## BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO In the Matter of the Application of Duke Energy: Ohio, Inc., for an : Case No. 17-32-EL-AIR Increase in Electric Distribution Rates. In the Matter of the Application of Duke Energy: Ohio, Inc., for Tariff : Case No. 17-33-EL-ATA Approval. In the Matter of the Application of Duke Energy: Ohio, Inc., for Approval : Case No. 17-34-EL-AAM to Change Accounting : Methods. In the Matter of the Application of Duke Energy: Ohio, Inc., for Approval : Case No. 17-872-EL-RDR to Modify Rider PSR. In the Matter of the Application of Duke Energy: Ohio, Inc., for Approval : Case No. 17-873-EL-ATA to Amend Rider PSR. In the Matter of the Application of Duke Energy: Ohio, Inc., for Approval : Case No. 17-874-EL-AAM to Change Accounting Methods. In the Matter of the Application of Duke Energy: Ohio, Inc., for Authority: to Establish a Standard Service Offer Pursuant to : Section 4928.143, Revised: Case No. 17-1263-EL-SSO Code, in the Form of an Electric Security Plan, Accounting Modifications, : and Tariffs for Generation: Services.

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    In the Matter of the
    Application of Duke Energy:
2.
    Ohio, Inc., for Authority:
    to Amend its Certified : Case No. 17-1264-EL-ATA
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    Supplier Tariff, P.U.C.O. :
    No. 20.
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    In the Matter of the
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    Application of Duke Energy:
    Ohio, Inc., for Authority: Case No. 17-1265-EL-AAM
    to Defer Vegetation
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    Management Costs.
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    Application of Duke Energy:
    Ohio, Inc., to Establish :
    Minimum Reliability : Case No. 16-1602-EL-ESS
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    Performance Standards
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    Pursuant to Chapter
    4901:1-10, Ohio
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    Administrative Code.
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                          PROCEEDINGS
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    before Mr. Nicholas Walstra and Ms. Stacie Cathcart,
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| 1  | Friday Morning Session,                            |
| 2  | July 20, 2018.                                     |
| 3  |  |
| 4  | EXAMINER WALSTRA: We'll go back on the             |
| 5  | record for Day 10 of In Re: Duke Energy, regarding |
| 6  | their global stipulation.                          |
| 7  | OCC, you may call your next witness.               |
| 8  | MR. HEALEY: Thank you, your Honor. The             |
| 9  | Ohio Consumers' Counsel calls Paul Alvarez.        |
| 10 | (Witness sworn.)                                   |
| 11 | EXAMINER WALSTRA: Thank you.                       |
| 12 | MR. HEALEY: Your Honor, at this time, I            |
| 13 | would like to mark as OCC Exhibit 18, the direct   |
| 14 | testimony of Paul Alvarez in opposition to the     |
| 15 | stipulation filed on June 5, 2018. May I approach? |
| 16 | EXAMINER WALSTRA: So marked, and you               |
| 17 | may.   |
| 18 | MR. HEALEY: Thank you.                             |
| 19 | (EXHIBIT MARKED FOR IDENTIFICATION.)               |
| 20 | (Witness sworn.)                                   |
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1565 PAUL J. ALVAREZ 1 2 being first duly sworn, as prescribed by law, was 3 examined and testified as follows: 4 DIRECT EXAMINATION 5 By Mr. Healey: 6 Good morning, Mr. Alvarez. Can you Ο. 7 please state your name for the record, please. Paul J. Alvarez. 8 Α. 9 Ο. And do you have in front of you what has now been marked OCC Exhibit 18? 10 11 Α. I do. 12 And can you tell me what OCC Exhibit 18 Q. 13 is? 14 Α. It's my testimony in the -- in this case. 15 Q. And did you prepare that testimony 16 yourself? 17 Α. I did. 18 Do you have any corrections or changes to Q.

19 that today?

20 Α. No.

24

2.1 Q. If I were to ask you the questions found 22 in your prefiled testimony today, would the answers be the same? 23

> Α. They would.

25 MR. HEALEY: Thank you, your Honor. With

1566 that, OCC moves for the admission of Mr. Alvarez's 1 2 testimony, subject to cross-examination. 3 EXAMINER WALSTRA: Thank you. Mr. Alvarez, can you turn on your mic. 4 5 THE WITNESS: There we go. 6 EXAMINER WALSTRA: Any cross-examination? 7 Welcome. MR. DOUGHERTY: Thank you, thank you. 8 9 Yes, I've got a couple of clarifying questions. 10 11 CROSS-EXAMINATION 12 By Mr. Dougherty: 13 Q. Hi. I'm Trent Dougherty, Counsel for the Environmental Defense Fund and Ohio Environmental 14 15 Council. I just had a couple of clarifying 16 questions, Mr. Alvarez. 17 On page, I think on pages 6, as well as 18 46 of your testimony, you recommend that the 19 Commission should adopt the Connect My Data standard. 20 Is that fair to say? 2.1 Α. Yes. 22 And are you referring to what is also Q. 23 referred to as the "Green Button" Connect My Data

A. Correct.

standard?

24

1 Q. Are you familiar with the testimony of 2 OEC/EDF Witness Michael Murray in this proceeding? 3 Α. No. Am I correct that you are recommending 4 Ο. 5 the standard in order to ensure customers receive the full benefits from the Itron meters for which Duke is 6 7 requesting cost recovery? 8 Α. I would argue that functionality is valuable, regardless of the type of meter involved. 9 10 MR. DOUGHERTY: Thank you. That's all 11 the questions I have. 12 EXAMINER WALSTRA: Thank you. 13 MR. OLIKER: Thank you, your Honor. 14 15 CROSS-EXAMINATION By Mr. Oliker: 16 17 Hello, Mr. Alvarez. My name is Joe Q. 18 Oliker, and I represent IGS Energy. I just have a 19 few questions for you today. 20 Am I correct that in your testimony you 2.1 speak about energy settlements in general? MR. HEALEY: Object to that as 22 23 potentially vague. 24 MR. OLIKER: If he doesn't understand, he 25 can --

EXAMINER WALSTRA: The witness can seek clarification if need be.

THE WITNESS: Am I to answer, I'm sorry?

EXAMINER WALSTRA: Yeah. If you need clarification, you can ask.

- A. Okay. Yes. Settlements as in how the wires companies settle energy charges to customers.
  - Q. Yes.
  - A. Yes.

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- Q. And are you familiar with the existing process that Duke Energy Ohio has in place?
  - A. Not really, no.
  - Q. And are you familiar with PJM Interconnection?
- 15 A. Somewhat.
  - Q. What is your familiarity with PJM Interconnection?
  - A. I understand they have energy and capacity markets that are available for people to either sell energy into, or buy energy into, or capacity into or out of.
  - Q. And would you agree that energy settlements occur throughout the day at different prices?
- 25 A. Yes.

- Q. And do you agree there can be -- there's off-peak and on-peak hours?
  - A. Yes.

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- Q. Would you agree the prices between on-peak and off-peak can be different?
- A. The costs to consumers might be different.
  - Q. And would you agree that on-peak and off-peak pricing sends signals to people that are using energy?
- 11 A. Yes, I agree with that.
- Q. What are those signals supposed to be indicative of?
  - A. The varying prices throughout the day.
- Q. Okay. And do you think it's a good thing or a bad thing if people are reacting to those prices?
- A. I guess I would argue it could be a good thing.
- Q. And that good thing would be if people are using energy more responsibly to help make the grid more efficient?
- A. If their pricing structure reflected those prices, I imagine.
- Q. Would you agree that the existing --

okay. Now, let's switch gears.

Would you agree that the wholesale market fundamentals in pricing is not always indicative of retail pricing?

- A. I agree with that.
- Q. And would you agree that the way that the wholesale market settles on an hourly basis is not the same way that metering information settles from a retail perspective?
- A. That's a little bit beyond my understanding.
- Q. Okay. Let me ask you a hypothetical then. Maybe we can get a little further. Let's assume you have two customers. Mr. Healey is one customer and I'm the other customer. And we have houses. We like each other, so we live in the same neighborhood.

MS. WATTS: They're forts.

- Q. Yeah, they're forts. They're forts, but they have electric meters.
- MR. MICHAEL: And you get there by railroad.
  - Q. We live in the same neighborhood because we're good friends. But I've got a Nest thermostat and Mr. Healey does not. And Mr. Healey and I have

the same air conditioner and we both like to keep the temperature at about 65 degrees in the summertime, but the difference is that I -- I am participating in a demand response program and I've got somebody cycling my air conditioner before -- between the hours of 2:00 and 6:00.

2.1

In the Duke Energy Ohio service territory now, would you agree that I have no way of monetizing the value of my air conditioner interruption if a CRES provider is serving me?

MR. HEALEY: I am going to object to that as, though thorough, still an incomplete hypothetical and also outside the scope of Mr. Alvarez's testimony who does not testify on Nest thermostats. He doesn't testify about demand response programs. His testimony is about the process that Duke should be following in any grid modernization proceeding.

MR. OLIKER: And, your Honor, I'm simply getting to the entire point of his testimony which is whether it makes sense to change the meters they have now, to the meters that Duke is proposing to put in place, and I'm trying to see whether or not his assumptions and conclusions are correct based upon what may actually happen now and what may happen in the future.

EXAMINER WALSTRA: I'll allow the question as long as you don't make Karen reread it.

MR. OLIKER: I will not.

Q. Mr. Alvarez, do you understand my question?

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- A. Maybe you could summarize a little bit.
- Q. Sure. Okay. Let's maybe just break it down very simply.

Assume you have two houses and all of the usage characteristics are identical except for the fact that one customer is cutting their air conditioner between the hours of 3:00 and 6:00 during all of the system peaks. Now, would you agree that currently, on a metered basis, those customers will get the exact same capacity assignment currently?

- A. Yes. To my understanding, that's correct.
- Q. And would you agree that if Duke were to move to a paradigm where they were assigning capacity responsibility based upon a customer's actual energy usage in each hour, that would change the capacity assignment for a customer?

MR. HEALEY: I am going to continue to object to this as outside the scope. It is unclear what connection this has to this proposal which,

again, is about the process that Duke should follow in developing a grid modernization initiative, not on the -- Mr. Alvarez is not testifying to the specific steps that Duke should or should not take in the future and what type of technology it should or should not install. This is getting very detailed and well beyond what he is testifying to today.

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EXAMINER WALSTRA: I'll allow it.

- A. I'm sorry, I lost track of the question again.
- Q. Okay. Would you agree that it would be beneficial for -- let's go back to the hypothetical.

For those two customers, and if somebody is cutting their air conditioning during the peak hours for capacity assignments, it would be beneficial, from a price signal standpoint, to allow the customer that is reducing their consumption to get a lower capacity assignment?

- A. I would agree with that.
- Q. Okay. And in general, as we're talking about system design for grid modernization, is not the aim to remove the disconnect between the operation of the wholesale markets and the retail market?
- A. I would say that's one of the goals.

- Q. And so we've talked about capacity.

  Would you agree that the same goal applies in the energy markets?
  - A. More or less.
- Q. So -- and would you agree that the goal would be the same for purposes of transmission use?
- A. I'm not as familiar with the whole transmission area and how that works.
- Q. Okay. And turning to -- on page 34, when it says on line 14, "But marketers can also cover high settlement costs for their customers by raising costs per kWh."
  - A. Yes.

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- Q. In that statement are you referring to the fact if a customer happens to have a higher assignment of capacity or energy, then the marketer can just raise their rates?
  - A. To cover that cost, yes.
- Q. And, but isn't it also true that if a customer happens to get a higher bill because of the cost responsibility assigned to them, that will send a more efficient price signal to the customer?
- A. Yeah, I guess I would have to agree with that.
- MR. OLIKER: Okay. Thank you,

1575 Mr. Alvarez. 1 2 Thank you, your Honor. No more 3 questions. EXAMINER WALSTRA: Ms. Watts. 4 5 MS. WATTS: Thank you, your Honor. 6 7 CROSS-EXAMINATION 8 By Ms. Watts: 9 Good morning, Mr. Alvarez. Ο. 10 Α. Good morning, Ms. Watts. 11 Regarding the Wired Group which is the Q. 12 entity for which you are employed. 13 Α. Yes. 14 That's an organization that you actually Ο. founded, is it not? 15 16 Α. Correct. 17 And you are its only full-time employee, Q. 18 correct? 19 Α. Yes. 20 Q. And you started or founded it, began 2.1 Wired Group in 2008. 2.2 Α. 2012. 23 Q. 2012, okay. Thank you. 24 And, sir, do you not have an engineering 25 degree; is that correct?

- A. No, that's correct.
- Q. And in June of 2011, while you were with a different entity known as MetaVu, Incorporated, you were retained by the Staff of the Public Utilities

  Commission of Ohio to do an audit of Duke Energy

  Ohio's SmartGrid deployment, correct?
  - A. That's correct.
- Q. And you did do that audit with MetaVu, correct?
- A. Yes.

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- Q. And do you recall that the audit was relevant to a case that was Case No. 10-2326?
  - A. I am.
- Q. And can we agree to refer to that case as the "midterm review case"?
- 16 A. Sure.
  - Q. So if I ask you about the midterm review, we will both know we're talking about Case 10-2326?
  - A. Okay.
    - Q. Okay. In your testimony on page 2, you state that prior to doing the audit for MetaVu, you did an audit of the SmartGrid performance for Xcel Energy, correct?
  - A. That's correct.
- Q. And you cited the docket where that case

was heard in Colorado and it's in your footnote 2, correct?

A. Yes.

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- Q. After your report was filed in that proceeding, did you follow-up to determine whether your client was successful or not?
  - A. I did not.
- Q. Do you recall reading portions of the Administrative Law Judge's opinion in your deposition?
- A. Yes.
- Q. And isn't it true that the ALJ stated there were significant problems with the MetaVu Report?
  - MR. HEALEY: Object to best evidence, I guess. The document that she's referring to speaks for itself and asking Mr. Alvarez to interpret a document that's not before us would violate the best evidence rule.
  - MS. WATTS: Your Honor, this is a report he authored for the Colorado Utilities Commission and he should be familiar with the Commission's decision on how that was received.
- MR. HEALEY: Whether he is familiar or not is not the issue; it's whether the document is in

front of us right now.

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EXAMINER WALSTRA: I'll see how far in the weeds we get in this, but I will allow him to speak of it generally.

MS. WATTS: Actually, that was my last question, your Honor.

- Q. I was just going to ask if it's not true that the ALJ stated there were significant problems with the MetaVu Report.
- A. I think I recall from the deposition that I did read that in his Order, yes.
  - Q. Okay. Thank you.

And when you did the midterm review audit for the Ohio Commission Staff, you spent roughly hundreds of hours with the -- with Duke Energy folks, did you not?

- A. I did.
- Q. And you were involved in working with the Staff to determine the scope of the audit, correct?
- A. I would argue that scope was largely defined in the request for proposal that we responded to, so I think it was largely set at that time.
- Q. And did you feel that you did a thorough audit?
- 25 A. I do.

MS. WATTS: Your Honor, may we have this marked as Duke Energy Ohio Exhibit 37, and may we approach, please?

EXAMINER WALSTRA: So marked, and yes.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Sir, do you have what was just now marked as Duke Energy Ohio Exhibit 37?
  - A. I do.

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- Q. And is that, in fact, the MetaVu Report that was produced for the Duke Energy -- for the Commission's Staff in the midterm review case?
  - A. It is.
- Q. And did you have a significant responsibility for this report and for producing the ultimate writing?
  - A. I did.
- Q. Would you turn to page 9 of that report, please.
  - A. Uh-huh.
  - Q. Referring to page 9, would you agree that the purpose for the MetaVu audit was to verify and quantify the value of SmartGrid deployment and to identify changes or revisions to the current Duke Energy plan?
- 25 A. Yes.

Q. And referring to page 10, part of your review was the analysis of 23 operational benefits that were identified by the company in its original application seeking approval of the SmartGrid plan, correct?

