that point.

2 MS. BOJKO: Well, your Honor, I need to
3 listen and I need to review and I can't listen to and
4 review at the same time. I am just asking for a
5 brief 5 minutes to read the document, that new
6 evidence that was just provided to us.

7 EXAMINER PARROT: Let's take a minute.

8 (Pause in the proceedings.)

9 MS. BOJKO: Thank you, your Honor, for
10 that indulgence.

11 EXAMINER PARROT: Mr. Dove.

12 MR. DOVE: No questions.

13 EXAMINER PARROT: Mr. Mendoza.

14 MR. MENDOZA: No questions.

15 EXAMINER PARROT: Ms. Leppla.

16 MS. LEPPLA: No questions.

17 EXAMINER PARROT: Mr. Kurtz.

18 MR. KURTZ: No questions.

19 EXAMINER PARROT: Mr. Michael.

20 MR. MICHAEL: Yes. Yes, your Honor. I
21 have a couple of questions.

22 EXAMINER PARROT: Hang on a second.
23 Stick to our prior order. Mr. Oliker.

24 MR. OLIKER: Thank you, your Honor.

25 - - -

1 Q. And -- but then that line crosses the
2 break-even line in 2022, correct?

3 A. In 2022, it does, yes.

4 Q. Okay. And you mentioned, I believe with
5 your counsel, that there are different discount rates
6 that a residential customer may have, correct?

7 A. Yes.

8 Q. And am I correct that a discount rate
9 reflects the present -- let me take a step back.

10 Discount rate is used to determine
11 present value, right?

12 A. Yes.

13 Q. And present value is the current value of
14 a future sum of money or a stream of cash flows given
15 a specified rate of return?

16 A. Sounds right.

17 Q. And future cash flows are discounted at a
18 discount rate; and the higher the discount rate, the
19 lower present value of the future cash flows.

20 A. That's correct.

21 Q. And for purposes of assumptions here, you
22 have got a 10-percent discount rate for residential
23 customers, correct?

24 A. We do.

25 Q. And some residential customers may have a

1 higher discount rate, correct?

2 A. Some may have higher, some may have
3 lower, yes.

4 Q. But for purposes of your generic solar
5 analysis, you used an 8.5-percent discount rate.

6 A. Yes.

7 Q. And, therefore, if the discount rate was
8 15 percent, you would agree that the net present
9 value numbers you have on your generic solar analysis
10 on Table 5 would be lower?

11 A. They would.

12 Q. And am I correct you have not done any --
13 am I correct your IRP that was filed in this case
14 doesn't contain any break-even analysis similar to
15 what you provided to the Arkansas Public Service
16 Commission?

17 A. It does not.

18 Q. And likewise, it doesn't contain any
19 range of discount rates for residential customers in
20 the IRP?

21 A. It only includes the AEP Ohio cost of
22 capital discount rates for AEP Ohio.

23 Q. And just to be clear though, at the end
24 of the day, it will be customers' money, not AEP's,
25 correct?

1 A. Well, AEP Ohio will, to the extent AEP
2 Ohio enters into a REPA and the cost or benefits flow
3 through to the customers, the ultimate benefit to the
4 customers would be based on the customers' discount
5 rate, yes.

6 MR. OLIKER: Thank you. I have no more
7 questions, your Honor.

8 Thank you, Mr. Torpey.

9 EXAMINER PARROT: Mr. Michael.

10 MR. MICHAEL: Thank you, your Honor.

11 - - -

12 REXCROSS-EXAMINATION

13 By Mr. Michael:

14 Q. Mr. Torpey, do you recall questions from
15 your counsel about how the 250-megawatt forecast for
16 wind would be scalable up to 500?

17 A. I do.

18 Q. I would like to draw your attention to
19 page 13 of your testimony. And specifically lines 3
20 through 7. Please let me know when you are there,
21 sir.

22 A. Yes.

23 Q. Okay. And I'd like to walk through that
24 statement with you, if I could, Mr. Torpey. So you
25 asserted that, in fact, the benefits were scalable

1 and roughly you would double various figures,
2 correct?

3 A. If we did the generic analysis using 500
4 megawatts instead of 250, yes, that would have been
5 the effect.

6 Q. Okay. And based on your testimony on
7 page 13, there are some ifs regarding that scalable
8 benefit, I think, Mr. Torpey, that I want to walk
9 through with you. So, first, the first "if" is it
10 would be scalable and doubled if the Company solicits
11 and receives an additional 250-megawatt or more of
12 project proposals, correct? That's one "if."

13 A. Right.

14 Q. I am asking questions, Mr. Torpey.

15 A. Yeah.

16 MS. BLEND: Your Honor --

17 A. Yeah, this refers to -- well, okay. Go
18 ahead. This says 250 megawatts, yes.

19 EXAMINER PARROT: Mr. Torpey, if you need
20 to finish your answer, go ahead.

21 A. This assumes there is another
22 250 megawatts out there that if we issued an RFP, we
23 would get a total of 500 megawatts of proposals.

24 Q. And the second "if" is if that results in
25 costs less than the break-even value described above,

1 correct?

2 A. Right. What we're saying there is that
3 it's slightly different than what I talked about on
4 redirect. I was talking about assuming -- if I
5 assume the REPA prices that we used in the
6 250-megawatt generic solar were doubled, we would
7 have -- I would calculate the benefit that way. This
8 just says that based on the break-even analysis we
9 did, if we received -- if we went out for requests
10 for proposals and we received proposals at prices
11 less than the break-even price, they would -- we
12 would consider those as something we would bring back
13 and propose.

14 Q. And the other "if," Mr. Torpey, is if the
15 responses are for projects with similar performance
16 characteristics to the general renewable projects,
17 correct?

18 A. Yes.

19 Q. Okay. So to the extent your 250-megawatt
20 forecast is scalable, it's only if, but only if, all
21 of those caveats we just walked through materialized,
22 correct?

23 A. Well, you could have lower prices and
24 worse performance and it still might be a good
25 project, but basically the point is that we would

1 have to issue an RFP and do an analysis to determine
2 if those projects were economic, and basically I am
3 laying out the parameters that would help us identify
4 if, in fact, those projects were economic.

5 Q. Okay. You said the benefits would
6 double, Mr. Torpey, for the additional 250 megawatts.
7 Isn't it also true that it's possible that the costs
8 could double as a result of PJM capacity and energy
9 price changes?

10 A. Well, the costs would be the costs of the
11 REPA, right? So the cost would just be whatever the
12 REPA cost is.

13 Q. But there is an offset for energy and
14 capacity, correct, revenue?

15 A. Then we're assuming there is a benefit
16 by -- from selling that REPA energy into the PJM
17 market and receiving the PJM clearing price. So I
18 think your question, so to the extent that price is
19 different, would the results be different?

20 Q. Correct.

21 A. Yes, if there were different prices than
22 we have in our forecast, then the actual benefit
23 could be different, yes.

24 Q. And, in fact, there could be a cost,
25 correct?

1 A. Prices would be -- would have to be --
2 stay pretty low for there to be a cost.

3 Q. But there could be a cost, correct?

4 A. There could be a cost or there could be a
5 better benefit.

6 Q. Could the cost -- would the cost be
7 doubled then, Mr. Torpey, as a result of scaling from
8 250 to 500?

9 A. Well, both the -- I think the net benefit
10 we said would double which means that the price we
11 pay to the -- to the renewable energy provider would
12 double and the offsetting PJM energy cost benefit
13 would also double. So both numbers double in the
14 generic example that I provided.

15 Q. Sure. And you keep referring to
16 benefits, Mr. Torpey, and I certainly understand why,
17 given your position in the case. But in the interest
18 of fairness, if PJM market prices and capacity prices
19 were to drop, it's also possible that the cost to
20 consumers, were you to scale the 250 megawatts, would
21 also double, correct?

22 A. Well, if the prices were less than what
23 we projected, the benefits would be less than what we
24 projected. That would be a fair statement.

25 MR. MICHAEL: Okay. Thank you.

1 EXAMINER PARROT: Ms. Glover. Mr. Whitt,
2 sorry.

3 MR. WHITT: No questions.

4 EXAMINER PARROT: I didn't see you had
5 joined us.

6 Ms. Bojko.

7 MS. BOJKO: Thank you, your Honor.

8 - - -

9 RECROSS-EXAMINATION

10 By Ms. Bojko:

11 Q. Good morning, Mr. Torpey.

12 A. Good morning.

13 Q. Let's first turn to the West Virginia
14 case that you talked about with your counsel. When
15 discussing -- first of all, the Commission did not
16 approve and did not affirmatively find that the --
17 there was a proper hedge; is that correct?

18 A. Are you saying in the list of findings
19 that the term "hedge" is not identified in the list
20 of findings? Is that --

21 Q. Well, that's true too.

22 A. That's what you are --

23 Q. That wasn't my question. You read a
24 sentence, out of the Order, that summarized parties'
25 positions, and I'm asking you -- or I'm asking you if

1 you know whether the Commission ultimately concluded
2 that there wasn't a hedge to support the approval of
3 the filing; is that correct?

4 A. Well, they didn't approve the filing. I
5 don't have the Order in front of me, but. So I don't
6 recall seeing the word "hedge" in the list of
7 findings, even on their -- the back page of their
8 Order where we had the findings of fact and law.

9 Q. I'm sorry. Your counsel had you read
10 from the Order, and you don't have it in front of
11 you?

12 A. No. I think she read --

13 Q. She read from the Order.

14 A. She read it and said do I recall hearing
15 this.

16 MS. BOJKO: Okay. Can you -- Counsel,
17 could you provide your witness a copy of the Order.
18 It's 11, OMAEG 11.

19 THE WITNESS: All right.

20 MS. BOJKO: We have another copy.

21 THE WITNESS: I got it.

22 Q. (By Ms. Bojko) I am looking on page 15.
23 Let me rephrase. If you're not familiar with that --
24 you cited to the hedge, so I thought you were
25 familiar with the Commission's Order and Finding with

1 regard to that issue.

2 If you look at page 15, when discussing
3 the hedge, the Commission responded to a question
4 from the Chairman of the West Virginia Public
5 Utilities Commission in asking whether the Company
6 would guarantee future prospective rate credits to
7 customers if their hedge was a losing hedge. Do you
8 see that?

9 A. Is that where the answer is "I think we'd
10 have to take it back to management and evaluate it"?

11 Q. And the Commission itself, that was the
12 Chairman's -- that was the AEP -- APCo's response to
13 the Chairman's question.

14 A. Yes.

15 Q. But the next paragraph discusses the
16 hedge and that the Commission concludes that they're
17 not inclined to engage in a fishing expedition --
18 expedition -- expedition to get a proposal from the
19 Companies on any conditions, deferrals, or
20 alternatives, as the Chairman proposed, that would
21 result in the Companies absorbing or even sharing the
22 burden that would be imposed on customers if AEP --
23 APCo's proposed physical hedge to the market turned
24 out to be a losing hedge, correct?

25 A. Right. So they acknowledged it was a

1 hedge; they just didn't know if it would be winning
2 or losing, I guess.

3 Q. So in your prior comments regarding the
4 parties' belief that this is a hedge, you were not
5 trying to imply that the parties believed it was a
6 winning hedge. It could be a losing hedge.

7 A. Well, you enter into a hedge because you
8 don't know what the future will be. So it mitigates
9 risk, so what it does is even if it's on the losing
10 side, you are just losing less. And if it's on the
11 winning side, you could be winning less as well, but
12 it's a risk-mitigation strategy.

13 Q. Right. And the West Virginia Commission
14 took that into consideration and determined they were
15 not willing to entertain that risk and denied the
16 Application, correct?

17 A. I think it was one of their
18 considerations.

19 Q. Well, let's talk about a couple more of
20 their considerations. Isn't it true that the --
21 well, if you know, Staff of the West Virginia
22 Commission is a party to the proceeding -- loosely
23 used -- party to the proceeding, just as the Staff of
24 the Commission filed testimony in this case and they
25 are a party to the proceeding, correct?

1 A. I don't know what the difference in
2 relationship is, but they -- they were a party to the
3 proceedings.

4 Q. And let's -- let's go to Mr. Short's
5 testimony. I believe, yesterday, you told me you did
6 not recall the Staff witness's recommendation when I
7 asked you a couple of questions on that. Has your
8 memory now been refreshed by his testimony?

9 A. I looked at his testimony, yes.

10 Q. You looked at his testimony last night,
11 not in preparation for your written testimony in this
12 case, correct?

13 A. I looked at it this morning. When it was
14 handed to me, I paged through it and refreshed my
15 memory. I mean, I read it a year ago, so a little
16 over -- yeah, a year ago.

17 Q. Of course.

18 So isn't it true that Mr. Short's
19 testimony actually states that he believes the
20 Companies' projections of the energy market are
21 overstated and, subsequently, the claimed benefits of
22 acquiring the wind facilities are overstated?

23 A. Yes. I think we covered that yesterday
24 too.

25 Q. And given that he believed that, isn't it

1 true in making his recommendation to the Commission
2 that you discussed with your counsel, he modified the
3 Companies' analysis and actually did his own analysis
4 to arrive at the conclusion that you referenced with
5 your counsel?

6 A. He substituted his projection of energy
7 prices for our projections.

8 Q. Well, he did a lot of things. He changed
9 the Companies' projections by he eliminated carbon;
10 isn't that true?

11 A. He -- well, what he did, I believe, was
12 he took the 2017 prices and just escalated those,
13 projected those out for 25 years.

14 Q. So, but he did use the no-carbon
15 scenario, correct?

16 A. Do you have a reference in here?

17 Q. Sure. Page 5, line 22. "I relied upon
18 the No Carbon scenario as it provides the lowest
19 projected market prices and is the most conservative
20 estimate....", correct?

21 A. Right. But that was a scenario we
22 provided.

23 Q. Sure. But then he said he further
24 adjusted the first year of the market prices downward
25 from the Companies' projected -- projections,

1 correct?

2 A. He certainly did.

3 Q. So he's modifying the Companies' proposal
4 in order to arrive at his conclusion that the
5 Companies' wind facilities is a break-even is what he
6 stated and that it should be adopted based on the
7 break-even scenario, correct?

8 A. Yes. He used his -- he came up with
9 essentially a set of market prices, starting -- he
10 used the escalation, I believe, from our no carbon,
11 if I recall, from our no-carbon scenario, so the
12 change, year to year, but the starting point was the
13 historically-low 2017 prices that we saw in the
14 market. And from that, yes --

15 Q. And did he also assume a REC value of \$7
16 a REC for 10 years in his calculation?

17 A. He assumed the value for RECs, yes.

18 Q. And didn't he also include the value
19 associated with the PTCs?

20 A. Well, the company was going to be able to
21 utilize the PTCs, so that was always in the forecast.
22 That's -- it's part of our revenue requirement. The
23 PTCs reduce our revenue requirement. This was an
24 owned project, not a REPA.

25 Q. And after lowering the Companies' market

1 price projections, after using the no-carbon
2 scenario, after including a revenue stream for RECs
3 for 10 years, that after all of those assumptions the
4 Staff relied upon, the Staff found that the wind
5 facility is likely no worse than continuing to
6 purchase from the market, correct?

7 A. Basically, yes. He lowered all those
8 assumptions, lowered those prices, and even with that
9 he was at -- and added the RECs back, but he was at a
10 break-even.

11 Q. And at the break-even point -- well,
12 strike that.

13 The Staff of the Commission in West
14 Virginia did not recommend approval if there was a
15 net charge to customers, correct?

16 A. I think his recommendation is shown on
17 page 23 and 24. And I think I read the
18 recommendation for Beech Ridge and for -- this is
19 from this testimony, right, we are talking about?
20 And then on the bottom of 23, he -- he talks about
21 the Hardin facility which is located in Ohio. And he
22 says "I recommend that this Commission's Order not
23 prohibit APCo from acquiring the Hardin facility in
24 the event the Virginia Commission finds the project
25 to be in the best interest of Virginia customers...."

1 Q. I'm sorry, you said Hardin?

2 A. Hardin. There were two facilities, Beech
3 and Hardin.

4 Q. Right.

5 A. So Hardin was located in the State of
6 Ohio. Beech is located in the State of West
7 Virginia.

8 Q. No, right. We were talking about the
9 break-even scenario of the Beech --

10 A. Yes.

11 Q. -- Ridge facilities. He came out, after
12 running his analysis, that there would be no net
13 charge to customers and that is what he recommended
14 approving to the Commission, correct?

15 A. Well, he's saying "Staff believes" --
16 this is on page 22, line 9 -- "Staff believes
17 acquisition of the Beech Ridge II Wind facility is
18 likely no worse than continuing to purchase from the
19 market and may, in fact, provide an economic benefit
20 to customers and therefore recommends the Commission
21 approve the Companies' request to acquire the
22 50-megawatt Beech Ridge II Wind facility." So he
23 recommended approving it.

24 Q. Right. Given that his analysis showed
25 that the economics were likely no worse off than

1 continuing to purchase from the market, correct?

2 A. Yeah. He's coming out and saying if it's
3 break-even, then we should still go ahead with it.

4 Q. Right. And that Staff recommendation was
5 rejected by the Commission, correct?

6 A. Well, again, after this was filed, we had
7 Tax Reform and the numbers changed, so the Commission
8 didn't make their finding based on this
9 recommendation. There was subsequent testimony, as
10 you heard yesterday, and the economics changed after
11 Tax Reform, so the products were no longer beneficial
12 as they would have been before Tax Reform.

13 Q. Well, that's a good point. So Mr. Short
14 recommended approval in this testimony based on that
15 there would be no charge to customers and the
16 Commission considered that and still denied it
17 regardless. I mean, the tax happened but they denied
18 the project, correct?

19 A. They denied it after -- we filed
20 supplemental -- there was testimony filed after Tax
21 Reform, showing the cost of the project after -- with
22 the effects of the Tax Reform. And the benefits of
23 the project were lower because of the Tax Reform.

24 Q. Right.

25 A. So that's when -- and it was after that

1 that the Commission denied the projects.

2 Q. Right. But did Mr. Short file
3 supplemental testimony?

4 A. I think he did.

5 Q. And did you bring that here with you
6 today?

7 A. I don't have that, no.

8 Q. Well, the Staff in this case has
9 recommended that the AEP proposal be denied, correct?

10 MS. BLEND: Objection, your Honor.
11 Outside scope of redirect.

12 MS. BOJKO: Your Honor, it's not. She's
13 trying to tell the differences between the West
14 Virginia case and this case. We just -- she brought
15 in Staff over my objections. So I am connecting the
16 dots to this case that there are different
17 assumptions and, in this case, Staff recommended that
18 the projects not be approved.

19 MS. BLEND: And, your Honor, it is not
20 only beyond the scope of redirect, but I think
21 Ms. Bojko has mischaracterized the Staff testimony in
22 this case. She also hasn't established any
23 foundation with Mr. Torpey with respect to the Staff
24 testimony and, for those reasons, I object to this
25 line of questioning.

1 MS. BOJKO: I am asking if he knows, your
2 Honor.

3 EXAMINER PARROT: Go ahead and rephrase
4 your question.

5 MS. BOJKO: Thank you.

6 Q. (By Ms. Bojko) Mr. Torpey, are you aware
7 that the Staff in this case has recommended that
8 there is no need and that AEP's project be rejected
9 as proposed?

10 MS. BLEND: Objection, misstates and
11 mischaracterizes Staff's testimony.

12 MS. BOJKO: Your Honor, he can clarify if
13 he disagrees with my statement.

14 EXAMINER PARROT: Overruled.
15 Go ahead, Mr. Torpey.

16 A. I didn't think it was that strong a
17 statement. If I had a copy of the testimony in front
18 of me, we could read what it says, and I think they
19 are going to be on later, so you could ask them.

20 Q. And we will do that.

21 Could you please turn to JFT-1, and I
22 would like to turn back to your Table 5 and Table 6,
23 on page 21 and 22 that your counsel, Ms. Blend,
24 discussed with you.

25 A. 21 and 22? Yep.

1 Q. Column M, you called it the "Present
2 Worth" row, but Column M is portraying projected
3 either net charge or net credit to customers in each
4 year of the 20-year REPA, correct?

5 A. That's correct.

6 Q. And that net benefit number, you
7 discussed with your counsel, that number would change
8 if there's no solar capacity credit value; is that
9 correct?

10 A. That's correct.

11 Q. Similarly, that number would change if
12 there's -- if the capacity factor changes, correct?

13 A. If the capacity factor?

14 Q. Yes.

15 A. Yes, it would be different.

16 Q. And in Column M, as it's laid out
17 presently, with the capacity credit value for the
18 solar on Table 5, it's still projected to have a net
19 charge to customers for four years, correct?

20 A. It is a slight charge to customers, yes,
21 for the first four years.

22 Q. And for the wind scenario in Table 6,
23 there's a charge to customers for six years, correct?

24 A. Right. It's a smaller -- it starts off a
25 smaller order of magnitude, but yes, there is a

1 charge through 2027, yes.

2 Q. And if we remove the capacity credit
3 value in line L, as you discussed with your counsel,
4 there would be a charge to customers on the solar
5 side, Table 5, for seven years, correct?

6 A. It would go -- it would be three
7 additional years where the number would not be
8 negative. Not show a credit.

9 Q. So seven years of charges to customers,
10 correct?

11 A. Yes. Very small numbers but yes.

12 Q. And similarly, for wind, if we remove the
13 capacity credit value that you discussed with
14 Ms. Blend, there would be seven years of either
15 charges or no -- no benefits to customers, correct?

16 A. Right. It would become zero in 2027.

17 Q. So six years without -- or six years with
18 a charge to customers, one year with no charge or a
19 credit, correct?

20 A. Yes.

21 Q. And isn't it true -- let's go back to the
22 West Virginia case for a minute. Isn't it true --
23 you stated you believed that Mr. Short filed rebuttal
24 testimony, correct?

25 A. I believe the Staff addressed -- I know

1 we did. I'm thinking the Staff filed testimony after
2 the Tax Reform Act.

3 Q. Well, isn't it true that Mr. Short
4 changed his opinion in the rebuttal testimony and
5 recommended to the Commission that both the Hardin
6 facility and the Beech Ridge facility be denied?

7 A. Well, because the economics went down,
8 yes.

9 MS. BOJKO: Thank you. No further
10 questions, your Honor.

11 EXAMINER PARROT: Ms. Whitfield.

12 MS. WHITFIELD: No questions, your Honor.

13 EXAMINER PARROT: Mr. Collier?

14 MR. COLLIER: Just a couple.

15 - - -

16 RECROSS-EXAMINATION

17 By Mr. Collier:

18 Q. I want to draw your attention to page 21,
19 Table 5 again.

20 A. Yes.

21 Q. In your testimony on redirect, you were
22 addressing the source of information in Column H. Do
23 you recall that?

24 A. Yes.

25 Q. The column definition for H is based on

1 the weighted average of the hourly market price of
2 energy displaced by hourly incremental REPA purchase,
3 correct?

4 A. That's correct.

5 Q. And you are telling us now that you also
6 used Mr. -- or AEP's Fundamentals Forecast?

7 A. The hourly --

8 Q. Projecting out?

9 A. I'm sorry. Yes. The hourly market price
10 of energy is derived from the AEP Fundamentals
11 Forecast.

12 Q. Is that the sole source for the weighted
13 average of hourly market price?

14 A. It's the source for the hourly prices
15 used in this calculation. To get the weighted
16 average you have to look at the output from the solar
17 facility at a given hour. So the two together gets
18 you the -- gets you the price that's here.

19 Q. But you are looking out on the value --
20 or the price of displaced energy, 20 years out in the
21 future.

22 A. Yes.

23 Q. And you're looking at an hourly
24 incremental comparison?

25 A. Yes.

1 Q. For every hour of every day of every year
2 in your forecast.

3 A. That's how we do it, yes.

4 Q. Is there a margin of error in the
5 Fundamentals Forecast?

6 A. I mean, the Fundamentals Forecast is --
7 is basically -- the Base Fundamentals Forecast is
8 what I'll call the Company's consensus view of what
9 prices should be. There are other forecasts that
10 Mr. Bletzacker prepares that bound that between high
11 and low cases. So there's a range of values in the
12 future that are plausible.

13 Q. Other than the base and lower band that
14 Mr. Bletzacker addressed, is there a margin of error
15 within the base forecast?

16 MS. BLEND: Your Honor, at this point,
17 I'll object. I think we are outside the scope of my
18 redirect. My question regarding the question
19 Mr. Collier asked yesterday about the Base
20 Fundamentals Forecast was simply to clarify an
21 ambiguity in the record about what "solely" meant in
22 that question. And I think this is not only beyond
23 the scope of my redirect, but also these questions
24 are outside the scope of Mr. Torpey's testimony.

25 MR. COLLIER: I think it relates to an

1 average and how this is derived.

2 MS. BLEND: And I think Mr. Torpey has
3 testified the weighted average was based on
4 production information, hourly direction information,
5 and the Base Fundamentals Forecast hourly forecast
6 information, that he received from Mr. Bletzacker.

7 EXAMINER PARROT: And the objection is
8 sustained.

9 MR. COLLIER: I have no further
10 questions.

11 EXAMINER PARROT: Mr. Darr.

12 MR. DARR: No questions.

13 EXAMINER PARROT: Mr. McNamee.

14 MR. McNAMEE: No questions. Thank you.

15 EXAMINER PARROT: Ms. Blend, I believe
16 you have already moved for the admission of Company
17 Exhibit 14. Start with that. Are there any
18 objections?

19 MS. BOJKO: Your Honor, we would just
20 renew our prior objections.

21 MR. COLLIER: Same. No objections
22 subject to the motions.

23 EXAMINER PARROT: All right. The prior
24 objections are again noted. With that, Company
25 Exhibit 14 is admitted.

1 (EXHIBIT ADMITTED INTO EVIDENCE.)

2 EXAMINER PARROT: Are you moving Company
3 Exhibit 15, Ms. Blend?

4 MS. BLEND: Your Honor, could we defer a
5 motion for admission of Company Exhibit 15 until
6 after the outcome of the motions for admission of
7 OMAEG Exhibits 6 through 10?

8 EXAMINER PARROT: Yes. Let's group those
9 exhibits together.

10 Mr. Oliker, let's go with yours.

11 MR. OLIKER: Did we move Company Exhibit
12 1?

13 MR. NOURSE: We are not there yet.

14 EXAMINER PARROT: We will get through
15 these and then we got a few to --

16 MR. OLIKER: IGS would move for the
17 admission of Exhibit 7 and 8.

18 EXAMINER PARROT: Any objection to the
19 admission of IGS 7 or 8?

20 MS. BLEND: No.

21 EXAMINER PARROT: All right. Both of
22 those are admitted.

23 (EXHIBITS ADMITTED INTO EVIDENCE.)

24 MR. OLIKER: For clarity, on behalf of
25 IGS and IGS Solar, LLC; although I think that's a

1 given.

2 EXAMINER PARROT: Thank you.

3 Ms. Bojko.

4 MS. BOJKO: Thank you, your Honor. At
5 this time, we would like to move the admission of
6 OMAEG Exhibit 5, and I would like to ask the Bench to
7 take administrative notice of OMAEG 11 and 12. State
8 Agency Orders -- I am not moving for admission of 6
9 through 10, as I alluded to previously, your Honor.

10 EXAMINER PARROT: Let's start with OMAEG
11 Exhibit 5. Are there any objections to that exhibit?

12 MS. BLEND: Not from the Company, your
13 Honor.

14 EXAMINER PARROT: Okay. Hearing none,
15 OMAEG Exhibit 5 is admitted.

16 (EXHIBIT ADMITTED INTO EVIDENCE.)

17 EXAMINER PARROT: The Bench is going to
18 take administrative notice of OMAEG Exhibits 11 and
19 12 as requested.

20 MS. BOJKO: Thank you, your Honor.

21 EXAMINER PARROT: All right. Ms. Blend,
22 back to Company Exhibit 15. I am going to assume
23 with that no motion --

24 MS. BLEND: That's correct, your Honor.

25 EXAMINER PARROT: -- with that exhibit?

1 Okay. Very good.

2 Mr. Collier.

3 MR. COLLIER: Yes. I move for admission
4 of OCA Exhibit 1, the filing by Hecate, and request
5 to take administrative notice, admitted on that
6 basis.

7 MS. BLEND: Your Honor --

8 EXAMINER PARROT: Ms. Blend, go ahead.

9 MS. BLEND: The Company objects to the
10 admission of OCA Exhibit 1. As we went over last
11 night, Mr. Collier failed to establish foundation
12 whatsoever with this witness with respect to this
13 document. Additionally, it's not proper to just dump
14 in a filing by a -- the developer regarding this
15 specific project into this proceeding.

16 And I don't think administrative notice
17 is appropriate either. Again, this is an application
18 that was filed in an OPSB proceeding regarding a
19 specific facility. Mr. Torpey's generic analysis I
20 think is -- as has been made clear, was just that, a
21 generic analysis, not specific to this project.

22 And, if anything, the issues that
23 Mr. Collier was seeking to raise with Mr. Torpey are
24 really Phase II issues and/or issues that should have
25 been addressed with Mr. Ali.

1 Mr. Torpey, as he testified last night
2 and was clear in his direct testimony, relied on
3 three sets of discrete information from Mr. Ali and
4 can't be held to -- wasn't held to and there was no
5 record established that he knows any specifics about
6 what went into Mr. Ali's -- specifically what details
7 went into Mr. Ali's analysis. So I'll stop there.

8 MR. COLLIER: In response, your Honor,
9 first of all, there was testimony by Mr. Torpey
10 regarding the calculation of the locational marginal
11 prices and he sponsors the table. He testified that
12 he calculated locational marginal prices for various
13 years, 20-year period. That he did that based on a
14 representative analysis of not only RFPs but the RFP
15 for the Highland project itself. He specifically
16 brought in the Highland RFP on that basis. He
17 assumed, for purposes of his calculation, that the
18 representative generic projects would connect to the
19 AEP system, the AEP eastern load, and made that
20 assumption for purposes of this calculation. The
21 evidence actually indicates that the Highland project
22 will not connect to the AEP system but to the
23 345-kilovolt Stuart-Clinton line in the Dayton Power
24 & Light system.

25 MS. BLEND: Your Honor, that's not

1 evidence in -- I just want to note that's not
2 evidence.

3 MR. COLLIER: It is evidence. It will be
4 if it's right in here in Exhibit 1.

5 MS. BOJKO: Your Honor, may I be heard?

6 EXAMINER PARROT: Were you finished,
7 Mr. Collier?

8 MR. COLLIER: Yeah. I mean, it's
9 established, in OCA Exhibit 1, where the source of
10 connection will be and, again, at the Clinton line,
11 Stuart-Clinton line, not the AEP system.

12 EXAMINER PARROT: Go ahead, Ms. Bojko.

13 MS. BOJKO: Thank you, your Honor.
14 Yesterday, in cross-examination from me, we did talk
15 in great detail about the assumptions underlying
16 Mr. Torpey's analysis and we talked about and
17 actually discussed in great detail, read an excerpt
18 from the deposition transcript, regarding whether the
19 facilities are located in AEP's service territory or
20 just in Ohio and what those assumptions were in the
21 generic study. There had to be an assumption and
22 Mr. Torpey explained that he did, in fact, make an
23 assumption that it was in the State of Ohio, not in
24 the AEP service territory.

25 So this document goes along with that

1 line of questioning and is relevant for purposes of
2 Mr. Torpey's analysis and his underlying assumptions
3 in this phase of the proceeding. And I think that it
4 should be -- administrative notice should be taken of
5 such filing.

6 MS. BLEND: Your Honor, we've conflated
7 some issues here and we've conflated some evidence
8 here. Mr. Torpey's testimony, I don't know
9 specifically which portion of his deposition
10 Ms. Bojko is referring to offhand, but Mr. Torpey's
11 testimony has been very clear that he took
12 information provided by Mr. Ali. Mr. Ali's testimony
13 is clear that his Figure 1 shows the, quote,
14 reduction in LMPs for the AEP zone. Mr. Torpey
15 testified that he used Ohio -- I don't know what
16 Ms. Bojko is referring to with respect to
17 Mr. Torpey's testimony at deposition. But it doesn't
18 impact -- it doesn't impact the lack of foundation
19 for the inadmissibility of this several -- nearly
20 100-page document prepared by a party who is not a
21 party to this case and filed in that proceeding
22 unrelated to this one.

23 MR. OLIKER: Your Honor --

24 MR. COLLIER: Will Ms. Blend stipulate
25 that the Highland project connects to the

1 345-kilovolt Stuart-Clinton line in the Dayton Power
2 & Light system?

3 MS. BLEND: Your Honor, we can talk about
4 that later. I don't think that goes to the question
5 of the admissibility of this document. And I think
6 specifics of -- as your Honors have repeatedly
7 held -- specifics regarding the specific projects for
8 which cost recovery is sought in Phase II in this
9 proceeding, are Phase II issues, they are not Phase I
10 issues.

11 MR. OLIKER: Your Honor, may I be heard
12 briefly?

13 EXAMINER PARROT: Go ahead.

14 MR. OLIKER: My understanding, based on
15 much of the analysis that's been provided in this
16 hearing, is although we have talked about generic
17 facilities, the physical location of those facilities
18 was taken from evidence provided in the separate
19 docket. And the physical location -- it is what it
20 is and the transmission lines are what they are. It
21 is not something we should be fighting about here.
22 And if they are connected into the Dayton Power &
23 Light transmission system, that's a fact that's not
24 going to change based upon the physical location. So
25 we should simply take notice of it.

1 MS. BLEND: Your Honor, I feel parties
2 are not -- counsel for other parties are trying to
3 sandbag. They didn't ask Mr. Ali about how this
4 factored into his analysis or whether it factored
5 into his analysis. Mr. Ali has already testified.
6 Mr. Ali's testimony is clear that his analysis shows
7 the reduction specifically for the AEP zone. And now
8 we are trying to put in information with a witness
9 who doesn't have a basis or understanding for the
10 information and say that it's somehow relevant to his
11 testimony.

12 MR. DARR: Actually, your Honor, that
13 statement about the cross-examination of Mr. Ali is
14 incorrect. Specifically, Mr. Collier requested a
15 determination as to whether or not the
16 interconnection of the Hecate plant would be with
17 DP&L. That was objected to. The objection was
18 sustained. So he followed up with a question -- or,
19 I followed up with a question, would it make a
20 difference whether or not the interconnection was
21 with DP&L or AEP, and he responded generically yes.
22 That put the issue in play with regard to the generic
23 study.

24 I think Mr. Oliker has hit the nail on
25 the head. Is there an appropriate basis for taking

1 administrative notice of the fact that the Hecate
2 project as proposed by Hecate, and what is clearly
3 available in the Commission's own record, whether or
4 not it will be interconnected AEP or DP&L, and the
5 document clearly demonstrates that the recommendation
6 is that it be connected with the Stuart line which is
7 a DP&L facility.

8 The relevance was established with the
9 cross-examination with regard to Mr. Ali. The
10 request for administrative notice, whether in the
11 context of Mr. Torpey or at the conclusion of AEP's
12 case or at any other point could be taken -- could be
13 advanced. It's not tied specifically to Mr. Torpey's
14 testimony. It's tied to the fact that as presented
15 in this case, there is a material fact that's in
16 play.

17 Mr. Ali says that the location is
18 important and that the interconnection is important.
19 Mr. Torpey says that he has assumed there is no
20 congestion pricing. Taking those two issues
21 together, it makes relevant the
22 administratively-noticeable fact that the Hecate
23 facility, which Mr. Torpey -- or Mr. Ali used, is
24 interlinked or would be interconnected or is proposed
25 to be interconnected with some of the facilities

1 other than AEP Ohio.

2 On that basis, since the fact can be
3 administratively noticed by reference to the
4 Commission's record and is relevant, then the request
5 that Mr. Oliker has advanced, which is basically a
6 subset of what Mr. Collier has asked for with regard
7 to the stipulation, should be granted.

8 MS. BLEND: Your Honors, the other thing
9 I will note, OCA Exhibit 1 does not appear to be a
10 complete copy of the Application filed by Hecate.

11 EXAMINER PARROT: I would assume that's
12 correct as well, just based on the length.

13 MR. DARR: And, again, your Honor, with
14 regard to what I believe Mr. Oliker is asking for and
15 my construction of it, there would be no need to
16 admit OCA 1. There would merely be a request that
17 for purposes of the adjudication of this proceeding
18 that the Commission accept, as a fact, that the
19 Hecate facility is proposed to be interconnected with
20 DP&L.

21 MR. OLIKER: Another way of saying it is
22 that the megawatts associated with the output of that
23 facility that was modeled here, would be stipulated
24 to be interconnected to the DP&L transmission system.

25 MS. BLEND: I can't -- I am sorry. Could

1 you repeat that, Mr. Oliker? I couldn't hear you.

2 MR. OLIKER: For purposes of the analysis
3 done here, you can simply imply or stipulate that the
4 megawatt output associated with that facility would
5 be considered interconnected to the DP&L transmission
6 facility. Given that the generic benefits are based
7 upon modeling specific locations, specific counties,
8 and those counties correspond to certain transmission
9 systems.

10 MS. BLEND: I don't think it would be
11 appropriate to stipulate to something as generic as
12 what Mr. Oliker indicated. If we want to talk about
13 whether we could agree to stipulate to the specific
14 interconnection point and only that fact, we could
15 talk about the specific interconnection point and
16 what that stipulation would -- should look like.

17 EXAMINER PARROT: And let's go off the
18 record briefly so you may attempt to do that.

19 (Discussion off the record.)

20 EXAMINER PARROT: Let's go back on the
21 record.

22 We are going to table this discussion for
23 now. We will revisit this issue at a later point.

24 Ms. Blend, did you want to, at this time,
25 move for the admission of Company Exhibits 1 and 2?

1 MS. BLEND: Yes, your Honor, the Company
2 so moves.

3 EXAMINER PARROT: Any objections?
4 Hearing none, Company Exhibits 1 and 2
5 are admitted.

6 (EXHIBITS ADMITTED INTO EVIDENCE.)

7 MS. BLEND: And, your Honor, just for the
8 record, did you rule on OCA Exhibit 1?

9 EXAMINER PARROT: No. We are tabling the
10 entire discussion for now.

11 MS. BLEND: All right. Thank you, your
12 Honor.

13 EXAMINER PARROT: I believe you've moved
14 also for the admission of Company Exhibit 7?

15 MR. NOURSE: Yes, your Honor.

16 EXAMINER PARROT: Have the parties had
17 time to review that now? Are there any objections?
18 Hearing none, Company Exhibit 7 is also
19 admitted.

20 (EXHIBIT MARKED AND ADMITTED.)

21 EXAMINER PARROT: Thank you very much,
22 Mr. Torpey.

23 THE WITNESS: Thank you.

24 EXAMINER PARROT: Let's take a 5-minute
25 break.

1 (Recess taken.)

2 EXAMINER SEE: Let's go back on the
3 record.

4 MR. DARR: Your Honor, a preliminary
5 matter before we hear from Dr. Lesser?

6 EXAMINER SEE: Sure.

7 MR. DARR: At this point has the Company
8 rested its case-in-chief?

9 MR. NOURSE: Yes.

10 MR. DARR: That being the case, your
11 Honor, the Intervenors who move for directed decision
12 at this point. The case -- The company has failed to
13 demonstrate on the record that the -- that there is a
14 need for these facilities. That being the case, we
15 can go directly to decision and avoid the next four
16 days of question, answer, question, non-answer, and
17 the expense that's entailed with that.

