BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Edison: Company, The Cleveland : Electric Illuminating Company, and The Toledo :
Edison Company for : Case No. 16-0743-EL-POR
Approval of Their Energy :

Efficiency and Peak Demand : Reduction Program Portfolio: Plans for 2017 through 2019:

PROCEEDINGS

before Mr. Richard Bulgrin, Attorney Examiner, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-D, Columbus, Ohio, called at 10:00 a.m. on Monday, January 23, 2017.

VOLUME I

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7 1 Monday Morning Session, 2 January 23, 2017. 3 EXAMINER BULGRIN: This is the first day 4 5 of hearing for Case No. 16-743-EL-POR, being the 6 application of Ohio Edison, Cleveland Electric 7 Illuminating, and Toledo Edison Companies for Approval of Their Energy Efficiency and Peak Demand 8 9 Reduction Program Portfolio Plans from 2017 through 10 2019. 11 My name is Dick Bulgrin. I am the 12 Attorney Examiner assigned to conduct this hearing. 13 And let's start with appearances. For 14 the company. 15 MS. OSTROWSKI: Good morning, your Honor. 16 On behalf of Ohio Edison Company, The Cleveland 17 Illuminating Company, and the Toledo Edison Company, 18 Erika Ostrowski, FirstEnergy Service Company, 76 19 South Main Street, Akron, Ohio 44308. With me today 20 are my colleagues, Carrie Dunn with the same address; 2.1 Kathy Kolich from the law firm of Kolich and 22 Associates, 1521 Hightower Drive, Uniontown, Ohio 23 44685; and Michael Gladman from the law firm of Jones 24 Day, 325 John H. McConnell Boulevard, Suite 600,

Columbus, Ohio 43215. Thank you.

EXAMINER BULGRIN: Why don't we go straight down the row here.

2.1

MR. HEALEY: Thank you, your Honor.

Christopher Healey representing the residential customers of the FirstEnergy companies on behalf of Bruce Weston, Ohio Consumers' Counsel, 10 West Broad Street, Columbus, Ohio 43215. With me is outside counsel to OCC, Dane Stinson of Bricker & Eckler.

EXAMINER BULGRIN: Thank you.

MR. PARRAM: Good morning, your Honor.

On behalf of the Ohio Hospital Association, Attorneys

Matthew Warnock, Dylan Borchers, and Devin Parram, on

behalf of the law firm of Bricker & Eckler, 100 South

Third Street, Columbus, Ohio 43215; and also Rick

Sites, of Counsel, on behalf of the Ohio Hospital

Association, 155 East Broad Street, Suite 301,

Columbus, Ohio 43215.

EXAMINER BULGRIN: Ms. Mooney.

MS. MOONEY: Colleen Mooney on behalf of Ohio Partners for Affordable Energy, P.O. Box 12451, Columbus, Ohio 43212.

MS. MESSENGER: On behalf of the staff of the Public Utilities Commission of Ohio, Ohio Attorney General Mike DeWine, by Assistant Attorneys General Natalia Messenger and John Jones, 30 East

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1 Broad Street, Columbus, Ohio 43215.
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2 EXAMINER BULGRIN: Who's next?

3 MS. PAUL WHITFIELD: Angela Paul

4 | Whitfield on behalf of the Kroger Company. I'm with

Carpenter, Lipps & Leland, 280 North High Street,

6 | Suite 1300, Columbus, Ohio 43215.

MS. LEPPLA: Miranda Leppla on behalf of the Ohio Environmental Council and the Environmental Defense Fund, 1145 Chesapeake Avenue, Suite I, Columbus, Ohio 43212.

11 EXAMINER BULGRIN: Thank you.

MR. OLIKER: Good morning, your Honor.

On behalf of Interstate Gas Supply, Inc., Joseph

Oliker, 6100 Emerald Parkway, Dublin, Ohio 43016.

15 Thank you.

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16 EXAMINER BULGRIN: Thank you.

MR. PRITCHARD: On behalf of the

18 Industrial Energy Users of Ohio, I am Matt Pritchard

19 with the law firm McNees, Wallace & Nurick, 21 East

20 State Street, Columbus, Ohio 43215.

21 EXAMINER BULGRIN: Thank you.

MR. PERKO: On behalf of the Ohio

23 Manufacturers' Association Energy Group, James Perko,

24 Jr., and Kim W. Bojko, with the law firm Carpenter,

25 Lipps & Leland, 280 North High Street, Columbus, Ohio

10 1 43215. 2 EXAMINER BULGRIN: Is that everybody? 3 MS. WILLIAMS: Good morning, your Honor, Samantha Williams, Natural Resources Defense Council, 4 5 20 North Wacker Drive, Suite 1600, Wacker is spelled 6 W-a-c-k-e-r, Chicago, Illinois 60606. I am also 7 making an appearance of Robert Dove of the Law Offices of Robert Dove, P.O. Box 13442, Columbus, 8 Ohio 43213. 9 10 EXAMINER BULGRIN: Okay. 11 MS. FLEISHER: Good morning, your Honor. 12 Madeline Fleisher and Robert Kelter on behalf of the 13 Environmental Law and Policy Center, 21 West Broad 14 Street, Suite 500, Columbus, Ohio 43215. 15 EXAMINER BULGRIN: Thank you. Okay. Does that do it? Very good. All right. Let's go 16 off the record for a minute and let anybody that 17 18 wants to escape, escape. 19 (Discussion off the record.) 20 EXAMINER BULGRIN: Ms. Ostrowski. 2.1 MS. OSTROWSKI: The witness on behalf is 22 going to be Denise J. Mullins. 23 EXAMINER BULGRIN: Okay. 24 MS. OSTROWSKI: Next will be George

Fitzpatrick, then Edward Miller, and finally Mr. Eren

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     Demiray.
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                 EXAMINER BULGRIN: Okay. And there are
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     no preliminary matters to be addressed?
                 MR. STINSON: If I can inquire of other
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     witnesses; an order for other witnesses?
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                 EXAMINER BULGRIN: I know the OCC has --
 7
     we are going to start tomorrow morning with
 8
    Mr. Spellman. And I assume staff will put theirs on
     after that?
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10
                 MR. JONES: After OCC, yes, your Honor.
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                 EXAMINER BULGRIN: Okay. Good. All
12
     right. Call your first witness.
13
                 MS. OSTROWSKI: The companies call
    Ms. Denise J. Mullins.
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15
                 (Witness sworn.)
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                 EXAMINER BULGRIN: Please be seated.
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                 MS. OSTROWSKI: Thank you, your Honor.
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19
                       DENISE J. MULLINS
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    being first duly sworn, as prescribed by law, was
2.1
     examined and testified as follows:
22
                       DIRECT EXAMINATION
23
    By Ms. Ostrowski:
24
                 Please state your full name for the
            Ο.
25
     record and spell your last name.
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- A. Denise Jamison Mullins, M-u-l-l-i-n-s.
- Q. Ms. Mullins, by whom are you employed and in what capacity?
- A. I'm employed by FirstEnergy and I work as an analyst in the Retail Tariff Analysis and Forecasting Department.

MS. OSTROWSKI: Your Honor, at this time we would like to have marked an exhibit that was filed in this case, the amended direct testimony of Denise J. Mullins on behalf of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company, dated December 8, 2016. May we approach the witness?

EXAMINER BULGRIN: Sure. And we are going to mark this Company Exhibit?

MS. OSTROWSKI: 1.

EXAMINER BULGRIN: Okay. That's fine. (EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Do you have before you what has been marked for identification Company Exhibit 1?
 - A. I do.

2.1

- Q. Can you identify Company Exhibit 1, please?
- A. It is the amended direct testimony of Denise J. Mullins.

- Q. Ms. Mullins, do you have any changes or corrections to your amended direct testimony that need to be made for the record at this time?
- A. I do have two changes that need to be made to my direct testimony. My original filed direct testimony. Those can be found on page 5, lines 16 and 19. There is a citing reference. It should read "4928.66(A)(2)" and then we need to insert a "(a)" on both lines 16 and 19 on page 5. As well as page 11, the same insert on line 9 and line 12.
 - Q. Do you have any other changes?
- A. My second change is on page 12, line 18, please strike the word "ten" and change that to "fourteen."
 - Q. Does that conclude the changes to your testimony?
- 18 A. Yes, it does.

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- EXAMINER BULGRIN: Could you give me that one, Karen, if you can just read that?
- 21 (Record read.)
 - Q. If I asked you the questions that appear in Company Exhibit 1, with the amendments you've just made, would your answers be the same?
- 25 A. Yes, they would.

14 Was Company Exhibit 1 prepared by you or 1 Q. 2 under your direction and supervision? 3 Yes, it was. Α. Is the information contained in Company 4 5 Exhibit 1 true and correct to the best of your knowledge, information, and belief? 6 7 Α. Yes, it is. MS. OSTROWSKI: Your Honor, I move the 8 9 admission of Company Exhibit 1 subject to 10 cross-examination and any timely motions. 11 EXAMINER BULGRIN: All right. MS. OSTROWSKI: Ms. Mullins is now 12 13 available for cross. 14 EXAMINER BULGRIN: Thank you. 15 Mr. Healey. 16 17 CROSS-EXAMINATION 18 By Mr. Healey: 19 Good morning, Ms. Mullins. Ο. 20 Α. Good morning. 2.1 Do you have a copy of your initial direct Q. 22 testimony in front of you? 23 Α. Yes, I do. 24 Can you please turn to page 3. Ο. Α. 25 Yes.

Q. Starting at line 12, you state that the purpose of your testimony is to describe the companies' methodology for calculating their respective baselines and associated benchmarks for the energy efficiency requirements set forth in section 4928.66 (A)(1)(a) of the Revised Code. Do you happen to have a copy of 4928.66 in front of you?

A. I do not.

2.1

MR. HEALEY: Your Honor, may I approach just to?

EXAMINER BULGRIN: Sure.

MR. HEALEY: Thank you.

- Q. Ms. Mullins, I just handed you a copy of Ohio Revised Code 4928.66. You are familiar with this section of the Revised Code, correct?

 Generally?
 - A. Correct.
- Q. And we just discussed in your testimony on page 3 that you refer to both baselines and benchmarks. Can you look at 4928.66(A)(2)(a). The first sentence reads "The baseline for energy savings under division (A)(1)(a) of this section shall be the average of the total kilowatt-hours the electric distribution utility sold in the preceding three calender years." Can you confirm when you use the

word "baseline" on page 3, starting at line 12, this is the baseline you are referring to?

A. Yes, that is correct.

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- Q. And I would like to move up to 4928.66(A)(1)(a) and a little ways down it says "The annual savings requirements shall be, for years 2017, '18, '19, and '20, one per cent of the baseline and two per cent each year thereafter." Just to clarify when you use the word "benchmark" in your testimony, you're referring to this 1 percent annual savings requirement under 4928.66(A)(1)(a), correct?
 - A. That is correct.
- Q. Let's turn to page 4 of your initial testimony, please. Starting at line 21, you mention various adjustments that can be made to the baseline and one of them you describe is customer opt-outs permitted by Section 4928.6611 Revised Code or Section 8 of the Substitute Senate Bill 310, correct?
 - A. That is correct.
- Q. And then on page 5 of your testimony you mention that the companies may reduce the value for the distribution service sold by the usage for customers who opts out, correct?
- MS. OSTROWSKI: Do you have a line reference, Counsel?

MR. HEALEY: Yes. One second. It starts on line 16.

MS. OSTROWSKI: Thank you.

- Q. Starting on line 16 of page 5 of your initial testimony, you note that "the Companies may reduce the values for the 'distribution service sold' by the usage for customers opting-out of the utility's portfolio plan," correct?
 - A. Yes, I state that.

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- Q. So let's say we have a customer who opts out and that customer uses 500 megawatt-hours per year. Those 500 megawatt-hours would be subtracted from the baseline, correct?
- A. They would be subtracted from the retail sales.
 - Q. Okay. And how does retail sales differ from the baseline?
 - A. If we could turn to my Exhibit DJM-1 in my original testimony. Subtracting the opt-outs that occurs in Column 2, right after retail sales. We then make further adjustments including the weather and special contract adjustments. And then we adjust for the mercantile savings addbacks and the additional EE beyond mercantile which gives us an annual fully adjusted retail sales value. The

baseline is the average of the three preceding years.

Q. Got it. So to come back to my example of a customer who opts out and uses 500 megawatt-hours, that would reduce Column 7, fully adjusted retail sales, by the same amount?

MS. OSTROWSKI: Objection. Asked and answered.

EXAMINER BULGRIN: I'll allow it. You can answer if you know.

A. Yes, it would.

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- Q. And then the benchmark, given that it's a percentage of the baseline, would also be reduced as a result of that customer opt-out, correct?
 - A. Yes, it would.
- Q. And coming back to my example again of a customer that use 500 megawatt-hours, if the benchmark, which we already discussed is 1 percent for 2017, '18, and '19, it would reduce the benchmark by 5 megawatt-hours, correct?

MS. OSTROWSKI: Same objection.

21 EXAMINER BULGRIN: Overruled. You can 22 answer.

- A. Assuming all other factors remain constant, yes.
- Q. Can you turn to page 6 of your initial

"The Companies do not have a forecast of customers who will opt-out as of or after January 1, 2017." Do you see that on lines 2 to 4?

A. I do.

- Q. When you say "The Companies do not have a forecast," does that mean the companies did not attempt to forecast opt-outs for 2017, '18, and '19?
- A. As we stated in our testimony on page 5. Any of the companies -- or any of the customers who opted out of the 2015-'16 plan would be invalid, and any customers would have to opt out as of January 1, 2017, and at the time we prepared this, we were not aware of any opt-outs at that time.
- Q. My question was, did the companies attempt to forecast the number of opt-outs there would be in 2017, 2018, or 2019?
- A. No, we did not.
- MS. OSTROWSKI: Objection. Asked and answered.
- 21 EXAMINER BULGRIN: Overruled.
 - Q. You are not aware of any rule or law that prohibits the companies from forecasting opt-outs, are you?
- A. No, I am not.

Q. Ms. Mullins, let's turn to your, I guess it's amended testimony now, please. On page 2, line 16, you state that you are incorporating by reference various portions of your original testimony and that includes Exhibit DJM-1, correct?

A. Correct.

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- Q. And then on page 3 of your amended testimony, you state that Exhibit DJM-A2 is an amended version of DJM-1, correct?
 - A. That is correct.
- Q. I just want to make sure it's clear for the record so DJM-A2 replaces in its entirety DJM-1, correct?
 - A. Correct.
 - Q. And you prepared Exhibit DJM-A2 yourself?
- 16 A. I did.
 - Q. So you are familiar with all the calculations underlying the numbers on DJM-2, correct?
- 20 A. I am.
 - Q. Let's turn to that exhibit now, please, Exhibit DJM-A2 to your amended testimony. This is obvious, but just can you confirm that "CEI" refers to Cleveland Electric Illuminating, "OE" refers to Ohio Edison, and "TE" refers to Toledo Edison?

- A. That is correct.
- Q. Thank you.

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I would like to walk through how the numbers in the baseline column, Column No. 8, are calculated. Let's look at Cleveland Electric just as an example. I see that the baseline for Cleveland Electric for 2017 is 18,845 gigawatts hours, correct?

- A. Correct.
- Q. And that number is calculated by taking the average of the fully adjusted retail sales numbers in Column 7 for the preceding 3 years, correct?
 - A. That is correct.
- Q. So for the 18,845 for 2017, that's the average of the 2014, '15, and '16 numbers in Column 7 for Cleveland Electric, correct?
 - A. That is correct.
- Q. And then the process is the same for the rest of the numbers for Cleveland Electric, Ohio Edison and Toledo Edison, correct?
 - A. That is correct.
- Q. And going down to the bottom of this -or near the bottom of the exhibit, you have a section
 called "Total Ohio." I take it that the numbers in
 the "Total Ohio" column are just the sums of the

respective numbers from CEI, OE, and TE, correct?

- A. That is correct.
- Q. Now, looking at the benchmark column,
 Column No. 10, let's do Cleveland Electric for 2017
 again. I see 980 gigawatt-hours as the benchmark for
 2017 for Cleveland Electric, correct?
 - A. Correct.

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- Q. And that number is derived by multiplying the baseline of 18,845 by 5.2 percent, the cumulative benchmark in Column 9, correct?
 - A. That's correct.
- Q. And the same process for the remaining numbers for Cleveland Electric and all the numbers for Ohio Edison, Toledo Edison, and Total Ohio, correct?
- 16 A. That is correct.
- Q. Now, these benchmarks in Column 10, those are the cumulative benchmarks under the Ohio Revised Code, correct?
- 20 A. That is correct.
 - Q. So earlier today we -- we don't have to say "earlier today" when it was like 4 minutes ago.

 Earlier we discussed the annual benchmarks of the 1 percent, correct?
- A. Correct.

- Q. And I just want to understand, to use Exhibit DJM-2 to calculate the annual benchmarks, we would take the baseline numbers in Column 8 and multiply those by 1 percent, correct?
 - A. Could you please restate that question?
- Q. Sure.

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- A. Thank you.
- Q. To calculate the 1 percent annual benchmarks under Ohio Revised Code 4928.66, you would multiply the numbers in Column 8, marked "Baseline," by 1 percent, correct?
- 12 A. That is correct. However, we are calculating a cumulative benchmark here.
 - Q. Understood. So this exhibit is calculating the cumulative benchmarks, but you could use the data from Column 8 to calculate the annual benchmarks, correct?
 - A. Yes, that is correct.
 - Q. And we would do that the way I just described, by multiplying by 1 percent.
 - A. That is correct.
- Q. And so looking down at the Total Ohio,
 Column 8, for example, in 2017, we see 53,523
 gigawatt-hour baseline. If you multiply that by 1
 percent, you get 535.23 gigawatt-hours and that would

- be the 1 percent benchmark for the combined companies
 for 2017, correct?
- A. That would be 1 percent of the baseline, correct.
- Q. And the same process for 2018 and 2019 for Total Ohio?
 - A. That would be the same calculation.
 - Q. And this Exhibit DJM-A2 assumes, as we discussed before, that there will be no opt-outs, correct?
- 11 A. That is correct.