- A. That's correct.
- Q. And referring to page 11, you noted that MetaVu reviewed the Validation, Editing, and Estimation routines utilized by the two data processing systems, EDMS and MDMS, and found that they were adequate, correct?
  - A. That's correct.
- Q. And on page 32 of your report, page 32 consists of sort of a picture, correct?
  - A. Correct.
- Q. Or a photograph, if you will.
- A. Uh-huh.

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- Q. And in that picture there is reference to both EDMS and MDMS, correct?
- 20 A. Yes.
- Q. Okay. And turning to page 36.
- 22 A. Uh-huh.
  - Q. You stated that MetaVu was asked to verify accuracy of customer bills calculated under time differentiated rates, and MetaVu did this and

found that the system yielded entirely accurate bills, correct?

- A. That's correct.
- Q. And, sir, you are aware that Duke Energy received United States Department of Energy funding for its SmartGrid project, correct?
  - A. Correct.

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- Q. And after you completed your midterm review for the Staff of the Commission, you were subsequently retained by Duke Energy Ohio, were you not?
  - A. Subsequently, yes.
- Q. And you were retained to summarize, in writing, some reports that could be provided to the Department of Energy, correct?
  - A. That's correct.
- Q. Now, I believe you've said you first became aware that Duke Energy was installing Itron meters in addition to Echelon meters at approximately the time when you were retained by OCC in connection with these proceedings, correct?
  - A. Correct.
- Q. So that was approximately 2017.
- A. Or possible a little bit earlier, but 25 2016, 2017.

1582 Q. Okay. And in your testimony, you mention

- And your first edition was published in Ο. 2014, correct?
  - That's correct. Α.

a book that you've written.

Yes.

Α.

- I have a copy of your book. Q.
- A. Yes.
- Q. Does this look familiar to you?
- It does look familiar to me. Α.
- 11 MS. WATTS: Your Honor, I only have one 12 book, but I have copied just the one page from the
- 13 book that's relevant to my question so.
- 14 EXAMINER WALSTRA: Okay. I think he 15 would appreciate it if you bought copies for
- 16 everyone.

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- 17 MS. WATTS: I think he would. I tried to
- 18 hold back from that.
- 19 THE WITNESS: I would have appreciated
- 20 that.
- 2.1 MS. WATTS: Would you like to distribute
- 22 them for free?
- 23 May we approach, your Honor?
- 24 EXAMINER CATHCART: You may.
- 25 EXAMINER WALSTRA: You may.

- Q. (By Ms. Watts) I am going to refer you to page 287, Mr. Alvarez.
  - A. Yes.

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- Q. And so, Mr. Alvarez, that's an accurate -- that is, in fact, the book that you authored, correct?
- A. It is, yes.
- Q. And I have also given you what I would like to have marked as Duke Energy Ohio Exhibit 38.

10 EXAMINER WALSTRA: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. That is one of the Acknowledgments pages from your book, correct?
  - A. It is.
- Q. Would you take a moment to make sure it's an accurate copy. You don't have the page?
- A. Yes, this has the accurate -- this is an accurate copy.
- 19 Q. Okay. Thank you.

And on that page you thanked members of the Ohio Public Utilities Commission staff, correct?

- A. I did.
- Q. And you said that you applauded their efforts to maximize SmartGrid benefits for Ohio citizens, correct?

A. Correct.

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- Q. In what way did you believe the Staff maximized SmartGrid benefits for Ohio citizens?
- A. I think the Settlement Agreement in that case reflected some things that I was complimentary of.
- Q. Is there anything else that you can think of?
- A. Well, I can -- I mean a couple of things in particular were the fact that they addressed the rate case timing issue. That's a situation where, you know, benefits are -- economic benefits are maybe available from the smart meters but not translated into rates until the rate case. And so, I remember the Settlement Agreement had something in there to that extent and I was appreciative of that.

And then also the scalability of the Validation, Editing, and Estimating routines, which I pointed out in the report were maybe an issue. They appear to address that in that -- in that order, in that Settlement Agreement and subsequently approved. And so, I was complimentary of that as well.

- Q. Thank you.
- A. Uh-huh.
- Q. You also thanked Don Schneider on

page 287, correct?

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- A. Correct.
- Q. That's the same Don Schneider that testified in these proceedings, correct?
  - A. Yes.
  - Q. And you stated in -- on that page that "My teams have worked with many utilities over the years, but the professionalism, focus, and integrity of every Duke Energy employee with whom we've ever worked have been truly exceptional." Is that a correct reading of what you put in that page?
  - A. It is.
- Q. And you wrote that after having completed the MetaVu audit, correct?
- A. That's correct.
- Q. And do you have any reason to doubt those qualities in Don Schneider today?
  - A. I do not.
- Q. And would you agree that in working with
  Duke Energy folks in the SmartGrid audit that you
  accomplished while with MetaVu, that you were
  learning a lot about SmartGrid deployment at that
  time?
- 24 A. Yes.
- Q. On page 3 of your testimony.

A. Uh-huh.

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- Q. At lines 8 and 9, you mention the report, the MetaVu Report, and you say portions of which are at issue in these cases. Do you see that?
  - A. I do.
- Q. The portions you believe that are at issue include billing processes, the use of interval data, the design capabilities of the communications network, the metering communication network, and functionalities of back office systems and software, correct?
  - A. Can you repeat that list again?
- Q. Yeah. Billing processes, the use of interval data, the design capabilities of the communications network, the metering communication network, and functionalities of back office systems and software.
  - A. Yeah, I would say that's fair.
- Q. Do you believe that the Settlement
  Agreement in the midterm review case stated that Duke
  was to make billing-quality interval data available
  to competitive suppliers?
  - A. That's my understanding.
- Q. But you would admit, would you not that, the stipulation does not specify for what volume of

customers, how frequently the data was to be accessed, and what timeframes it was to be provided?

A. I don't remember that.

MS. WATTS: Your Honor, the Stipulation and Recommendation in Case No. 10-2326, is that already an exhibit and do --

EXAMINER WALSTRA: I believe OCC presented that yesterday.

MR. HEALEY: It's Duke 35.

MS. WATTS: It is?

EXAMINER WALSTRA: Yes.

MS. WATTS: May we approach, your Honor?

EXAMINER WALSTRA: You may. We will make sure the witness has this, but if everybody already has it. I think the Bench only got one copy

16 yesterday.

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- Q. (By Ms. Watts) Mr. Alvarez, would you take a moment to review that document.
- A. Uh-huh.
- Q. That's the Settlement Agreement to which you have been referring, correct?
  - A. Correct.
- Q. And would you turn to page 10, please, of that document.
- 25 A. Yep.

Q. On page 10, towards the bottom, there's a section entitled "Customer Pilots and Time Differentiated Rates." Do you see that?

A. I do.

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- Q. And would you agree with me that that section requires the company, Duke Energy Ohio, to "continue to work with the Duke Energy Ohio SmartGrid collaborative in developing a portfolio of time-differentiated rate offerings that include further pilot programs of innovative designs and non-pilot rates that provide standard service offer customers pricing structures that incentivize them to shift energy usage to reduce their electric bills"?
  - A. Yes.
- Q. And do you know whether Duke Energy Ohio did that?
  - A. I do not.
- Q. Okay. Is that the section to which you were referring in regard to offering time-differentiated rates to competitive retail energy suppliers?
  - A. No.
  - Q. Can you point us to that section, please?
    - A. I believe that's Section c on page 11.
  - Q. Okay. And the first sentence of

Section c states "The Company will provide CRES providers the necessary billing system functionality to offer CRES customers time differentiated rates consistent with its existing supplier tariff beginning January 1, 2013." Do you see that?

A. I do.

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Q. Have you ever reviewed the company's supplier tariff as it was on that date?

A. No.

- Q. Do you know what "consistent with its existing supplier tariff" means in reference to that sentence?
- A. Well, I could guess. I imagine that's the agreement between Duke and the CRES providers, that tariff. That's my guess.
  - Q. But you don't actually know.
  - A. No, I do not know.
- Q. Okay. Now, you read Mr. Schneider's testimony in this proceeding, correct?
  - A. I have.
- Q. And you're familiar with what he refers to as the Business Continuity Plan?
- 23 A. Yes.
- Q. And you understand that Mr. Schneider in his testimony offers a cost evaluation of two

different scenarios for Duke Energy, correct?

A. Correct.

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- Q. And if I refer to them as the transition to mesh environment and the continued node environment, will you understand what I mean?
  - A. Yes.
- Q. Okay. With respect to those two different scenarios, would you expect that regardless of which scenario is selected, the Business Continuity Plan would take place in either case?

MR. HEALEY: I would object. That calls for speculation as to what Duke -- Duke may or may not do. Mr. Alvarez doesn't have personal knowledge of what Duke will do with respect to making investments in its distribution system.

EXAMINER WALSTRA: I will allow the question.

- A. Sorry, Ms. Watts, could you repeat that?
- Q. Sure. And maybe I can state it in a different way.

You have offered alternatives to what Mr. Schneider has offered in terms of two different plans for going forward.

- A. Yes.
- Q. And you have provided some financial

analysis with respect to your view of Mr. Schneider's plan.

A. Yes, correct.

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- Q. Isn't it true in either analysis with respect to either continued node environment or transition to mesh environment, in either case in the meantime, the company is required to do the continued -- what's it called -- the Business Continuity Plan?
  - A. Well, I know the company's required to read meters. How they actually do that I guess is -- there are many options available. I don't -- I don't -- that's my answer.
  - Q. With respect to the Business Continuity
    Plan, is it your understanding that the company is
    seeking approval in these cases for that plan?
- A. I'm not sure how the company plans to recover those costs.
- Q. Shifting gears for a moment, are you aware that the Verizon network is upgrading from 3G to 4G technology?
  - A. Yes.
- Q. And you don't dispute the need to do something to address that shift, correct?
- A. I do not.

- Q. And you are further aware, are you not, that Ambient has gone bankrupt and the technology owned by Ambient has been purchased by Ericsson Corporation.
  - A. Yes, I'm aware of that.
- Q. Sir, are you aware of any utility in the U.S. that's currently deploying Echelon meters?
  - A. I'm not.
  - Q. On page 7, line 2, of your testimony.
- A. I have it.
- Q. I believe you discuss billing enhancements there.
- 13 A. Yes.

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- Q. Have you ever done a review or audit of Duke Energy's billing system?
- 16 A. Yes.
- Q. And what did that involve other than verifying the accuracy?
  - A. It involved verifying the accuracy, but in that process we had to understand the process used to translate data into bills, so we did look at and examine the systems and business processes along the way.
- Q. Okay. And that audit that you referred to was done sometime between 2010 and 2012, correct?

- A. Correct.
- Q. And are you aware that Duke Energy has engaged in mergers with other utility companies since 2012?
- A. Yes.

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- Q. And do you know anything about any changes to the billing system that may or may not have occurred since 2012?
  - A. I do not.
  - Q. On page 8, line 15 of your testimony.
- 11 A. Uh-huh.
- Q. You reference Ms. Alexander stating that
  the Echelon metering system has multiple
  shortcomings. Do you see that?
- 15 A. I do.
- Q. And you have, no doubt, read
- 17 Ms. Alexander's testimony?
- 18 A. I have.
- Q. And do you agree with it?

  MR. HEALEY: Objection, your Honor.
- 21 Mr. Alvarez was simply cross-referencing
- 22 Ms. Alexander's testimony. If Ms. Watts appears to
- 23 be wanting to cross-examine Mr. Alvarez on what is in
- 24 Ms. Alexander's testimony, her opportunity to
- 25 cross-examine Alexander was yesterday. It's not

appropriate for her to start asking Mr. Alvarez questions which effectively are cross-examination of the evidence that's already been admitted.

EXAMINER WALSTRA: Ms. Watts.

MS. WATTS: Your Honor, I am not interested in -- I'm not trying to get at anything Ms. Alexander said yesterday. I want to understand what Mr. Alvarez's view is of some of the statements she made with respect to a system that he audited some years ago.

EXAMINER WALSTRA: I'll allow it.

- A. I'm sorry, the question again, Ms. Watts?
- Q. Did you agree with Ms. Alexander's testimony?
- 15 A. Yes.

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- Q. And Ms. Alexander stated that the metering -- the Echelon metering system had shortcomings relative to promises made in the 07-589 case, correct?
- A. That's correct.
- Q. And you did your audit after the 07-589 case, correct?
  - A. That's correct.
- Q. Is there somewhere in the MetaVu audit, that you can point to, where you address meter

shortcomings?

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MR. HEALEY: I object to that as vague as to what a meter shortcoming is just for purposes of clarity in the record.

EXAMINER WALSTRA: Overruled.

- A. Well, I think the most relevant one to this case is on page 38, where I talk about the Validation, Editing, and Estimating routines which are used to, you know, create bills. And these variable -- time-variable rate bills were insufficient for larger volumes.
- Q. Sure. And would you agree with me that that actually relates to the MDM and the EDMS systems rather than the meters?
  - A. Yes, I would agree with that.
- Q. Is there any other reference to the meters? Where there are shortcomings pointed out?
- A. I mean, there may be. I would have to look. It would take some time to find them, but I do not believe there are any other substantially-relevant shortcomings mentioned.
- Q. Turning to page 9 of your testimony, you reference the average age of the Echelon metering system to be six to seven years. Do you see that?
- 25 A. Yes.

- Q. Do you know when Duke installed its first Echelon meter?
  - A. I do not.
  - Q. And do you know when it installed its first Ambient node?
- A. I do not.

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- Q. On page 9 of your testimony, with reference to Verizon Wireless, you use the word "allegedly" there. Do you see that?
- 10 A. I do.
- Q. Do you have any reason not to believe that that -- that it's true?
- A. No, I have no reason to believe they will not discontinue the system. The 2G system.
  - Q. And item 2 on page 9 of your testimony.
- 16 A. Uh-huh.
- Q. Talks about the number of customers for whom billing-quality data is available being extremely limited. Do you see that?
- 20 A. I do.
- Q. Do you know how many total customers the company has?
- A. Roughly.
- Q. Could you tell us what?
- A. Oh, roughly 700,000 is what my estimate

is.

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- Q. Okay. And do you know how many customers for whom the company has billing-quality customer energy usage data?
  - A. I do not know that.
- Q. In your testimony, on page 19, you reference a Massachusetts proceeding, correct?
  - A. Correct.
- Q. And in that proceeding the Attorney

  General -- you were employed by the Attorney

  General's Office of Ratepayer Advocacy, correct?
  - A. Correct.
- Q. And you were asked to review the benefit/cost analysis of smart meter deployments by Massachusetts investor-owned utilities, correct?
  - A. Correct.
- Q. And the proceeding was, in essence, an application by all investor-owned utilities being considered all in one proceeding, correct?
- A. I think they had different docket numbers but yes, in essence, it was the same proceeding.
- Q. Okay. And each company's application was a bit different from the other, correct?
  - A. Correct.
- Q. And you stated in your testimony that the

Massachusetts Department of Public Utilities rejected the smart meter deployments, citing the high cost of prematurely-retired assets as a primary consideration. Do you see that?

A. I do see that.

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- Q. And do you believe that the Massachusetts
  Department of Public Utilities' decision uses the
  terms "primary consideration"?
- A. I do not recall. It could be my -- my language, not theirs.
- Q. All right. And would you agree with me that the chief decision for -- the chief -- one of the chief reasons for the Department's decision not to preauthorize customer-facing investment was because, in their view, the cost versus benefits didn't prove out?
  - A. Correct.
- Q. And isn't it also true that the Massachusetts Department of Public Utilities determined that the primary benefits had to do with dynamic pricing and many customers were aggregated or shopping?
  - A. That's correct.
- Q. And so, the Massachusetts Department of Public Utilities stated that it needed the supply

market to maximize benefits of advanced metering. Without that assurance, they didn't see sufficient value; is that correct?

