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         BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO
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     In the Matter of the
    Review of the Application:
    of Ohio Edison Company,
    The Cleveland Electric
    Illuminating Company, The : Case No. 12-2190-EL-POR
5
    Toledo Edison Company for : Case No. 12-2191-EL-POR
6
    Approval of Their Energy : Case No. 12-2192-EL-POR
    Efficiency and Peak
7
    Demand Reduction Program :
    Portfolio Plans for 2013
8
    through 2015.
9
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                          PROCEEDINGS
11
    before Mr. Gregory Price and Ms. Mandy Willey Chiles,
12
    Attorney Examiners, at the Public Utilities
    Commission of Ohio, 180 East Broad Street, Room 11-A,
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    Columbus, Ohio, called at 10:00 a.m. on Tuesday,
15
    October 30, 2012.
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                       VOLUME VI-REBUTTAL
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Tuesday Morning Session, 1 October 30, 2012. 2. 3 4 EXAMINER PRICE: Let's go on the record. Good morning. The Public Utilities has 5 6 set for hearing at this time and place Case Nos. 7 12-2190-EL-POR, et al., being In the Matter of the Application of Ohio Edison Company, the Cleveland 8 9 Electric Illuminating Company, and The Toledo Edison Company for Approval of Their Energy Efficiency and 10 11 Peak Demand Reduction Program Portfolio Plans for 12 2013 through 2015. 13 My name is Greg Price. With me is Mandy 14 Willey Chiles. We are the attorney examiners 15 assigned to preside over today's hearing. We'll 16 dispense appearances, as has been our practice so far in this hearing. This is our sixth and final day of 17 18 hearing in this proceeding. 19 Before we take our first witness, 20 Mr. Lang, you have something for the Bench? 21 MR. LANG: Yes, your Honor, thank you. 22 On the second day of hearing while 23 Mr. Fitzpatrick was testifying, he referenced an AEP 2.4 achievable -- AEP achievable potential data, and the

request was to identify where that was coming from.

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That was filed November, 2011, in Case No.
1
     11-5568-EL-POR, the AEP portfolio plan proceeding,
2.
3
    and the data that he was referencing was from their
4
     Plan, Volume II, Appendix B, and he drew the base
5
     case and the high case for AEP from Tables 32, 36,
6
     37, 40, 44, and 45, and then using figure 1, did a
7
    weighted average using total kilowatt-hours sales to
    derive the 16 percent base case and 20 percent high
8
9
    case that he referenced in the testimony. And
     that's -- so that's the one.
10
                 And then he also referenced an ACEEE
11
12
     study, and the citation for that is Neubauer, Elliott
13
    and Korane, K-O-R-A-N-E. It was 2009 study, and the
14
     title was "Shaping Ohio's Energy Future, Energy
15
    Efficiency Works, published Washington, D.C.,
16
    American Council for an Energy-Efficient Economy.
17
                 EXAMINER PRICE: Thank you very much.
18
    Anything else for the Bench before we take our first
19
    witness?
20
                 Okay. Mr. Miller.
21
                 (Witness sworn.)
22
                 EXAMINER PRICE: Please be seated.
23
     your name and business address for the record again.
2.4
                 Please state your name and business
25
     address for the record. There we go.
```

THE WITNESS: My name is Edward Charles 1 2 Miller. My business address is 631 Excel Drive, 3

Suite 200, Mount Pleasant, Pennsylvania 15666.

EXAMINER PRICE: Thank you.

Please proceed.

MR. LANG: Your Honors, the companies would ask that Mr. Miller's rebuttal testimony be marked as Company Exhibit 21.

EXAMINER PRICE: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

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## 12 EDWARD C. MILLER

13 being first duly sworn, as prescribed by law, was 14 examined and testified on rebuttal as follows:

15 DIRECT EXAMINATION

16 By Mr. Lang:

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- And, Mr. Miller, do you have your 0. rebuttal testimony in front of you this morning?
- 19 Α. I do.
- 20 Was this prepared by you or under your Ο. direction? 21
  - Α. Yes.
- 23 Q. Do you have any corrections to make to 24 your rebuttal testimony?
- 25 I do not. Α.

If I were to ask you the same questions 1 Q. 2 today that are in your rebuttal testimony, would you 3 provide the same answers? 4 Α. Yes. 5 MR. LANG: Your Honor, Mr. Miller is 6 available for cross. 7 EXAMINER PRICE: Thank you. 8 Mr. Williams. 9 MR. WILLIAMS: No questions. 10 EXAMINER PRICE: Mr. Dougherty. 11 MR. DOUGHERTY: No questions. EXAMINER PRICE: Mr. Allwein. 12 13 MR. ALLWEIN: Thank you, your Honors. 14 15 CROSS-EXAMINATION 16 By Mr. Allwein: 17 Good morning, Mr. Miller. Q. 18 Α. Good morning. 19 Q. I'm Chris Allwein, and I will be asking 20 you questions on behalf of the Natural Resources 21 Defense Council and the Sierra Club this morning. 22 On page 8 of your testimony you discuss 23 the data centers beginning on line 1. Do you see 2.4 t.hat.? 25 Α. Yes.

Q. And in the sentence beginning on line 6, you say, "The companies will develop a sub-program to specifically target data center participation in the Companies' plans. Do you have a proposed timeline for that development?

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- A. We would develop -- excuse me. We would develop the subprogramming in conjunction with implementation of the plans upon Commission approval.
- Q. Okay. And upon Commission approval, from that moment, how long do you think it will take to develop the program?
- A. I'm referring to Section 5 of our plans where we provide an implementation schedule for our programs, does show that for newer programs and measures, the implementation timing does vary between certain programs but does show roughly a three- to six-month period associated with implementation of new programs. I would anticipate that the development of the subprogram would be completed in conjunction with that timing.
- Q. All right. And just to be clear, the page you are referring to, I think it's page 77, Section 5.0, correct?
  - A. Yes, sir.
  - Q. And you don't -- data centers is

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something you're proposing that's an addition, that's not in that list; is that correct?

A. That is correct.

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- Q. All right. I want to ask you about the development of marketing materials. Do you have a process for developing those marketing materials?
- A. Marketing plans and marketing materials are developed in coordination with the implementation vendors that we hire to support and deliver the programs. The process would be once the vendors are under contract, we work with them on their proposed marketing plan and then ultimately very close coordination for the development of the marketing materials through the course of program implementation.
- Q. Okay. And do you plan on utilizing the collaborative at all to assist in the development of those materials?
- A. I don't believe that we've historically, you know, reviewed marketing materials as they were developed with the collaborative. I would note though that we, you know, I believe, would be open to receiving any input or feedback on our marketing materials for the various programs.
  - Q. Okay. So do you plan on, perhaps,

presenting a draft of these materials to the collaborative for input ahead of releasing them or completing them?

- A. I don't have an answer for that at this time.
- Q. All right. And may I ask, will you solicit the collaborative's input in terms of program development for this particular program? Program design is what I am referring to specifically.

Strike that and let me ask you again. Will you solicit the collaborative's input for program design?

- A. I'm not sure I understand specifically what program design is referring to.
- Q. Well, this is a new program and so there -- the only detail we have about this program, and correct me if I'm wrong, is from line 4 through line 14 on page 8 of your testimony, correct?
  - A. Yes.

2.

- Q. And so in terms of details of program design that you have developed with some of your other programs that do appear in your proposed plans, do you plan on soliciting the collaborative's input for some of those program design details?
  - A. I wouldn't characterize that we are

developing a new program. I would comment that the core foundation for the program is our commercial and industrial efficient equipment program, as proposed.

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You know, we recognize data centers are a specific either end use or customer type that would be eligible to participate in our programs. What we're proposing is as part of implementation of our commercial and industrial portfolio, the Energy Efficient Equipment Program that as part of that we will have a subprogram element through -- through implementation we will develop specific marketing materials, as well as specifically target the data center uses and customers through the implementation of the larger program.

- Q. So, in your opinion, is there enough information here from lines 4 through lines 14 to begin or institute this subprogram?
- A. I believe between the proposed plans, as well as the information in my testimony, that there is sufficient information. I note that, you know, data center, you know, specific measures that are provided to data centers includes HVAC type of equipment, which is included in our Efficient Equipment Program; includes lighting equipment, again, also in the Efficient Equipment Program;

includes motors and drivers type applications; as well as other custom measures. So we're leveraging the Efficient Equipment Program design, but through program implementation we will specifically target data center participation in our programs.

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- Q. Are you planning to employ or utilize the same implementation vendors that you are using for the Efficient Equipment Program already, small and large?
- A. That will be decided when we conduct RFPs for the program. We do plan on, as a portion of implementing the subprogram, targeting data centers, that the implementation vendor will be required either to have the experience directly or through their contractors and trade allies in order to support data center participation in the programs. Could be the same implementation vendor or it could be a different implementation vendor.

But, again, that will be decided through the RFP process based on the vendors who submit bids to us in order to support the implementation marketing of the programs based upon their experience and expertise.

Q. All right. Thank you. And I want to ask you about line 11 where you discuss leveraging the

budgets. I think you just mentioned this in your
previous answer as well. Is this additional money,
or will you be moving -- are funds from your proposed
commercial and industrial efficient equipment
programs, small and large, going to be dedicated, if
you will, to this subprogram? Is that what you are
proposing in your testimony?

- A. It's not an addition of funds. It's a -it's a utilization of the funds as proposed in the
  plan.
- Q. Okay. If you look at your testimony on page 8, line 18 through line 20, you state that "The Companies consider a Continuous Energy Improvement Program as a form of customer education, marketing and engagement of energy efficiency opportunities within major C/I customers." Do you see that?
  - A. Yes, sir.

2.0

- Q. And can you explain that statement,
  what -- what do you mean when you say that they
  "consider the Continuous Energy Improvement Program a
  form of customer education"?
- A. The Continuous Energy Improvement

  Program, the typical approach is it's a methodology

  to engage major customers and to obtain their

  interest and commitment to performing energy

efficiency retrofits, et cetera, within the -- within the customer.

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- Q. Okay. And, finally, I would like to ask you about the Continuous Energy Improvement Program. Further down beginning on line 21 on page 8, you say, "The Companies plan to target their major C/I customers through their implementation vendors and their Customer Service Representatives." That isn't anything new that you are proposing here; is that correct?
- A. I wouldn't characterize it as new. I would characterize it as continued or expanded focus, recognizing that the plans that we are proposing here are greatly or vastly expanded over the existing plans, but it continues to leverage the customer service representatives and their relationships that they have with our major customers.
- Q. All right. And then I would ask you on page 9, lines 1 through 3, you discuss, "The Companies will engage their largest customers to promote energy efficiency opportunities." Is -- is that new? Is that something that you're not doing now?
- A. I would not characterize that as new.

  Again, I would characterize that as a continued, as

well as an expanded focus.

2.

- Q. And just one final item here, on line 2 of page 9, the second part of that sentence you state that you are going "to promote energy efficiency opportunities without the added costs associated with a Continuous Energy Improvement Program." What do you mean by "added costs"?
- A. What I was referring to was the increased costs of administration that would be associated with specifically developing a program that would organize that involvement among the major C&I customers, you know, from, you know -- for instance, in the AEP plan I believe they have approximately \$9 million assigned to that program within their plans, so it's basically recognizing that by leveraging the existing relationships, as well as the implementation vendors that we'll be hiring for all of the programs, it helps us to avoid the increased administration, operations costs, such as M&V, for instance, tracking, reporting that would result from having an additional program on top of the existing portfolio.
- Q. So is it your opinion that you will add no additional administrative costs for this item as proposed on -- that we have just been discussing on pages 8 and 9 of your testimony?

A. It's my opinion that the costs associated with those efforts will be covered by the existing programs.

2.

- Q. But is it your testimony also that you'll gain additional energy savings without any additional cost? Is that your testimony?
  - A. I -- can you repeat the question?
- Q. Yes. Is it your opinion then that you -with your proposal regarding the Continuous Energy
  Improvement Program on pages 8 and 9, that you are
  going to generate additional savings with no
  additional administrative costs?
- A. The no additional administration costs is specific to the approach of having a -- having a dedicated program for that activity. The goal of the -- of the overall plan design is to achieve participation across the programs in order to meet our targets.
- The -- I mean, the additional energy savings is supported through the marketing and engagement activities that we are proposing.
- Q. And by taking the steps that you outline on pages 8 and 9 for this Continuous Energy

  Improvement Program, do you have an estimate of -- an estimate, excuse me, of additional energy savings

that you'll generate?

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A. The projections would be as we included in our plans.

MR. ALLWEIN: Okay. Thank you.

I have no further questions, your Honor.

EXAMINER PRICE: Thank you.

Ms. Kern.

MS. KERN: No questions, your Honor.

EXAMINER PRICE: Ms. Kyler.

MS. KYLER: No questions, your Honor.

EXAMINER PRICE: ELPC.

MR. KELTER: I do have some questions,

your Honor.

14

## 15 CROSS-EXAMINATION

16 By Mr. Kelter:

- Q. Mr. Miller, could you please turn to page 3, line 14 of your testimony.
- 19 A. Yes.
  - Q. At line 14 you state, "The Opt-In Kit program has proven successful in both Pennsylvania and Maryland. It is a major source of energy savings for the companies that are offered them," correct?
- 24 A. Yes.
- Q. And you continue that "The kits provided

in both of these states are very similar to those
being contemplated in the Companies' Energy

Efficiency and Peak Demand Reduction Plans and,
therefore, we expect similar results in Ohio"?

A. Yes.

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- Q. When did you implement the Pennsylvania kits program?
- A. Line 8 of my testimony, the West Penn Power opt-in case was implemented during the second quarter of 2011. I believe, more specifically, it was the month of May.
  - Q. What about in Maryland?
- A. Line 12 of my testimony identifies the fourth quarter of 2011. I don't remember the exact timing within the fourth quarter.
- Q. So you don't have -- refresh my recollection from last week, do you have results from those programs yet?
- A. We have -- yes, we do. We have participation results and energy savings results that have been included as part of our reporting.
- Q. And do you know how many CFLs the average resident in Pennsylvania had at the time that you implemented that program?
  - A. I don't remember the last number, exact

number, but I believe it's less than the six CFLs that were cited in Ohio.

- Q. Could you get that number for us?
- A. I could.

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- Q. And the same question about how many CFLs the average residents in Maryland had at the time.
- A. I believe it's comparable, but, again, don't have the exact number.
- Q. Do you have any protections in place to guard against households that already have CFLs from obtaining those kits?
- A. We do track participation in the program. If a customer receives an opt-in kit from us, they are only eligible to receive one.
- Q. But before you send out the opt-in kit, you don't ask them -- or strike that.

Before you send out the opt-in kit, do you have any idea whether they -- whether that household already has CFLs?

A. Not specific to that household.

EXAMINER PRICE: Could I ask a question 22 about opt-in in Maryland and Pennsylvania?

THE WITNESS: Okay.

EXAMINER PRICE: So your testimony is 55
percent of the customers in West Penn Power

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affirmatively opted in to the kits?
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2.
                               That is correct.
                 THE WITNESS:
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                 EXAMINER PRICE: Did they get some sort
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    of notice -- how did that work, I guess my question
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    is?
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                 THE WITNESS:
                               The opt-in kit for West
7
    Penn Power is promoted through a few methods,
     including billing inserts, postcards that were
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9
    provided to customers, as well as some billboard
     signage within the service territory.
10
11
                 EXAMINER PRICE: So the customer had to
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     initiate the contact to opt in; you were not calling
13
     them or anything like that?
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                 THE WITNESS: That is correct.
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                 EXAMINER PRICE: And you got 55 percent
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    participation?
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                 THE WITNESS: Yes.
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                 EXAMINER PRICE: Is the same situation in
19
    Maryland, the same sort of marketing?
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                 THE WITNESS: Yes.
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                 EXAMINER PRICE: Thank you.
22
                 (By Mr. Kelter) Turning to page 4 of your
            Ο.