18 MR. OLIKER: Your Honor, IGS and IGS
19 Solar would join that motion, and we would cite to I
20 believe it is Ohio Power Company Exhibit 1 which
21 demonstrates that there is no need to build new
22 generation in Ohio to maintain reliability.
23 Therefore, we should have a directed decision that
24 the Application should be dismissed.

25 MR. COLLIER: Your Honor, OCA joins the

1 motion. It would be a motion to dismiss, motion for
2 directed judgment, in either --

3 EXAMINER SEE: Mr. Collier, you trail off
4 when you're speaking, so please use the mic.

5 MR. COLLIER: I am usually not accused of
6 that. OCA joins in the motion, whether it's a motion
7 to dismiss or directed judgment, for the reasons
8 raised in the various motions in limine and as
9 enunciated by counsel. We are not rearguing the
10 motion, but serving to protect the record.

11 MS. BOJKO: OMAEG supports the motion,
12 your Honor.

13 MS. WILLIS: OCC supports the motion,
14 your Honor.

15 MR. WHITFIELD: Kroger supports the
16 motion, your Honor.

17 MR. WHITT: Your Honor, Direct Energy
18 would point out that the statutes and rules, pursuant
19 to which this proceeding was commenced, do not
20 require the Commission to find that anything is
21 needed. The purpose of the proceeding is to review
22 the Company's forecast information and determine
23 whether it is reasonably accurate in a review of the
24 data and so forth. So it is a limited -- the
25 proceeding is necessarily limited in scope in any

1 event.

2 MR. NOURSE: Your Honor, if I could
3 respond?

4 EXAMINER SEE: Yes.

5 MR. NOURSE: First of all, the statute
6 that we are talking about is the ESP statute and the
7 Commission has approved the Renewable Generation
8 Rider based on the ESP statute, and the Commission's
9 rules require that -- that this case be filed, this
10 Amended LTFR be filed to demonstrate need prior to
11 approving a nonbypassable charge. Currently the
12 Company's RGR Rider is zero. And prior to approving
13 a nonzero rate, the Commission needs to determine
14 need and look at the other criteria in that ESP
15 statute to -- to make sure those -- all those boxes
16 are checked.

17 As the October 22 Entry, that the
18 Examiners put out, indicates, you know, the
19 Commission has chosen to divide this query up into
20 two phases. Phase I is the phase we're in today.
21 And I believe in the October 22 Entry the -- you
22 indicated that Phase II would also consider need as
23 well as the other criteria in the statute.

24 So furthermore, the -- the Bench's ruling
25 on January 14, I think is instructive here, in that

1 these parties are just recycling the same arguments
2 they've made there in the motion in limine where
3 they've maintained that all of our evidence is beside
4 the point and doesn't address the rate issues.
5 Obviously we opposed that and the Bench denied the
6 motion to -- in limine and so, you know, if --
7 another facet of this is why it's not Commission
8 practice to grant these motions is, of course, that
9 we haven't briefed the issues yet. We haven't
10 presented to the Commission, as opposed to the
11 Attorney Examiners in these proceedings, for
12 decision, the ultimate questions and presented the
13 evidence through briefing and such to have the
14 Commission decide the merits.

15 So rather than shortcut the proceeding or
16 try to prevent the Commission from looking at the
17 merits of our evidence in our case, I think the
18 Commission should proceed with all the evidence in
19 this case, proceed to briefing, and allow the parties
20 to debate the impact and the import of the evidence
21 in the record to let the Commission decide the
22 question of need. Thank you.

23 MR. MENDOZA: Your Honor, may I add
24 something briefly?

25 EXAMINER SEE: Yes.

1 MR. MENDOZA: Sierra Club opposes the
2 motion. I would just add that -- I would just add
3 that the statutory claim, underlying Mr. Darr's
4 motion, has already been rejected several times in
5 this hearing. I've lost count. The legislature
6 chose not to define "need" when it passed the
7 statute. That's a grant of power to the Commission
8 to interpret "need" as it sees fit. And I think the
9 interpretation offered by AEP is reasonable and
10 surely that's for the Commission to decide.

11 MS. LEPPLA: Your Honors, OEC also joins
12 AEP and Sierra Club and, of course, supports the
13 motion.

14 MR. DOVE: As does NRDC.

15 MS. MOONEY: As does OP&E.

16 EXAMINER SEE: And the motion to dismiss
17 AEP Ohio's Application or for a directed decision is
18 denied.

19 Ms. Willis.

20 MS. WILLIS: Thank you, your Honor. OCC
21 calls Dr. Jonathan A. Lesser to the stand.

22 (Witness sworn.)

23 EXAMINER SEE: Thank you.

24 - - -

1 JONATHAN A. LESSER, 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, Dr. Lesser.

7 A. Good morning.

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

10 A. My name is Jonathan Lesser. My address
11 is P.O. Box 590, La Veta, L-a V-e-t-a, Colorado,
12 81055.

13 MR. COLLIER: Your Honor, I am wondering
14 if the microphone is turned on.

15 Q. And, Dr. Lesser, for purposes of this
16 proceeding, by whom are you employed and in what
17 capacity?

18 A. I'm the President of Continental
19 Economics, and I've been hired by -- for this case by
20 the Office of Consumers' Counsel.

21 MS. WILLIS: At this time, your Honor, I
22 would mark as OCC Exhibit No. 18, the public version
23 of the direct testimony of Jonathan A. Lesser, filed
24 with the Commission on January 2, 2019. And I would
25 also mark for identification purposes as OCC Exhibit

1 18A, the confidential version of the direct testimony
2 of Jonathan A. Lesser, filed January 2, 2019.

3 EXAMINER SEE: So marked.

4 (EXHIBITS MARKED FOR IDENTIFICATION.)

5 MS. WILLIS: Thank you, your Honors.

6 Q. (By Ms. Willis) Dr. Lesser, do you have
7 any additions, corrections, or deletions to your
8 testimony?

9 A. I do not.

10 Q. And, Dr. Lesser, if I were to ask you the
11 questions that are posed in OCC Exhibit 18 and 18A,
12 would your answers today be the same?

13 A. They would.

14 MS. WILLIS: Your Honor, at this point, I
15 would offer Dr. Lesser up for cross-examination and
16 move for the admission of Exhibits 18 and 18A.

17 MR. NOURSE: Your Honor, I'd like to make
18 a motion to strike when you are ready.

19 EXAMINER SEE: Okay.

20 MR. NOURSE: Are you ready?

21 EXAMINER SEE: Go ahead, Mr. Nourse.

22 MR. NOURSE: Yes, your Honor. The
23 Company moves to strike the out-of-court statements
24 and evidence that Dr. Lesser presents from the
25 FirstEnergy Solutions bankruptcy proceeding. Excuse

1 me. Let me identify first what's on page 17, lines
2 14 through 19. And that includes Footnote 16.

3 EXAMINER SEE: Page?

4 MR. NOURSE: Page 17. Lines 14 through
5 19. Including Footnote 16. Okay? And then the
6 second portion of this discussion is on page 76 and
7 that's line 19 through page 77, line 7. So it would
8 be through the word "moreover comma."

9 Okay. So this is -- this is reference to
10 out-of-court statements made by a Mr. Kevin Warvell
11 which is a FirstEnergy Solutions witness in the
12 bankruptcy proceeding. And my motion also includes
13 Exhibit JAL-3 which is attached to Dr. Lesser's
14 testimony and that is the testimony that was
15 submitted in the bankruptcy proceeding by
16 Mr. Warvell.

17 This is clearly an out-of-court statement
18 that Dr. Lesser wants the Commission to rely upon for
19 the truth of the content of the testimony, and these
20 out-of-court statements are offered also to
21 improperly collaterally attack the Commission's Order
22 approving the PPA rider which I'll note the Ohio
23 Supreme Court had recently affirmed by unanimous
24 vote.

25 And although the Commission is not

1 strictly bound by the Rules of Evidence, it seeks to
2 maintain consistency to the extent practical --
3 practicable. So there is no exception to the hearsay
4 rule that applies to permit this wholesale
5 introduction of out-of-court testimony. Move to
6 strike.

7 MS. WILLIS: May I respond, your Honor?

8 EXAMINER SEE: Yes.

9 MS. WILLIS: Thank you.

10 As your Honor knows, Dr. Lesser is a
11 highly-qualified expert witness, as his credentials
12 bear out shown on page 1 and 2, and his -- along with
13 his 32-page vitae. And as an expert, Dr. Lesser is
14 entitled to testify or give opinions on matters that
15 include those that he does not have personal
16 knowledge of.

17 In fact, experts can base their testimony
18 on facts perceived before the hearing or facts or
19 data that are made known to the expert from sources
20 that are -- and here is the key word -- reasonably
21 relied upon in the field, in forming opinions,
22 whether or not that information is admissible.

23 Essentially, your Honors, an exception --
24 the expert testimony provides an exception to
25 hearsay, permitting experts to base their opinion on

1 reliable hearsay.

2 Here we have the information that has
3 been moved to strike relates to the statements filed
4 in the bankruptcy court under oath by an employee of
5 FirstEnergy Solutions. Clearly they are reliable
6 information. It is a reliable source. Mr. Lesser
7 should be able to submit this testimony as a reliable
8 source of -- of data that he does perceive.

9 I would also note, your Honor, that it is
10 akin to an exception or it's akin to the 801(D)(2)(e)
11 exception to hearsay which allows co-conspirator
12 statements. Those are not considered hearsay.
13 Clearly if your Honor -- if your Honor was -- would
14 go to that section, we could consider AEP a
15 co-conspirator along with FirstEnergy because they
16 were all parties to the OVEC agreement.

17 So even if your Honors determined that
18 this -- that Mr. Lesser is not entitled to rely on
19 it, I think it could be found that that is a
20 co-conspirator statement and would not -- would not
21 be defined as hearsay.

22 MR. OLIKER: Your Honor, may I be heard
23 briefly?

24 EXAMINER SEE: Go ahead.

25 MR. OLIKER: I would just point out that

1 the declaration of Kevin Warvell was admitted into
2 evidence and referenced and relied upon by the
3 Commission in the Opinion and Order issued in Duke
4 Energy Ohio's Electric Security Plan case. It's
5 information that the Commission is familiar with. It
6 has previously been admitted into evidence and it's
7 been referenced in Commission Orders, so it's
8 appropriate.

9 And to the extent that hearsay has been
10 permitted in throughout this hearing, I think that
11 this would qualify as an even more reliable source
12 than much of the other information that has come into
13 the record to date.

14 MR. NOURSE: May I respond, your Honor?

15 EXAMINER SEE: Yes.

16 MR. NOURSE: First off, Dr. Lesser's
17 expertise is completely beside the point. He doesn't
18 have expertise in, you know, taking out-of-court
19 statements and using them in a different context.
20 That's completely beside the point.

21 This is highly-controversial projections
22 of market prices and, as you know, it's the same type
23 of information that Dr.-- Dr. Bletzacker has
24 submitted in the PPA case and in this case and is
25 highly contestable and doesn't get waived into

1 evidence without questions or responsive testimony.

2 And I believe in the Duke case,
3 Dr. Warvell was a witness there, and there was some
4 connection to, you know, to that record, but here,
5 again, all Dr. Lesser has done is taken this from
6 another proceeding. It's pure hearsay. There's no
7 exception that applies and there's no reason it
8 should be admitted into this record.

9 MR. OLIKER: Your Honor, this is
10 incorrect. Mr. Warvell was not a witness in the Duke
11 case which you can quickly determine from the
12 composite index in that case. He is a FirstEnergy
13 employee.

14 MR. NOURSE: But I believe there was a
15 connection to the witness that was in the Duke case
16 and I don't -- your Honor, I don't have all the
17 details, but I don't think we should rely on that for
18 whatever reason it was admitted there. There is no
19 reason to do it here.

20 MS. BOJKO: Your Honor, may I respond?
21 To a point?

22 EXAMINER SEE: Go ahead, Ms. Bojko.

23 MS. BOJKO: Thank you, your Honor.

24 I would just note this testimony is no
25 different than Mr. Short's testimony from West

1 Virginia that counsel just argued successfully to
2 allow it to be used in cross-examination and allowed
3 to be used in this proceeding. Similar to
4 Mr. Short's testimony, this testimony can be used and
5 Mr. Lesser can be crossed on it. The Company should
6 not be allowed to cherry pick the testimony or
7 out-of-court statements that it wants and argue some
8 are hearsay and some are not.

9 MR. NOURSE: Yeah, your Honor. First of
10 all, we didn't move for admission of Mr. Short's
11 testimony as an exhibit. And the only reason it was
12 discussed was because OMA wanted to point to the West
13 Virginia Commission decision as somehow being
14 instructive and, of course, we asked questions to
15 show that enlightened staff there looked at the
16 economics and didn't get hung up on resource
17 accuracy. But we did not move for admission of that
18 testimony. And if somebody wanted to ask Dr. Lesser
19 or another witness about this -- this out-of-court
20 testimony, that would be a different scenario than
21 incorporating it as an exhibit, relying on it for the
22 truth of the matter asserted, and having the witness
23 be unavailable for this hearing.

24 EXAMINER SEE: The motion -- AEP's motion
25 to strike the two cited portions of Dr. Lesser's

1 testimony are denied.

2 MS. WILLIS: Thank you, your Honor.

3 EXAMINER SEE: Are there any other
4 motions, Mr. Nourse?

5 MR. NOURSE: No.

6 EXAMINER SEE: Any cross-examination for
7 this witness, Mr. Dove?

8 MR. DOVE: No, your Honor. Thank you.

9 EXAMINER SEE: Mr. Mendoza.

10 MR. MENDOZA: Yes, thank you, your Honor.

11 - - -

12 CROSS-EXAMINATION

13 By Mr. Mendoza:

14 Q. Good morning, Mr. Lesser.

15 A. Good morning.

16 MR. MENDOZA: Your Honor, may I approach?

17 EXAMINER SEE: Yes.

18 MR. MENDOZA: I would ask that this
19 document be marked as Sierra Club Exhibit 2, please.

20 (EXHIBIT MARKED FOR IDENTIFICATION.)

21 Q. Mr. Lesser, you wrote this column,
22 correct?

23 A. I did.

24 Q. Fair to say that "Natural Gas &
25 Electricity" is a trade publication?

1 A. It is.

2 Q. And your column in "Natural Gas &
3 Electricity" was called "Energy and The Environment";
4 is that right?

5 A. That's correct.

6 Q. Okay. And you wrote such column on and
7 off from 2007 to 2014; is that correct?

8 A. Sounds about right.

9 Q. Okay. If you would, would you take a
10 look at the Editor's Note at the beginning of this
11 column. Do you see that Editor's Note?

12 A. I do. If you will just give me a minute
13 to read it. Okay.

14 Q. Do you see where it says "To attempt to
15 add a voice of reason about global warming and other
16 so-far-unproven theories about which many billions
17 are about to be spent...." Do you see that
18 statement?

19 A. I do, yeah.

20 Q. At the time in 2007, did you think global
21 warming was so far unproven?

22 A. Well, first off, I didn't write the
23 editorial statement. So I can't comment on what the
24 editor said. Secondly, if you are asking me for my
25 opinions on climate change, I'm not a climate

1 scientist. I believe the climate is changing.

2 Q. Okay. So my question was: At the time
3 you wrote this -- I recognize that the editor wrote
4 that statement, but I am asking you what you thought
5 at the time you wrote this. Did you think that
6 global warming was so far unproven?

7 MS. BOJKO: Objection, your Honor. May I
8 have a point of clarification, please? He keeps
9 saying "at the time you wrote this" and the witness
10 just testified he didn't write this statement. So is
11 he talking about the article or is he talking about
12 the statement from Jim Hoecker?

13 MR. MENDOZA: I think my question was
14 clear.

15 Q. If you have a problem understanding my
16 question, Mr. Lesser --

17 EXAMINER SEE: Try it again, Mr. Mendoza.

18 Q. At the time you wrote this column,
19 recognizing you didn't write the editorial note, at
20 the time you wrote this column, did you think that
21 global warming is a -- was a so-far-unproven theory?

22 A. I think I answered your question.

23 Q. I'm certain you didn't.

24 A. I wrote about climate change in my
25 environmental and economics policy textbook that was

1 published in 1997. So at this -- at that -- at the
2 time of this column, you know, again, I'll stand by
3 my statement. I believe that the climate is
4 changing.

5 Q. Do you think it was an unproven theory
6 at -- in 2007?

7 MS. WILLIS: Objection, your Honor.
8 Asked and answered.

9 MR. MENDOZA: It's certainly not
10 answered, your Honor. We've got nothing but evasive
11 responses from the witness.

12 EXAMINER SEE: The question has been
13 asked and answered.

14 MS. WILLIS: Thank you, your Honor.

15 EXAMINER SEE: Move on, Mr. Mendoza.

16 Q. (By Mr. Mendoza) Okay. Let's take a look
17 at the first paragraph of the article. Do you see
18 where you use the phrase "generalized mayhem"?

19 A. I do.

20 Q. Do you think climate change will cause
21 generalized mayhem?

22 A. Counselor, if you really want to have a
23 debate about climate change in this hearing, which I
24 think is inappropriate, you know, when I wrote this,
25 I have a -- a somewhat tongue-in-cheek way of writing

1 columns. "Generalized mayhem" is probably not a
2 scientific term that I'm familiar with. Although
3 perhaps it is. Again, I am not a climate scientist
4 so I don't know if they use that term.

5 Again, I stand by my statement. I
6 believe the climate is changing. I don't know what
7 the impacts of that will be. Will they -- will it be
8 mayhem? Will it be severe? Not so severe? I don't
9 know.

10 Q. So fair to say "generalized mayhem" was a
11 tongue-in-cheek comment; is that right?

12 A. That's correct.

13 MR. MENDOZA: Your Honor, may I approach?

14 EXAMINER SEE: Yes.

15 MR. MENDOZA: I would ask this be marked
16 Sierra Club Exhibit No. 3, please.

17 EXAMINER SEE: So marked.

18 (EXHIBIT MARKED FOR IDENTIFICATION.)

19 Q. (By Mr. Mendoza) And, Dr. Lesser, you
20 wrote this column, correct?

21 A. I did.

22 Q. Great. And would you --

23 EXAMINER SEE: Mr. Mendoza, Mr. Mendoza.

24 MR. MENDOZA: Yes.

25 EXAMINER SEE: Can you just work into the

1 record what the article is, when it was written?
2 Title? Identify what you've marked as Sierra Club
3 Exhibit 3.

4 Q. And the document, Mr. Lesser, I have
5 asked to be marked as Sierra Club Exhibit No. 3, is
6 titled "As the Climate Turns: The Saga Continues." Is
7 that right?

8 A. No. It's "As the Global Climate Turns:
9 The Saga Continues."

10 Q. Thank you, sir.

11 If you would, would you look at the first
12 page, which in the journal was page 29, column 2. Do
13 you see where you use the expression "ivory-tower
14 thugs" at the end of the paragraph there?

15 MR. OLIKER: Objection. It's not clear
16 how this document -- and I let it go with the last
17 document, but how either of these documents have any
18 relevancy to this hearing. And we've just simply
19 jumped into a few documents without establishing any
20 connection whatsoever to the testimony in this case.
21 It seems like we're getting pretty far afield. Next
22 we'll be talking about how much the temperature will
23 be changing in 2040 and I don't think anybody here
24 wants to make any of those predictions.

25 EXAMINER SEE: Mr. Mendoza, back up a

1 little bit.

2 MR. MENDOZA: Your Honor, I am trying to
3 establish bias in the witness. I mean, I agree
4 with -- with the commentary that, you know, climate
5 temperature predictions are not relevant, but the
6 witness's credibility is surely a relevant issue in
7 this case unless OCC would like to withdraw him.

8 EXAMINER SEE: Back up, Mr. Mendoza, and
9 build the foundation.

10 MR. MENDOZA: Your Honor, I think the
11 witness's credibility is always an issue in any
12 proceeding. What I would like to establish, if you
13 will allow me to proceed, would be to show that the
14 witness has a longstanding history of doubting
15 climate science and advocating on behalf of fossil --
16 fossil generators, and I think that's surely a
17 relevant issue that the Commission can consider in
18 evaluating his credibility. And I would note the
19 articles, with maybe one or two exceptions, the
20 articles I am going to ask him about are all in his
21 CV. I mean, they were in his exhibit.

22 MS. WILLIS: Your Honor, if I may briefly
23 respond? Dr. Lesser testified that he is not a
24 climate scientist. He is not presenting the science
25 of climate and climate warming -- or climate

1 information about climate warming. He is here to
2 present testimony on issues that are before the
3 Commission which relate to two proposed solar
4 projects. And I would -- again, I would echo what
5 Mr. Oliker said, not sure how that is relevant. And
6 even if he were to show bias, I'm not sure that
7 that -- the bias on climate change is relevant if it
8 can't even be shown to the issues that are before the
9 Commission.

10 MR. NOURSE: Your Honor, I would just
11 note, first of all, Mr. -- Dr. Lesser has put all of
12 this into his own testimony, his credentials, and
13 found that those were relevant credentials to offer.
14 And certainly his bias is -- is impactful on what his
15 testimony is today and, you know, the Commission --
16 the Commission's own rules about resource planning
17 cases talk about environmental impacts and so this is
18 all -- this is all relevant. It goes to the
19 credibility of this witness's testimony if he's
20 already biased against renewable projects before
21 he -- before he wrote his testimony.

22 MS. LEPPLA: Your Honor, if I may. This
23 is certainly relevant to the case that AEP is trying
24 to make based upon need. And because the opposing
25 intervenors don't agree with the definition that AEP

1 is trying to give, they are trying to strike
2 questions related to this. And also I would just add
3 the Commission is fully capable of weighing, you
4 know, evidence based upon their review of this, and
5 it should be permitted, this line of questioning.

6 THE WITNESS: Your Honor, since my
7 credibility is being questioned --

8 EXAMINER SEE: No. Hold on just a
9 minute.

10 So, Mr. Mendoza, go ahead.

11 MR. MENDOZA: Thank you, your Honor.

12 EXAMINER SEE: Ask your question.

13 Q. (By Mr. Mendoza) Mr. Lesser -- or
14 Dr. Lesser, would you turn to the second page of this
15 article. Do you see where it says "Although some
16 believe" -- the second page, Column 2.

17 EXAMINER SEE: Of Sierra Club 2 or 3?

18 MR. MENDOZA: Exhibit 3, your Honor.

19 Q. Do you see -- do you see a paragraph that
20 starts "Although some believe the science of global
21 climate change is settled," and goes on to say some
22 other things?

23 A. I see that.

24 Q. When you wrote this article, did you
25 consider yourself among the some who believed that

1 climate change is settled?

2 A. I think the theories are still, in terms
3 of impacts by the models, it's still not settled.

4 Q. Okay.

5 A. Counselor, I would also like just to
6 clarify the record for completeness. First thing,
7 you seem to be under the mistaken impression that I
8 represent fossil fuel interests. You also seem to be
9 under the impression I was paid by those interests to
10 write these columns. I was not compensated by anyone
11 to write any of these columns.

12 MS. LEPPLA: Your Honor, I would just
13 move to strike that as nonresponsive. That wasn't
14 responsive to Mr. Mendoza's question in either way.

15 MR. MENDOZA: And my legal argument is
16 not evidence, your Honor. If they want to clear up
17 who has been paying him, they can do that. I don't
18 intend to ask him who is paying for this article.

19 MS. WILLIS: Your Honor, he's just
20 providing context like all the witnesses in this
21 proceeding have been able to do.

22 MS. LEPPLA: Your Honor, respectfully,
23 that was commentary, not context.

24 EXAMINER SEE: And Dr. Lesser's response
25 after "Counselor, I would also like just to clarify

1 the record...." after that sentence is stricken.

2 Dr. Lesser, answer the question that's
3 been presented to you.

4 MR. MENDOZA: Thank you, your Honor.

5 Q. (By Mr. Mendoza) Dr. Lesser, in that same
6 paragraph, do you see where you wrote climate --
7 "climate scientists" and then skipping down "have
8 perverted the scientific method for their own gain"?

9 A. Based on the Climategate scandal, I would
10 stand by that statement.

11 Q. You stand by that statement? You think
12 that --

13 A. Based on the Climategate scandal, which
14 you are probably familiar with in terms of the
15 e-mails, et cetera, and the disallowance of people,
16 of publication, the perversion of the academic
17 peer-review process, I stand by that statement.

18 Q. Okay. And then putting aside the persons
19 involved in what you call the Climategate scandal, do
20 you think climate scientists, in general, have
21 perverted the scientific method?

22 A. That's not my testimony.

23 Q. But do you think it, is what I am asking
24 you.

25 A. You will have to be more specific,

1 Counselor. Which climate scientists are you
2 referring to?

3 Q. All climate scientists other than the
4 ones that were involved in what you refer to as the
5 Climategate scandal. Any climate scientists that you
6 are familiar with.

7 A. I think a number of climate scientists
8 are quite honorable, very-well-respected academics.

9 Q. And do you think some of them have
10 perverted the scientific method for their own gain?

11 A. I believe some of them may have, yes.

12 MR. MENDOZA: Okay. Thank you.

13 Your Honor, may I approach?

14 EXAMINER SEE: Yes.

15 MR. MENDOZA: I would ask that this
16 document be marked Sierra Club Exhibit 4, please.

17 Q. And, Mr. Lesser, can you help me identify
18 this document? Is the title "Global Warming, Climate
19 Changer, Er, Climate Volatility: 2012 and Beyond"?

20 A. That's correct.

21 Q. Okay. Thank you.

22 EXAMINER SEE: Sierra Club 4 is so
23 marked.

24 (EXHIBIT MARKED FOR IDENTIFICATION.)

25 Q. Would you turn to the second page of this

1 document which in the journal was page 23.

2 A. All right.

3 Q. Do you -- do you see where you referred
4 to James Hansen as a defender of all things climate
5 change?

6 A. I see that.

7 Q. Do you still -- would you stand by that
8 statement today?

9 A. I stand by the statement that the -- of
10 the three false assumptions in Mr. Hansen's claim,
11 yes.

12 Q. So you would still -- okay. Thank you.
13 Further down in that paragraph, do you
14 see where you say "there is no correlation between
15 summer temperatures from year to year"?

16 A. That's one of his assumptions, correct.

17 Q. You know, you are right. I will withdraw
18 that question.

19 MS. WILLIS: Your Honor, I don't know
20 that it can be withdrawn. It's already been
21 answered.

22 MR. MENDOZA: Okay. We'll move on. Your
23 Honor, may I approach?

24 EXAMINER SEE: Yes.

25 MR. MENDOZA: I would ask this document

1 be marked Sierra Club Exhibit 5, please.

2 EXAMINER SEE: So marked.

3 (EXHIBIT MARKED FOR IDENTIFICATION.)

4 Q. (By Mr. Mendoza) And, Dr. Hansen, what's
5 been marked as Sierra Club Exhibit 5, it's called --
6 the column is titled "The Devil and the EPA," right?

7 A. I'm not Dr. Hansen actually, sir.

8 Q. That's fair. Dr. Lesser.

9 A. It is. That's the title. I am sure
10 Dr. Hansen would not want to have authored this.

11 Q. And in this article you refer to the
12 USEPA as the devil, right?

13 A. No, that's not correct.

14 Q. Okay. Could I direct your attention to
15 the last paragraph of the article which is on the
16 third page, numbered page 32. "EPA's Second Act."
17 Do you see the sentence that says "Perhaps the Devil
18 will take the high road, but in the war -- er,
19 domestic contingency operation -- against coal, do
20 not bet on it."

21 A. Counselor, this is all tongue in cheek
22 and you know that.

23 Q. Okay. But I just want to clarify, you
24 were referring to the USEPA as the devil, right?

25 A. No, I was not.

1 Q. You were not?

2 A. No, Counselor.

3 Q. Who were you referring to as the devil in
4 that paragraph?

5 A. I was being -- if you will read the
6 first -- the very first paragraph of the article,
7 it's a -- it's based on a -- the late comedian, Flip
8 Wilson's 70s television show where he refers to "The
9 devil made me do it."

10 So this is just, you know, I was not
11 referring to the EPA Administrator or the EPA as the
12 devil. It's a generic -- call it a generic version
13 of Lucifer if you would like.

14 Q. Okay. So you were referring to the
15 generic devil in the last paragraph under "EPA's
16 Second Act"?

17 A. Are we going to argue about the existence
18 of hell and the devil, counselor, now?

19 MS. LEPPLA: Again, your Honor, that's
20 commentary and I move to strike Mr. Lesser's
21 testimony. I would ask that you just direct him to
22 answer the questions directly and we can move on.

23 A. There was no -- I am not referring -- I
24 don't recall -- there's no specific identity for the
25 devil when I wrote this six years ago.

1 Q. Okay. I think the credibility of that is
2 apparent. Let's move on.

3 MS. BOJKO: Objection.

4 MS. WILLIS: Objection, your Honor. Move
5 to strike. I think we need to take a step back and
6 present ourselves professionally and without the
7 commentary. That doesn't help the record.

8 MR. MENDOZA: Your Honor, I would
9 withdraw my comment.

10 EXAMINER SEE: And it would be helpful if
11 all parties left the snarky comments out of the
12 record and acted professionally.

13 Go ahead, Mr. Mendoza.

14 Q. (By Mr. Mendoza) Dr. Lesser, one more
15 question about this devil article, page 1. Do you
16 see on -- in column 2, where you refer to "the
17 scourge of climate change." Is that --

18 A. I would -- give me a minute. I don't see
19 that.

20 Q. It's on column 1, at the full --

21 A. You just said column 2.

22 Q. I'm sorry. Column 2, page 1, the
23 paragraph that begins "EPA Administrator Gina
24 McCarthy...." The very last word of that paragraph.

25 A. Okay, I see that. Thank you.

1 Q. And when you refer to "the scourge of
2 climate change," is that a tongue-in-cheek comment?

3 A. I honestly don't recall, Counselor. Some
4 people consider it a scourge; others consider it
5 less. You know, I was -- again, these are -- I am
6 not sure how to describe it. You know, when you
7 write commentary columns, you tend to be somewhat
8 colorful. You know, I use colorful language. Some
9 people consider it a scourge. Some people consider
10 it the most-serious problem we face. Others do not.

11 Q. And my question is: What do you think?
12 What did you think -- if you recall when you wrote
13 this?

14 A. I don't recall.

15 Q. What about today? Do you think of
16 climate change as a scourge?

17 A. Well, why don't you define what you mean
18 by "scourge" since people have different definitions.

19 Q. I am referring to however you meant it
20 when you used it in this article.

21 A. I don't recall how -- what I said.

22 MR. MENDOZA: Okay. Your Honor, may I
23 approach?

24 EXAMINER SEE: Yes.

25 MR. MENDOZA: I would like this document

1 to be marked Sierra Club Exhibit 6, once I give it to
2 the court reporter.

3 (EXHIBIT MARKED FOR IDENTIFICATION.)

4 Q. (By Mr. Mendoza) Dr. Lesser, do you have
5 before you one of your articles titled "Outlook -
6 Sunspot Data May Indicate End of Global Warming
7 Trend"?

8 A. I do.

9 Q. Have we reached the end of the global
10 warming trend today?

11 A. I have no idea, Counselor. I was citing
12 to a peer-reviewed article that's listed at Footnote
13 3 on the last page, which is marked page 32 of this
14 publication, by H. Ahluwalia, December 2013, titled
15 "An empirical approach to predicting the key
16 parameters for a sunspot number cycle." And it was
17 published in the peer-reviewed journal, "Advances in
18 Space Research." And I show where it can be
19 retrieved.

20 Q. Okay. Thank you.

21 As to your opinion, do you -- I take the
22 answer to your question is I don't know if we have
23 reached the --

24 A. I believe I started this in your line of
25 questioning by saying I am not a climate scientist.

1 So even if I have an opinion, it would not be
2 relevant because I'm not a climate scientist. So I
3 can't tell you what the climate is going to do in 10
4 years, 20 years. I can't even predict the weather
5 tomorrow.

6 Q. Okay. And then on the second page of
7 this document, below the chart, do you see -- the
8 sentence actually begins on the page before, but do
9 you see there is a question, "does that mean global
10 cooling is in our future?" Do you see that text?

11 A. I see that.

12 Q. Do you think global cooling is in our
13 future?

14 A. I just answered your question. I am not
15 a climate scientist, Counselor. I don't know.

16 Q. You wrote this article, correct?

17 A. I did.

18 Q. Okay. Thank you.

19 Staying on the second page, second
20 column, do you see the paragraph that begins "Second"
21 and then you talk about James Hansen again in that
22 paragraph?

23 A. I do.

24 Q. Do you still believe that James Hansen
25 manipulated data to show warming temperatures?

1 A. I -- well, all I did, Counselor, I cite,
2 if you go to the last page you will see Footnote 6.
3 I am citing B. Snow's article, "NASA data worse than
4 Climate-Gate data, GISS admits." I was simply
5 quoting that. I'm not a climate scientist. I am not
6 qualified to review Mr. Hansen's research or his --
7 his data analysis on temperatures.

8 Q. So you are not qualified to review his
9 analysis, but you accused him of manipulating data to
10 show warming temperatures; is that right?

11 A. No, it's not, Counselor.

12 Q. Okay. Page 3, column 1.

13 A. I'm there.

14 Q. Do you see the paragraph that begins
15 "Many individuals who believe in human-caused climate
16 change say 'the science is settled.'" Do you see
17 that sentence?

18 A. I do.

19 Q. And when you wrote this, did you consider
20 yourself among the referenced "many individuals"?

21 A. As I say in the next sentence, "Science
22 is never settled." So I answered -- that's my answer
23 to your question. I don't believe -- as far as I'm
24 concerned, science is never settled.

25 Q. Okay. So you don't think the science

1 that humans are causing climate change is settled.

2 A. Define -- by "science" what do you mean?
3 Are humans causing certain changes in climate? Sure.

4 Q. I am asking you about the meaning of the
5 sentence that you wrote, not -- not my definition of
6 anything.

7 MS. WILLIS: I think, your Honor, he
8 answered the question that was posed.

9 Q. You did not consider yourself among the
10 "many individuals" in that -- in that statement,
11 correct?

12 MS. WILLIS: Objection. That's been
13 asked and answered.

14 EXAMINER SEE: That question has been
15 answered, Mr. Mendoza.

16 MR. MENDOZA: Thank you, your Honor. May
17 I approach?

18 EXAMINER SEE: Yes.

19 MR. MENDOZA: I would ask this document
20 be marked Sierra Club Exhibit 7, please.

21 EXAMINER SEE: So marked.

22 (EXHIBIT MARKED FOR IDENTIFICATION.)

23 Q. (By Mr. Mendoza) And you wrote this
24 article, correct, Dr. Lesser?

25 A. I did.

1 Q. And it's titled "Talk Is Cheap: The UN's
2 Doha Conference Strikes Out...Again"; is that
3 correct?

4 A. Correct.

5 Q. And if you would please turn to page 3,
6 column 1, and I will wait for you to get there.

7 A. I'm there.

8 Q. Do you see where it says "Although some
9 see the Doha conference as a rousing success, what
10 Doha reveals is the folly of continued efforts to
11 prevent climate change." Do you see that statement?

12 A. I see it.

13 Q. Do you still consider efforts to prevent
14 climate change to be folly?

15 A. Certainly some of the efforts that are
16 being undertaken could prevent climate change, for
17 example, AEP is claiming that these -- the two
18 renewable resources are going to address climate
19 change. It will have no measurable impact on climate
20 change.

21 So do I think -- I'm not -- I am not
22 saying there should be no efforts to prevent climate
23 change at all. Certainly some of the efforts that
24 have been undertaken, I believe, are unreasonable and
25 uneconomic.

1 Q. Okay. Thank you, Mr. Lesser.

2 MR. MENDOZA: Your Honor, may I approach?

3 EXAMINER SEE: Yes.

4 MR. MENDOZA: Your Honor, can this be
5 marked as Sierra Club Exhibit 8, please?

6 EXAMINER SEE: So marked.

7 (EXHIBIT MARKED FOR IDENTIFICATION.)

8 Q. Dr. Lesser, you wrote this article,
9 correct?

10 A. Yes.

11 Q. And it's titled "Rethinking Green Energy
12 Mandates"?

13 A. Correct.

14 Q. And if you would please turn to page 3.
15 Do you see the paragraph that starts with the -- it's
16 on column 2 on page 3, the paragraph that starts with
17 "Fourth"?

18 A. Yeah, I see it.

19 Q. And do you -- it's the second sentence in
20 that paragraph where you say "Even if you believe
21 climate change is responsible for everything from
22 warmer temperatures" and then it goes on?

23 A. I see that.

24 Q. When you wrote this article, did you
25 believe that climate change was responsible for

1 warmer temperatures?

2 A. I certainly -- I am not a climate
3 scientist. Some climate scientists says that's the
4 case.

5 Q. But what did you believe is my question.

6 A. It's irrelevant what I believe. I am
7 writing a column. I was writing a column about the
8 effects of green energy mandates on climate. And my
9 conclusion still is my conclusion today that
10 individual state mandates have zero measurable impact
11 on climate.

12 If the U.S. reduced its greenhouse
13 emissions to zero tomorrow, the impact -- there would
14 be no measurable impact on global temperature. And
15 that's according to the global climate models such as
16 if you are familiar with the EPA's MAGICC --
17 M-A-G-I-C-C, that's an acronym -- Model, you can run
18 the numbers yourself, Counselor, and you will find it
19 will have no measurable impact.

20 Q. So you're telling me you are familiar
21 with climate model, but you're unable to tell me if
22 you personally believe that climate change is
23 responsible for warmer temperatures?

24 MS. WILLIS: Your Honor, I object. This
25 witness has indicated he is not a global climate

1 scientist, so he is not an expert on global climate
2 issues, so what Mr. Lesser believes on global climate
3 is really not relevant. And we've been very patient
4 throughout all this cross and it also appears that
5 these -- these articles are cumulative evidence of
6 whatever point Sierra Club is trying to make.

7 MR. NOURSE: Your Honor, I disagree with
8 that objection. Dr. Lesser continues to say he is
9 not an expert, but then he continues to offer
10 opinions about the impact on climate -- climate
11 change which doesn't -- doesn't match up at all. So
12 I think Mr. Mendoza is entitled to continue probing
13 the area.

14 MR. MENDOZA: And I would add, your
15 Honor, Mr. Lesser wrote about this topic for at least
16 seven years and apparently is -- I agree he is not a
17 climate scientist but he wrote about the topic for a
18 long time and so surely he can answer some basic
19 questions about his own personal beliefs about the
20 topic. If it would be helpful, I could repeat my
21 question.

22 EXAMINER SEE: You can. You can pose the
23 question again to Dr. Lesser.

24 Q. (By Mr. Mendoza) When you wrote this
25 article, did you believe that climate change was

1 responsible for warmer temperatures?

2 A. Well, by definition, Counselor, "warmer
3 temperatures" indicate a change in climate. So if
4 there's -- if the climate is changing, one
5 manifestation of a changing climate is a change in
6 temperature. So, by definition, that statement is
7 true.

8 Q. So if that statement is always true, why
9 did you include the word "if" in the second place in
10 that -- the second word in that sentence? "If"
11 everyone would agree. Why would you say "if" someone
12 believes that?