A. That's correct.

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- Q. Isn't it also true that the Massachusetts
  Department of Public Utilities said in that Order
  that they were not moving away from deployment of
  advanced metering, but they were going to engage
  stakeholders to remove barriers to implementation of
  dynamic pricing?
  - A. That's my recollection, yes.
- Q. And are you aware of whether or not such stakeholder engagement has incurred -- occurred in Ohio?
- 15 A. I'm not aware.
  - Q. And do you know what the Ohio Commission has done in terms of removing barriers to implementation of dynamic pricing?
    - A. I'm not aware.
  - Q. Have you ever discussed dynamic pricing with anyone at Duke Energy?
    - A. Not that I can recall.
- Q. In your report, your MetaVu Report that
  was filed in the midterm review, provided an overview
  of 25 benefits resulting from SmartGrid deployment,

1600 1 correct? 2 That's correct. Α. 3 Q. And we could agree those are potential benefits. 4 5 Α. That's right. 6 Have you rereviewed any of these to Q. 7 create an updated analysis? 8 Α. No. 9 And do you have any knowledge of how each Ο. 10 of those 25 benefits manifested once deployment was 11 complete? 12 Α. I do not. 13 Q. So now, sir, I would like to turn to 14 page 17 of your testimony where you provide a summary 15 of what you call the "Customer Cost Ignored in Duke's 16 Projections." 17 Α. Yes. 18 Now, three -- three of the cost types Q. 19 included in your table there on page 17 involved 20 carrying charges, correct? 2.1 Α. Yes. 22 Q. And you calculated a nominal and a 23 present value for those carrying charges, correct? 24 Α. Correct.

And you provided exhibits to show those

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Q.

- calculations if I'm understanding your testimony
  correctly.
  - A. That's correct.

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- Q. And the calculations on page 17 come from your Exhibit PJA-3, correct?
  - A. That's correct.
- Q. In the first series of rows in PJA-3, you calculate profits by multiplying the weighted cost of equity which you used 50.75 equity ratio in your assumptions, times 9.84 ROE, by the total book value of the investment; is that correct?
- 12 A. That's correct.
- Q. And so, for example, in 2020, your math is 96,0009 -- 96,906,422 multiplied by a 50.75 percent equity ratio, multiplied again by 9.84 percent, to get to \$4,839,313 in profit, correct?
- 18 A. I'm sorry. I'm going to have to magnify
  19 here.
- Q. I have extra glasses if you need it.
- 21 A. Got it.
- Can you run through the calculation again for me, please, I'm sorry.
- 24 Q. Sure.
- 25 96,906,422 multiplied by 50.75 equity

1602 ratio. 1 2 Α. Uh-huh. 3 Multiply again by 9.84 percent. Q. Α. Uh-huh. 4 5 Q. To get to 4,839,313 in profit. Is that 6 accurate? 7 Α. That's correct. 8 Q. And you calculated income tax by 9 multiplying 21 percent federal income tax times the 10 profit you calculated, correct? 11 That's correct. Α. 12 And you calculated interest expense as Ο. well, correct? 13 14 Α. Correct. 15 Ο. On the far right side of your 16 spreadsheet, you add up the numbers for a nominal 17 dollar calculation, and on the left side you 18 calculate in net present value, correct? 19 Α. Correct. 20 Q. So with respect to PJA-3, you've 2.1 calculated a utility return on net book value of an 2.2 asset, correct? 23 Α. That's correct. 24 In other words, it's the gross plant Ο. 25 minus the book depreciation, correct?

A. Correct.

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- Q. Do you know what deferred taxes are?
- A. Somewhat.
  - Q. Would you agree that because a utility can depreciate assets faster for computing income tax liability than it does for accrual purposes, it gets a benefit in the form of cash in the early years of an investment that it will have to repay at some later time?
- 10 A. Yes.
- 12 Q. Essentially deferred taxes are a free loan from the government, would you agree?
- 13 A. I would.
- Q. And would you agree that a utility

  generally gets to earn a return on its rate base and

  not just its net plant?
- A. My understanding is that those two are equivalent.
  - Q. On page 24 of your testimony.
- 20 A. Uh-huh.
  - Q. You have a table that again purports to show "Costs Duke Failed to Include in the Transition to Mesh Environment." Do you see that?
- A. Uh-huh.
- Q. And again in that table you make

reference to Exhibits PJA-3 and PJA-4, correct?

A. I can see that.

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- Q. To your knowledge does Duke Energy Ohio have any outstanding applications before the Public Utilities Commission for recovery of costs related to the gas portion of the AMI transition?
  - A. Not to my knowledge.
- Q. And can you explain why you would have included, in an electric-only case, the cost associated with gas service?
- A. Well, in Mr. Schneider's Exhibit DLS-1, he makes the business case for removing the old system, the existing system prematurely to, you know, replace it with this new system, the -- I can't remember what you call it -- the node environment, the Itron environment --
  - Q. The mesh.
- A. The mesh environment, thank you. And in that analysis he includes gas costs and benefits, so I did -- I did as well.
- Q. In the table on page 24 of your testimony, in Section B.2. Are you with me?
- A. Uh-huh.
- Q. You again calculate carrying costs on a nominal and net present value basis. Is it fair to

say that you calculated the carrying costs and net present value in the same manner as discussed earlier in PJA-3?

A. Yes.

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- Q. Referring to PJA-4, just focusing on the electric data for the moment, you used the book value numbers from the company's rate case, correct?
  - A. That's correct.
- Q. And those book value numbers were based on the company's book value reported as of June 30, 2016?
  - A. That seems about right, yes.
- Q. And would you agree that Duke Energy continues to depreciate the value of those assets since June 30, 2016?
  - A. Yes, certainly.
  - Q. So, all else being equal, would you expect that the book value today to be less than, equal to, or greater than what it was in June 30, 2016?
- A. Somewhat less than.
- Q. And would you agree that because the book value today must be lower than what you have shown in your table, that all of your present value calculations related to the existing plant would be

overstated?

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- A. By a small amount, yes.
- Q. Referring to Table 3 on page 24 again.
- A. Uh-huh.
- Q. Do you know if costs for the company's business continuity effort have already occurred?
- A. I assumed so in this -- in this document, in this calculation.
- Q. And do you believe that those costs should be added to both of the scenarios offered by Mr. Schneider, both the continued node and transition to mesh scenarios?
- A. I believe those costs should be considered in any kind of business case analysis of the metering system replacement.
- Q. On page 18 of your testimony, at lines 16 through 18, you reference testimony of Chris Kiergan from a previous Duke Energy case. Do you see that?
  - A. Yes.
- Q. Are you certain that the Echelon meters were projected to deliver benefits to customers for 20 years?
  - A. Yes. I am quite certain of that.
- Q. And do you recall that the Ambient communication nodes were projected to deliver

benefits to customers for 10 years?

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- A. Yes, I do recall that.
- Q. On page 20 of your testimony, you consider 15 years to be a better estimate of the new system's service life, correct?
  - A. That's correct.
- Q. And so, that's assuming that benefits associated with new Itron meters installed beginning in 2019 should only be projected for the remaining estimated service life of those meters?
  - A. Correct.
- Q. And does that mean there should be no benefits associated with the original Echelon meters after they have been in service for 20 years?
  - A. I think that's correct.
- Q. Do you know if Echelon still
  manufacturers AMI meters for use in the United
  States?
  - A. I do not know.
    - Q. Do you have any way of knowing whether Echelon would continue to manufacture AMI meters for use in the United States 10 years from now?
- MR. HEALEY: Objection, that calls for speculation.
- 25 A. No.

MR. HEALEY: He can't possibly know what Echelon may or may not do 10 years from now.

3 EXAMINER WALSTRA: I think that's the question.

MS. WATTS: Exactly.

EXAMINER WALSTRA: Overruled.

- A. Can you repeat that, Ms. Watts?
- Q. Yeah.

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Do you have any way of knowing whether Echelon will continue to manufacture AMI meters for use in the United States 10 years from now?

- A. I have no way of knowing that.
- Q. And is it reasonable to assume that a 10-year-old Echelon meter will last another 15 years from now?
- A. I think it's hard to say how long they'll last.
- Q. On page 25 of your testimony, at lines 1 through 13.
- 20 A. Uh-huh.
  - Q. You offer some alternative solutions there, correct?
- 23 A. Yes.
- Q. Now, can we agree that with respect to

  Duke Energy's -- can we call the SmartGrid deployment

- to date the "Echelon Ambient solution"?
- A. Sure.

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- Q. Okay. Do you know any other utility that has opted for that solution in the United States?
- A. I do not.
- Q. And do you know any other utilities that have experience using the EDMS Oracle product?
  - A. I do not.
  - Q. On page 26, line 4 you referenced "EDMS VEE limitations." Do you see that?
- 11 A. Yes.
- Q. And you discuss those same VEE
  limitations on pages 38, 39 of the MetaVu Report,
  correct?
- 15 A. That's correct.
- Q. Did you recommend that VEE functions be performed on interval data for EDMS in your MetaVu
  Report?
  - A. I do not recall.
- Q. Again on page 26, at lines 8 through 11.
- 21 A. Yes.
- Q. You state that it's "possible that a translation program could be written to 'map' the individual elements from an EDMS data record into the corresponding elements in an MDM-compatible data

record." Do you see that?

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- A. I do.
- Q. Did you include that in a scenario? A cost scenario?
- A. I did not specifically include that in any of the cost elements of my analysis, no.
- Q. Do you know how that concept is different from the EDMS to MDM conversion that is included in Duke Energy Ohio's Scenario A?
  - A. I do not.
- Q. Do you have any idea how mapping meters from EDMS to MDM, such as you discuss there, would address the problem with the sunsetting of 3G to 4G?
- A. I do not believe it's related to that.

  It's related to the interval data, not the sunset of the communications protocol.
- Q. Okay. And that mapping wouldn't solve the problem of the node failures that the company's experiencing either, would it?
  - A. It would not.
- Q. On page 27 of your testimony, at line 11, you state that the company did not consider any of the options that you discussed, correct?
- A. Correct.
- 25 Q. Looking at Scenario A on page 25 --

- actually, I think it's on page 17.
  - A. 24 maybe?

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Q. Yeah. Thank you. Yes. Thank you for that.

In Scenario A, now you stated that

Scenario A is essentially a recreation of Duke Energy

Witness Schneider's continued node environment,

correct?

- A. Some of the columns are, yeah, the Duke columns, the columns with Duke there.
- Q. And do you see an EDMS to MDM conversion cost in Scenario A?
  - A. I do.
  - Q. Is it possible that this is the conversion that can be done by mapping work from MDMS to EDMS as you suggested?

MR. HEALEY: I would object to the relevance, your Honor. Mr. Schneider's proposal under Part A speaks for itself. If Mr. Schneider, in fact, said that in his testimony, Duke is free to point to that. But to ask Mr. Alvarez whether that might be possible is really not relevant to Mr. Schneider's testimony, it's his own testimony; and ask Mr. Alvarez to speculate as to the intent of Mr. Schneider's testimony can't possibly be relevant

here.

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MS. WATTS: Your Honor, Mr. Alvarez has testified that the company has not considered any of the possibilities that he's referencing in his testimony and I want him to tell me whether he believes this actually is a consideration of one of his suggestions.

EXAMINER WALSTRA: Overruled.

- A. I would say it's possible.
- Q. And with respect to the alternative solutions that you've offered in your testimony, to be clear, you're not specifically recommending any of these as alternative scenarios to the Commission today, correct?
  - A. They're just examples, that's correct.
- Q. For one of your recommendations with respect to the X -- 3G to 4G meter changes, would the company have to visit each individual meter to accomplish that solution?
  - A. Yes.
- Q. Have you done any cost estimate for the differential between the CGR node or ongoing cellular cost per meter?
- A. No.
- Q. And do you have any technical expertise

to suggest that that scenario is possible?

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- A. I would say based on my experience, it is possible.
  - Q. Would you agree that all of the alternative solutions you have suggested would require some capital investment?
    - A. I would agree with that.
  - Q. Would you further agree that the solutions you've suggested would, in some cases, leave aging hardware in the field?
- A. I would argue that all Duke equipment in the field is aging all the time.
- Q. Well, I don't believe that's responsive
  to my question. So the question is: The scenarios
  that you propose, would you agree that in those
  scenarios they would leave aging hardware in the
  field?

MR. HEALEY: Objection, asked and
answered. He responded that all hardware is aging.

EXAMINER WALSTRA: I'll sustain. If you have a follow-up question, you can clear that up.

MS. WATTS: I'll just move on, your
Honor.

24 EXAMINER WALSTRA: Thank you.

Q. Do you know how many different metering

systems are used in the United States?

A. No.

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- Q. Can you offer an estimate of approximately how many there are?
- A. I mean, there are thousands of electric utilities in the U.S., so there are many, many different systems out there. I couldn't attempt to estimate.
- Q. Do you know how many companies have gone with the Itron solution?
- 11 A. No.
  - Q. On page 30 of your testimony you state that Duke Energy's metering system, planning design, and build stages, all these steps seem to have been missed. Do you see that?
- A. What page are you on?
- 17 Q. 30.
- A. I don't see that on 30.
  - Q. Did you state that in your testimony?
  - A. I believe so, yes. One moment.

    Yeah, page 38, yes.
- 22 O. Thank you.
- Isn't it true the planning and design

  phases of Duke Energy Ohio's system was complete at

  the time the MetaVu audit occurred?

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            Α.
                Yes.
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                 Would you further agree with me that
            Q.
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     the -- actually, the build stage had already started?
            Α.
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                 Yes.
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                 MS. WATTS: That's all I have, your
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     Honor. Thank you.
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                 EXAMINER WALSTRA: Thank you.
                 Staff?
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                 MR. EUBANKS: No questions.
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                 EXAMINER WALSTRA: Thank you.
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                 Any redirect?
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                 MR. HEALEY: May we have a couple of
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    minutes?
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                 EXAMINER WALSTRA: Sure. We'll go --
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    we'll take a 10-minute recess and go off the record.
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                 (Recess taken.)
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                 EXAMINER WALSTRA: Back on the record.
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                 Redirect?
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                 MR. HEALEY: Yes, your Honor.
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                      REDIRECT EXAMINATION
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     By Mr. Healey:
                Mr. Alvarez, do you still have in front
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            Q.
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     of you a copy of the MetaVu Report?
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            A. I do.
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- Q. And can you turn to page 32.
- 2 A. Yes.

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- Q. And do you recall when Counsel for Duke asked you whether this sheet identifies both EDMS and MDMS?
- A. Yes.
  - Q. And can you -- can you see on this sheet it also mentions something called a "communication node"?
- 10 A. I see that.
- Q. And which of the two metering systems as, between the Echelon and Itron system, has a communication node?
- A. That's the Echelon system that's currently installed.
- Q. And does this diagram at all show the Itron systems or Itron meters?
- 18 A. No.
- Q. Do you recall when Duke's counsel asked you about whether the Business Continuity Plan would be necessary under both the continued node environment and transition to mesh?
- 23 A. Yes.
- Q. Do you believe that there are any alternatives to Mr. Schneider's Business Continuity

Plan for Duke's short-term planning?

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- A. I think there may be. I think there may be several. And that's, as discussed in my testimony, that's something that should be examined in a more transparent manner.
- Q. Do you recall when Duke's counsel was discussing whether you identified shortcomings in meters in your MetaVu Report?
  - A. That's correct. I remember that.
- Q. And she asked if you could identify any shortcomings in the meters in that report you had pointed out.
  - A. Right.
- Q. And I believe you -- I believe she had said or asked you whether the shortcomings were an issue with the EDMS versus the MDM, correct?
  - A. I believe that's correct.
- Q. And Duke's suggestion was that this was not a metering issue. Would you agree with that?
  - A. Right.
- Q. Would you agree that the distinction between EDMS and MDM is an issue that is unrelated to the meters?
- A. Well, EDMS and meters are kind of one and the same. They function -- they function together.

And so, I don't think you can necessarily distinguish between those.

- Q. Can you turn to Exhibit PJA-4, please.
- A. Got it.