23
     testimony at line 3 you stated, "The Companies'
2.4
    conservatively included EISA impacts for all CFLs in
     the Opt-In Energy Efficiency Kits for the entire 2013
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to 2015 Plan Period. The savings estimate for kits modeled in the Companies' plans is a constant value that represents the full reduction of savings for all CFLs for the entire 3-year period in accordance with the baseline established under EISA, regardless of the timing projections associated with the kits," correct?

A. Yes.

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- Q. And then you continued it, "As an example, EISA reduces the baseline for 60 watt incandescent with a 43 watts effective January 1, 2014. However, the Companies' modeling incorporates the 43 watts baseline for the entire 3-year period including any 60 watt equivalent CFLs distributed in 2013," correct?
  - A. Yes.
- Q. And under the new EISA standard, the 60-watt equivalent standard goes down to a maximum of 43 watts, correct?
  - A. That is correct.
- Q. And you anticipate that there will be
  42-watt halogen, 60-watt equivalent bulbs, in 2014,
  correct?
  - A. I can't be specific to that exact question regarding the availability of halogen

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meeting the EISA requirements. I would anticipate that there will be halogen bulbs that do meet the EISA requirements, but specific to wattage, I don't have the wattage distribution.
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- Q. Well, you anticipate that there will be some 42- or 43-watt bulbs for sale that are 60-equivalent; is that correct?
  - A. I would say that's a fair assumption.
- Q. And so based on your previous answer, it's also fair to say that you don't have any projections of how many of those bulbs would be available on the market?
  - A. Halogen bulbs?
- Q. Halogen, yes.

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- A. That's correct, I don't have any projections.
  - Q. What about other types of bulbs that would replace the 60 watt?
    - A. Other types such as?
  - Q. I don't know. Are there any other type bulbs that you anticipate would be replacing the 60-watt bulbs under the EISA standards that meet the EISA standards?
- A. With the exception of CFLs, I can't speak to the, you know, availability of other more

efficient, other technology bulb types that would, you know, meet or exceed the 60-watt requirements.

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EXAMINER PRICE: You don't think there will be LEDs available by 2014?

THE WITNESS: Actually, that's a good question. I would expect there would be LED technologies available. I just don't know the distribution among the different wattage types and equivalence to the incandescents.

## EXAMINER PRICE: Okay.

- Q. (By Mr. Kelter) What is the equivalency in terms of wattage for C -- for CFLs that would be replacing the 60-watt?
- A. I believe it's in the 13- to 15-watt range.
- Q. Do you have any projections of how many customers will replace incandescent bulbs with CFLs immediately upon receipt of kits?
  - A. Can you repeat the question?
- Q. Sure. Do you have projections of how many customers will replace incandescent bulbs with CFLs immediately upon receipt of the kits? In other words, somebody receives their kit in the mail on a Tuesday, and in the next few days they replace working bulbs with CFLs.

A. Is there something specific in my rebuttal that is referencing that? I'm sorry.

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Q. No. I'm going to the -- what you talk about is the effectiveness of the kits, and you're making the arguments about how effective the kits are, so I'm asking a question about how quickly people replace their bulbs.

EXAMINER PRICE: The Bench would like to hear the answer to this too, so.

A. Okay. My statement on the success of the kits was predominantly based on the levels of participation, noting that we were successful in obtaining a very broad participation among the residential customers in the programs.

Specific to the question what -- what, you know, the -- I think what you are referring to relates to the installation rates, and I know earlier in the hearing last week we did discuss various installation rates associated with various kit components.

Specific to CFLs, my recollection was the program year 2 evaluation rate in Pennsylvania cited a 70 percent installation rate based on surveying within the first two or three months of customer participation, and then increased to an 82 percent

installation rate within one year. So I believe the replacement of the incandescents with CFLs that result from the kit would follow those evaluation findings.

2.

- Q. Could you repeat that last part of your answer in terms of the statistics?
- A. The -- that the installation rates increased to I believe it was 82 percent within one year of the receipt of the kit. I believe the evaluation report that we discussed was a follow-up survey of those customers who had participated to ascertain the timing of installation, you know, the -- associated with the CFLs component of the kits.
- Q. I may be wrong, but I don't think you answered the question in terms of how many customers receive those kits and within the first few days replace working incandescent bulbs.
- A. I don't have any insight on within the first few days. I was relying on the information that was available.

EXAMINER PRICE: So you don't have any information as to whether people immediately replace or just put them in the closet and as incandescents bulbs fail replace them with CFLs?

THE WITNESS: Other than the initial survey results, which was within two to three months of participation, that's correct. I don't have any more aggressive knowledge.

EXAMINER PRICE: Right. But you really can't extrapolate from the information in two or three months people usually have two or three or four incandescent bulbs fail anyway.

THE WITNESS: I cannot.

- Q. (By Mr. Kelter) Turning to your testimony regarding the T8s, could you turn to page -- page 5, line 1.
  - A. Yes.

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- Q. And you state, "Based on the likelihood that T12 lamps remain in retail stock or customer inventory, I believe that there are opportunities to incent standard T8 lighting installations that provide the early retirement of T12 lighting installations and achieve greater participation in the Companies' programs." Did I say it correct?
  - A. Yes.
- Q. Would you also agree that there are opportunities to get customers to move from T12 lamps to a high performance T8?
  - A. That is correct.

- Q. What's the average life expectancy of a standard T8 fixture?
- A. I believe in the industry the measured life in technical reference manuals is approximately 15 years.
- Q. Do you know the difference in price between a standard T8 fixture and a high performance T8 fixture?
- A. I know there is a price premium. There's a lot of variables involved just because of the volume of different types of fixtures that are available in the market. My understanding is for a common type of T8 fixture, it would be an approximately 38 percent increase. But that's my understanding, again, recognizing there is a huge volume of different types of fixtures.
- Q. Is it -- is it correct that standard T8s use different bulbs than the high performance T8s?
  - A. Yes.

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- Q. And are those bulbs generally less efficient than the bulbs from the high standard -- high performance T8s?
  - A. Yes.
- Q. Are you familiar with a manufacturer called Sylvania?

A. Yes.

Q. According -- if I told you according to Sylvania, the high efficiency T8s save customers 20 percent in energy costs over the average T8, does that sound like an accurate figure?

MR. LANG: Your Honors, I object at this time as going beyond the scope. He's asked several questions, I think, straying from the point in his testimony, which is simply whether it, you know, should be permitted to give incentives for standard T8s. Obviously, ELPC wants to spend all their time talking about high efficiency T8s. That's already been answered in their testimony. It's not being addressed in Mr. Miller's testimony, so I believe that this line is beyond the scope of what is in the rebuttal.

EXAMINER PRICE: Overruled.

- A. Can you repeat the question?
- Q. I said, according to Sylvania, the high efficiency T8s save customers 20 percent on average in energy costs over the average standard T8. Does that sound like an accurate figure to you?
- A. Without seeing the assumptions behind their calculation, it appears to be a little bit high, on the surface. Standard T8 fixtures are

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32 watts. High efficiency are in the 28-watt range
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    so there is basically a 4-watt delta, you know, on a
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    32-watt base. To me, it's closer to 10 percent, 12,
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   percent than 20 percent, so I think it all --
   everything else being equal, such as hours of use, it
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   does appear to be on the high side. So I'm -- again,
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   without seeing the assumptions, it's hard to agree
   with that number.
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- Q. Are you familiar with the Consortium for Energy Efficiency?
  - A. Yes.

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- Q. Do you think they have reliable numbers?
- A. I would be hard-pressed to not -- to disagree.
  - Q. So if they -- if they say that the lighting systems, the difference between the high efficient T8 and the standard T8 are 10 to 20 percent, you would accept that?
- MR. LANG: Objection, facts not in evidence.
- EXAMINER PRICE: We'll give him a little bit of leeway on this one, but after this.
- MR. KELTER: That's my last question along those lines.
- 25 EXAMINER PRICE: Okay. Go ahead and

answer.

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- A. I would accept it as reasonable.
- Q. And you would also agree that when comparing the differences between standard T8s and high performance T8s, you would also need to consider the differences in efficiency of the bulbs that you would use in each of those fixtures.
  - A. Yes.
- Q. And you would agree that the high performance -- the high performance T8s use more efficient bulbs; is that correct?
- A. They use bulbs that have less wattage, if that's what you're --
- Q. Correct. So would it be in the realm of reasonableness, in your opinion, to assume that when you combine the high efficiency T8 with a lower wattage bulb, that the savings compared to a standard T8 fixture and bulb may be in the 40 percent range?
- A. I would recognize that the savings does change by the combination of the bulbs and ballasts associated with the fixtures. Whether you are comparing a standard T8 or a high performance T8, I do note that there are cost issues associated with driving, I'll say, lower wattage bulbs or driving a higher performance related to the fixtures that also

needs to be factored into that consideration.

And there's also some considerations from an operations and maintenance standpoint, based on hours, measured life of the bulbs themselves. But, you know, you are correct in that you can -- there's a lot of many different combinations of T8 lights and fixtures, and depending upon the bulb and ballast assumption, it does drive differences in savings, as well as it does drive differences in costs.

- Q. And could those savings be in the 40 percent range?
- A. I don't have any information that I could base a 40 percent on. I would be speculating on that. I do acknowledge there are different energy savings based on different lamp and bulb configurations, but just can't put a specific number to what the -- you know, what different combinations would produce.

MR. KELTER: Can I approach the witness, your Honor?

EXAMINER PRICE: You may.

- Q. Could you take a look at the second column over to the left down at the bottom.
- MR. LANG: Objection. Lack of
- 25 | foundation.

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EXAMINER PRICE: Sustained.

MR. KELTER: Sorry.

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- Q. Mr. Miller, you're familiar with Sylvania, correct?
- A. I'm familiar to the point of knowing they are a light bulb manufacturer and lighting fixture manufacturer. I can't speak intimately regarding Sylvania or their products specifically, but I am familiar with them.
- Q. And this -- this sheet is marked "Sylvania" -- the title of this is Sylvania High Performance T8 Systems," correct?
- A. Yes. This appears to be a specific type of lamp.
- Q. And at the bottom in the right-hand corner, it also has the Consortium for Energy Efficiency logo, correct?
  - A. Yes.
- Q. So if you -- if you take a look at this paragraph at the bottom of the second column --

MR. LANG: Your Honors, I continue to object. There is no evidence the witness has seen this document before.

MR. KELTER: I'm just going to ask him a question whether he thinks Sylvania's number is

reasonable.

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EXAMINER PRICE: We'll defer ruling on your objection.

- Q. (By Mr. Kelter) As I think Sylvania is a well-known manufacturer and they are part of the Consortium for Energy Efficiency and use their logo on this fact sheet, it says do you see the paragraph that says. "When you couple this system with highly efficient luminaries such as the Lithonia Lighting ES8 luminaire (shown above), the energy savings can be up to 44 percent compared to standard T8 Systems"?
  - A. Yes.
- Q. And do you have any -- any reason to think that that would be an inaccurate statement by Sylvania?

MR. LANG: Continue to object, your

Honor, based on the use of the document, and he is
essentially trying to pull hearsay in through the
document and assuming facts not in evidence that way.

EXAMINER PRICE: Sustained. It's a hearsay document, I don't mean to impugn Sylvania, but certainly as their interest in their savings document to maximize the value of the product, so this is not like a -- it's not going to come into the

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learned treatise exception, let's put it that way.
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                 MR. KELTER: Well, I -- again, your
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    Honor, I am just asking him if he thinks that's a
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    reasonable number so if he -- if he doesn't, then he
    doesn't.
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                 MR. LANG: Your Honor, he has already
    asked -- he has been asked and answered that question
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    before he brought that document out.
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                 EXAMINER PRICE: He's already said the
     40 percent is a reasonable estimate.
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                 MR. KELTER: Okay. That's all the
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    questions I have, your Honor.
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                 EXAMINER PRICE: I just have a follow-up
    question to that line of questions. Now, you intend
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     to provide incentives for both standard T8 and high
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    performance T8 systems; is that correct?
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                 THE WITNESS: Yes.
                 EXAMINER PRICE: Will the incentive
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     levels be the same?
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                 THE WITNESS: No, they will not. Our
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     incentive structure is on an energy-savings basis so
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    we do provide a greater incentive for customers to
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     install higher efficiency lighting fixtures.
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                 EXAMINER PRICE: Have you considered
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whether your incentive structure should also be

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disproportionate so you get a relatively higher
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     incentive if you go with the more efficient system
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     rather than the straight line that's just based on
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    energy savings?
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                 THE WITNESS: I don't know.
                 EXAMINER PRICE: You don't know whether
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    you have considered that?
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                 THE WITNESS: Yeah. I don't know.
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     know we work very closely with our implementation
    vendors to set the incentives to drive the
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    participation, but I don't know as part of those
    discussions if that was considered or not.
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                 EXAMINER PRICE: And have you set the
     incentives for these light bulbs yet or this program
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15
    yet?
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                 THE WITNESS: We have our rebate strategy
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    which provides the up to value that's part of our
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     filing. Would you like me to reference it?
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                 EXAMINER PRICE: If you could, just
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     identify where it is so I can find it later.
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                 THE WITNESS: Okay.
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                 EXAMINER PRICE: I'm sorry, I've not
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    committed your entire 1,500 pages.
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                 THE WITNESS: Understood. Rebate
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     strategy is Appendix C-4 of our filing, and for
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lineal fluorescent retrofit, it's what I was
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    referring to, is called nonstandard. It's up to 12
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    cents per kWh energy savings. The standard which is
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     for smaller retrofits is 75 percent of the
     incremental cost, not to exceed.
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                 EXAMINER PRICE: Okay. Thank you.
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                 I'm sorry, Mr. Kelter, you have completed
    your cross; is that correct?
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                 MR. KELTER: Yes, your Honor.
                 EXAMINER PRICE: Mr. Oliker.
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                 MR. OLIKER: No questions, your Honor.
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                 EXAMINER PRICE: EnerNOC.
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                 MR. POULOS: No questions, your Honor.
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                 EXAMINER PRICE: Staff.
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                 MR. PARRAM: No questions, your Honor.
                 EXAMINER PRICE: Redirect.
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                 MR. LANG: May we have two minutes, your
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    Honor?
            We will do this very quickly.
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                 EXAMINER PRICE: You may.
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                 Let's go off the record.
                 (Discussion off the record.)
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                 EXAMINER PRICE: Let's go back on the
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    record.
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                 Mr. Lang.
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                 MR. LANG: Thank you, your Honor. And we
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have no redirect so the company would move Exhibit
2 21.

EXAMINER PRICE: Okay. Any objections to the admission of Company Exhibit 21?

Seeing none, the exhibit will be admitted.

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(EXHIBIT ADMITTED INTO EVIDENCE.)

MS. KOLICH: Your Honor, before we take the next witness, just to knock this off the list, can we read a stipulation into the record?

EXAMINER PRICE: You may.

MR. POULOS: Your Honor, the statement is, "EnerNOC and the Companies stipulate that the results from a competitive request for proposal enabled the Ohio Edison Company and the Cleveland Electric Illuminating Company to pay less than 10 percent of the modeled incentive value of \$120,000 per megawatt in contracted demand response resource incentives in 2011. The Toledo Edison Company did not issue a request for proposal for contracted demand response resources in 2011."

EXAMINER PRICE: Thank you.

MS. KOLICH: And to put that stipulation into context, Mr. Poulous asked several questions pertaining to the cost of the incentives that the

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company deemed confidential. The companies
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     originally agreed to file that under seal. This
     stipulation is in lieu of us filing that information
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    under seal.
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                 EXAMINER PRICE: Thank you. Any
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    objections to the stipulation?
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                 Seeing none, thank you.
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                 MR. POULOS: Thank you, your Honor.
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                 (Witness sworn.)
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                 EXAMINER CHILES: You may proceed.
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                        EREN G. DEMIRAY
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    being first duly sworn, as prescribed by law, was
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    examined and testified on rebuttal as follows:
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                       DIRECT EXAMINATION
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    By Mr. Lang:
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                 Mr. Demiray, could you introduce yourself
            0.
    again.
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19
            Α.