13 A. Well, if you look at the whole sentence,
14 Counselor, which you're not, this is referring to
15 people who essentially say climate -- they use the
16 generic term "climate change" to be responsible for
17 everything. So it's responsible for warmer
18 temperatures. However, those are measured. It's
19 responsible for changing populations of polar bears.
20 And some people, as I say tongue in cheek, you know,
21 the cold snap that knackered your flower garden.
22 That you think climate change is responsible for all
23 of that.

24 I am sure that if the climate is -- I've
25 already testified, the climate is changing. Changing

1 climate probably implies changing temperatures.
2 What's the magnitude of that change, I don't know.
3 I'm not a climate scientist.

4 Q. When you referred to "sullen polar bears"
5 in that sentence, were you mocking people who are
6 concerned about human-caused climate change?

7 MS. WILLIS: Objection. Argumentative
8 and not relevant.

9 MS. LEPPLA: I would say, your Honor,
10 he's repeatedly said these articles are tongue in
11 cheek. I think it's a fair question. We are trying
12 to understand what he is writing about. He said he
13 is not a climate scientist. Mr. Mendoza is properly
14 probing this topic.

15 MR. MENDOZA: Your Honor, I asked him an
16 open-ended question. If he wants to say he wasn't
17 mocking people, then that's -- that's a fair
18 response.

19 MS. MOONEY: Your Honor, also trying to
20 show bias and that his -- these articles represent
21 someone -- he says he is not a scientist, he is not a
22 climate scientist, but he's certain that the projects
23 that are in discussion in this case are not going to
24 do anything for climate. So we're trying to show a
25 bias here that he has an inherent bias against

1 anything that purports to help climate change issues.

2 EXAMINER SEE: And the witness can answer
3 the question. Do you need --

4 A. No is my answer.

5 Q. Okay. Thank you.

6 MR. MENDOZA: Your Honor, may I approach?
7 And this is my last document.

8 EXAMINER SEE: Yes.

9 MR. MENDOZA: Thank you, your Honor. I
10 would ask this document be marked Sierra Club Exhibit
11 9, please.

12 EXAMINER SEE: So marked.

13 (EXHIBIT MARKED FOR IDENTIFICATION.)

14 Q. (By Mr. Mendoza) And, Mr. Lesser, you
15 wrote this article, correct?

16 A. I did.

17 Q. And it's titled "Goldilocks Chills Out."

18 A. I did. That's what it's titled.

19 Q. And then let's take a look at page 3,
20 column 2. The very last sentence of the article.
21 There's a sentence there that ends "especially if
22 climate change has little to do with man-made CO-2
23 emissions." Do you see that sentence?

24 A. I do. Counselor, I haven't looked at
25 this in 12 years.

1 Q. Fair. I am just asking you what your
2 beliefs are today.

3 EXAMINER SEE: We'll give him some time
4 to look at it.

5 A. Well, the article is about costs and
6 benefits of policies to address climate change.

7 MR. MENDOZA: Your Honor, I haven't asked
8 a question.

9 A. Actually you did.

10 EXAMINER SEE: I'm --

11 A. You asked a question about the last
12 sentence.

13 Q. I was just directing your attention.

14 A. All right. Well, what's your question,
15 Counselor?

16 Q. Do you think it's reasonable to believe
17 that manmade CO-2 emission have little to do with
18 climate change?

19 A. I'm not a climate scientist, Counselor,
20 as I have said over and over. I don't know what
21 impacts of manmade CO-2 emissions will -- are on
22 climate. I don't run climate models. I have used
23 the EPA's MAGICC Model. If you took a project like
24 this, like the AEP project, and ran it through the
25 EPA model to look at the change in emissions and,

1 hence, the change in global climate, you would find
2 that temperature change is not physically measurable.

3 Q. Okay. So my question was: Recognizing
4 that you are not a climate scientist, but you did
5 write about this topic for a decade, would you agree
6 that it is unreasonable today to say that man-made
7 CO-2 emissions have little to do with climate change?

8 A. I don't know, Counselor. I am not a
9 climate scientist.

10 Q. Okay. And on that topic you're an
11 economist, correct?

12 A. Last I checked, yes.

13 Q. And you are not a climate scientist,
14 right?

15 A. I am not a climate scientist.

16 Q. And you are not any kind of physical
17 scientist, right?

18 A. I am not.

19 Q. And what explains your years of writing
20 about climate change science?

21 A. Because a lot of economists write about
22 climate science because policies to address climate
23 change have a cost. And so one -- an economist like
24 myself often looks at costs and benefits, and I have
25 done cost/benefit analyses, so it's an economic

1 topic.

2 Q. And 2015 was the hottest year ever
3 recorded up to that date, right?

4 A. I don't know that, Counselor.

5 Q. You don't know?

6 A. I don't know.

7 Q. Do you read the newspaper?

8 MS. BOJKO: Objection, your Honor.

9 MR. MENDOZA: I will withdraw the
10 question.

11 Q. 2016 was the hottest year ever recorded
12 up to that year, correct?

13 A. I don't know, Counselor. I'm not a
14 climate scientist. I haven't measured temperatures.
15 I don't know how someone measures the earth's
16 temperature.

17 Q. Is it -- does it say anywhere in the
18 articles that you wrote, that I've showed you, that
19 you are not a climate scientist?

20 MS. WILLIS: Objection, your Honor.
21 Argumentative.

22 MR. MENDOZA: I just want to know if he
23 had the same disclaimer on his climate-change/science
24 writing as he does for his testimony.

25 MS. BOJKO: Objection, your Honor. It

1 does -- well, mischaracterizes the article. It does,
2 in fact, say what he is. He is an economist.

3 MS. WILLIS: Including the articles speak
4 for themselves. We can look at the articles when we
5 have the opportunity to figure that one out. I don't
6 think we need to spend our time on that.

7 MR. MENDOZA: I agree with Ms. Willis.
8 We will move on.

9 Q. (By Mr. Mendoza) 2017 was the hottest
10 year recorded up to that date, right?

11 A. I don't know, Counselor.

12 Q. Okay. And 2018 is the new record for the
13 hottest year ever.

14 A. I don't know, Counselor.

15 Q. Okay. And you're testifying in this case
16 on behalf of the office of consumers' counselor?
17 Isn't that right?

18 A. I believe it's Consumers' Counsel.

19 Q. Thank you for the correction. And did
20 you discuss your views on climate change science with
21 OCC as you were preparing your testimony?

22 A. No, because it's completely irrelevant to
23 this case. This case is about the impacts on
24 ratepayers from two specific proposed solar energy
25 projects. And those projects, as I testify, would

1 adversely affect ratepayers. And I also testified
2 that the -- there is no need for these two projects
3 based on the statutory definition under 4928.143
4 (B)(2)(c); that the Navigant survey showing there
5 were -- that everyone in Ohio wants these projects is
6 totally flawed.

7 MR. MENDOZA: Your Honor, I would move to
8 strike his entire answer after "No."

9 MR. NOURSE: Yeah, your Honor, second the
10 motion, and especially the gratuitous statement about
11 the Navigant survey. It was completely unrelated to
12 any interpretation of the question.

13 MS. WILLIS: Can we have that question
14 reread, and I would also note I don't think
15 Dr. Lesser was finished with his answer, but I would
16 like the question reread, please.

17 (Record read.)

18 MS. WILLIS: And I think that given the
19 question was wide open, he explained that he did not
20 and the reason why he did not, so I think it -- he
21 was giving context to his response.

22 MR. NOURSE: That doesn't address my
23 separate motion to strike, your Honor.

24 EXAMINER SEE: And your motion to strike
25 his answer, Mr. Nourse, was?

1 MR. NOURSE: The statement about the
2 Navigant survey -- statements. It's the latter part
3 of the answer.

4 EXAMINER SEE: To the extent that it
5 describes Dr. Lesser's testimony, it can stay in the
6 record.

7 Mr. Mendoza.

8 MR. MENDOZA: Thank you, your Honor.

9 Q. (By Mr. Mendoza) And OCC is paying you
10 for your work in this case, right?

11 A. I certainly hope so.

12 Q. The answer to that question is yes,
13 right?

14 A. Yes.

15 Q. Thank you.

16 And did you receive any compensation from
17 any entity other than OCC for your work? On this
18 case?

19 A. No.

20 Q. And you're currently an adjunct fellow
21 with the Manhattan Institute for Policy Research?

22 A. That's correct.

23 Q. How much money comes along with being a
24 adjunct fellow with the Manhattan Institute for
25 Policy Research?

1 MS. WILLIS: Objection.

2 MS. BOJKO: Objection.

3 MS. WILLIS: Relevance.

4 MS. BOJKO: Object to form, your Honor.

5 "How much money comes along with."

6 MR. MENDOZA: Your Honor, may I respond?

7 EXAMINER SEE: Briefly.

8 MR. MENDOZA: The Manhattan Institute is
9 a think tank with an agenda, and I think it's
10 relevant if he is receiving pay from that institute.

11 MS. WILLIS: And, your Honor, that is
12 not -- you know, whether that think tank, what that
13 think tank is, that is not in the record. So, again,
14 we're trying to put things into the record that are
15 not in the record, so I would object to --

16 MR. NOURSE: Your Honor --

17 MS. WILLIS: I would object to the
18 characterization of that institute.

19 EXAMINER SEE: If we could respect each
20 other and speak one at a time, I would appreciate it.

21 Mr. Nourse.

22 MR. NOURSE: I was just indicating he
23 indicated in his testimony, put it in as a relevant
24 credential that he's -- he's an adjunct fellow there.
25 And he cited several articles that he's written in

1 that capacity. So it's the same -- same line of bias
2 material, your Honor, that's why it should be
3 permitted.

4 EXAMINER SEE: The objection is
5 sustained.

6 MR. MENDOZA: Okay. I'll rephrase.

7 Q. (By Mr. Mendoza) Are you compensated by
8 the Manhattan Institute?

9 A. I am.

10 Q. Okay. And the Manhattan Institute
11 regularly publishes works opposing legislation --
12 legislative and regulatory action on climate change;
13 isn't that right?

14 A. No, that's not correct.

15 MR. MENDOZA: Your Honor, I have no
16 further questions. Thank you.

17 EXAMINER SEE: Ms. Leppla?

18 MS. LEPPLA: No questions, your Honor.

19 EXAMINER SEE: Ms. Mooney?

20 MS. MOONEY: No questions.

21 EXAMINER SEE: Mr. Kurtz?

22 MR. KURTZ: Thank you, your Honor.

23 - - -

24

25

CROSS-EXAMINATION

1
2 By Mr. Kurtz:

3 Q. Good afternoon, Dr. Lesser.

4 A. Good morning. Oh, it is afternoon.

5 Q. Heard the whistle. Okay. Obviously you
6 are an expert on PJM; is that correct?

7 A. I know something about PJM. I am not an
8 expert on everything that's PJM, but that's probably
9 too large a field.

10 Q. Okay. But you testified about PJM
11 extensively in your testimony.

12 A. I do.

13 Q. Okay. And you regular -- excuse me --
14 routinely review PJM information and documents and so
15 forth?

16 A. I review some of them, yes.

17 Q. Okay. Just background before I get into
18 it. Do you know how many megawatts of generating
19 capacity is in the PJM RTO?

20 A. I don't have a number for you. I could
21 hazard a guess but it would be speculation.

22 Q. Can I just refresh your recollection?

23 MR. KURTZ: Can I approach, your Honor?

24 EXAMINER SEE: Yes.

25 MR. KURTZ: I am going to have the

1 witness look at the 2017 PJM annual report which
2 gives PJM at a glance.

3 Q. Do you see the megawatts?

4 A. I do. Approximately 180,000 megawatts.

5 MS. WILLIS: Mr. Kurtz, can I also --

6 MR. KURTZ: Yeah. Sure.

7 MS. WILLIS: -- see that? Thank you. We
8 appreciate that. Okay.

9 Q. What about the -- the -- the annual
10 energy?

11 A. This says 773,522 gigawatt-hours.

12 Q. Okay. Thank you.

13 By the way -- oh, and by the way, earlier
14 in your cross-examination with Mr. Mendoza, you used
15 the term "400 megawatts," but actually this is the
16 900-megawatt generic case and you use "900 megawatts"
17 throughout your testimony; is that correct?

18 A. For the generic case. My understanding
19 is that the capacity for the two solar projects
20 discussed is 400 megawatts in total.

21 Q. Right, but 400 megawatts generic solar
22 and 500 megawatts --

23 A. Wind.

24 Q. -- generic wind. Right. Okay. So
25 simple math. The 900 megawatts of generic

1 renewables, divided by the PJM total generating
2 capacity of 180,000 megawatts, is one-half of
3 1 percent?

4 A. That sounds right, yeah.

5 Q. And the energy produced by these generic
6 projects, if you want to take a look it's on the
7 Torpey exhibits, it's page 21 of 47 and 22 of 47, the
8 megawatt-hours from these generic projects, do you
9 know how many megawatt-hours are projected?

10 A. I don't, and I don't have Mr. Torpey's
11 testimony with me.

12 MR. KURTZ: Can I approach and just --

13 A. Or, if you want, you can just tell me.
14 I'll accept what you read, subject to check.

15 Q. Okay. The generic solar is 8 -- this is
16 in year 2021 and it declines, but let's use the
17 biggest number, 813.9 gigawatt hours. And then on
18 page 22 of 47, this is for 250 megawatts of wind,
19 678.9 gigawatt-hours. Can you accept those numbers?

20 A. Sure.

21 Q. We multiply the wind by 2 to get the 500.
22 Would you accept we get 2,171,700 megawatt-hours?

23 A. Subject to check, I accept that.

24 Q. Okay. And would you accept that's 0.3
25 percent of the load on the PJM system?

1 A. I would accept that.

2 Q. Okay. Your testimony is 95 pages long;
3 is that correct?

4 A. It is.

5 Q. Okay. And you summarize your testimony
6 on pages 6 to 14, correct?

7 A. I do.

8 Q. Okay. I just want to go through your
9 summary of your testimony, instead of all 95 pages,
10 but can you turn to page 6. The first page of your
11 summary.

12 A. I'm there.

13 Q. Okay. What I would like to do is -- is
14 simply paraphrase the bullet point beginning on line
15 15. If I paraphrase incorrectly, you can correct me.
16 Your first -- your first summary point is that AEP
17 Ohio is part of PJM, and PJM's most-recent generating
18 reserve margin forecast for its region, that includes
19 Ohio, shows adequate reserves and, therefore, AEP's
20 Application here is not needed to provide adequate
21 generating capacity and energy to consumers.

22 A. That's correct.

23 Q. Okay. "The region," is that the rest of
24 RTO that AEP is located in, or did you mean all
25 13-state PJM?

1 A. I believe when I wrote it, I was not
2 distinguishing between AEP which my understanding is
3 they are considered to be in the RTO rest-of-PJM
4 region versus any specific sub -- sub area that's
5 capacity constrained. My understanding from PJM
6 documents is that AEP's service territory is not in a
7 capacity-constrained portion of PJM.

8 Q. Okay. So when you wrote this, you meant
9 the entire 13-state PJM region?

10 A. That's correct.

11 Q. Okay. 13 states and the District of
12 Columbia. 65 million customers.

13 A. Approximately.

14 Q. Okay. Well, not customers, people
15 served, I guess.

16 A. People.

17 Q. All right. Now, and this capacity
18 surplus that PJM has is expected to continue for at
19 least a short-term, medium-term future?

20 A. Based on my reading of the draft, the
21 latest draft reserve document that I include as an
22 exhibit, it would -- it's expected to continue for
23 some time.

24 Q. Okay. Now, let me ask you this question,
25 Dr. Lesser, if the 13-state PJM region was expected

1 to have a capacity deficit, short of the reserve
2 margin requirements, would your conclusion change?

3 A. Which -- can you be more specific? Which
4 conclusions?

5 Q. The conclusion that AEP has not
6 demonstrated need because PJM has a surplus; would
7 your conclusion change if PJM had a deficit?

8 A. No, Counselor, and the reason it wouldn't
9 change is because you can't separate out need from
10 cost. They are intertwined. And so if -- in other
11 words, if you said that AEP -- I mean, it might be
12 that AEP, even if PJM was capacity deficient, AEP had
13 sufficient resources to meet its SSO load obligation
14 or -- well, AEP doesn't have load obligations. It
15 might be the case that there were no specific load
16 obligations for AEP itself.

17 However, even if there was a deficit, you
18 would not say there is a need for generation --
19 specific generic -- generation, whether it's a
20 specific project or whether it's generic, without
21 considering the costs. And so my testimony, in large
22 measure, addressed the costs of the proposed
23 projects.

24 Q. But your first bullet point here is about
25 supply and demand, adequate generating capacity.

1 This first summary point doesn't get into the cost.
2 It just says PJM has enough capacity resources, more
3 than enough to meet need, the demand and, therefore,
4 the need has not been proven; isn't that correct?
5 You address cost elsewhere, extensively, but not in
6 this bullet point.

7 A. But again, under resource planning, you
8 cannot divorce planning for demand from cost
9 because -- because the cost is a function of -- is a
10 determinant of total demand.

11 Q. Okay. So walk me through it then. The
12 next base residual auction is in May of this year,
13 correct?

14 A. I believe so, yes.

15 Q. Okay. Let's assume that there's a
16 deficit within the PJM market. Are you saying that
17 at that point the Ohio Commission may have legal
18 authority to step in and provide -- provide the
19 reserves for the 13-state PJM region?

20 MS. BOJKO: Objection.

21 MR. OLIKER: Objection. I believe the
22 prior question and even the answer is assuming a fact
23 not in evidence and also misstates the current PJM
24 auction schedule which is not in May.

25 MR. KURTZ: Whenever the next PJM auction

1 schedule is, how would --

2 EXAMINER SEE: Just a minute, Mr. Kurtz.

3 MR. KURTZ: Okay.

4 EXAMINER SEE: Ms. Willis.

5 MS. WILLIS: I think he asked the witness
6 a legal question, and Dr. Lesser is an expert in many
7 areas, he is certainly not a legal expert. He is not
8 an attorney.

9 MR. KURTZ: Well, he testifies on need.
10 I'll rephrase.

11 EXAMINER SEE: Thank you.

12 Q. (By Mr. Kurtz) Let's assume in the next
13 PJM auction, whenever it occurs, that will address
14 capacity needs three years out for one year, correct?

15 A. I believe that's correct.

16 Q. So let's assume that there is a capacity
17 shortfall in the PJM auction. How -- under what
18 circumstances, explain it to me, how AEP could come
19 in and say to the Ohio Commission, under this
20 statute, that we have a need to meet the generating
21 resources of the 13 PJM -- 13-state PJM region?

22 MR. OLIKER: Your Honor, I object. The
23 question, I don't know if it's capable of being
24 answered. I don't know what a capacity shortfall is
25 in the PJM auction.

1 MR. KURTZ: Well, I'll be a little --
2 I'll walk it slow.

3 Q. (By Mr. Kurtz) Assume a 900-megawatt
4 capacity deficit in the next PJM auction. 900
5 megawatts below the planning reserve margin. How
6 would the Ohio Commission, under this statute,
7 address the needs for the 13-state PJM region?
8 Explain how AEP could make its case.

9 A. Counselor, I apologize. I don't
10 understand when you say the PJM whole -- capacity
11 auction and its -- and the market prices are such
12 that despite prices going up, there's still a
13 shortage of capacity, even though the market is
14 designed to address to make sure there is enough
15 capacity. So somehow you are saying the PJM capacity
16 market doesn't work. That's my assumption I think
17 you're making.

18 Q. No. I am trying to -- you're saying
19 because there is a surplus of capacity in the
20 13-state PJM region, AEP has not shown a resource
21 planning need. Flip it around. Assume there is a
22 resource deficit in the PJM market, would that
23 justify the Ohio Commission finding -- making a need
24 finding?

25 A. Apply -- well, first, I am not an

1 attorney and I can't speak for the Commission. I'll
2 let your Honors speak for yourselves on that.
3 Without more facts about finding a need for these
4 projects, again, because you can't divorce need from
5 cost, simply observing that somehow the PJM capacity
6 market failed to provide sufficient reserves would
7 not, in my -- under my plain reading of
8 4928.143(B)(2)(c), say that, aha, there is a need for
9 these specific projects.

10 Q. I agree with you. So if there is a
11 surplus or a deficit, the Commission could not make a
12 need finding under this statute. That's -- that's
13 what you just said?

14 A. Based on your -- based on your
15 hypothetical, I don't know -- again, I don't know
16 what the Commission could -- the Commission can find
17 whatever it decides to find. My testimony, again, is
18 as I read the plain language of 4928.143(B)(2)(c),
19 there is no need for these projects.

20 Q. Okay. Do you understand that it is the
21 Commission's job to give effect to all of the
22 statutes that govern the Commission?

23 A. I'm not sure what you mean by "give
24 effect."

25 Q. Not create an interpretation of a statute

1 which renders the statute a nullity.

2 MS. WILLIS: Your Honor, I object. We're
3 getting into legal questions, statutory
4 interpretation.

5 MR. KURTZ: I will withdraw that
6 question.

7 MS. WILLIS: Thank you.

8 Q. (By Mr. Kurtz) Under what circumstances
9 in your mind, not as a lawyer, under what
10 circumstances could the Commission make a finding of
11 need under this statute?

12 A. Well, under my nonlegal interpretation,
13 if the Commission found that the statute met -- if
14 the facilities were being owned or operated by, in
15 this case, AEP, which my understanding is they won't
16 be; and no surcharge shall be authorized based on
17 resource planning projections submitted by the
18 electric distribution utility, that would be AEP; and
19 if the -- the output was being dedicated to Ohio
20 consumers, which in this case AEP is not doing; you
21 know, I -- if it met all the statutory requirements,
22 then I would assume the Commission could, you know,
23 approve it subject to other facts that were relevant
24 that the Commission decided were relevant.

25 Q. Assume -- assume that we know with

1 certainty that the 900 megawatts of generic
2 generation would absolutely result in a cost benefit
3 for consumers and would absolutely result in more
4 stable pricing; with those assumptions, would you
5 agree that AEP would have established need?

6 A. No.

7 Q. Even if it would help consumers by
8 lowering prices?

9 A. If it hasn't met -- no, because subsidies
10 are -- have an adverse impact on competitive markets.
11 Ohio has a competitive generation market.

12 Q. Okay.

13 A. If you introduce subsidies, what you are
14 likely to do is you are going to upset that
15 competitive market and, in the long run, that will
16 harm consumers.

17 Q. You understand that the Ohio Commission's
18 job is to look out for Ohio consumers, not for the
19 13-state PJM region?

20 A. That's my understanding that the Ohio --
21 the PUCO does not have statutory authority over other
22 states or over PJM.

23 Q. Okay. Let's go to the next bullet point.
24 Again, let me paraphrase, that AEP has admitted that
25 they have enough renewable energy certificates to

1 meet the RPS standard in Ohio, therefore, it has not
2 met need through that rationale as well. I am on
3 page 7.

4 A. Yeah.

5 Q. Is that a fair paraphrasing?

6 A. Yes.

7 Q. Okay. Well, on this point, you, AEP, and
8 Staff all agree on that; isn't that correct? There
9 is no controversy over this point?

10 A. As far as I know, but in this hearing,
11 who knows.

12 Q. Okay. Next bullet point, okay, this is a
13 long bullet point that runs on for three pages but
14 this is your criticism of the economic benefit
15 analysis by AEP; is that correct?

16 A. That's correct.

17 Q. Okay. And you list six -- six?

18 EXAMINER SEE: Mr. Kurtz --

19 MR. KURTZ: I'm sorry.

20 EXAMINER SEE: I will remind you that
21 when you are referring to page 8 that there is a
22 motion to strike that was granted pursuant to the
23 entry issued on January -- January 14.

24 MS. WILLIS: Your Honor, would that be
25 corrected, "motion to defer"?

1 EXAMINER SEE: Motion to defer.

2 MR. KURTZ: I'm sorry. I don't know what
3 was deferred on this page.

4 MR. NOURSE: Lines 3 through the end,
5 including the footnote on page 8.

6 MR. KURTZ: Oh, 3 through the end
7 including the footnote.

8 MR. NOURSE: Through page 9 at line 12.

9 MR. KURTZ: Well, I didn't know that, and
10 I had a lot of good questions, but I'll move on.

11 MS. WILLIS: You can ask those if you
12 like, Mr. Kurtz.

13 MR. KURTZ: What's that?

14 MS. WILLIS: I said you are welcome to
15 ask those.

16 MR. KURTZ: I would like to, but I guess
17 I won't.

18 EXAMINER SEE: Let's keep it moving.

19 MR. KURTZ: Okay.

20 Q. (By Mr. Kurtz) Now, then let's go to page
21 9, line 14. You're criticizing AEP's energy
22 independence argument that Ohio is a net importer of
23 power and it should -- and AEP says it should be an
24 exporter and this is an invalid economic argument.
25 Is that a fair summarization of that bullet point?

1 A. I don't -- well, in fairness to AEP, I
2 don't believe they testified that they should be an
3 electric exporter. I think they used the term
4 "energy independence."

5 Q. Okay. What you say here is they are
6 missing the point because AEP's customers get
7 benefits from the energy markets in PJM and that's
8 what really matters; is that correct?

9 A. Well, the whole point is that the entire
10 concept of being electric energy independent is
11 contrary to the entire purpose of PJM which is to, as
12 an integrated market, provides customers with lower
13 cost and greater reliability than if every state or
14 every utility had separate markets.

15 The other point was, as I described in my
16 testimony, the concept of trying to -- of somehow it
17 being adverse to import electricity by a state is
18 simply a silly concept that denies comparative
19 advantage.

20 Q. Okay. Do you agree that the two are not
21 mutually exclusive, meaning that Ohio consumers can
22 enjoy the benefits and the competitiveness of PJM and
23 build generation in Ohio?

24 A. There's nothing -- competitive generators
25 build generation in Ohio. There's nothing -- if I

1 understand your question, you are asking whether, you
2 know, does being a member of PJM imply that no
3 generating capacity should be built in Ohio. If
4 that's your question.

5 Q. Let me ask it a different way.

6 Let's assume AEP is going to build
7 900 megawatts of renewable generation somewhere in
8 its load zone. Would Ohio be better off if that was
9 built in Indiana or Ohio?

10 A. What do you mean by "better off"?

11 Q. Jobs, property tax revenues, school tax
12 revenue, I mean, the effect on PJM would be the same
13 because we're -- PJM market would be the same
14 unconstrained zone. We would get the same benefits
15 if the wind was built in Indiana as we would -- and
16 solar, if it was built in Ohio, but "better off"
17 meaning wouldn't Ohio also get property taxes, jobs,
18 and school taxes?

19 A. Well, it depends on how the projects are
20 financed. If it's built competitively by AEP's
21 competitive generation subsidiary, or it's built
22 directly by AEP renewables. You know, as -- as my
23 testimony states, I have no objection to that at all.

24 Q. Okay. Let's go to the next bullet point.
25 You say the hedge benefits are speculative and

1 insignificant. And you list four salient facts to
2 demonstrate why the hedge argument is invalid; is
3 that fair?

4 A. That's correct.

5 Q. Okay. The first one which was line 10 --
6 excuse me -- page 10, line 19. First, hedging is a
7 form of insurance. All insurance has a net expected
8 cost; otherwise, insurers would go out of business.
9 AEP has not demonstrated that the expected benefits
10 of hedging are greater than the expected costs of
11 hedging. Did I read that basically correct?

12 A. Yes.

13 Q. Now, AEP has put on at least prima facie
14 testimony that these 900 megawatts, really only
15 650 megawatts, would provide net present value
16 economic benefits to consumers of \$173 million. I
17 know you disagree with their analysis, but they have
18 shown that the cost is less than the benefit.

19 A. I don't know what your question is,
20 Counselor.

21 Q. Well, you said AEP hasn't shown that the
22 cost of this hedge is less than the expected benefit.
23 But they have put on evidence that these 650
24 megawatts of renewable would provide a net benefit to
25 consumers of \$173 million.

1 MS. BOJKO: Objection, your Honor. I
2 object to the form of the question. It
3 mischaracterizes the alleged evidence that AEP has
4 put on. I think that those kind of conclusions are
5 for the Commission to decide, not Mr. Kurtz.

6 MR. KURTZ: I was -- it's been throughout
7 this entire case, page 19 of 47, \$31 million LMP
8 benefits, \$88 million net present value benefits from
9 the solar, and \$54 million net present value benefits
10 from the wind. I mean, they've put that case on to
11 show that this project -- that the cost of the
12 insurance is less than the value. I mean, haven't
13 they -- I know you don't agree with it, but they put
14 on that case.

15 MS. BOJKO: Objection, your Honor. I
16 think there is disagreement on what AEP may or may
17 not have put on or demonstrated. Mr. Kurtz is not
18 including in his commentary such things that
19 intervenors raised as costs that are not included in
20 the AEP's analysis or different scenarios or
21 different capacity factors. So I think it's a bit
22 misleading to say that AEP has, in fact, put on such
23 evidence when we don't believe they have.

24 MR. KURTZ: It's not misleading. That's
25 Mr. Torpey's entire testimony. I am not saying that

1 Dr. Lesser agrees. But this is AEP's evidence.

2 MS. WILLIS: Is there a question pending?

3 EXAMINER SEE: Yeah.

4 Q. (By Mr. Kurtz) Don't you agree that AEP
5 at least says that the value of this insurance policy
6 is \$173 million more than the cost?

7 A. No, I don't.

8 Q. Okay. You disagree that that's AEP's
9 case?

10 A. I disagree that AEP is -- has said
11 there's 173 --

12 Q. Yes.

13 A. -- million dollars of hedging benefits.
14 I don't think that's the case. I don't recall
15 reading that testimony from AEP but perhaps you can
16 ask an AEP witness that.

17 Q. Let me ask you this: You equate -- well,
18 this is -- you're saying this is an insurance policy
19 and AEP hasn't shown it's worth the money. Because
20 otherwise insurance companies --

21 A. No.

22 Q. I'm sorry. Answer that question.

23 A. All insurance has a net expected cost
24 because otherwise insurance companies would go out of
25 business. That's what I'm saying. AEP talks about

1 hedging benefits associated with these projects.
2 AEP, as far as I know, did not quantify these
3 specific hedging benefits. In other words, the
4 benefits to reduce price volatility. I also point
5 out that in a similar case the Commission found
6 that -- I believe it may have been Wyandot -- that
7 the hedge benefits were not shown and were
8 insignificant.

9 Q. You know what, you're right, because
10 Mr. Torpey, on redirect said they didn't quantify the
11 value of the hedge. Their 173 million, the hedge
12 value, would be in addition to that. So let me ask
13 you this question.

14 A. No, I don't think that's -- what you just
15 said, Counselor, is incorrect.

16 Q. We'll skip that.

17 Let me ask you this: Isn't buying
18 insurance sometimes a good idea?

19 A. Well, for the insurance company it's
20 always a good idea.

21 Q. Well, isn't having health insurance a
22 good idea even if you don't get sick?

23 A. It depends on your preferences.

24 Q. Okay. Do you own a house?

25 A. I do. Well, the bank owns it but, yeah.

1 Q. Do you have a fixed-rate mortgage or
2 variable?

3 A. I have a fixed-rate mortgage.

4 Q. Okay. Well, that's a form of hedging,
5 isn't it?

6 A. It is.

7 Q. And most people do because it's a good
8 thing rather than taking the short-term risk that
9 your variable rate will always stay below the fixed
10 price.

11 A. Not everyone does that, Counselor. It
12 just depends. You pay for -- anyone who has a
13 fixed-rate mortgage is paying for that certainly.

14 Q. The State of Ohio sometimes requires
15 people to have insurance; isn't that right? If you
16 drive a car, you have to have a minimum level of
17 insurance.

18 A. I am not familiar with Ohio laws.

19 Q. On your mortgage at your house, doesn't
20 the mortgage holder require you to have fire
21 insurance?

22 A. They do.

23 Q. Okay. Second point here, page 11, line
24 2. AEP customers purchase from marketers, they can
25 contract for offerings that provide hedges against --

1 against price volatility. In other words, can buy a
2 fixed-price product from a CRES marketer.

3 A. Correct.

4 Q. Can you purchase a 20-year hedge from a
5 CRES provider?

6 A. I don't know.

7 Q. Point 3 on line 7 -- okay. The -- the
8 SSO, Standard Service Offer customers use competitive
9 bidding with the use of laddering and that reduces
10 price volatility; is that a fair summarization?

11 A. It is.

12 Q. And that's -- the Commission SSO has been
13 very effective, but are they -- is that mutually
14 exclusive? Can't the Commission have SSO laddering
15 and these REPA contracts?

16 A. Are you asking me a legal question,
17 Counselor?

18 Q. No. You're saying that -- that we don't
19 need this hedge because the SSO pricing is stable
20 already. I am asking you, they're not mutually
21 exclusive. The Commission can still do the SSO
22 auctions the way it does and provide an additional
23 hedge.

24 A. Well, again, I can't tell you what the
25 Commission can or cannot do legally. You know, I

1 suppose if the Commission allows this, and my
2 testimony is they should not, then you would have a
3 case where you had SSO laddering and you had the
4 supposed hedge benefits. But as I point out, these
5 hedge benefits are elusive because they don't take
6 into account all the additional costs that will be
7 associated with the inherent intermittency of solar
8 and wind projects which Ohio customers would then be
9 responsible for. And furthermore, it doesn't take
10 into account the penalty costs under PJM's new
11 capacity market, where if the solar projects are not
12 available when PJM says we need you, there would be
13 penalties to pay and those penalties would be paid by
14 Ohio customers.

15 Q. Let me ask you about the capacity
16 performance penalty. And point four is the
17 intermittency argument, right? Isn't that your
18 fourth point on line 11?

19 A. Correct.

20 Q. But let me ask that: That is the point
21 you were making, right?

22 A. Yes.

23 Q. Okay. But in terms of capacity
24 performance, you understand that AEP applied a
25 5 percent capacity component to its wind? In other

1 words, 250 or 500 megawatts of wind, they only
2 assumed 5 percent of that would bid into the capacity
3 auctions?

4 A. I don't believe that's -- if you're
5 saying they would only bid 12-1/2 megawatts of the
6 250 megawatts into the capacity market auctions, you
7 may be confusing a capacity credit value. I'm not
8 sure.

9 Q. No. That's exactly what they've assumed.
10 12-1/2 megawatts. Row K, page 22 of 47, Exhibit
11 JFT-1.

12 MS. WILLIS: Your Honor, I don't believe
13 Dr. Lesser has that exhibit in front of him. If
14 counselor wants to approach the witness and show the
15 witness that, that would be great.

16 Q. Okay. It's 12-1/2 megawatts.

17 A. No. No, Counselor. If you look at note
18 K, what AEP is doing for this 250-megawatt project is
19 assuming a capacity value of 5 percent.

20 Q. Uh-huh.

21 A. And so they bid in -- essentially what
22 that means is that PJM would recognize 250 megawatts
23 of wind power providing 12-1/2 megawatts of actual
24 capacity.

25 Q. So -- but the capacity performance

1 penalty would be assessed against what they bid in,
2 12-1/2 megawatts.

3 A. That's correct.

4 Q. Okay. So they are assuming very little
5 capacity value. You can see 12-1/2 times the R --
6 the expected RPM price, and there would be
7 correspondingly very little capacity performance
8 risk.

9 A. Compared to what?

10 Q. Compared to if they bid in more than
11 5 percent.

12 A. Counselor, they can't bid in more than 5.
13 They can only bid in as much capacity, ascribe that
14 much installed capacity for purposes of the capacity
15 market auctions, as PJM says. In other words, PJM is
16 not going to say yes, wind is 100-percent available,
17 can't -- they won't allow AEP to do that.

18 Q. Totally agree. There is an equivalent
19 forced outage factor for the fossil units. There are
20 PJM-determined numbers for the renewables. But the
21 point is that they don't ascribe a capacity value of
22 5 percent, PJM doesn't. AEP has put in less than the
23 prescribed PJM values.

24 A. I don't know what PJM's wind capacity
25 factor for specific projects is.

1 Q. Now I want to talk about this fourth
2 point, this intermittency. This is -- okay. Line --
3 page 11, line 11. "Fourth, and most importantly,"
4 AEP ignores inherent intermittency of solar
5 generation, requires costly back-up generation, can
6 lead to additional price volatility. In other words,
7 when solar suddenly is unavailable, more costly
8 additional generation is needed to replace it. And
9 they haven't factored that in. Is that correct?

10 A. Correct.

11 Q. Now, did you -- you're not saying, are
12 you, that additional -- that Ohio consumers have to
13 buy more capacity from PJM -- let me back up.

14 For the amount of capacity that the
15 load-serving entity or an individual customer that's
16 metered is based upon their 5 PLC from the prior
17 year.

18 A. I don't know what the "five PLC" stands
19 for.

20 Q. It's your -- it's your peak at the time
21 of the five PJM summer peaks. That establishes your
22 capacity obligation for the next calendar year. This
23 is not a planning-year thing.

24 A. Okay.

25 Q. Your peak load contribution.

1 A. Okay.

2 Q. Okay. You are not saying that a
3 customer's peak load contribution is increased
4 because the Commission would approve these projects,
5 are you?

6 A. Peak load contribution should be based on
7 demand.

8 Q. That's the point. So you say the costly
9 back-up generation will be required, but that's not
10 something consumers -- don't have to pay for more
11 capacity if the Commission were to approve these
12 projects.

13 A. Well, that's not really true, Counselor,
14 because it depends what the alternative is. If
15 customers -- if the alternative would be, you know,
16 baseload generation of some sort or a new gas turbine
17 which is dispatchable, then the cost would, you know,
18 there would be -- those intermittency costs would not
19 take place and so customers would not have to pay
20 those.

21 Q. Now, did you review the testimony of
22 Mr. Ali?

23 A. I may have read it. I don't recall at
24 this point.

25 Q. Let me ask you, do you know why the Ohio

1 Coal Association has found an interest in this
2 proceeding?

3 MS. WILLIS: Objection.

4 MR. KURTZ: Okay. I will withdraw that.

5 Q. You -- do you understand that when --
6 that when the solar is available or the wind, that
7 the thermal units, the gas and the coal, ramp down
8 because the zero-energy-cost renewables always
9 dispatch first?

10 A. I'm not sure how PJM actually does its
11 dispatch.

12 Q. Okay.

13 A. And, in fact, in California, they have
14 had to tell solar and wind facilities at times to
15 back down. Same with the Bonneville Power
16 Administration.

17 Q. That will be for congestion-type issues,
18 wouldn't it?

19 A. I am not sure.

20 Q. Okay. Are you aware of Dr. -- of
21 Mr. Ali's testimony that -- first of all, are you
22 aware he ran three PROMOD studies to determine the
23 impact on LMP of 650 megawatts of renewables?

24 A. I am aware that he ran some studies. I
25 don't know the exact number.

1 Q. And he said it takes weeks to run each of
2 those PROMOD studies.

3 A. I am somewhat familiar with PROMOD and I
4 wouldn't be surprised.

5 Q. And his testimony was that here is the
6 generation, the thermal generation, the renewables
7 come on, the thermals ramp down across -- not one
8 thermal unit but across PJM and that creates the
9 energy savings for all consumers in the AEP load
10 zone, not just AEP Ohio.

11 A. What's your question?

12 Q. Are you aware of that?

13 A. I would have to look at his testimony
14 again.

15 Q. Your concern seems to be that when the
16 units are "suddenly unavailable" that the thermal
17 units would have to ramp back up to pick up the lost
18 generation when the solars are not producing.

19 A. To deal with intermittent resources, that
20 requires additional reserves to make up for the
21 sudden -- to potential for sudden loss of generation.