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- Q. So when there are opt-outs, if there are any, the baselines in this sheet would be adjusted downward to account for the opt-outs, correct?
- A. Holding all other items constant, correct.
- Q. And holding all else constant, the
 benchmarks would also be reduced in the same way we
 discussed before, correct?
- 20 A. Correct.
- MR. HEALEY: That's all I have, your
 Honor.
- MR. PARRAM: No questions, your Honor.
- MS. MOONEY: No questions, your Honor.
- MS. MESSENGER: The staff has no

25 1 questions. 2 MS. OSTROWSKI: Can we take a minute? 3 EXAMINER BULGRIN: Sure. MS. KOLICH: Your Honor, we need to 4 5 clarify something with the witness to make sure the record is clear. 6 7 EXAMINER BULGRIN: Okay. 8 MS. OSTROWSKI: Just one clarifying 9 question, your Honor. 10 EXAMINER BULGRIN: Okay. 11 12 REDIRECT EXAMINATION 13 By Ms. Ostrowski: Ms. Mullins, do you recall the 14 Ο. 15 hypothetical about the 500 megawatt-hour reduction of 16 the baseline based on opt-outs that Mr. Healey asked 17 of you? 18 Yes, I do. Α. 19 So if you were to reduce the baseline by 20 500 megawatt-hours based on opt-outs, what would the 2.1 impact be on the benchmarks? 2.2 Α. If it is 500 megawatt-hours, it would 23 reduce the benchmark as shown in my Exhibit DJM-A2 24 by .5. If it was 500 gigawatt-hours, it would

subtract -- reduce the benchmark by 5.

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                 MS. OSTROWSKI: Thank you.
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                 EXAMINER BULGRIN: Any objection to the
     admission of Company Exhibit 1?
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                 It will be so admitted.
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                 (EXHIBIT ADMITTED INTO EVIDENCE.)
 6
                 EXAMINER BULGRIN: Thank you. You may
 7
     step down. Let's go off the record here.
                 (Discussion off the record.)
 8
 9
                 MS. OSTROWSKI: The companies call
10
    Mr. George Fitzpatrick.
11
                 (Witness sworn.)
12
                 EXAMINER BULGRIN: Please be seated.
13
                     GEORGE L. FITZPATRICK
14
15
    being first duly sworn, as prescribed by law, was
     examined and testified as follows:
16
17
                       DIRECT EXAMINATION
18
    By Ms. Kolich:
19
            Q. Good morning, Mr. Fitzpatrick.
20
            Α.
                 Good morning.
2.1
            Q.
                 Would you please state your name and
22
    business address for the record.
23
                 George L. Fitzpatrick, 551 North Country
            Α.
24
     Road, Suite 201, Saint James, New York 11780.
25
                 MS. KOLICH: Your Honor, at this time I
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would like to have marked as Company Exhibit 2 for identification, the amended direct testimony of George L. Fitzpatrick on behalf of The Ohio Edison Company, The Cleveland Electric Illuminating Company, and Toledo Edison Company, marked.

EXAMINER BULGRIN: Okay. It will be so

EXAMINER BULGRIN: Okay. It will be so marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Fitzpatrick, do you have a copy of your amended -- may we approach the witness?

 EXAMINER BULGRIN: Sure.
- Q. Mr. Fitzpatrick, do you have a copy of your amended direct testimony which has been marked as Company Exhibit 2 for identification?
 - A. Yes, I do.
- Q. And do you have -- was this testimony prepared by you or under your direct supervision?
- A. Yes.

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- Q. Do you have any changes to the amended direct testimony?
- A. No.
- Q. Now, attached to your amended direct testimony is GLF-1 which is the direct testimony of George L. Fitzpatrick on behalf of the companies. Do you have any changes to that exhibit?

- A. No, I do not.
- Q. Okay. So if I asked you the same questions as set forth in your amended direct testimony or in the exhibit attached thereto, would your answers be the same today?
 - A. Yes.

MS. KOLICH: Your Honor, the witness is available for cross.

EXAMINER BULGRIN: All right.

MR. STINSON: Can we go off the record

11 | for a minute?

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12 EXAMINER BULGRIN: Sure. Let's go off

13 the record.

(Discussion off the record.)

EXAMINER BULGRIN: Ms. Kolich.

MS. KOLICH: Thank you.

- Q. Mr. Fitzpatrick, do you have other corrections?
- A. I do, to the Market Potential Study which was developed under my direction and control. I refer to it in my amended and my original testimony.
 - Q. What's your first correction?
- A. Okay. In order to make the peak tables
 consistent with Table 1-3 on page 12, on page 15
 under the heading of "State Peak Reduction Mandate

Percentage," I would strike out the percentages, the 7.75 percentage from 2021 through 2027. And similarly on page 18, Table 1-9, I would strike out the State -- "State Peak Reduction Mandate" of 7.75 starting in 2021 through 2027.

2.1

- Q. Do you have other corrections?
- A. I do. On page 32, it's the paragraph -third paragraph on the page entitled "Customer
 Characteristics, Behavior and Intentions." The third
 line it says -- at the end of that line it says
 "...another 100 commercial telephone surveys." That
 number should be "200 commercial telephone surveys
 per Company...."

And on page 39, on 4.3, third line down,

I would strike out the words "Internet and" and then

I would leave -- I would leave the word "email" and I

would add the words "and telephone survey responses."

- Q. Are there any other corrections?
- A. Yes. On page 56, under 6.0, the title "Residential Mail Survey Results," I would change that to be "Email and Telephone Survey Results."

And then I would go to page 99. In Section 8.5, fourth line down it says right now "mail and telephone surveys." I would change that to be "email and telephone surveys." And at the end of

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30
     that line it says "mail and telephone" -- it says
 1
     "mail survey data." It should say based on "email
 2
 3
     and telephone survey data."
                 And finally on page 100, under Section
 4
 5
     8.7, third line down, the middle of the page, "The
     residential survey was conducted by email and
 6
     telephone" instead of "mail."
 7
 8
                 Mr. Fitzpatrick, could you turn back to
            Ο.
 9
     page 39.
10
            Α.
                 Sure.
11
            Q.
                 The Market Potential Study.
12
            Α.
                 I'm there.
13
            Q. On -- I'm sorry, page 32.
14
                 32. Yes.
            Α.
15
            Q.
                 Where you made your correction to change
16
     the 100 to 200.
17
            Α.
                 Yes.
18
                 There is a reference up above that to
            Q.
19
     "Completed residential internet."
20
            Α.
                 Yes. I am sorry I missed that. I would
2.1
     change "internet" to "email."
2.2
            Q.
                 Okay.
23
                Sorry about that.
            Α.
24
                 Are there any other changes?
            Ο.
25
            Α.
                 No.
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Q. Okay. So if -- since you incorporate the Market Potential Study into your testimony, if I asked you the questions set forth in your amended direct testimony today, with those changes, would your answers be the same?

A. They would.

2.1

MS. KOLICH: Now the witness is ready for cross.

EXAMINER BULGRIN: Thank you.

Mr. Healey.

Mr. Stinson.

MR. STINSON: Thank you, your Honor.

Just for clarification, is the Market Potential Study going to be a part of Exhibit No. 2 or a separate exhibit or how are we handling that?

MS. KOLICH: It was attached to the application and it's Exhibit D in the original plan.

MR. STINSON: I guess my inquiry is whether your Honor wants the application marked as an exhibit.

EXAMINER BULGRIN: Ms. Kolich.

MS. KOLICH: Your Honor, rather than get confused what's in the record and what's out from the original filing, we'll have it identified and mark it as its own exhibit for purposes of hearing, if that's