                 Yes. My name is Eren Glen Demiray. My
    business address is 76 South Main Street, Akron, Ohio
20
21
    44308.
22
                 MR. LANG: Your Honor, we would ask that
23
    Mr. Demiray's rebuttal testimony be marked as Company
    Exhibit 22.
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                 EXAMINER CHILES: So marked.
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1087 1 (EXHIBIT MARKED FOR IDENTIFICATION.) 2 Mr. Demiray, do you have your rebuttal Q. 3 testimony in front of you? 4 Α. Yes, I do. 5 It was prepared by you or under your Ο. 6 direction? 7 Α. Yes, it was. Do you have any corrections to make to 8 Ο. 9 your testimony? One very minor one, yes. On page 7, line 10 Α. 7, in the parentheses it has "(EGD-R4 F 18)." The 11 12 "R4" should say "R5," and that's my only correction. 13 If I were to ask you the same questions Ο. 14 today as are in Company Exhibit 22, would, with that 15 one correction, would your answers be the same? 16 Α. Yes. 17 MR. LANG: Your Honor, Mr. Demiray is available for cross. 18 19 EXAMINER CHILES: Thank you. 20 Mr. Williams. 21 MR. LANG: I'm sorry, I have one last 22 housekeeping matter. 23 EXAMINER CHILES: Go ahead. 2.4 MR. LANG: Moved too quickly through

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that.

Q. (By Mr. Lang) Mr. Demiray, on the first day of hearing, Attorney Examiner Price asked I believe it was Mr. Dargie what percentage of customers prior to the May, 2012, base residual auction declined to commit their resources and what percentage of customers simply were unable to make a decision or unable to be reached. Do you have a response?

A. Yes, I do. Your Honors, the -Mr. Dargie did testify 15 percent of customers did
assign their EE resources while the remaining
85 percent we didn't hear back from or said no. In
that 85 percent, essentially the companies did reach
out to the top customers that made up the
disproportionate amount of the savings, and of those,
9 percent of the customers said specifically no.

The remaining 91 percent, although our customer service reps and national account reps would have reached out to them to ensure they did receive the letter, tried to walk them through what it actually meant, the 91 percent never got back to us by the time of the deadline.

EXAMINER PRICE: Okay. Thank you.

MR. LANG: And now I'm done. Thank you,

25 your Honor.

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FirstEnergyPOR Volume VI-Rebuttal 1089 EXAMINER CHILES: Mr. Williams. 1 2. MR. WILLIAMS: No questions. 3 EXAMINER CHILES: Mr. Dougherty. 4 MR. DOUGHERTY: I have one question. 5 That question that was presented by Mr. Lang, is that 6 considered part of the rebuttal testimony, or is he 7 just answering a question that was presented to 8 another party -- to another witness? Is that 9 crossable? 10 EXAMINER CHILES: We will allow cross on 11 the statement. 12 EXAMINER PRICE: That was your one 13 question, though. 14 MR. DOUGHERTY: And I am going to leave 15 it at that. No questions. 16 EXAMINER CHILES: All right. 17 Mr. Allwein.

MR. ALLWEIN: Thank you, your Honors.

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## 20 CROSS-EXAMINATION

21 By Mr. Allwein:

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- Good morning, Mr. Demiray. Ο.
- 23 Α. Good morning.
- 2.4 My name is Chris Allwein, and I'll be Q. 25 asking questions on behalf of the Natural Resources

Defense Council and the Sierra Club this morning.

Were you the sole author of this

testimony?

- A. It was prepared by me or under my direct supervision, yes.
- Q. All right. And did you consult with other folks at FirstEnergy before filing it?
  - A. Yes.
  - Q. Who did you consult with?
  - A. It would have been Diane Rapp.
    - Q. Is that R-A-P-P?
- 12 A. Yes.

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- Q. And can you tell me what department that Diane Rapp works in?
  - A. I'm not sure the technical title, but it's essentially within our energy efficiency department, the EMB group.
  - Q. In your previous testimony -- I should say your original direct testimony, did you testify as to whether the plan was designed to meet the benchmarks?
- A. That was not part of my direct testimony, no.
- 24 Q. Why not?
- A. My testimony was on shared savings.

Q. Okay. And have you participated in the preparation of the FirstEnergy companies' previous portfolio status reports?

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- A. Are you saying specifically to Ohio? Pennsylvania? What states are you referring?
- Q. Sorry. I will clarify. I am referring to the FirstEnergy Ohio Electric Distribution
  Utilities Annual Benchmark Portfolio status reports.
- A. Specific to Ohio, no, I don't believe I have.
- Q. Now, even though you haven't participated in the preparation of those Ohio Electric

  Distribution Utility Reports, are you familiar with the reports of the companies' evaluators, ADM

  Associates?
  - A. Generally, yes.
- Q. Going to your testimony on page 2, line

  19, you state that the three companies, The Cleveland

  Electric Illuminating Company, The Toledo Edison

  Company, and the Ohio Edison Company, you state that
  the proposed plans "as filed are designed to meet or

  exceed Ohio's statutory benchmarks for energy

  efficiency, both on a cumulative savings and
  additional incremental savings basis." Do you see

  that?

A. Yes, I do.

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- Q. All right. And can you define, please, your definition or the definition you've used for "cumulative savings."
- A. I would say that it is consistent with 4928.66(A)(1)(a) where it is a total savings, year over year, that is increasing.
- Q. All right. And then can you please provide what definition you used or what you are referring to when you state "additional incremental savings."
- A. I would say that incremental amount would be the difference, year over year, between those cumulative numbers.
- Q. All right. And on page 2, beginning on line -- well, beginning on line 20, your second bullet point, you state that "The methodology used by Mr. Sullivan in his Direct Testimony... contains flaws and overstates the comparative alleged benefits." Do you see that?
  - A. Yes, I do.
- Q. All right. How would you have calculated, on a ballpark basis, the net billed savings and enhanced portfolio of nonmercantile self-direct and nontransmission distribution programs

would produce?

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- A. Again, what I would say is I'm not proposing that I necessarily agree with the analysis. I'm just pointing out flaws that are apparent in the one that was performed.
- Q. Okay. So you wouldn't have an idea of how to perform such an analysis yourself?
- A. That analysis was not performed as part of this. I was just finding fundamental errors in the methodology that was employed.
- Q. Okay. I know it wasn't done, but I guess my question was, do you have an idea of how you would perform the calculation?
- A. Well, if you refer to my testimony, page 8, lines 16 through 19, I do state that "While detailed modeling would be required to see if this supposed additional savings could even be achieved in the 2013-'15 period and at what ultimate cost, it is clear that Mr. Sullivan's analysis focused solely on long term potential benefits, without regard for the near term rate impacts of such actions."

So I would state that to do such an analysis, you would have to do, as I state, the detailed modeling to see if it's achievable.

Q. Now, is such a -- is the detailed

modeling that you describe on lines 16 through 19 on page 8, is that available in the companies' Market Potential Study?

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- A. I think that would be one of many inputs that would have to be considered as part of developing a detailed modeling to see, but not the sole input.
- Q. All right. And is the determination of whether those benchmarks are achievable, is that part of the Market Potential Study?
- A. I believe the definition of the Market
  Potential Study is looking at the achievable results
  and the economic results and the technical results,
  so I think that that is contained within the broad
  view of that. But to do such a detailed analysis you
  would have to take in many other considerations,
  including participation rates, experience the
  companies have in these programs and the other
  programs in other jurisdictions to create a
  well-balanced portfolio.
- Q. All right. And I believe you mentioned Company Exhibit 15. And I apologize. I don't have a line number. Hang on one second. I will look for it, unless you know what it is. Okay. That was -- it's page 4, line 4. Do you see that?

A. I'm there.

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- Q. All right. And do you have a copy of that exhibit with you?
  - A. The original discovery, yes.
  - Q. Did you develop this estimate?
- A. What estimate in particular are you referring to?
- Q. I am referring to the exhibit in general. Were you a part of developing the estimates that appear?
- A. In conjunction as looking at part of the overall modeling, there was a -- these tables do come directly from that, yes.
- Q. All right. Okay. I want to refer specifically to the 2012 cumulative annualized year-end estimate, which I believe is in the top left corner.
  - A. The specific operating company?
- Q. We can -- you can choose one, if you want, but if you want me to choose one, we'll look at Ohio Edison's.
  - A. Okay. That's the first one.
  - Q. Okay. So did you develop that estimate?
- A. I was involved as part of the modeling of the overall portfolio. Yes, that was one thing I

helped prepare.

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- Q. All right. And who assisted you with that?
  - A. I would say Ed Miller's team, in general.
- Q. All right. And looking at that table, can you tell me the basis or, I guess asked more plainly, where did you get the annualized year-end estimate for residential programs?
- A. Would have come from internal reporting that would have been through the time at which we were developing the plan. At that point we took a look at installed measures, month over month, to the point where they would have been, I guess you would say, you would take a look at the total you had under the belt to the estimation of when those came in and estimate the residual savings that would apply in the next year based on that under partial year methodology. Those two bits together would make up the annualized equivalent.
  - Q. Okay.
- A. Including also all activity to date that was prior to the year 2011 -- I'm sorry, prior to the year 2012, so 2011 and before, annualized results.
- Q. Okay. And just to be clear, you say "annualized results." But when you say "annualized

results," you mean the -- the residual pro rata that extends from the beginning of that measure to the end of that measured life; is that correct?

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A. I think there's a couple of points there. I mean, first off, I was talking about annualized results in terms of the 2011 and prior, so we had those to the companies' annual status reports on top of that. You would take, again, the partial year contributions you do have within the year in 2012 and then an estimate for those that would apply in 2013.

Those were not included as part of the overall portfolio because the portfolio program in '13-'15, you have to ensure you have a pro rata amount in there that is not influenced by activities from prior years that you can say that the budgets and TRC are specific to what's listed in the plan.

- Q. Right. And I guess I just want to distinguish the way that you are using the term "annualized" as being different from the waiver that the company was requesting -- requesting, you know, in reference to pro rata versus annualized savings. You are using "annualized" here differently, just to refer to the beginning of the pro rata measured life to the end of that pro rata measured life?
  - A. I would say under the Companies' proposal

for a waiver, they had requested that the savings in futire periods would count would have the partial-year methodology. So that, regardless of the point at that time within the year that you do install it, it is counted as the full-year equivalent. I would say that's consistent with what these are suggesting.

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- Q. Okay. All right. In the annualized year-end estimate for residential programs, are you including the 2010, 2011, and 2012 year results of the online audit program?
- A. I would say that the savings prior to the 2011 -- I'm sorry, prior to 2012 would be included as part of the 2011 status report. In the 2012 period it would include a combination of those installations that the companies were aware of at the time the modeling was created, as well as a forecast of activity through the end of the year.
- Q. All right. And do the annualized year-end estimates for mercantile customer-sited programs, does that include projects that the Commission has not yet approved?
- A. Again, it would be in conjunction with a number of things, that being prior to 2012, those that were filed as part of the companies' annual

status report in 2012, it would have been an estimate of the number that the companies had, again, under their belt and those that they forecast through the end of the period.

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- Q. In going back to my question, does that estimate include projects that the Commission has not yet approved?
- A. It depends on, I think, the -- it would include those that have been filed with the Commission. Again, it would include those that have been projected through the end of the year. You can definitely say that those that are projected have not been approved by the Commission.
- Q. Okay. All right. And are these estimates based on ex-ante or ex-post verified annualized savings?
- A. It would be consistent with the information -- well, again, depends on what we are talking about here. The 2011 would be consistent with the information as presented in there. It would be -- I don't recall off the top of my head at what level that was done. I would -- I don't believe that -- for terms of the forecast savings for the balance of this year, it would definitely be done on an ex-ante basis.

And I will add, I know this entire process is a series of forecasts, both for the period of the balance of the year from the forecast through the entire '13 to '15 plan, so the companies did deem that these were reasonable expectations.

- Q. Okay. Really quickly here, I just want to look at Exhibit EGD-R4, and just for reference you refer to this on page 4, lines 11 through 12 -- well, line 11 through 13. I just want to ask you, is it your testimony that this September 6 document provides the same level of detail that was provided on September 24 to the collaborative?
- A. I think it definitely provides the -- to the collaborative?
- Q. Yes. Wasn't this part of a collaborative -- oh, it's a technical conference.
- A. It's part of the technical conference supporting the portfolio plan to demonstrate, again, that the targets that we have would be met by what was included in the portfolio plan.
- Q. And can you just read the note that appears below the table there on this page?
- A. Yes. It says, "For discussion purposes only, numbers are subject to change."

The reason that was included, again, at

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the top of the page it does say it is a savings forecast.

- Q. Okay. All right. I would like to turn back to your testimony now on page 5, lines 15 through 17. If you look, you state that "Mr. Sullivan does not account for the application of banked surplus energy savings the Companies are estimating at the end of the 2012." Do you see that?
  - A. I do.

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- Q. All right. And according to the FirstEnergy companies' proposed plans, would the companies be able to comply with the 2013 to 2015 additional incremental benchmarks without employing these banked surplus energy savings?
- A. I disagree, first off, that there are incremental and renewal benchmarks. Again, the way that I have defined it is on a cumulative basis consistent with 4928.66(A)(1)(a).
- Q. And I think you are referring to your testimony. Well, first, let's -- okay. Let's go to page 6, line 2. You state that "The correct way to calculate the additional incremental annual baseline is to use the difference in yearly cumulative benchmarks consistent with 4928.66(A)(1)(a). Do you see that?

- A. One more time, the line?
- Q. Page 6, lines 2 through 4.
- A. Yes, I see that.
- Q. Okay.

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- A. I get that as a conflict with what I just said, that it is, again, on a cumulative basis.
- Q. And when you say "the correct way," is that your opinion, or is there some -- is there some statute or Commission rule that defines calculating the incremental annual baseline this way?
- A. Again, I don't think that there is anything other than in 4928.66(A)(1)(a), where it states specifically that on a cumulative basis, the cumulative amount increases year over year.
- Q. And so turning back to my question, using this language that you present here, the additional incremental annual baseline, would the companies be able to comply with the 2013-2015 additional incremental benchmarks without banked surplus energy savings?
- A. Again, my answer would be the same, that it is based on a cumulative basis, and that those cumulative savings are what is applicable, that there is no separate annual incremental baseline as established in 4928.66.

Q. So the companies haven't employed any calculations to show additional incremental benchmarks?

A. I don't think it is part of the -- their requirement. No, that has not separately been done.

Q. Okay.

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EXAMINER PRICE: Okay. Let's ask the question a different way. Can the companies comply with their 2013, '14, and '15 energy efficiency benchmarks without the use of banked savings?

THE WITNESS: Without the use of banked savings?

EXAMINER PRICE: Yeah.

THE WITNESS: I would say the way we did -- complied was using a portion of the banked savings that was subject to future years so I don't want to argue over the semantics of it.

about the legality of it. Nobody is questioning your ability to use banked savings. I'm just asking if banked savings were to be excluded, which they will not be, but, hypothetically, if banked savings were to be excluded, would the companies comply with their 2013, '14, and '15 benchmarks?

THE WITNESS: On a cumulative basis?

EXAMINER PRICE: On a cumulative basis.

THE WITNESS: I think you would have to take a look at the exhibits where that would or would not occur. I think it would occur in some situations. It might not occur in other situations.

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EXAMINER PRICE: Walk me through them.

THE WITNESS: All right. So I think we can walk past Exhibit EGD-R1 because that's purely on a cumulative basis. Do you think that's fair?

EXAMINER PRICE: Sure.

THE WITNESS: CK if you take a look at Exhibit RD -- EDG-R2, on there you would see the -- the cumulative benchmark each year, and to determine if you ultimately comply, and assuming for some reason banked savings could not be applied, you would take out what is in column 9.

So then it would be a combination of columns 5 plus columns 8, and, for example, the first year would be -- and I am referring specifically to CEI here -- you would take that 839,193, plus the additional 63,849, and then you would have to compare that against the benchmark, which would be 608,007.