22 So, for example, clouds can go by and the
23 output from a large solar facility will suddenly go
24 from say 200 megawatts or whatever the capacity is to
25 zero in a matter of minutes. And so to compensate

1 for that, PJM has to have extra spinning reserve
2 available and frequency reserves in order to make up
3 for that sudden loss of generating capacity. That's
4 costly and consumers pay for it.

5 Q. Well, actually, Mr. Ali testified the
6 spinning reserve would not be affected. This all
7 would be handled within the ramp rates of the various
8 thermal units. Were you aware of that?

9 A. I would have to review his testimony.

10 Q. Okay. Now, this is sort of analogous to
11 your climate exchange discussion with Mr. Mendoza.
12 Do you think that -- that the 900 megawatts of
13 renewables here, which are half a percent of the PJM
14 generating reserves, and three-tenths of 1 percent of
15 the energy usage on the system, do you think that
16 that would have a material effect on the market?

17 A. Define "material effect."

18 Q. Well, you said that if the whole United
19 States did not -- had zero carbon, it would not have
20 a material effect on global climate issues, and I
21 guess I'll use it in the same way. Would it have a
22 material effect on the PJM market? These projects.

23 A. And I'm sorry, Counselor. In terms of
24 what?

25 Q. Okay. In terms of this -- when the --

1 when the renewables are running, it ramps down the
2 thermal, saves energy costs, and consumers benefit.
3 When the renewables are not available and the thermal
4 has to ramp back up, what I mean by "material," would
5 it have a meaningful adverse effect on the PJM
6 market?

7 A. Subsidized generation will have a
8 meaningful adverse impact -- impact on the
9 competitive PJM electric market, that's true.

10 Q. Now, that's -- you haven't tried to
11 quantify that effect, have you?

12 A. The effect of the subsidies?

13 Q. The effect -- the adverse effect on the
14 PJM price volatility when the solar and the other
15 renewables are suddenly not available. You haven't
16 tried to calculate it.

17 A. I have not quantified that cost, no.

18 Q. Okay. So we don't know if it's the
19 equivalent of a bucket of water in a bathtub or a
20 bucket of water in a swimming pool.

21 A. I don't understand your analogy.

22 Q. The analogy being if it's a bucket of
23 water in a swimming pool, it wouldn't be a meaningful
24 impact on consumers.

25 A. It would be a real cost. What you are

1 forgetting is that consumers, in addition to paying
2 the costs for intermittent resources to back those
3 resources up, they would be paying for the contract
4 costs. So simply looking at the effects on the PJM
5 market is insufficient. You have to look at the
6 overall impacts on customers.

7 Q. Are you aware -- have you reviewed, this
8 is IGS Exhibit 2, PJM Renewable Integration Study
9 from March of 2014?

10 A. That's not -- I'm not familiar. I may
11 have at some point. I don't know. I would have to
12 look at the document to know whether I have even seen
13 it.

14 Q. Okay. Let me ask you if you agree with
15 the conclusion of this report. Very first sentence.
16 "The study findings indicate that the PJM system,
17 with adequate transmission expansion and additional
18 regulating reserves, will not have any significant
19 issues operating with up to 30 percent of its energy
20 provided by wind and solar generation."

21 MS. WILLIS: Objection, your Honor.
22 There's no foundation. The witness said he's not
23 even remembering whether he had that report or not.
24 It's not in evidence at this point. So, you know, to
25 take a sentence out of a report I think is -- is not

1 helpful for the record. I would at least if this --
2 if this cross-examination is going to continue, I
3 would ask that Mr. Kurtz show that document to the
4 witness.

5 MR. KURTZ: It is in evidence but I will
6 be happy to show it to the witness.

7 EXAMINER SEE: I am sorry, Mr. Kurtz, as
8 opposed to you -- is there an available copy of IGS 2
9 that the witness can see?

10 MR. NUGENT: I have one.

11 MR. KURTZ: Okay.

12 EXAMINER SEE: Thank you.

13 Q. (By Mr. Kurtz) The portion I read is the
14 "Major Conclusions and Recommendations," page 6. I
15 guess the question is: Do you agree with PJM's
16 conclusion?

17 A. I am not an expert on transmission system
18 modeling, so I can't tell you. I would note that
19 they say the key thing is with adequate transmission
20 expansion and additional regulating reserves. My
21 point on costs of intermittent resources goes
22 directly to additional regulating reserves. You have
23 to have additional reserves and sufficient reserves
24 to maintain frequency voltage within required limits.
25 That's costly.

1 Q. Do you have any idea what the cost of
2 that is versus the LMP savings?

3 A. I do not.

4 Q. Do you see the last bullet point on page
5 7 of the conclusions?

6 A. Same document?

7 Q. Yes.

8 A. I see it.

9 Q. Well, that's okay, Dr. Lesser, if you are
10 not familiar with it. Let me move on from the
11 intermittency issue.

12 Okay. Page 12 of your testimony.

13 A. All right.

14 Q. The Commission's website has lots of
15 fixed-price contracts, fixed-price contracts hedge
16 those marketers' customers against price volatility.
17 But as volatility increases, the cost of hedging
18 increase. So, in other words, I think you are saying
19 the same thing that the -- that the renewables will
20 in -- will cause price volatility in PJM, therefore,
21 making the marketers' costs more expensive and making
22 costs to consumers more expensive. Is that a fair
23 summary?

24 A. That's a fair summary for both marketers
25 and because more intermittent resources increase

1 costs to PJM.

2 Q. So -- but you haven't -- you haven't done
3 any type of analysis to show how much costs increase
4 versus how much energy pricing and cost to consumers
5 go down. We have both effects. I mean, when the
6 renewables are dispatched, the cost of the LMP energy
7 price factors in zero energy costs and prices goes
8 down. You're saying there is a cost when the
9 renewables are suddenly unavailable. Have you done a
10 comparison as to the pros and cons?

11 A. I haven't done that analysis but, again,
12 it's -- that analysis is only a partial analysis
13 because you have to look at the costs to consumers of
14 the resources themselves, not just the PJM impact.
15 Your questions are essentially assuming the consumers
16 gets the solar resource for free, that they don't
17 have to pay for those PPA contracts.

18 Q. No, no. That's a different question.
19 That's the part I wanted to ask you about that was
20 stricken about the six flaws in the Torpey analysis.

21 A. Counselor, that's true of any generic,
22 any generic contract, PPA, you know, you are
23 saying -- you know, AEP customer, you are buying the
24 contract. So you have to pay for the fixed costs,
25 the construction, the fixed O&M, et cetera. So on

1 top of that cost, then you have to add in, well,
2 there is intermittency costs, et cetera. And to your
3 point, there may be some PJM energy savings. So you
4 have got to include it all.

5 Q. Totally agree. Now, we won't get to that
6 unless and until we get to Phase II; isn't that
7 right?

8 A. I'm not sure what exactly is Phase II,
9 but.

10 Q. That's when the actual specific
11 400 megawatts of solar would be addressed.

12 A. Okay.

13 Q. And so, we won't get into costs like debt
14 equivalency, capacity performance penalties and all
15 that, unless and until there is a Phase II.

16 A. Okay.

17 Q. Okay. Page 12, the bullet point on line
18 18, you talk about the flawed customer survey, and
19 the flawed study showing that in-state development
20 will boost the Ohio economy. I don't know a thing
21 about those surveys, so I won't ask anything about
22 that. The flawed study, that's your
23 economic-independence argument that Ohio is part of
24 PJM and it's economically improper to look at just
25 the Ohio benefits?

1 A. No. That was referring to the -- I mean
2 that's certainly one of the flaws of the entire
3 concept of energy -- electric energy independence.
4 The other was the economic study, I briefly reviewed
5 that of -- I don't recall the witness -- the AEP
6 witnesses' names, showing that building these
7 projects would have wide-spread economic benefits to
8 Ohio and also solve things like, you know, gender
9 inequality and solve the opioid epidemic. Those are
10 things that may be real policy issues in Ohio. My
11 understanding is those are somewhat beyond the
12 purview of the PUCO's regulation.

13 Q. Okay. Okay. Next bullet point. Almost
14 done. This is a long summary. Page 13, line 5, you
15 say nothing prevents AEP's competitive generation
16 subsidiary from accepting the risk and taking the
17 reward, et cetera, and that, therefore, what AEP, the
18 utility, is asking for here, is improper.

19 EXAMINER SEE: Is there a question there,
20 Mr. Kurtz?

21 Q. Is that correct? Did I paraphrase
22 correctly?

23 A. Not entirely. Essentially the question
24 is saying that this question goes to the Navigant
25 survey which is, as I have pointed out in my

1 testimony, is severely flawed, suffers from bias.
2 If -- my testimony is if AEP truly believes the
3 result of the Navigant survey and that all customers
4 in Ohio are desperate for renewable generation, then
5 they should be, in fact, building this resource --
6 these proposed solar and wind resources through the
7 competitive generation subsidiary because hundreds of
8 thousands of Ohio customers are going to rush to sign
9 up and they will make a lot of money for their
10 shareholders.

11 The fact that AEP is demanding a
12 nonbypassable surcharge to develop these resources
13 and the fact that if you look at actual customers
14 signed up which, based on public evidence, is
15 approximately 7,500 Ohio customers, versus what AEP
16 is -- the survey is saying that the vast majority
17 wants renewables and is willing to pay extra. Then,
18 again, those things are simply in -- incompatible.

19 Really, it's an issue of what's called
20 stated preference versus revealed preference.
21 Revealed preference is what economists like to rely
22 on because that shows what people actually do, what
23 their actions actually are, versus what they say
24 they -- you know, every -- in other words, if I go
25 to -- if I say gee, I want cleaner air, okay, but I'm

1 driving a 1970 Oldsmobile, well, maybe I don't really
2 want cleaner air because my revealed preference, like
3 the car I'm driving, shows that, you know, I'm
4 driving a high-polluting car versus what I say in a
5 survey. And so I won't get into all the biases in
6 that survey at this point.

7 But, you know, again, if AEP really
8 believes the results of this survey, then it should
9 be busting down the doors to build it on its own and
10 enjoy all the profits from it.

11 Q. Okay. Assuming everything you said is
12 correct, you would agree that this Commission has no
13 jurisdiction over AEP's competitive subsidiary, would
14 you not?

15 MS. WILLIS: Objection. That's a legal
16 question.

17 Q. If you know.

18 EXAMINER SEE: The witness can answer the
19 question with the acknowledgment that he's not an
20 attorney.

21 A. Are you referring to AEP's competitive
22 generation or AEP as a seller as a CRES supplier? I
23 believe the Commission does have some -- some
24 responsibility and oversees who can be a CRES
25 provider and who can't.

1 Q. No, I meant you said AEP's competitive
2 generation subsidiary, AEP Renewables, with a capital
3 R. I assume that's an actual company. If -- isn't
4 it? Assuming that's an actual company, the
5 Commission doesn't have any jurisdiction over -- the
6 Commission only has jurisdiction over utilities.

7 A. That's my understanding. I don't know
8 if -- I believe there is a siting Commission that's
9 separate. I don't think a generation company is
10 allowed in Ohio to simply start constructing a
11 facility without getting some sort of permit saying,
12 yes, you can do this.

13 Q. That's true. That's the Ohio Power
14 Siting Board which is different from the Ohio Public
15 Utilities Commission.

16 A. Okay.

17 Q. By the way, there is no Federal Power
18 Siting Board, is there?

19 A. Sure. It's called the Nuclear Regulatory
20 Commission.

21 Q. Well, okay. For fossil units. There is
22 no Federal Power Siting Board, is there?

23 A. I'm not aware of one but there may be.

24 Q. Do you know why that is?

25 A. I could hazard a guess.

1 Q. Under the Federal Power Act, jurisdiction
2 over generating facilities is a state matter.

3 MS. WILLIS: Objection, your Honor.

4 MR. KURTZ: I will withdraw that
5 question.

6 MS. WILLIS: Thank you.

7 Q. Page 13, line 18, this is your last one.
8 "Finally, AEP is proposing a bypassable Green
9 Tariff." If AEP believes the results of the
10 Navigant, the utility must -- okay. So you're saying
11 that the Green Tariff is relevant to the finding of
12 need, and because they are proposing the Green
13 Tariff, it's evidence that they don't need to build
14 these renewables? Well, you explain to me, you
15 paraphrase what you mean by that.

16 A. Well, again, Counselor, I think it's
17 quite clear if AEP believes the results of the
18 Navigant survey, then the utility must expect that a
19 majority of AEP Ohio's residential and business
20 customers will sign up to purchase renewable energy
21 under that Green -- that voluntary Green Tariff.
22 Obviating a reason for the proposed renewable charge
23 on customers.

24 So, again, I have no objection whatsoever
25 to AEP's competitive generation subsidiary or its

1 renewable subsidiary developing these, however much
2 wind and solar as they want, and then voluntarily
3 selling that to a customer, either SSO customers
4 under a Green Tariff as long as there is no cross
5 subsidies, or through their competitive CRES provider
6 to customers who take competitive generation service.

7 And my testimony again is that, one,
8 there is no need for the project, no -- under the
9 statute 4928.3 -- 4928.143(B)(2)(c) does not meet the
10 need. And if you believe the Navigant survey, then,
11 by all means, AEP should be rushing to the exits to
12 build these on its own and not asking for a
13 nonbypassable surcharge that would be paid by both
14 AEP, all AEP customers, including CRES customers, who
15 are purchasing green energy. Essentially you are
16 going to pay twice.

17 Q. You would agree that the Green Power
18 Tariff and the renewable projects that AEP has asked
19 for are not mutually exclusive; the Commission could
20 approve both.

21 A. Could approve both the Green Tariff and
22 the non -- and the nonbypassable tariff?

23 Q. Yes.

24 A. I suppose they could, yes.

25 MR. KURTZ: That concludes your summary

1 and that ends my cross. Thank you, Dr. Lesser.

2 EXAMINER SEE: Mr. Oliker?

3 MR. OLIKER: As much as I would like to,
4 no, thank you, your Honor.

5 EXAMINER SEE: Ms. Bojko?

6 MS. BOJKO: No, thank you, your Honor.

7 EXAMINER SEE: Mr. Whitt?

8 MR. WHITT: Very briefly, your Honor.

9 - - -

10 CROSS-EXAMINATION

11 By Mr. Whitt:

12 Q. Good afternoon, Dr. Lesser. I am Mark
13 Whitt. I represent Direct Energy which is a CRES
14 provider and also develops solar projects in the
15 unregulated market we'll call it. Your testimony
16 addresses AEP's OVEC facility, doesn't it?

17 A. Its ownership share, yes.

18 Q. And OVEC is a fossil plant, isn't it?

19 A. My understanding is it's two coal-fired
20 plants.

21 Q. And you understand that AEP has a PPA
22 with OVEC; is that correct?

23 A. That's my understanding.

24 Q. What does AEP's decision to have a PPA
25 with OVEC say about AEP's revealed preference in the

1 context of your discussion about stated preferences
2 versus revealed preferences?

3 A. Well, my understanding was that the OVEC
4 contracts were supposed to save Ohio customers money,
5 but based on the testimony of the FirstEnergy
6 witness, that's not the case. FirstEnergy estimated
7 that the -- their share of those contracts would have
8 an above-market value of approximately 250 million.
9 And I extrapolated that base -- comparing their share
10 of 4.9 percent with AEP's approximately 20 percent
11 share and said, well, that equates to approximately 1
12 billion in net present value cost to customers
13 above-market costs.

14 Q. Okay. What I was getting at is you
15 talked about the Navigant survey as well which as
16 presented by AEP would indicate there is a customer
17 preference for renewable energy, yet AEP has a PPA
18 with OVEC for fossil energy. Does that tell you
19 something about whether AEP Ohio is acting
20 consistently with the survey results or AEP's
21 revealed preference versus the stated preference in
22 this proceeding?

23 MR. NOURSE: Your Honor, I object. It's
24 a confusing compound question that I think he is
25 trying to elicit friendly testimony out of this

1 witness and there is obviously nothing hostile about
2 his questioning.

3 EXAMINER SEE: Mr. Whitt, try the
4 question again.

5 Q. (By Mr. Whitt) You understand that part
6 of AEP's case is that it is representing there is a
7 need for more renewable generation because that's
8 what its customers have said; is that correct?

9 A. That's my understanding of what AEP is
10 saying, yes.

11 Q. Okay. Would the -- would those customer
12 survey results suggest that AEP Ohio customers would
13 not approve of the purchase of fossil generation from
14 OVEC?

15 MR. NOURSE: Object, your Honor. I mean,
16 I don't know the relevance of this. Certainly beyond
17 the survey. He is trying to collaterally attack a
18 prior Commission decision that's not being debated in
19 this case. So it's pretty friendly, irrelevant
20 cross.

21 MR. MENDOZA: I would just add, your
22 Honor, none of the supporting witnesses have --
23 excuse me, supporting parties have tried to engage in
24 friendly cross, so I think there should be a
25 consistent rule about that.

1 MR. WHITT: It is not.

2 EXAMINER SEE: Go ahead, Mr. Whitt.

3 MR. WHITT: I am just trying to follow up
4 on questions that had been asked by other counsel,
5 particularly this area of stated versus revealed
6 preference and whether -- what AEP's actions tell us
7 about its preferences, if anything.

8 MR. NOURSE: Again, your Honor, the
9 survey had nothing to do with OVEC. It had nothing
10 to do with validating a historical decision. It goes
11 back decades. So he's trying to extend the survey to
12 something that's way beyond its purpose and try to,
13 you know, bolster his position through this witness's
14 testimony.

15 EXAMINER SEE: The objection is
16 sustained.

17 Q. (By Mr. Whitt) Would it be your
18 understanding that the OVEC facility produces the
19 type of emissions that contribute to global warming
20 that the Sierra Club counsel talked to you about?

21 A. I believe coal plants emit carbon, carbon
22 dioxide, which is labeled as a greenhouse gas, yes.

23 Q. Okay. And, sir, we haven't worked
24 together before, have we?

25 A. I don't recall. No.

1 Q. I don't believe we have either. And so
2 questions have been raised about your independence
3 and a suggestion that there is some bias here. And I
4 don't want -- I don't want to cite a biased witness's
5 testimony in my brief, so let me just ask you: Do
6 you have some axe to grind with the environmental
7 community?

8 MR. MENDOZA: Objection, your Honor.

9 MR. NOURSE: I object.

10 MR. MENDOZA: Clearly he is trying to
11 rehabilitate somebody else's witness, and if OCC
12 would like to do that, they are free, of course. But
13 a friendly -- you know, a party that is aligned with
14 OCC in this case should not be permitted to do that.

15 MS. MOONEY: Not to mention he wouldn't
16 admit to having an axe to grind.

17 MR. NOURSE: The Company concurs in the
18 objection.

19 MR. WHITT: Well, the --

20 EXAMINER SEE: Move on, Mr. Whitt.

21 MR. WHITT: Well, there is a question
22 pending.

23 EXAMINER SEE: The objection is
24 sustained.

25 Q. (By Mr. Whitt) Okay. Sir, why should

1 anybody listen to you?

2 MR. NOURSE: I object.

3 MS. MOONEY: Objection.

4 MS. LEPPLA: Objection, your Honor.

5 MR. WHITT: No. If you are going to
6 attack a witness's credibility, I haven't worked with
7 the gentleman, and I am entitled to explore his bias
8 that's been raised by other people. Is he biased or
9 not? I am asking him if he is. If he can explain to
10 me that he isn't and why we should pay attention to
11 him because other counsel are telling the Commission
12 don't listen to this guy. I want to know, well,
13 should I listen to him? Can I rely on him?

14 MR. NOURSE: I think Mr. Whitt is
15 disregarding your ruling and trying to circumvent
16 your ruling, and clearly it's on the same exact topic
17 that you just sustained the objection.

18 EXAMINER SEE: Move on, Mr. Whitt.

19 MR. WHITT: Okay. No further questions.
20 Thank you, sir.

21 EXAMINER SEE: Ms. Whitfield.

22 MS. WHITFIELD: No, thank you, your
23 Honor.

24 EXAMINER SEE: Mr. Collier? Mr. Stock.

25 MR. STOCK: "Stock." That's all right.

1 No questions.

2 EXAMINER SEE: Mr. Darr?

3 MR. DARR: No questions.

4 EXAMINER SEE: Mr. McNamee?

5 MR. McNAMEE: No questions.

6 EXAMINER SEE: I am assuming, Mr. Nourse,
7 you have some questions?

8 MR. NOURSE: I do. I would estimate at
9 least 20, 30 minutes.

10 EXAMINER SEE: Okay.

11 MR. NOURSE: Might be a good time for a
12 break, your Honor.

13 EXAMINER SEE: Let's take a lunch recess
14 until 1:50. We're off.

15 (Thereupon, at 1:15 p.m., a lunch recess
16 was taken.)

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Wednesday Afternoon Session,
January 23, 2019.

- - -

EXAMINER SEE: Let's go back on the
record.

Mr. Nourse.

MR. NOURSE: Thank you, your Honor.

- - -

JONATHAN A. LESSER, PH.D.

being previously duly sworn, as prescribed by law,
was examined and further testified as follows:

CROSS-EXAMINATION

By Mr. Nourse:

Q. Good afternoon, Dr. Lesser.

A. Good afternoon, Mr. Nourse.

Q. I see in your credentials that you
recently became an adjunct fellow at the Manhattan
Institute.

A. That's correct.

Q. In 2018?

A. Yes.

Q. Okay. And how would you describe the
Manhattan Institute relative to economics and the
intersection of economics and politics?

MS. WILLIS: Objection.

1 EXAMINER SEE: On what basis?

2 MS. WILLIS: Relevance. Perhaps the
3 Manhattan Institute in terms of economics is a fair
4 question, but politics, I don't think this proceeding
5 has anything to do with politics, so I would object
6 on the ground of relevancy.

7 MR. NOURSE: Well, that could be one
8 possible answer the witness could give, your Honor,
9 but I am asking him, since he is the fellow and he
10 listed that in his credentials.

11 EXAMINER SEE: And the witness can answer
12 the question. The objection is overruled.

13 A. Would you mind restating your question,
14 please?

15 Q. Well, let me start here: How would you
16 describe the Manhattan Institute?

17 A. Well, it's an institute for policy
18 research. They do policy research. I'm not sure how
19 else -- I believe they have -- in terms of, say,
20 markets, I believe they're -- they generally advocate
21 ahead of markets --

22 MS. BOJKO: Your Honor, excuse me,
23 could -- the witness is turning towards Mr. Nourse.
24 Could he maybe put the microphone -- microphone -- the
25 microphone near him. Thank you.

1 Q. And when you say "policy research," is
2 that fair to say the focus is public policy?

3 A. I think generally "policy" refers to
4 public policy.

5 Q. Yeah. Thank you. And so what were --
6 what were the criteria that were applied to you to
7 become an adjunct fellow at the Manhattan Institute?

8 A. I don't understand the question.

9 Q. How did you become an adjunct fellow at
10 the -- at the Manhattan Institute?

11 A. Well, I've been asked to prepare studies
12 for them in the past. And in 2018, based on those
13 studies and the favorable reception of those studies
14 and I guess what they believe that they seem to like
15 the work I do, they asked if I would -- they could
16 have a more formal arrangement where I would be an
17 adjunct fellow.

18 Q. And did you submit a body of your work
19 to -- as part of that process of becoming an adjunct
20 fellow?

21 A. No. Other than the work I've done for
22 them which they have.

23 Q. Okay. And now that you're an adjunct
24 fellow at the Manhattan Institute, they have listed
25 some of your publications, I think prior to becoming

1 a fellow as well as since becoming a fellow, on their
2 website, the Manhattan Institute's website, correct?

3 A. Okay. I don't know. I haven't checked
4 their website.

5 MR. NOURSE: Okay. Your Honor, I would
6 like to mark an exhibit. I would mark this AEP Ohio
7 Exhibit 16. It's a printout from the Manhattan
8 Institute's website under the heading of Jonathan A.
9 Lesser.

10 EXAMINER SEE: So marked.

11 (EXHIBIT MARKED FOR IDENTIFICATION.)

12 Q. (By Mr. Nourse) Mr. Lesser, does this
13 look like the -- your listing of publications on the
14 Manhattan Institute website?

15 MS. WILLIS: Your Honor, I would object.
16 I think Dr. Lesser testified he hasn't been to the
17 website or looked at the website so I don't think
18 there is a foundation, correct foundation laid.

19 MR. NOURSE: I don't think he said that,
20 but I asked him if it was part of their website under
21 his name, so I think he can answer that.

22 EXAMINER SEE: You can answer the
23 question, Dr. Lesser.

24 A. Yes, this appears to be a listing of some
25 of my publications.

1 Q. Okay. And these are the publications
2 that the Manhattan Institute has listed on their
3 website associated with your name, correct?

4 A. That's what it would appear, yes.

5 Q. Okay. And do these -- in scanning these
6 articles, which I assume you'll agree were performed
7 or written by you, each one?

8 A. As far as I know.

9 Q. Okay. Is this a fair representation of
10 your recent publications regarding public policy and
11 environmental issues?

12 A. I have published some other things but
13 those are more on regulatory policy.

14 Q. Okay. And these articles, the 18 items
15 that are listed here, address climate change issues,
16 electric vehicle issues, issues regarding pipeline
17 policy which I believe refers to natural gas; is that
18 correct?

19 A. No, that's not entirely correct. These
20 all are economics focused.

21 Q. Right.

22 A. Every one of these articles is economics
23 focused. The -- the policy -- I mean they are also
24 not all on gas pipelines which appear to be -- your
25 question. One of them is, the one -- the last one on

1 the last page.

2 Q. Right.

3 A. But they all focus on costs and benefits.

4 Q. Right.

5 A. So if they are not focused on the science
6 of climate change, they are focused on costs and
7 benefits of policies that are designed to address
8 climate change.

9 Q. Correct. And I apologize if my question
10 was not clear. I was attempting to summarize in a
11 list of topics including EV, including climate
12 change, including gas pipelines, these are various
13 articles that you've written on those topics,
14 correct?

15 A. Correct. Not just op eds, but also
16 detailed research reports.

17 Q. Right. And so your area of expertise
18 relative to the Manhattan Institute website and these
19 collection of articles that you've written relates to
20 applying economic principles to public policy and
21 regulatory matters, right?

22 A. Generally but I'm not -- you know, I'm
23 not limited. They've never told me you must write
24 about X and you should conclude Y. They would never
25 do that.

1 Q. By "they" you are referring to the
2 Manhattan Institute?

3 A. That's correct.

4 Q. And you are considered part of the --
5 well, which group in the Manhattan Institute are you
6 considered part of?

7 A. Well, they have a -- well, I'm not sure.
8 They have I guess you call it an energy, a group of
9 people focused on energy issues. But I know one of
10 them who belongs to that group also writes on labor
11 market.

12 Q. Okay. And so is it fair to say -- let me
13 ask you this, on the -- there's a few articles here
14 about EV or electric vehicles. One is "It's Time to
15 End, Not Mend, Electric Vehicle Subsidies," correct?

16 A. That's right.

17 Q. And another one is "Electric Vehicles -
18 Subsidies for an Environmental Pretender," correct?

19 A. Correct.

20 Q. Another one is "Are Electric Cars Worse
21 for the Environment?"

22 A. Correct.

23 Q. Another one is "Short Circuit: The High
24 Cost of Electric Vehicle Subsidies."

25 A. Correct.

1 Q. Okay. So in any of those articles or in
2 all of those articles, are you concluding that EV
3 technology is not economic or not beneficial from a
4 public policy standpoint and an economic standpoint?

5 A. Well, you'll have to be more specific
6 about when you say "beneficial from a public policy
7 standpoint." What do you mean, Counselor?

8 Q. Yeah. What I am asking is whether you
9 conclude in those articles that the net cost is
10 higher than the net benefits so there's -- it's not
11 beneficial from a cost/benefit standpoint.

12 MS. BOJKO: Objection, your Honor. I
13 think we've gone far down the path of relevancy at
14 this stage. He is asking about electric vehicles.
15 And while I don't think climate change has anything
16 to do with this, I cannot even fathom how electric
17 vehicles have anything to do with AEP's finding of
18 need for renewable energy.

19 MR. NOURSE: Yeah, your Honor. This is
20 just an extension, I am trying not to duplicate, but
21 an extension of the earlier discussion about climate
22 change and how Dr. Lesser, in his economic views and
23 his role at the Manhattan Institute has a particular
24 predisposition against these renewables technologies
25 and that's -- that's what I am asking about.

1 MS. WILLIS: And, your Honor, I would
2 object to the characterization of a predisposition
3 against renewable technologies. I think the record
4 is very clear that Dr. Lesser is looking at it from
5 an economic standpoint and the costs and the benefits
6 of technology and the cost and benefits of renewable
7 that is -- and that in no way indicates a disposition
8 against renewable technologies or electric vehicles
9 or whatever have you.

10 MR. NOURSE: Right. And I think I asked
11 him that question, your Honor, and I just have a
12 couple more to wrap up before I move on.

13 EXAMINER SEE: The objection is
14 overruled.

15 You can answer the question, Dr. Lesser.

16 THE WITNESS: I'm sorry, Counselor, can
17 you repeat the question?

18 MR. NOURSE: Yeah.

19 EXAMINER SEE: Would you like to have it
20 read back, Dr. Lesser?

21 MR. NOURSE: Please.

22 THE WITNESS: Yes, please.

23 (Record read.)

24 A. Those articles found that some of that --
25 the benefits, many of which were expressed in terms

1 of benefits to reductions in climate based on the
2 social cost of carbon, would not accrue to specific
3 in-state residents. For example, the New York
4 articles. So any time you talk about climate change,
5 if you institute -- if say the State of Ohio
6 institutes a policy to address climate because it's
7 global climate change, the vast majority of benefits
8 accrue elsewhere.

9 The studies you are citing looked at
10 electric vehicle -- for example on the electric
11 vehicles, you know, one of the sort of standard
12 assumptions is that electric vehicles reduce
13 pollution. And what my research found based on the
14 overall generation mix in the nation is that, in
15 fact, emissions of particulates, sulfur dioxide and
16 oxides of nitrogen were actually higher than gasoline
17 vehicles. And I was actually quite surprised by that
18 and said this can't be right. And then
19 double-checked the numbers and found, yes, it was.

20 In terms of CO-2, I then looked at
21 analysis of that and I compared it to the proposed
22 Clean Power Plan of what those impacts would be,
23 found that the -- based on the Energy Information
24 Administration projections of electric vehicle sales
25 through 2050 that the greenhouse -- the CO-2

1 reductions associated with electric vehicle sales
2 relative to sales of new gasoline-powered vehicles
3 would be about one-tenth of the amount forecasted
4 through the Clean Power Plan, which I concluded would
5 not have, if you again run the models like the EPA's
6 MAGICC Model, you'll find that the implied
7 temperature change by the year 2100 is in the
8 hundredths or thousandths of a degree. That's not
9 physically measurable.

10 So based on the fact that there was no
11 measurable impact on climate, I conclude that there
12 is no benefits. If I can't measure any impact, you
13 can't say there is billions of dollars of benefits
14 associated with an unmeasurable impact.

15 Q. Okay. And I think a couple of the points
16 you made in there relate to testimony you gave
17 earlier that I wanted to follow-up on. And I think
18 you had the same themes that many of your papers as
19 well as your statement earlier about the AEP Ohio
20 projects. So on -- you had stated earlier, though
21 you are not a climate scientist or an expert in that
22 area, that the proposed 400-megawatt solar projects
23 in Ohio would have no measurable impact on climate
24 change. Do you recall that?

25 A. They would have no measurable impact on

1 world climate, correct.

2 Q. And so of the -- first of all, did you
3 attempt to measure the impact on climate change of
4 400 megawatts of solar in Ohio in any scientific
5 study?

6 A. Did I run the models using EPA's MAGICC
7 Model, the answer is no, I did not. I have looked at
8 much larger impacts such as the Clean Power Plan and,
9 again, those have no measurable impact. Given that
10 you are only talking about 400 megawatts of solar,
11 the impacts on world climate would be far less than
12 say under the Clean Power Plan and, therefore, those
13 would also be unmeasurable.

14 Q. Okay. So when you say they are not
15 measurable, are you saying that within PJM,
16 400 megawatts of solar would not have a measurable
17 impact on carbon emissions? Is that something --

18 A. No, Counselor. Let me clarify. It would
19 have -- you could certainly measure the change in
20 carbon emissions. Excuse me. By comparing those
21 emissions from the solar plants, essentially what you
22 would do is you would run a status quo case, maybe
23 your Mr. Bletzacker or someone has done this, you
24 would run a status quo case assuming the no-solar
25 plants but perhaps some other capacity, an equal

1 amount of capacity, call it natural gas-fired
2 capacity. And then you would run the case where,
3 instead of that, you have the solar facility output.
4 You would then want to look at the intermittency and
5 the additional emissions caused by having to cycle
6 natural gas and coal plants up and down. And you
7 could therefore measure the SN -- essentially develop
8 and measure the impacts of the 400 megawatts of solar
9 on -- in terms of the change in CO-2 emissions which
10 is might be higher or lower, I don't know.

11 But what I am suggesting is that the
12 impact, if you then took that impact and say a change
13 in tons of CO-2 emitted, and you then ran it through
14 the EPA's MAGICC climate model to estimate the impact
15 on global temperature, which is what that model does,
16 you would find that the impact is not measurable.

17 Q. Okay. But you haven't done that exercise
18 you just described, correct?

19 A. Not for these two solar projects because
20 the answer is obviously it would have no impact.

21 Q. And one of the other things you stated
22 earlier in connection with the EV article that I
23 asked you about, but I want to ask you if the same
24 rationale applies here with renewable power
25 resources, was that if a state -- if there's a local

1 effort, like the State of Ohio a policy, to reduce
2 carbon, that that would not have impact -- the
3 benefits of that would occur elsewhere? Did I state
4 that correctly?

5 A. That's right, because it's -- you are
6 addressing global climate change, presumably the
7 benefits would accrue globally, and since Ohio is a
8 small part of the globe, virtually all of the
9 benefits would accrue outside of the state.

10 Q. And does that reflect a policy or a
11 viewpoint on carbon reduction that until, you know,
12 China, India, Russia, commit to carbon reduction,
13 there is no point in anyone in the United States
14 doing so?

15 MS. WILLIS: Objection. Relevance. I
16 think we are getting way out there. It's not the
17 Commission's responsibility or job to ensure a
18 perfect climate in Ohio. It is not within the
19 regulatory jurisdiction of Ohio. And I think we are
20 getting very far afield. We are here to talk about
21 two power plants -- or two renewable projects and
22 Mr. Lesser is giving testimony on the economics of
23 those projects.

24 MR. NOURSE: Your Honor, I've asked him
25 about how he views this -- this concept that he is

1 applying in multiple contexts to the renewable plants
2 in Ohio and how his -- his underlying rationale, you
3 know, go ahead and act globally if you want but it's
4 going to have a benefit elsewhere. This is right on
5 point. I am asking about the renewable projects
6 here.

7 EXAMINER SEE: And the objection is
8 overruled.

9 You can answer the question, Dr. Lesser.

10 THE WITNESS: Would you please reread the
11 question.

12 (Record read.)

13 A. If you're -- Counselor, if -- Counselor,
14 if you are asking whether that -- your question is
15 relate -- relative to the -- the cost and benefits of
16 these two solar projects? I guess I'm -- I'm not
17 following your question relative to these two solar
18 projects.

19 Q. Sure. I was trying to ask you about your
20 statement earlier that I tried to re-paraphrase and
21 you agreed with me that your -- your statement was
22 there's no point in acting locally when the benefits
23 will occur somewhere else in the globe.

24 A. First off, you have mischaracterized my
25 testimony. I never said that. I didn't say -- I

1 said the benefits would accrue globally.

2 Q. Yeah.

3 A. Not locally. Virtually all of the
4 benefits would accrue globally because you are
5 addressing a global issue. That's simply a fact.
6 That has -- I didn't say anything about don't act
7 locally. In my testimony on these projects, I looked
8 at the economics of these projects. When I looked at
9 AEP's own numbers by your own witnesses, and started
10 looking at things like debt equivalency costs, the
11 assumption of carbon tax and how that applies to the
12 benefits, if you look at the fact that your witness
13 assumed despite decreasing generation output from the
14 solar facilities that the capacity would somehow not
15 be reduced which is incorrect, I concluded that once
16 you start removing the speculative benefits and the
17 other costs you intend to charge customers, that the
18 projects are not economic. That's simply -- that's
19 my testimony based on your numbers.

20 Q. I understand. Yeah, I understand. So in
21 your analysis though, you attributed no value, from a
22 policy standpoint, you've not incorporated any
23 consideration of environmental impacts or any
24 intrinsic, whether it's quantitative or not, values
25 associated with carbon reduction, correct?

1 A. I didn't see anything in your witnesses'
2 testimony that valued emissions reductions for these
3 projects.

4 Q. And you have not attributed any value to
5 that.

6 A. I did not do any independent analysis
7 because the total emissions, due to the intermittency
8 issue, could actually be higher.

9 Q. So, again, when you say and you said
10 earlier that the -- the impact of AEP's 400 megawatts
11 of solar project proposal will have no measurable
12 impact on climate change, excuse me, you're -- you're
13 saying that it could globally but it wouldn't --
14 wouldn't in Ohio; is that how you would apply that
15 concept here?

16 A. No. It will have no measurable impact on
17 climate period, ergo it will have no measurable
18 impact on Ohio, ergo there are no climate benefits
19 that will accrue to the State of Ohio.

20 Q. And that -- that is your conclusion with
21 400 megawatts of solar. What about 900 megawatts of
22 a combination of solar and wind?

23 A. That would be my same conclusion that
24 emissions -- that carbon reduction if it -- and it
25 could be -- again, I stress it could be a net

1 increase in carbon because of these projects.

2 Furthermore, by affecting the competitive
3 market for renewable generation through subsidies,
4 AEP could end up discouraging competitive generation.
5 You would end up with less renewable generating
6 resources in total in which case, again, emissions,
7 by your own -- by your own standard, would go up, not
8 benefiting the environment.

9 Q. Sure. And, again, to focus on this line
10 of questioning, I am asking you about the -- the
11 climate benefits, and you're saying 400 is -- is no
12 measurable impact, 900 is no measurable impact.
13 Would you say the same thing for 9,000 megawatts?

14 A. I don't know, Counselor. I haven't run
15 the numbers.

16 Q. Okay. Now, you rely in your testimony
17 on -- part of your JAL Exhibit 3 is testimony from
18 the FirstEnergy Solutions' bankruptcy that we talked
19 about earlier. Do you recall that?

20 A. I do.

21 Q. And this is basically similar to
22 testimony you personally submitted in the AEP Ohio
23 PPA Rider case, a couple years back, correct?

24 A. I don't know. I don't have any other
25 testimony with me, Counselor, so you are going to

1 have to be more specific.

2 Q. Yeah.

3 A. If you want me to answer questions about
4 previous testimony, I would need a copy.

5 Q. Do you recall -- well, I am going to ask
6 you from your memory first. Do you recall whether
7 you filed testimony in AEP Ohio's PPA Rider case that
8 suggested, based on future market projections, that
9 the -- that the proposal would have a net cost and
10 not a net benefit?

11 A. I don't recall -- I don't recall the case
12 and I don't recall the testimony. Again, I would
13 have to just look at the testimony, Counselor.