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32
 1
     okay.
 2
                 EXAMINER BULGRIN: Sure. Let's go off
 3
     the record.
                 (Discussion off the record.)
 4
 5
                 EXAMINER BULGRIN: Let's go back on the
 6
     record.
 7
                 Mr. Fitzpatrick, do you have a copy of
     the Market Potential Study that Harbourfront prepared
 8
9
     on behalf of the companies?
10
                 I have a copy, but it has my own notes on
11
     it, so.
12
            Q.
                 Okay. Hang on.
13
                 MS. KOLICH: Your Honor, I have a
14
     document, FirstEnergy Ohio Operating Companies Market
15
     Potential Study, dated April 2016. It's a multi-page
     document with a number of exhibits. I would like
16
17
     that to be marked Company Exhibit 3 for
18
     identification.
19
                 EXAMINER BULGRIN: Okay. It will be so
20
    marked.
2.1
                 (EXHIBIT MARKED FOR IDENTIFICATION.)
22
                 MS. KOLICH: Mr. Fitzpatrick -- may I
23
     approach?
24
                 EXAMINER BULGRIN: Sure.
25
            Q.
                 Mr. Fitzpatrick, I am handing you a copy
```

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of what's been marked as Company Exhibit 3 for
 1
 2
     identification. Do you recognize that document?
 3
            Α.
                 I do, yes.
                And what is that document?
 4
 5
            Α.
                 It's the April 2016 Market Potential
 6
     Study for the FirstEnergy Ohio companies.
 7
            Ο.
                And does this document support the
     revised plan that's before the Commission in this
 8
9
     case?
10
            Α.
                Yes.
11
                 MS. KOLICH: Okay. Your Honor, I would
12
     move that Company Exhibit 3 for identification be
13
     admitted.
14
                 EXAMINER BULGRIN: Any objection?
15
                 MR. STINSON: Pending cross, I suppose,
16
     your Honor.
17
                 EXAMINER BULGRIN: Okay.
18
                 MR. KELTER: Yeah, can you speak up,
19
    please, Dane?
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                 MR. STINSON: Yes, I'll try. We don't
2.1
     have microphones in this room.
2.2
                 EXAMINER BULGRIN: No, we don't.
23
                 Mr. Stinson.
24
                 MR. STINSON: Thank you, your Honor.
25
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CROSS-EXAMINATION

By Mr. Stinson:

2.1

- Q. Good morning, Mr. Fitzpatrick.
- A. Good morning.
- Q. Just a few questions for you here today.

 My name is Dane Stinson. I'm representing the Office of Consumers' Counsel here, the residential customers of the state. And I do want to ask you some questions about the Market Potential Study. The cover of the study has the date April 2016. Is that the month in which the study was conducted and prepared?
- A. No.
 - Q. What is it? What does that date signify?
- A. It's the date at which the final report was edited and finished. We started the study in December of 2015. We looked at the savings estimates and the cost estimates in the December time frame. We then prepared surveys in December and then we got the surveys back which gives us information on participation in the base case and the light case. We got them back at the end of February. I got some data earlier than that, but we were finished with the study the middle of March.
 - Q. Do you know what date in December that

you began the study?

2.1

A. I can tell you I began -- I began doing the work around November 16th, because I received -- I received a phone call in the end of October from counsel, FirstEnergy Counsel, and a letter on I think November 5th or 6th indicating they were going to retain us to do this work. And then once I heard that and given I know the time frame of what we had to do, we started doing the -- some of the metrics for quantities in terms of costs and savings. We started that right away.

The only thing we couldn't start right away was participation because we had to get that from our surveys. So we had to modify our surveys, send those to FirstEnergy, the design team for their look and their help and their input. And those surveys went out back to our -- our contractor that does surveys for us in January. And we decided at that point we would do a combination of telephone like -- for residential, 200 property company, and then internet surveys or e-mail surveys where we have e-mail lists, and we did that and we turned that data around in the final form in like the 26th of February. I know the date because we were under a time frame to get that done.

Q. Thank you, Mr. Fitzpatrick. Now, just for some background for the -- for the next few questions. Just to confirm that the Market Potential Study assesses three areas, correct? Technical potential, economic potential, and achievable potential; is that correct?

A. That's correct.

2.1

- Q. Now, I want to focus some on the economic potential. Is it correct that the purpose of the economic potential assessment is to determine cost effectiveness?
 - A. Yes, it is.
- Q. And in determining cost effectiveness, you have used the total resource cost test, correct?
- A. We actually present three tests in the report and -- but in Ohio they rely on the total resource cost test. We look at the total resource cost test and we look at utility cost test as well.

And we also look at -- I mean I know -- I think I understand some of these questions in that there were certain things of an educational nature that we included in these programs because the whole idea of these energy efficiency programs is not only to capture kilowatt-hours and kilowatt savings, but also to move the market towards the next level of

energy efficiency, and you can't really do that without having the informational programs as well.

- Q. And is it correct that the total resource cost test is applied to energy efficient measures, programs, and portfolio?
- A. It's applied to -- it's applied to energy efficiency measures and programs. And we look at also an overall portfolio basis. Our -- our metric is to make sure that the -- at the end of the day that the overall portfolio that we present in the economic and certainly the achievable potential passes the TRC test in toto.
 - Q. Thank you.

2.1

2.2

And, generally, a TRC score of less than 1 signifies that the measure, program, or portfolio is not cost effective?

- A. A TRC less than 1 would indicate that it's not cost effective from the TRC perspective.

 Not necessarily from the utility cost test perspective, for example, or the participants.
 - Q. Thank you. My question goes to the TRC.
 - A. Sure.
- Q. And a score of greater than 1 means that
 a measure, program, or portfolio is not cost
 effective, correct?

A. Can you repeat that?

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- Q. And a score of greater than 1 means that a measure, program, or portfolio is cost effective?
- A. It means it is cost effective in the context in which it's designed, yes.
- Q. I want to direct your attention to, I believe your amended testimony at page 5. I'm sorry, it's the original, I'm sorry.
- 9 A. My amended has three pages so. It must 10 be.
- MS. KOLICH: Dane, I'm sorry, where are you?
- MR. STINSON: I'm on page 5 of the original.
- 15 A. Yes, I am there.
- Q. And there you state that "Generally,

 Economic Potential reviews the Technical Potential

 and screens it to identify and select only those

 measures that pass the cost-effectiveness test,"

 correct?
- MS. KOLICH: Could I have a line number, please?
- MR. STINSON: I'm sorry. Line 19 and 20.
- 24 A. Yes, that's what it says.
- Q. And does the economic potential review,

as well, and select those measures and programs that pass the cost effectiveness test?

A. I'm sorry. I apologize.

2.1

- Q. In other words, this talks about measures. I am just asking whether the economic potential screens for programs that pass the cost-effectiveness test?
- A. Yeah. We basically in the Market

 Potential Study look more at -- at measures. We do

 roll-up to programs, but we look more at measures

 because we are really interested in the packages of

 measures that we put together for different sectors,

 be they rebates, be they information programs, be

 they educational programs and things of that nature.
- Q. Now, we've mentioned measures, programs, and a portfolio. I want to direct your attention to the Market Potential Study. I will just refer to that as "the study." And on page 89.
 - A. 89, I'm there.
- Q. And am I correct those are the residential programs which you screen for cost effectiveness? I'm sorry. Let me restate that. Those are the measures that you -- the residential measures you screened for cost effectiveness.
- A. Yeah. 31 of them, yes.

- Q. And of those 31, 19 were considered economic?
 - A. That's true.

2.1

- Q. And as to programs, I would like to direct your attention to pages 106 to 108.
 - A. I'm there.
- Q. Are those the programs to which you applied the TRC test for residential customers?
- A. No. It says "Sub Program Name" but we did apply the TRC to those elements on those tables, yes.
 - Q. And just for background, page 106 is for Ohio Edison, page 107 is for CEI, and page 108 is for Toledo Edison, correct?
 - A. That's correct.
- Q. Now, Column 4 of each of those pages is captioned "Today's Value TRC Test." What is meant by "Today's"?
- A. It's basically when you look at the present value of the TRC over the period we looked at from 2017 through 2031. That's the TRC test that we see, given all the escalations and other issues that we account for in doing this type of a test on a 15-year basis.
- Q. So "today" would be mean 2016?

- A. It would mean when it was done, yes. It would be as of today, the present value of the streams of costs and benefits over the 2017 through '31 time frame.
- Q. Column 2, "RES" stands for residential, correct?
- A. Yes, it does. And "LI" stands for low income.
 - Q. Okay. Thank you.

2.1

And for each of those residential programs that have a TRC value of less than 1, those would be considered not cost effective; is that correct?

A. They would not be cost effective in and of themselves, but they add tremendous value to an overall portfolio. And if you look -- if you go back and look at the overall portfolio for Ohio Edison, for example, the Ohio Edison TRC for the package and portfolio of measures that we have in the Market Potential Study has a TRC of 1.69.

MR. STINSON: Your Honor, I would move to strike everything beginning with "in and of themselves" as not responsive to the question.

EXAMINER BULGRIN: Denied. Can you explain your answer? Where are you getting that

number?

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THE WITNESS: If we go to page 105, what we do, your Honor, is we -- in the Market Potential Study we design or we pick a set of measures and programs that are -- that are current best practice. Along with the ones that give rebates to get energy savings and things of that nature. We also pick those measures and those programs that educate consumers. The most important thing to do with these programs is to move the market toward the next level of energy efficiency. Therefore, you need some of these programs even though they don't pass the TRC test.

EXAMINER BULGRIN: Thank you.

- Q. (By Mr. Stinson) Just a few other questions, Mr. Fitzpatrick. On what pages of the Market Potential Study did you assess the energy efficient homes programs?
- A. I'm not sure I have a specific page that we did that. I think that was done in our analysis, in our models which were provided I believe to the parties.
 - Q. Sorry.
- A. No. They were provided to the parties, I believe. I don't have anything in here where I --

where I actually show that.

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- Q. Do you have any reference in the Market Potential Study that assesses energy efficient production programs?
- A. I'm sorry. There is a lot of things
 here. I can look at it if you want to give me 10
 minutes to look, but I can't recall off the top of my
 head if it's in this big report.
- Q. Yeah, I'll give you the time if you need to look at it.
- 11 A. Okay. What was that again you want to see?
- Q. The energy efficient production program
 and also the residential demand response program,
 that would be the next question.
- MS. KOLICH: Did you say energy efficient production program?
- MR. STINSON: Right.
- EXAMINER BULGRIN: Let's go off the record here.
- 21 (Discussion off the record.)
- EXAMINER BULGRIN: Let's go back on the record.
- Dane, why don't you rephrase the question and ask it again.

- Q. (By Mr. Stinson) Again, Mr. Fitzpatrick, my questions are -- there is three here. I am looking for references in your Market Potential Study that assesses the energy efficient homes program, the energy efficient products program, and the residential demand response program.
- A. Did you say direct demand response program? Is that one you mentioned?

2.1

- Q. I said residential demand response program.
- A. We have a direct residential direct load control program.
- Q. Well, my question is a specific program captioned "residential demand response program."
- A. I don't see that. I see direct load control. Residential direct load control. What was the next one, sir?
- Q. Energy -- let me get this right. Energy efficient products program.
- A. Well, the energy efficient products program, there are elements of that that we look at. For example, we would look at lighting. We would look at consumer electronics. We look at appliance turn in. We look at smart thermostat. We look at appliance rebates, those kinds of things. So we look

at components of that in our list of measures.

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- Q. Again, my question is, is there any reference in your testimony -- any assessment in your testimony of that program itself?
- A. I don't believe so, no. It's measures we look at.
- Q. And the final is the residential -- you mentioned the residential. Strike that.

The final is the energy efficient homes program.

- A. We have -- we have a new homes program, and we have a low-income new homes program. And we have audits -- audits and education program which are components of that.
- Q. Again, my question is a reference in your testimony to the energy efficient homes programs.
 - A. Where do you find that in my testimony?
- Q. I don't find it. I am just confirming that it's not there.
- A. Right. It's not there. We looked -- we looked at many of the elements of that, but we don't build it into a program as the designers do.
- MR. STINSON: Nothing further, your Honor.
- MR. PARRAM: No questions, your Honor.

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                 EXAMINER BULGRIN: Anyone else?
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                 We have -- any objections to the
     admission of Exhibits -- Company Exhibits 2 or 3?
 3
                 MS. KOLICH: Your Honor, do we have an
 4
 5
     opportunity to redirect?
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                 EXAMINER BULGRIN: Oh, I'm sorry. Yes.
 7
                 MS. KOLICH: Could we take a break?
 8
                 EXAMINER BULGRIN: Sure. How about 5
9
     minutes?
10
                 (Discussion off the record.)
11
                 EXAMINER BULGRIN: Back on the record.
12
    Ms. Kolich.
13
                 MS. KOLICH: Thank you, your Honor.
14
15
                      REDIRECT EXAMINATION
16
     By Ms. Kolich:
17
                 Mr. Fitzpatrick, Mr. Stinson asked you
     some questions about the TRC test, and I believe you
18
     indicated that the TRC test is used in Ohio. In what
19
20
     context were you referring to the TRC test?
2.1
                 What I do, the TRC -- the TRC is a test.
22
     We screen programs with the total resource cost test,
23
     and that's what we use to screen our programs. But
24
     we also present, like I said, other tests, the
25
     utility cost test, as well, in the Market Potential
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Study.

2.1

- Q. Right, but you are -- you are not conceding that the TRC test is used for every aspect of the Market Potential Study, are you?
- A. Oh, no, certainly not. I think the TRC is a good test to use when you are looking at -- at measures of programs that provide rebates to customers and things of that nature.

But like I said before, I think during my cross-examination, there are other programs that need to be part of a Market Potential Study that would not necessarily pass the TRC, like educational programs, like new technology programs, like inserting new technologies. I think we found LEDs, when they were originally used in 2009, I remember buying LEDs and they were super expensive and you have -- you could not have a cost-effective program back then to incentivize LEDs because they would be so expensive. So you need to incentivize new technologies.

Q. Okay. Now, would you expect the TRC values that you used for purposes of the Market Potential Study to be identical to the TRC values that would be reflected in the revised plans before the Commission?

MR. STINSON: I am going to object, your

1 Honor. Outside the scope of cross. 2 EXAMINER BULGRIN: Okay. Sustained. 3 MS. KOLICH: Oh, I don't get to respond? 4 EXAMINER BULGRIN: No. I was waiting for 5 your response. 6 MS. KOLICH: Oh. Your Honor, he has 7 asked all kinds of questions about the TRC values and 8 how low they are or the low ones. And in the context 9 of the plan it is relevant as to why they are 10 different, why they could be different, or if they 11 are different. 12 EXAMINER BULGRIN: Okay. I will allow 13 it. Anything further? 14 THE WITNESS: Can I answer? MS. KOLICH: Could I have the question 15 16 reread, please. 17 (Record read.) 18

A. No, I would not. As I stated during my cross-examination, we have a 15-year present value look. And so we have a present value of the TRC over a 15-year period where you have escalations in costs. While the savings may stay the same, your costs will go up, for example, administration costs, perhaps rebate costs, whatever.

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I think when I look at what Mr. Miller

- does, he does a three-year plan, a three-year look.

 And the three-year look is much more granular than a
- 3 | 15-year higher-level look.

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- Furthermore, I think the revised plans, if I recall, there were a few of those measures, three or four of those programs actually changed, the TRCs change because he has better data now and he is constantly having better data; where I had data as of December or January of 2015-'16.
- Q. Okay. And just to clear the record up,
 Mr. Stinson questioned you about if you are on
 page 106 of the Market Potential Study. The column
 that talks about today's value.
 - A. Yes.
- Q. What time frame were those numbers calculated?
- A. It was a present value analysis that was done in the, I guess, February time frame. Net present value analysis over a 15-year period up to 2031 brought back to 2016 TRC or -- yeah, 2016 TRC.
 - Q. February 2016?
- A. February 2016.
- MS. KOLICH: That's all I have, your
- 24 Honor.
- 25 EXAMINER BULGRIN: Anything further?

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 1
                 Any objections to the admission of
 2
     Company Exhibits 2 and 3, I believe it was.
 3
                 MR. STINSON: None, your Honor.
                 EXAMINER BULGRIN: It will be so
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 5
     admitted.
 6
                 (EXHIBITS ADMITTED IN A EVIDENCE.)
 7
                 EXAMINER BULGRIN: You may step down.
 8
     Thank you.
9
                 THE WITNESS: Thank you.
10
                 MS. OSTROWSKI: Companies call Mr. Edward
11
     C. Miller.
12
                 (Witness sworn.)
13
                 EXAMINER BULGRIN: Be seated.
14
15
                        EDWARD C. MILLER
     being first duly sworn, as prescribed by law, was
16
17
     examined and testified as follows:
18
                       DIRECT EXAMINATION
19
     By Ms. Kolich:
20
            Q. Good morning, Mr. Miller.
2.1
            A. Good morning.
                 Would you please state your name and
22
            Q.
    business address for the record.
23
24
                 My name is Edward C. Miller. Business
25
     address is 800 Cabin Hill Drive, Greensburg,
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Pennsylvania 15601.
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MS. KOLICH: And, your Honor, at this time I would like to have marked as Company Exhibit 4 for identification, the direct testimony of Edward C. Miller on behalf of The Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company.

 $\hbox{\tt EXAMINER BULGRIN:} \quad \hbox{\tt It will be so marked.}$

(EXHIBIT MARKED FOR IDENTIFICATION.)

MS. KOLICH: May we approach?

EXAMINER BULGRIN: Sure.

- Q. Mr. Miller, you have just been handed what's been marked as Company Exhibit No. 4 for identification. Do you recognize that document?
 - A. Yes.
 - O. And what is that document?
- A. This is my direct testimony.
- Q. Was that testimony prepared by you or under your direct supervision?
- 20 A. Yes.
- Q. And in that testimony, do you have any corrections or changes?
- 23 A. Yes.
- Q. What would that be?
- A. Page 29, line 1, the "passes" should be

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"pass" in the question.
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- Q. Are there any other changes to your direct testimony?
 - A. No.
- Q. So if I asked you the questions as modified -- as you just modified today, would your answers set forth in your direct testimony be the same?
 - A. Yes.
- MS. KOLICH: Your Honor, I would like now marked as Company Exhibit --
- 12 EXAMINER BULGRIN: Company Exhibit 5?
- MS. KOLICH: Company Exhibit 5 for
- 14 identification, please.
- 15 EXAMINER BULGRIN: It will be so marked.
- 16 (EXHIBIT MARKED FOR IDENTIFICATION.)
- MS. KOLICH: Entitled the supplemental
- 18 direct testimony of Edward C. Miller on behalf of The
- 19 Ohio Edison Company, The Cleveland Electric
- 20 Illuminating Company, and The Toledo Edison Company.
- 21 EXAMINER BULGRIN: So I'm clear the
- 22 initial testimony is Exhibit 4 and supplemental is
- 23 Exhibit 5.
- MS. KOLICH: Correct. So marked?
- 25 EXAMINER BULGRIN: Yes.

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                 MS. KOLICH: May we approach?
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                 EXAMINER BULGRIN: Sure.
                 Mr. Miller, you have just been handed
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            Q.
     what's been marked as Company Exhibit 5 for
 4
 5
     identification. Do you recognize that document?
 6
            Α.
                 Yes, I do.
 7
            Ο.
                 And what is that document?
 8
            Α.
                 It's my supplemental direct testimony.
 9
            Ο.
                 Do you have any changes to this
10
     testimony?
11
            Α.
                 Yes.
12
            Q.
                 What's -- what change do you have?
13
            Α.
                 Page 18, line 21, it's missing a word
     "of." It should read "...is generally anticipated
14
15
     before the launch of many...."
16
            Q.
                 Do you have any other changes?
17
            Α.
                 Yes.
18
                 What change would that be?
            Q.
19
                 Page 20, line 2. "Savings achieved" is
            Α.
20
     duplicative and one "savings achieved" should be
2.1
     stricken to read "New savings achieved delay...."
2.2
                 Do you have any other changes?
            Q.
23
            Α.
                 I do not.
24
                 So with those changes, if I asked you the
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     same questions as set forth in your supplemental
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direct testimony, would your answers to those questions be the same today?

A. Yes.

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MS. KOLICH: Your Honor, I would move for the admission of Company Exhibits No. 4 and No. 5, subject to cross.

EXAMINER BULGRIN: Okay. Mr. Healey.

MR. HEALEY: Subject to cross.

EXAMINER BULGRIN: And we are tendering the witness for cross.

MS. KOLICH: I am sorry, your Honor. The witness is available for cross-examination.

EXAMINER BULGRIN: Thank you.

MR. HEALEY: Thank you, your Honor.

15 | - - -