If you want to do that a different way, you could state that the difference between the cumulative benchmark year over year, for example, the

860,007 against the 427,846, that would be if there weren't incremental benchmarks that you had to hit, that that would be an equivalent of what that would be compared against, the 63,849, and that's assuming you had no banked whatsoever, no prior performance whatsoever.

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EXAMINER PRICE: Okay. Thank you.

MR. ALLWEIN: All right. Your Honors, may I have the last portion of that last answer read back, please.

EXAMINER PRICE: You may. Why don't we read back the entire answer.

MR. ALLWEIN: That will be fine.

EXAMINER PRICE: Not guessing where you want to start. Read back the previous answer, please.

(Record read.)

- Q. (By Mr. Allwein) Mr. Demiray, are you aware of banked surplus energy savings referenced anywhere in the law?
- A. I don't know semantics about law versus what might be ordered, things like that, but I will say in 888, it's my understanding companies are allowed to apply banked savings.
  - Q. All right. And do you know if any Ohio

utilities have used banked surplus savings to comply with the additional incremental benchmarks?

A. I am not aware if they have exercised that right.

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- Q. And do you know if any Ohio utility has used banked surplus savings to comply with cumulative incremental benchmarks?
- A. I am not aware if they have exercised that right.

EXAMINER PRICE: What we can agree, however, is that you project for each company for each year, the -- both on an annualized and pro rata basis, that the projected banked savings balance will decline steadily over the course of this three-year program portfolio period.

THE WITNESS: I think that's fair, yes.

Q. (By Mr. Allwein) I'm sorry, let me find one more testimony reference here.

Turning to your testimony on page 7, beginning on line 14 and through line 17, you state that "Simply keeping other errors constant and using the corrected net benefits/gigawatt hour for FirstEnergy rather than AEP would eliminate almost 53 million of the alleged additional benefits." Do you see that?

A. Yes, I do.

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- Q. How did you calculate that?
- A. I can walk you through on Sullivan

  Exhibit DES-1. There are a number of errors on there
  and which ones I corrected. Bear with me. I am
  getting there now.
- Q. I'm sorry, are we going to look at one of your exhibits or DES-1 --
- A. No. I would like to go to DES-1 because that's how I calculated it.
  - Q. Okay. Hand on one second, please. Okay.
- A. All right. If you are there, there are 11 numbers on this page, and I believe 6 of them are wrong. But essentially, you know, in support of the 53 million, first off, the B5B 139,945 demonstrated on EDG-R5, that is inappropriate noting the exclusions as called out on Mr. Sullivan where that would be in the range of 160 million.

Then you take that over -- even though there is a reference in D5 that you are taking B and dividing by D, that is incorrect. You are actually taking B and dividing by C. In that case, the 126,127 per net benefit to gigawatt would change to I think it's 146,000 or so.

Again, putting aside that E5 and then

ultimately E9 are wrong, you would then essentially be saying that the 324, which, again, was calculated in Mr. Sullivan's testimony by taking the 1,995 and for some reason calculating that against AEP's net benefit per gigawatt hour, which is inappropriate, you would then correct that against the now correct FirstEnergy one, which would be 146, again, which would be the corrected value in D5. That would take that down to I believe it's 231 or 239 million, somewhere around there, and 184 would drop to 131 million.

- Q. Okay. And you are aware some of this was, I believe, corrected by Mr. Sullivan when he was on the stand.
  - A. I don't have all of that.
  - Q. Okay.

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- A. Again, though, I don't believe the reference to using AEP's avoided costs as opposed to FirstEnergy's was.
- Q. All right. And you state on page 8, beginning on line 10 and going through line 12, "The resulting adjusted budget is approximately \$238 million dollars or roughly \$217,000 per gigawatt hour." Do you see that?
  - A. Yes.

Q. And -- okay. And then on line 14 through line 15 you see that it says in DES-1, the -- I'm sorry. I'll back up.

You're referring to the "additional 898 gigawatts of energy savings suggested in DES-1 could cost an additional \$195 million on top of The companies' proposed budgets." Do you see that?

A. Yes, I do.

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- Q. And what would that be in terms of per kWh? Do you know?
  - A. I don't know off the top of my head, no.
  - Q. All right. And --
- A. Again, though, I think the underlying analysis is flawed, and I don't think the comparative nature of it is reasonable. But taking it into consideration, making the same exclusions that Mr. Sullivan noted, I do just show that as a rough guide what that -- a way to calculate an impact, yet still note on the bottom it is not a detailed modeling.
- Q. All right. One more question here and then I wanted to move on to the crossable item you talked about earlier but.
- All right. On page 8, lines 17 through 19, you state, "It is clear that Mr. Sullivan's

analysis focused solely only on long term benefits, without regard for the near term rate impacts of such action." Do you see that?

A. Yes, I do.

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- Q. What is the weighted average measured life of the measures in the proposed plans?
- A. I don't know. That would be a great question for Mr. Miller.
  - Q. Okay. One moment, please.

Okay. Regarding the -- the testimony that you presented when you -- when you got on the stand, I wanted to ask you, has FirstEnergy experienced a significant decline in program participation since April?

- A. I don't believe the companies have seen a significant decline.
- Q. All right. And according to the Opinion and Order in -- in 12-1230-EL-SSO, the FirstEnergy so-called "ESP III," according to that order, if the participants don't commit ownership, they are not eligible for the rebates; is that correct?

MR. OLIKER: Can I have that question read back, your Honor? I'm sorry.

EXAMINER CHILES: Would you read that back.

(Record read.)

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MR. LANG: Your Honor, I would object. I am trying to figure out how that's within the scope of his testimony, and I'm not seeing it so I'll object on that basis.

EXAMINER CHILES: Mr. Allwein.

MR. ALLWEIN: I don't think it's in the scope of his rebuttal testimony, but I believe he made a statement regarding ownership and participation this morning to supplement something that Mr. Dargie had stated. Is that correct?

MR. LANG: With regard to as in answering a hearing examiner question, but it was -- had nothing to do with ESP III and the legal requirements. It was simply the factual matter of who was contacted and who responded.

EXAMINER CHILES: Overruled.

- A. I don't have a legal basis for that. I don't think that language that you quoted is exactly what the ESP III states either, though.
- Q. Have any of the 91 percent of customers that you stated did not respond responded since the May auction two-year letter?
  - A. I am not aware.
  - Q. All right.

EXAMINER PRICE: Excuse me, wait one second, Mr. Allwein. When you say "I'm not aware," you are saying: I'm not aware of any," or "I do not know one way or the other"?

THE WITNESS: I don't know one way or the other. I do know the companies have taken, if you

want to call it, another shot at trying to contact
them and trying to get them to commit those
additional resources, but I don't know any of the
specifics about that.

EXAMINER PRICE: Okay. Thank you.

- Q. (By Mr. Allwein) All right. And has the company followed up, or do the companies plan to follow up regarding the ownership of the 91 percent of the customers to bid into, perhaps, subsequent incremental auctions?
  - A. I believe I just answered that question.
  - Q. Oh, you did, I'm sorry.

MR. ALLWEIN: May I have the answer read back?

EXAMINER CHILES: Please read it back.

22 (Record read.)

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MR. ALLWEIN: Okay. I have no further questions, your Honor. Thank you.

EXAMINER CHILES: Thank you.

1113 Ms. Kern. 1 2. MS. KERN: I have no questions, your 3 Honor. 4 EXAMINER CHILES: Ms. Kyler. 5 MS. KYLER: No questions. 6 EXAMINER CHILES: ELPC. 7 MR. McDANIEL: No questions. 8 EXAMINER CHILES: Mr. Oliker. 9 MR. OLIKER: I think I have one question, 10 your Honor. 11 12 CROSS-EXAMINATION 13 By Mr. Oliker: 14 You mentioned a portion of the customers, 15 Mr. Demiray, that affirmatively said no, they would like to retain the ownership rights of energy 16 17 efficiency credits. 18 That's correct. Α. 19 Q. Is it possible that those customers 20 wanted to retain those ownership rights because they 21 wanted to bid those capabilities into PJM? 22 Yes, it is. Α. 23 MR. OLIKER: No more questions, your 2.4 Honor. 25 EXAMINER CHILES: Thank you.

Mr. Parram.

MR. PARRAM: Yes, your Honor. Thank you.

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## CROSS-EXAMINATION

5 By Mr. Parram:

- Q. Good morning, Mr. Demiray.
- A. Good morning.
- Q. I have a question regarding your Exhibit EDG-R2. And I'm looking specifically at column 5. It's Cumulative Forecasted Savings.
  - A. I'm there.
- Q. Do you see where I'm at? Now, the cumulative forecasted savings listed in column 5 are based upon an assumption that the Commission will grant mercantile applications from 2013 through 2015; is that correct?
- A. That it will grant applications in 2013 through '15, I believe it would be based on the projected results as included in the companies' filings where there were some savings associated with mercantile programs.
  - Q. Okay.
  - A. Mercantile sited, I apologize.
- Q. Okay. And those savings are based upon mercantile customer applications that some have been

approved by the Commission and some have not been approved by the Commission?

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- A. I would say it doesn't specifically state they would be going through the rider exemption method or they would be going through the pilot program. To say that some have not been approved, I think is fair. But I think recent memory or recent experience would show the vast majority going through the pilot program have been approved, and I would say that, most likely, the style of projects that you would see as projected in the portfolio plan are more likely those that are going through that pilot mechanism which has seen a very high approval rate.
- Q. Okay. Just to be clear, these are still pending applications?
- A. They are forecasted, and then pending on top of that, yes.
- Q. And if you could, go to column 9 on the same exhibit, the "Incremental pro-rata banked savings applied."
  - A. Yes.
- Q. And for these banked savings, these numbers are also based upon mercantile applications that are still pending before the Commission; is that

correct?

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A. Again, I think it would be a blend of when you're talking about specifically, I would say that it includes activities as part of the 2011 annual status report. Those that were applied, I don't know the exact status of how many were approved versus pending. It would also include a forecast through the balance of '12 and those that we would expect to file, again, most likely under the pilot program.

And then within specifically the future period, it would probably be a combination of those that you would expect in '13 and '14, depending on which banked number you are specifically referring to. It would probably include a forecast portion in there as well.

- Q. Are you aware of a general number of how many mercantile applications have already been either denied or suspended by the Commission?
- A. I want to say that somewhere around 450 applications have actually gone to the Commission, this was as of mid September, and I am aware of maybe one or two, it would be very, very small numbers, that have been suspended or not approved. Of the 450, the vast, vast majority of them have been

1117 approved and, again, especially those that will be 1 2. going under the pilot program. 3 MR. PARRAM: That's all I have. Thank 4 you. 5 THE WITNESS: Thank you. 6 EXAMINER CHILES: Thank you. 7 Mr. Lang, redirect? 8 MR. LANG: Your Honors, we have no 9 redirect. EXAMINER CHILES: Examiner Price. 10 11 EXAMINER PRICE: No questions. 12 EXAMINER CHILES: I have no questions. 13 Thank you. You may step down. 14 THE WITNESS: Thank you, very much. 15 MR. LANG: Your Honors, the companies 16 would move Exhibit 2, please. 17 EXAMINER CHILES: All right. Are there any objections to the admission of Company Exhibit 18 22? 19 2.0 Seeing none, Company Exhibit 22 will be 21 admitted. 22 (EXHIBIT ADMITTED INTO EVIDENCE.) 23 MR. ALLWEIN: Your Honor, may we take a brief break before the last witness here? 2.4

EXAMINER CHILES: Sure. Let's take a

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      brief five-minute recess.
                   (Discussion off the record.)
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                   (At 12:41 p.m. a lunch recess was taken
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      until 1:06 p.m.)
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1119 Tuesday Afternoon Session, 1 2. October 30, 2012. 3 4 EXAMINER CHILES: Let's go on the record. 5 MR. LANG: Your Honors, the companies 6 call Eileen Mikkelsen. 7 (Witness sworn.) 8 EXAMINER CHILES: Thank you. You may be 9 seated. 10 EILEEN M. MIKKELSEN 11 12 being first duly sworn, as prescribed by law, was examined and testified on rebuttal as follows: 13 14 DIRECT EXAMINATION 15 By Mr. Lang: 16 Can you -- hit the mic first. Can you 17 introduce yourself, please. My name is Eileen Mikkelsen. 18 19 Q. Business address. 20 My business address is 76 South Main Α. 21 Street, Akron, Ohio 44 308. 22 MR. LANG: Your Honor, at this time I 23 would like Ms. Mikkelsen's testimony, rebuttal testimony, marked as Company Exhibit 23. 24 25 EXAMINER CHILES: It is so marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Ms. Mikkelsen, do you have before you Company Exhibit 23?
  - A. I do.

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- Q. Is this rebuttal testimony that you prepared or was under your supervision?
  - A. Yes.
  - Q. Do you have any corrections to make?
- A. I do. Page 3, line 5, the word "Testified" is misspelled.
  - Q. Add an "i"?
- A. Correct. And on page 8, line 20, the word that is currently styled "W-H-A-Y" should be why, "W-H-Y." That's all the corrections I have.
  - Q. Thank you.
  - A. You're welcome.
- Q. And if I were to ask you the questions in Company Exhibit 23, would those -- with those two corrections, would your answers be the same?
  - A. Yes.
- MR. LANG: Your Honor, the witness is available.
- 23 EXAMINER CHILES: Thank you.
- Begin with Mr. Allwein.
- MR. ALLWEIN: Thank you, your Honors.

## CROSS-EXAMINATION

By Mr. Allwein:

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- Q. Good afternoon, Ms. Mikkelsen.
- A. Good afternoon.
- Q. My name is Chris Allwein, and I'm here to ask questions on behalf of the Natural Resources

  Defense Council and the Sierra Club today.

Let's look at your testimony. Page 2, lines 17 to 20, you discuss your -- I'm sorry, lines 17 to -- 16 to 19. You talk about your work with various positions at FirstEnergy Solutions. And I was just wondering, did you participate in the PJM market as part of your work with FirstEnergy Solutions?

- A. Can you be more specific? What do you mean with respect to participating in the PJM market?
- Q. Did you assist the company with any PJM market activities during your time at FirstEnergy Solutions?
- A. At various times throughout my tenure at FirstEnergy Solutions, I did participate in various rulemaking activities associated with PJM and would -- another point in my time at FirstEnergy Solutions, I would have used PJM forward prices for

developing price quotes, or under my direction, price quotes would have been developed for customers of FirstEnergy Solutions.

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- Q. Did any of your activities involve the -- any auction participation of any kind?
- A. When I was at the FirstEnergy's consulting business, the E Group, we had clients that participated in PJM demand response programs, so in that capacity, discharging those responsibilities on behalf of our clients, I would say yes.
- Q. Okay. Thank you. On page 3, beginning with line 1 and going through line 3, you note that you "participated in internal decision making to develop the strategy for the Companies' participation in PJM auctions." What was your role in that decision-making process, if you can speak to it generally?
- A. My role in the internal decision making to help develop the strategy was probably a couple of things. One, I communicated to my management concerns and issues that I heard, both through the collaborative process as well as in discussions with staff as part of the 12-1814 docket; and in addition to kind of communicating that information that I was learning from various folks we were dealing with, I

did participate directly with the folks on the energy efficiency team to put together a strategy for participating in the PJM auction, which we then recommended that that strategy be reviewed and improved by the management of the companies, specifically through our EE Steering Committee.

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- Q. Okay. And were you -- did you participate in the bid into the PJM base residual auction that occurred earlier this year in which the companies participated?
- A. Two questions, in what respect are you using the word "participated"; and, two, are you referring to the base residual auction in May or some other auction?
- Q. I am referring to the base residual auction in May, and "participated" meaning that the companies bid, I believe, 36 megawatts in or 36 megawatts cleared. Did you assist in preparing and executing that bid into the PJM base residual auction in May?
- A. I participated in -- I would say I did.

  I participated in the development of the bid.

  Someone other than me actually executed the bid.
- Q. Okay. Who is it in FirstEnergy that actually executed the bid?

- A. Our regulated generation strategy group.