14 Q. Okay. All right. We'll skip that.

15 Is it -- now, I am asking you
16 economics -- from an economic standpoint which is
17 what you said you focused on, but generally with
18 respect to renewable energy resources, is it your
19 position that economic benefits achieved with
20 renewable energy resources are not worth the cost of
21 deploying those resources?

22 A. Which economic benefits are you referring
23 to?

24 Q. I'm categorically including all benefits
25 that you would include. Have you ever concluded that

1 a renewable energy resource was -- was economically
2 beneficial?

3 A. Define "economically beneficial."

4 Q. I am asking you to use your own standard.

5 A. Counselor, I don't have a standard for
6 that. It's your question. You tell me what you
7 think "economically beneficial" means and I will
8 answer your question.

9 Q. And can you -- can you point me to any
10 piece of testimony or article that you've written
11 that has that conclusion?

12 A. That renewables are economically
13 beneficial?

14 Q. That a renewable energy resource is
15 economically beneficial.

16 A. Well, if it reduces cost, then it would
17 be economically beneficial.

18 Q. Now, do you agree in the context of the
19 PJM market that a 400-megawatt solar farm is
20 primarily an energy play?

21 A. I don't think you build solar energy for
22 capacity, Counselor.

23 Q. Is that a yes?

24 A. That would be a yes.

25 Q. Thank you. That's as close as we come,

1 right? All right.

2 A. You never know. Keep trying.

3 Q. All right. I will.

4 Now, do you agree more specifically that
5 a generation resource can be economical based on
6 energy revenues and without clearing the base
7 residual auction in PJM?

8 A. Is that possible theoretically? Sure.

9 Q. Okay. And that would be driven by one's
10 future view of future market prices? One's current
11 view of future market prices?

12 A. Well, it would be based upon the -- your
13 question was slightly different. It would be based
14 on actual realized prices to determine whether -- if
15 it was economic or not. One could certainly say that
16 based on my projection of future energy prices and
17 the costs of the project, I am going to decide that
18 it's beneficial and then I am going -- you know, a
19 competitive generation supplier would then say it's
20 worth building this project which is entirely
21 different than what your company is proposing which
22 is to force captive customers to subsidize the
23 project and bear all the risks and that's contrary to
24 Ohio policy over the last 20 years.

25 Q. Now, is it your view that -- in the

1 context of a traditional regulatory jurisdiction and
2 an integrated utility, that the risk associated with
3 a new generation resource is on the utility's
4 shareholders?

5 A. Are you talking about a
6 vertically-integrated utility?

7 Q. Yes.

8 A. The risk -- well, let's be more specific
9 about the kinds of risk. Are you talking about cost
10 overruns or performance risk or both?

11 Q. Any and all.

12 A. Cost overruns may be -- well, first off,
13 there is the issue is the utility making a prudent
14 investment decision. If a Commission found that a
15 vertically-integrated utility has made an imprudent
16 decision regarding a generating resource, my
17 understanding is its shareholders would be liable or
18 would have to absorb the cost of that imprudent
19 decision.

20 If you're talking about performance risk
21 or cost overruns that weren't anticipated, that can
22 be hotly debated. The Santee Cooper nuclear plant
23 that was not completed and was involved at the center
24 of a controversy over the Dominion SCANA merger is
25 certainly evidence of that in terms of who gets to

1 pick up the tab.

2 Q. All right. Let's focus my question down
3 then on the scenario where a traditional regulatory
4 jurisdiction finds that the utility's investment is
5 imprudent. It's included in rate base for decades to
6 come and nonbypassable charges. Does that
7 circumstance present risk for the utility
8 shareholder?

9 A. I don't know, Counselor. You are asking
10 me a legal question about what a utility Commission
11 would do. I don't know.

12 Q. No. That was part of my hypothetical.
13 My question I am asking you is purely economic and
14 whether the risk in that example falls to the
15 shareholder of the utility.

16 A. Well, Counselor, your question really
17 can't be answered because you have to say from the
18 perspective of a shareholder, they would ask the
19 question and base their share price, the share price
20 would be based on future cash flows. That would
21 depend on do investors believe that regardless of
22 what happens to this generating resource, will they
23 ever be held responsible for some of the costs such
24 as costs of construction costs, overruns, or
25 nonperformance costs, or penalty costs, they would

1 probably -- well, I don't know. I don't know what
2 shareholders would think and I don't -- and it would
3 really depend on the specifics of the Commission.

4 Q. Okay. So you don't have an opinion on
5 that.

6 A. I do not.

7 Q. Thank you. I knew I would find something
8 you didn't have an opinion on.

9 A. Keep trying.

10 Q. So, again, I'm going to ask you a few
11 questions about the regulatory framework in Ohio. I
12 am not asking you legal questions. And I am not
13 asking you questions about specific projects, so I
14 don't want to get into any of that. The projects
15 that are part of Phase II in these proceedings, okay?
16 You understand my parameter there, Dr. Lesser?

17 A. I do.

18 Q. Thank you.

19 So are you familiar with the hybrid
20 deregulated -- deregulatory construct in Ohio?

21 A. You will have to be more specific.

22 Q. Okay. And when I say "hybrid," I am
23 referring to the combination of market principles and
24 cost-based regulation principles?

25 A. Well, there is certainly that combination

1 in Ohio as in most states.

2 Q. And more specifically for electric
3 distribution utilities like AEP Ohio, the -- there is
4 a choice between a market rate offer and electric
5 security plan; is that your recollection?

6 A. That's my understanding. I believe AEP's
7 distribution costs are fully regulated and that's
8 cost of service regulatory principles.

9 Q. Okay. And so the electric security plan
10 or ESP option, is it your understanding that Ohio
11 utilities like AEP Ohio must provide generation
12 service using market-based options only?

13 A. I think generally the utilities provide
14 power that's been under the Standard Service Offer
15 that's competitively sourced. Whether that precludes
16 them from providing any other generation, I don't
17 know.

18 Q. Okay. Well, you've certainly cited part
19 of the ESP statute several times today. That's a
20 number I think you almost have committed to memory
21 that allows a cost-based generation option as part of
22 an ESP, correct?

23 A. Let's go to the statute. If you will
24 just bear me a minute. So you are referring
25 specifically to 4928.143(B)(2)(c), correct?

1 Q. As -- yes, as an example, since you had
2 mentioned it several times. I am just trying to
3 connect the dots here. Is it your understanding that
4 that subdivision or that provision within the
5 electric security plan statute allows a cost-based
6 generation solution as part of an ESP?

7 A. Under certain conditions, which AEP has
8 not met for these renewables, you're correct.

9 Q. Okay. Now, is it your view that a
10 traditional definition of "resource need" be -- is
11 required, again not a legal question, but just your
12 understanding in that context.

13 A. I guess I'm sorry, Counselor, I am not
14 following the question. Are you asking whether under
15 this statute talks about -- when it talks about
16 "need," you are asking me what does that mean?

17 Q. Let me do it this way, Dr. Lesser. Turn
18 to page 7 of your testimony, starting on line 3. You
19 have a statement "Thus, based on traditional
20 definitions of resource need to provide safe,
21 adequate, and reliable electric service for
22 customers, as reflected in the Ohio law, there is no
23 need," et cetera. Do you see that?

24 A. I do.

25 Q. And so your statement there, which

1 arguably comes very close to a legal conclusion but I
2 know you didn't intend it that way, you were
3 referring to the -- the (B)(2)(c) part of the ESP
4 statute and the "need" concept there, correct?

5 A. That's correct.

6 Q. So you're characterizing that as a
7 traditional definition of "resource need." Am I
8 correct?

9 A. That's a fair statement, yes.

10 Q. Okay. Now, going back to the ESP statute
11 generally, do you know or do you understand that rate
12 stability can be an element or a component of an ESP?

13 A. Are we referring to this subsection or
14 something else?

15 Q. It could be anywhere in the ESP statute
16 but I am just asking your understanding whether rate
17 stability can be part of an ESP.

18 A. I would have to see the entire statute to
19 answer your question.

20 Q. Okay.

21 A. I don't see rate stability discussed in
22 4928.143(B)(2)(c) as part of need.

23 Q. Okay. And you don't know -- you don't
24 know even though you have the statute in front of
25 you, apparently, whether rate stability is discussed

1 anywhere in the ESP statute?

2 A. Well, Counselor, if you would point me to
3 where in this section, I've got it on page 18 and 19
4 of my testimony, where rate stability is referred to.

5 Q. Okay. I am going to take that as I don't
6 know. But let me ask you the next question: Do you
7 agree that whether rate stability is an essential
8 component of an ESP, as is the case for any insurance
9 product, depends on what the price is?

10 A. Do you mean -- do you mean -- let me see
11 if I understand your question. Do you mean that
12 essentially purchasing insurance, the value of the
13 insurance is related to the cost of that insurance?
14 In this case, "insurance" means "rate stability"?

15 Q. Well, again, you've used the insurance
16 analogy in your testimony, the same section of
17 testimony. And so, I am asking you whether rate
18 stability is an essential component of an ESP; it
19 depends on what the price is. Would you agree with
20 that?

21 MS. WILLIS: Objection, your Honor.
22 Counselor for AEP is focusing on rate stability.
23 Rate stability, whether or not it is part of an ESP,
24 is not the issue here. We are dealing with a
25 specific section of the code 4928.143(B)(2)(c) that

1 Dr. Lesser's familiar with and has testified on. Any
2 reference to "rate stability" refers to other
3 sections of the code that are not in play here and
4 are not part of this proceeding. We are not in an
5 ESP proceeding. We are in the forecast proceeding.
6 We are here to determine need. And Dr. Lesser can
7 answer questions on need, but when we get into rate
8 stability and ESPs, we are beyond the scope of his
9 testimony. So I object.

10 MR. NOURSE: A couple of things, your
11 Honor. First of all, the Commission's rules on IRPs
12 talk about rate impacts and, you know, I think that's
13 part of the general debate here, but also the -- the
14 RGR has -- as an outgrowth of the PPA rider and it's
15 actually a combination of -- historically and based
16 on the Commission's Orders -- the multiple provisions
17 in the ESP statute including (B)(2)(d) and,
18 furthermore, this witness has provided testimony in
19 the past on this exact concept, so I am trying to --
20 I am trying to discuss that with him.

21 MS. WILLIS: Your Honor, if I may, the
22 RGR is a Phase II issue. We are in Phase I.

23 MR. NOURSE: Well, your Honor, the issue
24 about the impacts of a proposal on rate stability, I
25 think, is part of -- part of the testimony we filed

1 and some of it relates to the Phase II part of the
2 background and how the RGR was developed and is part
3 of the Commission's IRP rules which, again, I think
4 clearly relate to this phase of the proceeding.

5 But I am really asking him a simple
6 question about whether price is a driver for the
7 no -- for rate stability impacts of an insurance
8 product since he had made the insurance analogy in
9 his testimony on page 9 -- or 10.

10 MS. WILLIS: Again --

11 EXAMINER SEE: The objection is
12 overruled. You can answer the question, Dr. Lesser.
13 Do you need to have it read back?

14 THE WITNESS: I do, your Honor.

15 (Record read.)

16 A. I would agree that achieving rate
17 stability, the benefits of achieving rate stability
18 have to be compared to the costs of achieving rate
19 stability.

20 Q. Okay. And the hedging value of a
21 financial device relates to the net expected costs,
22 would you agree with that?

23 A. Your question is poorly worded.

24 Q. It's quoting your testimony, but go
25 ahead.

1 A. The hedging value is -- the hedging value
2 depends -- you would compare the value of the hedge
3 to the cost of the hedge.

4 Q. And you would --

5 A. A hedge -- all hedges are not inherently
6 beneficial and something to be sought after because
7 they all have a net expected cost.

8 Q. So the expected net cost would drive the
9 value or lack of value for a hedge, correct?

10 A. That's correct.

11 Q. And would you agree that rate stability
12 is related to the value of the hedge, again whether
13 it's a negative or positive value?

14 A. Well, the value of rates, you can hedge
15 a -- if you do a hedge, you can achieve a certain
16 level of rate stability. The question is, is that
17 hedge worth it?

18 Q. Okay. Thank you.

19 Now, Mr. Kurtz had asked you some
20 questions about PJM and -- excuse me, the -- a
21 scenario, an example or hypothetical about where PJM
22 would have a resource inadequacy. Do you recall
23 that?

24 A. I do.

25 Q. And I'll try to follow-up on that.

1 Because I think you said that that scenario would
2 lead to questions about cost?

3 A. No. I said that scenario assumes that
4 the PJM -- he was referring to the capacity market
5 and his hypothetical essentially assumed that the PJM
6 capacity market was not functioning as designed and
7 was not -- and so, PJM could not obtain sufficient
8 capacity in the market to meet its capacity -- or
9 reserve requirements. I see no evidence that the PJM
10 capacity market isn't functioning as designed.

11 Q. Okay. Well --

12 EXAMINER SEE: Could the witness move
13 closer to the microphone.

14 THE WITNESS: I'm sorry.

15 EXAMINER SEE: Sorry about that.

16 Go ahead, Mr. Nourse.

17 MR. NOURSE: No, I'm sorry. Let me start
18 a new hypothetical so I don't extend Mr. Kurtz's
19 hypothetical to the extent it's the same to start out
20 with. I apologize.

21 Q. (By Mr. Nourse) My hypothetical is where
22 PJM has been found -- as a factual matter, just
23 accept this as part of the hypothetical -- that --
24 that there's not -- the auction, specifically the
25 BRA, has not cleared enough capacity to meet the

1 reserve margin and there's a shortfall. Are you with
2 me?

3 A. Yes.

4 Q. Okay. And so far at that point in the
5 hypothetical is that your conclusion that the -- that
6 would necessarily mean PJM is not working as designed
7 or as -- as planned or designed, however, you want to
8 say that?

9 A. That's what I would conclude.

10 Q. Okay. So, in other words, that would not
11 happen, that factual hypothetical would not happen
12 unless there was a failure with the BRA, the base
13 residual auction, for capacity? Is that what you are
14 saying?

15 A. If the capacity market is functioning as
16 it's supposed to, it will incent sufficient
17 generation to meet the reserve requirements PJM sets.

18 Q. Okay. And as long as AEP Ohio is a
19 member of PJM, is it your testimony that there would
20 never be a resource-adequacy-based need for AEP Ohio
21 to add any generation resources?

22 A. No, that's not my testimony.

23 Q. Can you give me an example of where it
24 would occur?

25 A. Well, your hypothetical just assumes that

1 the PJM capacity market isn't working. And so, AEP
2 might -- might -- further extend your hypothetical --
3 AEP, as a load-serving entity, needs to have a
4 certain amount of resource, capacity resources, to
5 meet its reserve requirements. And so your
6 hypothetical is assuming, I presume, AEP has not met
7 that requirement. And, therefore, AEP would have to
8 go out and do something to get the required -- to
9 ensure that it has the required amount of reserves
10 that PJM is telling it it must have. Is that your
11 question?

12 Q. No. Let me ask you to clarify.

13 First of all, when you say "AEP," I am
14 asking only about AEP Ohio. And recognizing that
15 some of the other AEP East operating company
16 affiliates may be fixed-resource-requirement entities
17 in PJM, that is not the case for AEP Ohio. They are
18 not an FRR, correct?

19 A. Correct. I was actually meaning AEP
20 Ohio. I apologize for not being clear.

21 Q. Well, that's okay. But so AEP Ohio, not
22 an FRR entity, is entitled to, as a member and a
23 load-serving entity in PJM, is allowed to rely on the
24 capacity market in PJM to obtain resources for
25 capacity, correct?

1 A. That's correct.

2 Q. And so, I am trying to understand your
3 example where you said it's possible that AEP Ohio
4 could be called upon or mandated to develop its own
5 generation resource if there is a capacity inadequacy
6 at PJM. Is that --

7 A. No, that's not. What I've said is
8 that -- again, this is based on your hypothetical
9 that the PJM capacity market has stopped working as
10 it should. And also on a hypothetical that AEP Ohio
11 does not -- is not meeting its reserve requirement.
12 If AEP Ohio is not meeting its reserve -- or if AEP
13 Ohio is meeting its reserve requirement, even if PJM
14 isn't, then there's no -- AEP Ohio is not required to
15 build capacity to meet overall PJM needs. AEP Ohio
16 is required to have sufficient reserve capacity to
17 meet its -- what PJM says it must have.

18 So your hypothetical, all I am saying is
19 under your hypothetical, if the PJM capacity market
20 was not working and, as a result, AEP Ohio could not
21 obtain sufficient capacity from the market to meet
22 its reserve requirement, then presumably AEP Ohio
23 would then go to the Commission and say we need to
24 build our own generating resources because nothing is
25 forthcoming in the market and we have to meet our

1 reserve requirement.

2 Q. So, again, when you say they couldn't
3 obtain sufficient capacity from the market, I thought
4 we had agreed that as a non-FRR entity, AEP Ohio is
5 entitled to rely on the PJM capacity market to supply
6 capacity resources.

7 A. Counselor, your -- your hypothetical, and
8 I emphasize it is your hypothetical, says the PJM
9 capacity market isn't working. And so you have to
10 have sufficient capacity to serve your load somehow.
11 But under your hypothetical, the PJM capacity market
12 is not working and AEP Ohio doesn't have enough
13 capacity to meet its requirements. It can't -- it
14 can't serve its customers. To do that, AEP Ohio
15 would have to do something. The only "something"
16 would be to go out and obtain or somehow contract for
17 generating resources outside -- and capacity outside
18 of the PJM market.

19 Q. Okay. So let me -- let me give you a new
20 hypothetical just so we are clear on where we come
21 out on these concepts.

22 New hypothetical.

23 AEP Ohio is not an FRR entity. The PJM
24 markets are working to produce adequate resources for
25 capacity. Under those circumstances, is there any

1 possibility that AEP Ohio could show need under your
2 interpretation of need?

3 A. Sure. AEP Ohio could say, based on our
4 forecasts for demand growth, our company needs to --
5 we need to have more capacity reserves. So we either
6 have -- and that's the -- that is the resource
7 planning need. And hence, in that case, AEP Ohio
8 either have to purchase new capacity from the market
9 to meet its reserve requirements or it could
10 certainly, under this statute, it could go to the
11 Commission and say in fact, we can -- and show we can
12 beat the market by building our own generating
13 resources.

14 Q. Okay. To clarify your answer, when you
15 say the "capacity reserves," let me try to make it
16 more specific. Is your example where let's say PJM
17 has a capacity reserve requirement of 16-percent
18 reserve margin, and Ohio determines there should be
19 20-percent reserve margin so, therefore, that
20 difference can be -- there could be a need for that?
21 Is that your example?

22 A. I'm sorry, AEP Ohio has determined it has
23 that 20 percent?

24 Q. No, the PUCO has determined that. I am
25 trying to clarify your example.

1 A. No. My -- based on your hypothetical and
2 my interpretation of your hypothetical is that AEP
3 Ohio does not have sufficient reserve capacity to
4 meet its required reserves set by PJM.

5 Q. So even though PJM has adequate
6 resources, and even though AEP Ohio is able to rely
7 on the PJM capacity resources, your answer is that
8 there would be a scenario where AEP Ohio cannot
9 access adequate capacity resources in that context?

10 MS. WILLIS: Your Honor, could I have a
11 clarification? Are we still talking about the
12 hypothetical that Mr. Nourse has posed?

13 MR. NOURSE: It's the new hypothetical,
14 yep.

15 EXAMINER SEE: You can answer the
16 question.

17 A. Under your hypothetical, Mr. Nourse,
18 you've said that AEP Ohio now has adequate capacity.
19 PJM has adequate capacity. So I'm not sure what your
20 hypothetical is getting to.

21 Q. I was trying to clarify your answer,
22 Dr. Lesser, but we'll let the record speak for
23 itself.

24 MR. NOURSE: That's all I have. Thank
25 you, Dr. Lesser.

1 EXAMINER SEE: Ms. Willis, any redirect?

2 MS. WILLIS: Your Honor, if we could have
3 just a couple of minutes, that would be appreciated.

4 EXAMINER SEE: Certainly.

5 (Discussion off the record.)

6 EXAMINER SEE: Let's go back on the
7 record.

8 MS. WILLIS: Thank you, your Honor.

9 - - -

10 REDIRECT EXAMINATION

11 By Ms. Willis:

12 Q. Dr. Lesser, do you recall, earlier today,
13 a series of questions from the Sierra Club counsel
14 and a series of questions from the counsel from AEP
15 with respect to an alleged bias that you may have
16 against climate change and/or renewables or green
17 energy?

18 A. I recall those, yes.

19 Q. Is there a reason for the PUCO to
20 discount your testimony on account of any alleged
21 bias you may have with regard to climate change
22 and/or renewables?

23 A. No. My testimony has nothing to do with
24 climate change. It's strictly economic testimony
25 based on the costs and benefits that were analyses

1 prepared by AEP itself. The only mention I have of,
2 for example, carbon taxes, which was brought up, was
3 the fact that AEP assumes a carbon tax is enacted by
4 Congress. The carbon tax, as shown in my testimony,
5 has a present value benefit of 42 million for tax
6 that does not exist. And the prospects of such a
7 tax, in my view right now, don't appear very likely.
8 So AEP is assuming \$42 million of benefits for these
9 projects that it's not a known and measurable
10 benefit.

11 Q. And were there any aspects of your
12 testimony other than the carbon tax assumption that
13 dealt with climate change?

14 A. None whatsoever.

15 Q. Now, you answered or you were posed a
16 number of hypotheticals, Dr. Lesser, from not only
17 the Company counsel but from Mr. Kurtz and those were
18 hypotheticals about market failures for -- on behalf
19 of PJM. Do you recall those questions?

20 A. I do.

21 Q. And do you have an opinion, Dr. Lesser,
22 about whether or not the PJM market has provided
23 adequate generating capacity for AEP Ohio customers?

24 A. I do. PJM -- the PJM capacity market has
25 been working. It has been providing sufficient

1 capacity from the marketplace to meet all the reserve
2 requirements. It's obvious from the data and there's
3 nothing to indicate that the PJM capacity market will
4 not work.

5 Q. Now, you also were posed a hypothetical
6 or a number of hypotheticals by Mr. Nourse with
7 respect to market failures and whether or not the --
8 your view of the statutory need would allow AEP to
9 address those market failures by operating or owning
10 resources for customers. Do you have an opinion as
11 to whether or not if there were market failures, the
12 statute would allow AEP to own or operate resources
13 including renewable generation resources?

14 A. Yes. If you assume that the PJM market
15 has failed and AEP Ohio needs to -- needs generation
16 to meet -- to serve its customers, then, of course,
17 it's going to be -- as far as I'm concerned, under
18 the statute, AEP would be allowed to build generating
19 resources or somehow acquire them outside of the PJM
20 capacity market to serve the needs of its customers;
21 to assume otherwise, that would just be crazy.

22 MS. WILLIS: That's all the questions I
23 have. Thank you, Dr. Lesser.

24 EXAMINER SEE: Any recross, Mr. Dove?

25 MR. DOVE: No, your Honor, thank you.

1 EXAMINER SEE: Mr. Mendoza?

2 MR. MENDOZA: Briefly, your Honor.

3 - - -

4 RECROSS-EXAMINATION

5 By Mr. Mendoza:

6 Q. Dr. Lesser, do you recall the question
7 from your -- your counselor about the carbon tax. I
8 think you said something along the lines you -- I
9 don't know the exact words you used, but you didn't
10 expect there to be a carbon tax?

11 A. As my testimony discusses, Counselor, I
12 said the current prospects for Congress enacting a
13 nationwide carbon tax, it seemed to be -- that seems
14 to be a low probability in the next few years. Of
15 course, that can change.

16 Q. Okay. In your line of work, do you issue
17 predictions about who is going to win elections?

18 A. Do I?

19 Q. Yeah.

20 A. I am not in the election forecasting
21 business.

22 Q. And there is a presidential election in
23 2020 and another one in 2024, right?

24 MS. WILLIS: Objection. Relevance.

25 MR. MENDOZA: Do I need to respond? Your

1 Honor, the witness is predicting there won't be a
2 carbon tax and I am trying to inquire about his
3 knowledge about that.

4 A. No, Counselor, that's not what I said.
5 You mischaracterized my testimony. What I've
6 testified in -- if you read my testimony, I said the
7 current prospects are dim, that it doesn't appear
8 that Congress is going to enact a CO-2 tax. Under
9 traditional regulation, which you may not be familiar
10 with it, assuming something that doesn't exist would
11 not be considered to be a known and measurable and,
12 therefore, it wouldn't be allowed in rates. So you
13 wouldn't be collecting for something that doesn't
14 exist.

15 Q. Are you aware of any utility in any
16 vertically-integrated state that doesn't include a
17 carbon price in its integrated resource planning
18 modeling?

19 A. I have not reviewed every utility's
20 integrated resource plan and every integrated -- in
21 every state that has integrated planning. I don't
22 know.

23 Q. Okay. And it's fair to say that the
24 outcome of the 2020 and the 2024 presidential
25 elections could have a major impact on whether there

1 will be a carbon price in the United States, right?

2 A. I have no idea, Counselor. I don't know
3 what the election -- the election is about. It
4 hasn't occurred. It's complete speculation. I have
5 no idea.

6 MR. MENDOZA: Thank you very much, your
7 Honor. No further questions.

8 EXAMINER SEE: Ms. Mooney.

9 MS. MOONEY: No questions.

10 EXAMINER SEE: Ms. Leppla.

11 MS. LEPPLA: No, your Honor.

12 EXAMINER SEE: Mr. Kurtz.

13 MR. KURTZ: Thank you, your Honor. Just
14 very briefly.

15 - - -

16 RE-CROSS-EXAMINATION

17 By Mr. Kurtz:

18 Q. The last redirect from Ms. Willis got
19 into this hypothetical where the PJM capacity market
20 is not working and there is a failure and there is a
21 shortage, the statute would allow AEP to act
22 unilateral -- unilaterally to meet its -- its own
23 part of the shortfall. Is that --

24 A. No.

25 Q. Okay.

1 A. That's not correct.

2 Q. Tell me what is correct.

3 A. The hypothetical was if there is a
4 complete market failure in PJM, and AEP needs
5 generation to meet its customer demand, then I -- I
6 assumed that the Commission would certainly sanction
7 AEP and allow them to develop their own generation or
8 somehow obtain it outside of the PJM capacity market.
9 It's not my understanding that AEP can simply go out
10 and build whatever it wants without any Commission
11 input.

12 Q. No. That's exactly what I want to talk
13 about. Are you aware that under the PJM reliability
14 assurances agreement, the RRA, that AEP Ohio and all
15 RPM entities are required, they have to buy all of
16 their generation needs from PJM?

17 A. I am not aware of that, don't contest it,
18 but since AEP is not an FRR entity or AEP Ohio is not
19 an FRR entity, but the hypothetical, again,
20 Counselor, assuming the PJM capacity market has
21 failed, and so that requirement, in my view, would
22 have little meaning to say you must buy all your
23 capacity from the PJM capacity market when you are
24 also assuming simultaneously that market has
25 completely failed.

1 Q. Well, AEP -- the Commission here could
2 approve AEP Ohio to build 400 megawatts, the 900
3 megawatts, 9,000 megawatts, but all that has to be
4 bid into PJM and then they have to buy back what they
5 need to serve their own load. That's the way the PJM
6 rules work. In other words, the Ohio Commission
7 couldn't say your 5 percent of PJM, AEP Ohio, which
8 they are about, so you can -- we can fix 5 percent of
9 PJM's failure. Do you understand that that's the way
10 the PJM rules work? You are all in or you are all
11 out as an RPM entity?

12 A. If I follow your question, what you seem
13 to be getting at, Counselor, is that somehow
14 4928.143(B)(2)(c) doesn't -- no longer applies.

15 Q. Well, I am actually saying it is
16 irrelevant if you look at need as traditional
17 resource planning for a utility that's an RPM entity
18 within PJM.

19 A. Well, that -- again that's -- no. I
20 disagree. That's based on a hypothetical where the
21 market is not working.

22 MR. KURTZ: Okay. Thank you, Doctor.

23 EXAMINER SEE: Mr. Oliker.

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

25 EXAMINER SEE: Mr. Whitt.

1 MR. WHITT: No questions, your Honor.

2 EXAMINER SEE: Ms. Bojko.

3 MS. BOJKO: No questions.

4 EXAMINER SEE: Ms. Whitfield.

5 MS. WHITFIELD: No questions.

6 EXAMINER SEE: Mr. Stock.

7 MR. STOCK: Nothing.

8 EXAMINER SEE: Mr. Darr.

9 MR. DARR: Very briefly, your Honor, just
10 to clarify something.

11 - - -

12 RE-CROSS-EXAMINATION

13 By Mr. Darr:

14 Q. When you use the term "market failure,"
15 were you defining it as a failure of PJM to meet the
16 capacity requirements for the PJM territory?

17 A. Yes. In the case of the assumed
18 hypothetical posed by Mr. Kurtz and Mr. Nourse
19 separately was that the PJM market, the capacity
20 market which is designed to elicit sufficient
21 capacity to meet PJM reserve requirements, was
22 somehow not working. And hence that was
23 characterized as a market failure. It's a little
24 different than the kind of market failure you would
25 have say in supplying a pure public good.

1 Q. So you were using a very specific
2 definition, within the context of that hypothetical,
3 of what constituted market failure when you used that
4 term?

5 A. Yeah. "Market failure" meaning the
6 market is simply not working the way it's supposed to
7 work when there is indeed a market, as opposed to a
8 case when you have something for a pure public good
9 when there is no market.

10 Q. And are you familiar with the option
11 between a load-serving entity and a party, other than
12 PJM, to enter into bilateral contracts to satisfy
13 capacity requirements?

14 A. Yes, I am.

15 Q. And is that an option under PJM rules?

16 A. I believe it is, yes.

17 MR. DARR: Thank you. Nothing further.

18 EXAMINER SEE: Mr. McNamee.

19 MR. McNAMEE: No questions, your Honor.

20 EXAMINER SEE: Mr. Nourse?

21 MR. NOURSE: Thank you, your Honor.

22 - - -

23 RECROSS-EXAMINATION

24 By Mr. Nourse:

25 Q. A couple more questions, Dr. Lesser,

1 about this PJM market failure hypothetical. So can
2 you tell me specifically the steps that would happen
3 before you concluded there's a complete and total
4 market failure for PJM's capacity market, as a
5 prelude to your one example where AEP Ohio could
6 establish need?

7 A. Well, it would be PJM first determining
8 it, not me.

9 Q. Do you know -- are you talking about the
10 base residual auction, the supplemental auction, any
11 other steps that you can come up with?

12 A. Given your hypothetical, I am assuming
13 the base residual auction and all of the other -- or
14 the follow-up auctions have somehow failed to produce
15 sufficient generating capacity to meet reserve
16 requirements. And as a consequence, again under your
17 hypothetical, AEP Ohio cannot purchase sufficient
18 generation to meet its own reserve requirement as a
19 load-serving entity and so we have a complete failure
20 of the markets. Therefore, AEP has a need to obtain
21 new generating capacity to serve the needs of its
22 customers. So under your hypothetical, that would
23 have been established.

24 And so, AEP needs to go out and do
25 something else to obtain additional generating

1 capacity. And that either could mean building it, I
2 suppose building its own generating capacity,
3 contracting with a specific party for generating
4 capacity, you know, or some other measures.

5 Q. Dr. Lesser, I am asking you about the
6 hypothetical your counsel gave you on redirect. So
7 all the times you mentioned my hypothetical in your
8 answer, does your answer change when I am asking you
9 about the hypothetical that your counsel posed to
10 you?

11 A. Well, now I forget the hypothetical. So
12 are we assuming markets are working?

13 Q. No. I believe your answer on redirect
14 from your counsel was that there is a market failure
15 by PJM and that I think what you clarified since then
16 it's basically a complete and total or catastrophic
17 market failure for PJM's capacity market such that
18 there were no other options and that's the example
19 where you gave that the PUCO could determine AEP Ohio
20 has need to go build resources.

21 A. No, Counselor, you are mischaracterizing
22 what I said because you used the word "catastrophic."
23 I simply said there is a, you know, under your
24 hypothetical, which Ms. Willis was asking me about
25 which is a follow-up on your hypothetical, was based

1 on there is a market failure which I characterize
2 as -- and based on your hypothetical and Mr. Kurtz's
3 hypothetical -- the PJM market is not providing
4 sufficient capacity. And so it's not working -- by
5 "market failure" it is not working as it's intended.

6 Q. And --

7 A. Following up -- let me finish, sir.

8 Q. I will.

9 A. Following up and then on top of that,
10 AEP, in this hypothetical, AEP Ohio does not have
11 sufficient capacity to meet its reserve requirements.
12 And because presumably under this hypothetical AEP
13 Ohio cannot go to the PJM market to satisfy those and
14 so it needs to have some other option and that option
15 would be to build its own generating resources or to
16 contract for them directly from another third party.
17 And that -- because AEP would clearly have a need for
18 new generating resources.

19 Q. And regardless of whose hypothetical it
20 is, it's your testimony, as I understand it, correct
21 me if I am wrong, that there has to be a complete and
22 total capacity market failure before AEP Ohio could
23 possibly establish need before this Commission,
24 correct?

25 A. What do you mean by "complete and total

1 market failure"? I didn't use that -- I did not say
2 that in my testimony. I don't know what you mean.

3 Q. Okay. Well, my first question in this
4 recross was specifically what you meant by "market
5 failure."

6 A. No, sir. You said "catastrophic market
7 failure."

8 Q. No, I didn't in my last -- I am trying to
9 sum. My first question was, when you said "market
10 failure," and that was the one example where there
11 could be need. What specific steps were you talking
12 about. You did say all the auctions fail. And so my
13 follow-up question to that is: Do you know, under
14 PJM procedure, what happens after the auctions fail
15 according to the PJM tariff?

16 A. I do not.

17 Q. Are you familiar with the regulatory
18 backstop feature in the PJM tariff?

19 A. I probably read it, but I couldn't recall
20 it right now.

21 Q. Do you know whether it's a market-based
22 solution or cost-based solution?

23 A. It's likely a cost-based solution because
24 you are assuming the market-based solutions have all
25 failed.

1 Q. So would that also have to fail as part
2 of your capacity failure example?

3 A. It's your hypothetical, Counselor. I
4 don't know what's failed. You're -- you're the ones
5 coming up with a hypothetical that the PJM capacity
6 market is suddenly not working like it should and you
7 can't get the capacity you need out of the market
8 because it's failed. So you tell me what assumptions
9 you want to make about your hypothetical.

10 Q. Dr. Lesser, my questions are all designed
11 to understand the narrow circumstances in which you
12 acknowledge there is a possibility of showing need as
13 AEP Ohio is a member of the PJM market. So on
14 redirect when you said there had to be a market
15 failure, I am asking you now, in addition to the
16 auctions failing to produce adequate capacity, are
17 you also including the regulatory cost-based backstop
18 solution as failing in your example?

19 A. My example is not specific in that -- in
20 that regard, Counselor. I'm simply working off your
21 assumptions that however you define a market failure
22 that PJM -- you can't get adequate capacity from the
23 market which is not the case. There is plenty of
24 capacity. And so there's an alternative and under my
25 nonlegal interpretation of that statute,

1 4928.143(B)(2)(c) would say you would then have a
2 need because AEP Ohio needs to obtain capacity to
3 serve its customers. You would clearly have a need
4 under that statute and so you could go out and
5 develop your own generation or contract for it
6 directly.

7 Q. And sitting here today, you don't have
8 any other scenarios or examples that would lead to a
9 need finding? In this case?

10 A. Counselor, I don't know. You are asking
11 me about various hypothetical scenarios. I am sure
12 there might be other hypothetical scenarios you could
13 come up with. If you would like to come up with
14 those different hypothetical scenarios, please go
15 ahead.

16 Q. No, I wanted to give you a full
17 opportunity to do that.

18 A. No, I would rather have you do that.

19 MR. NOURSE: Thank you. That's all I
20 have, your Honor.

21 EXAMINER SEE: Ms. Willis?

22 MS. WILLIS: Yes, your Honor. Thank you.
23 At this time, I would move for the admission of
24 AEP -- excuse me -- OCC Exhibits 18 and 18A.

25 EXAMINER SEE: Are there any objections

1 to the admission of OCC Exhibit 18, the public
2 version, and 18A, the confidential version?

3 MR. NOURSE: Your Honor, I would just
4 note, and I think we had this discussion at the
5 outset of the hearing when I was asking for direction
6 on how to implement the January 14 Entry regarding
7 the substantial portions of Dr. Lesser's testimony
8 that have been deferred. And I believe, correct me
9 if I am wrong, I asked whether we should work with
10 counsel on creating an alternative exhibit.

11 But I believe we landed on, consistent
12 with other motions to strike and rulings there, since
13 you granted the motion to defer, since our motion
14 included, by line and page and exhibit, all the items
15 that should be deferred, and because that motion was
16 granted, we were going to rely on that to determine
17 all the passages that would be deferred. Am I
18 correct?

19 EXAMINER SEE: That is correct.

20 MR. NOURSE: Subject to that, that was my
21 only clarification about admitting those exhibits.
22 Thank you.

23 EXAMINER SEE: With that, OCC Exhibits 18
24 and 18A are admitted into the record.

25 (EXHIBITS ADMITTED INTO EVIDENCE.)

1 EXAMINER SEE: Mr. Mendoza.

2 MR. MENDOZA: Thank you, your Honor. I
3 move for Sierra Club Exhibits 2 through 9.

4 EXAMINER SEE: Are there any objections
5 to the admission of Sierra Club Exhibits 2 through 9?

6 MS. WILLIS: Your Honor, very briefly.
7 We object on the grounds of relevance.

8 MR. MENDOZA: Your Honor, may I respond?

9 EXAMINER SEE: Briefly.

10 MR. MENDOZA: Briefly. Again, all of
11 these are Dr. Lesser's own writings. Most of them
12 appear in his CV and go to his credentials, his
13 potential bias, and that's clear -- clearly an issue
14 on which the Commission can make a determination.

15 MS. LEPPLA: I will just note, Your
16 Honor, it would be very difficult -- I'm sorry. It
17 would just make the record very unclear if we weren't
18 sure what we were referencing throughout that, and
19 they are statements by a party opponent, so I think
20 it should be admitted as well.

21 EXAMINER SEE: Sierra Club Exhibits 2
22 through 9 are admitted into the record.

23 (EXHIBITS ADMITTED INTO EVIDENCE.)

24 MS. WILLIS: Your Honor, just to keep the
25 record clear and to preserve our rights on appeal, we

1 would proffer the entire Exhibits 18A and 18 for
2 purposes of pursuing issues related to the motion in
3 limine and all the related rulings on relevance.

4 EXAMINER SEE: So noted.

5 MR. NOURSE: And -- sorry, I didn't mean
6 to interrupt. I was going to move for admission of
7 Exhibit 16, AEP Ohio Exhibit 16.

8 EXAMINER SEE: Is there any objection to
9 the admission of AEP Ohio Exhibit 16?

10 MS. WILLIS: Briefly, your Honor.
11 Relevance. We would object.

12 MR. NOURSE: Same answer as with the
13 Sierra Club exhibits, your Honor.

14 EXAMINER SEE: The objection is noted and
15 AEP Exhibit 16 is admitted into the record.

16 (EXHIBIT ADMITTED INTO EVIDENCE.)

17 EXAMINER SEE: Thank you, Dr. Lesser.

18 THE WITNESS: Thank you.

19 MS. LEPPLA: Your Honor, if I could just
20 clarify. Steve, are you talking about the Manhattan
21 Institute article, was that 17? I had that listed as
22 17.