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- Q. And do you recall questions from Duke's counsel regarding the dates you used in the date column?
  - A. Yes.
- Q. And why did you use June 30, 2016, as the date in your calculations in PJA-4?
- 11 A. Well, that's the date certain in the rate 12 case.
  - Q. And Ms. Watts asked you if the numbers in your calculations would change if you were to use a more recent date based on continued depreciation of assets. Do you recall that line of questioning?
    - A. Yes.
  - Q. And why didn't you use a more recent date than June 30, 2016?
  - A. Well, you could do it on a daily basis if you had to. It would be onerous to do so and the benefit for doing so would be minimal because there's not that much time elapsed between that date and today.
- Q. Do you remember questions from Ms. Watts

regarding concerns about accuracy of billing in your MetaVu Report?

A. Yes.

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- Q. And she pointed out that you had concluded that the billing was accurate, correct?
  - A. Yes.
- Q. Did you identify any concerns you had with billing accuracy though?
- A. Well, yes. That was -- that led to the whole finding about the concerns of volume and scalability.
- Q. And can you explain what you mean by concerns with volume and scalability?
  - A. Well, according to the current system limitation, they couldn't, in volume, in large volumes, validate, edit and estimate interval data such to produce billing-quality data, and so that would imply a challenge in higher volumes of producing accurate bills.
  - Q. Do you recall questions from Mr. Oliker related to providing interval data to CRES?
    - A. Yes.
- Q. And what are -- can you describe to me how Duke's system might potentially be upgraded to allow for that capability?

- A. Well, I think there's a variety of options that need to be explored which is the, you know, the point I make in my testimony. My testimony attempts to say that not that we don't need interval billing data, but that we should -- we should strive to find the cheapest way to get that data.
- Q. Mr. Alvarez, you recall generally questions from Duke's counsel about your role in preparing the MetaVu Report, correct?
  - A. Yes.

- Q. And she had asked you about potential shortcomings in Duke's SmartGrid system that you may or may not have identified in that report, correct?
  - A. Right.
- Q. And you identified, at a minimum, potential issues with VEE, correct?
  - A. Yes.
- Q. And based on your testimony and Mr. Schneider's and Ms. Alexander's, your belief now is that there are many more issues with Duke's system beyond that here in 2018, correct?
- MS. WATTS: Your Honor, I object as this
  witness can only speak for his own testimony himself.
  He can't testify as to other witnesses's testimony.
- MR. HEALEY: Just confirming he's aware

of other witnesses's testimony regarding issues with SmartGrid. It's Duke's own testimony admitting that there are issues that need to be resolved.

EXAMINER WALSTRA: The question is to his belief. I'll allow the question.

- A. Sorry, Chris, can you repeat that?
- Q. Sure.

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You are aware that now in 2018,
Mr. Schneider, in addition to Ms. Alexander, and your
testimony as well, identify problems with Duke's
SmartGrid system beyond just the VEE issues you
identified in the MetaVu analysis, correct?

- A. Yes.
- Q. And can you explain to me why you -- why those issues were not addressed in 2011 when you did your MetaVu Report?
- A. Well, I would argue at the time, at the time we did our analysis -- the report speaks for itself. At the time we did the analysis, the bills were accurate. We identified issues that we felt were going to be problematic at volume.

And so, honestly, the stip came out and also addressed -- and the Order was approving, that Settlement Agreement came out clearly specifying that the interval data issue was going to get addressed.

And so, quite frankly, I'm surprised at this point that those things didn't get fixed. We pointed it out, the stipulation addressed it, and so here we are years later, I'm surprised that they're -- those issues weren't addressed as indicated in the Order or in the Settlement Agreement.

MR. HEALEY: Nothing further, your Honor.

EXAMINER WALSTRA: Thank you.

Any recross?

Ms. Watts.

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## 13 By Ms. Watts:

Q. Mr. Alvarez, with respect to the stipulation and the midterm review, what specifically are the issues that you are testifying were not addressed?

RECROSS-EXAMINATION

- A. III.c, on page 11, where it says "The Company will provide CRES providers the necessary billing system functionality to offer CRES customers time differentiated rates consistent with its existing supplier tariff beginning January 1, 2013."
- Q. Is that the only issue that you believe was not addressed from the stipulation?
  - A. Well, the other issue I would argue that

hasn't been addressed is the actual benefits secured. You know, the midterm review was conducted at the midterm, and so we were unable at that time -- at that point to quantify the actual benefits. So those are the two shortcomings from this stipulation, I argue, have not been addressed.

- Q. And paragraph c that you reference on page 11 states also that "Duke Energy Ohio shall provide a quarterly update to the Collaborative on the status of implementing the necessary billing functionality." Do you see that?
  - A. Uh-huh.

- Q. Did you attend any of those collaboratives where that topic was discussed?

  MR. HEALEY: Your Honor, we are getting well outside the scope of redirect. This is whether he attended a Collaborative meeting. That wasn't even remotely touched upon.
- EXAMINER WALSTRA: I'll see where she's going with it.
- THE WITNESS: I am sorry?
- 22 EXAMINER WALSTRA: You can answer.
- A. I did not.
- Q. And so, you don't know, sir, what additional discussions were had between Duke Energy

1624 and members of that Collaborative with respect to 1 2 that necessary billing functionality that's referenced in that paragraph, correct? 3 Well, I do not, but clearly the 4 Α. 5 capability is not available, so. 6 MS. WATTS: I don't have anything else. 7 EXAMINER WALSTRA: Thank you. Staff? 8 9 MR. EUBANKS: No questions. 10 EXAMINER WALSTRA: Thank you, 11 Mr. Alvarez. 12 THE WITNESS: Thank you. 13 EXAMINER WALSTRA: Move your exhibit, 14 Mr. Healey? 15 MR. HEALEY: Yes, your Honor. OCC moves 16 for the admission of Exhibit 18. 17 EXAMINER WALSTRA: Any objections? 18 Hearing none, it will be admitted. 19 (EXHIBIT ADMITTED INTO EVIDENCE.) 20 Duke? 2.1 MS. WATTS: Duke moves for admission of 22 Exhibits 34 and 36. 23 EXAMINER WALSTRA: 37, 38? 24 MS. WATTS: 37, 38. By the end of the hearing I'll get it straight, I promise. 25

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                 EXAMINER WALSTRA: Can I get the title of
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     the book and the year?
                 MS. WATTS: Yes.
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                 MS. BOJKO: Your Honors, it's footnote 3.
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                 MS. WATTS: Would the Bench like to have
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     the book?
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                 EXAMINER WALSTRA: I will be okay.
                 MS. WATTS: It's entitled "Smart Grid
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     Hype & Reality" by Paul Alvarez.
                 EXAMINER WALSTRA: What year?
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                 MS. WATTS: 2014.
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                 EXAMINER WALSTRA: Thank you.
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                 MS. BOJKO: Your Honor, I'm sorry, isn't
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     footnote 3. Could you tell, for clarification, where
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     it is in this testimony? We thought you were
16
     referring -- since we didn't have a copy of the book,
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     we thought you were referencing footnote 3.
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                 MR. HEALEY: It's underlined on page 2.
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     "Smart Grid Hype & Reality."
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                 MS. BOJKO: Great.
                                     Thank you.
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                 EXAMINER WALSTRA: Thank you.
                 Both of the exhibits, with no objections,
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     they will both be admitted.
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                 (EXHIBITS ADMITTED INTO EVIDENCE.)
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                 OCC, would you like to call your next
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Duke Energy Volume X 1626 1 witness? 2 MR. WOLTZ: Yes. Thank you, your Honor. 3 OCC calls, as our next witness, Peter J. Lanzalotta. And if we may approach, your Honor? 4 5 EXAMINER CATHCART: You may. (Witness sworn.) 6 7 EXAMINER CATHCART: You may be seated. MR. WOLTZ: OCC would like to have marked 8 9 as OCC Exhibit 19, the direct testimony of Peter J. 10 Lanzalotta. 11 EXAMINER CATHCART: So marked. 12 (EXHIBIT MARKED FOR IDENTIFICATION.) 13 14 PETER J. LANZALOTTA 15 being first duly sworn, as prescribed by law, was 16 examined and testified as follows: 17 DIRECT EXAMINATION 18 By Mr. Woltz: 19 Q. Mr. Lanzalotta, can you state your name 20 for the record, please. 2.1 Α. Peter J. Lanzalotta. 22 Q. And for whom and by where are you 23 employed?

LLC; and they have offices at 67 Royal Point Drive,

I'm employed by Lanzalotta & Associates,

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Hilton Head Island, South Carolina.

- Q. And do you have in front of you what has now been marked as OCC Exhibit 19?
  - A. Yes.

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- Q. Can you identify that document for me?
- A. It's my direct testimony in this case.
  - Q. And do you have any changes to make to your testimony at this time?
    - A. No.
- Q. And was this testimony prepared by you or at your direction?
- 12 A. Yes.
- Q. And if I were to ask you the same questions today, would your answers also be the same?
- 15 A. Yes.
- MR. WOLTZ: Thank you.
- 17 Your Honor, OCC moves for Exhibit 19,
- 18 | pending cross-examination.
- 19 EXAMINER CATHCART: Thank you.
- 20 Any cross-examination?
- 21 Mr. Whitt?
- MR. WHITT: No questions.
- 23 EXAMINER CATHCART: Mr. Oliker?
- MR. OLIKER: No, thank you, your Honor.
- 25 EXAMINER CATHCART: Duke?

1 MS. KINGERY: Thank you, your Honor.

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## CROSS-EXAMINATION

4 By Ms. Kingery:

- Q. Good morning, Mr. Lanzalotta.
- A. Good morning.
- Q. My name is Jeanne Kingery. I believe we met during your deposition.
  - A. Yes, I remember.
- Q. Good. And I am with Duke Energy.

Your direct testimony filed on June 25,

and it's OCC Exhibit 19, contains all of the opinions

that you're offering on behalf of OCC in these

proceedings, correct?

- A. Yes.
- Q. And you are aware of the Commission's standard three-prong test for the consideration of stipulations, correct?
  - A. Yes.
- Q. And looking, if we could, at page 3 of your testimony, on line 4, you state that you oppose those portions of the stipulation that address reliability index performance, standards proposed for Duke's reliability index performance, and proposals to address costs and other aspects of the company's

vegetation management program, correct?

A. Yes.

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- Q. So you are not opining as to any other aspects of the stipulation, correct?
  - A. Correct.
- Q. And you believe that the Commission should reject the stipulation because the proposed reliability standards promote less reliable electric service, correct?
  - A. Correct.
- Q. And because of this, you believe the stipulation does not benefit customers or the public interest, correct?
  - A. Correct.
- Q. But you have not analyzed any other portions of the stipulation, correct?
- A. Correct.
  - Q. And you have not made any attempt to balance the reliability standards portion of the stipulation with all of the other portions such that you would be considering the entire package, correct?
    - A. Correct.
- Q. Okay. Let's turn to page 8 of your
  stip -- of your testimony. And you have a table in
  the middle of that page. Do you see that?

A. Yes.

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- Q. And that table reflects the reliability standards that are proposed in the stipulation, correct?
  - A. Correct.
- Q. And following the table, you begin to analyze it and you first talk about the CAIDI or Customer Average Interruption Duration Index, correct?
  - A. Yes.
- Q. And CAIDI measures how long, on average, it takes the company to restore service per interrupted customer, correct?
  - A. Yes.
  - Q. And am I correct that it is calculated by adding up all of the minutes of interruptions over a year and dividing that sum by the number of customer interruptions?
    - A. Yes.
  - Q. So CAIDI is the result of a fraction where the numerator is the minutes of interruptions during the year and the denominator is the number of customer interruptions, right?
    - A. Yes.
- Q. And you express in your testimony that

you're concerned because the proposed CAIDI standards would increase over time; is that right?

A. Yes.

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- Q. And you believe that a reduction in CAIDI reflects an improvement in reliability, correct?
- A. A reduction in CAIDI implies shorter customer interruptions; yes, that's increase in reliability.
- Q. Okay. So let's just talk for a minute about the arithmetic that goes into CAIDI. So if you're dividing one number by another and expressing it as a fraction, you can reduce the result in two ways, either by decreasing the numerator or by increasing the denominator; is that right?
  - A. Yes.
- Q. So the company could reduce CAIDI, which you believe is the right goal, correct?
- A. It's a performance standard set for the company by the Commission, yes.
- Q. Yes. And you believe reducing it is a good thing.
- A. Well, I'm -- the company is trying to meet the Commission's set standards, I thought.
  - Q. Well, certainly.
  - A. Okay. So, yeah, I think that's a good

thing.

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- Q. Okay. So the company could reduce CAIDI in those same two ways, either by reducing the numerator or increasing the denominator, correct?
- A. Yes. By reducing the customer minutes of interruption or by increasing the number of customer interruptions.
- Q. Certainly, or by increasing the number of shorter-than-average interruptions, correct?
- A. I'm sorry. Shorter-than-average customer interruptions -- I am going to need that question again.
- Q. Okay.
- 14 A. In its entirety.
- Q. That's fine. So let me just start again.

  I'll try and rephrase.

If the denominator of our fraction increases faster than the numerator does, then the result will go down, correct?

- A. Yes.
- Q. Okay. So if the number of interruptions goes up, we certainly agree that it would -- CAIDI would go down, correct?
- A. All else held equal, yes.
- Q. Correct. If the number of very short

interruptions goes up, then if those very short ones are shorter than average, then the denominator will be going up faster than the numerator, therefore resulting in a decrease in CAIDI, correct?

- A. If the denominator increases faster than the numerator, CAIDI will go down.
  - Q. Thank you.

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So if CAIDI is reduced by increasing the number of very short interruptions, would you describe that in your expert opinion as an improvement in reliability?

- A. You're saying if CAIDI goes up --
- Q. No. CAIDI goes down.
- A. CAIDI goes down.
- Q. But the reason why CAIDI goes down is because there are more shorter-than-average interruptions. Is that a good thing?
- A. Taken in isolation, yes. If you are looking at customer reliability, you are looking at more than just CAIDI. You are looking at SAIFI, SAIDI, and CAIDI. The Commission has set standards for SAIFI and CAIDI. So those are the ones that we're mainly focusing on, I thought, in this proceeding.
- Q. And I'm asking about CAIDI.

A. Okay.

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Q. And I'm -- I'm proposing to you a question of whether you think that it -- that customers would see it as an improvement in reliability if they were getting more and more very short outages.

MR. WOLTZ: Objection, asked and answered. I think the witness just testified to his understanding of how the effect of CAIDI and SAIFI would establish customers' perception of reliability and how he understands reliability as it is here in Ohio.

MS. KINGERY: Your Honor, he didn't answer my question. I am asking only about CAIDI here, not about SAIFI. And I'm -- we just went through an investigation into their discussion about the arithmetic, and the witness has agreed that if CAIDI -- that CAIDI will go down if there are many more short interruptions, and I want to know what he thinks about whether that's -- an improvement in reliability.

MR. WOLTZ: And, your Honor, I think he did answer. He said in isolation that that could potentially be an improvement. However, from the customer's standpoint, you look at reliability not

just from CAIDI but you look at it with CAIDI, SAIFI,

SAIDI; and he continued on to his understanding of

how the customers and the PUCO evaluate reliability

in Ohio. Therefore, I think the question was

6 EXAMINER CATHCART: Overruled. I'll 7 allow the question.

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answered.

MS. KINGERY: Thank you.

- A. Okay. If you have an increase in the number of short interruptions, CAIDI may well go down, but at the same time you're increasing the number of interruptions means that SAIFI is going to be going up. So it's -- I'm reluctant to just look at CAIDI in isolation. Yes, in this particular instance, CAIDI would go down, SAIFI would go up. Is that an increase or a decrease in reliability? All some of each.
  - Q. Okay. All right.

So let's go on and talk about SAIFI a little bit. So SAIFI measures the average number of interruptions per customer, correct? Over the course of the year?

- A. Yes. Well, in this case we're looking at these indices taken over a yearly basis.
  - Q. That's correct.