- Q. Is that -- is Ed Stein one of the folks on this group?
  - A. Ed Stein is in a different group.
- Q. Okay. Did he participate in -- or in the preparation or execution of your bid into the capacity auction, into the base residual auction this year?
  - A. He may have.

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- Q. Okay. On page 3, line 8, you say that the purpose of your testimony is "to rebut recommendations of various parties that the Companies should bid speculative positions into future PJM Auctions." Do you see that?
  - A. I do.
- Q. And I just want to ask specific -- is there any specific recommendation that you are rebutting here, or is this just a general rebuttal of items in direct testimony?
- A. I think a number of parties in the course of this proceeding have raised the topic of whether the companies should be bidding into the forward market energy efficiency and demand response resources that don't exist currently, so I'm addressing those topics in this testimony.

Q. Okay. Okay. Let's move on to page 4, line 6 of your testimony. You state that "Energy efficiency resources must meet both" -- "the PJM project requirements and be of a size where the Companies "can reasonably expect the auction revenues produced by the technology or project to offset the cost of the incremental M&V associated with the project." Do you see that?

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- A. That's not completely correct. What the sentence reads is that "Energy efficiency resources must meet both the minimum PJM project requirements and be of a size where the Companies can reasonably expect the auction revenues produced by the technology or project to offset the cost of the incremental M&V associated with the project."
- Q. Thank you for that clarification.

  Regarding that statement, what PJM requirements are you referring to in that statement?
- A. The PJM requirement that in order to -- the minimum bid size for an energy efficiency project be  $100\ kW$ .
- Q. And then the second half of that statement, and can "reasonably expect the auction revenues produced by the technology or project to offset the cost of incremental M&V," is that a PJM

requirement?

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A. The additional M&V requirements in order to participate in the PJM auctions are a PJM requirement. The practical judgment that the company makes that the revenue expected to be received by participation should exceed the cost of participation is not, to my knowledge, a PJM requirement.

Q. Okay. And --

EXAMINER PRICE: Are there economies of scale in the M&V -- the cost of the M&V requirement?

THE WITNESS: You are obligated to have separate M&V for each project or technology, but to the extent that you have many projects of a similar type that you can use the same M&V, yes.

EXAMINER PRICE: Okay.

- Q. (By Mr. Allwein) And do you have any ballpark estimates of what the cost of incremental M&V is that you mentioned, like a per kW or per megawatt?
  - A. I don't.
- Q. And earlier when you were talking about your recommendations to management, did that include any analysis of the cost benefits or risks of bidding energy efficiency -- of bidding speculative energy efficiency resources into the 2012 base residual

auction? And by "speculative" I mean forecast savings from your plans.

MR. ALLWEIN: May I have that question reread, please.

EXAMINER CHILES: Please reread. (Record read.)

A. Yes.

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- Q. And can you describe the -- the analysis that was included?
- A. The question that you asked me addressed whether we did an analysis of the risks associated with -- for bidding forecasted energy efficiency resources into the 2012 base residual auction. And we did provide management our analysis and judgment with respect to the attendant risks associated with doing that.
- Q. Okay. And can you -- let's just talk about that for a minute. To the extent that you can, what -- what were the risks -- the attendant risks as you described them that you discussed with your management?
- A. I think those are the same risks that I have outlined in my testimony.
  - Q. Any others that are not in the testimony?
  - A. Not that I recall.

- Q. Okay. And if I didn't, I also meant to inquire whether your recommendations included an analysis of the costs associated with bidding forecast savings or the benefits of forecast savings. Did your analysis include either of those things?
- A. Again, our analysis addressed the risks associated with bidding those forecasts, but we did not perform a specific numerical analysis, cost/benefit analysis, and I am not sure we could have simply because it would have been based on future judgments which were not available at that time. I should clarify that to say future auction results, so merely we talked about the range of risks associated with the actions.
- Q. All right. I'm going to ask you -- let's see, I want to ask you about page 4, line 13 going through line 14, you state that "First, in my opinion, the primary purpose for PJM capacity market auctions is to provide certainty for system reliability." Do you see that?
  - A. I do.

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- Q. And is it your opinion that only the resources that are certain should be bid into the PJM capacity market auctions?
  - A. I think PJM rules allow for bidding

planned resources.

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- Q. So if the PJM rules allow for the bidding of planned resources and the company plans on generating energy efficiency savings in order to comply with the Ohio statutory benchmarks, how would you distinguish that from other planned resources?
- A. I think there is an element, as I say here in my testimony, particularly with respect to bidding energy efficiency resources that don't exist, to the extent that those are bid into the market and they are, in fact, not installed downstream, that does not provide for, you know, certainty with respect to the system reliability.
- Q. Now, do you think that that holds true for any form of generation or just energy efficiency resources?
- A. I think it would be incumbent upon any bidder to have a great degree of certainty that the planned resources they are bidding into a base residual auction will be delivered in advance of the delivery year.
- MR. ALLWEIN: May I have that answer read back, please.
- 24 EXAMINER CHILES: You may.
- 25 (Record read.)

Q. So is there a lack of certainty on your part that the proposed savings to be generated by your plan in 2013 to 2015 will actually be generated?

THE WITNESS: May I have that question reread, please.

EXAMINER CHILES: Please reread the question.

(Record read.)

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- A. I have a high degree of certainty that we will reach the statutory mandates in the years 2013 through 2015. I have less certainty, as I've discussed here in my testimony, about how we'll achieve those mandates.
- Q. I would like to move on to lines 16 to 18.
  - A. Page, please?
- Q. I'm sorry, page 4 still. You state that you "do not believe it is appropriate for regulated electric utilities to take speculative future positions that could subject either the utility or its customers to severe financial harm." Do you see that?
  - A. I do.
- Q. And can you, with more specificity, tell us what you mean by "severe financial harm"?

A. I think there is a couple of aspects to the financial harm associated with speculative -- taking a speculative future position. The first is in the event that the company would be unable to provide that resource in the delivery year, the company would be subject to penalties from PJM.

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Secondly, I've heard it discussed in this proceeding that the companies should view future incremental auctions as a possible hedge or risk mitigation tool for taking a future position today. And not knowing what future incremental auctions will clear at, to rely on that as a strategy for meeting an open future position creates a situation where the company may end up paying more for that resource than they were compensated for that resource in the BRA.

- Q. Well, is it your opinion that any utility that bids planned resources into a future capacity auction is taking a speculative position?
- A. I have no opinion on what other electric utilities do, sir.
- Q. Okay. The only reason I asked is because you said you do not believe it is appropriate for regulated electric utilities. Were you only referring to the FirstEnergy electric distribution utilities in Ohio? That's line 16 on page 4.

A. Yes.

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- Q. Are you aware of the Public Utilities Commission's order in the 12-814 case?
- A. Perhaps you could describe more completely what you mean by "order." I am not aware there was an order in that case.
- Q. I'm sorry. I misspoke. My apologies. Are you aware of the Commission's 12 -- I'm sorry. I'll start over.

Are you aware of the Commission's entry in 12-814 from February 29, 2012?

- A. Yes.
- Q. And are you aware that the Commission within that order requested that the FirstEnergy companies consult with staff and file a report detailing potential energy efficiency and peak demand reduction offers into the May, 2012, PJM auction?
- A. I'm aware that the entry requested that the company consult with the staff and prepare a report for the Commission with respect to the Companies' plans regarding the 2015-'16 base residual auction.
- Q. Okay. Now, you follow up your statement on page 4, lines 16 through 18, with a second statement where you say, "This is especially true

given there is not a statewide directive providing consistent requirements for electric utilities." Do you see that?

A. I do.

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- Q. And when you say "directive providing consistent requirements," are you referring specifically to any -- are you specifically referring to requirements by the Public Utilities Commission of Ohio regarding bidding energy efficiency resources into PJM?
- A. I'm referring in that line to the fact that there is no PUCO requirement for bidding in PJM, and that there is no statutory requirement for bidding in PJM, and PJM considers participation for these types of resources voluntary.
- Q. Are you aware of whether -- of whether FirstEnergy has presented this item, the fact that there isn't a statewide directive providing consistent requirements for the electric utilities in any of -- in the 12-814 docket or the ESP or some other appropriate docket?
- A. I'm not entirely clear what you mean by "appropriate docket," sir.
- Q. Well, I'll just take a couple then. Are you aware of whether the companies expressed this

position in either the 12-814 case or the so-called ESP III case?

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- A. I don't recall the company articulating this in the 12-814 case, and I genuinely don't remember the ESP III case, whether we did or did not.
- Q. Okay. Are you aware of other regulated utilities that bid -- that bid planned or forecast energy efficiency resources into the PJM base residual auction?
- A. Can you describe to me what you mean by "forecast," sir?
- Q. Savings that have not yet been generated but are planned to be generated in the future.
- A. Can you describe to me what you mean then by "plan"?
- Q. Well, they have a -- similar to the Companies' plans in this case, they have a presentation on how they will generate energy efficiency resources in the future.
- A. So when you use the word "plan" in this context, you are not using it in the same sense that PJM uses it when they talk about a planned resource.

  Am I correct in understanding you?
- Q. Well, I -- I would like to follow up your question with a question. Can you tell me how PJM

uses the word "plan"?

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A. PJM for energy efficiency resources considers a resource existing if it has an approved post-implementation m&V plan that has been approved by PJM. It considers the resource planned to the extent that it does not have a post-implementation approved M&V plan.

MR. ALLWEIN: All right. And may I have that answer reread, please.

EXAMINER CHILES: You may.

(Record read.)

- Q. All right. So in your understanding of PJM, can a planned resource be bid into a PJM base residual auction?
- A. PJM articulates a number of requirements before a resource provider can offer or bid an energy efficiency resource into a PJM auction. So in order to -- as long as the resource provider can satisfy those requirements, they are able to offer or bid a resource into. All of that would proceed well in advance of the point where you reach a post-implementation M&V plan.
- Q. Okay. So your understanding is that the only resources that can be bid into PJM base residual auctions -- and by "resources," I mean energy

efficiency resources -- are those existing resources, using PJM's definition that have an approved post-implementation M&V plan; is that correct?

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- Q. Okay. Please correct me.
- A. Perhaps -- if you could frame a question for me.
- Q. Okay. Sure. My question is what did I say that was incorrect?
- THE WITNESS: May I have his statement reread, please.
- EXAMINER CHILES: Please read the statement.
- 14 (Record read.)
- MR. ALLWEIN: Thank you.
  - A. So you would like me to now correct that statement? I think if I were to attempt to correct that statement, I would say that I don't believe the only resources that a resource provider is eligible to bid into PJM are existing resources. I don't believe that to be true.
  - Q. Okay. Well, my -- my question is, are there forecast resources by utilities that can be bid into future base residual auctions?
    - A. As I said earlier, there are specific

requirements that a resource provider has to satisfy in order to offer an energy efficiency resource into a PJM RPM auction.

- Q. And, hypothetically, let's say these resources meet those requirements that must be satisfied but they haven't yet been generated, those could be bid into the PJM base residual auction; is that correct?
- A. Energy efficiency resources that satisfy the requirements for being offered into a base residual auction as articulated by PJM can certainly be offered into a PJM auction.
- Q. Okay. And some of those resources have not yet been generated. Even when they satisfy all the requirements, it's possible they haven't yet been generated; isn't that correct?
- A. I apologize. I am not entire sure when we talk about generated, we are talking about EE resources here, so can you be clearer what you are talking about generated?
- Q. I'm sorry. I'm talking about the savings from energy efficiency resources being generated.
- THE WITNESS: I'm sorry, can you repeat the question? I apologize.

EXAMINER CHILES: Could you read the

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question back, please.

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(Record read.)

- A. Energy efficiency resources that have not yet been installed but that otherwise meet the requirements for being offered into the PJM auction may be offered by a PJM resource -- pardon me, by a resource provider.
- Q. Okay. And just for purpose of future questions, may we call those "planned resources"?
- A. I don't think so because I think -- why I am reluctant to do so because planned resources are a very specific term, and I don't think using it generally does a service to the discussion.
- Q. Okay. How about if I call them "forecast resources"?
- A. I think what I'm struggling with is in my mind, there may be resources and there may be energy efficiency resources that are included in the plan that we may forecast but that may not, in my judgment, meet the requirements necessary to offer those into the auction before they are installed.
- Q. All right. I can use a longer term and call them "planned resources that have not yet been" -- "planned energy efficiency savings that have not yet been generated." May I use that term?

A. I think we can use any term you want to use, but what I don't want to lose in using your term is a fundamental understanding of what needs to occur in order to bid those in, and so I am reluctant to accept your characterization because I'm afraid in doing so, I've assumed it into a resource that can, in fact, participate in the auction. That's where my reluctance is.

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- Q. All right. Well, my question is that I'm wondering whether you're aware of other regulated utilities bidding in resources that meet the PJM requirements to be bid into an auction but whose savings have not yet been generated. Are you aware of other regulated utilities bidding those resources, as I just described, into base residual auctions conducted by PJM?
  - A. I have no direct knowledge.
- Q. Okay. In going back to your earlier definition, would those resources being utilized by a utility to be bid in a PJM be speculative?
- A. I apologize. We had a number of discussions about a number of definitions. Which definition are you referring to now, sir?
- Q. Well, you discuss on lines 16 and 17 of your testimony on page 4 that you don't believe it's

appropriate for regulated electric utilities to take speculative positions. And so what I'm asking you now is, in your opinion, would utility companies that bid in existing resources as defined by PJM whose savings have not yet been generated would then be taking a speculative position by bidding those into the PJM auction?

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- A. The definition of an existing energy efficiency resource for PJM means that it has an approved post-implementation M&V plan. So in my mind that means the resource has been installed, PJM has done its due diligence with respect to validating the nominated value of the energy efficiency resources associated with that, and approved that M&V. So, no, sir, I don't think at that point I would consider that a speculative resources.
- Q. Now, did you just say that existing is defined by PJM as now something that's already been installed?
- A. An existing PJM resource is a resource that has an approved post-implementation M&V plan by PJM. I think I have been consistent in my description of that, and yes, sir, it has to be installed or implemented in order to have a post-implementation M&V plan that is reviewed and

vetted by PJM prior to approval.

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- Q. Is it your understanding that the M&V plan looks at a resource in terms of how it will be installed but doesn't imply that it already has been installed, according to PJM?
- A. I think your question, perhaps, is referring to an initial M&V plan that a resource provider is obligated to file with PJM no later than 30 days before an auction, and that, sir, is an entirely different M&V plan than the post-implementation M&V plan I have been referring to.
- Q. Okay. We'll move on for a while. Going to it -- back to page 4, line 18, you used the term "severe financial harm." And did you do any kind of analysis or calculation that would demonstrate the severe financial harm to the company if they did bid in a portion of their forecast resources as proposed by this plan?
- A. I think my testimony is that it could subject the utilities, not that it would, and, no, I did not make a calculation of what that severe financial harm could be.
- Q. Okay. So is it fair to say that you don't really know if it would be severe?

A. It could be severe. I don't know that it would be severe.

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- Q. Okay. Thank you. And then the next line which we've discussed already, which is, "This is especially true given that there is not a statewide directive providing consistent requirements for electric utilities," are you suggesting that if there was a statewide directive providing consistent requirements for electric utilities to bid into PJM, that the FirstEnergy companies would then begin to bid in forecast resources into these auctions?
- A. Whether the FirstEnergy companies would bid forecast resources into the PJM future auctions based on a state directive would be entirely dependent upon what the state directive is. But to the extent that there is a state directive, whatever that directive is, FirstEnergy, I believe, would follow that directive.
- Q. On page 4, beginning on line 19 and going through line 21, you state that "There is -- "There also is no risk protection mechanism in mass to insulate each of the Companies (or their customers) from such financial harm." Do you see that?
  - A. I do.
  - Q. And you just stated, and correct me if

I'm wrong, but you haven't calculated any potential financial harm here, be it severe or otherwise; is that correct?

- A. I have not estimated a potential future harm based on a speculative bid that doesn't exist today, no, sir.