23 MR. NOURSE: It should have been 16.

24 EXAMINER SEE: I have 16.

25 MS. LEPPLA: My fault. Thank you.

1 EXAMINER PARROT: Mr. Whitt, you may call
2 your witness.

3 MR. WHITT: Thank you, your Honor.
4 Direct Energy would call Mr. Frank Lacey.

5 (Witness sworn.)

6 EXAMINER PARROT: Please have a seat.

7 THE WITNESS: Thank you.

8 (EXHIBIT MARKED FOR IDENTIFICATION.)

9 - - -

10 FRANK LACEY

11 being first duly sworn, as prescribed by law, was
12 examined and testified as follows:

13 DIRECT EXAMINATION

14 By Mr. Whitt:

15 Q. Good afternoon, sir. Could you state
16 your full name for the record, please.

17 A. Yes. Frank Lacey, L-a-c-e-y.

18 Q. Sir, do you have in front of you a
19 document that has been marked as Direct Exhibit 2?

20 A. I do.

21 Q. What is that document?

22 A. My direct testimony.

23 Q. And does Direct Exhibit 2 also have
24 attachments F1-1 through -6 with it?

25 A. It does, yes.

1 Q. Do you have any corrections to your
2 testimony?

3 A. I do. I have a few.

4 Q. Okay. Could you point those out, one at
5 a time, by page and line number, please?

6 A. Yes. On page 6, Footnote 3, the actual
7 footnote says "Id. at 1." That should read "Exhibit
8 FL-2 at 1."

9 Q. Thank you, sir.

10 The next correction.

11 A. On page 7, Footnote 4, same vein. We
12 should add "at 4" at the end of that.

13 Q. Thank you.

14 Next?

15 A. On page 12, line 20, the case numbers I
16 think were auto-corrected or my bad handwriting, I'm
17 not sure. "EL-RED" should be "EL-RDR." And
18 "18-1393." It's currently "13-1393."

19 Q. Thank you.

20 Any more corrections?

21 A. Yes. On page 14, and this is the end of
22 it, on 14, line 9, same thing with the docket
23 numbers. It should be "18-1392" and "18-1393."

24 And then that next sentence that begins
25 "The September 2018" and ends with a free-hanging

1 "it," i-t, that should be deleted. That prior
2 sentence is part of the answer in Question 34, part
3 of the answer to Question 34.

4 Q. Okay. So just so the record is clear,
5 the corrections you just identified as corrected,
6 page 14 on line 9, that sentence would end after --
7 the reference to Case No. 18-1393-EL-ATA would
8 complete the answer to Question 36?

9 A. That is correct.

10 Q. Okay.

11 A. Yes.

12 Q. Do you have any other corrections?

13 A. I do not.

14 Q. Subject to the corrections that you've
15 just identified, if I were to ask you the same
16 questions that appear in Direct Exhibit 2 today,
17 would your answers be the same?

18 A. They would, yes.

19 MR. WHITT: Thank you.

20 EXAMINER PARROT: Thank you, Mr. Whitt.
21 Different order.

22 Mr. Healey.

23 MR. HEALEY: I do have just a clarifying
24 question very quickly.

25 EXAMINER PARROT: Okay.

1 - - -

2 CROSS-EXAMINATION

3 By Mr. Healey:

4 Q. Mr. Lacey, can you turn to page 4 of your
5 testimony, please?

6 A. Certainly.

7 Q. And the question starting at line 5,
8 "Does AEP Ohio own generation facilities?" And your
9 answer is no, and then you give an explanation. Do
10 you see that?

11 A. I do, yes.

12 Q. Are you aware of AEP Ohio's interest in
13 the OVEC plants?

14 A. I learned of that today.

15 MR. HEALEY: Thank you. That's all, your
16 Honor.

17 EXAMINER PARROT: Thank you, Mr. Healey.
18 Mr. Oliker.

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

20 EXAMINER SEE: Ms. Whitfield?

21 MS. WHITFIELD: No, thank you, your
22 Honor.

23 EXAMINER SEE: Mr. Stock?

24 MR. STOCK: No questions, your Honor.

25 EXAMINER PARROT: Mr. Darr.

1 MR. DARR: No questions, your Honor.

2 EXAMINER PARROT: Mr. McNamee, jump to
3 you.

4 MR. McNAMEE: No questions.

5 EXAMINER PARROT: Mr. Dove.

6 MR. DOVE: No questions, your Honor.

7 EXAMINER PARROT: Mr. Mendoza.

8 MR. MENDOZA: No questions, your Honor.

9 EXAMINER PARROT: Ms. Mooney.

10 MS. MOONEY: No questions, your Honor.

11 EXAMINER PARROT: Ms. Leppla.

12 MS. LEPPLA: No questions, your Honor.

13 EXAMINER PARROT: Mr. Nourse.

14 Mr. Gallon.

15 MR. KURTZ: Does the Company go last?

16 EXAMINER PARROT: I'm sorry, Mr. Kurtz.

17 Neutral Switzerland. Mr. Kurtz.

18 MR. KURTZ: I still do.

19 EXAMINER PARROT: Sorry.

20 - - -

21 CROSS-EXAMINATION

22 By Mr. Kurtz:

23 Q. Mr. Lacey, would you turn to page 5 of
24 your testimony, please.

25 A. Certainly.

1 Q. Okay. I'm going to do a little bit of
2 reading. At line 7, Question 13, "How does PJM
3 ensure that sufficient capacity exists to meet demand
4 in the region?"

5 "Answer: PJM members, including AEP
6 Ohio, are bound by an Operating Agreement,
7 Reliability Assurance Agreement, and Open Access
8 Transmission Tariff." I can stop right there.

9 Do you know, under the RAA agreement,
10 whether or not an RPM entity like AEP Ohio is
11 required to purchase all of its capacity through the
12 PJM auctions?

13 A. I don't think it's a requirement. They
14 are bilateral contracts for capacity. I think it
15 doesn't make a lot of sense to do that for a variety
16 of reasons but bilateral capacity contracts are a
17 viable option.

18 Q. For an RPM entity?

19 A. I believe so, yes.

20 EXAMINER SEE: Mr. Kurtz, could you use
21 the mic, please?

22 MR. KURTZ: Okay, thank you.

23 Q. I guess the RAA agreement is a tariff,
24 right? It will speak for itself?

25 A. It's a contract, right, that everybody

1 has. It's federally-regulated.

2 Q. It's a FERC-approved tariff?

3 A. It's a FERC-approved agreement.

4 Q. Okay. Let me ask you: If the PJM
5 capacity auction fails to clear enough resources, do
6 you understand the next step, which is what
7 Mr. Nourse asked Dr. Lesser about, is that PJM would
8 acquire cost-based capacity at whatever price
9 necessary to meet the reserves?

10 A. I -- I've actually never researched what
11 happens if the market fails. The market -- the
12 capacity market is structured such that it will take
13 all competitive bids, so it means that -- so if
14 "failure" basically means that there wasn't enough
15 financial incentive in the world for someone to build
16 a power plant in the next three years, I've actually
17 never looked at what happens if that auction fails.

18 Q. "Enough financial incentive in the
19 world." In other words, the price will keep going up
20 until new generation is incented to come on line.

21 A. That is correct.

22 Q. So what do you think the odds are of the
23 PJM markets "failing" three years in advance to
24 supply adequate capacity?

25 A. Based on what criteria? I mean, there

1 are lots of things that could make the PJM market
2 fail.

3 Q. Well, I thought you said they would raise
4 prices up, up, up, and up until they get the required
5 capacity.

6 A. That's the capacity market.

7 Q. Oh, that's what I meant.

8 A. I think the capacity construct, as long
9 as PJM stays intact, I think the capacity construct
10 will work. I think there are things that threaten
11 the PJM construct.

12 Q. Well, as long as the PJM construct stays
13 in place, would you agree that it's almost certain,
14 fairly certain, pretty darn certain that there will
15 be enough capacity?

16 A. I think pretty darn certain that there
17 will be enough capacity.

18 Q. Okay. Will you turn to page 8 of your
19 testimony. Question 19, "Does AEP Ohio's reliance on
20 PJM for capacity planning put Ohio customers at
21 risk?"

22 Answer: "No. AEP Ohio gives no
23 indication that PJM is not up for the task." I'll
24 stop there. What do you mean by "the task?"

25 A. Of ensuring the market, all market

1 participants that there will be enough capacity to
2 serve their needs plus a reserve margin.

3 Q. You go on to say, "Moreover, State of
4 Ohio is not entirely beholden to PJM if unforeseen
5 factors negatively impact wholesale markets or the
6 availability of capacity." The Revised Code allows
7 the Commission to authorize a utility to institute a
8 surcharge for a new generating facility if there is a
9 finding of need based on resource planning? Is that
10 what you state?

11 A. That is, yes.

12 Q. What are some of these unforeseen factors
13 that could negatively impact wholesale markets or the
14 availability of capacity?

15 A. I don't think any of them are short-term.

16 Q. Okay.

17 A. So I don't think any of this is going to
18 happen in the next couple of years. But I think
19 there's some things that are occurring in the market
20 that threaten PJM as a whole, right? I think we
21 passed one a couple years ago with the Supreme Court
22 challenge to FERC 745. I think some of the things,
23 like subsidies that are being requested by coal and
24 nuclear plants, threaten the market. I think FERC's
25 idea, quite frankly, to allow entities to opt out of

1 the capacity market is a death spiral for PJM, not
2 just the capacity market. And so I think -- and I
3 think all that's bad, right?

4 If we go back and look at what happened
5 over time, we don't even have to talk hypotheticals.
6 We can talk about history. The utility -- the
7 vertically-integrated utility model, by all accounts,
8 failed. We moved to an interstate wholesale market.
9 That apparently is working. And now I think these
10 other things, that are interfering with that market,
11 threaten the market.

12 Q. I won't get into -- so you think
13 regulation in Virginia, West Virginia, Indiana,
14 Kentucky, Colorado, all that vertically integrated is
15 a failed system, Florida, Georgia?

16 A. You said it, not me, but I tend to agree,
17 yes.

18 Q. You do. Well, I don't think those states
19 would agree.

20 A. I agree with you they wouldn't agree,
21 but.

22 Q. Now, let's go back to all the things you
23 talked about, the Secretary Perry, the bailout,
24 nuclear, coal, the renewables, the nuclear ZEN
25 legislation in New York and Illinois which has been

1 approved all the way through the circuit courts, the
2 federal circuit courts of appeal. FERC and PJM are
3 struggling with ways to cope with that to avoid the
4 failures --

5 A. I agree.

6 Q. -- you are talking about. Okay.

7 A. They're trying, but I think those things
8 threaten PJM. That's why they are trying to cope
9 with them.

10 Q. In other words -- do you also understand
11 that PJM concurs that it's important to -- to respect
12 the states' abilities to meet their own policy goals
13 within the PJM market?

14 A. Absolutely. Yes.

15 Q. If -- getting back to AEP's Application
16 here. If -- well, if the Commission knew with
17 certainty or if you knew with certainty that the AEP
18 application would absolutely lower costs for
19 consumers and provide additional rate stability,
20 would that satisfy "need" in your opinion?

21 MR. WHITT: Objection.

22 EXAMINER PARROT: Ground?

23 MR. WHITT: It's an incomplete
24 hypothetical and a hypothetical contrary to the
25 record insofar as there have been no assurances or

1 guarantees of anything other than projections.

2 MR. KURTZ: It's a hypothetical.

3 EXAMINER PARROT: Overruled.

4 A. So if I heard your question correctly,
5 you are asking if there was certainty that the AEP
6 proposals would lower rates?

7 Q. Would result in lower rates and
8 additional price stability for consumers, would that
9 satisfy "need" in your opinion?

10 A. No.

11 Q. Even if it was a lot of savings for
12 consumers?

13 A. Right now it's, I think, 60 cents a year
14 is what is in their analysis.

15 Q. 173 million net present value.

16 A. That's 60 cents per customer. That's a
17 big customer, 12,000-kilowatt-hour-a-year customer,
18 60 cents.

19 Q. That kind of cuts both ways, doesn't it?
20 It's not going to be very expensive if they approve
21 it; it's not going to be very beneficial if they
22 approve it.

23 A. They didn't talk about costs, so there is
24 no say that their requested costs won't be much
25 greater than 60 cents a year.

1 Q. Now, before we would know whether it's
2 60-cents-a-year savings or 60-cents-a-year cost or
3 whatever the number is, that's a Phase II issue,
4 isn't it?

5 MR. WHITT: I'll object. It calls for a
6 legal conclusion and it's an opinion that this
7 witness isn't qualified to -- well, his opinion,
8 frankly, on that subject, isn't relevant.

9 EXAMINER PARROT: Mr. Lacey, to the
10 extent you are able to, please answer the question.

11 THE WITNESS: I was going to answer I'm
12 not sure if it's a Phase I or Phase II issue.

13 MR. KURTZ: Okay. Thank you, Mr. Lacey.

14 EXAMINER PARROT: Thank you, Mr. Kurtz.

15 Mr. Gallon, back to you.

16 MR. GALLON: Thank you, your Honor.

17 - - -

18 CROSS-EXAMINATION

19 By Mr. Gallon:

20 Q. Mr. Lacey, you are appearing today on
21 behalf of Direct Energy, LP, correct?

22 A. I am, yes.

23 Q. And on page 1 of your testimony, in your
24 answer to Question 3, you offer some figures
25 regarding solar installations by Direct Energy Solar;

1 is that correct?

2 A. Yes.

3 Q. Direct Energy Solar is a brand of Direct
4 Energy, correct?

5 A. Yes, it is.

6 Q. You are not currently an employee of
7 Direct Energy or any of its affiliates, are you?

8 A. I am not.

9 Q. Direct Energy Services, LLC, is one of
10 Direct Energy's affiliates, correct?

11 A. It is, yes.

12 Q. You were previously an employee of Direct
13 Energy, correct?

14 A. I was, yes.

15 Q. How many positions have you held at
16 Direct Energy or its predecessors?

17 A. Well, its predecessors, I started in the
18 retail world at a company called Strategic Energy
19 which ultimately was absorbed by Direct Energy. I
20 probably had three or four different titles, but I
21 would say one of the titles was kind of do everything
22 that doesn't fit into the box that we've outlined
23 here, so. I've had lots of different
24 responsibilities at the different companies.

25 Q. How many years did you work for Strategic

1 Energy or Direct Energy in total?

2 A. Eight, I think.

3 Q. But you haven't worked for them for about
4 seven to eight years; is that right?

5 A. Correct. I left Direct in 2011.

6 Q. Do you personally know how many solar
7 installations Direct Solar has installed?

8 A. I got this number from their website, so
9 I trust it.

10 Q. Why do you trust it?

11 A. Because I assume they're not putting out
12 false information on their website.

13 Q. What is the basis for that assumption?

14 A. I just assume most corporations that are
15 credible are not putting out false information on
16 their websites.

17 Q. The corporation could be putting a number
18 on its website that is mistaken, could it not?

19 A. Accidents happen certainly. I didn't
20 audit the 9,000.

21 Q. And with regard to the statement that
22 Direct Energy Solar has installed solar installations
23 across 15 states, did you also draw that information
24 from the Direct Energy website?

25 A. I did, yes.

1 Q. And it's equally true you did not audit
2 that statement?

3 A. I did not, correct.

4 Q. You are currently working for a
5 consulting firm, correct?

6 A. Correct.

7 Q. Actually, you created that consulting
8 firm; is that correct?

9 A. I did, yes.

10 Q. And you've had your consulting firm since
11 the fall of 2015?

12 A. Correct.

13 Q. And since the fall of 2015, you presented
14 testimony on behalf of Direct Energy and its
15 affiliates several times?

16 A. I have, yes.

17 Q. Would you agree that it's approximately
18 11 times if you count multiple sets of testimony in
19 the same proceeding?

20 A. I didn't count, but the CV that's in here
21 is very up-to-date.

22 Q. And you've offered testimony, either oral
23 or written, on behalf of Direct Energy and its
24 affiliates several times in 2018, correct?

25 A. Correct, yes.

1 Q. Approximately half a dozen times?

2 A. Again, I didn't count, but that sounds
3 reasonable and the CV is very accurate.

4 Q. And you've also presented testimony on
5 behalf of the Retail Energy Supply Association; is
6 that correct?

7 A. I have, yes.

8 Q. Would you say you've testified on their
9 behalf maybe four times since the fall of 2015?

10 A. Again, same answer. It's been several,
11 but I didn't do the count before I got up here.

12 Q. Direct Energy Services, LLC, is a member
13 of the Retail Energy Supply Association, is it not?

14 A. They are, yes.

15 Q. Since you opened your current consulting
16 firm, have you ever presented testimony on behalf of
17 a regulated electric distribution utility?

18 A. I have not.

19 Q. Your CV and your report indicate that you
20 are also a founding member and the current chairman
21 of the Advanced Energy Management Alliance; is that
22 right?

23 A. That is correct.

24 Q. And the Advanced Energy Management
25 Alliance is a trade association, correct?

1 A. It is, yes.

2 Q. And it's dedicated to advancing market
3 opportunities for demand response and distributed
4 energy resources; is that right?

5 A. Yes.

6 Q. Distributed energy resources would
7 include things like rooftop solar, correct?

8 A. Rooftop solar would be considered a
9 distributed energy resource, yes. There are many
10 others but that would be one of them.

11 Q. And Direct Energy is a member of the
12 Advanced Energy Management Alliance as well.

13 A. They are, yes.

14 Q. If you would turn to Question and Answer
15 in your testimony which is on page 6.

16 A. Okay.

17 Q. Between lines 10 and 15, you reference
18 two current FERC dockets that are considering, you
19 say stakeholders' comments on proposed rules that
20 would allow distributed energy resources to
21 participate in the wholesale energy markets; is that
22 correct?

23 A. That is correct, yes.

24 Q. And those rulemaking dockets have been
25 opened since about 2016; is that correct?

1 A. That is correct.

2 Q. And the Advanced Energy Management
3 Alliance, which is the group you chair, is one of the
4 stakeholders who submitted comments in those dockets;
5 is that correct?

6 A. One of I think thousands but, yes.

7 Q. And, in fact, you've submitted multiple
8 sets of comments, correct?

9 A. We have, yes.

10 Q. And are you aware of any legally-set
11 deadline for completing this rulemaking process?

12 A. Not legally set, no.

13 Q. If we could turn a couple pages in your
14 testimony to Question and Answer 17, so it's page 7,
15 at the bottom of the page, lines 13 through 19, and
16 here we are talking about financial incentives for
17 vertically-integrated utilities under traditional
18 cost-based regulation. Do you see that?

19 A. Yes.

20 Q. And you assert in your -- in your answer
21 to Question 17 that these vertically-integrated
22 utilities built more generation than needed during
23 the '70s and '80s because the utilities didn't care
24 "whether or how often those plants ran" "so long as
25 regulators authorized cost recovery of new generation

1 resources." And I apologize. I mixed the word order
2 up a bit, but that is consistent with your testimony,
3 correct?

4 A. Yes.

5 Q. Mr. Lacey, you graduated from the
6 University of Maryland in 1988, correct?

7 A. I did, yes.

8 Q. That's when you got your Bachelor's
9 Degree, just to be specific.

10 A. Correct.

11 Q. You also have a Graduate Degree?

12 A. I do.

13 Q. So at the beginning of the 1970s, you
14 were approximately 4 years old.

15 A. Without trying to date myself, exactly at
16 the beginning of the 1970s, I was 5.

17 Q. I apologize for making you specify that.
18 So, by the end of the 1980s, you were still in
19 graduate school, correct?

20 A. Correct.

21 Q. So it's fair to say that during the
22 period you are discussing, the 1970s and 1980s, you
23 were not involved in the utility industry in any way.

24 A. But I have been involved in the utility
25 industry since I was in graduate school and including

1 while I was in graduate school and so the history of
2 regulation and the growth of deregulation I've been
3 intimate my entire professional career, so.

4 Q. So these are things you learned about in
5 graduate school and since you graduated, you are
6 saying; is that correct?

7 A. Yeah, I think when I was 5, I wasn't
8 really worried about APCo's rates at my parents'
9 house, yes.

10 Q. I am glad to hear that.

11 A. Yes.

12 Q. So your opinions on construction of
13 generation resources in the 1970s and '80s are not
14 based on firsthand knowledge; is that correct?

15 A. When you say "firsthand knowledge," I am
16 not sure exactly what you mean. They are based on
17 testimony that was presented during restructuring
18 hearings, so I don't know if that's firsthand
19 knowledge or learning it from people who had
20 firsthand knowledge. But it's based on my
21 understanding of the history of deregulation and why
22 deregulation came to be.

23 Q. Let me clarify my statement, or my
24 question then. Your testimony regarding financial
25 incentives for vertically-integrated utilities,

1 regarding construction of generation resources during
2 the 1970s and 1980s, clearly is not based on your
3 firsthand observation during the 1970s and 1980s.

4 A. No. All based on testimony that was
5 presented during the deregulation of the markets.

6 Q. And you, yourself, have never worked for
7 a vertically-integrated utility; is that correct?

8 A. I've never been directly employed by a
9 vertically-integrated utility. I have done
10 consulting. Early in my career I was working for a
11 consulting firm that was helping utilities
12 deregulate. The firm was called Putnam, Hayes &
13 Bartlett. We did stranded asset evaluations. We did
14 rate cases, unbundling cases, all that kind of stuff,
15 so I was -- I was very much in the weeds of
16 deregulation from 1993 on.

17 Q. It says in your CV, Mr. Lacey, that you
18 worked for Putnam, Hayes & Bartlett from 1995 to
19 1998; is that correct?

20 A. That's correct, yeah. Then went to
21 Arthur Andersen and it was the same type of thing,
22 not as in the weeds. It was more operational and
23 trying to operationalize utilities as they were -- as
24 they were unbundling, so what does an unbundled
25 utility look like. So it was doing kind of the

1 ground work at Putnam, Hayes & Bartlett that this --
2 the proceedings, and then, at Arthur Andersen, the
3 implementation.

4 Q. If we could turn again another page, this
5 time to page 8. So look at your response to Question
6 19. In your response to Question 19, you mention and
7 you quote Revised Code 4928.143(B) (2) (c) and
8 (B) (2) (b); is that correct?

9 A. Yes.

10 Q. And that statute includes the words
11 "resource planning projections," correct?

12 A. Correct.

13 Q. And you offer a definition here of
14 resource planning, I believe, in your answer to
15 Question 20 on the next page; is that correct?

16 A. Yes.

17 Q. And throughout your testimony you also
18 offer opinions on whether AEP Ohio has demonstrated
19 need for purposes of Revised Code 4928.143; is that
20 correct?

21 A. I do, yes.

22 Q. And you also offer alternative ways to
23 demonstrate need for purposes of that statute,
24 correct?

25 A. I think I talk about ways to

1 demonstrate -- the way need is demonstrated as
2 opposed to ways to meet need, to meet the statutory
3 standard.

4 Q. Which is another way of saying you offer
5 your opinion on how need should be demonstrated or
6 must be demonstrated under the statute; is that
7 correct?

8 A. No. It's how need is -- is revealed in
9 the market, actually, is what I am saying. There
10 could be an economic need. There could be a legal
11 need. So there are ways -- there are ways -- there
12 are ways to demonstrate need. A want is not a need.
13 I think that's what I was trying to say.

14 Q. So you just, I believe, said that there
15 could be a legal need, there could be an economic
16 need. You're saying there could be different kinds
17 of needs. So "need" can have different meanings in
18 different contexts?

19 A. Yeah. The need manifests itself in
20 different ways.

21 Q. And at risk of asking unnecessary
22 questions, your CV makes clear you don't have a law
23 degree; is that correct?

24 A. I do not have a law degree.

25 Q. And you weren't involved in any way in

1 the drafting or passage of Revised Code 4928.143?

2 A. I was not.

3 Q. You've never been a member of the Ohio
4 legislature.

5 A. I have not.

6 Q. Have you ever been a staff member for a
7 member of the Ohio legislature?

8 A. I have not.

9 Q. Have you ever worked for the Ohio
10 Legislative Service Commission?

11 A. No.

12 Q. Have you ever actually been employed here
13 in Ohio?

14 A. Not -- not -- my employment address was
15 never here in Ohio, no.

16 Q. You're currently living and working out
17 of Pennsylvania; is that correct?

18 A. Correct.

19 Q. You do have some prior experience before
20 the Public Utilities Commission of Ohio, correct?

21 A. I do, yes.

22 Q. But the last time you testified before
23 the PUCO was around 2003. Does that sound right?

24 A. I was going to say '4, but my CV speaks
25 for itself, yes.

1 Q. Mr. Lacey, if we could turn to Question
2 and Answer 39 which you'll find on page 15 of your
3 testimony. And in your answer to Question 39 you
4 reference PJM's interconnection queue; is that
5 correct?

6 A. Yes.

7 Q. And you have a printout of a portion of
8 the PJM interconnection queue attached to your
9 testimony as Exhibit FL-5.

10 A. I do, yes.

11 Q. And that printout shows active items on
12 the PJM interconnection queue for solar generation in
13 the AEP zone; is that correct?

14 A. That is correct.

15 Q. Knowing that you haven't counted the
16 items on this list, would you agree that the number
17 of items on this list is approximately 44?

18 A. I'll accept that.

19 Q. Give or take.

20 A. Give or take, yes.

21 Q. And none of these projects are currently
22 in service, correct?

23 A. No. It in the queue. It's the planning
24 queue.

25 Q. And the final column on Exhibit FL-5

1 lists the projected in-service date for each of these
2 projects, correct?

3 A. I have to go look at that. Hold on one
4 second. I believe so, but let me pull it out. Yes.

5 Q. And you will agree, if you start reading
6 down the projected in-service dates for these
7 projects, that several of them have already passed;
8 is that correct?

9 A. Yeah.

10 Q. So just to look at the first five items
11 on this list, all of them have projected in-service
12 dates of 2017 or 2018; is that correct?

13 A. Yes.

14 Q. If you would take a moment to scan the
15 projected in-service date column on this list, would
16 you agree that about 10 of the 44 projects listed
17 here already passed their projected in-service dates?

18 A. About, yeah.

19 Q. Would you agree that the fact that a
20 project is on the PJM interconnection queue does not
21 mean that the project will ever actually operate?

22 A. Without a doubt, right. I think
23 there's -- there is no guarantee that the AEP planned
24 resources will ever operate either, so it's a long
25 process to get something planned, sited, up and

1 running, built, and there are no guarantees of any of
2 it, but it's a good market indicator that there are
3 2,000 megawatts of independently-financed solar
4 developers out there that are trying to get stuff
5 built in AEP's service territory.

6 Q. One last set of questions, Mr. Lacey. If
7 we can turn to Question and Answer 51 on page 20.
8 You are asked a question here regarding spot prices
9 on the PJM energy market, correct?

10 A. Yes.

11 Q. The question is whether spot prices
12 determine the rates paid by AEP Ohio customers, and
13 you answer "For most customers, no"; is that correct?

14 A. That's correct.

15 Q. So for some customers, spot prices on the
16 PJM energy market do determine the rates those AEP
17 customers pay.

18 A. I don't know that definitively, but I
19 know for 835,000 customers, they are not determined
20 by spot market prices, so I don't know if every C&I
21 customer has -- is taking spot market power or taking
22 fixed market power from a CRES provider. So I don't
23 know that anybody is, in fact, taking it, but I know
24 that 835,000 are not taking it.

25 Q. Because those 835,000 are customers who

1 are residential and are being served by the SSO,
2 correct?

3 A. Yes, that's correct.

4 Q. So the vast majority of AEP's residential
5 customers have not chosen to be served by a
6 competitive retail electric service provider,
7 correct?

8 A. My number says 65 percent.

9 Q. And you say "the SSO generation rate is
10 based primarily on blended auction results, not spot
11 market prices"; is that correct?

12 A. That's correct.

13 Q. Have you worked for any company or
14 consulted for any company that has bid into AEP's SSO
15 auction?

16 A. I can't say for sure. I've worked for
17 most of the energy companies as a consultant so, but
18 I am not typically working in the wholesale group, so
19 I don't know what their wholesale groups are doing.

20 Q. So it's fair to say you haven't advised
21 any company that has bid into AEP's SSO auction on
22 that bid or that auction?

23 A. That is safe to say, yes.

24 Q. Would you also say, then, that you can't
25 testify whether any of the winning bidders in AEP's

1 SSO auction took spot market prices into
2 consideration when formulating their bids?

3 A. I can say that I have advised one of my
4 former employees, when they were participating in
5 auctions, not the Ohio auction, and the discussion of
6 spot market prices never entered the conversation.
7 Sport market prices reflect a point in time at a node
8 on the system. They reflect current weather, current
9 constraints, current transmission outages, power
10 plant outages. They don't reflect -- they don't
11 remotely reflect what's going to happen two, three
12 years into the future.

13 Q. But you've never had a conversation with
14 any of the winning bidders in AEP's SSO auction about
15 the things they took into consideration when
16 formulating their bids, correct?

17 A. I don't know who the winning bidders are,
18 so I can't answer that.

19 MR. GALLON: No further questions. Thank
20 you, Mr. Lacey.

21 EXAMINER PARROT: Any redirect?

22 MR. WHITT: No, your Honor.

23 EXAMINER PARROT: Okay. Go ahead and
24 move your exhibit.

25 MR. WHITT: Thank you. Direct Energy

1 would move for the admission of Direct 2.

2 EXAMINER PARROT: Are there any
3 objections?

4 MR. GALLON: None, your Honor.

5 EXAMINER PARROT: Okay. Hearing none,
6 Direct Exhibit 2 is admitted.

7 (EXHIBIT ADMITTED INTO EVIDENCE.)

8 EXAMINER PARROT: Thank you very much,
9 Mr. Lacey.

10 THE WITNESS: Thank you.

11 MR. WHITT: Let the record show it's
12 3:57. I promised my witness he would be off by 4:00.

13 EXAMINER PARROT: Well done.

14 THE WITNESS: For a 5:30 flight.

15 MR. OLIKER: Your Honor, are we off the
16 record?

17 EXAMINER SEE: Let's go off the record.

18 (Discussion off the record.)

19 EXAMINER SEE: Let's go back on the
20 record.

21 Mr. Oliker.

22 MR. OLIKER: Thank you, your Honor.
23 Interstate Gas Supply, Inc. and IGS Solar, LLC would
24 call Katie Rever to the stand.

25 (Witness sworn.)

1 EXAMINER SEE: Thank you. Have a seat.

2 - - -

3 KATIE BOLCAR REVER

4 being first duly sworn, as prescribed by law, was
5 examined and testified as follows:

6 DIRECT EXAMINATION

7 By Mr. Oliker:

8 Q. Good afternoon, Ms. Rever.

9 A. Good afternoon.

10 Q. Am I correct that you've prepared
11 testimony in this case?

12 A. Yes.

13 MR. OLIKER: And, your Honor, at this
14 time, I would like to mark the direct testimony of
15 Katie Rever as IGS Exhibit 9, I believe. And that's
16 IGS -- Interstate Gas Supply, Inc., and IGS Solar,
17 LLC, Exhibit 9.

18 EXAMINER SEE: So marked.

19 (EXHIBIT MARKED FOR IDENTIFICATION.)

20 Q. (By Mr. Oliker) Ms. Rever, do you have a
21 copy of IGS's Exhibit 9?

22 A. I have IGS's exhibit?

23 Q. Exhibit 9.

24 A. Yes.

25 Q. And was this testimony prepared by you or

1 under your direction?

2 A. Yes.

3 Q. And do you have any changes to this
4 testimony?

5 A. I do. I have two places where I mistyped
6 the word "grid." It says "gird" and it should read
7 "grid" and that's on pages 9 and 11, both on line 14
8 of those respective pages. At least that's all that
9 I caught so.

10 Q. And other than those changes, if you were
11 asked the same questions today, would your answers be
12 the same?

13 A. Yes.

14 MR. OLIKER: With that, your Honor, I
15 would move the exhibit and tender the witness for
16 cross-examination.

17 EXAMINER SEE: Okay.

18 MR. MILLER: Your Honor, I am going to
19 have a motion to strike, so.

20 EXAMINER SEE: Mr. Miller.

21 MR. MILLER: So I would like to move to
22 strike -- the Company would like to move to strike
23 page 6, line 10 in her testimony, beginning with
24 Question II, entitled "Barriers to Behind the Meter
25 Solar that AEP Should Work to Remove" through page

1 12, line 16, ending with "balanced and diverse mix of
2 solar deployment." And then in addition --

3 EXAMINER SEE: Hold on just a minute.

4 MR. OLIKER: Can you give a line on page
5 12?

6 MR. MILLER: Yes. So it's beginning on
7 page 6, line 10, the Question at II, so starting with
8 "Barriers" through page 12, line 16, ending with
9 "balanced and diverse mix of solar development."

10 And then page 13, line 1, beginning with
11 "The policies outlined above" through line 3 on 13,
12 ending with "increase the development of solar in
13 Ohio." So those two locations.

14 EXAMINER SEE: Okay.

15 MR. MILLER: The testimony presented
16 should be excluded, under Rules of Evidence Rule 402
17 and 403, as not relevant, prejudicial, confusing, and
18 creating undue delay here and, further, not probative
19 because the testimony presented is substantially
20 outweighed by the considerations of undue delay for
21 needless presentation of evidence.

22 The testimony provided, as referenced,
23 does not address the issues in this case and does not
24 have any tendency to make the existence of any fact,
25 that is of consequence to the determination of this

1 case, more probable or less probable than it would be
2 without the evidence.

3 It discusses and explains things that
4 both the Commission and the Company can do to aid in
5 the promotion and development of non-utility-scale
6 solar in Ohio and significantly details suggestions
7 for the Commission's considerations regarding net
8 metering and certain other behind-the-meter
9 generation.

10 Neither net metering nor behind-the-meter
11 generation is included in the Company's proposal or
12 in the testimony of any Company witness in this
13 proceeding. The testimony referenced simply does not
14 address the issues in this case.

15 Additionally, we would note that the net
16 metering issue, while certainly not a part of this
17 proceeding, is being considered by the Commission in
18 a separate and distinct docket, PUCO Case No.
19 12-2050-EL-ORD, in which the parties sponsoring this
20 witness, IGS, filed a motion for rehearing on January
21 18, 2019.

22 It would be unduly unfair to allow IGS to
23 place testimony in the record of this case that not
24 only lacks relevancy or probative value here but
25 squarely addresses the focus and stated issues in the

1 12-2050 case and would only be appropriately heard in
2 the 12-2050 case.

3 Essentially, IGS is trying to create
4 another outlet for voicing its arguments regarding
5 net metering and looking to get another bite at the
6 proverbial apple by hijacking this proceeding and
7 attempting to use it as an outlet to further its
8 arguments from the 12-2050-EL-ORD case.

9 MR. OLIKER: May I respond, your Honor?

10 EXAMINER SEE: Just --

11 MR. OLIKER: First of all, if you look at
12 the posture of this case from a really high level,
13 AEP has identified a massive amount of utility-scale
14 solar, its preferred method of construction, to meet
15 what they have defined as a desire from customers,
16 and they've said this is the only way to do it. And
17 we're saying it's not and that if there truly is a
18 demand from customers, they can do behind-the-meter
19 generation.

20 There are lots of ways to develop solar.
21 There are lots of policies that AEP should be
22 considering and part of that discussion is the fact
23 that -- and AEP doesn't want to talk about it -- is
24 they have consistently always opposed any
25 net-metering construct that benefits customers and

1 provides fair compensation. The reason is very
2 clear. Because it has the tendency to erode the
3 revenue collection of the distribution utility which
4 goes to their bias in what has been proposed here, an
5 in-front-of-the-meter project, which will have no
6 impact whatsoever on their revenue collection.

7 And Ms. Rever identifies how other states
8 are encouraging solar, how things are done nearly
9 throughout all PJM, and that's something that this
10 Commission should consider as it's determining if
11 there truly is a desire from customers to build solar
12 or wind, how is the best way to go about doing it,
13 and what policies should we consider.

14 Maybe they should look elsewhere where
15 it's been done successfully. And given her
16 experience with the Department of Energy, the Solar
17 Energy Industries, I think that Ms. Rever is well
18 situated to provide that testimony.

19 And within the context of all the issues
20 that have been raised here, whether it's climate
21 change or carbon regulation, we have addressed a host
22 of issues related to renewable energy, we've even
23 looked at projections in AEP's own testimony
24 regarding what will on -- on-site rooftop residential
25 solar cost over time. I mean, these things are all

1 wrapped together for whether utility-scale solar is
2 the only way to do this, and we are providing simply
3 our side of the story.

4 And regarding questions regarding the
5 12-2050 case which, consequently, AEP also filed an
6 application for rehearing once again seeking to
7 reduce the amount of net metering compensation
8 available to customers that shop for their electric
9 supply, we agree that case will proceed as it will.
10 AEP will file its pleadings, we'll file our
11 pleadings, and the Commission will decide in that
12 case. But we are providing context in this case
13 where the Commission is being asked to make a
14 determination regarding utility-scale solar and we
15 have proposed a different route and we are entitled
16 to put on our case.

17 MR. WHITT: Your Honor, if I may, Direct
18 would agree with everything just said and also point
19 out that the Commission rules specifically
20 contemplate evidence and information in forecast
21 proceedings about potential alternatives, whether
22 alternatives have been explored. And the fact that
23 the Company has not discussed any of those
24 alternatives only speaks to the deficiency of their
25 own filing, not to the relevance or admissibility of

1 the information presented by others.

2 MR. MILLER: May I respond?

3 EXAMINER SEE: Go ahead.

4 MR. MILLER: This is not the net metering
5 proceeding. This is -- this testimony is about
6 potential suggested reforms to behind-the-meter
7 solar -- or behind the meter in general and then
8 solar specifically in this state, and it talks to a
9 lot of suggestions, helpful hints, what the Company
10 might do, what the Commission might do. Again,
11 especially on the net metering issue, we have another
12 case that specifically is dealing with that.

13 This is not a discussion about
14 utility-scale solar. This is a discussion about
15 behind-the-meter solar, that's what her testimony is
16 about and we are suggesting it's not appropriate in
17 this case. There is a venue for it to be heard but
18 it's not here. And she can talk about the
19 alternatives but these are specific implementation
20 mechanisms she's suggesting for net metering in Ohio
21 and for behind-the-meter solar in Ohio.

22 MR. OLIKER: Your Honor, I have one other
23 clar --

24 EXAMINER SEE: Just one minute.

25 Mr. Oliker, go ahead. I'm sorry.

1 MR. OLIKER: I was simply going to add, I
2 think we did have a lengthy discussion about motions
3 to strike on testimony that was considered outside of
4 the issues. This would have been a nice issue to
5 address at that point in time, rather than before an
6 out-of-state witness was on the stand.