- A. I've seen them taken over different lengths of time as well.
- Q. Okay. SAIFI here is just talking about an annual figure.
  - A. Yes.

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- Q. Okay. And we calculate SAIFI, and I am going to do this again, you know, we have a fraction where the numerator is the number of customer interruptions in a year, correct?
  - A. Correct.
- Q. And the denominator is the number of customer interruptions in a year, correct?
  - A. SAIFI is the number of customer interruptions divided by the number of customers served.
  - Q. I misspoke. That's correct. So the numerator of SAIFI is the same as the denominator of CAIDI, correct?
    - A. Yes.
  - Q. Okay. And if we look at your testimony on page 8, on line 18 and following, you note that the SAIFI standard will go up, correct? As compared with the current one?
- MR. WOLTZ: Objection, your Honor.
- 25 That's vague. What current standard are you

1637 referring to? 1 2 MS. KINGERY: The one Duke is currently 3 under. I'm just looking at his testimony. Α. I agree. In 2018. 4 5 Q. That's correct. 6 The SAIFI standard is higher, less Α. reliable --7 8 Q. Right. -- than what we are using for 2017. 9 10 Q. And that's the standard, as you understand, PUCO Staff believes is applicable 11 12 currently that you are comparing it to. 13 Α. Yes. 14 Okay. And you would agree, would you Ο. 15 not, if you look back on page 8, that the SAIFI 16 standards actually go down over time. 17 Α. After 2018. 18 Q. Yes. 19 Α. Yes. 20 Q. They go up in 2018 and then go down; is 21 that correct? 22 Α. Yes. 23 Q. And you didn't mention that in your 24 testimony other than its existence in the table. 25 Α. I'll take that subject to check.

Q. Okay. So under the SAIFI standard, looking just at that metric, customers will see improving reliability with regard to the frequency of their outages, correct?

- A. From 2019 forward, yes.
- Q. Okay.

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- A. Assuming that the standard is met.
- Q. Of course.

Now, you are also aware of another standard called SAIDI, correct?

- 11 A. Yes.
  - Q. And that is the System Average Interruption Duration Index, correct?
  - A. Yes.
  - Q. Okay. And SAIDI measures how many interruption minutes are experienced by an average customer over the course of a year; is that right?
    - A. That's correct.
  - Q. And you would agree with me that the average customer would likely prefer fewer minutes of outages as compared with more minutes of outages.
    - A. I agree with that.
- Q. And they would probably prefer fewer
  minutes of outages as compared to more outages that
  are very short, correct?

- A. I don't -- I'm not sure of that one way or the other.
- Q. Okay. So SAIDI can be calculated by simply multiplying CAIDI times SAIFI, correct?
  - A. Correct.

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- Q. And your testimony does not include a calculation of SAIDI values through 2025, correct?
- A. That's correct. I focused on the reliability performance standards set by the Commission.
- Q. I understand. But you are aware that

  SAIDI values would reduce, under the stipulation's

  proposed reliability standards, by about one-third

  over that period, correct?
  - A. I haven't done the math. And I didn't bring a calculator. I don't want to do a calculation on the stand. It's possible.
- MS. KINGERY: May we approach, your Honor?
- 20 EXAMINER CATHCART: You may.
- Q. Mr. Lanzalotta, did I take your deposition on July 5?
- 23 A. Yes.
- Q. And were you under oath in that deposition?

A. Yes.

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- Q. Okay. You have just been handed a copy of the transcript from that deposition and I believe you reviewed that transcript and had no changes to it; is that correct?
  - A. That's correct.
- Q. Okay. Would you go to page 30 of the transcript, please.
  - A. Okay.
- Q. And would you please read from line -I'll go ahead and read it. I am going to start
  reading at page -- at line 12 on page 30.
- "Question: Would you be surprised to
  learn that SAIDI values, under the stipulations
  proposed standards for CAIDI and SAIFI, would reduce
  by approximately one-third over that period?
- "Answer: Was the question would I be surprised?
- 19 "Question: Yes.
- 20 "Answer: I believe that's what's
- 21 happening, correct."
- 22 A. Okay.
- Q. Did I read that correctly?
- A. You did.
- Q. Thank you.

- A. I said that I believe that's what's happening. I never said I did the calculations and confirmed that.
  - Q. Okay.

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- A. I just want to note that.
- Q. That's fine.

Returning for a moment to page 3 of your testimony, looking at line 15, you suggest that the Commission -- let me know when you're there.

- A. I'm there.
- Q. Okay. You suggest that the Commission should reject the settlement because reliability standards promote less reliable electric service, correct?
- A. That's correct.
  - Q. And you go on after that. We've just discussed the fact that both SAIFI and SAIDI will decrease under the proposed standards in the stipulation, correct?
  - A. SAIFI will decrease after a point.
- Q. After the first year, correct?
- A. After the first year. As far as the SAIDI goes, like I said, I have not done those calculations. It may well be.
- Q. You have not done the calculations, but

you do believe that SAIDI is decreasing by one-third.

- A. It's possible.
- Q. That's not what you said in your deposition. You said you believe that's what's happening, correct?
- A. You asked if I was surprised to hear that and I said -- I said I was surprised.
  - Q. No, you didn't actually. You said "I believe that's what's happening."
- 10 A. Okay.

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- 11 Q. Correct?
- 12 A. Correct.
- Q. And you would also agree with me that
  measuring service reliability by multiple metrics
  provides a more complete picture of the situation,
  correct?
- 17 A. Yes, I do.
- Q. Let's move to page 14 of your testimony.

  And I would like to look, for a moment, at Table 4.
- A. I'm there.
- Q. Okay. And in this table you are
  evaluating changes over time in the number of
  customer minutes of interruptions and you're showing
  both raw numbers and percentage changes, correct?
- 25 A. Yes.

- Q. You did not, in Table 4, account for any changes in the total number of customers served, correct?
  - A. That is correct.

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- Q. And if, hypothetically, the total number of customers served had increased by we'll say 10 percent, and the total customer minutes of interruptions due to a particular cause had increased by only 8 percent, that would actually reflect an improvement, correct?
- A. Under the terms of your hypothetical, that is correct. However, I assume when the company computes its reliability performance for the year, it takes into account the number of customers it's serving. And if your hypothetical were, in fact, true, then you would expect these reliability performance numbers for 2017 to be looking better instead of looking less reliable. So while the number of customers may be changing, I'm not sure they're changing from year to year enough to explain these increases in total.
- Q. But that's only an assumption on your part that the number of customers is already accounted for. By the company.
  - A. I don't see -- well, they computed these

reliability indices correctly, SAIFI -- the denominator is the number of customers served.

- Q. Sir, this isn't showing CAIDI numbers.
- A. No, it's not.
- Q. Right.

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- A. Well, CAIDI is part of that, customer interruption minutes.
- Q. But it's talking about minutes, it's not talking about -- these raw numbers don't include any reference to how many customers there are.
  - A. No. These raw numbers do not.
- 12 Q. Thank you.
- MR. WOLTZ: Object. Never mind.
- Q. Now, still looking at Table 4, you see a line near the bottom that is called "Unknown," correct?
- 17 A. Yes.
- Q. And do you note that, through time, from
  2015 through 2017, the number of unknowns fell
  dramatically -- I'm sorry -- from 2016 to '17, it
  fell dramatically.
  - A. Yes.
- Q. To the extent that the company had fewer that were unknown, that means they were better able to identify the causes of the outages; so reductions

in the unknown category would necessarily result in increases in some other categories, correct?

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MR. WOLTZ: Objection, your Honor. I think that Counsel is mischaracterizing this table. If you look at 2015, it jumps by almost 4,000; and then, from '16 to '17, it decreases by 3,000. Now she is trying to force the witness into making assumptions that aren't accurately based on the information that is before the witness.

MS. KINGERY: The information before the witness shows a dramatic reduction in unknowns from 2016 to 2017. And the witness just agreed with that, and I am asking then if you look at the 2016 to 2017 other figures, wouldn't that imply that there are increases in others because the company was more able to identify the causes of the outages.

EXAMINER CATHCART: Overruled. The witness can clarify.

- A. If we assume the total number of customer interruption minutes for 2017 is fixed, and fewer of those are unknown, then more of those will fall into these other categories.
- Q. Also in Table 4 there's a line, I believe this is the fourth line down, that reflects planned outages, correct?

A. Yes.

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- Q. And your results reflect a dramatic increase over the last two years, correct?
  - A. Yes.
- Q. And that fact would certainly have an impact on CAIDI, correct?
  - A. Yes.
- Q. Are you aware that under Duke Energy Ohio's Rider DCI, there are programs that might require customers to be taken out of service?

MR. WOLTZ: Objection, your Honor.

- 12 That's beyond the scope of this witness's testimony.
- 13 I don't believe he testifies to Rider DCI at all.
- 14 His testimony more is on the standards and vegetation
- management of Duke Energy Ohio. Therefore, he is not
- aware of the programs that are included in Rider DCI,
- 17 let alone the impact that they could have.
- MS. KINGERY: And I just asked him if he
- 19 was aware.
- 20 EXAMINER CATHCART: Overruled. The 21 witness can answer if he knows.
- 22 A. Could I have the question again?
- Q. I asked whether you're aware that under
- 24 Rider DCI there are programs that might require
- 25 customers to be taken out of service?

- A. That's my understanding.
- Q. Thank you. And -- all right. We'll move to page 15. And on page 15 at line 1, you are referring back to the same table, you talk about the fact that tree-related outages were the largest cause of customer interruption minutes during the last two years, correct?
  - A. Yes.

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- Q. And you then go on in your testimony to discuss the company's failure to trim fully one-quarter of its circuit mileage during 2016 and '17, correct?
  - A. Correct.
- Q. Are you aware of any other factors that might explain the increase in tree-related outages?
- A. Yes. There's an infestation that affects ash trees, I believe.
- Q. The Emerald Ash Borer, is that what you are referring to?
  - A. Yes.
  - Q. And you are aware that the consequences of an Emerald Ash Borer might result in a hazard tree, for example, that could then cause an outage.
    - A. I believe that's correct.
- Q. Turning to page 16, starting at line 10,

1648 you're talking about the company's proposal, as part 1 2 of the settlement, to change from a four-year tree-trimming cycle to a five-year cycle, correct? 3 Α. Correct. 4 5 Ο. You have not reviewed the company's 6 tree-trimming specifications and guidelines, correct? 7 Α. Correct. 8 Ο. And you have not examined any of the 9 company's tree-trimming cost data, correct? 10 Generally, that's correct. Α. 11 MS. KINGERY: All right. I have nothing 12 further, your Honor. 13 EXAMINER CATHCART: Thank you. MR. WOLTZ: If I could have a moment with 14 my witness, your Honor. 15 16 EXAMINER CATHCART: I am going to see if 17 Staff has any questions. 18 MR. WOLTZ: I am sorry. I forgot Staff 19 was there. 20 MR. EUBANKS: I understand. 2.1 2.2 CROSS-EXAMINATION

23 By Mr. Eubanks:

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I do have one question for the sake of 0. clarity. If you could go to Table 1.

- A. I have it.
- Q. I believe you said in your -- on cross that the way you calculate SAIDI is by multiplying CAIDI times SAIFI; is that correct?
  - A. Yes.

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- Q. And I believe you were also asked a question about whether or not SAIDI decreases by one-third over the period of time on this chart. Do you remember that question?
  - A. Yes.
- Q. You said you didn't feel like calculating it though, right?
- A. I didn't want to calculate it from the stand.
  - Q. But you would agree that if a person, later on in briefing or whenever, took the 2018 CAIDI and multiplied by the 2018 SAIFI and got a number, and then took the 2022 to 2025 CAIDI and multiplied it by the 2022 to 2025 SAIFI and got a number, and compared those two numbers and saw that it decreased by a third, then we would have our answer, correct?
  - A. Those are the mechanics you would want to use, yes.
- Q. And also you would agree that .375 is half of .75, right?

A. Yeah, I believe so.

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- Q. Okay. So if we took .375 and added it to the .75 there, right? You would roughly get the 1.12 during the 2018; is that correct? It would be 1.125.
- A. Yeah. If you add those two numbers together, that's what you get.
- Q. So you're basically -- you are increasing by basically a third for the SAIFI.
  - A. Decreasing by a third.
- Q. Yeah. Okay. Well, yeah, I was going up to 2018. But if you are going the other way, yes, you would be decreasing. And if you look at the CAIDI relatively speaking, when you look at how the SAIFI changes relatively speaking, the CAIDI doesn't really change. It goes from 134.34 to 137.
- A. But it doesn't increase by a third, that's for sure.
- Q. Right. It's by mere percentages, right? So with one side roughly not changing and the other side changing by a third, then naturally you can see that it does change by a third over time?
- A. That's what those numbers show, yes.

  MR. EUBANKS: Okay. I have no further
  questions.
- MR. WOLTZ: And now if I may have a

1651 1 moment, your Honor. 2 EXAMINER CATHCART: You may. Let's go 3 off the record. (Discussion off the record.) 4 5 EXAMINER CATHCART: Let's go back on the 6 record. 7 REDIRECT EXAMINATION 8 9 By Mr. Woltz: 10 Mr. Lanzalotta, do you remember earlier a 11 conversation you had about whether or not you 12 performed any analysis as to SAIDI? 13 Α. Yes. 14 And you had said you didn't do any Ο. 15 analysis, correct? 16 Α. That's correct. 17 And can you explain for me why you didn't Q. 18 do any analysis? 19 I focused my analysis on SAIFI and CAIDI, 20 and not SAIDI, because SAIFI and CAIDI are the 2.1 specified reliability performance standards that the 22 company supposedly is trying to meet. SAIDI may be used for other things, but the Commission is not 23

using it for those purposes here in Ohio.

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discussion you had of looking at CAIDI and SAIFI individually and discussing whether, you know, one change here would have an impact on the overall number?

A. Yes.

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- Q. And do you have any -- and I believe you also stated that during cross that you shouldn't look at those numbers in isolation, correct?
  - A. That's correct.
- Q. And do you believe that when looking at those numbers, there is a way to make sure both CAIDI and SAIFI improve?
- A. I believe it's possible to improve both SAIFI and CAIDI. There are interrelationships between them, it's true, but if you have fewer outages and you have fewer -- and shorter outages, then I believe you can improve both.
- MR. WOLTZ: Thank you. Nothing further, your Honor.
- 20 EXAMINER CATHCART: Thank you. Any 21 redirect -- recross? Sorry.
- MS. KINGERY: Nothing. Thank you.
- 23 EXAMINER CATHCART: Staff?
- MR. EUBANKS: I have no questions.
- 25 EXAMINER CATHCART: Thank you.

1653 1 Thank you, Mr. Lanzalotta. 2 THE WITNESS: Thank you, your Honor. 3 MR. WOLTZ: And, your Honor, at this time OCC moves for the admission of OCC Exhibit 19. 4 5 EXAMINER CATHCART: Any objections? MS. KINGERY: No, your Honor. 6 7 EXAMINER CATHCART: It will be admitted. 8 (EXHIBIT ADMITTED INTO EVIDENCE.) 9 MR. WOLTZ: Thank you, your Honor. 10 EXAMINER WALSTRA: Mr. Oliker. 11 MR. OLIKER: Thank you, your Honor. 12 Retail Energy Supply Association and Interstate Gas 13 Supply, Inc., would call Matthew White to the stand. 14 (Witness sworn.) 15 EXAMINER WALSTRA: Thank you. 16 MR. OLIKER: Does the Bench have copies 17 of the testimony? May I approach? 18 19 MATTHEW WHITE 20 being first duly sworn, as prescribed by law, was 2.1 examined and testified as follows: 22 DIRECT EXAMINATION 23 By Mr. Oliker: 24 Good morning, Mr. White. 0. 25 A. Good morning.