- Q. Okay. And there weren't any specifics in the analysis that you presented to your management; is that correct?
  - A. No.

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MR. ALLWEIN: May I have that question and the answer reread, please.

EXAMINER CHILES: You may.

Thank you.

(Record read.)

- Q. And just to be clear, you are saying there was no specifics in that analysis as provided to management?
- A. No, I don't think that's what I'm saying. I apologize. That was not what I was saying, no.
  - Q. Okay. What were you saying?
- A. If your question to me was, were there no specifics -- maybe I better have the question reread back to the question about, I think, were there any specific --

THE WITNESS: Please read the question 1 2. about the specifics to me. 3 EXAMINER CHILES: Thank you. 4 (Record read.) The answer "no" meant that is not 5 Α. 6 correct. 7 Ο. Okay. So were there specifics in the 8 analysis regarding financial harm, then, that you 9 presented to management? 10 I'm sorry, so now you've appended "financial harm" to the question, sir? 11 12 MR. ALLWEIN: Can I have that question 13 reread one more time, please. 14 EXAMINER CHILES: Please. 15 (Record read.) In the analysis you provided to your 16 17 management, were there any specifics in terms of calculations that bidding in forecast savings --18 19 strike that. 2.0 In your analysis to management, were 21 there any analysis of specifics regarding the severe 22 financial harm you mentioned on line 18, page 4? 23 Α. We discussed with our management in some 2.4 great detail risks associated with participating in

PJM -- or PJM base residual auctions and incremental

auctions. I would say we had a great deal of specificity in those discussions. They were fairly robust discussions.

- Q. And so were there calculations as to what the financial harm might be?
  - A. No.

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- Q. So what were the specifics in terms of the financial harm that you discussed?
- A. I think what I testified, sir, is that we discussed in great detail the risks associated with participating in the auctions, and the risks that we talked about, as I testified earlier, are really the risks that I have discussed here in my testimony.
- Q. Okay. And did you discuss the benefits to customers, your customers, in these discussions?
- A. Can you describe to me, sir, what you mean by benefits?
  - O. Financial or otherwise.
- A. We certainly included in the discussion the fact that should a resource clear in the auction, that resource would be compensated for participation in the auction. And our management is aware that those dollars would be credited back to customers through the DSE rider. Yes, we did have those discussions.

1146 EXAMINER PRICE: Is that -- hold on a 1 2. second, Mr. Allwein. 3 Is that the only benefits to customers 4 you discussed? 5 THE WITNESS: Yes. 6 MR. ALLWEIN: I'm sorry, I didn't hear 7 the question. I apologize. 8 EXAMINER PRICE: Let's read the question 9 and answer back, please. 10 (Record read.) 11 MR. ALLWEIN: Thank you. Are you aware that a lower capacity price 12 Q. is also a potential benefit to your customers? 13 14 I believe lower capacity prices are a Α. 15 benefit to customers, yes. And do these bids into PJM hold the 16 17 potential to lower that capacity price, depending on 18 their size? 19 A. When we talk about "these bids," which 20 bids are we talking about now, sir? The bids that 21 didn't occur? 22

Q. We are talking about just hypothetical bids into the PJM base residual auction of energy efficiency resources.

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A. Hypothetically speaking, energy

efficiency resources bid into the PJM base residual auction may impact the capacity clearing price in the auction.

- Q. Impact it by lowering it?
- A. Yes. May.

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- Q. And being aware of these benefits, did the companies ask the Commission in their proposed plans for any kind of risk mitigation measure to protect against the financial harm you discuss in your testimony?
- A. I'm a little troubled by the "being aware of these benefits" at the beginning of the statement because, again, the companies have participated in base residual auctions and incremental auctions with demand resources and energy efficiency resources. So the companies understand the benefits of participating in those auctions and have done so in the past.

The benefits of participating in an auction with an uncertain resource are much less clear to me because bidding a resource into a capacity auction that does not ultimately get installed does not, in my mind, meet the test or meet really the purpose for the capacity auctions.

Q. All right. I guess I'm referring to you

discuss in a question on page 4, beginning on line 9,
"Do the Companies agree with the recommendation of
certain parties that 'planned' energy efficiency
resources should be bid into future PJM auctions?"

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And you give your answer, and then you discuss that you don't believe it's "appropriate for regulated utilities to take speculative future positions," on page 4, lines 16 to 18, because it could subject the utility or the customers to severe financial harm.

And so my question is, you talk about what these unknowns and uncertainties are, and I believe you -- and that's on page 5 with the question beginning on line 13, but let's -- I guess specifically -- and I'll actually form a question here.

On page 4, line 2 is -- I'm sorry. Let me back up. On page 4, line 19, this is what my question earlier -- questions were referring to. It says, "There also is no risk protection mechanism in place to insulate each of the Companies... from financial harm." And then you say that "Essentially, the parties advocating this risk exposure are suggesting that the Companies utilize the PJM capacity market as a financial arbitrage

opportunity."

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So going to the line beginning on line 19 and going through line 21, that there is also no risk protection mechanism in place, that's what I am referring to, that you stated there -- you state it conditionally, I will concede that -- that it could -- it may lower the capacity price, and that any revenue realized would flow back through the DSE rider.

So my question to you is, keeping all that in mind, did the companies in their proposed plans advocate any kind of a risk mitigation mechanism in order to bid?

MR. LANG: I'm sorry, I just have to object to the form of the question because I'm afraid that will be a total mess in the transcript.

EXAMINER CHILES: Could you restate your question, Mr. Allwein?

MR. ALLWEIN: Sure. Yep, I can.

EXAMINER CHILES: Thank you.

Q. Okay. Regarding your statement on page 4, lines 19 through 21, where you state there is also no risk protection mechanism in place to insulate each of the companies or their customers from financial harm, my question to you is, did the

companies in their proposed plans present any kind of risk mitigation mechanism?

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- A. I believe the companies did, sir. And the risk mitigation mechanism that the company proposed is that it would plan to bid all eligible installed energy efficiency resources for which they have ownership rights at the time of each base residual auction or incremental auction, provided that the resources are of sufficient scale and will meet PJM measurement and verification standards and are included in an M&V plan approved by PJM. I believe, sir, that is the risk mitigation plan that the companies laid out when they filed their EE/PDR plan.
- Q. Okay. And -- and that is why you disagree -- or I should say, is that one of the reasons that you disagree, as you state in your question on page 4, lines 9 through 11, that you do not agree with the recommendation of certain parties that planned energy efficiency resources should be bid into future PJM auctions?
- A. As I've said here in my testimony, I believe that by bidding in these forecasted resources, it creates an additional level of risk for the company and/or its customers.

And did the companies propose in their 1 2. plan any risk mitigation measure for that? 3 MR. LANG: Objection, asked and answered. 4 EXAMINER CHILES: Mr. Allwein, do you 5 have a response? 6 MR. ALLWEIN: Well, if -- may I -- may I 7 restate the question but before I do that, have her last answer read back? 8 9 EXAMINER CHILES: Sure. Could you read 10 back the last answer, please. 11 (Record read.) 12 So to be clear, your risk mitigation measures are basically to not bid in forecast 13 14 additional resources; is that correct? 15 Α. Yes. Okay. Thank you. Were any other risk 16 Q. 17 mitigation strategies considered? For specifically dealing with the 18 Α. 19 forecasted energy efficiency resources? 2.0 Yes, ma'am. Q. 21 At the time of this plan or prior to the Α. 22 plan? 23 EXAMINER PRICE: I'm not sure if I 2.4 understand your request for clarification. At the

time -- I don't understand the distinction at the

time of the plan and prior to the plan?

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THE WITNESS: Well, perhaps I can provide a little clarification around that. At the time that the company was meeting with the staff, as it was directed to do in 12-814, we met with the staff, and at that time the companies were very -- expressed the position that to the extent that the Commission would insulate the companies and/or its customers -- I guess, the companies from the risk associated with participating in the '15-'16 base residual auction, that the companies may consider a different position with respect to participation in that auction.

That did not occur, and so coming out of that process as we developed our plan, I think the focus was on, as we've stated here, participating in these auctions to the extent that we were able with existing installed resources as we've discussed.

EXAMINER PRICE: Thank you.

THE WITNESS: You're welcome.

EXAMINER PRICE: Pardon my interruption,
Mr. Allwein. She asked you for a clarification on
your question, so the ball's in your court.

Q. (By Mr. Allwein) My question involved during the development of the plan or other risk mitigation measures considered.

MR. LANG: So I believe that question was answered.

EXAMINER PRICE: No.

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A. During the development of the plan, I think the risk mitigation measure that was considered was to bid, as we have discussed, those resources that are already installed that meet the PJM requirements that we have ownership for. I don't recall at the time of the plan development other risk mitigation measures.

But I guess, if I could add, again, the point of these capacity auctions is really to provide system reliability, so to the extent that a resource provider, in my mind, is offering a resource into that capacity auction, there should be a high degree of certainty that those resources will be available for use during the delivery year in order to support the overall reliability of the electrical system.

And so to the extent that we talk about bidding future resources where there is a high degree of risk, in my mind, at least, associated with those resources, be implemented in accordance with the plan or won't they. Will they be eligible for delivery into the PJM year, or won't they? I think that that's an entirely different discussion.

EXAMINER PRICE: But we have already covered that ground, haven't we? Because PJM has rules for bidding planned but uninstalled -- that satisfies resources -- that satisfies PJM's interests in system reliability?

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THE WITNESS: They do. And one of those requirements is that the installation — or that the project or technology is scheduled to be installed prior to the delivery year. And when I think about our energy efficiency plans, we have a forecast for participation rates and a number of other assumptions that underlie what might occur with respect to those plans; and to me, that's very different than having great certainty that you have that installation scheduled for implementation prior to the delivery year.

- Q. (By Mr. Allwein) But following up on that question and answer, you would agree that your energy efficiency and peak demand reduction plans as proposed for 2013 to 2015 do forecast the installation of several different energy efficiency measures; is that correct?
- A. The plans include assumptions of all participation in our various programs. But I think experience would suggest that what our expectations

are going into the plan are not necessarily how that plan will be implemented or how customers will choose to participate at those exact same levels throughout the plan period, and there are a number of resources built in our plan that simply aren't eligible for participation in the PJM process. And so to the extent that participation in those programs exceeds the level that was included in the forecast, you could find yourself in harm's way.

- Q. Aren't several of the energy efficiency measures that you proposed to install or oversee the installation of as a part of your plan, aren't several of those potentially eligible as a PJM base residual auction resource?
  - A. Yes.

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- Q. And is it your testimony today that you're uncertain about whether you will install or oversee the installation of enough of these resources to meet your energy efficiency statutory benchmarks between 2013 and 2015?
- A. No, sir. I think I already testified to the fact that I'm confident that the company will meet its statutory obligations with respect to its energy efficiency and peak demand reduction benefits for the 2013 to 2015 period. What I'm less certain

about is specifically which programs or measures will ultimately be implemented in what mix in order to allow us to achieve those mandates.

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So, for example, if I have contracted for demand response resources in order to satisfy my peak demand production mandates and I end up through the '13 through '15 period using more of the contracted demand resources, I could still and would still meet my statutory requirements, but I would not be able to bid those demand resources into a PJM auction because I would assume that I don't have ownership of those for PJM bidding purposes. The curtailment service providers would or the individual customer would.

EXAMINER PRICE: Okay. I am going to take one shot at this. Hopefully then we can move on.

What your testimony is, because the company has a substantial amount of flexibility in the implementation plan on meeting annual targets versus bidding into a PJM capacity auction three years in advance, you are not certain that the individual capacity resources will be eligible for the PJM auction, although you are certain you will hit your statutory benchmarks.

THE WITNESS: Yes, sir.

EXAMINER PRICE: I am going to ask a follow-up though. Given the four-year eligibility of demand -- of energy efficiency resources to be bid into a capacity auction, are you confident that all installed measures over the lifetime of this plan that otherwise meet the PJM requirements for bidding in the capacity auctions will eventually be bid into a PJM capacity auction?

THE WITNESS: I am.

EXAMINER PRICE: Thank you.

- Q. (By Mr. Allwein) Okay. I want to go to page 5, lines 13 and 14, you talk about specific examples of unknowns and uncertainties that you refer to a little bit above the question there, lines 7 through 12. Do you see that?
  - A. I do.

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- Q. I think we've already kind of discussed the first one. In your second example you state that planned resources "may or may not qualify for participation into the PJM BRAs depending on the technology and the PJM rules in place at the time of delivery." Do you see that?
  - A. I do.
- Q. Is it your opinion this PJM can disallow savings that were certified in an approved M&V plan

by changing the rules in the delivery year?

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- I believe once PJM approves a post installation M&V plan, those nominated values will not be changed. I would say that post installation are subject potentially to audit by PJM as part of that approval of the M&V process. But once the final post-implementation M&V report is approved, then, no, I don't believe those numbers are subject to change.
- Q. So a delivery year rule change is not really an uncertainty as you presented here then, is it?
- I think that there is always an uncertainty with regard to rule changes. What I testified to a moment ago was once PJM certifies the installation and approves the nominated savings based on their analysis of the post installation M&V plan, that I believe those values are solid.

EXAMINER PRICE: But you're certain technologies in your plan today do not qualify for PJM under the PJM rules for base residual auction.

THE WITNESS: Correct.

EXAMINER PRICE: And one of those examples is behavioral.

THE WITNESS: Correct.

EXAMINER PRICE: That's not a rule change

issue; the rules today do not apply -
THE WITNESS: That is correct.

- Q. (By Mr. Allwein) And you list the example of behavioral energy efficiency savings as something that does not qualify for the BRAs on page 6, lines 6 and 7. Do you see that?
  - A. I do.

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- Q. And it's clear already that those kind of resources don't qualify as a PJM resource; isn't that true?
- A. Under the rules today for PJM, behavioral programs do not qualify, that's correct.
- Q. All right. And I want to go to your third example where you discuss mercantile self-direct resources, and that begins on page 6, line 8, and extends through line 15. Do you see that?
  - A. I do.
- Q. Now, PJM has specific rules regarding a historic project. Are you familiar with those?
- A. I'm sorry, sir. I don't understand the question.
- Q. One of the criteria -- one of the criteria, one criterion -- one of the criteria in the PJM Manual 18B, which I think you referred to in your

testimony and is an exhibit in this case, states that the time period of an energy efficiency installation determines whether an installation is eligible to be a capacity resource for a delivery year. Do you — are you familiar with that?

A. I am.

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- Q. All right. So anything that was installed more than a year prior to the auction is ineligible to be bid into that auction; isn't that correct?
- A. If by "that auction" you are referring to the base residual auction, then I would agree with you, sir. If you are referring more broadly to base residual auctions and incremental auctions, then I would not agree with you.
- Q. I was referring to the base residual auction, thank you. And so historic mercantile self-direct customers, as you present there in lines 9 to 10 on page 6, if that historic self-direct project was installed more than a year before the auction, that's not going to qualify or be an eligible PJM resource; isn't that correct?
- A. Mercantile self-direct projects that yielded energy efficiency resources that were installed more than a year before the base residual

auction would not be eligible for offer into the base residual auction.

Q. Okay.

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A. I guess I want to be clear what I'm testifying to here is really attempting to identify uncertainties, right, so I wasn't suggesting otherwise with the inclusion of that statement.

Rather, what I was saying is that from the time we implemented the program through September of this year, the company did not have the ownership rights to those for PJM bidding purposes for the mercantile self-direct programs effective in September of 2012.

We modified that program such that on a prospective basis we would have those ownership rights for participating in future PJM auctions. And then just continuing the thought in discussions here, in the course of this proceeding, the subject has been raised again that perhaps for mercantile self-direct projects on a prospective basis, the company should not assume ownership, but, rather, the customers participating might have the opportunity to provide those ownership rights to the company for PJM purposes, but they would have the obligation. So the purpose of this paragraph really went to sort of pointing out some of the unknown, the uncertainties.

- Q. Right. I guess I was confused because you chose to include the word "historically." So I assume we are referring to historic self-direct projects.