16 CROSS-EXAMINATION

17 By Mr. Healey:

Q. Mr. Miller, you are the Manager,

Compliance and Development in the Energy Efficiency

Department for FirstEnergy, correct?

A. Yes.

Q. And in that role you oversaw the development of FirstEnergy's proposed energy efficiency and peak-demand reduction portfolio in this case, correct?

A. Yes.

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Q. And in that role you also oversaw the modifications to the portfolio in the settlement in this case, correct?

A. Yes.

Q. And by "settlement" I am referring to the December stipulation that was filed in this case, which is not in the record yet, but you'll understand that's what I am referring to if I say "stipulation" or "settlement," correct?

A. Yes.

Q. Now, Mr. Miller, you are generally familiar with the requirements under Ohio Revised Code 4928.66 for energy savings benchmarks in Ohio, correct?

A. Yes.

Q. And you understand that for 2017, 2018, and 2019, each of the companies is required to achieve energy savings of 1 percent of their baseline?

A. Yes.

Q. And the combined benchmark for the three companies together is about 530,000 megawatt-hours for 2017, '18, and ' 19. Does that sound about right?

- A. The combined benchmark does change on an annual basis. I believe it's closer to 535 in 2017 and then the other years are slightly less.
- Q. Mr. Miller, do you have a copy of your supplemental testimony in front of you?
 - A. I do.

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- Q. Can you please turn to page 6. Starting on line 11 you state that the estimated acquisition costs per kWh saved for the programs under the Companies' Revised Plans is approximately -- approximately 16 cents per kilowatt-hour. When you say "acquisition costs," you're talking about the first-year cost for the energy savings, correct?
 - A. That is correct.
- Q. And that's distinguished from the lifetime costs?
 - A. Yes.
- Q. Let's move on to page 11 of your supplemental testimony, please. Starting at line 8 which is marked Paragraph 6, you referred to a mid-stream program approach for certain items including heat-pump water heaters, EnergyStar products, and circulation pumps. Now a mid-stream approach, that involves paying incentives to retailers, correct?

A. Yes.

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- Q. And under the mid-stream approach, the incentives are not paid directly to FirstEnergy residential customers, correct?
- A. Through a mid-stream approach, we engage I'll call it market actors, could be retailers, could be contractors as an example, for them to promote the eligible products for the program. The incentive that we provide is the -- is to the, you know, to that market actor for that program.

There could be some passthrough where the retailer or the contractor or whatnot passes some portion of the incentive that we are providing on to the customer, but that is up to the retailer or the contractor who is engaged in the program.

- Q. So the incentive does not go directly to the customer, correct? Under a mid-stream approach?
- A. The incentive would be to the retailer, the contractor, whoever the entity is that we're engaging to promote the program.
- Q. And you mentioned that the party that you were engaging may pass through some of the savings to the customer. They are not required to pass any of that savings through, are they?
 - A. That's correct.

- Q. And on page 11, same lines, you also refer to an upstream approach. Now, in an upstream program approach, the incentives are going to manufacturers; is that correct?
- A. Manufacturers would be one of the entities that upstream would represent, yes.
- Q. And what other entities would represent -- be represented in an upstream approach other than a manufacturer?
- A. Potentially distributors. I guess distributors could be considered mid-stream as well. So those are the parties that come to mind.
- Q. And by "distributor" you mean kind of a middleman between a manufacturer and a retailer, for example?
 - A. Correct.

2.1

- Q. And, again, under the upstream approach, there's no incentive in going directly to a residential customer, correct?
- A. It would be similar to my -- my prior answer, you know, in an upstream approach, we are working with the manufacturer or working with the distributor, you know, it's encouragement for them to promote the eligible products to their customers which could be contractors, could be the end-use

customers as well, regarding the qualified products, and that entity could again pass through a portion of the incentive to the customer.

- Q. And, again, they would not be required to pass through any of the incentive to the customer, correct?
 - A. That is correct.
- Q. Mr. Miller, do you have a copy of the stipulation in front of you?
 - A. Yes.

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- Q. And do you have the exhibits as well?
- A. I have Exhibit A as well as Exhibit B.
- Q. Let's look at Exhibit A. Now, Exhibit A is attached to the stipulation, and just to describe it, it is a list of all of the programs, subprograms, and then provides a comparison of the projected energy savings and costs under these programs and subprograms from the application to the settlement, correct?
 - A. From the initial application to the settlement, that is correct.
- Q. And there are two columns that I would like to talk about right now. The second column is referred to as "Program" and the third column is referred to as "Sub-Program." Do you see those two

columns?

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A. Yes.

- Q. Now, there is no column on Exhibit A that is called "measures," is there?
- A. There is no column on Exhibit A that is measures. The measures would be identified in Exhibit B.
- Q. And looking at Exhibit A, we see that subprograms fall within programs, that is to say, there are some programs that have multiple subprograms, correct?
 - A. Yes.
- Q. So just to take an example, under the energy efficient homes program, you've got school education, so school education is a subprogram but it is also therefore part of the energy efficient homes program according to FirstEnergy's Exhibit A?
 - A. Yes.
- Q. And in some instances the program only has a single subprogram like appliance turn in as only a single subprogram, correct?
 - A. Yes.
- Q. So in that example, the subprogram and the program are the same thing, correct?
- 25 A. Yes.

- Q. Now, we mentioned measures briefly.

 Measures are another level down from subprograms,

 correct? So a subprogram can have multiple measures

 within it?
- A. A subprogram generally is a grouping of measures based on common-end uses or activities that that measure grouping includes.
- Q. Now, in Exhibit A we see a column near the top called "Budget." Do you see that? It's near the right top of this exhibit.
- 11 A. Yes.

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- Q. And "As Filed" means the budget as filed in the application on April 15, 2016, in this case, correct?
- 15 A. Yes.
- Q. And "Reprojection" means the new budget under the December stipulation, correct?
 - A. Yes.
- Q. And then "Delta" is just subtracting the
 "Reprojection" column from the "As Filed" column,
 correct?
- 22 A. Yes.
- Q. And then the "Percent Change" is just identifying the percentage change of the delta?
- 25 A. Yes.

- Q. Now, as we see in Exhibit A, the budget is done -- or the budgets identified at the subprogram level; is that right?
- A. They are shown on Exhibit A at the subprogram level, that is correct.
- Q. And then for each program I see a line for "Sub-Total" and that adds up all the subprogram budgets to get you a program budget, correct?
 - A. That is correct.

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- Q. Now, there is no -- let me strike that.

 In FirstEnergy's stipulation there are no specific budgets at the measure level, correct?
 - A. That is correct.
- Q. And so in developing a budget, the budgeting is largely or -- the budgeting is done at the subprogram level, correct?
 - A. That is correct.
- Q. And then to get the budget for the program you just take the individual subprogram budgets and add them up and that's your program budget, correct?
 - A. Correct.
- Q. Mr. Miller, there is no scientific way to determine what should be a program and what should be a subprogram, is there?

63 I'm not sure --1 Α. MS. KOLICH: Objection. 2 3 EXAMINER BULGRIN: Basis? MS. KOLICH: Vaque, "scientific way." 4 5 what context? 6 MR. HEALEY: I'll rephrase, your Honor. 7 EXAMINER BULGRIN: Thank you. 8 Q. Mr. Miller, if you were to look at a 9 specific subprogram in isolation, is there any 10 objective way to determine whether that subprogram 11 should be a subprogram as opposed to a program? 12 When we design our portfolio, which would 13 include the program as well as all the measures that 14 are included, there's a lot of factors that influence 15 it. 16 You know, first off, we have implemented 17 programs, you know we have prior programs in Ohio 18 where we have had, you know, the measures, the 19 subprograms and the programs identified. We have 20 experience from operating those programs. And every 2.1 time we design a plan we take into account that 22 experience in terms of how best to present the 23 programs and its elements to our customers and to all

So over the years the subprogram listing,

of our stakeholders and to the collaborative.

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as I mentioned earlier, is a -- effectively is a grouping of measures that have common end uses or common activities. And our grouping of the measures that make up the subprograms to the program level is more of a where program -- you know, where the measures are targeting common objectives as an example.

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So, you know, our makeup of the measures and the bundling of measures that the subprogram column indicates and the alignment with the programs is based on that experience.

- Q. So is it fair to say then in developing the portfolio, putting together programs, subprograms and measures, you are considering a lot of factors and then you, as Manager of Energy Efficiency Programs, has to exercise some judgment to decide where things fall in the spectrum of program, subprogram, or measure?
- A. Myself, as well as the energy efficiency team.
- Q. Mr. Miller, let's turn to page 2 of your supplemental testimony, please. Now, starting on line 20 of page 2 of your supplemental testimony, you discuss a stipulation from Case No. 14-1297-EL-SSO which you refer to as the ESP IV case. Do you see

65 that at the bottom of page 2? 1 2 Α. Yes. 3 MR. HEALEY: Your Honor, I would like to mark as OCC Exhibit 1, a copy of the December 1, 4 5 2015, stipulation from Case No. 14-1297-EL-SSO that 6 is mentioned at the bottom of page 2 of Mr. Miller's 7 supplemental testimony. May I approach? EXAMINER BULGRIN: 8 Sure. 9 (EXHIBIT MARKED FOR IDENTIFICATION.) 10 EXAMINER BULGRIN: This is OCC Exhibit 1. 11 Mr. Miller, you have in front of you a Ο. 12 December 1, 2015 stipulation that was filed in Case 13 No. 14-1297. Is this the stipulation you referred to at the bottom of page 2 of your supplemental 14 15 testimony? 16 MS. KOLICH: Could I have that question 17 reread, please? 18 (Record read.) 19 Α. Yes. 20 Ο. And Mr. Miller, this -- you are generally 21 familiar with the stipulation at least as it pertains 2.2 to energy efficiency, correct? 23 Α. Correct. 24 Let's turn to page 11 of the ESP IV

stipulation, please. And there's no line numbers so

- 1 | I will do my best to direct you where I'm looking.
- 2 It's Section E.3.a. and it states here "The Companies
- 3 | will reactivate in 2017 all programs suspended in
- 4 | their EE/PDR Portfolio Plan in Case No.
- 5 | 12-2190-EL-POR...."
- Now, by "suspended" here, the stipulation
 is referring to the companies' decision to suspend
 some of its program after Senate Bill 310 was passed;
 is that correct?
- 10 A. Yes.
- Q. And those programs that were suspended were suspended for 2015 and 2016, correct?
 - A. Yes.

- O. And so this --
- 15 A. Yes.
- Q. This stipulation here from the ESP IV
 case, which has been marked OCC Exhibit 1, commits
 the companies to reactivate all of those programs
 beginning in 2017, correct?
- 20 A. Yes.
- Q. And then let's look at the next -- next
 subparagraph, E.3.b. in the ESP IV stipulation. This
 notes that "The robust EE/PDR Portfolio Plan
 offerings would strive to achieve over
 800,000 megawatts of energy savings annually, subject

to customer opt outs." Do you see that, correct?

A. Yes.

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- Q. And 800,000, just to do very basic math, 800,000 megawatt-hours of energy savings annually, over the three-year planned period in the settlement 2017 to 2019, that would be 2.4 million megawatt-hours of energy savings, correct?
 - A. Yes.
- Q. Let's go back to Exhibit A to the stipulation, please. Now, at the top there is a column identified as "MWH," megawatt-hours. That's the projected energy savings for the programs, correct?
 - A. I'm sorry. Can you repeat the question?
- Q. Sure. At the top of Exhibit A there is a column which has four subcolumns. "MWH" is megawatt-hours. That heading identifies that what is below is the projected energy savings for the programs, correct?
- A. Yes. There is a "As Filed" column which would be the companies' initial application and the reprojection represents the stipulated -- stipulated plan, the revised plan.
- Q. And so all the way at the bottom of the "As Filed" column, you see a number, 2,416,670. Do

68 1 you see that? 2. Α. Yes. And so is it fair to say then that this 3 Ο. 2,416,670 was intended to comply with the 4 5 stipulation's requirement for about 2.4 million 6 megawatt-hours in energy savings? 7 Α. Yes. 8 MS. KOLICH: I'm sorry. I am having a little trouble hearing. Can I have that last 9 10 question reread? 11 (Record read.) 12 MS. KOLICH: Your Honor, I object to that 13 question on the grounds that it characterizes it as a 14 requirement. I believe the stipulation indicates that the companies will strive to achieve it. It did 15 16 not make it a requirement. 17 MR. HEALEY: Your Honor, he has already 18 answered the question, and Counsel --

MS. KOLICH: I couldn't hear the question to object before.

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EXAMINER BULGRIN: Okay. Well, I'll note your objection. I think he did already answer it so.

Mr. Miller, let's go back to your Ο. supplemental testimony, please. Page 3, starting on line 4, you mentioned in October 12, 2016, the

Commission entry on rehearing in the ESP IV case which says that "[T]he Commission will clarify that the goal of 800,000 megawatt-hours of energy efficiency savings annually...is simply a goal. The Companies are expected in the energy efficiency program portfolio plans to budget for the annual statutory energy efficiency mandate rather than the goal." Do you see that in your testimony?

A. Yes.

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- Q. And as we discussed before, the annual stat -- statutory energy efficiency mandate is about 535,000 megawatt-hours for 2017, and then I believe you said slightly lower than that for '18 and '19, correct?
 - A. Yes.
- Q. Now, let's look at Exhibit A to the stipulation again, please. Sorry for all the bouncing back and forth. Now, before we discussed the 2,416,670 at the bottom of the "As filed" column under megawatt-hours. Immediately next to that is a number, 1,781,833. That's -- that represents the total projected energy savings for all three companies for 2017 to 2019 under the stipulation, correct?
 - A. Yes.

Q. So you identified this 1,781,833 megawatt-hour energy savings target as a target that you believed was consistent with the October 12, 2016, fifth entry on rehearing in the ESP IV case, correct?

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- A. I wouldn't consider it a target. That is the amount of energy savings that we have based on our assumptions of developing the plan, with the plan design achieved to meet the statutory targets that's associated with it. So the number -- that number there itself is not the target. When I refer to "targets," it would be the statutory targets.
- Q. Okay. So the -- so the 17 -- 1,781,833, though, that would be the projected energy savings under the stipulation based on the budgets as you've projected them, correct?
- A. That would be the number that would result if every assumption in the plan held true to the projections.
- Q. And you believe that this 1,781,833 is sufficient to achieve your statutory minimum energy savings, correct?
- A. We believe that amount is what is required for us to ensure we are able to meet our statutory targets.

Q. Now, when you say that's what is required to meet your energy savings requirements, are you saying that that is the only number that you could possibly use that would be sufficient to reach your statutory minimums?

A. No.

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- Q. So, for example, the number here is 1,781,833. 1,781,832 might also work, right?
- A. When we designed our plans, we had an amount of cushion that we felt was needed to ensure that we were able to meet our targets. And that number was within the amount of cushion that we felt was needed.
- Q. When you refer to the "cushion," you are talking about a certain amount of energy savings above the statutory minimum?
- A. I'm referring to that when you're designing a plan, we have targets to meet. You can't just design the plan to just hit the targets. That will never happen. That's just unreasonable from the standpoint that we wouldn't be able to ensure that we are able to meet the targets and it would be at a much level -- or a significant amount of compliance risk. And, I'm sorry, I may have forgot the question while I was responding.

Q. I'll move on.

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And so given that you were responsible for overseeing the modifications to the programs for purposes of the stipulation, you had to make a judgment call on what number you believed would give you an adequate cushion, correct?

- A. It mischaracterizes it. It would not be a number that I, myself, believe is necessary. It would be based on the experience of the entire energy efficiency department and what level of savings we must design a plan that, you know, if every assumption holds true, you know, would result in this level of savings. But as we know, assumptions are assumptions and they will not hold true.
- Q. Let's stay with Exhibit A. Now, it's clear to reduce the energy savings from 2.4 million to about 1.78 million, there had to be modifications to some of the programs and subprograms, correct?
 - A. Yes.
- Q. And, for example, in some cases you eliminated an entire subprogram. I see that the new homes subprogram under energy efficient homes in the residential sector now has a reprojected budget of zero, correct?
- 25 A. Yes.

Q. And in other instances the program budgets were reduced, correct?

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- A. Program budgets were revised to reflect the changes that we made to the programs.
- Q. So just, you know, looking down the list, we discussed new homes, but it's clear other programs have -- or well, let's say subprograms since that's the term used here, other subprograms have a new budget that's lower than the old budget compared to the application, correct?
- A. Some programs have a budget that is less.

 I do note that there are a program or two that have a budget increase associated with it.
- Q. Now, in deciding which programs to modify, you considered input from the intervenors in this case, correct?
- A. We considered input from the intervenors as well as from the collaborative.
- Q. And when you refer to "input from the intervenors," are you talking about suggestions they may have made during settlement negotiations? And I don't want you to reveal those to me because I understand the confidentiality issues, but is that what you are referring to when you say "input from intervenors"?

- A. When I say "input from intervenors," I would be referring to input that we received in the direct testimony filed by several parties in the case, input that we may have received at the collaborative meetings, as well as input that we received through the settlement discussions.
- Q. Did you consider the objections that were filed in this case back in June of 2016?
 - A. Yes, we did.
- Q. Mr. Miller, can you turn to page 5 of your supplemental testimony, please. Starting on line 11, you state that the Market Potential Study that was used to develop the proposed plans was also used to develop the revised plans; is that correct?
 - A. Yes.

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- Q. And just so we're clear for the record, when you are discussing the revised plans, we are talking about the plans as they stand in the stipulation from December 2016, correct?
 - A. Yes.
- Q. And so the Market Potential Study was used, at least in part, to decide which subprograms to eliminate or reduce or add to, correct?
- A. I wouldn't characterize it that way. We used the Market Potential Study to perform

participation projections of specific measures. We used it to perform the potential -- or the amount of potential that the programs were designed to achieve. That was done in part of our balancing effort to ensure we're not unreasonably expecting any given program to target a different amount of potential.

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And we also used it to -- it was also used in the original plans to establish measures that we should consider as we develop our plans.

So it really had the three prong or three primary areas of input being, you know, measure considerations, potential, and participation projections.

- Q. Did you consider the Market Potential Study's conclusions on -- on economically-feasible energy savings when modifying the programs for purposes of this stipulation?
- A. We considered the achievable potential of the Market Potential Study.
- Q. So you did not consider the technical potential or the economic potential?
 - A. That is correct.
- Q. Did you consider the cost effectiveness of the subprograms when modifying the portfolio under the settlement?

A. We considered cost effectiveness of the programs according to our cost effectiveness modeling.

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- Q. And so, for example, according to your cost effectiveness modeling, you looked at a subprogram that had a sub-1.0 TRC score, that would have made you, all else equal, more likely to reduce or eliminate that program under the stipulation, correct?
- A. As we completed our modeling, when we had cost -- you know, as we completed our modeling and had the cost effectiveness results for the various components of our plan, we did take into account the cost effectiveness results in establishing our final projections. It did cause us to look at components of the plan to, you know, basically validate the reason for continuing to include measures, and as part of that, that would have also been a consideration of whether we should eliminate some measures.
- Q. Okay. Let's go back to Exhibit A to the stipulation, please. I would like to focus right now on the residential customer action program. Do you see that in the "Residential" section?
 - A. You are on Exhibit A, correct?

Q. Yes.

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- A. Yes, I do.
- Q. And looking at the budget for the customer action program residential, it appears to have been reduced by 119,395 which is an 8 percent reduction; is that correct?
 - A. That is correct.
- Q. Now, under the settlement there were no changes to the program that resulted in this 8 percent decrease, correct?
 - A. That is correct.
- Q. And moving a little further to the left in that same row for the customer action program, we see that the energy savings projection went from 150,490 down to 13,681 which is a 91 percent decrease in energy savings under the customer action program, correct?
 - A. That is correct.
- MR. HEALEY: Your Honor, I would like to
 mark as OCC Exhibit 2, a copy of FirstEnergy's
 response to OCC Set 6 Interrogatory 130. May I
 approach, your Honor?
- EXAMINER BULGRIN: Sure. This will be marked OCC Exhibit 2.
- 25 (EXHIBIT MARKED FOR IDENTIFICATION.)

Q. Mr. Miller, you have in front of you what's been marked as OCC Exhibit 2 and this is one of FirstEnergy's discovery responses to an interrogatory from OCC. You'll see at the top right you are identified as the witness for this response. Are you familiar with this interrogatory?