7 EXAMINER SEE: AEP Ohio's motion to
8 strike the two specified portions of the testimony
9 are denied.

10 MR. OLIKER: Thank you, your Honor.

11 EXAMINER SEE: Are there any other
12 motions?

13 MR. MILLER: Good morning.

14 EXAMINER SEE: OCC?

15 MR. MILLER: Your Honor --

16 EXAMINER SEE: OCC?

17 MR. MICHAEL: No questions, your Honor.

18 EXAMINER SEE: Ms. Whitfield?

19 MS. WHITFIELD: No questions, your Honor.

20 EXAMINER SEE: Mr. Stock?

21 MR. STOCK: No questions.

22 EXAMINER SEE: Mr. Darr?

23 MR. DARR: No questions.

24 EXAMINER SEE: Mr. McNamee?

25 MR. McNAMEE: No questions.

1 EXAMINER SEE: Mr. Dove?

2 MR. DOVE: No questions, your Honor.

3 EXAMINER SEE: Mr. Mendoza?

4 MR. MENDOZA: No questions, your Honor.

5 Thank you.

6 EXAMINER SEE: Ms. Leppla?

7 MS. LEPPLA: Just a few questions, your
8 Honor.

9 - - -

10 CROSS-EXAMINATION

11 By Ms. Leppla:

12 Q. Good afternoon, Ms. Rever. I'm Miranda
13 Leppla. I'm with the Ohio Environmental Council. I
14 just have a couple of questions for you.

15 IGS develops solar projects, correct?

16 A. Yes.

17 Q. And one of the solar projects IGS is
18 currently participating in working on is a 4-megawatt
19 project -- is a 4-megawatt project in the City of
20 Brooklyn on a capped landfill; is that correct?

21 A. Correct.

22 Q. Okay. And the Brooklyn Landfill solar
23 project is the largest project, at 4 megawatts, that
24 IGS has developed in Ohio to date, correct?

25 A. That I am aware of, yes.

1 MS. LEPPLA: Okay. No further questions,
2 your Honor.

3 EXAMINER SEE: Mr. Whitt?

4 MR. WHITT: No questions, your Honor.

5 EXAMINER SEE: Mr. Kurtz?

6 MR. KURTZ: No questions.

7 EXAMINER SEE: Now, Mr. Miller.

8 MR. MILLER: Thank you, your Honor.

9 - - -

10 CROSS-EXAMINATION

11 By Mr. Miller:

12 Q. Good morning, Ms. Rever -- or, I'm sorry.
13 Good afternoon. How are you?

14 A. Good afternoon.

15 Q. You're employed by IGS Energy, correct?

16 A. Yes.

17 Q. And you are the, as I understand it, the
18 Director for Legislative and Regulatory Affairs.

19 A. Yes.

20 Q. What exactly are those job duties? What
21 does your job entail?

22 A. So I primarily support the solar portion
23 of our business, IGS Solar, and I'm responsible for
24 advocating for various policies both in front of
25 legislators and regulators at statehouses and

1 Commissions across the U.S.

2 Q. And you said "primarily." Are there
3 other job duties?

4 A. I help my company understand what those
5 policies are.

6 Q. And so your focus is really strictly
7 solar.

8 A. I would say that is my primary focus.
9 The world of distributed resources, there is a lot of
10 different technologies that also interweave when I'm
11 dealing with solar policies.

12 Q. And who do you report to at IGS?

13 A. Our General Counsel, Matt White.

14 Q. And when you perform your duties as IGS,
15 who do you work with? Do you have a team?

16 A. I am part of the regulatory team that
17 reports to Matt White. And I also work extensively
18 with our solar business so I can understand where
19 they're headed and help them understand where
20 policies are.

21 Q. Are there any other staff that you work
22 with on a regular basis beside Mr. White?

23 A. Oh, I work with many people within my
24 teams on a regular basis.

25 Q. Okay. And you said -- because I

1 understand -- I think I understand IGS. They've been
2 around -- been involved with these kind of
3 proceedings where they've been testifying. Can you
4 explain to me a little bit about what IGS Solar is,
5 that part of the business?

6 A. Sure. We develop, own, operate, solar
7 systems of various sizes for various types of
8 customers in -- I don't have the exact number of
9 states. I believe -- well, but in multiple states,
10 probably 15 or 16 states across the U.S.

11 Q. How many employees are in IGS Solar?

12 MR. OLIKER: I think the witness can
13 answer the question, but I'll object because this is
14 covered by another witness, but if she knows, she can
15 answer.

16 A. Sure. Referring to Chris Rengstorf's
17 testimony, there are about, I believe, 31 full-time
18 solar employees at IGS. That is not the totality of
19 the solar jobs that we help support within the solar
20 industry because all of our investments that we make
21 in the over 125 megawatts, per Mr. Rengstorf's
22 testimony, we support many solar jobs that are beyond
23 IGS Solar. We don't do the construction. We don't
24 do the engineering. Many different aspects that we
25 don't do.

1 Q. And IGS Solar is a part of a piece of the
2 puzzle that is IGS, correct?

3 A. Correct.

4 Q. Can you give me an idea of just what
5 percentage of the total IGS business that IGS Solar
6 represents?

7 A. According to what metrics?

8 Q. Whatever metrics you're familiar with as
9 sort of the I assume the lead, and I don't know if
10 that's the wrong term, the lead for solar at IGS.

11 A. I am not the lead for solar at IGS. I am
12 responsible for regulatory and legislative affairs at
13 IGS for solar primarily.

14 Q. Who would be the lead?

15 A. Mike Gatt is -- well, the lead is Scott
16 White, who heads our company. I would say Mike Gatt
17 is our Chief Operations Officer for distributed
18 generation.

19 Q. Is Scott White, is he President of IGS
20 Solar?

21 A. President and CEO, I believe.

22 Q. Or is he President of IGS?

23 A. IGS, but is --

24 Q. I don't know. I am just asking.

25 A. Okay. He is President of IGS. Mike Gatt

1 reports directly to Scott.

2 Q. And so just to confirm, so Scott is
3 President of IGS and --

4 A. Mike Gatt is Chief Operating Officer of
5 IGS Generation, and solar is part of IGS Generation,
6 distributed generation, yeah.

7 Q. And so back to my earlier question, so
8 can you explain to me or kind of define for me what
9 percentage, of the total IGS picture, IGS Solar
10 occupies?

11 MR. OLIKER: Objection. I think the
12 witness said she can't answer the question without
13 greater specifications for what kind of financial
14 metrics counsel is utilizing. It's a hard question
15 to answer.

16 MR. MILLER: I'm happy to rephrase.

17 EXAMINER SEE: Okay.

18 Q. (By Mr. Miller) What percentage of the
19 total business of IGS is represented by the money
20 that's brought in by IGS Solar?

21 MR. OLIKER: And also I would object
22 because that's confidential. If she knows the
23 answer, I would want to ensure nobody could hear the
24 answer that doesn't have the clearance to do so, if
25 she knows the answer.

1 A. I do not. I would refer you to our
2 finance team.

3 Q. How many employees are there in IGS
4 total?

5 A. I don't know the official count. I
6 believe it's around 750 across our entire footprint.

7 Q. Those would be full-time employees as far
8 as you know?

9 A. I believe so.

10 Q. And let's talk a little bit quickly about
11 you're educational background. I understand, based
12 on your testimony, you have an Undergraduate Degree
13 in, what is it?

14 A. Biology and Environmental Sciences.

15 Q. And then your Masters is in?

16 A. Public Policy and Environmental
17 Management from Duke University.

18 Q. And you are not a lawyer, are you?

19 A. I am not a lawyer.

20 Q. You say that with some relish. Do you
21 have any legal training?

22 A. Not a -- I took a law school class while
23 I was in policy school but no official -- no official
24 degree.

25 Q. Did you take a class at the law school

1 or was it -- when you say you took a law school
2 class, I guess I am trying to understand.

3 A. Yes. I took energy policy. I took
4 energy law.

5 Q. But other than that, you don't have any
6 formal legal training? You are not a lawyer,
7 correct? Have you provided testimony -- I'm sorry,
8 let me rephrase. Strike that.

9 You have not provided testimony here at
10 the Commission before, have you?

11 A. That's correct. I've testified in front
12 of the PowerForward hearing, PowerForward process,
13 but not testimony at the -- in a case.

14 Q. Did you testify in front of PowerForward
15 or were you a witness?

16 A. I was on a panel.

17 Q. You were on a panel in front of
18 PowerForward. What was the subject of your --

19 A. It was primarily on rate design for
20 promoting distributed resources.

21 Q. And so, you weren't deposed by anyone for
22 this proceeding?

23 A. Nobody.

24 Q. And I believe your testimony indicates
25 you provided other testimony at regulatory agencies;

1 is that correct?

2 A. Uh-huh.

3 Q. Where?

4 A. Primarily -- excuse me -- New Jersey.

5 EXAMINER SEE: Mr. Miller, get closer to
6 the mic.

7 MR. MILLER: Oh, sorry. Bring the mic to
8 me.

9 Q. What were those cases about?

10 A. They were both cases in which a regulated
11 utility was asking to own solar.

12 Q. You said they were two separate cases.
13 Were they recent?

14 A. They were. I believe the first one was
15 in -- and I am going on memory, I believe the first
16 one was in 2013 or 2014 and the last one was in 2017
17 or 2018.

18 Q. And they were regarding solar.
19 Specifically what were -- what was each case
20 regarding?

21 A. The regulated utility was asking to own
22 solar generation in tandem with the competitive
23 market. And in both of those cases, we -- I opposed
24 the utility doing that.

25 Q. And that was on behalf of IGS Solar?

1 A. I was -- that was -- I was a witness for
2 SEIA, on behalf of SEIA in those cases.

3 Q. Have you ever provided testimony on
4 behalf of a regulated utility?

5 A. I have not.

6 Q. And you have only provided testimony on
7 behalf of other parties besides regulated utilities,
8 correct?

9 A. I have never worked for a reg -- I have
10 never provided testimony for a regulated entity.

11 Q. Has your testimony always been contra to
12 the regulated utility's request?

13 MR. OLIKER: Objection. That's a very
14 vague question.

15 Q. I believe you stated in your testimony
16 you were testifying against what the utility was
17 asking for in New Jersey; is that correct?

18 A. Yes. The positions that I take are not
19 always against a position that a regulated utility
20 takes. In the case -- in the two specific cases
21 where I was providing testimony, these were both
22 cases where a regulated entity was asking to own and
23 rate base solar generation that was in tandem with a
24 competitive market, where the competitive market was
25 able to provide the same -- the same solar

1 generation, the same solar development that the
2 utility was asking for and simply stating that there
3 was not a need; but if the utility wanted to do it
4 through its deregulated arm, it should go ahead and
5 do so, but there was not a need for -- for ratepayers
6 to backstop that, and the impact of that on the
7 competitive market, the negative impact of a
8 rate-regulated entity also participating in the solar
9 market on that competitive market.

10 Q. And both those cases were about the same
11 things?

12 A. Essentially, yes.

13 Q. Was that -- was the regulated utility
14 proposing utility-scale solar?

15 A. In the first case, it was proposing
16 varied distributed, so panels on -- no. In -- in
17 both of those cases it was they were proposing about
18 10-megawatt systems.

19 Q. So just to clarify, neither one of those
20 cases were about utility-scale solar.

21 MR. MICHAEL: Objection. I think --

22 A. What's the definition of utility scale --
23 I'm sorry. I apologize.

24 MR. MICHAEL: You took the words right
25 out of my mouth. And I would simply add we've heard

1 different witnesses say different things about what
2 that is, so I object to the question.

3 EXAMINER SEE: And the witness can
4 complete her answer.

5 THE WITNESS: Yes.

6 EXAMINER SEE: Go ahead.

7 A. It depends on what your definition of
8 "utility-scale solar" is.

9 Q. So, Ms. Rever, you are the expert in
10 solar. Unfortunately, I am not. Can you tell me
11 what your definition of "utility-scale solar" happens
12 to be?

13 A. I think there are many different -- that
14 there are many different views on what is the
15 appropriate cutoff for utility-scale versus
16 distributed. The way that I look at it is more of a
17 transmission-sited versus distribution-sited system
18 or behind the meter versus in front of the meter.
19 But in this case it's really more about utility owned
20 versus competitively owned and less to do with -- it
21 does not refer to the size.

22 Q. So is there -- is there some sort of --
23 you talk about the size. Let me strike that.

24 In regards to size, you are talking about
25 output generation. What do you mean by "size"?

1 A. When I say "size," I generally mean
2 megawatts either measured in AC or DC.

3 Q. So you're indicating that you believe
4 that there is a size cutoff between sort of utility
5 scale and everything beneath that, correct?

6 A. I am saying that this case is about
7 utility owned, whether -- no matter what the size
8 is -- versus something that is developed and owned by
9 the competitive market and by customers and not about
10 the size of the system.

11 Q. And I was asking you, I think about just
12 in general, but you referred to this case. In this
13 case, is AEP proposing to own utility-scale solar?

14 A. I -- they are proposing to own
15 400 megawatts of solar. I believe there is a
16 300-megawatt and a 100-megawatt.

17 Q. So let me ask you some questions because
18 we kind of got ahead of ourselves here. Have you
19 read the Company's Application in this case?

20 A. I have skimmed parts of it and read
21 the -- a summary that was prepared by a member of the
22 regulatory team.

23 Q. Of your regulatory team at IGS?

24 A. Yes.

25 Q. Did you read the Amendment? There were

1 two filings. Did you read both or read a summary of
2 both?

3 MR. OLIKER: Counsel, do you want to show
4 her the documents instead of loosely referring to
5 them?

6 MR. MILLER: I think I can ask her if she
7 has read the Application in this case.

8 MR. OLIKER: Yeah, but that's been used
9 very loosely on what the actual Application we've
10 been litigating is.

11 Q. Let me be a little more specific.

12 Have you read the Company's application
13 in this case, which would be the Long-Term Forecast
14 Report, filed on April 16 of 2018?

15 A. I have read a detailed summary provided
16 by a member of the IGS regulatory team.

17 Q. So the answer is you have not read it in
18 its entirety; is that correct?

19 A. I have not read it word for word, no.

20 Q. Do you know what portions of it you read?

21 A. I don't.

22 Q. Did you read the amendment that was filed
23 on September 19, 2018?

24 A. No, I did not.

25 Q. Did you read a summary of that?

1 A. I believe so, but I honestly don't recall
2 what it was.

3 Q. So we talked about the filing, what I am
4 going to call the filing, the Company's filing
5 initially, and I asked if you read it. Did you
6 happen to read the testimony of any of the Company's
7 witnesses that was filed -- that were filed in this
8 case?

9 A. I've read summaries of the testimonies.

10 Q. And so, there was summaries of the
11 testimony also?

12 A. Yes.

13 Q. But you did not read the testimonies, any
14 of them in their entirety?

15 A. No, I did not. But . . .

16 Q. Go ahead. I don't want to interrupt you.
17 Sorry.

18 Have you read the testimony of any of the
19 intervening witnesses in this case?

20 A. I have read summaries of the testimonies.

21 Q. Did you write your testimony in this
22 case?

23 A. Yes, I did.

24 Q. Did you have any assistance in writing
25 that testimony?

1 A. I did collaborate with other members of
2 the regulatory team but this is my testimony.

3 Q. What members of the regulatory team, that
4 weren't providing legal advice, did you collaborate
5 with?

6 MR. OLIKER: Objection. Your Honor,
7 counsel is starting to delve into the work product
8 behind the testimony.

9 MR. MILLER: Your Honor, I think it was
10 clear I didn't want her to tell me what legal advice
11 she received, but she has a regulatory team that
12 appears to be relative substantive, and I believe
13 some of them probably provided resources that aren't
14 legal in nature.

15 EXAMINER SEE: With the -- the witness
16 can answer the question. Do you need to have it
17 reread?

18 THE WITNESS: Yes, please.

19 (Record read.)

20 A. I guess I'm hesitating because I'm not
21 entirely sure the differentiation between legal
22 advice and -- could you -- if you could elaborate on
23 what you mean by that.

24 Q. Well, for starters, in general, anybody
25 who was a lawyer.

1 A. Okay. Everybody that I collaborated with
2 was a lawyer.

3 Q. The -- I think in your testimony, I think
4 at page 4, lines 6 to 8, do you see that? Do you
5 have that in front of you?

6 A. Just a second. Yes.

7 Q. So I think you indicate, in this portion
8 of your testimony, that several states have adopted
9 what you -- what you term pro-competitive policies
10 rather than allowing for the construction of solar
11 through rate-regulated models. Are there states that
12 do accept construction of solar through
13 rate-regulated models?

14 A. Certainly virtual -- or vertically
15 regulated -- vertically-integrated states where the
16 utility owns all generation. There are many models,
17 for example, Georgia, they have utility-owned
18 generation.

19 Q. Are there states that aren't
20 vertically-integrated or are regulated in a way
21 that's supported?

22 A. I would say in my experience, with the
23 competitive markets that I have worked in, generally
24 where there's a robust competitive market, the
25 utility is also -- is not owning and rate-basing

1 solar.

2 Q. So to your knowledge, there aren't any?

3 A. To my knowledge, in the competitive
4 markets within which I operate and have extensive
5 experience, the -- the policy of the Commissions has
6 not been to allow utility-owned rate-based solar
7 because of the fear of interfering with competitive
8 markets, or one of the reasons is that in the cases
9 that I was a party to that you referred to earlier,
10 in those two cases, the regulated entity was allowed
11 to own rate-based solar.

12 However, in New Jersey, there is about a
13 3-gigawatt market of competitive -- competitively --
14 of a competitive -- of competitive solar, excuse me.
15 And the amount that that rate-regulated entity was
16 allowed to rate base was about 100 megawatts or
17 150 megawatts, so very de minimus. And in those
18 cases I have seen and through talking with other
19 market participants that the rate-regulated
20 participation in the solar market has been a
21 detriment to the competitive market even at that
22 scale.

23 Q. So I'm not sure that was an answer to my
24 question, but is it possible there are
25 vertically-regulated-integrated states that allow for

1 such things?

2 A. Do you have an example?

3 MR. OLIKER: Can I have his initial --
4 his previous question read back and then his existing
5 question?

6 (Record read.)

7 MR. OLIKER: Okay. That's fine.

8 A. And I would answer that I prefer not to
9 speculate about the possibility, and if you could
10 give me an example that -- then I would be happy to
11 answer that.

12 Q. You indicated, I think, that -- just a
13 minute ago that the -- this kind of solar is a
14 detriment to the market. Did I hear that correctly?

15 A. That it has -- can have a negative impact
16 on the competitive market. For example, in New
17 Jersey, with allowing the rate-regulated entity to
18 develop on landfills and brownfields, what we have
19 found is when competitive entities go out to try to
20 put a lease on -- lease the land of a landfill or
21 brownfield, the land lease rates that they are --
22 that the market expects is significantly higher than
23 they would have seen in other markets because the
24 regulated entity was able to offer a higher land
25 lease rate.

1 So that's what the market expects and
2 that has had a detrimental impact on the ability of
3 the competitive market to fully develop that market
4 segment.

5 Q. Is that your opinion or is that something
6 the New Jersey Board found?

7 A. The New Jersey Board did not make a
8 finding on the impact afterwards. That is something
9 from talking with both my team and other members of
10 the solar industry when I talk with them about their
11 development activities, and when they are talking
12 with owners of landfills and brownfields, that that
13 is something that they have highlighted that has --
14 how the regulated entity participation in competitive
15 market has distorted what the market can bear for --
16 for lease prices.

17 Q. Did you do a study to that effect or are
18 you -- is this anecdotal?

19 A. In my job, I talk to a lot of people, so
20 it's through talking to a lot of people.

21 Q. So this is what other people have said?

22 MR. OLIKER: Objection. She indicated it
23 was through discussions with her own team. It
24 misstates the testimony. It's asked and answered.

25 MR. MILLER: Your Honor, I don't think

1 that's what she said. She said in her job or
2 business she talks to a lot of people. She didn't
3 say her own team.

4 MR. OLIKER: Her prior answer she did.

5 EXAMINER SEE: The objection is
6 overruled. The witness can answer the question.

7 A. In discussions with members of my own
8 team as well as people from other competitive solar
9 companies who are trying to develop these types of
10 projects.

11 Q. So your conclusion is based on your
12 personal knowledge resulting from those discussions.

13 A. Correct.

14 Q. No studies?

15 A. No.

16 Q. Thank you.

17 The court reporter can't see your head
18 shake. I think in your testimony, page 4 again, I
19 think lines 14 through 16, are you there? I think
20 you state that AEP's proposal would provide special
21 compensation to only select sets of companies. What
22 did you mean by that?

23 A. The proposal would choose a couple
24 winners and provide compensation that is only
25 available to those winners as opposed to a policy

1 that would be competitively neutral that would be
2 open to all market participants.

3 Q. Are you familiar with how AEP would make
4 its choices regarding the entities it might use to
5 build or develop any utility-scale solar?

6 A. I believe it would go out for an RFP --
7 or -- I'm not intimately familiar with it.

8 Q. So if it was an RFP, would it be open to
9 the general public? Whoever wanted to bid, could
10 bid?

11 A. The point is that -- the point of my
12 testimony is not whether or not the AEP RFP process,
13 within its limited scope, would or would not be
14 competitive in that limited scope. Rather, the point
15 is the competitive market is able to offer products
16 and solutions to customers.

17 In 2019 -- in 2018, corporate entities
18 entered into 6.4 gigawatts of kind of virtual PPA
19 offtake agreements. There are many different types
20 of policies that the competitive market can offer,
21 behind-the-meter customers, in-front-of-the-meter
22 customers, and these -- this mechanism of
23 rate-basing -- of rate-basing solar sends -- both
24 sends a signal to the rest of the competitive market
25 that those types of -- those types of structures are

1 not -- are maybe not the way that Ohio wants to do
2 solar.

3 As -- and so it's much more about
4 developing a competitive market to -- to allow --
5 allow other entities to meet the demands of
6 customers.

7 MR. MILLER: So I am going to move to
8 strike everything in her answer starting with "so it
9 was" -- or, I'm sorry, "the point is that." I think
10 I asked the question if it were an RFP, would it be
11 open to the general public to bid on.

12 Q. I don't think you responded to my big
13 question at all in that diatribe.

14 MR. OLIKER: Your Honor, the witness
15 explained that the point of her testimony isn't to
16 evaluate the competitiveness of the RFP process
17 within its limited scope and provided the context of
18 what her testimony relates to in this answer that
19 counsel is referring to.

20 MR. MILLER: With all due respect, I
21 didn't ask her what the point of her testimony was.
22 I asked her if she was aware if an RFP was let by the
23 Company, would it generally be available to the
24 general public to bid.

25 EXAMINER SEE: You can ask again, but I

1 think she did hit up on her answer to that. Motion
2 to strike the answer is denied.

3 MR. OLIKER: Thank you.

4 MR. MILLER: Thank you.

5 Q. (By Mr. Miller) You indicated that the
6 potential development of solar would likely be
7 performed by an RFP being let by the Company,
8 correct?

9 A. That's my understanding, yes.

10 Q. Do you know who could bid on that RFP?

11 A. I don't know the parameters of the RFP.

12 Q. For this kind of development, is this
13 something that IGS would be interested in bidding on
14 based on what you know about the company?

15 A. IGS decided not to bid on this project
16 because we do not believe that it is legal for AEP to
17 rate-base solar.

18 Q. So you did -- IGS did not bid on this.

19 A. Correct. We evaluated it, and we decided
20 we did not believe that it was appropriate for us to
21 bid as we did not believe it was -- it was legal for
22 AEP to -- to procure solar in this fashion.

23 Q. If it weren't this specific circumstance,
24 it was somewhere else, is that the kind of project
25 IGS would be interested in?

1 MR. OLIKER: Objection. It's outside the
2 scope of the testimony. It has no relevance. That
3 "somewhere else" could be Georgia which is a very
4 different market and is not Ohio that has a
5 restructured market. I don't think she can answer
6 the question based upon the vague statement or
7 question presented to the witness.

8 EXAMINER SEE: Sustained.

9 Try again, Mr. Miller, another question.

10 Q. (By Mr. Miller) Does IGS bid on
11 utility-scale solar projects?

12 MR. OLIKER: Same objection, your Honor.
13 Without more information.

14 EXAMINER SEE: The witness can answer the
15 question.

16 A. Could you please be more specific?
17 Particularly in what you mean by "utility-scale
18 solar"?

19 Q. Sure. We talked earlier about what
20 utility-scale solar might mean. I believe you gave
21 me an interpretation of what you thought it might
22 mean, so let's start there.

23 A. No. I said that there are a lot of
24 different -- there are a lot of different definitions
25 of utility-scale solar. There's not, that I know of,

1 a universally-agreed-upon definition.

2 I said that this case was more about
3 utility-owned versus -- or regulated-entity-owned
4 versus competitively-market-owned, so I did not offer
5 a definition of "utility scale."

6 Q. Are you aware of the fact that AEP's
7 intention here is to go to a third-party solar
8 developer to develop these projects?

9 A. I believe we've covered that in previous
10 questions.

11 Q. I think your counsel needs to object.

12 A. The -- yes, I am aware that the intent is
13 to go out to a third party, that AEP does not intend
14 to do the development and construction with its own
15 employees.

16 Q. And I think you've mentioned earlier that
17 IGS reviewed the RFP but chose not to bid, correct?

18 MR. OLIKER: And that one I will object
19 as asked and answered.

20 Q. How much time did IGS spend on reviewing
21 the AEP RFP? Do you know?

22 A. I do not.

23 Q. Were you involved in that process?

24 A. I was marginally involved.

25 Q. Can you define "marginally" for me?

1 A. I was part of a couple regulatory
2 conversations, but I was not part of all of them or
3 part of all of the business discussions around it. I
4 primarily, you know, I support solar in a lot of
5 other -- in a lot of states. In Ohio, when it refers
6 to Ohio law, my colleagues, who are based here in
7 Ohio, are much more adept at their understanding of
8 that law.

9 Q. In your testimony on page 4, line 20, I
10 think you refer to, and you use these words, "robust
11 solar development." Just so I understand, can you
12 explain to me what you mean by "robust solar
13 development"?

14 A. It's a bit subjective. It depends on the
15 size of the state, the size of the state's
16 electricity market. So a state that has a very small
17 population and total number of retail sales would
18 have a different level of megawatt deployment that
19 would be robust. But, you know, generally a state
20 where there is a significant amount of solar activity
21 being done.

22 Q. Does Ohio have a robust solar
23 development?

24 A. I would say that Ohio is in its infancy.
25 There is a number of states that are in their infancy

1 and starting to grow. You know, I think that solar
2 and particularly the behind-the-meter solar is cost
3 effective here in Ohio. It is -- with some different
4 types of policies, and as costs starts to decline
5 more and more, that will become more and more robust.

6 Indeed in the -- the testimony of
7 Mr. Torpey, he put forward a figure that shows the
8 cost declines and showing that the cost declines of
9 commercial and residential solar will continue to
10 plummet. Therefore, driving more and more deployment
11 and, you know, in -- according to these, I would
12 certainly say that by 2021, 2022, we have a robust
13 industry here in Ohio, particularly through the
14 PowerForward Initiative, the Commission continues to
15 look at things like rate design and net metering
16 policies that really enable customers to size systems
17 to the full -- their full annual load that we
18 certainly will have a robust industry and a growing
19 industry here in Ohio.

20 Q. In the future.

21 A. I mean, it's 2019, so to 2020, 2021,
22 it's -- it should be ramping up.

23 Q. So you're relying on Mr. Torpey's
24 testimony?

25 A. Yes.

1 Q. Have you read Mr. Torpey's testimony?

2 A. I have not read the entirety of
3 Mr. Torpey's testimony.

4 Q. Just to be clear, I thought you said you
5 only read summaries of the testimony of Company
6 witnesses?

7 MR. OLIKER: Objection. That misstates
8 the witness's testimony from earlier when she said
9 she skimmed portions.

10 EXAMINER SEE: The witness can clarify.
11 The objection is overruled.

12 You can answer the question.

13 THE WITNESS: Okay. I'm sorry. Could I
14 get the question repeated back that I am supposed to
15 answer?

16 EXAMINER SEE: Okay.

17 (Record read.)

18 A. I primarily have read summaries. I've
19 also skimmed portions of the testimony including a
20 couple of the exhibits that were relevant to the --
21 that were relevant to my testimony. And that
22 includes the cost-decline figure put forward in
23 Mr. Torpey's testimony.

24 Q. So you reviewed his exhibits. Did you
25 review anything else in his testimony besides that

1 exhibit?

2 A. I have looked at the cost to -- the cost
3 table that was discussed this morning. But if there
4 is any exhibits that you would like me to be familiar
5 with, if you could show them to me.

6 Q. No. In the interest of time, no.

7 Let's look at page 5, line 1. You refer
8 to "state incentives" and I think you do that several
9 times throughout your testimony. And I just want to
10 be clear so I understand. When you say "state
11 incentives," are you referring primarily to economic
12 incentives?

13 A. As opposed to?

14 Q. Other kinds of incentives.

15 A. Such as?

16 Q. Providing everyone a free lunch. It
17 could be anything.

18 A. Is that an economic incentive?

19 Q. It depends on where the lunch is from, I
20 guess.

21 A. So often -- yes, so state incentives, REC
22 markets, SREC markets, rebates, those are
23 generally -- there are many forms of incentives.
24 There could be tax abatement.

25 Q. Is there a cost to such state incentives?

1 A. I believe that when you look at the many
2 benefits that solar provides, that the costs are
3 generally outweighed by those benefits.

4 Q. So sometimes solar development, the cost
5 of solar development outweigh the costs of the amount
6 of money you pay for it. It's better to pay a little
7 money and get some solar development; is that right?

8 MR. OLIKER: Objection. It's a pretty
9 vague hypothetical question to the witness. He
10 hasn't identified what amount of costs, the
11 parameters around that, what the benefits might be.

12 EXAMINER SEE: The witness can answer the
13 question.

14 A. Okay. Could you please be more specific
15 about what you are -- about the kind of hypothetical
16 you would like me to talk about?

17 Q. Well, I think your answer previously was
18 when you look at the many benefits that solar
19 provides, that the costs are generally outweighed by
20 those benefits, correct? I mean that's -- that's
21 your thinking?

22 A. I think that the reason that states put
23 an incentive forward of any kind is because they
24 believe that the benefits that they will get from
25 that incentive, however you define "benefits" or

1 however that particular state defines "benefits,"
2 outweighs -- outweighs those costs.

3 Q. Who -- who is going to support those
4 costs? Who pays for those costs?

5 A. It really depends on the mechanism and
6 that -- that mechanism varies from state to state.

7 Q. Do taxpayers of those states pay those
8 costs?

9 A. Sometimes.

10 Q. Do ratepayers of utilities pay those
11 costs?

12 A. In some cases.

13 Q. Are there other ways people pay those
14 costs that you are aware of?

15 A. I would say if a -- sometimes there can
16 be a budget that -- well, budgets are generally from
17 taxpayers. I would say those are the two groups that
18 would generally pay for those incentives.

19 Q. Has AEP proposed anything other than the
20 construction of utility-scale solar in this case?

21 A. It has proposed to rate base and receive
22 a rate of return on con -- on constructing
23 400 megawatts of solar and 500 of wind.

24 And there are many instances, as I
25 mentioned before, of, again, what's the definition of

1 "utility scale" but let's -- that are not done
2 through that model and that the competitive market
3 could provide those here in Ohio without it being
4 regulated through rates. Or recovered through rates.

5 Q. But, again, in this case, you refer to
6 AEP and 400 megawatts of solar construction, correct?

7 A. That AEP's proposal is 900 megawatts of
8 renewables, 400 of which would be solar, that they
9 would pay through a PPA and then recover any
10 differences through rates, any differences that they
11 don't recover through the energy markets, through
12 rates; so they would not be taking any risk on that
13 PPA.

14 Q. So where -- where are you getting that
15 information? I know you skimmed certain pieces of
16 testimony. I think you looked at summaries. Where
17 was that information from?

18 A. The -- I don't have specific page numbers
19 from --

20 Q. How did you come upon that information?

21 A. Through reading the summaries and talking
22 with members of my team about how this case is
23 structured.

24 Q. So was the rate-base rate of return
25 specifically listed in your summaries that you

1 reviewed?

2 MR. OLIKER: Your Honor, we've tried not
3 to talk about Phase II, and I think the witness
4 inadvertently mentioned Phase II, and I'm just trying
5 to be consistent and keep the record straight about
6 the debt equivalency, and I think it slipped in
7 inadvertently, and I am trying to clean it up before
8 we go down that road too far, and the record gets
9 mirky.

10 THE WITNESS: And I am not familiar
11 with --

12 EXAMINER SEE: Just a moment.

13 Okay. The question -- Ms. Rever can
14 answer the last question that was posed.

15 THE WITNESS: Okay. Could I have it read
16 back to me, please?

17 EXAMINER SEE: I'm sorry. She has
18 answered the last question out there. Sorry about
19 that. I confused things.

20 MR. MILLER: Your Honor, I think my
21 question got folded into her previous answer, and I
22 don't want to put words in her mouth.

23 EXAMINER SEE: Okay. So ask your
24 question again then.

25 Q. (By Mr. Miller) So the question I believe

1 was: So was the rate-base rate of return
2 specifically listed in your summaries that you
3 reviewed?

4 A. So I -- the rate -- the rate base or what
5 the rate of return might be, I -- I believe would be
6 probably a Phase II question. Specifically my
7 testimony talks about that under the proposal, AEP
8 would enter into a fixed-price agreement and then
9 what -- and resell that power into the wholesale
10 market and rather -- rather than like the competitive
11 market which would normally take the risk of what
12 that resale rate is, they would be able to recover
13 any costs of -- of underages from the sale of the
14 products into the wholesale market; and, therefore,
15 they are not taking -- the risk of the PPA is on the
16 customer -- sorry, is on the ratepayer which is not
17 how competitive markets function.

18 Q. So there is not a rate-base rate of
19 return proposed in this case?

20 A. I guess I'm not entirely sure.

21 Q. Can we look at page 6, please, lines 3
22 and 4. I think you indicate in your testimony on
23 page 6, lines 3 and 4, that it's "highly questionable
24 that AEP can legally build 400 megawatts of solar and
25 charge those costs to all customers." Did I read

1 that correctly?

2 A. That's how I read it as well.

3 Q. You wrote it.

4 A. Yes. Those are the words that are on
5 that paper.

6 Q. What are you basing that conclusion on?

7 A. So I am basing that -- I would refer you
8 to the testimony of Mr. White who covers the legality
9 or the arguments that IGS has vis-a-vis the legality
10 of the proposal.

11 Q. So, but I think you are just citing
12 Mr. White here? You haven't made a legal conclusion,
13 have you?

14 A. I think we've already -- I am not a
15 lawyer, and in the discussions that IGS Solar had
16 vis-a-vis whether or not we would respond to the
17 proposal, although I was part of those discussions,
18 it was not my legal view that was -- that was relied
19 upon to make a decision about whether or not we would
20 participate in the RFP.

21 Q. Is Mr. White your lawyer?

22 MR. OLIKER: Objection.

23 A. Mr. --

24 MR. OLIKER: Your Honor, now we're -- we
25 have a cross reference in the testimony, and she

1 clearly says to refer to Mr. White. I think those
2 questions would be better for Mr. White. Whether
3 Mr. White is or is not her lawyer is really
4 irrelevant. I don't know how it adds to the record.

5 MR. MILLER: She talked about her team,
6 and she said there was some lawyers. I am trying to
7 figure out who were her lawyers. Is this a person
8 who is a lawyer representing the company? A person
9 who is in an executive position who is a lawyer? And
10 she recites this quote and --

11 THE WITNESS: Matt White is our --

12 EXAMINER SEE: Excuse me.

13 THE WITNESS: I apologize.

14 MR. MILLER: She basically says this
15 person told me this and this draws a legal
16 conclusion, and I am trying to understand where that
17 comes from and, you know, there is some argument here
18 that says this is hearsay.

19 MR. OLIKER: Your Honor, this is all
20 prefatory testimony.

21 EXAMINER SEE: The reference to the
22 testimony of Mr. White, Mr. Miller --

23 MR. MILLER: I'm sorry?

24 EXAMINER SEE: The objection is
25 sustained. Move on.

1 MR. OLIKER: Thank you, your Honor.

2 Q. (By Mr. Miller) Does IGS have customers
3 that deployed behind-the-meter solar in the State of
4 Ohio?

5 A. Yes, we do.

6 Q. Do you know how many?

7 A. I know that -- I know that we have two
8 behind-the-meter systems that have been -- or I know
9 that one behind-the-meter system has deployed, one
10 in-front-of-the-meter system. We are talking with
11 another customer about a behind-the-meter system. We
12 have talked with a number of customers, universities,
13 schools, about deploying behind-the-meter systems.
14 In a number of cases, because of the netting period
15 with regards to net metering, we have had to
16 substantially reduce the size of the system so that
17 we only meet a very small portion of their annual
18 load. And those systems at this point -- with 2018
19 prices are not economical, but if we were able to
20 size the system to meet their full annual load, they
21 would have been economical and we would have more
22 systems.

23 Q. Okay. So just to be clear, you have one
24 behind the meter?

25 A. We have one, I believe it's a -- it's a

1 public entity behind the meter. We are working on
2 another one. And we have the in-front-of-the-meter,
3 4-megawatt system. And we have talked with a number
4 of other customers about behind-the-meter systems.

5 Q. Did IGS provide services or equipment to
6 allow that one customer to put in place their solar
7 project?

8 A. Yes, we developed and we owned the system
9 that's on their -- their roof. They are a customer.

10 Q. You are leasing that to them?

11 A. It's a PPA.

12 Q. Oh, it's a PPA. Did that customer -- how
13 did that customer find you?

14 A. I -- I am not -- I don't know. I am not
15 part of our sales and marketing team.

16 Q. Is it possible that customer issued an
17 RFP and you responded to it?

18 MR. DARR: Objection.

19 A. I don't believe so.

20 MR. DARR: Now we are asking the witness
21 to speculate on how the marketing team selected a
22 customer. This has gone --

23 EXAMINER SEE: And she's answered the
24 question.

25 MR. DARR: My apologies, your Honor.

1 Q. (By Mr. Miller) Can you tell me, is
2 rooftop solar available to all of AEP's customers?

3 A. I believe that all of AEP's customers
4 could make the choice to install that system, but
5 there is not -- yeah.

6 Q. So any AEP customer could have rooftop
7 solar?

8 A. Yes.

9 Q. The proposal AEP has -- so AEP's
10 proposal, in whatever amount of detail you reviewed
11 it, your suggestion is, based on that proposal, all
12 of AEP's customers could have rooftop solar -- does
13 AEP have customers that don't own their own homes?

14 A. I don't believe that the proposal talks
15 about the fact that AEP -- all of AEP's customers
16 could own their own solar. Or I would assume that
17 there are renters, and I would say that those
18 renters, IGS or other retail providers could offer
19 those customers retail products that are combined
20 with a solar REC or some other REC that would enable
21 that customer to participate in solar if they so
22 chose or if they couldn't physically install it on
23 their house.

24 Q. So just to be clear, in the question I
25 was trying to talk about rooftop solar, and I think

1 my question was could all of their customers have
2 rooftop solar, and your answer was you thought so.

3 So what about those folks that don't own
4 their homes? Can they have rooftop solar?

5 MR. OLIKER: Objection. I think the
6 witness just answered this question. Asked and
7 answered.

8 Q. Are there environmental reasons why
9 someone couldn't have rooftop solar?

10 A. "Environmental," what do you mean by --

11 Q. They live under a bridge.

12 A. Sure.

13 Q. Do you know if the PIPP -- do you know
14 what PIPP is?

15 A. I do not.

16 Q. Percentage of Income Payment Plan, does
17 that ring a bell?

18 A. Okay.

19 Q. And there are -- there is a program in
20 Ohio for folks who pay under that PIPP, they're
21 called PIPP customers, do you know if PIPP customers
22 are eligible for the solar benefits from the AEP
23 proposal?