1654 Could you please state your name for the 1 Q. 2 record. 3 Matthew White. Α. And did you prepare testimony in this 4 Q. 5 proceeding? 6 Α. Yes. 7 And is that testimony on behalf of RESA Q. and IGS? 8 9 Α. Yes. 10 MR. OLIKER: And, your Honor, at this 11 time I would like to mark the testimony as RESA/IGS 12 Exhibit 5, I believe. 13 EXAMINER WALSTRA: So marked. 14 (EXHIBIT MARKED FOR IDENTIFICATION.) 15 Q. And was this testimony prepared by you or under your direction? 16 17 Α. Yes. 18 And do you have any corrections to this Q. 19 testimony? 20 Α. Yes. I have one. 2.1 Q. And what page is that correction on? 22 Page 3, line 11 through 12. Α. 23 And can you please state that correction Q. 24 for the record. 25 Α. Yes. Starting at line 11 on my testimony

the sentence that states "Certain parties have agreed to a Stipulation and Recommendation authorizing Duke to spend \$45 to 50 million for a new billing system and customer information system." I have a change to that sentence. That sentence, the change to the sentence, the new sentence will read "Certain parties have agreed to a Stipulation and Recommendation recommending Duke to file an application that may result in -- in -- spending approximately 45 to 50 million -- in Duke spending approximately 45 to 50 million for a new billing system and customer information system."

MR. OLIKER: Do you have the change?
MS. WATTS: More or less.

- Q. Just so the record is clear, Mr. White, could you read that one more time?
- A. The new sentence should read: "Certain parties have agreed to a Stipulation and Recommendation recommending that Duke file an application that may result in Duke spending approximately 45 to 50 million dollars for a new billing system and customer information system."
- Q. And do you have any other changes or corrections?
- A. No, I do not.

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MR. OLIKER: With that, your Honor, I would move for the admission of the testimony, subject to cross-examination. And tender the witness for cross.

EXAMINER WALSTRA: Thank you.

Any cross-examination?

Mr. Michael.

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MR. MICHAEL: Thank you, your Honor.

I would like to begin, your Honor, if I might, by moving to strike the entirety of Mr. White's testimony.

I draw your Honor's attention first to page 5, lines 16 through 17 of his testimony. He says, "Thus, the Stipulation proposes to defer issues related to Duke's CIS upgrade to a future proceeding."

And then, your Honor, I would bring your attention to the correction Mr. White just made to his testimony wherein he basically affirms the same point which is the stipulation simply provides for a future filing regarding the CIS system. And the entirety of Mr. White's testimony, as stated on page 3, lines 11 through 18, talks about what ought to be in that application.

And although RESA, IGS, and Mr. White,

certainly in that future proceeding, can come in and say whatever they want about what that CIS system should look like, this is not the appropriate forum in which to make the recommendations that Mr. White does in his testimony.

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We're talking about a settlement that simply says in a future filing Duke can look to make a new CIS system. This is neither the time nor the place to do it, as I think Mr. White in his testimony concedes. So we would move to strike the entirety of the testimony.

MS. WATTS: And, your Honor, the company would join in that motion.

MR. OLIKER: Your Honor, I find the objection a little interesting given that we just went through a witness that was describing metrics for what should be contained in a smart meter system that Duke is going to be deploying. As Mr. White identifies in his testimony and as we acknowledge with the change we are making, through this proceeding there was a proposal for an updated CIS system, that system had a very large dollar amount on it, that dollar amount provided good context for Mr. White based upon our prior experience with Duke spending large amounts of money for capital

expenditures that if you don't design those systems right on the front end, they can cost a lot of money to fix on the back end. And we are actually going through one of those issues in this proceeding regarding the smart meters.

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MS. WATTS: Your Honor --

MR. OLIKER: So Mr. -- I promise I will let you talk when I'm done, Ms. Watts.

But one of the important things we are trying to identify is the parameters that we would like to see in the application. And that application, as described in the stipulation, that there will be a filing. And if that filing doesn't have parameters, and Mr. White sets forth at least three of them, we could very well find ourselves in a position in a future filing or even in a future case where Duke is going to come back and say, "Well, we didn't look at that, so I'm sorry, I can't tell you how much that will cost to fix. We would like to spend some more money and maybe we'll look at it later. It might be another \$100 million."

I think we are simply trying to have a discussion here for what the structure of that filing will be. And Counsel is free to be explore, you know, the basis for Mr. White's numbers in

cross-examination or whether or not he is actually recommending that the Commission approve the expenditures here which Mr. White says he is not. He is simply trying to provide some structure for the future application.

EXAMINER WALSTRA: Ms. Watts, as promised.

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MS. WATTS: Yes, thank you, your Honor.

I would also like to mention that the company has withdrawn the testimony with respect to anything related to the customer information system. It would have been contained in the testimony of Duke Witness Retha Hunsicker. That was not offered into this case at all, so there are no issues related to CIS.

And while I appreciate Mr. Oliker's speculation about what the company might propose at some future filing, I think it's way too early to speculate about that, and all of that is not relevant in this case because there is nothing before the Commission to decide about the CIS in this case.

MR. MICHAEL: And let me just respond,
Mr. Oliker, if I might, to some of the comments you
made regarding what OCC witnesses addressed, real
quickly.

What OCC witnesses have addressed is

what's actually going on or arising out of this particular case that brings us here today, your Honor. Again, Mr. White's testimony is aimed at a future filing. I think Mr. White's testimony would result in binding both Duke and potentially the Commission on what it is that is going to happen in that future filing. And again, we don't contest the fact that in that future filing IGS can come in and say whatever it wants, but in this filing their testimony is not appropriate at this point in time.

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MR. OLIKER: And, your Honor, to clarify, we are not seeking to bind the Commission. We're seeking to place some parameters on what the application should consider. We, of course, will have additional litigation based upon what is in the application, where OCC will be allowed to respond, and Duke will be allowed to present its own application, but we are trying to simply have some parameters for the Commission to consider.

Regarding what is at issue in this proceeding, Mr. White has attached some discovery responses. Those discovery responses are admissions of a party opponent containing information and analysis that has been performed by Duke. It doesn't matter that the witness is not testifying. We may

offer that as evidence in this case, at least, and the Bench can give it the appropriate weight.

If they have said it's 45 to 50 million dollars to develop the CIS, yes, maybe that is not the number, but it is evidence that it could be a substantially -- a substantial number that is going to be presented to the Commission. We're not saying that's the only number and it is subject to change, but it's a matter that goes to the weight.

And if it's 50 million or 20 million or even 10 million or 100 million, those are all big numbers. And unless Duke is going to say today that the number is de minimus, then I think it's something the Commission should at least acknowledge and consider.

EXAMINER WALSTRA: I am going to deny the motion to strike. I think his testimony speaks to items in the stipulation, proposed modifications to the stipulation. Intervenors are allowed to deliberate on them, to propose modifications, so I'll deny the motion to strike.

MR. OLIKER: Thank you, your Honor.

MR. MICHAEL: Thank you, your Honor.

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## CROSS-EXAMINATION

2 By Mr. Michael:

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- Q. Mr. White, if I could draw your attention to page 4, lines 11 through 16 of your testimony.

  Let me know when you are there, please.
  - A. Yes.
- Q. If the Commission were to approve your recommendation for Duke to offer supplier consolidated billing in the new CIS, would there be incremental costs for Duke to provide suppliers with the necessary information to render bills that include Duke charges?
  - A. I don't know that.
- Q. If I could draw your attention,
  Mr. White, to page 5, lines 7 through 9 of your
  testimony, please. Let me know when you're there.
  - A. Yes, I'm there.
- Q. And I think you address this with your correction, Mr. White, but you now acknowledge that the settlement doesn't permit Duke to spend 45 to 50 million to upgrade the CIS, correct?
- A. The settlement would direct Duke to file an application for a CIS, but does not settle on the the actual cost recovery amount.
- Q. And in discussing the needs of Choice

customers, are you discussing the needs of business or residential customers or both?

A. Both.

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- Q. Can you describe for me, if you would, Mr. White, the specific billing needs of Choice customers and how these billing needs are different from any other customers?
- MR. OLIKER: Bill, is there a reference in the testimony specifically that you're talking about?
- MR. MICHAEL: I am still generally talking about page 5, lines 7 through 9.
  - A. You are talking about page 5, lines --
- 14 Q. 7 through 9.
- 15 A. 7 through 9?
- 16 Q. Uh-huh.
- A. I don't see a reference to "needs."
- 18 Okay, sorry, I see it.
- 19 Q. Okay.
- 20 A. Can you repeat the question, please?
- 21 Q. Certainly.
  - Can you please describe the specific billing needs of Choice customers and how those billing needs are different from any other customers.
- A. When you say "any other customers," are

you talking about any other electric customers, any other --

Q. Yes.

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- A. So any, like, basically different than SO customers.
  - O. Correct. Correct.
- A. Can you repeat the question again?

  MR. MICHAEL: Could you please read the question, Karen.

(Record read.)

- A. I think Choice customers and CRES suppliers are able to offer products and services that the utility cannot offer. And to the extent that the CRES suppliers' products and services may be more diverse than the utility plain-vanilla default service products, there would be a need for more dynamic billing options to address those needs.
- Q. And when you say "more dynamic billing options," Mr. White, what do you mean by that?
- A. Billing that gives CRES providers the opportunity to offer customers a more diverse range of products and services on a single bill.
- Q. Okay. In that response, Mr. white, you referenced giving CRES providers et cetera, et cetera, et cetera, and I want you to focus on the

customer, okay? So if I were to ask you the same question again and ask you to focus on the customers, what does it mean from their perspective, what would your answer be?

- A. Well, CRES providers serve Choice customers. So to the extent the CRES providers can offer Choice customers a more diverse product and service, it means the Choice customers have the opportunity to receive more diverse products and services that meet their individual needs.
- Q. And as a result, their bill needs to be more detailed; is that what you're saying?
  - A. I didn't say that.
- Q. Okay. If I could draw your attention, Mr. White, to page 6, lines 1 through 17 of your testimony. Take a moment to look at that, if you would, Mr. White.
  - A. Page 6, lines 1 through 17?
  - Q. Yes, sir.

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- A. I've reviewed it.
- Q. Thank you.

Isn't it true, Mr. White, the system design for the new CIS would generally occur after the PUCO were to approve the application, if ever?

MR. OLIKER: Objection. Which

application? This one or the CIS application that we're potentially going to see in a few months?

MR. MICHAEL: The CIS application that we are potentially going to see in a few months.

THE WITNESS: Can you repeat the question, please?

MR. MICHAEL: Certainly. May I have it read back, Karen?

(Record read.)

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- A. No, not necessarily.
- Q. Okay. Under what circumstances would system design be approved before the application?
- A. In the application -- before Duke files the application, Duke would propose a system design in the application. So there would be some system design that would occur before the application is filed, because Duke would set forth parameters at which the system would be set at in the application.
- Q. Okay. But that system design wouldn't be approved unless and until the application were approved, correct?
- A. The Commission ultimately would approve the system design or could modify Duke's proposed system design, but the actual designing of the system would occur before the application.

- Q. But it wouldn't be approved unless and until the application were approved.
- A. The system design wouldn't be approved unless the application was approved.
  - Q. Thank you.

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There are no issues, Mr. White, being addressed in your testimony that could not be addressed as part of the review and deliberation of the application for the CIS system that's supposed to come in the future, correct?

- A. No.
- Q. What -- what issues are being addressed in your testimony that couldn't be addressed in that future RDR?
- A. How Duke actually files the application. I found, because I've been in numerous proceedings, how the utility files the ultimate application has a huge fact -- is a huge factor in the ultimate outcome of that proceeding.
- Q. Okay. So are you suggesting that you couldn't file testimony in that future RDR proceeding the same or similar to what we're now discussing?
  - A. No, I'm not suggesting that.
- Q. If I could draw your attention, still on page 6, Mr. White, but specifically line 4, if I

could. Are marketers currently billing customers for non-commodity charges on bills they render for CRES service?

MR. OLIKER: Objection. The question is vague. It doesn't identify what type of billing options and it could be susceptible to multiple interpretations.

EXAMINER WALSTRA: The witness can answer if he knows.

MR. OLIKER: Can you repeat the question, please. Can you repeat the question, please.

MR. MICHAEL: Yes. Karen, would you please repeat the question.

(Record read.)

- A. On bills utilities render for CRES service?
- 17 Q. Yes.

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- A. Currently, CRES providers do not have the ability to specifically line-item non-commodity products and services on the utility consolidated bill.
  - Q. Do any of Ohio's EDUs bill non-commodity charges on consolidated bills that include CRES charges?
- 25 A. I think they do.

Q. If I could draw your attention,
Mr. White, to page 8, line 18, please. And when you
reference "bundled or 'all-in' price" there, do you
see that?

A. Yes.

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- Q. Would that include the combination of electric generation charges and any other non-commodity charges?
- A. It means a price for the total -- a single prices for the total package of services that the customer receives from a provider.
- Q. So that would include electric generation charges and other non-commodity charges then.
  - A. It could, yes.
- Q. If I could turn your attention to page 9, lines 19 through 21, please, Mr. White. Given your answer just then, Mr. White, how are such charges separated for determining the amounts that could be subject to disconnection for nonpayment if customers are unable to pay the bill?
- A. I'm referring in this instance to where there is a separate line item on the bill for a particular charge, which I'm advocating for Duke to provide the ability to allow CRES providers to do.
  - Q. Okay. So it would be based on a

different line item that you could distinguish between the different charges, is that what you are telling me?

A. Yes.

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- Q. If you would turn to page 10, lines 6 through 11, please, Mr. White. And my question, Mr. White, how is supplier consolidated billing different from utility consolidation, in this case Duke's consolidated billing?
- A. Supplier consolidated billing allows the supplier to issue the customer the bill directly, and the distribution utility's distribution charges and other charges are consolidated on that bill.

Utility consolidated billing is the inverse, where the distribution utility issues the bill, and the CRES provider's charges are included on the distribution utility's bill.

- Q. All right. If I could draw your attention to page 13, lines 18 through 21. And --
  - A. I'm sorry, I haven't gotten there.
  - Q. Certainly. Take your time.
- 22 A. Yes.
- Q. In discussing value-added products and services, does this mean non-commodity products and services?

A. They could be non-commodity products and services.

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- Q. Is it true that Duke will bill supplier charges now on consolidated bills using both bill-ready and rate-ready billing?
  - A. I believe, yes, Duke has that capability.
- Q. Explain for me, if you would, Mr. White, how customer energy charges are reduced, and reliability is enhanced, as a result of supplier consolidated billing?
- A. Just as an example, if they're supplier consolidated billing and a customer offers -- or, a CRES provider offers smart thermostat and, the customer is able to pay for that smart thermostat as a line item on the bill, the customer is more likely to enroll in that product or any other product that could include energy efficiency, LED lightbulbs. It's a more convenient product for a customer. It makes it easier to pay and adopt for that product and service and, thus, the customer will be more likely to adopt the energy-efficiency measures which -- which reduce consumption and demand on the distribution utility's grid which ultimately leads to a more reliable and efficient grid.
  - Q. If you turn to page 15, Mr. White,

- beginning with line 21, and continuing through
  page 16, line 3.
  - A. Okay.

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- Q. Duke is currently required to offer marketers billing for non-commodity products and services, correct?
- 7 MR. OLIKER: Could I have that question 8 read again?

9 (Record read.)

- MR. MICHAEL: Your Honor, I would like to ask that question again if I might.
- MR. OLIKER: Okay. Thank you.
- Q. Duke is currently required to offer
  marketers billing for commodity -- commodity products
  and services, correct?
  - A. Duke is currently required to allow CRES providers to bill their generation charges on the Duke utility bill.
- MR. MICHAEL: Okay. I would move to
  strike, your Honor, as nonresponsive, and I think the
  basis for the motion speaks for itself.
- MR. OLIKER: Can I have the question and answer read back again. I'm trying to understand the basis for the motion. I did not catch it.
- MR. MICHAEL: Well, I asked him, Duke

is --

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2 EXAMINER WALSTRA: Let Karen.

(Record read.)

MR. MICHAEL: Your Honor, upon reflection, I would like to withdraw that motion to strike.

EXAMINER WALSTRA: Thank you.