A. Yes, I am.

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- Q. And the question here asks about the line that I was just discussing on Exhibit A and asks the companies to describe how they arrived at the 13,691 megawatt-hour savings number. Do you see that in the question?
 - A. Yes.
- Q. And your response is that the updated projections for the residential customer action program are based on the current expectations that the utility -- utility-administered programs will capture the vast majority of customer projects. Do you see that in your response?
 - A. Yes.
- Q. Now, when you say that the current expectations are that the utility-administered programs will capture the vast majority of customer projects, what you're saying is that because there are programs available to customers, they are less

likely to do energy efficiency measures on their own, correct?

- A. That's not how I would characterize it.

 The response is that as a result of having a robust portfolio of programs and measures, as a result, it's our expectation that customers will participate in the programs. It's not the customers are going to do less. It's that customers will participate in the programs.
- Q. So some customers who might have done energy efficiency on their own if there were no programs, you're saying will now participate in the program instead.
 - A. That's the expectation, yes.
- Q. Now, we discussed earlier that the scope of the programs under the stipulation has been reduced as compared to the application, correct?
 - A. Yes.

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- Q. And so wouldn't it have been true when the application was filed and the programs were even larger, that that would capture even more of the customers' energy savings on their own as opposed to less as is projected in Exhibit A?
- A. I think the rest of the response to this discovery request speaks to it. When we were

targeting 800 gigawatt-hours, our statutory requirements were still the 535. As a result of the Commission order to effectively budget to meet the statutory targets, we had to revise our plan in the programs as a result of that.

So given that our revised plan is now designed just to meet the statutory targets, we must ensure -- I mean, it says it here, we just ensure that the utility-administered programs are of sufficient size to ensure compliance. And that's associated with the uncertainty of the amount of savings that will be recognized under the CAP program.

- Q. Mr. Miller, you testified earlier there were no changes to the customer action program, didn't you?
- A. No changes to the customer, that is correct, in terms of the program.
 - Q. So what you're saying is under the settlement --
- 21 MS. KOLICH: Could you let the witness 22 complete his answer?
- MR. HEALEY: I apologize.
- Q. Were you done? I didn't mean to cut you off.

A. The design of the program is the same. It's as part of developing the revised plans we very carefully looked at all the programs that make up that plan. We looked at the potential study, as I mentioned earlier, across the various programs. I mentioned, you know, we have to ensure that we don't unnecessarily overrely on any given component. Given the reduced design of the plan to meet the statutory targets, we have to ensure and be very comfortable with every program's ability to contract savings for us to meet our targets and that includes the utility-administered programs.

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- Q. I guess what I am having trouble understanding is why everything you said -- just said isn't also true when you filed the application.
- A. When we filed the initial application, that was a much larger robust portfolio. As a result, every program had an increased level of expectation associated with it. But the -- you can't overlook that the statutory targets are the same in both cases, the original plan and the revised plan. The only difference was the original plan was targeting a goal of 800 gigawatt hours so there was reliance on each and every component of the plan to do more.

Q. Okay. Let's move on, still within

Exhibit A, to the residential HVAC program. Do you see that about halfway down the residential sector on Exhibit A?

A. Yes.

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Q. Now, let's run through some numbers again. "As Filed" meaning under the application, the residential HVAC program was projected to save 27,580 megawatt-hours, correct?

A. As filed, yes.

Q. And then that increases by 1,291 under the settlement, correct?

A. Correct.

Q. And the as-filed budget was 8,665,309, correct?

A. Yes.

Q. And then that is one of the programs we discussed before that actually has an increase in the budget of 3,208,743, correct?

A. Yes.

MR. HEALEY: If it's all right with your Honor, I would like to ask Mr. Miller to do some very basic math involving nothing more than division.

Q. Would that be all right, Mr. Miller? Do you have a calculator on you?

- A. If my battery is not dead. It's hanging in there, so, yes, I do.
- Q. Okay. So we notice that there is an increase in the cost of 3,208,743 and an increase in the energy savings of 1,291. That comes out to a cost of \$2,485 for each of those additional 1,291 megawatt-hours. Can you confirm that, please?
- A. So you are asking me to divide the 3,208,743 by the 1,291. The number is 2,485.
- Q. And that's for megawatt-hours, correct, since Exhibit A is done in megawatt-hours?
 - A. On that metric, yes.
- Q. And then one more quick conversion.

 \$2,485 per megawatt-hour is \$2.48 per kilowatt-hour,

 correct?
- 16 A. Yes.

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- Q. And that's compared to what we discussed before, the average acquisition costs under your portfolio of just 16 cents per kilowatt-hour, correct?
- 21 A. That metric, yes.
- Q. Mr. Miller, we'll stick with Exhibit A.
 Let's move down to the --
- EXAMINER BULGRIN: Let's go off the record for a minute.

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                  (Discussion off the record.)
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                  (Thereupon, at 12:10 p.m., a lunch recess
     was taken.)
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that, "Custom Buildings-SCI." Do you see that as

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well?

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- Q. Now, the Custom-SCI program, that's a program for energy-efficient equipment for nonresidential customers, correct?
- A. The "Energy Solutions for Business

 Program" is the program for small, commercial and industrial customers.
- Q. Okay. Sorry. Maybe I was hung up on the word "program." The Custom-SCI subprogram is a subprogram for energy-efficient equipment for nonresidential customers, correct?
 - A. Correct.
- Q. And the Custom Buildings-SCI subprogram, in contrast with the Custom-SCI, focuses on building shell improvements; is that correct?
 - A. That is correct.
- Q. And then moving down into "Large

 Enterprise," I see there is also "Custom-LCI." Do

 you see that under the "Large Enterprise" section of

 Exhibit A to the stipulation?
 - A. Yes.
- Q. And "LCI" stands for "Large Commercial and Industrial"?
- 24 A. Yes.
- Q. And then same question, Custom-LCI is a

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program for equipment -- sorry, a subprogram for
equipment for large nonresidential customers,
correct?
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A. Yes.

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- Q. And then Custom Buildings-LCI is a nonresidential subprogram for energy-efficient building shell improvements, correct?
- A. For large commercial and industrial customers, yes.
- Q. Now, let's move back to the megawatt-hour columns. The -- let's start with Custom-SCI. We see under the stipulation, 142,886 megawatt-hours over the three-year period, correct?
 - A. For Custom-SCI, correct.
 - Q. And then for Custom Buildings, 56,855?
- 16 A. Correct.
- Q. And then moving down, Custom-LCI is 233,208?
- 19 A. Correct.
- Q. And Custom Buildings is 50,454?
- 21 A. Correct.
- Q. Now, can I ask you to do some math again and add those four numbers up for me, please?
- MS. KOLICH: Which four numbers would
- 25 | those be?

MR. HEALEY: Those would be the projected 1 2 energy savings for the Custom-SCI, Custom 3 Buildings-SCI, Custom-LCI, and Custom Buildings-LCI subprograms on Exhibit A to the stipulation. 4 5 Α. Okay. 6 Ο. And what's the total for those four put 7 together? 8 Subject to check my calculations that I Α. 9 didn't key a wrong number or read the wrong number, 10 the number I get by adding 142,886, with 506,855, 11 plus 233,208, plus 50,454 should be 483,403. 12 Ο. And that's in megawatt-hours? 13 Α. Yes. 14 Thank you. Ο. 15 Mr. Miller, let's turn to page 18 of your 16 supplemental testimony, please. 17 I'm sorry, what page number? Α. 18 18 of your supplemental testimony. Q. 19 Α. Okav. 20 Q. Now, on line 13 to 14 you note that there 2.1 was an additional hearing date scheduled for July 22 2016 in this case, correct? 23 What line? I'm sorry?

Α.

Ο.

Α.

13 to 14.

Yes.

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- Q. And obviously the hearing did not take place in July 2016, correct?
 - A. Correct.

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- Q. Now, the next sentence you say, "Through no fault of the Companies, that schedule was postponed on several occasions." Do you see that?
 - A. Yes.
- Q. And with that statement, are you referring to other parties seeking continuances of the hearing in this case?
- A. I was generally referring to the fact that we filed the plans in April of this -- in April of 2016. We had a procedural schedule with a hearing scheduled for July, and I do know that in the docket there's been several extensions of that procedural schedule due to various reasons and that's what that's referring to.

MR. HEALEY: Your Honor, I would like to mark as OCC Exhibit 3, a printout of the docket from this case that Mr. Miller just referenced. May I approach?

22 EXAMINER BULGRIN: Sure.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. Now, Mr. Miller, do you recognize what I just handed you which has been marked OCC Exhibit 3

as a printout of the docket from this Case No. 16-743-EL-POR?

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- A. I haven't seen a printout before, so the format is something that I haven't seen before. But from looking at the content, I believe that's correct.
- Q. And looking at this, do you have any reason to believe this is an inaccurate representation of the docket in this case?
- A. It looks like it was printed from the Ohio Commission website, so I would believe so.
- Q. Okay. Now, this is in reverse chronological order, so let's start near the back, actually on page 3 out of 4. There's a filing on June 27, 2016. There is only one filing that date so you should be able to find it. It's a "Motion For Continuance and Request for Expedited Treatment and Memorandum in Support filed on behalf of the Public Utilities Commission of Ohio, electronically filed by Ms. Tonnetta Scott on behalf of PUC." Do you see that?
 - A. Yes.
- Q. And do you see any objections to that motion for continuance?
- A. I see objections earlier in June. I'm

not seeing an objection following that motion for continuance immediately following.

Q. Thank you.

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Let's move to page 2 of OCC Exhibit 3.

And there is, again, a single filing on September 29,

"Motion to Continue Indefinitely Procedural Schedule,

Request for Expedited Treatment, and Memorandum in

Support filed by J. Jones PUCO staff." Do you see

that?

- A. What was the date again? I'm sorry.
- Q. September 29. 9-29.
- A. "Motion to Continue Indefinitely
 Procedural Schedule, Request for Expedited Treatment
 and Memorandum in Support filed by J. Jones, PUCO
 Staff," yes.
- Q. And, again, do you see any objections to this motion to continue the procedural schedule?
 - A. Not immediately following it.
 - Q. And moving up the same page 2 on

 November 15. Again, only one filing that date and
 this is "Unopposed Joint Motion for Continuance
 electronically filed by Michael Gladman on behalf of
 The Ohio Edison Company and The Toledo Edison
 Company, and The Cleveland Electric Illuminating
 Company." Do you see that on the 15th?

A. Yes.

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- Q. And based on this docket, you see that was filed by the FirstEnergy companies, correct?
 - A. Yes.
- Q. And, again, there appears to be no opposition to this given that it is marked "Unopposed Joint Motion" and you do not see any objections on the docket to this motion for continuance, correct?
 - A. Correct.
- Q. Let's go back to page 18 of your supplemental testimony.
- MS. KOLICH: I am sorry. What was that reference?
- MR. HEALEY: Page 18 of the supplemental testimony.
- MS. KOLICH: Thank you.
- Q. And starting on line 20 you state, "Once the Revised Plans are approved, a three-month 'ramp-up' is generally anticipated before the launch of many of the programs." Do you see that on page 18 there?
- 22 A. Yes.
- Q. Now, it's true that some of your programs are already in place for 2017; isn't that right?
- A. I'm aware of one program that's in place

and components of two other programs that are in place.

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- Q. And what programs -- what program are you referring to that is in place?
 - A. The Community Connections program.
- Q. And what program are you -- what programs are you referring to that there are -- well, let me ask you this, can you explain what you mean when you say "components of a program"?
- A. I'm referring to certain measures within certain programs.
 - Q. And which -- which programs are those?
- A. It would be components of the energy solutions for business programs small and the energy solutions for business program large.
- Q. And which components of those programs are currently active?
- A. What I am aware of is the lighting measures, excluding standard CFLs, some of the custom measures within both of those programs. That's what I'm recalling.
- Q. When you say "custom," are you referring
 to the Custom-SCI, Custom Buildings, and Custom
 Buildings subprograms in each of Small Enterprise and
 Large Enterprise?

A. Yes.

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Q. And who is the -- let me ask you this, have you hired an implementation contractor for any of the four custom subprograms, those being Custom-SCI, Custom Buildings-SCI, Custom-LCI, and Custom Buildings-LCI?

A. Yes, we have.

Q. And is it the same implementation contractor for all four?

A. Yes.

Q. And is that implementation contractor an entity called Sodexo?

A. Yes.

MR. HEALEY: Your Honor, I would like to mark as OCC Exhibit 4, this is a printout of a website for the current FirstEnergy custom programs that are -- that Sodexo was hired as program implementer for. May I approach?

EXAMINER BULGRIN: Sure. OCC Exhibit 4.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. Mr. Miller, I just handed you what's been marked as OCC Exhibit 4. Can you turn to the last page of this exhibit which is marked 5 out of 5 at the bottom.

A. Yes.

Q. And then in the middle of the page, the name "Sodexo" is there, which we just -- you just testified is the program implementer for the four custom nonresidential programs. And you'll see here it says "Sodexo is the designated program implementer for commercial and industrial energy efficiency programs for FirstEnergy's Ohio utilities. This website is maintained by Sodexo." Do you see that?

A. Yes.

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- Q. And in light of that, and with a quick review of this, do you recognize this as the website for the Custom programs?
 - A. I believe it is.
- Q. And let's look at the first page of this OCC Exhibit 4. There's a bold heading called the "Effective Dates." Do you see that?
 - A. Yes.
- Q. And it says, "To qualify for incentives through the program, equipment must be new and installed after January 1, 2017." Do you see that?
 - A. Yes.
- Q. And so that states that these are the programs that are currently in effect, correct? In other words, it's not an old website for 2015 or 2016 programs, correct?

1 Α. Correct. 2 And then if we go to page 3, there's Q. 3 another bold heading, "Effective Dates." Do you see that on page 3? 4 5 Α. Yes. 6 And that says, "To qualify for incentives Ο. 7 through the Custom Buildings program, equipment must be new and installed after January 1, 2017." Do you 8 see that? 9 10 Α. Yes. 11 Ο. And so, again, that indicates that this 12 portion of the website for the Custom Buildings 13 program is also the current 2017 program, correct? 14 Α. Yes. 15 MR. HEALEY: That's all I've got, your 16 Honor. 17 EXAMINER BULGRIN: Okay. 18 MR. PARRAM: I have some questions, your 19 Honor. 20 EXAMINER BULGRIN: Oh, I'm sorry, Devin. 2.1 22 CROSS-EXAMINATION 23 By Mr. Parram: 24 Good afternoon, Mr. Miller. My name is 0.

Devin Parram. I am counsel on behalf of the Ohio

- Hospital Association and I have some questions for you today with respect to the companies'
 administrator contract with the Ohio Hospital
- So, by way of background, I want to get
 some definitions clear. Do you have Exhibit B to the
 stipulation in front of you?
 - A. Exhibit B, yes.
- 9 Q. Okay. Exhibit B is the "Revised Energy
 10 Efficiency and Peak Demand Reduction Program
 11 Portfolio Plans"; is that correct?
- 12 A. Yes, sir.

Association.

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- MS. KOLICH: Your Honor, could I ask
 Counsel to speak up. We've got this blower going.
- MR. PARRAM: Oh, sure.
- MS. KOLICH: Thank you.
- Q. And could you turn to page 11 of
- 18 Exhibit B.
- 19 A. Yes.
- 20 Q. You're there, Mr. Miller?
- 21 A. Yes, sir.
- Q. And in Section 1.4, in that paragraph, I
 think about four sentences down, there is a
 discussion about the companies using specific
 organizations called, quote-unquote, administrators.

Do you see that?

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- A. Not yet. I'm sorry. Can you redirect me?
 - Q. Sure. If you look at the -- if you go to the second sentence in the very first paragraph under Section 1.4.
 - A. Okay.
 - Q. It says, "Pursuant to a stipulation entered into in Case No. 08-0935-EL-SSO, the Companies committed to using specific organizations as 'Administrators.'" Do you see that?
 - A. Yes.
- Q. And are you familiar with the companies'
 filing in Case No. 08-0935-EL-SSO?
 - A. I am generally aware of it.
 - Q. It's correct that in that case the companies filed an application for approval from the Commission with respect to a number of different administrator contracts; is that correct?
 - A. That's my understanding.
- Q. And one of those specific organizations
 that were an administrator was the Ohio Hospital
 Association; is that correct?
- A. I believe so.
- Q. And the Commission ultimately approved

the companies' request to -- for approval of those administrator contracts; is that correct?

- A. Yes.
- Q. And the Commission approved of the -- of OHA's specific administrator contract; is that correct?
 - A. That's my understanding.
- Q. And OHA has been acting as a contract administrator throughout the companies' prior portfolio program; is that correct?
- 11 A. Yes.

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- Q. And on December 1, 2016, the companies served OHA written notification that the companies intended to terminate OHA as administrator of contract; is that correct?
- 16 A. Yes.
- MR. PARRAM: Your Honor, I would like to
 have marked for purposes of identification, OHA
 Exhibit 1, which is the December 1, 2016, Notice of
 Intent to Terminate Program Administrator Agreement.
- EXAMINER BULGRIN: Okay. It will be so marked.
- == | mainea.
- 23 (EXHIBIT MARKED FOR IDENTIFICATION.)
- MR. PARRAM: May I approach the witness,
- 25 | your Honor?

EXAMINER BULGRIN: Sure.

- Q. Mr. Miller, do you have in front of you a document that's been marked OHA Exhibit 1?
 - A. Yes.

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- O. What is OHA Exhibit 1?
- A. It's Notice of Intent to Terminate the Program Administrator Agreement dated December 1, 2016, from the company to Ohio Hospital Association.
 - Q. And you've seen this document before?
 - A. Yes, I have.
- Q. And in this document, the companies -the companies' basis for terminating OHA as a
 contract administrator was Section 11 of the
 agreement; is that correct?
- A. Yes.
- Q. And in this notice of termination there is no other basis articulated for the termination of OHA; is that correct?
- MS. KOLICH: Objection. The letter speaks for itself.
- 21 EXAMINER BULGRIN: I'll let him answer.
 22 You can answer the question.
- A. Okay. As I read, the basis indicated is Section 11 of the agreement.
- Q. And are you familiar with Section 11 of

the agreement?

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- A. I am aware of Section 11 of the agreement. I'm not sure I can quote it verb and verse.
- Q. Have you seen the OHA's administrator contract?
 - A. I have not.
 - Q. Now, the administrator contract with OHA officially terminated on December 31st of 2016; is that correct?
- MS. KOLICH: Objection. The witness

 indicated that he had not seen the contract, so how

 would he know when it had terminated?
- MR. PARRAM: Well, let me rephrase, your Honor.
 - Q. In OHA Exhibit 1, if you go down to the second paragraph, "Accordingly, the Agreement will terminate on December 31, 2016...." Do you see that?
 - A. I see the "intent to terminate the Agreement effective December 31, 2016."
 - Q. Okay. So assuming this -- that OHA

 Exhibit 1 accurately summarizes the administrator

 contract, the companies' administrator contract with

 OHA terminates on December 31, 2016; is that correct?

MS. KOLICH: Objection. The witness is

not an attorney as to contract -- he is not an attorney. He is not an expert on contract law and -- EXAMINER BULGRIN: Okay. Sustained.

MS. KOLICH: The letter speaks for itself.

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EXAMINER BULGRIN: Sustained.

- Q. To the best of your knowledge, prior to this Notice of Intent to Terminate OHA, was OHA ever terminated as a contract administrator?
 - A. Can you repeat the question?
- Q. Sure. Prior to the companies' serving this Notice of Intent to Terminate on OHA, are you aware of another instance where OHA was terminated as a contract administrator?
 - A. I am not aware.
- Q. Now, I want to talk quickly about the companies' prior portfolio case which would be the portfolio case from 2013 to 2015. And a hearing took place in 2012, where I believe you testified in that case; is that correct?
- A. I testified in the prior case. I'm not certain of the timing.
- Q. Okay. And the case -- the Case No. is
 12-2190-EL-POR. Does that help you remember about
 when the case was?

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            Α.
                 I'm sorry. I don't remember the prior
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     Case No. I was actually looking in our revised plan
     to see if it was noted.
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                 MR. PARRAM: Your Honor, I would like to
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     have marked, for purposes of identification, the
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     rebuttal testimony of Edward C. Miller from Case No.
 7
     12-2190-EL-POR.
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                 EXAMINER BULGRIN: That would be OHA
     Exhibit 2?
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                 MR. PARRAM: Yes.
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                 (EXHIBIT MARKED FOR IDENTIFICATION.)
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                 MR. PARRAM: May I approach?
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            Α.
                 I actually found a reference in our
14
     revised plan that the prior case was 12-2190-EL-POR.
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            0.
                 Mr. Miller, do you have in front of you
     OHA Exhibit 2?
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            Α.
                 Yes.
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                 Have you seen this document before?
            Q.
                 Brings back memories.
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            Α.
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            Q.