24 MR. OLIKER: To the extent it
25 characterizes it as "benefits," I think that

1 mischaracterizes the testimony and the evidence.

2 MR. WHITT: I would add to the objection.
3 There is no proposal to recover costs or affect rates
4 for anyone at least in Phase I.

5 MR. OLIKER: I would also add just
6 because he spelled out the acronym of what PIPP
7 means, doesn't mean he has established any foundation
8 that the witness is familiar with Ohio policy related
9 to PIPP.

10 EXAMINER SEE: The witness can answer the
11 question.

12 THE WITNESS: I'm sorry. Could I have
13 the question restated to me?

14 MR. MILLER: You want it read back?

15 THE WITNESS: That's fine.

16 (Record read.)

17 A. I don't believe that there are direct
18 ratepayer benefits flowing through to rates described
19 in the testimony of the -- of the -- of the
20 witnesses. If there are, if you could show those to
21 me.

22 Q. Just to be clear, at least there are not
23 any excerpts of the testimony you read, fair enough?

24 A. Correct.

25 Q. Let's look at page 6, line 10, running

1 through page 12, line 16. And this is nothing
2 specific, it's just general, but I think you spend
3 approximately six pages basically in that section of
4 your testimony addressing barriers to
5 behind-the-meter solar, correct?

6 A. That's correct.

7 Q. And I think six pages -- that six pages
8 is approximately half your entire 13 pages; is that
9 fair?

10 A. And I am one witness -- I am one of five
11 witnesses for IGS.

12 Q. Sure. Your testimony, just yours; that
13 is fair?

14 A. Sure.

15 Q. Thank you. The court reporter will need
16 to hear a verbal.

17 And so much -- much of those six pages
18 addresses net metering issues, correct?

19 A. It explains the aspects of net metering
20 and why they are important to more enable a
21 competitive market.

22 Q. And so, in its filings to this case, has
23 AEP or any of its witnesses addressed the concept of
24 net metering to your knowledge?

25 A. Not in this case but in a number of other

1 cases, AEP has consistently opposed providing fair
2 compensation through net metering to customers.

3 Q. So you think the Commission's decisions
4 are unfair regarding net metering?

5 A. I am saying --

6 MR. OLIKER: Objection.

7 A. -- AEP's -- AEP's positions in those
8 cases have consistently opposed fair compensation for
9 net-metered customers.

10 Q. So do you know, does AEP determine what
11 the rules are for net metering, or does the
12 Commission?

13 A. The Commission decides.

14 Q. And you are aware there is another
15 Commission proceeding in a separate docket, the
16 12-2050 docket? You are familiar with that?

17 A. Yes.

18 Q. Now, on page 8, lines 8 through 10, lines
19 17 through 21, I think you talk about -- a little bit
20 about system size or refer to that. In the case of
21 solar generation, would you say larger systems are
22 less expensive for the consumer because larger
23 systems have better economies of scale? Is that what
24 you are saying?

25 A. I'm saying that for a given customer,

1 that the economies of scale do allow more penetration
2 of solar but the -- when you -- but we are
3 continuously seeing costs decline and dramatic cost
4 declines and look forward to the -- to the future as
5 the costs of the economies of scale can start to come
6 together and per the -- per witness -- the exhibit in
7 Mr. Torpey's testimony, those differentials should
8 start to be squeezed out in the next handful of
9 years.

10 Q. So is it your testimony today, right now,
11 larger is more economical?

12 A. I would -- often there is a lower cost
13 per watt, but we are seeing customers that are
14 willing to enter into PPAs of -- for systems of many
15 different sizes, and we expect to see that market to
16 continue.

17 Q. You are not an economist, are you?

18 A. Not per se. I studied -- I took several
19 graduate-level economic courses during the course of
20 my public policy degree.

21 Q. But you are not appearing here as an
22 economist. You are appearing here as a consultant in
23 solar, correct?

24 A. Yes.

25 MR. OLIKER: Objection.

1 Q. So one last question. In your testimony
2 you talk about behind-the-meter solar generation. To
3 your knowledge, does AEP have a behind-the-meter
4 solar generation proposal in front of us today?

5 A. To my knowledge this is all about -- this
6 is about in-front-of-the-meter solar generation but
7 it is also driven -- the underpinning of the
8 testimony is driven by a -- a surveyed need from a --
9 that AEP has put forward that there is demand for
10 solar from people in Ohio, and to the extent that
11 this proposal meets that demand, meets that desire,
12 then that could remove or use up that demand for some
13 of these behind-the-meter -- behind-the-meter
14 systems.

15 MR. MILLER: I think I'm done. Thank
16 you.

17 EXAMINER SEE: Mr. Olikier, any redirect?

18 MR. OLIKER: Could we take 2 or 3
19 minutes? I don't think there is much, if anything at
20 all, but I would just like to chat with the witness
21 for a moment.

22 EXAMINER SEE: Certainly.

23 Let's go off the record.

24 (Discussion off the record.)

25 EXAMINER SEE: Let's go back on the

1 record.

2 Redirect, Mr. Oliker?

3 MR. OLIKER: Just very briefly, your
4 Honor.

5 - - -

6 REDIRECT EXAMINATION

7 By Mr. Oliker:

8 Q. Ms. Rever, do you remember a conversation
9 you had with counsel when there was discussions
10 regarding the concept of rate basing?

11 A. Yes.

12 Q. Could you -- do you have anything else to
13 offer on your response to those questions?

14 A. Just to clarify that when I used the term
15 "rate basing," I was really using it in a general
16 sense where AEP's proposal would allow it to recover
17 any underages, it would enter into a fixed price PPA
18 with a developer or a -- whoever owns the system, and
19 then it would sell into the wholesale market, and any
20 risk of not recovering all of the revenues up to the
21 price of the PPA would be passed on and recovered
22 through rates, and so recovered through ratepayers,
23 and that as a mechanism, that's not available to
24 anybody that is not a rate-regulated entity.

25 Q. And, again, when you had a conversation

1 with counsel regarding a rate of return, do you have
2 any clarifications on those questions?

3 A. Yes. The rate of return, I understand
4 the debt-equivalency concept is something that will
5 be discussed in the Phase II of this case and not in
6 this particular case. But that was what I was
7 referring to.

8 MR. OLIKER: Okay. And those are all the
9 questions we have, your Honor.

10 EXAMINER SEE: Mr. Healey, any cross?

11 MR. HEALEY: No, your Honor.

12 EXAMINER SEE: Ms. Bojko?

13 MS. BOJKO: No, your Honor. Thank you.

14 EXAMINER SEE: Mr. Stock?

15 MR. STOCK: No, your Honor.

16 EXAMINER SEE: Mr. Darr?

17 MR. DARR: No, ma'am.

18 EXAMINER SEE: Mr. McNamee?

19 MR. McNAMEE: No, thank you.

20 EXAMINER SEE: Mr. Dove?

21 MR. DOVE: No, your Honor. Thank you.

22 EXAMINER SEE: Mr. Kurtz?

23 MR. KURTZ: No questions.

24 EXAMINER SEE: Mr. Miller?

25 MR. MILLER: Yes, one minor thing.

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RECROSS-EXAMINATION

By Mr. Miller:

Q. I think you indicated, just a moment ago to your counsel, that all risk would be passed on to the customers; is that correct?

A. That the risk of any price differential between the PPA that was entered into and the revenues that you were able to recover from a sale in wholesale markets would be recovered through rates.

Q. But just to be clear, the operational risk of the development, the solar development, wouldn't be passed onto the customers under the Company's proposal, would it?

MR. OLIKER: Objection. Your Honor, that is a Phase II issue and it goes explicitly to the PPA contracts that would be entered into with the specific developers, and he should not be allowed to ask questions about that here.

MR. MILLER: Your Honor, with all due respect, I think she said "all risk" and I am trying to clarify that and she essentially made that comment and opened the door.

THE WITNESS: And --

EXAMINER SEE: Just a minute.

1 MR. MILLER: And we entered into this
2 debt equivalency Phase II discussion, although
3 limited.

4 MR. OLIKER: Your Honor, we simply
5 entered into that discussion to clarify it shouldn't
6 be in this record.

7 MR. MILLER: I think she was citing
8 Torpey's testimony. He covered these issues. So I'm
9 not sure why we can't ask this minor question.

10 MR. OLIKER: Your Honor, that is a
11 different question. If he has a way to tie this to
12 the redirect and Mr. Torpey's testimony, I won't
13 object, but he has not presented the testimony to
14 her.

15 EXAMINER SEE: With the understanding
16 there are phases to this proceeding, the witness can
17 answer the question.

18 THE WITNESS: Thank you.

19 A. I would clarify that my term of the word
20 "all" referred to or "all risk" referred to the
21 mechanism through which AEP would -- would recover
22 any costs that they weren't able to recover through
23 reselling the power into the wholesale market, they
24 wouldn't be able to recover those, and those risks
25 would be borne by ratepayers. And that is -- so I'm

1 clarifying that is what I meant when I was saying
2 "all risk."

3 Q. Again, I think my question was
4 operational risk.

5 A. And my response is my -- when I was
6 referring, I was referring to -- I think I clarified
7 the risk that I was referring to.

8 Q. And again, in your clarification, you
9 indicated various risks or you think you did, but
10 what I want to know is, is operational risk one of
11 those risks you were considering?

12 A. I was considering this -- the reselling
13 of the power into the wholesale market and the
14 difference between what they could -- what they are
15 able to recover from reselling the power into the
16 wholesale market vis-a-vis their obligation under the
17 PPA.

18 Q. So "no" to the operational risk.

19 A. Sure. Yes. Correct.

20 Q. Thank you.

21 A. Not that I am aware of.

22 EXAMINER SEE: Mr. Olikier.

23 MR. OLIKER: Your Honor, IGS would move
24 Exhibit IGS and IGS Solar, LLC, Exhibit 9.

25 EXAMINER SEE: Are there any objections

1 to the admission of IGS and IGS Solar Exhibit 9?

2 Hearing none -- hearing none, IGS/IGS
3 Solar Exhibit 9 is admitted into the record.

4 (EXHIBIT ADMITTED INTO EVIDENCE.)

5 EXAMINER SEE: And, Mr. Oliker, just to
6 be clear, some of your prior exhibits, were they also
7 to be IGS/IGS Solar?

8 MR. OLIKER: Yes, your Honor, that would
9 be preferred for purposes of marking the transcript
10 and the composite index.

11 EXAMINER SEE: Okay.

12 MR. OLIKER: I apologize if I did not
13 make that clear. Thank you.

14 EXAMINER SEE: Thank you, Ms. Rever.

15 THE WITNESS: Thank you.

16 EXAMINER PARROT: Mr. Darr, you may call
17 your witness.

18 MR. DARR: Thank you, your Honor.
19 Industrial Energy Users - Ohio calls Kevin Murray.

20 Prior to Mr. Murray's testimony, I
21 provided to the court reporter a digital version of
22 his testimony and all parties have been served with
23 that testimony as well. I would request what was
24 filed with the Commission on January 2, 2019, shall
25 be marked as IEU Exhibit 1.

1 (Witness sworn.)

2 EXAMINER PARROT: The exhibit is so
3 marked.

4 (EXHIBIT MARKED FOR IDENTIFICATION.)

5 MR. DARR: Thanks, your Honor.

6 - - -

7 KEVIN MURRAY

8 being first duly sworn, as prescribed by law, was
9 examined and testified as follows:

10 DIRECT EXAMINATION

11 By Mr. Darr:

12 Q. Please state your name.

13 A. Kevin Murray.

14 Q. By whom are you employed?

15 A. I'm employed by McNeese Wallace & Nurick.

16 Q. And where is McNeese Wallace & Nurick
17 located?

18 A. 21 East State Street, Columbus, Ohio
19 43215-4228.

20 Q. What is your capacity at McNeese Wallace &
21 Nurick?

22 A. I am a Technical Specialist which is an
23 internal engineer.

24 Q. Do you have in front of you what's been
25 marked as IEU Exhibit 1?

1 A. Yes, I do.

2 Q. Please describe for us what that is.

3 A. It's my direct testimony that was filed
4 in this proceeding on January 2, 201.

5 Q. And inclusive with that exhibit, does
6 that also include the exhibits that were filed in
7 support of that testimony?

8 A. Yes, it does.

9 Q. If I were to ask you the question --
10 first of all, do you have any corrections or
11 additions to that testimony at this time?

12 A. I do not.

13 Q. If I were to ask you the questions that
14 are contained in that testimony, would your answers
15 be the same?

16 A. They would.

17 MR. DARR: Your Honor, I tender the
18 witness for cross-examination.

19 EXAMINER PARROT: Thank you, Mr. Darr.
20 Mr. Healey?

21 MR. HEALEY: No questions, your Honor.

22 EXAMINER PARROT: Ms. Bojko?

23 MS. BOJKO: No questions, your Honor.

24 EXAMINER PARROT: Mr. Stock?

25 MR. STOCK: No questions.

1 EXAMINER PARROT: Mr. Whitt?

2 MR. WHITT: No questions.

3 EXAMINER PARROT: Mr. McNamee?

4 MR. McNAMEE: No questions.

5 EXAMINER PARROT: Mr. Kurtz?

6 MR. KURTZ: Very briefly.

7 - - -

8 CROSS-EXAMINATION

9 By Mr. Kurtz:

10 Q. Good afternoon, Mr. Murray.

11 A. Good afternoon.

12 Q. Okay. Your testimony is that AEP has not
13 satisfied the need finding because primarily, maybe
14 not exclusively, because PJM is awash in capacity and
15 there is no indication the situation is likely to
16 change any time soon.

17 A. That's part of my testimony.

18 Q. Okay. Hypothetical question, assume that
19 the AEP application would provide -- if approved,
20 would provide savings for customers as well as rate
21 stability for customers. Would your recommendation
22 change?

23 A. No, it would not.

24 Q. Okay.

25 MR. KURTZ: Thank you, your Honor. No

1 more questions.

2 EXAMINER PARROT: Thank you, Mr. Kurtz.

3 Mr. Hughes? Actually, hang on.

4 Mr. Dove over there, start with him.

5 MR. DOVE: No questions, your Honors.

6 Thank you.

7 EXAMINER PARROT: Thank you.

8 MR. HUGHES: Yes, your Honor. I see that
9 counsel for IGS has left the room. We just wanted to
10 make sure the record was clear they are waiving
11 cross-examination.

12 EXAMINER PARROT: Just a moment.

13 MR. STOCK: It's my understanding he put
14 his coat on and went down the elevator.

15 EXAMINER PARROT: All right. Go ahead,
16 Mr. Hughes.

17 MR. HUGHES: Okay. Thank you.

18 - - -

19 CROSS-EXAMINATION

20 By Mr. Hughes:

21 Q. Good evening, Mr. Murray. How are you?

22 A. Fine. How are you?

23 Q. Good. I don't know you, so I am just
24 going to ask a few brief questions about your
25 background beyond what you mention in your testimony.

1 Do you have any graduate degrees, sir?

2 A. I do not.

3 Q. Okay. What about any professional
4 certifications or licensure?

5 A. I do not.

6 Q. Okay. And you mentioned your work at the
7 McNees law firm, but you are not an attorney,
8 correct?

9 A. That's correct.

10 Q. Have you had any legal training or legal
11 courses in your background?

12 A. I'll identify a seminar I attended. I am
13 not sure if you would classify it as legal or not,
14 but it was a seminar put on by a company called --
15 it's now called Brubaker & Associates. It was a
16 two-day training session on fundamentals of utility
17 ratemaking.

18 Q. Okay. Thank you. And are you in a
19 particular practice group at the firm?

20 A. I am in what's called our Energy
21 Utilities and Environmental Practice Group.

22 Q. And you mentioned "environmental" in
23 there. Do you do any environmental work?

24 A. If I could clarify my prior answer?

25 Q. Certainly.

1 A. We also have a practice group that is
2 primarily focused on what I would characterize as
3 lobbying activities and a part of that practice group
4 as well.

5 Q. Okay. And is that an ancillary business
6 of the law firm? If you know?

7 A. I'm not sure what you mean by the term
8 "ancillary." We have a number of individuals within
9 our office here in Columbus as well as offices in
10 Harrisburg, Pennsylvania, that are registered as both
11 executive and legislative agency lobbyists.

12 Q. And do you know whether that -- the
13 lobbying practice group that you mentioned, is that a
14 separate legal entity?

15 MR. DARR: Objection, your Honor,
16 relevance.

17 MR. HUGHES: He mentioned in his answer
18 he was part of this lobbying group. I think it's a
19 fair question.

20 MR. DARR: Still doesn't establish
21 relevance, and counsel still hasn't established why
22 we are going down this path.

23 EXAMINER PARROT: Overruled.

24 Go ahead, Mr. Murray.

25 A. I don't know the answer.

1 Q. Okay. Thank you.

2 Your background mentions that in addition
3 to working as a Technical Specialist at the firm, you
4 also serve as the Executive Director of IEU-Ohio; is
5 that correct?

6 A. That's correct.

7 Q. Okay. And are you compensated by
8 IEU-Ohio for that?

9 MR. DARR: Objection, relevance.

10 MR. HUGHES: Your Honor, just trying to
11 figure out, explore any bias that may exist with this
12 witness.

13 EXAMINER PARROT: I'll allow the
14 question.

15 Go ahead, Mr. Murray.

16 A. I am not compensated as the Executive
17 Director.

18 Q. And what percentage of your typical
19 workday would you say is spent in your capacity as
20 Executive Director of IEU-Ohio?

21 MR. DARR: Same objection, your Honor,
22 relevance.

23 MR. HUGHES: Your Honor, the witness is
24 here testifying on behalf of this organization, so I
25 think I'm entitled to explore the scope of his work.

1 EXAMINER PARROT: Overruled.

2 Go ahead.

3 A. I would say I probably spend about three
4 or four days a month of my time doing something
5 related to my role as Executive Director.

6 Q. Okay. Thank you.

7 And you authored your testimony that was
8 filed in this case?

9 A. Yes, I did.

10 Q. Okay. Turning to the testimony which has
11 been marked as IEU Exhibit 1, I would first like to
12 ask you about the Question and Answer at the bottom
13 of page 4. Do you see that?

14 A. You are referring to Question and Answer
15 8?

16 Q. Yes. That's correct.

17 A. I'm there.

18 Q. Okay. And in response to a question
19 asking how AEP Ohio has characterized the need for
20 its proposal, you refer, in your answer, to the
21 survey conducted by Navigant; is that correct?

22 A. That's part of my answer.

23 Q. Okay. And is the Navigant survey --
24 that's the only part of the Company's Application
25 that you referred to in the text of this response,

1 correct?

2 THE WITNESS: Could I have that question
3 reread?

4 (Record read.)

5 A. No. I don't believe that's correct. I
6 believe the first sentence in that answer is
7 consistent with one of the testimony -- one of AEP
8 Ohio's witnesses in the case so that's separate than
9 the Navigant survey. And in the sentence that begins
10 on line 16, with the word "AEP admits," continuing to
11 the end of that sentence on line 18, is also
12 discussed in, I believe, the testimony of one of
13 AEP's witnesses.

14 Q. Thank you.

15 In your response, you mentioned that the
16 first part of your answer on line 14 indicated there
17 is a strong desire from customers to source
18 electricity from renewable energy resources. Is that
19 portion of your answer also referring to the Navigant
20 study, the Voice of the Customer?

21 A. Again, it was discussed in the Navigant
22 survey, but I believe it's also discussed in the
23 testimony of the -- I think the two Navigant
24 employees that discuss the survey results.

25 Q. Okay. Thank you.

1 You don't have any specialized training
2 or expertise in customer surveys, do you?

3 A. I do not.

4 Q. Okay. And you are not presenting any --
5 any competing survey of customer preferences as part
6 of your testimony here, right?

7 A. I am not.

8 Q. At the end of your response to Question
9 8, you state there at the bottom of page 4 that AEP
10 Ohio has interpreted the results of the Navigant
11 survey to conclude that AEP Ohio customers desire
12 renewable energy, which AEP Ohio equates to need,
13 even if there are additional costs in securing the
14 renewable resources, correct?

15 A. Correct.

16 Q. Okay. And as for the additional costs
17 you refer to here in your response to Question 8,
18 your testimony does not actually model any projected
19 cost to customers associated with this proposal,
20 correct?

21 A. It does not.

22 Q. And you also don't address any potential
23 economic benefits to customers here in your response
24 to Question 8, correct?

25 A. That's correct.

1 Q. And your written testimony also does not
2 address the methodology that Company witness Torpey
3 undertook to calculate projected economic benefits
4 associated in this proposal, correct?

5 A. That's correct, but I might add my
6 testimony was drafted with the understanding that
7 those were in Phase II of the -- for the case and we
8 were not to stray into those waters.

9 Q. Okay. Thank you.

10 Now, Section III of your testimony,
11 Mr. Murray, is titled "Need For Capacity," correct?

12 A. That's correct.

13 Q. And in that section of your testimony,
14 you state that the PJM market is, to use your words,
15 awash in capacity, correct?

16 A. Correct.

17 Q. And to support that assertion you mention
18 the results of PJM's most-recent base residual
19 auction, right?

20 A. That's correct.

21 Q. And yet, you also acknowledge, don't you,
22 that AEP Ohio is not actually seeking a Commission
23 determination that there is a capacity need for these
24 generic projects, correct?

25 A. Correct.

1 Q. Okay. Were you here, Mr. Murray, for the
2 discussion and testimony with Dr. Lesser?

3 A. Yes, I was.

4 Q. Okay. I have a question for you that
5 goes to some of the hypotheticals that AEP Ohio
6 presented to Dr. Lesser. And my question is, is it
7 your testimony, in Section III, that there could
8 never be a need for additional generation resources,
9 such as those at issue in this case, so long as there
10 is sufficient capacity that's being offered into the
11 PJM base residual auction to satisfy minimum reserve
12 requirements?

13 A. I believe that's correct. You would not
14 be able to demonstrate a physical need.

15 Q. Okay. Thank you.

16 A. One clarification to that. If you were
17 to assume that, for example, that the Commission was
18 looking for attributes such as fuel, fuel diversity,
19 there might be a set of circumstances in which you
20 would look at the resource mix within the PJM and say
21 we want some different type of generation and that
22 might be a reason to, in essence, acquire capacity
23 over and above what's being acquired through the
24 capacity auction.

25 Q. So you acknowledge then that there may be

1 factors besides capacity that the Commission could
2 consider in this context.

3 A. I believe that's the case, and it's been
4 a while since I reviewed them, but I believe the
5 actual Ohio Administrative Code rules that discuss
6 long-term forecast proceedings talk about some of
7 those attributes.

8 Q. And so your position -- your position is
9 that the Commission in this long-term forecast
10 proceeding, regarding the generic renewables, could
11 conceivably assess factors beyond a strict capacity
12 need.

13 A. Yes, they could.

14 Q. Okay. I have some questions for you
15 about your Exhibit KMM-4 which is the spreadsheet
16 that I believe you downloaded some information from
17 the Commission's website. Can you turn to that
18 exhibit for me.

19 A. I'm there.

20 Q. And that is a pretty lengthy spreadsheet.
21 I think it's, let see, 183 pages; is that correct?

22 A. I didn't do an exact page count, but it's
23 rather lengthy.

24 Q. And --

25 A. Small print, too, so I have to get my

1 glasses.

2 Q. Yes, yes. Subject to check, would you
3 agree with me that each page of this spreadsheet
4 includes about 50 -- 50 different facilities
5 previously certified by the Commission?

6 A. It's close to that. I think I counted it
7 yesterday. It was like 45 or 48.

8 Q. Okay. And so if you multiplied 183 pages
9 by 48, that's -- would you -- subject to check, would
10 you agree with me that's close to 9,000 different
11 renewable facilities certified by the Commission?

12 A. That's actually shown on the first page
13 of this exhibit at the very top left, total cases
14 approved, 9,674.

15 Q. Thank you. Yeah, great. I hadn't seen
16 that.

17 A. If I could, I would also indicate that
18 the exhibit is dated on October 22, 2018.

19 Q. So there may be some additional
20 facilities since that time?

21 A. There are and, in fact, as of yesterday,
22 the number of cases now total 9,768.

23 Q. And it looks like you have the
24 spreadsheets sorted by -- alphabetically by
25 technology; is that correct?

1 A. That's correct.

2 Q. And that the solar facilities begin on
3 page 3 of the spreadsheet?

4 A. That's correct.

5 Q. And they continue all the way to, let's
6 see, close to the end, page 182, I think; is that
7 correct, solar facilities?

8 A. That's correct. They end on page 182.

9 Q. How would you define a utility-scale
10 solar project, Mr. Murray?

11 A. I don't know that there is a common
12 definition of "utility scale." For the purposes of
13 my testimony, I identified projects that were large
14 enough in Ohio to require approval by the Ohio Power
15 Siting Board. And it's my understanding that that
16 applies to any generating facility with a nameplate
17 capacity of at least 50 megawatts.

18 Q. I'm sorry, I couldn't hear the last part
19 of your answer. The nameplate capacity of?

20 A. Of at least 50 megawatts.

21 Q. Thank you.

22 And if you know, do any of the solar
23 facilities listed from pages 3 to 182 in your exhibit
24 meet that -- that definition of utility scale?

25 A. I have not performed that analysis.

1 Q. Okay. And referring to page 8 of your
2 testimony, lines 15 through 16, you state that "since
3 it began certifying renewable energy facilities, the
4 Commission has certified 592.47 megawatts of solar
5 generation," correct?

6 A. Correct.

7 Q. Okay. And when you say "since it began
8 certifying," do you know when the Commission first
9 began doing that? If you know.

10 A. I don't recall the exact date the
11 renewable requirement went into effect in Ohio.

12 Q. Okay. And on page 9 of your testimony,
13 Mr. Murray, you mentioned eight projects with a
14 combined capacity of 914.9 megawatts that have been
15 proposed in Ohio since the beginning of 2017,
16 correct?

17 A. Correct.

18 Q. And by the way Question 17 is posed, you
19 would agree those are utility-scale projects?

20 A. Again, as I define them, projects that
21 require approval from the Ohio Power Siting Board.

22 Q. And am I correct, not one of those
23 projects you mention on page 9 is yet commercially
24 operational?

25 A. I did not perform that analysis. I know

1 that quite a few of them can't be commercially
2 operational because some of them are still sitting
3 before the Ohio Power Siting Board.

4 Q. And then on page 6 of your testimony, you
5 note that the fact that a project is in the PJM
6 interconnection queue doesn't mean it will become
7 commercially operational, correct?

8 A. That has been the historical pattern.

9 Q. Okay.

10 A. Correct.

11 Q. So sitting here today, you don't know
12 whether any of the eight utility-scale projects that
13 you mention on page 9 will actually become
14 commercially operational, do you?

15 A. There's no guarantee.

16 Q. Okay. So when you testify on page 12,
17 line 7, that "Market-based approaches are working to
18 bring renewable generating resources in the
19 marketplace," when it comes to what you define as
20 utility-scale solar, that assertion isn't true as of
21 today, is it?

22 THE WITNESS: Could I have the question
23 reread?

24 (Record read.)

25 A. No, I believe it is true. As I've

1 identified in my testimony, there are a number of
2 projects in the development phase, so it may or may
3 not come into operation.

4 Q. Do you agree, Mr. Murray, that for
5 projects that are pending before the Power Siting
6 Board, construction has not commenced?

7 MR. DARR: Asked and answered, your
8 Honor.

9 MR. HUGHES: Your Honor, I am not sure I
10 asked about the construction status of projects
11 pending at the OPSB.

12 EXAMINER PARROT: Overruled.

13 A. It's my understanding that for projects
14 that require approval by the Ohio Power Siting Board,
15 they would not be able to turn a shovel and break
16 ground before receiving approval.

17 Q. Okay. Thank you.

18 On page 13 of your testimony, Mr. Murray,
19 in response to Question 23, you include a block
20 quotation from the Commission's Opinion and Order in
21 the affiliate PPA case, correct?

22 A. Correct.

23 Q. And beginning on line 11 of that page,
24 you interpret the Opinion and Order to state that the
25 Commission directed AEP Ohio to first look towards

1 the use of bilateral contracting opportunities in
2 order to fulfill the 900-megawatt renewable
3 commitment, correct?

4 A. That's correct.

5 Q. Okay. Are you aware, Mr. Murray, that
6 AEP Ohio filed an Application for Rehearing that
7 was -- included an assignment of error focused on
8 this provision?

9 A. I would have to refresh my memory to see
10 if that is correct or not.

11 Q. Okay.

12 MR. HUGHES: Your Honor, may I approach?

13 EXAMINER PARROT: You may.

14 Q. Okay. So, Mr. Murray, I -- just for your
15 convenience, I put a -- it's a lengthy Entry on
16 Rehearing. Can you identify the caption on the cover
17 for the record, please, for AEP Ohio Exhibit 17?

18 A. It's the Second Entry on Rehearing, dated
19 November 3, 2016, in Case No. 14-1693-EL-RDR and Case
20 No. 14-1694-EL-AAM.

21 EXAMINER PARROT: It's been marked
22 Company Exhibit 17.

23 (EXHIBIT MARKED FOR IDENTIFICATION.)

24 Q. Okay. Mr. Murray, if you can turn to
25 page 56 of the Second Entry on Rehearing and take a

1 look at paragraphs 134 and 135, and I'll give you an
2 opportunity to read those paragraphs.

3 A. I've read these paragraphs. Because the
4 last sentence in paragraph 135 references back to
5 subpart A of AEP's second ground for rehearing, I
6 would need to look at that to have some context. If
7 you happen to know where that's at in the -- or
8 discussed in this, I can try to reference it.

9 Q. Sure. I do have a copy of that.

10 MR. HUGHES: I did not bring sufficient
11 copies for everyone, your Honors. If I could
12 approach, I could hand the witness the Application
13 for Rehearing that that's referring to.

14 EXAMINER PARROT: You may.

15 MR. DARR: Do you have a copy for me,
16 please?

17 MR. HUGHES: Your Honor, since I only
18 have one copy of the Application for Rehearing, with
19 your permission -- yeah, I could either have him look
20 over my shoulder to see the assignment of error on
21 the Application for Rehearing or perhaps we can find
22 the paragraph of the Second Entry on Rehearing where
23 the Commission simply restates that assignment of
24 error.

25 EXAMINER PARROT: Paragraph 126.

1 MR. HUGHES: Paragraph 126, thank you.

2 MR. DARR: Give me a moment, your Honor.

3 I am going through the filings right now. May I
4 approach Counsel, please --

5 EXAMINER PARROT: Yes.

6 MR. DARR: -- so I can confirm I am
7 looking at the right thing?

8 Q. (By Mr. Hughes) Are you ready,
9 Mr. Murray?

10 A. I am not sure.

11 Q. I would just like to refer to paragraph
12 135 on the Second Entry on Rehearing, AEP Exhibit 17.
13 And where the Commission states "As to bilateral
14 contracting, the Commission clarifies that AEP Ohio
15 should adhere to the stipulation and competitively
16 bid the projects for both the remaining ownership
17 share and for construction." Do you see that?

18 A. I see that.

19 Q. And do you have any reason to believe,
20 sitting here today, that the Company did not adhere
21 to that directive as clarified on rehearing by the
22 Commission?

23 MR. DARR: Objection, your Honor. We go
24 back to the Stipulation. It is what I believe we
25 should go to. I think that clarification, that

1 question is unclear.

2 MR. HUGHES: Your Honor, the Company asks
3 the Commission to clarify the directive that the
4 witness is block quoting on page 13 of his testimony.
5 The Commission provided that clarification on
6 rehearing, and I'm simply asking the witness if he
7 has any reason to believe that the Company has not
8 complied with the Commission's directive as
9 clarified.

10 EXAMINER PARROT: Overruled.

11 A. I don't know the degree to which the
12 Company has explored bilateral contracting one way or
13 the other.

14 Q. Mr. Murray, when you refer to "bilateral
15 contracting" in your last response, are you referring
16 to retail contracts?

17 A. I'm referring to either retail or
18 wholesale contracts that would be used to provide
19 support for the construction of renewables. And as I
20 go back and interpret the paragraphs that I quote
21 in -- on page 13, my understanding -- impression or
22 understanding what the Commission was trying to do is
23 to encourage AEP to use bilateral contracts to
24 provide the necessary support to contract renewables
25 rather than pursuing nonbypassable charges.

1 Q. And so you are referring to -- when you
2 say "bilateral contracting," you're interpreting that
3 to mean retail contracts?

4 A. It could be retail. It could be
5 wholesale. You could, for example, sell renewables
6 to a municipal electric system.

7 Q. Mr. Murray, is it possible that we could
8 address this topic in the Phase II when we get into
9 more detail about the RGR?

10 A. Who are you defining as "we"?

11 Q. Are you planning on returning? I can't
12 remember if you are returning, if you filed testimony
13 in that proceeding as well.

14 MR. HEALEY: I am going to object. There
15 is no procedural schedule for Phase II, so I am not
16 even sure what we are talking about right now.

17 EXAMINER PARROT: Let's rephrase,
18 Mr. Hughes.

19 Q. Is it your position, Mr. Murray, that in
20 the March 31 Opinion and Order, and the Second Entry
21 on Rehearing, the Commission was requiring the
22 Company to pursue bilateral retail or wholesale
23 contracts?

24 MR. HEALEY: Objection, your Honor. The
25 Commission's Orders speak for themselves, and

1 Mr. Murray is an expert witness. We don't need to
2 sit here and have him interpret the Commission's
3 Orders. Counsel for AEP can make any arguments it
4 wants, based on the Orders, in its briefs, and we
5 don't need Mr. Murray's lay interpretation of them.

6 MR. HUGHES: Respectfully, your Honor,
7 Mr. Murray has block quoted the Opinion and Order in
8 his testimony and suggested that the Company did not
9 comply with the Commission directive. So we are
10 certainly entitled to explore whether the Company has
11 complied with the directive as it was clarified on
12 rehearing.

13 EXAMINER PARROT: Overruled.

14 Q. (By Mr. Hughes) Isn't it true,
15 Mr. Murray, you didn't consider the Company's
16 Application for Rehearing when drafting your
17 testimony?

18 A. That's correct. I did not review it.

19 Q. Nor did you review the Commission's
20 Second Entry on Rehearing when you drafted your
21 testimony?

22 A. That's correct.

23 Q. Okay. On the last page of your
24 testimony, Mr. Murray, you ask the Commission to
25 conclude that AEP Ohio's proposed definition of

1 "need" does not satisfy what you describe as "the
2 Commission's long-term forecast rules to demonstrate
3 the need for additional electricity resource
4 options." Can you identify the rules that you are
5 referring to here?

6 A. It's a portion of the Ohio Administrative
7 Code. I don't have the rules in front of me, and I
8 don't have the rule number committed to memory.

9 MR. HUGHES: No further questions.

10 EXAMINER PARROT: Thank you, Mr. Hughes.

11 Any redirect? Do you need a moment?

12 MR. DARR: I may, your Honor, on one
13 narrow issue. May I have a couple of minutes?

14 EXAMINER PARROT: Yep. Take a moment.

15 Any redirect, Mr. Darr?

16 MR. DARR: Yes, your Honor. One narrow
17 area I would like to follow up on.

18 - - -

19 REDIRECT EXAMINATION

20 By Mr. Darr:

21 Q. Mr. Murray, you offered in response to a
22 question that the Commission might consider the
23 resource mix as a matter in determining need in this
24 case. Do you recall that response to a question
25 presented to you by counsel for AEP?

1 A. Yes, I do.

2 Q. Are you aware of any studies concerning
3 the resource mix in PJM with regard to whether or not
4 it's adequate or not?

5 A. Yes, I am. PJM resource -- recently
6 released the results of a study on that issue.

7 Q. And what were the results of that study?

8 A. The conclusions of PJM was the resource
9 mix in PJM is more diverse now than it ever has been
10 in the past and that there is no specific need for
11 additional amounts of any specific type of generating
12 resource.

13 MR. DARR: Thank you.

14 Nothing further, your Honor.

15 EXAMINER PARROT: Thank you.

16 Mr. Healey?

17 MR. HEALEY: Nothing further, your Honor.

18 Thank you.

19 EXAMINER PARROT: Ms. Bojko?

20 MS. BOJKO: No, thank you, your Honor.

21 EXAMINER PARROT: Mr. Stock?

22 MR. STOCK: No, your Honor.

23 EXAMINER PARROT: Mr. Whitt?

24 MR. WHITT: No, your Honor.

25 EXAMINER PARROT: Mr. McNamee?

1 MR. McNAMEE: Nothing, your Honor. Thank
2 you.

3 EXAMINER PARROT: Mr. Kurtz?

4 MR. KURTZ: No.

5 EXAMINER PARROT: Mr. Dove?

6 MR. DOVE: No, your Honor. Thank you.

7 EXAMINER PARROT: Mr. Hughes?

8 MR. HUGHES: Very briefly.

9 - - -

10 RE-CROSS-EXAMINATION

11 By Mr. Hughes:

12 Q. Mr. Murray -- oh, I'm sorry. Would you
13 agree that PJM's market design is indifferent to the
14 type of generation in the capacity market?

15 A. Just to clarify, you are asking
16 specifically about the PJM capacity market, no other
17 parts of the PJM market?

18 Q. That's correct.

19 A. I would say that I would agree that that
20 is currently the case that there are ongoing
21 proceedings at the Federal Energy Regulatory
22 Commission looking at changes to PJM market rules
23 that may change that.

24 MR. HUGHES: No further questions.

25 EXAMINER PARROT: Thank you, Mr. Hughes.

1 All right. Thank you, Mr. Murray.

2 Mr. Darr.

3 MR. DARR: Move the admission of IEU
4 Exhibit 1.

5 EXAMINER PARROT: Are there any
6 objections?

7 All right. Hearing none, IEU Exhibit 1
8 is admitted.

9 (EXHIBIT ADMITTED INTO EVIDENCE.)

10 EXAMINER PARROT: Mr. Hughes.

11 MR. HUGHES: The Company is not offering
12 that AEP 17. Thank you.

13 EXAMINER PARROT: All right. Thank you
14 very much.

15 All right. With that, we will break for
16 the evening.

17 MR. DOVE: Your Honor, sorry. One issue
18 in the interest of keeping Mr. Siegfried from having
19 to wear a suit tomorrow, if I request administrative
20 notice for two Commission filings in lieu of cross,
21 would that be acceptable?

22 EXAMINER PARROT: Let's talk about that
23 with Mr. Siegfried's counsel, I guess.

24 MR. DOVE: Oh, he is okay with it.

25 EXAMINER PARROT: I'm sorry. I thought

1 you were asking. I thought you were putting that out
2 there. Sorry. I misinterpreted.

3 MR. DOVE: We can deal with it tomorrow,
4 if you would like. I thought I would firm it up now.

5 MR. DARR: I guess I would like to know
6 what we are seeking administrative notice of.

7 EXAMINER PARROT: Yeah, as may others, so
8 let's take this up tomorrow.

9 MR. DOVE: Okay.

10 EXAMINER PARROT: Let's break for the
11 evening. We will reconvene tomorrow at 9:00 a.m.
12 Thank you.

13 (Thereupon, at 6:19 p.m., the hearing was
14 adjourned.)

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CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Wednesday, January 23, 2019, and carefully compared with my original stenographic notes.

Karen Sue Gibson, Registered
Merit Reporter.

Carolyn M. Burke, Registered
Professional Reporter.

(KSG-6681)

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Summary: Transcript in the matter of the Long-Term Forecast Report of the Ohio Power Company hearing held on 01/23/19 - Volume VI electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.