- A. I was, sir. I was referring to the fact that historic mercantile self-direct customers through the end of August, 2012, the company does not have the ownership rights for those projects.
- Q. Okay. But the ownership issue has been resolved; is that correct?
- A. As of September the company is requiring ownership. Whether that's resolved, I guess, remains to be seen.
- Q. But as you stated previously, if it was a Commission order, in your opinion, the companies will comply with Commission orders; is that correct?
  - A. That is correct.
  - Q. Okay.

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EXAMINER PRICE: Good answer.

THE WITNESS: I have two kids getting ready for college. It's the only answer.

Q. I want to ask you, that you mentioned earlier that your mitigation strategy is to wait until -- or to bid in resources that are already installed and that you have ownership, correct?

MR. LANG: Objection, asked and answered.

EXAMINER CHILES: I'm sorry, could you

read back the question.

(Record read.)

EXAMINER CHILES: Sustained.

- Q. Okay. By waiting until resources are installed, would you agree that you are delaying potential benefits to your customers?
- A. By waiting until resources are installed, I think we are participating in a proper fashion in the capacity markets because we have some sense of certainty that those resources will be available for delivery when in the delivery year. I think that by participating in those PJM auctions prior to that really creates risk for the company and/or its customers.
- Q. All right. And just to be clear, by risk, you are talking about the financial harm that you mentioned in your testimony, right?
- A. The risks that we've discussed today, yes, sir.
  - Q. Okay.

MR. ALLWEIN: One moment, your Honor.

I have no further questions, your Honor.

25 Thank you.

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1 EXAMINER CHILES: Let's take a brief 2. five-minute recess before we resume with cross. 3 (Recess taken.) 4 EXAMINER CHILES: Let's go back on the record. I believe we are at Mr. Williams. 5 6 MR. WILLIAMS: No questions. 7 EXAMINER CHILES: Mr. Dougherty. 8 MR. DOUGHERTY: Yes, I just have a couple 9 of questions. 10 CROSS-EXAMINATION 11 12 By Mr. Dougherty: Good morning -- or afternoon now. 13 Ο. 14 Good afternoon. Α. 15 Q. Good afternoon. It's been a long day. My name is Trent Dougherty, and I will be asking you 16 a couple of questions on behalf of the Ohio 17 18 Environmental Council. 19 Now, you mentioned, both in your 2.0 testimony a number of times -- I'm sorry, during 21 your -- during the answers to the questions from 22 Mr. Allwein earlier, you mentioned the discussions 23 with your management. Who are you referring to when you referred to your management in those answers to 2.4

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Mr. Allwein?

A. My direct management is Mr. Bill Ridmann, Vice President of Rates and Regulatory Affairs for the FirstEnergy companies, so some of that reference was discussions directly with him.

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The more broader discussions with management I think, as I mentioned in my testimony, really refer to the Energy Efficiency Steering Committee for FirstEnergy.

- Q. In those discussions, who else is in that room other than those senior management? Or only those senior management?
- A. No. There would have been Mr. Dargie would have been present in the room, Mr. Terosky, perhaps others.
- Q. And -- and you mentioned that they all work for the FirstEnergy utilities -- the companies, excuse me, as they are referred to. The companies, we'll call them.
- A. The people that participate in the Energy Efficiency Steering Committee either work for the FirstEnergy utility companies or FirstEnergy Service Company.
  - Q. Anyone from FirstEnergy Solutions, FES?
  - A. No, sir.
  - Q. Let me go back again to another series of

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questions that I believe Mr. Allwein had asked you. Let me find it. If you go to your testimony on page 6, starting on line 4 through line 7, that would be your second bullet point under the question that begins on page 5 concerning the uncertainties and unknowns. Do you see that?

- A. I do.
- Q. Follow up on the questions that Mr. Allwein asked you, just trying to get an idea of a baseline on this, are you aware of any proposed changes in the qualifications in the base residual auction for PJM in the May, 2013, or May, 2014, or May, 2015, auctions?
- A. As it relates to energy resources or resources more generally?
- Q. I apologize, clarify it. As it relates to energy efficiency qualifications.
- A. No, sir, I am not. In fact, I think the most recent revision of the PJM capacity market manual came out in September of 2012.
- Q. And did you happen to do any analysis of -- strike that.

MR. DOUGHERTY: No further questions.

EXAMINER CHILES: Thank you.

THE WITNESS: Thank you.

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EXAMINER CHILES: Ms. Kern. 1 2. MS. KERN: Just a few, your Honor. 3 4 CROSS-EXAMINATION 5 By Ms. Kern: 6 Q. Good after, Ms. Mikkelsen. Good afternoon. 7 I'm Kyle Kern, an attorney with OCC. I 8 Ο. 9 just have a few follow-up questions for you today. 10 What benefits do the companies attain by 11 having their energy efficiency and peak demand 12 reduction clear the PJM base residual auctions? 13 THE WITNESS: May I have that question 14 reread, please. 15 EXAMINER CHILES: You may. 16 (Record read.) 17 It reduces the cost of compliance with 18 the statutory mandates for energy efficiency and peak 19 demand reduction. 20 Okay. Thank you. And I believe Q. 21 Mr. Allwein went over this topic with you, I'm 22 referring to page 4, lines 18 through 19, of your 23 testimony where you state that "There is not a statewide directive providing consistent requirements 2.4 for electric utilities?" Do you see that? 25

A. I do.

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- Q. And I believe you clarified that you meant there was not a statutory directive; is that correct?
- A. I think my clarification was broader than statutory. I think the discussion we had was around the fact that there was no PUCO rulemaking or requirement with respect to bidding in PJM. There was no statutory requirement to bid into PJM, and that the PJM rules consider participation for energy efficiency and demand response resources as voluntary.
- Q. Okay. Thank you. And you responded, I believe, earlier to Mr. Allwein that you are familiar with the Commission's February 29, 2012, entry in Case No. 12-814; is that correct?
  - A. Yes.
- Q. And do you recall that the Commission said in that entry that FirstEnergy has an obligation to take all reasonable and cost-effective steps to avoid unnecessary RPM price increases for its customers?
- A. I don't recall that language specifically, but it very well may be in there.
  - Q. I have a copy of it, if I can refresh

your recollection if you don't recall that language.

Or do you recall something similar to that?

- A. It may be helpful to see what you are looking at.
  - Q. Sure, sure.

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MS. KERN: Your Honor, may I approach the witness?

EXAMINER CHILES: You may.

MS. KERN: Thank you.

THE WITNESS: May I just take a moment?

It's been awhile since February.

EXAMINER CHILES: Take your time.

CK That's my copy, I'm sorry, if I can take that back. Thank you.

- Q. All right. So you had a chance to read the language that I had just expressed to you earlier, correct?
  - A. Yes.
- Q. And do -- does FirstEnergy view that language as a directive? I know it doesn't fit into the statutory or the P-U-C -- PUCO rule directive, as you were speaking about earlier, but do you -- does the company view that as a directive?
- A. I think it might be useful -- and I apologize. I no longer have the document. But

know prior to that clause that you are referring to, there was language about "consistent with state policy."

Q. Uh-huh.

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- A. So I think, you know, it may behoove us to take that in the broad context of that entire paragraph rather than the excerpt.
- Q. Would you agree that the entire paragraph is a directive?

MR. LANG: Just which particular paragraph number are you referring to?

MS. KERN: I'm referring to paragraph 4.

- A. I don't have the document in front of me, but the layman's read of that document, I think it would be more of a reciting of circumstances. I don't think reading it I would take it as a directive. I think it would be more -- I read it more as this is sort of what you are expected to do. It was reciting what you were expected to do rather than specifically in 812 directing us to do something that perhaps hadn't been.
- Q. So it's an expectation of the Commission, you would agree with that then, for the company? And I'm not asking for a legal conclusion.
  - A. Yes.

Q. Okay. Thank you. Switching gears, on page 4, lines 19 to 20, of your testimony, you state that "There also is no risk protection mechanism in place to insulate the companies (or their customers) from financial harm." Do you see that?

A. I do.

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- Q. Are you aware that parties to this proceeding have suggested ways to mitigate risk?
- A. Yes. The next sentence in my testimony, in fact, talks about that a number of parties have suggested that the companies manage this risk exposure by participating to the extent necessary in future incremental auctions to the extent that they have an open forward position based on a speculative position they took in a base residual auction.
- Q. And I believe Staff Witness Scheck proposed that FirstEnergy mitigate both the price and performance risks by bidding in zero dollars and 75 percent of its projected capacity reductions; is that correct?
- A. I think that the subject of bidding in at zero is a separate matter, not related to the risks that I'm addressing here. And I think that
  Mr. Scheck modified his testimony with respect to the 75 percent when he took the stand.

Q. Okay. Looking at page 9 of your testimony, lines 2 through 7, you state, "Second" -- excuse me. Yeah, that's correct. Okay. "Second, existing Rider ELR customers may have already entered into contractual arrangements with the curtailment service providers for the period beyond the existing ESP, let alone the period beyond ESP3." Do you see that?

A. I do.

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- Q. Okay. In your opinion, in order to maximize the amount of PDR bid into the PJM base residual auction, should the companies let ELR rates expire and let the curtailable service providers serve this market?
- A. I don't have an opinion on that at this time. The current rider ELR extends through May 31 of 2016, so I think that's probably a question better addressed as we approach the end of that tariff rather than as I sit here today because the facts and circumstances, I'm certain, will be different in the future than they are today.

EXAMINER PRICE: Doesn't that present a paradox for the Commission? You have got an ESP that runs for maybe two or three years and a PJM capacity auction that's bid out three years in advance. How

1173 can we ever reach a situation where you could bid in 1 2. this peak demand reduction for the whole term of your 3 three-year portfolio program when the capacity 4 auction is way out in the future? 5 THE WITNESS: I agree with you, there is 6 a timing disconnect with respect to that. I'm sure 7 there is a solution to that problem. EXAMINER PRICE: And that would be? 8 9 THE WITNESS: Either extend the ESP or extend the EE/PDR plan periods. 10 11 EXAMINER PRICE: Thank you. MS. KERN: That's all the questions I 12 13 have. Thank you, Ms. Mikkelsen. 14 THE WITNESS: Thank you, ma'am. 15 EXAMINER CHILES: Thank you. 16 Ms. Kyler. 17 MS. KYLER: Yes, thank you, your Honors. 18 19 CROSS-EXAMINATION 20 By Ms. Kyler: Good afternoon. Turning to page 8, lines 21 22 11 through 19, of your testimony -- I'll wait until 23 you're there. 2.4 Thank you. Sorry, page 8, lines 11 Α. 25 through 19?

Q. Yes.

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- A. Thank you. I'm there.
- Q. How much did the companies receive for the 10 megawatts of interruptible load that it bid into the incremental auction for the 2014-'15 delivery year?
- A. It would be the resource clearing price from the '15-'16 auction times the 10 megawatts -- I guess that's megawatt-day. I believe the resource clearing price from that auction was \$354 a megawatt-day. So you would take the -- rats, like most people, I hate to do math on the stand, but I think you would take the \$354 per megawatt-day, times the 10 megawatts, times 365 days.

MR. LANG: Just so the record is clear, was the question about the first incremental auction for 2014-'15?

MS. KYLER: Yes.

THE WITNESS: Thank you for that clarification. Then my answer is wrong. I apologize. Thank you.

- Q. Do you want to correct your answer?
- A. I do want to correct my answer. Thank you very much. I do. Same calculation but the incremental clearing price was \$5.54.

- Q. \$5.54 per megawatt-hour?
- A. Megawatt-day.

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- Q. Megawatt-day, sorry. And that revenue would be passed back to customers through rider DSE?
- A. Yes; in the '15-'16 delivery year when the company receives it.
  - O. How does --
- A. Pardon me. I'm turned around, the '14-'15 delivery year. I apologize.
- Q. Have the companies bid rider ELR interruptible load into base residual auctions in the past?
- A. Yes. I believe for the '13-'14 delivery year the company bid ELR resources into the base residual auction.
  - Q. Do you know if that's the only year?
- A. Prior to that year, the company was an FRR entity.
- Q. Thank you. Do you agree that bidding interruptible load into the base residual auction can lower capacity prices for customers by displacing higher cost capacity resources?
- A. It may. I don't know for certainty if it will. It depends where it clears on the supply curve, but it may.

Q. Okay. Turning to page 8, lines 20 through 23, of your testimony, is there anything in the PJM rules that would prevent the companies from bidding ELR load into a base residual auction, even if FirstEnergy didn't have that load under contract for the delivery year?

THE WITNESS: May I have that question reread, please.

EXAMINER CHILES: You may.

(Record read.)

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A. PJM requires you to demonstrate ownership of those demand resources in your, you know, portfolio. You may not have to demonstrate that ownership when you offer that resource into it, but you need to demonstrate that ownership.

So by way of answering your question, I don't believe the companies could offer those ELR-related resources into a future base residual auction because when the time came to demonstrate ownership of those demand response resources, the companies may not be able to do that, for any number of reasons.

Q. If the companies could demonstrate ownership at a later time, do PJM rules prevent the company from bidding those resources into the base

residual auction?

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A. No. But as I sit here today, I sent a letter out to our ELR customers on August 6th of 2012 asking them to sign contract addendums to continue participation on our rider ELR for the period of June 1st of 2014 through May 31st of 2016. And I asked those customers to respond as quickly as possible to support the company in their efforts to participate in incremental auctions but no later than December 15.

And as I sit here today, at the end of October, I've heard from 14 of those customers, so that suggests to me some degree of uncertainty about whether customers are going to choose to participate in the ELR for the '14 to '16 period, notwithstanding what uncertainty there may be with respect to their desire to continue to take service beyond that period.

- Q. Do curtailment service providers bid interruptible load that they don't have under contract into base residual auctions?
- A. I don't know with certainty what CSPs do with respect to their bidding strategy.
- Q. Do generation companies ever bid generation that's planned but not yet built into the

PJM base residual auctions?

A. Yes.

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- Q. Isn't there a risk that the plan generation won't be built?
- A. I think if a generating company bids a plan generation resource into the auction and it clears, it would be a very unusual event for that generating company not to complete that asset. I would expect those assets would be installed prior to the delivery year.
- Q. If the generation company bids planned generation into the BRA but that generation doesn't get built, aren't there ways for that generation company to make up the capacity shortfall in the delivery year, for example, incremental auctions?
- A. The shortfall, to the extent it exists, needs to be made up in advance of the delivery year. There are incremental auctions, but I think that relying on incremental auctions as a hedge for forward positions you take in a base residual auction brings another whole set of risks to auction participants.
- Q. Okay. Turning to page 9, lines 2 through 5, do you know whether any existing ELR customers have entered into contractual arrangements with

curtailment service providers for the period beyond the existing ESP or ESP III?

- A. I don't know, but as I mentioned earlier, the fact that on August 6 I sent contract addendums out to all the ELR customers, and as we sit here on October 30 I believe have only heard back from 14, I am beginning to suspect that may be the case. But no, I don't know that with certainty, ma'am.
- Q. If rider ELR were extended in this case through May 2017 and customers signed up for that extended ELR prior to the 2013 base residual auction, would FirstEnergy be willing to bid this ELR load into the 2013 BRA?

I'm probably confusing time periods and delivery years. Do you want me to be more specific?

A. Sure.

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- Q. Okay. If rider ELR were extended in this case through May, 2017, and customers signed up for that extended ELR prior to the BRA to be held in May, 2013, would FirstEnergy be willing to bid that ELR load into the May, 2013, base residual auction?
- A. The company, nor any other party that I'm aware of, is proposing that the rider ELR be extended in this proceeding, so I'm having trouble with that as a promise, ma'am.

Q. Just as a -- as a hypothetical then, rather than a proposal by a party in this case, would FirstEnergy be willing to bid the load into the 2013 BRA?

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- A. I guess consistent with the company's strategy, to the extent that the company has ownership of eligible resources that meet PJM M&V requirements -- I guess in this case we wouldn't need the M&V requirements -- we would bid those resources into the base residual auction.