                 Good memories, I'm sure. What is OHA
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     Exhibit 2?
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                 OHA Exhibit 2 is rebuttal testimony of
            Α.
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     Edward C. Miller on behalf of Ohio Edison Company,
24
     The Cleveland Electric Illuminating Company, The
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     Toledo Edison Company, and I'm not sure of the date
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- Q. But you do recall now testifying in that case?
 - A. Yes.
- Q. Okay. Now, if you turn to page 6 of OHA Exhibit 2 and specifically lines 13 through 18, you testify regarding some proposals that OHA had presented in that case; is that correct?
 - A. Yes.
- Q. And in that case you agreed that the companies should provide OHA \$50,000 over the term of the portfolio to assist OHA with its benchmarking efforts; is that correct?

MS. KOLICH: Objection. Your Honor, what does this have to do with the case before us? The contract was terminated according to OHA Exhibit 1. This is — this is information dealing with a plan that is no longer in existence. It expired last year, at the end of last year, and we are not here to rediscuss issues that dealt with the plan no longer before this Commission.

MR. PARRAM: May I, your Honor? Your Honor, it's relevant because in this case the companies have terminated OHA as a contract administrator when in the initial portfolio plans the

companies filed they listed OHA as a specific contract administrator that they planned to potentially contract with. They -- let me finish.

MS. KOLICH: Sorry.

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MR. PARRAM: They specifically have decided to terminate and cut ties with OHA as a contract administrator. OHA, for years, has been working with the companies to help its member hospitals working as a contract administrator.

MS. KOLICH: Objection. Facts not in evidence.

MR. PARRAM: In the --

EXAMINER BULGRIN: Okay. Well, I am going to -- I think the question was basically that they were reading this.

MR. PARRAM: With respect to Mr. Miller's rebuttal testimony, Mr. Miller specifically testified in Case 12-2190 with respect to the experience and the commitment of OHA working with its member hospitals and specifically agreed to a proposal to support OHA to work with its member hospitals, so this is past evidence of the companies' agreeing that OHA is --

EXAMINER BULGRIN: Okay. But I don't think he's denying that.

1 MS. KOLICH: Would you please direct me 2 to where he testified to all of that in this case? MR. PARRAM: In this case? 3 4 MS. KOLICH: Yes. 5 MR. PARRAM: I'm testifying -- I am 6 directing you directly to his testimony. 7 MS. KOLICH: And I see no reference to 8 where all of that you just said was in this 9 testimony. I see a reference to a \$50,000 payment 10 made as part of a program that's no longer in a plan 11 that's before this Commission. 12 MR. PARRAM: I'm -- I am able to ask the 13 witness questions that go beyond his direct 14 testimony. If it relates to a specific part of 15 their -- part of your portfolio plans, which in this 16 case relates to the contract administrator's program 17 and OHA's performance as a contract administrator. 18 EXAMINER BULGRIN: Okay. Do you have a 19 question that relates to this case for this witness? 20 MR. PARRAM: Sure. 2.1 Ο. (By Mr. Parram) Mr. Miller, with respect 22 to OHA as a contract administrator, are you aware of 23 OHA -- any reason why the companies have terminated 24 OHA as a contract administrator?

MS. KOLICH: Objection. The reasons for

termination are asked and answered. It's in OHA Exhibit 1. He asked him. He responded that it was done pursuant to Section 11.

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EXAMINER BULGRIN: I am going to overrule and let the witness answer if he can.

- A. Can you repeat the question?
- Q. Sure. With respect to the companies' termination in this case of OHA as a contract administrator, are you aware of a particular reason why the companies have terminated OHA in this case?
- A. The only reason that I am aware of is as indicated in the letter, the OHA Exhibit 1.
- Q. Are you aware if the companies have previously agreed to work with OHA as a contract administrator with respect to funding to OHA?

MS. KOLICH: Could that question be reread? I'm sorry.

(Record read.)

MS. KOLICH: Objection on relevance.

EXAMINER BULGRIN: I don't know that the question has actually been answered here. It's certainly not answered in this letter.

MS. KOLICH: I objected on relevance. Why they've done business in the past has no bearing on their decision to terminate the contract.

108 1 MR. PARRAM: But. --2 EXAMINER BULGRIN: Do we have a question 3 pending here? Can you reread it? (Record read.) 4 5 EXAMINER BULGRIN: You can answer. 6 I'm aware of the administrator agreements Α. 7 which provided funding to OHA to act as an administrator. 8 9 Do you have a copy of the stipulation in Ο. 10 front of you, Mr. Miller? 11 Α. Yes, I do. 12 Can you turn to page 8 of the Ο. 13 stipulation. Are you there? 14 Α. Yes, sir. 15 Ο. Under paragraph R which is "Miscellaneous 16 Provisions," first bullet point. Now, in this 17 paragraph the companies are indicating that they are 18 willing to work with OHA with respect to its Energy 19 Star benchmarking program; is that correct? 20 Α. Yes. 2.1 Ο. Does the stipulation contain any provision with respect to funding assistance to OHA 22

MS. KOLICH: Objection. The stipulation

to perform these energy benchmarking efforts?

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speaks for itself.

EXAMINER BULGRIN: Sustained.

- Q. Mr. Miller, do you have in front of you Company Exhibit 4 which I believe is your direct testimony?
 - A. Yes.

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- Q. And could you turn to page 8 of your testimony. Are you there?
 - A. Yes.
 - Q. Okay. Pages -- or lines 9 -- I

 apologize. Lines 10 and 11, you -- you testified

 that -- you testified regarding the companies'

 obligation to attempt to align and coordinate their

 programs with other utility programs. Do you see

 that?
- 15 A. Yes.
 - Q. And then on page 14 of your testimony, lines 11 and 12, you indicate that the plans contain a description of the efforts of the companies to coordinate their programs with other public utility programs. Do you see that there?
 - A. Yes.
- Q. And you say that specifically in Section
 3.16 of the proposed plans.
- 24 A. Yes.
- Q. I am jumping around here.

MR. KELTER: I'm sorry, Mr. Parram, where are you?

MR. PARRAM: Company Exhibit 4, page 14,

MR. PARRAM: Company Exhibit 4, page 14, lines 11 and 12.

MR. KELTER: Page 14, lines 11 and 12?

MR. PARRAM: Yes.

MR. KELTER: Thank you.

- Q. And do you still have Exhibit B in front of you, Mr. Miller, Exhibit B to the stipulation?
- A. Yes.

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- Q. So on page 24 of Exhibit B, the stipulation, is where the companies describe some of the steps that they took to align their programs with other utility -- Ohio utility portfolio programs; is that correct?
- 16 A. Page 24 of?
- Q. Exhibit B of the stipulation.
- 18 A. Correct.
 - Q. Now, starting four lines down, you indicate that in Section 3.1.6, four lines down, the first paragraph, there is a sentence that starts, "The Companies" -- "Additionally, the Companies review other utilities' EE/PDR plans and programs to determine if adopting some of these utilities' ideas may improve FirstEnergy's programs."

1 My question is, did the companies review 2 DP&L's 2013 through 2015 plans and programs when they were preparing their -- their portfolio plans? 3 Α. 4 Yes. 5 Ο. Were the companies aware that DP&L 6 provided OHA \$75,000 in funding for years 2014 to 7 2015 to conduct energy audits? 8 MS. KOLICH: Could I have that question 9 reread, please? 10 (Record read.) 11 MS. KOLICH: Objection on relevance. 12 First of all, what DP&L does is a business decision 13 made by DP&L; and, secondly, it's for a period that's not even relevant to the period that we are talking 14 15 about in these plans. 16 EXAMINER BULGRIN: Overruled. You can 17 answer if you know. 18 I can't say that I remember that specific Α. 19 detail. When I answered yes to reviewing the other 20 utilities' plans, we are constantly looking at other 2.1 utilities' plans as we are developing our plans, 22 whether that be in Ohio or other jurisdictions. And

So I'm -- you know, I am aware that we

we are constantly looking for opportunities to

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improve our plans.

reviewed the other Ohio utilities' plans in developing our plans. But I just don't remember that level of detail to be able to say that I am aware of a specific payment to OHA as part of their prior plans.

- Q. In preparing your plans, did you -- did you review AEP's portfolio plans for the years 2012 through 2014?
- MS. KOLICH: Could I just get a clarification? Reviewing -- preparing the plans, which period are we talking about?
- Q. Did the companies, in preparing their current portfolio plans --

MS. KOLICH: Thank you.

- Q. -- review AEP's 2012 through 2014 portfolio plans?
- A. We reviewed AEP's current portfolio programs, when we were designing our plans, which they extended for 2015 and '16, so, by virtue, we did review their prior plans.
- Q. Were you aware that AEP provided OHA \$75,000 per year in its 2012 through 2014 portfolio plan?
- MS. KOLICH: Objection on the same grounds.

EXAMINER BULGRIN: Overruled.

A. That level of detail would -- the same answer would apply. I don't remember that level of specificity.

MR. PARRAM: That's all the questions I have, your Honor.

EXAMINER BULGRIN: Staff.

MS. MESSENGER: Yes.

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10 CROSS-EXAMINATION

11 By Ms. Messenger:

- Q. Good afternoon, Mr. Miller.
- A. Good afternoon.
 - Q. My name is Natalia Messenger. I am representing the PUCO staff here. I just have a few questions for you. If you could turn to page 19 of your testimony -- of your supplemental testimony.
 - A. Okay.
 - Q. Beginning with line 7, you state, "...the parties agreed that each Company's shared savings trigger should be reduced by 14 percent for the 2017 program year," correct?
 - A. Yes.
- Q. Can you explain what you mean by "shared savings trigger"?

- A. That would be the level of the annual savings that are achieved under the portfolio plan for the given year.
- Q. So if the plan is -- so if the trigger is reduced by 14 percent, just for an example, if the original trigger as proposed in the application was 100 megawatt-hours, if you reduce that by 14 percent, the new shared savings trigger would be 86 megawatt-hours, correct?
- A. If I understood the question correctly, no.
- 12 Q. Okay.

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- A. The shared savings trigger would be the company's statutory target for that current year, so it would be the annual savings target that the company has by statute.
- Q. So -- so when you are reducing the -- so the trigger is a statutory target?
- A. The trigger for shared savings is -- is established based on our statutory target, correct.
- MS. KOLICH: Your Honor, it might be helpful, Mr. Demiray talks about the mechanics and how it's calculated.
- MS. MESSENGER: Right, yes.
- MS. KOLICH: He may be a better person to

ask. Mr. Miller generally is here to talk about how the 14 percent was determined. But how it applies to the actual calculations would be better asked of Mr. Demiray.

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MS. MESSENGER: It's just trying to lay a foundation for my other questions.

- Q. (By Ms. Messenger) Okay. So let's move on to the next question in your testimony. In lines 12 and 13, you state that the companies -- the delay of the procedure schedule "will cause the companies to lose the opportunity to achieve at least 75 gigawatt-hours of energy efficiency savings...." How did you determine that number?
- A. I didn't specifically do the calculation of that number. My understanding of the calculation is it was an assessment that at the time the calculation was done it was an estimate of the delay in the proceeding and the amount of savings that the company, you know, would not be able to achieve as a result of delayed program implementation for 2017.

And the 75 gigawatt-hours was essentially a one-and-a-half month delay and applying that on a linear basis to the design of the plan of 594 gigawatt-hours. And then when you look at 75 gigawatt-hours as a basis of our statutory target,

116 1 it's approximately 14 percent. 2 MS. MESSENGER: Your Honor, could I just 3 have a couple of minutes? EXAMINER BULGRIN: Sure. 4 5 MS. MESSENGER: Your Honor, at this time 6 we have nothing further for Mr. Miller. EXAMINER BULGRIN: Anyone else? 7 Redirect? 8 9 MS. KOLICH: Could we take a break? 10 EXAMINER BULGRIN: Sure. Why don't we 11 come back at 2:20. 12 (Recess taken.) 13 EXAMINER BULGRIN: Let's go back on the 14 record. 15 Ms. Kolich. 16 MS. KOLICH: Thank you, your Honor. 17 18 REDIRECT EXAMINATION By Ms. Kolich: 19 20 Ο. Mr. Miller, OCC's Counsel asked you 2.1 questions about mid-stream and upstream subjects. 22 you recall that line of questioning? 23 Α. Yes, I do. 24 Are there any reasons that -- or is it

beneficial to incent at the mid-stream or upstream

level as opposed to end-use rebates?

A. Yes.

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- O. And what would those benefits be?
- A. The benefits of a mid-stream and upstream program approach is it allows you to engage market actors, the manufacturers, the retailers, the contractors, distributors; for them to promote the eligible products to all of their customers. So effectively you are reaching a very -- a much larger population. As opposed to relying solely on a mail-in-rebate program where only customers who are knowledgeable about a rebate participate in the program.

The mid-stream/upstream program design is typically a program that targets specific measures in order to overcome potential barriers to participation in the measure, such as customer education, as well as, you know, distributor stocking the equipment, loading the equipment, having the retailers knowledgeable about the energy-efficient products that are qualified. So they are actively promoting the program or the qualifying measures to customers.

Q. And turning to Exhibit A in the stipulation, OCC's Counsel asked you questions about whether you saw any measures defined in Exhibit A.

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Do you recall that line of questioning?
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- A. Yes, I do.
- O. Are there --

4 MR. HEALEY: I'll object. I'm sorry,

5 | your Honor. I am going to object as

6 mischaracterizing the prior testimony. I don't think 7 there were any questions about measures being defined

8 in Exhibit A.

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EXAMINER BULGRIN: Ms. Kolich.

MS. KOLICH: I'll rephrase.

EXAMINER BULGRIN: Thank you.

MS. KOLICH: Or, actually, can we go back to the beginning of his cross. I wrote it down. I'm almost positive there is a question about measures in Exhibit A, so let's get the characterization correct.

EXAMINER BULGRIN: Maybe I ought to just overrule.

- Q. Regarding measures in Exhibit A, are there measures listed in Exhibit A?
 - A. Yes.
- Q. Which ones would be characterized as measures?
- A. The educational subprograms which would include "School Education," "Audits and Education," and "Behavior Allocation."

Q. And why is "Behavioral" considered an education program?

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- A. That program specifically provides information to customers to educate them on their energy use and how it has changed over time, as well as to provide recommendations to the customer on how to become more energy efficient based on behavioral science.
- Q. And is a smart thermostat an educational program as well?

MR. HEALEY: Objection, your Honor. This is going outside the scope. There was no discussion of what were and weren't educational programs. There was merely a question about whether there were measures identified on this document.

EXAMINER BULGRIN: I'll overrule. You can answer.

- A. Yes. Similarly, the smart thermostats are a program -- I'm sorry, a measure that targets educating customers on behavioral opportunities regarding more efficient use of HVAC equipment.
- Q. Okay. And staying with Exhibit A, OCC's Counsel compared and contrasted programs versus subprograms. Does the company budget at the program or subprogram level when designing your plans?

A. When we design the plans, we create the budgets at the subprogram level.

Q. Why is that done?

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- A. That's done to support transparency to the components of the various programs. It supports transparency of the components of the programs, transparency to our customers, to our implementation team, as well as to the collaborative and to our stakeholders. So all the parties are aware of the components of our program and what our projections are for each of the components of the programs.
- Q. Now, OCC's Counsel also talked to you about the levels of kilowatt-hours that would be generated under the current plans, and I believe your answer was if all -- regarding the current level of projected savings under the current plans. Do you recall that line of questioning?
- A. The current savings under the current plans?
 - Q. Projected savings.
- A. The projected savings under the revised plans.
 - Q. I'm sorry, yes.

MR. HEALEY: Let me get that asked again.

25 EXAMINER BULGRIN: That's possibly good.

- MS. KOLICH: Let me try that one more time. Too many plans.
- Q. OCC's counsel asked you questions about the projected savings related to the revised plans which are before the Commission in this case. Do you recall that line of questioning?
 - A. Yes.

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- Q. And you referred to a cushion included in the numbers on Exhibit A related to the reviewed plans. Do you recall that?
 - A. Yes.
- Q. Now, why -- why is that cushion necessary?
- A. That cushion is necessary -- there are many assumptions that go into designing a plan.

 Assumptions regarding what the baseline would be over time, assumptions regarding participation in the programs, as well as the energy savings of the programs. So given the reduced level of the plan we would have to design the plan with a cushion to ensure that each of the programs are of sufficient scale and scope in order for us to meet our statutory targets.
- Q. And are those cushions comparable to other plans?

A. Yes. The cushion that's represented in Exhibit A, the 1,781 and 833 megawatt-hours, is approximately a 12 percent cushion versus the statutory target over the three years of the plan. That 12 percent is consistent with the companies' prior plans in Ohio as well as the plans of the other Ohio utilities.

MR. HEALEY: Your Honor, I would move to strike that response. There is nothing on the record on the cushions from previous plans or for other Ohio utilities.

EXAMINER BULGRIN: I'll overrule.

- Q. OCC's Counsel also asked you questions about the Market Potential Study and how you used it. Do you recall that line of questioning?
 - A. Yes, I do.

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- Q. Are the measures included in the Market Potential Study the same as the measures that you use in -- for purposes of designing your -- the revised plans?
 - A. No, they are not.
 - Q. Could you explain the differences?
- A. The measures included in the companies' plans are more granular. As example, the Market Potential Study looked at residential lighting which

- was inclusive of CFLs and LEDs; whereas, the companies' plan and our projections were based on both CFLs and LEDs separately.
- Q. And that's just one example; is that right?
 - A. That's just one example.
- Q. OCC's Counsel also asked a question related to whether you reviewed the economic or technical potential as opposed to just the achievable potential. Do you recall that line of questioning?
 - A. Yes, I do.

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- Q. And I believe you answered that you focused on achievable; is that correct?
 - A. Correct.
 - Q. Could you explain why that focus was centered on achievable potential instead of the economic or technical?
- A. The achievable potential is a function of a technical and economical potential that takes into account customer preferences and projections regarding their -- their participation among the various measures. So by considering the achievable potential, we, in fact, did take into account the technical and economical potential.
- Q. And OCC's Counsel also asked you

questions regarding the CAP program and noted that there -- I believe you noted there was about an 8 percent change in the budgets to the CAP program between what was filed originally in this case and the revised plans that are before the Commission today. Do you recall that line of questioning?

A. Yes.

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- Q. And could you explain what prompted that 8 percent reduction in budget?
- A. Yes. When we followed the original plans back in April, we based our budget projections on the actual costs that we had at that time for the CAP program. When we developed the revised plans, we had actual results for the continuation of that program under the prior plan that we factored into the budget reduction.
- Q. And there was some questions regarding the levels of participation under the CAP program when it was designed at 800,000 megawatt-hours versus the designs in the revised plan. Do you recall that line of questioning?
 - A. Yes.
- Q. And you indicated that you assumed there would be less participation under the revised plans; is that correct?

A. Yes.

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- Q. And what was the basis for that assumption?
- A. The basis of that assumption is by having robust portfolio plan programs available for customers with incentives available to them, the customers will participate in the programs directly.
- Q. Is that because they get paid if they participate under the programs and they don't get paid under the CAP program?
 - A. That's correct.
- Q. OCC's Counsel also had you do several calculations; specifically one related to the HVAC program. Do you recall that?
 - A. Yes.
 - Q. And according to my notes, that calculation resulted in an answer of \$2.48 per kilowatt-hour; is that correct?
 - A. Yes.
- Q. In your opinion is that metric indicative of the costs and savings associated with the HVAC program -- subprogram? I'm sorry.
- A. I believe that's a mischaracterization of the information. There were several changes that were made to the HVAC subprogram including the

increase of circulation pumps, the addition of 30,000
smart thermostats over the three-year plan period.
The reduction of other HVAC measures. When you look
at the reprojection budget and the reprojection
megawatt-hours at the HVAC level as presented in
Exhibit A, it equates to 41 cents a kilowatt-hour.

- Q. And for a subprogram, is 41 cents a kilowatt-hour still within the range of what would be expected in a designed program?
- A. That's well within the range of the dollar per megawatt-hour on that metric basis among the subprograms that are included in the companies' plans.
- Q. Counsel also showed you an exhibit which basically portrays the filings in this docket. Do you remember --
 - A. Yes.
 - Q. -- the questions related to that?
- 19 A. Yes.

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- Q. And he noted -- you noted to him that you did not see on that exhibit anywhere where there were objections to motions for continuances. Do you recall that?
- A. Yes, based on a review of the -- of the exhibit.

- Q. And were you privy to any conversations that might have taken place between the parties as to when those motions were proposed and whether parties would object?
- A. I was not involved in any discussions regarding those motions or the companies' position regarding those motions.
- Q. Would you know why the companies chose not to object?
- MR. HEALEY: Your Honor, he just said he was not part of the conversations. That calls for speculation.
- 13 EXAMINER BULGRIN: Sustained.
- MS. KOLICH: I didn't ask him to say what

 he thought they were. I just asked if he was aware

 of any.
- EXAMINER BULGRIN: Perhaps you could rephrase.
