BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the :
Application of Duke Energy:
Ohio for Authority to :
Establish a Standard :
Service Offer Pursuant to :

Section 4928.143, Revised: Case No. 14-841-EL-SSO

Code, in the Form of an : Electric Security Plan, : Accounting Modifications : and Tariffs for Generation: Service. :

In the Matter of the : Application of Duke Energy:

Ohio for Authority to : Case No. 14-842-EL-ATA

Amend its Certified : Supplier Tariff, P.U.C.O. : No. 20.

PROCEEDINGS

before Ms. Christine M.T. Pirik and Mr. Nick Walstra, Attorney Examiners, at the Public Utilities

Commission of Ohio, 180 East Broad Street, Room 11-A, Columbus, Ohio, called at 9:00 a.m. on Friday,

October 31, 2014.

VOLUME VIII

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2098 Friday Morning Session, 1 2 October 31, 2014. 3 EXAMINER WALSTRA: We'll go on the record 4 5 then. And, Duke, would you like to call your 6 7 witness. 8 MS. WATTS: Thank you, your Honor. Duke 9 Energy Ohio calls Marc Arnold. EXAMINER WALSTRA: Thank you for being 10 patient with us. 11 12 THE WITNESS: Oh, no problem. 13 (Witness sworn.) MS. WATTS: And, your Honor, I would like 14 to have marked as Duke Energy Ohio, what exhibit are 15 16 we up to? Do we know? 17 MR. SERIO: 21. 18 MS. KINGERY: 20. 19 MS. WATTS: Mr. Arnold's direct testimony 20 and 20a would be his --2.1 MR. SERIO: I think it's 21, your Honor. 22 EXAMINER PIRIK: It's 21. MS. WATTS: 21, sorry. Duke Energy Ohio 23 24 Exhibit 21 would be his public and 21a would be his 25 direct testimony confidential.

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1	EXAMINER WALSTRA: So marked.
2	(EXHIBITS MARKED FOR IDENTIFICATION.)
3	MS. WATTS: And, your Honor, on August 21
4	Duke Energy Ohio filed a further unredacted version
5	of Mr. Arnold's Attachment 7. I'm wondering how you
6	would prefer that that be marked.
7	EXAMINER WALSTRA: Is that part of what
8	was submitted with his testimony on that part of
9	his testimony that was
10	MS. WATTS: It is.
11	EXAMINER WALSTRA: submitted? I think
12	we can just keep it as 21.
13	MS. WATTS: Okay. Ultimately, when we
14	get the redactions all straight, it will all be
15	sorted and incorporated into one document.
16	EXAMINER WALSTRA: Yes. Thank you.
17	MS. SPILLER: One moment, please, your
18	Honor.
19	
20	MARC W. ARNOLD
21	being first duly sworn, as prescribed by law, was
22	examined and testified as follows:
23	DIRECT EXAMINATION
24	By Ms. Watts:
25	Q. Mr. Arnold, would you state your name and

place of employment, please.

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- A. Yes. My name is Marc W. Arnold. My place of employment is Duke Energy. The address is 139 East Fourth Street, Cincinnati, Ohio 45202.
- Q. And do you have what's been marked as Duke Energy Exhibit 21 and Duke Energy Exhibit 21a before you?
 - A. I do.
- Q. And are those open and confidential versions of the testimony that you caused to be filed in this proceeding?
 - A. Yes, they are.
- Q. And do you have any additions or corrections to that testimony?
- A. I do have two corrections. On the second page of the first exhibit, on MWA-2 and MWA-3, those are both attachments, it should read "Excerpt from the Duke Energy Summation of the 2014 J.D. Power Study." As well as on MWA-3, "Excerpt from the Duke Energy Summation of J.D. Power 2013."
- Q. Thank you. Do you have any other -
 MR. SERIO: Excuse me, Counsel. Where on
 page 2 is that modification?
- 24 THE WITNESS: I'm sorry. It's actually
 25 the second page, but it's page I that shows the table

2101 of contents. This is part of my testimony. 1 2 MR. SERIO: This is MWA-2? 3 THE WITNESS: 2 and 3. MR. HART: Title page, Joe. 4 5 MR. SERIO: Okay. MS. WATTS: Are you with us, Mr. Serio? 6 7 MR. SERIO: Yes. I was actually going to 8 exhibit page 2. 9 MS. WATTS: I just want to make sure 10 everybody was. MR. SERIO: If you could repeat that 11 12 please. 13 THE WITNESS: Sure. On both of those 14 attachments it would be "Excerpt from the Duke Energy Summation of the 2014 J.D. Power" and the same for 15 16 MWA-3. 17 (By Ms. Watts) And, Mr. Arnold, do you 18 have any other additions or corrections? I do not. 19 Α. 2.0 And if I were to ask you the questions 2.1 contained in your testimony again today, would your 22 answers be the same? 23 Α. Yes, they would. 24 And are they true and correct to the best

25

of your knowledge?