- Q. (By Mr. Michael) Next question,
  Mr. White, does IGS or any other RESA marketer
  currently bill customers directly for any
  non-commodity products and services they may
  purchase, without having these charges included on
  the Duke electric and gas bills?
  - A. Can you repeat the question, please?
  - Q. Certainly.

Does IGS or any other -- excuse me -does IGS or any other RESA marketer currently bill
customers directly for any non-commodity products and
services they may purchase without having these
charges included on the Duke electric bill?

MR. OLIKER: To the extent that response is confidential for IGS, Mr. White, keep that in mind before you respond, and please don't speculate to anyone else if you don't know.

A. IGS bills non-commodity charges directly

And so you're generally familiar with

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Α.

Q.

Yes.

Revised Code sections and the Commission's

Administrative Code sections that apply to utility
regulation, correct?

- A. Yes, I have a general knowledge.
- Q. And the overall purpose of your testimony is to make recommendations regarding supplier consolidated billing and non-commodity billing, correct?
  - A. Yes.

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- Q. And those are the only two items that you're making recommendations with respect to?
  - A. Those are the main recommendations; although, I wouldn't necessarily say those are the only recommendations that I make in the stipulation -- or in the testimony.
  - Q. Okay. What other recommendations are you making?
  - A. It's more specific than that. I recommend that the Commission require that in the CIS application that Duke include the -- in their system design, the ability to allow CRES providers to bill for non-commodity products and services, and also have the functionality for supplier consolidated billing.
    - Q. Okay. And with that clarification, does

that fairly summarize what the point of your testimony is?

- A. Yes, that's a high-level --
- Q. Okay.

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- A. -- summary of my testimony.
- Q. And as part of Duke Energy's application in the electric security plan and distribution rate cases, the company discussed the need for construction of a new customer information system, correct?
  - A. Can you repeat the question, please?
- 12 Q. Sure.

In the company's application in the rate case and the ESP case, there was a proposal for the construction of a new customer information system.

- A. Yes, I believe that was part of Duke's distribution case application.
- Q. And you would agree with me that Duke Energy Corporation is upgrading its customer information system across all of its operating companies, correct?
- A. I believe according to Duke's testimony, that was filed in their testimony.
- Q. And you're aware, are you not, sir, that
  Duke Energy Corporation has utility operations in

1 | states other than Ohio?

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- A. Yes, I am aware.
- Q. And would you agree, subject to check, than Duke Energy operates in North Carolina, South Carolina, Florida, Kentucky, Indiana, and Ohio? And Tennessee?
  - A. I will take your word for that.
- Q. Do you know whether all of those jurisdictions just mentioned, where Duke Energy has electric utility operations, whether amongst those states Ohio is the only deregulated state?
  - A. Can you repeat the jurisdictions, please?
- 13 Q. Sure.
  - Let's start with North Carolina and South Carolina.
- 16 A. Those are not restructured states.
- 17 Q. How about Indiana or Kentucky?
- A. Neither are restructured on the electric side.
- 20 Q. Okay. How about Florida or Tennessee?
- 21 A. Neither of those are restructured states.
- Q. Okay. And you've reviewed the stipulation in these proceedings?
- 24 A. Yes.
- Q. On page 15, line 6 of your testimony, you

state that Duke Energy Ohio's existing customer information system -- and just as we go along, I am going to refer to it as the "CIS," okay, just to make it move quicker?

A. Okay.

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- Q. Okay. And "CIS" is customer information system.
  - A. Yes.
  - Q. Okay. Duke's existing CIS was designed to create barriers to CRES providers placing non-commodity charges on bills. Do you see that?
  - A. Yes.
- Q. Do you know when the existing CIS system was designed?
  - A. I don't know the exact date.
  - Q. Do you know whether or not it was designed before Ohio became a deregulated state?
    - A. I don't know.
    - Q. On page 5, line 3 of your testimony, you mention that the Staff Report in the company's electric distribution case recommended that the CIS upgrade be removed from the company's test year for ratemaking purposes. Isn't that correct?
- A. I'm sorry. Give me a minute. What were the lines you're referencing?

Q. Page 5, line 3.

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- A. Yes, that's what I said in my testimony.
- Q. Okay. And do you agree, as part of the stipulation in this case, that there are no costs for the CIS included in the -- in base distribution rates pursuant to the stipulation.

MR. OLIKER: I object just simply because we referred to the CIS that is in place today, and the CIS that is going to be rolled out pursuant to an application, and I am not sure which one we're talking about.

MS. WATTS: All right. Thank you. I'll clarify that.

- Q. Mr. White, with respect to the CIS that the company will be proposing in the future, is it your understanding that there are any costs associated with that -- with that future CIS construction in base rate -- base distribution rates pursuant to the stipulation?
- A. It is my understanding that the stipulation, if approved, does not provide for recovery of CIS upgrade immediately, but would direct Duke to file an application that would allow for Duke to get CIS recovery, upgrade recovery.
  - Q. So there's nothing in the stipulation

that authorizes Duke Energy to proceed with that construction of a new CIS immediately, correct?

- A. The stipulation doesn't -- you can't authorize anything. It would be the Commission that ultimately approves the stipulation that would authorize something. So there's nothing in the stipulation that authorizes anything.
- Q. There's no agreement amongst the parties in the stipulation for the company to immediately proceed with construction of the CIS.
- A. If the stipulation were approved as is, it would require the -- it would require Duke to file an application to upgrade the CIS and get cost recovery.
- Q. And if the company were to file such an application as you just discussed, would you expect RESA members to participate in that proceeding?
  - A. I would expect they would.
- Q. And would you expect IGS Energy to participate in that proceeding?
  - A. It would be likely.
- Q. Okay. So let's talk about consolidated billing for a moment.
  - A. Sure.

2.1

Q. Page 6, lines 4 through 6 of your

testimony, and that -- at that cite you describe supplier consolidated billing as enabling CRES suppliers to provide customers with a single bill that includes utility distribution charges. Is that a fair characterization of your testimony?

- A. I'm sorry, can you repeat that question?
- Q. At page 6, lines 4 through 6, you describe supplier consolidated billing as enabling CRES suppliers to provide customers with a single bill that includes utility distribution charges. Is that what you are describing there?
  - A. Yes, that's what's in my testimony.
- Q. Okay. Now, you did not perform any specific cost analysis for the expense to design a customer information system that's capable of handling supplier consolidated billing or non-commodity billing, correct?
  - A. I did not.
- Q. And you would agree with me that Duke Energy Ohio is both a gas and electric utility, correct?
  - A. Yes.

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Q. And Duke Energy Ohio is the only regulated combination gas and electric utility in Ohio, correct?

- A. It's the only one that I'm aware of.
- Q. Okay. And would you expect, then, that Duke has some customers who are gas-only customers?
  - A. I don't know for sure.
  - Q. And would you know whether the company has electric-only customers?
    - A. I don't know for sure.
    - Q. Is that a reasonable expectation?
  - A. If you say that that's the case, then I would believe you.
- Q. Okay. And would you agree with me that it's likely that the company also has combination gas and electric customers?
- A. I would expect, yes, that would be the case.
- Q. Do you happen to know how many gas customers, gas-only customers the company has?
  - A. I don't know the exact number.
  - Q. And IGS Energy, in fact, provides commodity service for both electric and gas customers also, correct?
- 22 A. Yes.

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- Q. And IGS Energy serves customers in Duke
  Energy Ohio's service territory, correct?
- 25 A. Yes.

- Q. Do you happen to know how many competitive retail electric service and competitive retail natural gas service suppliers are registered to supply customers in Duke Energy Ohio's service territory?
  - A. I don't know the exact number.
- Q. And customers certainly have a right to choose different suppliers for their gas or electric service, correct?
  - A. Can you repeat the question, please?
- Q. Customers have a right to choose different suppliers for gas and electric service in Duke Energy Ohio's service territory.
  - A. Yes.

2.1

- Q. Do you happen to know how many of Duke's combination gas and electric customers have opted for a different supplier for their gas and electric commodity?
- A. I believe in my testimony I cite the switching rate in Duke for electric at roughly 48 percent of residential customers. I don't know the switching rate, off the top of my head, for gas customers in the Duke service territory.
- Q. Do you know whether there are customers in Duke Energy Ohio's service territory that have a

competitive retail electric service provider that is different from their competitive retail natural gas service provider?

- A. I don't know for certain, but I would expect that's a possibility.
- Q. So as of today, with utility consolidated billing, Duke Energy Ohio's combination customers receive a single bill that has their electric and natural gas charges, including commodity charges from both CRES and CRNG suppliers, correct?
  - A. Can you repeat the question, please.
  - Q. Sure.

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As of today, with utility consolidated billing, Duke Energy Ohio's combination customers receive one bill that has their electric and natural gas charges, including commodity charges from both CRES and CRNG suppliers, correct?

- A. I would expect that to be the case.
- Q. Okay. And just so we're clear, "CRNG" meaning competitive retail natural gas supplier.
  - A. Yes.
- Q. Okay. On page 11, line 5 of your testimony. Your proposal for Duke

  Energy's combination natural gas customers is that instead of the current process where the customer

gets one bill for gas and electric service that includes both utility and supplier charges, that the company design its new customer information system to separate gas and electric services so that customers would receive separate gas and electric bills, correct?

- A. Can you repeat the question, please?
- Q. Yeah.

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MS. WATTS: Actually, Karen, would you read that one, please.

11 (Record read.)

THE WITNESS: I am sorry. Can you repeat the question again? I'm just reading my testimony.

I want to make sure it's accurate.

(Record read.)

A. Under my proposal, in that instance where there was a dual-bill customer with Duke, and the customer elected to -- and the CRES provider agreed and the customer elected to have supplier consolidated billing on the electric side, that to the extent that supplier consolidated billing does not become available on the gas side -- which, although this is not a gas proceeding, we would support that as well -- but to the extent that did not exist, that Duke would issue a separate gas bill

for the customer, and the CRES provider would issue the consolidated electric bill if that's what the customer agreed to.

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- Q. As it relates to supply plan consolidated billing as a combination electric and natural gas company, do you agree that the Commission needs to consider how to address issues related to combination customers?
- A. I do think that would be an appropriate consideration, yes.
- Q. And, sir, with utility consolidated billing, Duke Energy currently is purchasing the receivables of CRES providers, correct?
- A. Yes. Currently, purchasing receivables is available to CRES providers.
- Q. And CRES providers receive 100 percent of their commodity billing in the Purchase of Receivables Program, do they not?
  - A. I'm sorry. Can you repeat the question?
- Q. Is there any discount related to the purchase of receivables in the Duke Energy Ohio service territory?
- A. I don't know without having -- going back and checking that, whether there is a discount rate or not. I know that was a topic of conversation and

each utility does it differently, but I can't say for sure.

Q. Okay.

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- A. I would have to check.
- Q. Under your proposal for supplier consolidated billing, would the CRES then purchase the utility's receivables?
- A. Yes, under my proposal, the CRES provider would purchase Duke's distribution receivables.
- Q. And if Duke is currently purchasing CRES provider receivables at 100 percent with no discount, would CRES providers be willing to purchase Duke's receivables at 100 percent with no discount?
- A. It would depend on the design. I would expect that the -- the CRES provider's receivables would be -- would be treated as the same as the distribution receivables, so whatever discount applied to generation receivables would apply to the distribution receivables, and I would also expect that SSO receivables would be treated the same as CRES receivables.
- Q. Now, IGS is a -- I am stating the obvious here -- IGS Energy is a licensed CRES in the State of Ohio, correct?
- 25 A. Yes.

Q. And it provides competitive retail electric service and that constitutes a commodity service, consistent with our discussions this morning, correct?

A. Yes.

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- Q. And IGS also provides non-commodity services.
  - A. Yes, we provide non-commodity services.
- Q. And among those services would include such things as home warranty services, or smart thermostat, smart water heaters, and so forth.
  - A. Yes.
- Q. On page 6 of your testimony, at line 9, you point out Duke is permitting affiliates to utilize the utility bill to place non-electric charges on the utility bill. And the affiliate you are referring to there is Duke Energy One, correct?
- A. That is the affiliate I've been able to identify.
- Q. And are you aware of any other Duke

  Energy affiliate that uses the utility bill to place
  non-commodity charges?
- A. I know that Duke has placed varying different non-commodity charges from time to time on the bill. I know that they've changed what's been

available to customers over time. I have identified Duke Energy One as one of those providers, but I don't know if there are others or if they are using some third party at this time.

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- Q. So as of today, your testimony is you are not aware of any other Duke Energy Ohio affiliate that uses the utility bill to place non-commodity charges.
  - A. Just Duke Energy One that I'm aware of.
- Q. And you will recall or you will agree with me that IGS raised this issue in Duke Energy -- with respect to Duke Energy One placing non-commodity charges on the utility bill as part of Duke Energy's last ESP, Case 14-841-EL-SSO?
- A. I would have to go back and check to see if that was an issue raised in that particular case. I know it's been raised before. But I don't know specifically.
- Q. Would you agree, subject to check, that it was in the last --
  - A. Subject to check.
- Q. Okay. And Duke Energy One currently is not a competitive retail electric service provider so far as you are aware.
- A. I don't know if they are or not. I don't

believe they are.

2.1

- Q. Do you know whether Duke Energy Ohio presently has an affiliate offering competitive retail electric or natural gas in Ohio?
  - A. Currently, I do not believe they do.
- Q. And on page 6 of your testimony, you state that failure to permit CRES providers to place non-commodity charges on Duke Energy Ohio's bills would be providing an advantage to its affiliate in violation of Revised Code 4928.17(A)(2) and (3), correct?
- A. Yes.
  - Q. And those provisions relate to the corporate separation plan requirements, correct?
    - A. Yes.
- Q. And if you recall, I can provide you a copy of the statute if it's helpful, but 4928.17(A)(2) that you cited in your testimony, speaks to the utility's corporate separation plan satisfying the public interest in preventing an unfair competitive advantage and preventing market power, correct?
  - A. Can you please provide me a copy before I opine on what the statute says?
- Q. Sure.

MS. WATTS: May we approach, your Honor?

EXAMINER WALSTRA: Yes.

- Q. Just so you know, I'm almost done.
- A. Okay. No, this is fun.
- Q. And do you have a copy of the statute before you now?
  - A. Yes.
- Q. Would you refer, please, to 4928.17(A)(2).
- 10 A. Yes.

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- Q. And would you agree with me that the statute states that the plan, which would be the company's corporate separation plan, "satisfies the public interest in preventing unfair competitive advantage and preventing the abuse of market power"? Do you see that?
- A. Yes.
- 18 Q. And then look at 4928.17(A)(3), please.
- 19 A. Yes.
  - Q. Would you agree with me that that section, among other things, requires that the corporate separation plan be sufficient to ensure that the utility will not extend any undue preference or advantage to any affiliate, correct?
- 25 A. Yes.

Q. And to your knowledge has Duke Energy
Ohio ever been found to be in violation of its
corporate separation plan?

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- A. I know Duke Energy Ohio lost a Supreme

  Court case that it was seeking to amend its corporate separation plan. It was determined in that Supreme

  Court case that it -- the amendment that it was seeking would have been in violation of the corporate separation plan. So to the extent that that Supreme

  Court case is the law of the land, then I would say, yes, they have been found to be in violation of the corporate separation plan.
- Q. So the Supreme Court in that case was addressing a proposal by the company, correct?
- A. Well, it was addressing initial approval by the Commission that the Commission -- that ultimately then the Supreme Court found that it was a violation, the Commission's approval was a violation of Duke's corporate separation plan.

Well, let's put it this way: The

Commission's approval was a violation of Duke's -- of
the corporation separation statutes.