- 19 MS. KOLICH: Sure.

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- Q. Do you have any knowledge as to -- as to why the companies may or may not have chosen to object to the motions for continuance?
- A. I do not. I'm sure management had their,
 you know, had their positions or decisions, but I do
 not know.

- Q. And do you have OCC Exhibit 3 in front of you?
 - A. Can you refresh me on what that is?
 - Q. That's a copy of the docket.
 - A. Okay. The case record?
- 6 Q. Yes.

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- 7 A. Yes.
 - Q. Looking at page 1 of 4 on 12/09/16, do you see where the Attorney Examiner issued an entry continuing the hearing until December 13, 2016?
- 11 A. Yes.
- Q. And then on December 14, do you see the
 Attorney Examiner entry ordering the hearing -hearing be continued until January 23?
- 15 A. Yes.
 - Q. Do you see any motions for continuances found between those two dates on the docket?
- 18 A. No.
- Q. Now, OCC's Counsel also asked you
 questions related to certain C&I programs, small and
 large; do you recall that line of questioning?
 - A. Yes.
- Q. Now, those are also pertaining to some programs and subprograms in those -- those activities; is that correct?

A. Yes.

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- Q. Now, excuse me. Your discussions related to programs and subprograms as they pertained to residential customers. Would that discussion equally apply to the programs and subprograms related to the customer -- the C&I programs?
 - A. Yes.
- Q. Going to staff's line of questioning, I just want to make sure the record is clear. Staff asked you questions regarding the 75 megawatt-hours related to the early trigger. Do you recall that?
 - A. Yes.
- Q. And you indicated that you took
 14 percent of a number to get to the 75
 megawatt-hours; is that correct?
 - A. No.
 - Q. Okay. Would you please explain?
- A. At the time the calculation was completed, it was estimated that the delay in the procedural schedule would cause at least a 1-1/2 month delay in our ability to implement all of our programs. The 1-1/2 month delay applied to the companies' portfolio plan design of 594 gigawatt-hours. On an average annual basis it equates to a 75 gigawatt-hour lost reduction. The 75

gigawatt-hours divided by our statutory target of approximately 535 gigawatt-hours is 14 percent.

- Q. Now, related to OHA and the hospitals, is there -- can the companies work directly with hospitals to get -- encourage them to participate in the companies' portfolio plan?
 - A. Yes.

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- Q. Are there other ways to engage the hospitals besides the companies directly dealing with them?
- A. Yes. We hire an implementation vendor. It was noted earlier that Sodexo is the vendor for our commercial/industrial energy solutions for business programs. Our implementation vendor has the responsibility to conduct outreach and marketing through the customers who are eligible to participate in the programs which would include hospitals.

They also are responsible for developing what we refer to as a "program ally network" and those would be entities who, you know, are, you know, have customers that they support with the programs. Program allies could be a distributor, for example, you know, they sell equipment to customers.

So to the extent you work with a distributor to promote the equipment, you know, they

are a program ally. They are benefiting us and we are helping them with their business as an example.

OHA could be a program ally.

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So our implementation vendors, you know, again works with program allies to promote the programs, but also works with customers directly.

- Q. And there's nothing to preclude OHA from reaching out to its customers -- to its membership -- nothing in our plan prevents OHA from reaching out to its membership and educating them on the programs that may be beneficial to their membership, is there?
- A. That is correct. There is absolutely no reason why they could not work with their members and provide information to their members regarding our programs.

MS. KOLICH: That's all I have, your
Honor.

EXAMINER BULGRIN: Anything further?

Okay.

MS. KOLICH: Your Honor, at this time I would like to move into the -- into evidence Company Exhibit No. 4 and Company Exhibit No. 5.

EXAMINER BULGRIN: While we are doing that, is there any objection to OCC Exhibits 1, 2, 3, 4 or OHA Exhibits 1 or 2?

132 MS. KOLICH: Your Honor, if you could 1 2 just give me a second to get those organized and take 3 a quick look. 4 EXAMINER BULGRIN: Sure. 5 I think we are done with you, so you can 6 be excused. 7 THE WITNESS: Oh, thank you, your Honor. 8 MS. KOLICH: No objections to OCC's 9 exhibits, but I do object to both exhibits being --10 that were identified by OHA. OHA Exhibit No. 1 is a 11 letter dealing with termination of administrator 12 agreement that really has no bearing on this case. 13 It's totally irrelevant to this case. And I see no 14 relevance in admitting it. 15 EXAMINER BULGRIN: And that will be 16 overruled. 17 MS. KOLICH: Okay. And OHA Exhibit 2 18 deals with testimony in a case that was before the 19 Commission on a plan that's -- has expired. I see no 20 relevance in admitting this testimony. 2.1 EXAMINER BULGRIN: I am going to overrule 22 that one as well. 23 MS. KOLICH: Okay. 24 EXAMINER BULGRIN: All of those exhibits 25 will be admitted.

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                 MS. KOLICH: Your Honor, could I get a
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     clarification on your ruling on the second one? You
     did sustain my objection related to page 6 and the
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     $50,000 payment. So while it's in the record, I
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     assume your ruling on the questioning regarding the
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     50,000 payment is not part of the record; is that
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     correct?
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                 EXAMINER BULGRIN: Correct.
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                 MR. PARRAM: So OHA Exhibit 2 is admitted
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     into the record?
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                 EXAMINER BULGRIN: Exhibit 2 is admitted
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     into the record.
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                 MR. PARRAM: Thank you.
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                 EXAMINER BULGRIN: The line of
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     questioning, I guess there was an objection to it, so
     that -- the objection I believe was -- was sustained.
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                 MR. PARRAM: Thank you, your Honor.
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                 (EXHIBITS ADMITTED INTO EVIDENCE.)
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                 EXAMINER BULGRIN: Okay.
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                 MS. OSTROWSKI: The companies call
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    Mr. Eren Demiray.
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                 (Witness sworn.)
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                 EXAMINER BULGRIN: Please have a seat.
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EREN G. DEMIRAY 1 2 being first duly sworn, as prescribed by law, was 3 examined and testified as follows: 4 DIRECT EXAMINATION 5 By Mr. Gladman: 6 Q. Good afternoon, Mr. Demiray. 7 Α. Good afternoon. 8 Ο. Could you state your name and business 9 address, please. 10 My name is Eren G. Demiray, 11 D-e-m-i-r-a-y. My business address 76 South Main 12 Street, Akron, Ohio 44308. 13 Q. And where do you work, Mr. Demiray, and 14 in what capacity? 15 I'm the Manager of Reporting within the 16 Energy Efficiency Department of FirstEnergy Services 17 Company. 18 MR. GLADMAN: Your Honor, at this time we 19 would like to mark the amended direct testimony of 20 Eren G. Demiray on behalf of Ohio Edison Company, The 2.1 Cleveland Electric Illuminating Company, and The 22 Toledo Edison Company, dated December 8, 2016, as 23 Company Exhibit 6. May we approach the witness, your 24 Honor?

EXAMINER BULGRIN: Sure.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Demiray, do you have before you what has been marked as Company Exhibit No. 6?
 - A. I do.

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- Q. And can you identify that exhibit for us, please?
 - A. This is my amended direct testimony.
- Q. And, Mr. Demiray, do you have any changes or corrections to your amended direct testimony that need to be made for the record at this time?
- A. No, I do not.
 - Q. Mr. Demiray, if I asked you the questions that appear in Company Exhibit 6, would your answers be the same as indicated in that document?
 - A. Yes, they would.
- Q. Was Company Exhibit 6 prepared by you or under your direction and supervision?
 - A. Yes, it was.
 - Q. And is the information contained in Company Exhibit 6 true and correct to the best of your knowledge, information, and belief?
 - A. It is.
- MR. GLADMAN: Your Honor, I would move
 for the admission of Company Exhibit No. 6, subject
 to cross-examination.

136 1 EXAMINER BULGRIN: Okay. 2 MR. GLADMAN: And Mr. Demiray is 3 available for cross-examination. 4 EXAMINER BULGRIN: Thank you. 5 MR. HEALEY: Your Honor, could we go off the record for a second? 6 7 EXAMINER BULGRIN: Sure. (Discussion off the record.) 8 9 EXAMINER BULGRIN: Back on the record. 10 Mr. Healey. 11 MR. HEALEY: Thank you, your Honor. 12 13 CROSS-EXAMINATION 14 By Mr. Healey: 15 Mr. Demiray, can we start by turning to 16 page 105 of the revised plans in the Exhibit B to the 17 stipulation. Do you have that in front of you? 18 Α. I do. 19 Ο. Thank you. 20 Α. I'm there. 2.1 Q. Okay. About halfway down the page it's 22 the, I guess it's near the end of the third 23 paragraph, there is a sentence that says, "The Shared

Savings Mechanism is the same as approved by the

Commission in the Companies' Previous EE/PDR

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Portfolio Plans except for the changes approved by the Commission in Stipulated ESP IV or as listed below." Do you see that?

A. I see that.

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- Q. Now, here when you refer to the previous EE/PDR portfolio plans, you are referring to the plans that were filed in Case No. 12-2190-EL-POR; is that correct?
 - A. That's correct.

10 MR. HEALEY: Your Honor, I would like to 11 mark as OCC Exhibit 5, a copy of the direct testimony 12 of Eren Demiray on behalf of Ohio Edison, The 13 Cleveland Electric Illuminating Company, and The 14 Toledo Edison Company from Case No. 12-2190-EL-POR. 15 This was filed with the Commission in that docket on 16 July 31, 2012. May I approach the witness, your 17 Honor?

EXAMINER BULGRIN: Sure.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Demiray, do you recognize the document in front of you that's been marked OCC Exhibit 5?
- A. Yes, I do.
- Q. And this is your direct testimony from
 FirstEnergy's previous energy efficiency portfolio

Case No. 12-2190, correct?

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- A. That's correct.
- Q. Now, on page 105 of the portfolio plans as we discussed, you mentioned that the shared shavings mechanism is the same as in this previous case, except for certain changes in the stipulated ESP IV and as listed below. Do you recall that?
 - A. I see that, yes.
- Q. So if we were to look at your testimony in OCC Exhibit 5, this testimony would describe the shared savings mechanism in the current Case No. 16-743 except to the extent that anything has been changed in the ESP IV -- ESP IV stipulation or as listed in Exhibit B to the stipulation, correct?
- A. A lot in there, but to clarify, you said OCC 5 is my testimony from a prior case?
 - Q. Yes.
- A. That -- that would be the basis for which -- for the shared savings mechanism that is in this case, yes, subject to the changes that I noted in Section 7.
- Q. Great. Let's continue with page 105, this is Section 7.1 of the amended plans. Now, the last paragraph starts off by saying, "The Shared Savings Mechanism would be triggered only if the

Companies exceed both their Annual and Cumulative energy saving targets as set forth in R.C.

4928.66(A)(1)(a) in any given year."

And then the next sentence says that "The Shared Savings Mechanism will be calculated annually on an individual EDU basis, consistent with information presented in each EDU's annual compliance report." Do you see those two sentences there?

A. I do.

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- Q. So just to make sure I understand this correctly, each of Ohio Edison, Toledo Edison, and Cleveland Electric must exceed its individual annual and cumulative energy savings targets to qualify for shared savings in a given year, correct?
- A. I'm not sure if I would characterize it exactly like that. They are independent of each other. It's not that all three have to pass to qualify.
 - O. Sure.
- A. So any one company could trigger or not trigger based on that company's independent achievements through the year. Add to that, also, this doesn't take into consideration some of the language that's listed further down in the section specifically regarding the trigger adjustment that's

proposed relative to 2017. But generally, yes.

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Q.

- Understood. So just to one more Ο. clarification. It's conceivable then that, you know, in one year Ohio Edison could qualify for shared savings, but Toledo Edison might not and Cleveland Electric might not, correct?
 - Α. Yes. They stand independently.
- Mr. Demiray, in the companies' Ο. application they proposed an annual shared savings cap of \$25 million aftertax; is that right?
- I don't believe I have the application in front of me, but there is language that addressed that within the plan itself in Exhibit B in Section 7. I'm sorry. I apologize. In the application itself. The stipulation; not the application. I apologize.
- Understood. Thank you. Can you direct me to that in the stipulation?
- Relevant section, page 9 of 13, Section T, the first paragraph under the "ESP IV Order." The bottom half of that third bullet underneath there is recognizing that within the ESP IV order "the increase in the cap from \$10 million to \$25 million on shared savings that the Companies may earn is

stayed until such time as the Companies are no longer receiving revenue under rider DMR."

MR. HEALEY: Your Honor, I would like to mark as Exhibit -- OCC Exhibit 6 the -- this is a discovery response of -- it's the companies' response to NRDC Set 1 Interrogatory 32. May I approach the witness, your Honor?

EXAMINER BULGRIN: Sure.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Demiray, you have in front of you what's been marked OCC Exhibit 6. This is one of the companies' responses to an NRDC interrogatory. Do you recognize this discovery response?
 - A. I do.

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- Q. And you'll note on the top right you are identified as the witness for this discovery response?
 - A. Noted.
- Q. And the response refers to the \$25 million aftertax shared savings cap that was referenced in the application and asks approximately what that would be pretax. And your response was that it would be "Approximately \$39 million based on the Companies' current composite income tax rate."
 - A. I see that language.

- Q. And the \$35 million pretax, becoming \$25 million aftertax, represents a tax rate of about 36 percent; does that sound right?
- A. I'll put it in context, yes, that was based on the current composite income tax rate at that time. However, I don't know what that tax rate will be in the future period.
- Q. Sure. It's understood that whatever the tax rate will be is what it will be, but for now you are assuming 36 percent for purposes of this calculation, correct?
 - A. That's correct.

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- Q. And the -- the second portion of this discovery response asks: "Does the proposed cap apply to the sum of shared savings from all three FirstEnergy subsidiary companies?" And you say, "Yes, as stated in Section 7.1 of the...Plan...."

 Just to clarify, there is a single cap for the three operating companies each year for shared savings, correct?
- A. Again, it would be the cap is applied if the shared savings amount, as earned by all companies, would exceed that \$25 million would be capped and allocated across the companies. But, again, this is responsive to a situation that's no

longer what's in the stipulated agreement.

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- Q. Understood. And so based on your response to this discovery request, there's no individual cap, say, for Ohio Edison or Toledo Edison or Cleveland Electric, correct?
- A. It depends on your definition of what a cap is in particular. I would say there is a limiting mechanism based on the tiers that are included in the shared savings mechanism of 13 percent being the upper limit. So it could be considered a type of cap, but not a cap as stated here.
- Q. Now, let's come back to page 9 of the stipulation which you directed me to earlier and you noted there under Section T that the increase in the cap from 10 million to 25 million on shared savings that the companies may earn is stayed until such time as the companies are no longer receiving revenue under rider DMR. Now, that's interpreted to me that assuming nothing changes in the ESP IV case, the cap will be 10 million aftertax for purposes of this stipulation, correct?

MR. GLADMAN: Objection. It misstates what's in the document.

25 EXAMINER BULGRIN: I'm sorry, I didn't --

I just didn't hear you.

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MR. GLADMAN: Yeah. I think it misstates what's in the stipulation in the first bullet under T.

MR. HEALEY: That's what I am trying to ask him; to explain what it means to me.

7 EXAMINER BULGRIN: I will overrule on the 8 objection.

THE WITNESS: I'm sorry. Could we have the question reread?

11 (Record read.)

MR. GLADMAN: I guess maybe I would like to change my objection. It's not clear exactly what he's asking in that question to me. I am not sure what he is asking to the extent it's interpreting by whom or how.

MR. HEALEY: I would just respond if the witness doesn't understand, he can tell me.

EXAMINER BULGRIN: Sure. Go ahead.

A. I guess how I could answer this, as I understand the question would be that my understanding right now of the situation is that rider DMR was enacted January 1 of this year, so it's expected to have a three-year life which is exactly overlapping the companies' proposed '17 to '19 EE/PDR

plan.

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So, as I understand it, the companies would not, as it stands today, have an opportunity to receive more than \$10 million through a cap, aftertax, based on this provision. I can't say what will or won't happen in the future.

- Q. And using, again, the companies' estimated 36 percent tax rate, the 10 million aftertax, would be about 15.6 million before tax; is that about right?
 - A. In total, yes.
- Q. And the same -- the same applies under the stipulation, right, that this is a single cap spread across the three companies?
- A. I don't know the characterization of a "single spread across." You know, the shared savings mechanism, yes, it is \$10 million in total. But to say it's spread, I think I would take issue with that characterization because it is allocated to the companies in line with the adjusted net benefits at each company -- I'm sorry, not adjusted net benefits, but the -- the financial incentive shared savings incentive earned by each company prior to application of a cap.

So it's not arbitrarily thrown about, but

it is done on an equitable manner to ensure that each company has shared savings collection aligned to the company that produced those financial incentives.

- Q. I'll ask it a little more directly, hopefully, this time. If you -- if you add up the amount of shared savings each of the three companies get in a given year, it cannot exceed that 10 million combined, correct?
 - A. On an aftertax basis, correct.
- Q. Right. And, again, under the stipulation as compared to the application, there's no separate hard cap on a per-company basis aside from this \$10 million cap, correct?
- THE WITNESS: I'm sorry. Could we please have that reread?
- 16 EXAMINER BULGRIN: Sure.
- 17 (Record read.)

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- MR. GLADMAN: Objection. I think he answered this one at least twice.
- 20 EXAMINER BULGRIN: Well, one more time.
- A. Just for terminology, I am not sure, the application, if I have that in front of me as opposed to the stipulation itself. But, in general, I would say that the Exhibit B, which is the plan itself, is a continuation. So in terms of a cap as it's listed,

yes, it is included there. The allocation methodology is also included by virtue of it being the same mechanism that was approved in 12-2190.

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Q. Let's -- you will recall earlier you mentioned that it's possible, for example, for Ohio Edison to qualify for shared savings in a given year, but if the other two companies did not meet their benchmarks, they would not qualify for shared savings in that year, correct? Do you recall that?

MR. GLADMAN: Objection. That misstates his testimony.

EXAMINER BULGRIN: Overruled. You can --

A. I recall we had a discussion along those lines.

EXAMINER BULGRIN: -- clarify.

- Q. And you testified that it is possible, for example, if Ohio Edison meets its cumulative and annual benchmarks in a given year, that it would qualify for shared savings. And if Ohio Edison -- sorry -- and if Toledo and Cleveland Electric did not, then they would not qualify for shared savings in that same year, correct?
- A. It's possible that one company would trigger while the other two would not; and collection then of that one company would be limited to that one

company's customers, that's correct.

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- Q. And in that situation where one company triggered and the other two did not, that company would be eligible for shared savings up to the full amount of the \$10 million cap, correct?
- A. In line with the approved mechanism, yes. It would be -- it would have to flow through the calculations as listed, but one company could earn no more than a 13 percent share as the tiers would lay out, yes. If that amount exceeded \$10 million, it would be capped at \$10 million.
- Q. Mr. Demiray, can you turn to page 6 of your amended testimony, please.
 - A. I'm there.
- Q. And on line 9 you state, "...as projected for the Ohio Edison Company's benchmark calculation, the Company's baseline in 2017 is 24,123 gigawatt-hours." Do you see that?
 - A. I see that line.
- Q. And did you get that number from Ms. Mullins' Exhibit A2?
- A. I pulled it from Table 3 which is on page 3 of the plan. It might very well be the same number.
- Q. I see. Well, let's work off of -- let's

work off of Table 3 then if that's where you got it. Now, Table 3 on page 3 of the amended plans has the baselines and benchmarks for 2017 to 2019, and these are the revised benchmarks under the stipulation, correct? The old ones are on page 2.

A. Yes.

2.1

- Q. And -- sorry, I am going to have to bounce back and forth. Okay. Let's look again -- so page 6 of your testimony, you note 24,123 gigawatt-hours and then we see that same number on page 3 of the plans; 24,123 -- 24,123,467 megawatt-hours. Those are just different because of the units, correct?
 - A. That's correct.
 - Q. And then you state that in your testimony that a 1 percent annual target therefore translates into 241.23 gigawatt-hours, correct? That's on page 6, lines 10 to 12.
 - A. Correct.
 - Q. And just so we're clear, we get that number by multiplying the 24,123 gigawatt-hours by 1 percent or .01, correct?
 - A. Yes.
- Q. And then further down in your testimony in the same paragraph you're discussing the

14 percent reduction to the annual target and you say that would be reduced to 207.46. You got that number by multiplying 241.23 by 0.86, correct?

A. That is correct.

2.1