- Q. If -- this is kind of a long question so I'll try to take it slow. If current ELR customers were willing to commit now to providing interruptible load under a rate with the same or similar terms and conditions as current rider ELR through May, 2017, and the Commission were to agree to hold FirstEnergy harmless from replacement capacity costs or penalties or other financial obligations if some of that interruptible load didn't show up in the delivery year, isn't it true there would be no financial risk to FirstEnergy from bidding in that ELR load?
- A. To the extent that the Commission commits to hold the company harmless for actions taking -- taken, you know, in the May base residual auction for future outcomes, I guess as long as we are held

harmless, the companies have no risk. There is a lot of details surrounding what "held harmless" means and what have you.

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- Q. Under that scenario is there any reason why FirstEnergy couldn't bid in the ELR load?
- A. I guess I'm becoming increasingly confused, and I apologize for that. But are you suggesting that the company extend rider ELR, or simply that it enter into -- I'm not clear what the hypothetical is here. I apologize.
- Q. Sorry. I'm sorry to interrupt you. If the company had a rate -- either extended current ELR or had a rate with similar terms and conditions as the current ELR through May, 2017, and the Commission made a hold harmless commitment, decided to hold the company harmless, is there any reason why FirstEnergy couldn't bid in the ELR load or equivalent rate load?
- A. Again, and I think I may have testified to this earlier, as I sit here today, I'm not certain from a company perspective whether the company in June of 2016 would want to continue rider ELR, so I don't think we're in a position to make that commitment today to accept that hypothetical.

MS. KYLER: No further questions.

1182 EXAMINER CHILES: Thank you. 1 2. Mr. Kelter? 3 I'm sorry, Mr. McDaniel. 4 MR. McDANIEL: Thank you, your Honor. 5 6 CROSS-EXAMINATION By Mr. McDaniel: 7 8 We have a few questions, most have been Ο. 9 answered, I think. I would like to go back to page 10 4, line 6 and 7. I think Attorney Examiner Price and 11 Mr. Allwein had a couple of questions about your 12 testimony here, but I think mine is a little -- a 13 little different. 14 So here you state that energy efficiency resources must be of a size where the companies can 15 16 reasonably expect the auction revenues produced by 17 the technology or project to offset the cost of the incremental M&V associated with the project. Do you 18 19 see that? I do. 2.0 Α. 21 Does the company plan to aggregate individual measures in order to make this of-scale 22 23 calculation? 2.4

Α. Yes.

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So can you explain that a little bit? Q.

A. Yeah. I think really what we are trying to get at here is the company may aggregate into individual measures to be of scale with similar -- that all qualified under the same M&V plan, but to the extent that there is a unique measure or project that may not be able to be aggregated with other similar projects in that it may not be of sufficient scale or it may not be cost effective to perform the M&V on that individual project.

- Q. Okay. Would you agree that a purpose of the PJM capacity auction is to send price signals about the need for more capacity?
  - A. Yes.

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- Q. So if that was put another way, the results of the auction and the clearing prices can send signals about more capacity is needed in a certain region, correct?
- A. Well, it sends a price signal what the market is willing to pay for the capacity. I think a provider has to decide if it's a sufficient price signal. But auction -- PJM conducts the auction so it clears with sufficient capacity and a sufficient reserve margin.
- Q. Now, on page 4, lines 18 and 19, this has been asked about a little as well, you state that

"there is not a statewide directive providing consistent requirements for electric utilities."

Do you know which states have statewide directives that provide consistent PJM requirements for electric utilities?

- A. I do not.
- Q. Ms. Mikkelsen, you participated in the collaborative process; is that correct?
  - A. Yes.

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- Q. And you -- that included attending collaborative meetings?
  - A. Yes.
- Q. I think you stated earlier that you had no direct knowledge of other utilities bidding forecasted PJM-eligible resources into the PJM base residual auction; is that correct?
  - A. Yes.
- Q. So are you aware that through the collaborative it was brought to the companies' attention that ComEd saved its customers \$22 million by bidding forecasted PJM-eligible energy efficiency resources in the most recent PJM base residual auction?
- A. I have heard discussions about ComEd in our collaborative meetings, and I think, you know --

thank you for allowing me to clarify when I use the word "direct." That is exactly what I meant, that I don't have any personal knowledge. I've heard others talk about it in an environment such as the collaborative, but I have no direct, personal knowledge whether what you have heard is correct or incorrect, sir.

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- Q. Actually, I have one more question. And this is kind of a clarifying question that was discussed a little bit earlier as well. But it's not the companies' belief that PJM would allow certain measures to pass their M&V rules and be bid into the auction at the time of the auction and then PJM would suddenly change those M&V rules midstream to disallow those savings at the time of delivery, is it?
- A. I think that there is a requirement when you offer an energy efficiency resource into PJM that at the time you offer that resource, it meets the then known standards for the delivery year. That's a requirement simply to participate or offer.

I'm not sure, as I sit here today, what happens if that standard changes between when you offer it and when you have your post-implementation or post-M&V program, and that creates a sense of ambiguity for me as well, sir.

Q. Let me see if I can ask it a little bit different way. You testified earlier that a measure in order to qualify, a resource in order to qualify, must have a PJM-approved post installation M&V report; is that correct?

A. I apologize. There is a lot of M&V going on here, so let me -- I apologize. In order to offer a resource, an energy efficiency resource, into a PJM auction, the companies need to submit an initial M&V plan for approval by PJM prior to offering those resources into the auction, so that's one sort of M&V plan.

And then prior to the delivery year the company has to submit a post-implementation or post-installation M&V plan for review and approval by PJM to sort of shore up, if you will, the nominated value of that energy resource. Does that help?

- Q. Okay. And at the time of the auction when a resource is being bid in, the company would know whether or not there was an approved PJM post installation measurement and verification report?
- A. I think at the time the company bids the resource into a PJM auction, they would know that they had an approved initial M&V plan, sir.

EXAMINER PRICE: Are you still on the

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1 hook if at the time you do your post installation 2. M&V -- let's say a measure that you bid in at 12 3 megawatt-days only turned out to be measured at 11 4 megawatt-days. Are you still on the hook for that differential? 5 6 THE WITNESS: Yes. 7 EXAMINER PRICE: Thank you. MR. McDANIEL: That's all I have. 8 9 you. EXAMINER CHILES: Mr. Oliker. 10 11 MR. OLIKER: I think I have just a few 12 questions, your Honor. 13 14 CROSS-EXAMINATION 15 By Mr. Oliker: Good afternoon, Ms. Mikkelsen. 16 Q. Good afternoon. 17 Α. 18 First, I get you're not an attorney, Ο. 19 correct? 2.0 No, sir. Α. 21 I didn't think so. I wasn't sure if I Q. 22 missed that in your testimony. 23 Now, there was some discussion earlier 2.4 about the question of whether mercantile customers 25 seeking an exemption under a rider -- do you remember

hearing that. And there was maybe some controversy over that issue, the question of whether or not those customers retain ownership to bid those capacity reduction capabilities in the PJM auctions?

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- A. Yes, I addressed that topic in my testimony, sir, at page 6, lines 8 through 15, yes.
- Q. And I just wanted to make sure you are not offering a legal conclusion whether the Commission has directed mercantile customers seeking an exemption to transfer those ownership capabilities to FirstEnergy to bid those into the PJM auction, correct?
- A. No, sir. I am stating, though, that the company built the plan under the assumption that that would occur and changed all the participating forms effective September, 2012.
- Q. Okay. And you're not suggesting if the Commission were to determine customers can retain the ownership right of the ability to bid into the PJM, that would in any way affect the total amount of megawatts bid into the PJM auction, correct?

Maybe if I can state that differently, the question of who owns those megawatts, whether it's FirstEnergy or the customer, that doesn't necessarily affect whether those megawatts are bid

into PJM, correct?

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- A. No. I think, if I'm understanding your point, that if the company has them and bids them, or if the company doesn't have them and the customer bids them, the resources are still bid under either circumstance?
  - O. Correct.
  - A. Yes, yes.

MR. OLIKER: Okay. Thank you. I have no more questions, Ms. Mikkelsen.

Thank you, your Honor.

THE WITNESS: You are welcome.

EXAMINER CHILES: Thank you.

Mr. Parram.

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16 CROSS-EXAMINATION

By Mr. Parram:

- Q. Good afternoon, Ms. Mikkelsen.
- 19 A. Good afternoon, sir.
  - Q. Ms. Kyler asked you a question regarding whether a generation company could bid planned generation into the BRA, and you indicated that it could; is that correct?
  - A. Yes.
- Q. Do you know if any FirstEnergy generation

affiliate bid planned generation into the most recent BRA?

A. I do.

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- Q. Do you know how many megawatts were bid into the BRA?
  - A. I don't recall.
  - Q. And what affiliate are you referring to?
  - A. FirstEnergy Solutions.
- Q. Are you familiar with an Eastlake plant in Eastlake, Ohio?

EXAMINER PRICE: Mr. Parram, relevance?

MR. PARRAM: Your Honor, it goes directly
to Ms. Mikkelsen's testimony as it relates to page 4.

EXAMINER PRICE: Okay.

MR. PARRAM: Lines 13 through 15, she has a general discussion regarding her opinion as it relates to bidding in resources or planned resources to the PJM BRA. She's already had some testimony as it relates to FirstEnergy's affiliate bidding in planned generation resources. I would like to ask her specific questions as relates to FirstEnergy's affiliate bidding in the most recent BRA, although that is not installed today, to show that it is reasonable for the companies here today to consider bidding in planned demand response resources,

although they are not actually installed.

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EXAMINER PRICE: So you want to compare the position of three regulated distribution utilities with an unregulated generation affiliate and how much risk that ungenerated -- unregulated generation affiliate may or may not be willing to take on in a given project?

MR. PARRAM: Yes, your Honor.

EXAMINER PRICE: That's the parallel you want to draw?

MR. PARRAM: That is the questions I would like to ask her, if she would like to point out distinctions between the unregulated generation affiliate as opposed to FirstEnergy companies. If she is willing to do that, she could do that, but --

MR. LANG: Your Honor, I would note, just to follow up on this, Ms. Mikkelsen has already discussed and distinguished the difference between a generation resource and an energy efficiency demand resource.

EXAMINER CHILES: I think we need to move on to a different line of questioning.

MR. PARRAM: Well, that's all I have, your Honor.

EXAMINER CHILES: All right.

1192 Mr. Lang, redirect? 1 2 MR. LANG: If we could have just a couple 3 of minutes, please, your Honor. 4 EXAMINER CHILES: Sure. (Discussion off the record.) 5 6 EXAMINER CHILES: Let's go back on the 7 record. 8 MR. LANG: Yes, one question. 9 10 REDIRECT EXAMINATION 11 By Mr. Lang: 12 Q. You were asked earlier by a few of the 13 attorneys about the potential of the Commission 14 holding the company harmless for the risk that you described in your testimony. If that happens, does 15 that eliminate the risk? 16 17 No, it does not eliminate the risk. It 18 merely transfers the risk to the customers. 19 MR. LANG: No further questions, your 2.0 Honor. 21 EXAMINER CHILES: Is there any recross, 22 Mr. Allwein? 23 MR. ALLWEIN: I have no questions, your 24 Honor. Thank you.

EXAMINER CHILES: Mr. Williams.

1193 1 MR. WILLIAMS: No questions. 2. EXAMINER CHILES: Mr. Dougherty. 3 MR. DOUGHERTY: No questions. 4 EXAMINER CHILES: Ms. Kern. 5 MS. KERN: No questions 6 EXAMINER CHILES: Ms. Kyler. 7 MS. KYLER: No questions 8 EXAMINER CHILES: ELPC. 9 MR. KELTER: Give us one second. MR. LANG: I heard a no. 10 11 MR. KELTER: It was an unauthorized no. 12 MR. McDANIEL: We do have a question, 13 your Honor. 14 EXAMINER CHILES: Go ahead. 15 RECROSS-EXAMINATION 16 17 By Mr. McDaniel: 18 Mr. Mikkelsen, does it matter to the Ο. 19 companies if groups like OCC say that customers are 2.0 willing to accept that risk that we were just talking 21 about? 22 I'm not sure "what matters to the 23 companies" means, but I will say, too, in my capacity 2.4 as a rate-maker and responsible for regulatory

affairs, I am very concerned about the cost passed on

to our customers, and I spend really the better part of my day looking at the costs that are being charged to the customers and really trying to ensure that the costs that are passed on to the customers are reasonable.

MR. McDANIEL: That's all. Thank you.

EXAMINER CHILES: Mr. Oliker.

MR. OLIKER: No questions, your Honor.

EXAMINER CHILES: Mr. Parram.

MR. PARRAM: No questions, your Honor.

EXAMINER CHILES: Examiner Price.

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## EXAMINATION

By Examiner Price:

- Q. You understand when counsel asks if the Commission was willing to hold the company harmless, you still will be at risk of disallowance, that you may make a decision that upon review, the Commission decides was imprudent and there is -- there would still be a downside risk to the company, didn't you?
- A. I didn't incorporate that into my thinking, so thank you for that clarification. With that clarification, my sense is no.
- Q. I have another question, line of questions, perhaps. You've been here, and we heard

our extensive discussion about energy efficiency kits; is that correct?

- A. I have been in and out, but I have heard discussion about kits, yes, sir.
- Q. I just wanted to clarify, energy efficiency kits will produce energy savings that when aggregated, will be able to be bid into the PJM base residual auctions, will it not?
- A. I believe the individual components of the kits will be aggregated as a measure that would be eligible, yes.
- Q. The individual components will be aggregated?
  - A. Correct.

2.

- Q. The CFLs will be aggregated and bid in, and the furnace whistles and the LED nightlights all --
- A. To the extent that they are eligible under PJM rules, yes, sir.
- Q. Do you know if they are eligible under PJM rules?
- A. I certainly know the lights are. I'm less certain about the other elements.
- Q. Okay. But all those should pass muster in terms of EM&V and be biddable into the base

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residual auction? Not all -- all the CFLs?
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             Α.
                  Yes, sir.
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                  EXAMINER PRICE: Okay. That's all I
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     have.
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                  THE WITNESS: Thank you.
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                  EXAMINER CHILES: I have no questions.
7
                  Thank you. You are excused.
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                  THE WITNESS: Thank you, ma'am.
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                  MR. LANG: Thank you. Your Honor, at
     this time the companies would move Exhibit No. 23?
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                  EXAMINER CHILES: Are there any
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     objections to the admission of Company Exhibit 23.
                  Hearing none, Company Exhibit 23 is
13
14
     admit.
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                  (EXHIBIT ADMITTED INTO EVIDENCE.)
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                  EXAMINER CHILES: Is there anything else
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     to come before us?
                  EXAMINER PRICE: While we were off the
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19
     record before, we got to that -- while we were off
2.0
     the record earlier today, we discussed briefing
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     schedules, and initial post hearing briefs will be
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     due on November 20, 2012, and reply briefs will be
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     due on November 30, 2012.
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                  With that, is there anything we have not
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already thoroughly discussed?

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                  EXAMINER CHILES: Seeing nothing, we are
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      adjourned. Thank you.
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                   (The hearing concluded at 3:38 p.m.)
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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 Tuesday, October 30, 2012, and carefully compared with my original stenographic notes.

Karen Sue Gibson, Registered Merit Reporter.

11 (KSG-5605)

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1199 1 CERTIFICATE I do hereby certify that the foregoing is a 2 true and correct transcript of the proceedings taken 3 by me in this matter on day 4 5 month date , 2012, and carefully compared with my original stenographic 6 7 notes. 8 Rosemary Foster Anderson, 9 Professional Reporter and Notary Public in and for 10 the State of Ohio. My commission expires April 5, 2014. 11 12 (RFA-) 13 14 15 16 17 18 19 20 21 22 23 24 25

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Case No(s). 12-2190-EL-POR, 12-2191-EL-POR, 12-2192-EL-POR

Summary: Transcript of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company hearing held on 10/30/12 - Volume VI Rebuttal electronically filed by Mrs. Jennifer Duffer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.