- Q. So, in fact, Duke Energy was not found to be in violation of its corporate separation plan.
  - A. It depends on how you wanted to interpret

1693 what a violation of a corporate separation plan is 1 2. but. Q. We'll let the case speak for itself. 3 4 Α. Okay. 5 MS. WATTS: Okay. Okay. That's all I've got. Thank you. 6 7 EXAMINER WALSTRA: Thank you. 8 Mr. Eubanks? MR. EUBANKS: No questions, your Honor. 9 10 EXAMINER WALSTRA: Any redirect? 11 MR. OLIKER: Your Honor, could we just 12 have a few minutes? I don't think we'll need much 13 time. EXAMINER WALSTRA: Okay. We'll go off 14 15 the record. 16 (Discussion off the record.) 17 EXAMINER WALSTRA: We'll go back on the 18 record. 19 MR. OLIKER: Thank you, your Honor. Just 20 a few questions on redirect. 2.1 22 REDIRECT EXAMINATION 23 By Mr. Oliker: 24 Mr. White, do you remember questions that 25 you received from Counsel about times where a CRES

charge and non-commodity charges may be on the same bill?

A. Yes, I do.

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- Q. Do you have any clarifications?
- A. Yes. I believe Mr. Michael had asked me if currently CRES -- if there is instances in Ohio where the utility allows for CRES charges and also non-commodity charges on the utility bill. And I said, yes, I believe there are instances, and I just wanted to clarify what those instances were.

So typically in several of the utilities, they will allow for a customer to be billed by a CRES for their generation charges, but they also have their own non-commodity charges. So, for instance, AEP offers a home warranty product or service that if you're a CRES customer, you can get AEP's home warranty product and service on the utility bill, but you can't get the CRES customer's home warranty product similar to Duke.

Duke allows for -- if they are a CRES customer, you can still get Duke's non-commodity products and services on the utility bill, but you can't get the CRES provider's non-commodity products and services. So I just wanted to make that clarification.

- Q. And do you remember discussions about IGS's previous efforts to get equal access to the utility bill for non-commodity charges?
- A. Yes. We have asked Duke to allow IGS to bill for certain non-commodity charges on the utility bill similar to non-commodity charges it bills from its affiliate, and Duke has not agreed to that. Or we sent a letter back in 2014 to Duke -- Duke or Duke's Counsel, I believe, and Duke -- I'm still anxiously waiting for Duke's response because they haven't responded to us.
- Q. And do you remember questions about IGS and RESA's ability to intervene in the future application to obtain cost recovery for a CIS?
  - A. Yes, I do.

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- Q. And do you have any concerns with being required to wait for that proceeding to set parameters for what the application should look like?
  - A. I'm sorry. Can you repeat the question?
  - Q. Sure.

And what are your concerns if IGS and RESA are required to wait for that future proceeding to provide input or recommendations regarding the parameters of what Duke should put into place?

A. From my experience, if -- if parameters

are set or a particular proposal is not made in the actual utility application itself, it's much less likely to be included or approved by the Commission, and I will just give you an example.

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For instance, if -- if we want non-commodity billing or supplier consolidated billing on the utility bill and Duke is not directed by the Commission to include that in its application, then Duke won't -- won't provide any cost estimates. They won't provide any of the technical details of what's required for that particular product to be offered in its application. And it will be used against -- then used against us in that there's not enough data or detail to -- to adopt that proposal because Duke has not initially provided that data or detail in its initial application and much of that data and detail really can only be provided by Duke.

MS. WATTS: And, your Honor, I move to strike that response. Mr. White has testified at length what he believes Duke will do, and I don't believe Mr. White has any basis for understanding what Duke would or would not do in an application before the Commission.

MR. OLIKER: Your Honor, briefly.

Mr. White provided his opinion of how

there could be a disadvantage to IGS and RESA to the extent no input parameters were set in this application. And the Commission can give, you know, that its due weight based upon Mr. White's experience and his opinion.

EXAMINER WALSTRA: I agree. I'll deny.

MR. OLIKER: Thank you, your Honor.

EXAMINER WALSTRA: Were you done?

MR. OLIKER: Yes.

- Q. (By Mr. Oliker) I believe, Mr. White, you were done, correct?
- 12 A. Yes.
- MR. OLIKER: And that's all we have.
- 14 Thank you.

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- THE WITNESS: Thank you.
- MS. WATTS: No recross.
- 17 EXAMINER WALSTRA: Thank you.
- 18 MR. EUBANKS: No questions.
- 19 EXAMINER WALSTRA: Thank you, Mr. White.
- MR. MICHAEL: We have no recross either,
- 21 your Honor.
- 22 EXAMINER WALSTRA: You seemed pretty
- 23 | comfortable.
- 24 THE WITNESS: Thank you.
- 25 EXAMINER WALSTRA: Would you like to move

1698 1 your exhibit? 2 MR. OLIKER: Thank you, your Honor. RESA and IGS would move for the admission of Exhibit 5. 3 4 EXAMINER WALSTRA: Subject to the motions 5 to strike, any? 6 MR. MICHAEL: Nothing further, your 7 Honor. 8 EXAMINER WALSTRA: Thank you. It will be admitted. 9 10 (EXHIBIT ADMITTED INTO EVIDENCE.) 11 MR. WHITT: Your Honor, RESA/IGS's next 12 witness would be Teresa Ringenbach. My understanding 13 is she's the last witness for today. I am not sure 14 what the cross estimates are. We are happy to 15 proceed with that witness now rather than breaking 16 for lunch and coming back, but if that's the 17 consensus of the group, we would be fine with that. 18 EXAMINER WALSTRA: I think there was some 19 discussion off the record that everyone is 20 comfortable just going forward. 2.1 MR. WHITT: Okay. 2.2 MS. WATTS: We are going to set some land 23 speed records. 24 (Witness sworn.)

EXAMINER CATHCART: You may be seated.

1699 1 MR. WHITT: Your Honors, if we may 2 approach, we will be distributing a document marked as RESA/IGS Exhibit 6 which I believe the witness 3 will authenticate is her prefiled direct testimony. 4 5 EXAMINER CATHCART: So marked. (EXHIBIT MARKED FOR IDENTIFICATION.) 6 7 8 TERESA RINGENBACH 9 being first duly sworn, as prescribed by law, was 10 examined and testified as follows: 11 DIRECT EXAMINATION 12 By Mr. Whitt: 13 Q. Good afternoon. Could you introduce 14 yourself, please. 15 My name is Teresa Ringenbach. I'm the 16 Senior Manager of Government Regulatory Affairs for 17 the Midwest for Direct Energy. 18 And, Ms. Ringenbach, do you have in front Q. 19 of you a document marked as RESA/IGS Exhibit 6, 20 titled "Direct Testimony of Teresa Ringenbach on 2.1 behalf of the Retail Energy Supply Association and 22 Interstate Gas Supply, Inc."? 23 Α. I do. 24 Was this document prepared by you for Ο. 25 this case?

A. Yes.

2.1

2.2

- Q. Do you have any corrections or changes to make to your testimony?
- A. I do. I have one. It's page 3, line 19, where it says "and the growth of new (insert policy language) offerings." That's just an old note that was in there. It should actually say "and the growth of new product offerings."
- Q. And just so we have a clear record, I will read the sentence as corrected. Read along with me silently and make sure that I read it correctly, if you would, please.

The sentence as corrected on page 3, line 19, should now read: "Meter data is essential to the policy of the state and the growth of new product offerings"; is that correct?

- A. That's correct.
- Q. Apart from the change you just identified, if I were to ask you the same questions in RESA/IGS Exhibit 6 today, would your answers be the same?
  - A. Yes.

MR. WHITT: With that, your Honors, we would move for the admission of the exhibit, subject to cross-examination.

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                 EXAMINER CATHCART: Thank you.
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                 Any cross-examination?
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                 OCC?
                 MR. MICHAEL: If it would be acceptable
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     to the Bench, your Honor, we would like to reserve
 6
     any cross-examination until after the company goes.
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                 EXAMINER CATHCART: Okay. Thank you.
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                 MS. WATTS: Thank you.
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                       CROSS-EXAMINATION
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     By Ms. Watts:
12
                 Good morning, Ms. Ringenbach.
            Q.
13
            A. Good morning.
14
                You are employed by Direct Energy,
            Ο.
15
     correct?
16
            Α.
                I am.
17
                 But you're testifying today on behalf of
            Q.
     IGS and RESA?
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19
            Α.
                 That's correct.
20
            Q.
                 And why are you not testifying on behalf
2.1
     of Direct today?
22
            Α.
                 We're a member of the RESA, so we're
23
     testifying under the trade org.
24
                 Is IGS a member of RESA?
            Ο.
25
            Α.
                They are.
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- Q. And yet IGS is called out separately?
- A. I think they wanted it that way.
  - Q. But Direct did not?
  - A. We did not.
    - Q. Do you have any idea why?
- A. It's been a while in this case, I actually don't remember why.
- Q. Okay. And the purpose of your testimony is to make recommendations regarding, I have a list of four things: Data access, ZigBee access, "Enroll From My Wallet," and a recommendation with respect to purchase of accounts receivable. Are those the four items you're covering?
  - A. Yes.
- Q. Okay. And there aren't any additional ones that I've missed.
- 17 A. No.

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- Q. On page 4 of your testimony at line 18,
  on that line you're discussing a request and you say
  "Similar to AEP, we," and I assume you mean RESA and
  IGS?
- 22 A. Yes.
- Q. "...would like a review after one year of the market." Do you see that?
- 25 A. Yes.

Q. I am not sure I understand that statement. Could you explain what you're asking for there?

2.1

A. So in -- in AEP, what was agreed to was that there would be a one-year review after time-of-use-products product capability came to the market, to determine if suppliers were offering those products, were there any barriers to it. And at that point there would be a report by Staff to determine whether or not there were enough suppliers making enough of these product offerings that the utility would no longer have the need to actually offer anything.

So what I'm saying here is we would also like to see something in Duke that makes it clear that once the capability is out there and suppliers are actually making those offers at some point, the utility requirements to offer time-of-use would go away.

Q. Thank you.

On page 5 of your testimony at lines 4 through 14, you discuss ZigBee. Do you know whether the AMI transition the company is currently proposing and which is included in the stipulation -- let me ask you: You've read the stipulation in this

proceeding?

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- A. I have.
- Q. Okay. And so, do you know whether the AMI transition that the company is proposing and which was included in the stipulation would have ZigBee capability?
- A. Most meters for SmartGrid -- actually all the ones that I'm familiar with in the midwest states have ZigBee capability, so the assumption here is that what Duke is planning would also have a ZigBee-capable meter deployed. What we are asking for is clarity that if that is, it's part of the plan that simply customers would have ZigBee access to their meters.
- Q. And on page 5 of your testimony, you describe a program called -- you refer to as "Enroll From My Wallet" as an option to replace the current letter of authorization process, correct?
  - A. Yes.
- Q. And you -- you are familiar with Duke Energy Ohio's letter of authorization process?
  - A. As it is today, yes.
- Q. Yes, okay. And do you know whether
  Direct Energy has used the letter of authorization
  process in the Duke Energy Ohio service territory?

- A. For non-residential customers we have.
- Q. On page 5, line 21, you state that "The Enroll From My Wallet option eliminates the middle step by allowing the customer to provide additional verifying information..." Do you see that?
  - A. Yes.

2.1

- Q. What additional information would be provided?
- A. So each utility is different, so what we would do is we would work with Duke to determine what information is consistent across your customers that you do collect and then that would become the identifying information that we would collect in lieu of getting -- we would still have the LOA, but in lieu of us submitting the LOA to Duke, we would submit that information.
- Q. And you're familiar with the Commission's regulations concerning customer safeguards of information, correct?
  - A. Yes.
- Q. Do you know whether the Commission's rules for customer safeguards would need to be amended to enable "Enroll From My Wallet"?
  - A. We don't believe that it would be.
  - Q. On page 6, line 4, you indicate that

- there is a delay in passing paper back and forth. Do
  you see that?
  - A. Yes.
  - Q. Do you agree that Duke Energy Ohio's process is electronic?
    - A. I do.

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- Q. And in that process, a signed piece of paper is not mailed to Duke but is electronically uploaded to the company, correct?
  - A. Yes.
- Q. And do you have any reason to doubt that
  after the supplier uploads a PDF of the
  authorization, the account number is presented within
  a few moments?
  - A. For residential, I do not know.
- 16 O. How about for commercial?
- A. For commercial I believe it's set up you can see the account number then.
- Q. Okay. Have you performed any cost
  analysis to determine the costs of implementing
  "Enroll From My Wallet" functionally?
  - A. Not with Duke.
- Q. In preparing your testimony in this
  proceeding, did you review the company's application
  in the ESP proceeding?

- A. In this current ESP?
- Q. In this case, yes.
  - A. Yes.
- Q. And did you also review the application in the rate case?
- A. Yes.

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- Q. And you would agree me that the company did not request any change to enable "Enroll From My Wallet" programs.
- A. Yes.
- Q. As part of the stipulation, the company's existing purchase of accounts receivable will continue, correct?
- 14 A. Yes.
  - Q. And currently Duke purchases accounts receivable from CRESs at a zero discount, correct?
  - A. Duke has an uncollectible rider which recovers their credit risks, so the purchase of receivables at 100 percent.
- Q. Okay. And there's nothing in the stipulation that will change that.
- 22 A. That's correct.
- Q. And the only modification to the
  stipulation -- to the existing purchase of
  receivables program is the inclusion of an annual

audit of that program, correct?

2.1

- A. So that's where my testimony comes in is the current PA -- purchase of accounts receivable, PAR contract allows for an audit. So our concern is that by putting this in the stipulation, are we asking for something different that's undefined? Or is it the same thing and it's just being repeated? So what we are asking suppliers is we need clarity on what that audit is, what is being audited. Is this a retroactive audit on things we didn't know? And just clarifying that language what exactly is it.
- Q. Do you believe that the Staff should not audit whether a CRES is including non-commodity products and services as part of receivables purchased by the utility?
- A. I believe that Staff has -- can audit it, but I think we need a definition of what is a non-commodity in a clear definition. I think we need to understand exactly what Staff is requesting. We need to make sure we're not crossing over into a world where we are now regulating the cost of suppliers versus verifying that PAR is being used appropriately.
- MS. WATTS: That's all I have. Thank you.

MR. EUBANKS: Staff has no questions.

2 EXAMINER CATHCART: Thank you.

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## CROSS-EXAMINATION

5 By Mr. Michael:

- Q. If non-commodity charges are included in the PAR with no discount, they could be included in the uncollectible rider, correct?
- A. I go back to again it's unclear what "non-commodity" is. We've never fully defined it in the state.
- Q. Okay. If I were to define it for purposes of the question as something other than electric generation and I were to ask you the question again, what would your response be?
- A. If a supplier is using purchase of receivables in Duke and utility consolidated billing, both of those, and included some defined non-commodity amount, and the customer did not pay, then, yes, it would show up in the uncollectible rider.
- MR. MICHAEL: No further questions.
- 23 Thank you very much.
- 24 EXAMINER CATHCART: Thank you. Any
- 25 redirect?

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                 MR. WHITT: No redirect.
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                 EXAMINER CATHCART: Thank you.
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     you.
                 THE WITNESS: Thanks.
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                 EXAMINER CATHCART: Would you like to
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    move your exhibit?
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                 MR. WHITT: That would be a good idea,
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     your Honor. At this time we would move for the
     admission of RESA/IGS Exhibit No. 6.
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                 EXAMINER CATHCART: Any objection?
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                 MS. WATTS: No objection.
12
                 EXAMINER CATHCART: It will be admitted.
13
                 (EXHIBIT ADMITTED INTO EVIDENCE.)
14
                 EXAMINER WALSTRA: We will adjourn for
15
     the day.
16
                 Go off the record.
17
                 (Discussion off the record.)
18
                 (Thereupon, at 12:50 p.m., the hearing
19
     was adjourned.)
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CERTIFICATE We do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by us in this matter on Friday, July 20, 2018, and carefully compared with our original stenographic notes. Karen Sue Gibson, Registered Merit Reporter. Carolyn M. Burke, Registered Professional Reporter. (KSG-6585) 2.4 

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Summary: Transcript in the matter of the Duke Energy Ohio, Inc. hearing held on 07/20/18 - Volume X electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.