- Q. And it's .86 because it's a 14 percent reduction, so 1 minus 14 is .86, correct?
 - A. That's correct.
- Q. Now, according to your testimony, therefore, Ohio Edison for 2017 would be eligible for shared savings if it exceeds 207.46 gigawatt-hours of eligible energy efficiency savings in 2017, correct?
- A. Yes. The testimony reflects that and the testimony is reflecting the stipulated terms; that's correct.
- Q. Great. Let's turn back to Section 7 of the plans, page 106 -- or 7.1, rather, on page 106. And here there's a table that identifies "Incentive Tier," "Compliance Incentive," and "Incentive Percentage." Do you see that?
 - A. I see the table, yes.
- Q. And earlier you had mentioned a

 13 percent incentive. That's this tier 5 here,
 correct, at the bottom of the table?
- A. Yeah, that's correct. If the companies were to exceed 15 percent of the trigger amount.

- Q. So to -- using the example for 2017 for Ohio Edison at 207.46 gigawatt-hours as the trigger, you would multiply that by 115 percent and that would be the cutoff for getting the maximum incentive percentage, correct?
- A. Yes. I believe that translates to 238.58.

2.1

- Q. And just so we can -- I appreciate that number, that was my number as well, so I am glad we are on the same page. That 238.58 is actually lower than the 241.23 1 percent annual target that you identify in your testimony a couple of lines earlier, correct?
 - A. Yes, 238 is less than 241.
- Q. Mr. Demiray, can you turn -- back one page, 105 of the amended plans, please. Near the bottom of page 105, you -- the plans state that "The Shared Savings Mechanism will be determined based upon discounted net lifetime benefits as calculated by the Utility Cost Test." You see that, correct?
 - A. The last bullet, yes, I do.
- Q. I would like to focus quickly on the phrase "net lifetime benefits." The word "net" here signifies that you take the lifetime benefits and subtract the lifetime costs and you get a net amount

of benefits, correct?

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- A. Yes. If you take a look at the approved mechanism, there is, for each program within the companies' portfolio, you would determine the adjusted total net lifetime benefits. You are taking a look at the lifetime discounted costs and the lifetime discounted benefits. Those two are netted together to arrive at a total discounted net lifetime benefits.
- Q. And so if the -- if the discounted lifetime benefits are greater than the discounted lifetime cost, the net benefits will be positive, correct?
 - A. That is correct.
 - Q. And then, conversely, if the discounted net -- sorry -- if the discounted lifetime benefits are less than the discounted lifetime costs, then the net benefits will be negative, correct?
 - A. Generally, yes.
 - Q. Now, under the utility cost test or UCT as you understand it, the costs are generally the administrative costs of the programs and any rebates and incentives under the programs; is that right?
- 24 THE WITNESS: Can I have that reread,
- 25 please?

EXAMINER BULGRIN: Sure.

(Record read.)

2.1

- A. Yes, the costs under a UCT generally would be program overhead costs, program installation costs, as well as the direct costs of incentives or rebates paid to customers.
- Q. And are there any other costs counted under the UCT other than those you just described?
 - A. No. Those are the main ones.
- Q. I apologize. You say they are the main ones. Are there others?
 - A. Those are the ones to which I am aware.
 - Q. Thank you.

Now, this differs from the total resource cost or TRC test which also includes the costs that customers pay out of pocket, correct?

A. TRC does look at it from a different perspective so it is using different cost inputs. So the ones we just talked about under the UCT, the program administration and the program installation costs are both the same; whereas, the TRC does not take into account in any way the incentives that are paid to customers. They are viewed as a zero net transfer. So a cost to the companies; yet, a benefit to the participants within that program. So,

essentially, those incentives are -- they are out of the equation and they are not considered in the costs of the TRC. So if it were double or triple, it would have no impact on the TRC cost.

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- Q. And just to clarify, the reason that the incentives are not included is because it's effectively transferring money from one set of customers to another set of customers so it nets out to zero, correct?
- A. Within a region, yes, that's how it's considered zero net transfer.
- Q. And under the TRC and the UCT, though, the benefits calculations are the same; is that right?
- A. Under TRC and UCT, I would agree that they are generally the same. They are not 100 percent the same though. The UCT, I'll use the avoided cost of generation and capacity, those are also used in the TRC calculation. TRC may include, depending on the jurisdictional guidance, additional benefits, which could be a number of other things, but those are largely the noise in the overall calculation. It's really the avoided cost of generation and capacity that are the lion's share of the benefits in either calculation.

- Q. Now, this may seem obvious, but the TRC score and UCT score for a given program are not always going to be the same, correct?
- A. They are not; TRC and UCT. UCT could be higher or lower depending on a number of factors including incentive levels.
- Q. Now, you said sometimes the UCT will be higher but sometimes it will be lower.
 - A. It could be lower, yes.
- Q. And a -- within the context of a single test, we talk about a score, a TRC score, UCT score. It's understood that a score above 1 means that it's cost effective, and below 1 means that it's not cost effective, correct?
 - A. Yes.

2.1

- Q. And so it's possible that you could have a program that hovers around the margin of 1.0 where it might be cost effective under one, but not cost effective under the other, TRC and UCT, correct?
 - A. In theory, yes.
- Q. And the UCT is used for your shared savings calculation, correct?
- A. Yeah, the UCT was approved and decided by the Commission in the 12-2190 case that it is an appropriate cost effectiveness measure.

- Q. And so since we just discussed the possibility that a program might be cost effective under one but not the other, it's possible that you could have a program that's cost effective under the UCT and therefore would generate shared savings, but would nonetheless be not cost effective under the TRC, correct?
- A. Again, you are talking theory, but I am not aware of any situation where that's the case within the companies' plan.
- Q. But it is possible. Just on a pure numbers basis, right?
- A. I am sure you could craft a calculation one way to come up with that response if you wanted to.
- Q. Let's go back to page 106 of the amended plans, please. The second-to-last bullet point states that "The Total Discounted Net Lifetime benefits of all cost-effective energy efficiency programs (as determined by the UCT) are eligible for shared savings." Do you see that first sentence in that bullet point?
 - A. Yes.

2.1

Q. And this means that if there are programs that are not cost effective under the UCT, they would

be excluded from the calculation of the total discounted net lifetime benefits, correct?

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- A. That is correct. They would be excluded during the adjustments to the total discounted net lifetime benefits; one of a number of adjustments that are made in the approved mechanism.
- Q. And here in this bullet point you refer to "cost-effective energy efficiency programs." Can you clarify that you are talking about programs and not subprograms here?
- A. "Programs" as it's used here would align with "programs" as used by Company Witness Miller and is used throughout this Exhibit B where programs are identified. To the extent that subprograms underneath a program could be cost effective or ineffective, those would be netted together. So that's -- it's only the program in total that passes a cost-effectiveness test that would be included per this language.
- Q. So just to clarify, if you have a program that is cost effective at the program level, but there's a subprogram within that program that is not cost effective under the UCT, the net benefits from that subprogram would still be counted towards the overall net benefits calculation, correct?

A. If you're -- let me restate it my own way; make sure we are on the same page with that.

But, again, the subprograms that are underneath program are really groupings of measures. All of the measures underneath a program would be summed together when determining that program's cost effectiveness score so that the total program is the level at which the UCT would be calculated. And only if that total program, including any measure underneath there that is cost effective or cost ineffective, only if the balance of all of those is greater than 1 would it be included in the shared savings mechanism.

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- Q. Now, at the top of page 106 of the amended plans attached to the stipulation, there's this table that we discussed earlier showing the "Incentive Tiers," "Compliance Percentage," and "Incentive Percentage," correct?
 - A. The one we referred to before, yes.
- Q. And let's talk about 2018, so we don't have to worry about the 14 percent issue, just to simplify things. So I just want to understand what the "Compliance Percentage" column means. When you say, for example, in Incentive Tier 2, 100 to 105 percent, that's talking about a percentage of the

statutory benchmark under R.C. 4928.66, correct?

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- A. You might have misstated it, but Tier 2 is greater than 100 to 105 percent, but that would be going against the annual trigger as calculated and, yes, that is -- it's annual increment that's identified in 4928.66(A)(1)(a).
- Q. Now, we just discussed that the non-cost-effective programs would be excluded from the calculation of total discounted net lifetime benefits. My question is, do the energy savings from non-cost-effective energy efficiency programs count for purposes of determining what tier you are in on this table?
- A. Yes and no. The purpose of the shared savings mechanism is to incent the companies to exceed the statutory targets in 4928.66, thereby -- or I should say -- but there is one exclusion to that. One of the stipulated terms would be the third bullet on that same page 106. "For purposes of whether determining the Companies'" -- or "For purposes of determining the Companies' eligibility to receive shared savings and the applicable shared savings tier, the Companies shall not include energy savings achieved under the Customer Action Program."

So in your scenario where we would be

talking about 2018, the companies' performance as demonstrated in its annual report would be reduced by any impacts from the Customer Action Program prior to determining what compliance percentage the companies have achieved.

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- Q. But other than the Company Action

 Program, all programs, including non-cost-effective

 programs, will be counted for purposes of determining
 which tier, correct?
- A. Again, as the shared savings mechanism was designed to incent against the compliance benchmarks, with the exception of CAP, yes, because all those -- or all those programs would count towards the companies' performance against 4928.66(A)(1)(a), yes, they would also be used for the shared savings mechanism.
 - Q. And looking at the third -- or the last -- the second-to-last bullet point on this page, again, the -- after the semicolon, it says
 "...however, the Companies may not receive shared savings for the energy savings under the Customer Action Program or the historic Mercantile Customer Program." With respect to the "historic Mercantile Customer Program," do the energy savings from that program contribute to which incentive tier is

achieved?

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A. Yes. As approved in the 12-2190 case, historical mercantile programs do have an exclusion on the net benefits side, but they do count fully towards the trigger.

MR. HEALEY: Your Honor, I would like to mark as OCC Exhibit 7 the companies' response to OCC Interrogatory Set 6, No. 144. May I approach the witness?

EXAMINER BULGRIN: Yep. OCC Exhibit 7.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Demiray, do you have in front of you what's been marked as OCC Exhibit 7?
 - A. I do.
- Q. And this is the companies' response to OCC Set 6, Interrogatory 144, correct?
- A. That is correct.
- Q. And you are the witness for this interrogatory response, correct?
 - A. Yes, I am.
 - Q. Now, this --
 - A. Except for the objections.
- Q. Thank you. This interrogatory pertains
 to the Energy Special Improvement District or ESID
 program under the portfolio, correct?

A. That is correct.

2.1

Q. Now, does -- do the total discounted net lifetime benefits -- strike that.

In your response here you state that "the Companies will not include Energy Special Improvement District program results in their calculation of the Portfolios' Adjusted Net Benefits used in the Shared Savings Mechanism." Do you see that?

- A. I see that.
- Q. And I am going to ask you the same question as before, do the energy savings from the Energy Special Improvement District program count for purposes of determining which incentive tier is used on page 106 of the portfolio plans?
- A. Yes, similar to the historical mercantile programs, the energy savings that were achieved under energy special improvement districts, they are deemed appropriate to count towards 4928.66(A)(1)(a), would be used in the trigger calculation for the compliance percentages.
- Q. Mr. Demiray, looking at the incentive tier table on page 106, within one of the operating companies, say Ohio Edison, customers in each customer class will pay shared savings under the same tier in a given year, correct?

MR. GLADMAN: Could I have the question read back?

(Record read.)

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MR. GLADMAN: Thank you.

A. I don't know that I would say pay "under the same tier," but if I can phrase it my way, I would say that the incentive tiers as listed in the table are aligned to the shared savings mechanism which is to again exceed the targets set forth in 4928.66(A)(1)(a). In there there is a single target for operating companies which is, again, at a cumulative level and not anything other than that. So the design of the mechanism follows that and sets the compliance tier.

Again, in assuming that a single level is set, those are translated into dollars. The dollars are then sent to each of the classes within the company. They are allocated in proportion to the adjusted net benefits that each class's programs delivered. So there is an equity between those two where the programs that delivered the benefits align with the dollars collected from that class. So in any case that is driven by the same incentive tier.

Q. So it's not possible, say, in 2018 for residential customers of Ohio Edison to pay in Tier 1

and non-residentials to pay in Tier 2?

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- A. Approved mechanism is designed to trigger at a total company level.
- Q. And just to clarify, and I apologize if we covered this already, these compliance percentages refer to the annual compliance, not the cumulative compliance under the statute?
- A. The cumulative compliance is a factor in determining the annual compliance. If you take a look at our -- my prior testimony you would see that both of those are considered kind of a waterfall, you have to pass both before you would be eligible to trigger shared savings. There are very odd situations where a cumulative deficit could impact the annual amount; but in general, yes, it's referring to the annual.
- Q. And generally speaking the requirement that you meet the cumulative is just a binary; you met it or you didn't. If you do, then you qualify for shared savings; and if you don't, then you don't, right?
- A. Yes, subject to the additional thing that the cumulative could have potential impacts on the annual if a prior year's deficit needs to be made up.

 MR. HEALEY: Your Honor, I would like to

mark OCC Exhibit 8. This is the companies' response to OCC Interrogatory Set 1, No. 12. May I approach?

EXAMINER BULGRIN: Sure. This is OCC

Exhibit 8.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Demiray, you have in front of you what's been marked OCC Exhibit 8, and you'll see this is another discovery response. It's the companies' response to OCC Set 1, INT No. 12, and you are the witness responsible for this discovery response, correct?
 - A. That is correct.

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- Q. And this question asks how shared savings will be allocated among the three operating companies if the cap is reached, and your response is that if the \$25 million cap is reached, the amount of shared savings that will be recovered by each company will be based on the proportion that the company earned an incentive in the prior reporting year. Do you see that?
 - A. I do see that, yes.
- Q. Now, that response doesn't change if the cap is 10 million, correct, other than the number?
- A. Yes. I would like to just make sure that it's clear what this is saying though. By prior

reporting year you have to interpret when the shared savings calculation is determined. So, for example, the 2017 mechanism would not be calculated until the annual report is done in 2018.

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So "prior year" really does mean the year -- the test year for both the benchmark, companies' compliance with that, and the energy savings achieved as well as costs and how all those flow through the shared savings mechanism within a given year. So it is all tied to the achievements and benefits within the reporting year.

- Q. And maybe let's do a quick numerical example just so we understand how the money is being allocated to the three companies. Simple example, let's assume there is a \$10 million cap and let's ignore the tax issue for now so we can do the numbers more easily. And let's say each of the companies individually would have qualified for \$5 million in shared savings. They each contributed a third of the total shared savings, so then they would each get a third of the 10 million, correct?
- A. Make sure I have got your hypothetical correct. You are saying there were \$15 million achieved prior to application or the uncapped amount of the financial incentive is done equally among all

167 three companies, in that situation as each company 1 2 did -- proportionately did one-third, each of them would receive one-third of the financial allocation, 3 that's correct, so 3.3 repeating. 4 5 MR. HEALEY: Can I just have one minute, 6 your Honor? 7 EXAMINER BULGRIN: Sure. 8 MR. HEALEY: That's all I have, your 9 Honor. 10 EXAMINER BULGRIN: Great. 11 MS. MESSENGER: I just have one question 12 for clarification, if that's okay. 13 14 CROSS-EXAMINATION 15 By Ms. Messenger: 16 0. Sure. I -- can you turn to page 106 of 17 Exhibit B. 18 Α. I'm there. 19 Q. Of -- okay. That middle column is titled 20 "Compliance Percentage." 2.1 Α. It is. 22 Q. As originally filed by the company, 23 compliance percentage refers -- and for years 2018 24 and 2019, compliance percentage refers to compliance

with the statutory mandate, correct?

- A. Compliance percentage here would be a calculation that would take the annual energy savings achieved against the annual target that is calculated as an increment in the cumulative amount as listed in 4928.66. So it is going against the number that is calculated through that other equation. And, again, for 2018 and 2019 that would not be adjusted as the 14 percent is listed here.
- Q. Right. So in years 2018 and 2019, it correlates with that 1 percent mandate, that calculation you would make, correct?
 - A. Yes.

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- Q. And so for 2017, it would correlate to that 14 percent reduction in the shared savings trigger.
- A. To be clear, the reduction in the shared savings trigger is as I outlined in my testimony.
 - Q. Right.
- A. You would calculate what the 1 percent increment would be and then you would reduce that by 14 percent and that would set the level at which you would compare annual achievements and then those would flow through this calculation here on the table you've identified.
- MS. MESSENGER: That's all I have. Thank

FirstEnergy Volume I 169 1 you. 2 EXAMINER BULGRIN: Redirect? 3 MR. HEALEY: Can we have a break? Thank 4 you, your Honor. 5 EXAMINER BULGRIN: We'll take a 5-minute 6 break. 7 (Recess taken.) 8 MR. GLADMAN: Your Honor, thank you. We 9 have no redirect questions for Mr. Demiray. 10 EXAMINER BULGRIN: Very good. You may 11 step down. Thank you. 12 MR. GLADMAN: Your Honor, at this time 13 can we move for the admission of Company Exhibit 6? 14 EXAMINER BULGRIN: Any objections to 15 Company Exhibit 6 or OCC Exhibits I have 6, 7, and 8? 16 MR. HEALEY: There's a 5 also, your 17 Honor. 18 EXAMINER BULGRIN: 5. 5, 6, 7, and 8. 19 MR. HEALEY: No objections. 20 EXAMINER BULGRIN: No objection, they 2.1 will be admitted. Thank you. 2.2 (EXHIBITS ADMITTED INTO EVIDENCE.) 23 MR. GLADMAN: Your Honor, can we address

one other housekeeping matter I have discussed with

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Mr. Healey?

1 EXAMINER BULGRIN: Sure. Do you want 2 this on the record? 3 MR. GLADMAN: Yeah, let's do that. There has been references several times to the stipulation 4 5 that's been filed in the case, Exhibit A and B to 6 that stipulation, but I don't believe that has yet 7 been admitted into the evidence. We have got copies 8 of that ready. I think it would be a joint exhibit. 9 If we could agree to stipulate to put that into the 10 record, we would like to do so now. 11 EXAMINER BULGRIN: Sure. Let's do that. 12 This would be Joint Exhibit 1. 13 MR. GLADMAN: For purposes of 14 clarification, in addition to the stipulation and the two exhibits, there are also the subsequent filings 15 16 we made, short ones, to show amendments to the 17 signature page and one page of the plan, so it's an 18 entire package, your Honor. 19 EXAMINER BULGRIN: Great. 20 MR. GLADMAN: Thank you. 2.1 EXAMINER BULGRIN: Those will be so 2.2 marked. 23 (EXHIBIT MARKED FOR IDENTIFICATION.) 24 EXAMINER BULGRIN: And any objections? 25 guess we could wait until the end. Any objections to

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     the admission of Joint Exhibit 1?
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                 MR. PARRAM: Just a point of
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     clarification, the most recent filing, the Notice of
     Amendment to page 89 of the revised plan, that's just
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     incorporated?
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                 EXAMINER BULGRIN: Yes, yes.
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                 MR. PARRAM: Okay. Thank you, your
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     Honor.
                 EXAMINER BULGRIN: Sure.
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                 MR. GLADMAN: Thank you, your Honor.
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                 EXAMINER BULGRIN: That will be so
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     admitted then.
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                  (EXHIBIT ADMITTED INTO EVIDENCE.)
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                 EXAMINER BULGRIN: If there is nothing
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     further, I think we are adjourned for today.
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                  (Thereupon, at 3:51 p.m. the hearing was
17
     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 Monday, January 23, 2017, and carefully compared with my original stenographic notes.

Karen Sue Gibson, Registered
Merit Reporter.

Carolyn M. Burke, Registered
Professional Reporter.

13 (KSG-6304)

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Case No(s). 16-0743-EL-POR

Summary: Transcript in the matter of Ohio Edison Company, The Cleveland Electric Illuminating Company and the Toledo Edison Company hearing held on 01/23/17 - Volume I electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.