A. Yes, they are.

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MS. WATTS: Mr. Arnold is available for cross-examination.

EXAMINER WALSTRA: Thank you.

I think at this point we'll take arguments on confidentialities.

MS. WATTS: Okay. Your Honor, would you like to do it generally or page by page or how would you like to proceed with that?

EXAMINER WALSTRA: There's nothing in the actual testimony, right?

MS. WATTS: Correct. Testimony is completely open.

EXAMINER WALSTRA: Okay. You can just give a general argument about each attachment and then if there's specifics in the response, we can address those specifically.

MS. WATTS: Okay. Thank you, your Honor.

The information attached to Mr. Arnold's testimony largely contains data related to customer surveys that are performed in several different ways for the companies and by the company. The information that's provided from J.D. Power and Associates is produced to the company pursuant to a contract. The contract includes a clause that the

company maintain that information confidentially and keep it proprietary and trade secret, and the company does, in fact, do that.

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The information that J.D. Power often puts out into the public, if you Google, J.D. Power, you will find there is quite a bit of information from J.D. Power, specifically with respect to utilities, but all of that information is aggregated. You won't see specific information related to Duke Energy as a company and isolated for that particular company. So they talk about industry trends and so forth, but nothing specific to Duke Energy Ohio.

So it's been our -- what we've attempted to do here is to isolated the information that's only specific to the company which we hold as proprietary and trade secret.

And one of the reasons we do that is because these surveys are undertaken for the purpose of improving our internal operations, and if we were forced to disclose for, lack of a better term, some of the less stellar parts of the company we are working to improve, it would chill our efforts to undertake such surveys and essentially not be good public policy. So we would ask that that information be kept proprietary and confidential for those

reasons.

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EXAMINER WALSTRA: Thank you.

Any responses from the intervenors?

MR. SERIO: Yes, thank you, your Honor.

First of all, the requirement is that if they want to keep the documents confidential, there has to be value to a competitor. Duke has made absolutely no showing that there is any value to a competitor from any of the documents attached to Mr. Arnold's testimony that they are asking protection for.

In particular, the J.D. Power documents, Duke might have a contract with J.D. Power, and if anybody is going to assert any confidentiality claim, then it should be J.D. Power and not Duke. Duke's concerned that it could have a chilling effect on their looking at improving internal operations, but the PUCO requires customer surveys. So it might chill Duke's efforts to engage J.D. Power to do it, but the company is still required by PUCO rules to do a certain minimum amount of customer surveys, and that would be used then for their internal operations.

And to the extent that the surveys show that the company is not doing well, then that's

exactly the information that the public should have available so that they can make demands known to the company that this is what we need you to do better. By keeping that confidential and secret from the public, you're requiring the public to pay for things that they don't get to know what's being considered and, in fact, what are the areas that you've identified as being — that need to be improved and, you know, what are you doing to improve them.

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So it's absolutely information that should be made public, especially to the extent that the company is now asking the Commission to impose an additional rider with significant dollars associated with it that customers would be required to pay as a result of the information contained in those attachments.

EXAMINER WALSTRA: Thank you.

MS. WATTS: May I respond, your Honor? EXAMINER WALSTRA: Certainly.

MS. WATTS: First of all, with respect to value to a competitor, the surveys that are attached to Mr. Arnold's testimony are paid for at great expense to the corporation and would provide great value to competitors if known. I think a quick review of what is contained in the surveys would

disclose that.

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Secondly, with respect to who is obligated to protect the information in the surveys, the contract provides — the contract between Duke Energy Corporation and J.D. Power provides that Duke Energy Ohio protect the documents, and so it's our responsibility to do so and not J.D. Power in the first instance.

Finally, with respect to the survey that the Commission requires, that survey is attached to Mr. Arnold's testimony and it is offered as open to the public. We have not redacted any portion of that survey and that is the survey that the Commission requires that we — that we do on an ongoing basis and provides much of the information that Mr. Serio would need to understand the status of our reliability at this time.

MR. SERIO: Your Honor, one last thing, the company alleges that there is values to competitors. The last time I checked, distribution service is a monopoly service. There is no competitor to Duke electric for distribution service. So who is the competitor that gets value of knowing if Duke has problems with distribution service?

EXAMINER WALSTRA: Anyone else?

2107 1 Ms. Watts, on page 3 of that 2 attachment --3 MS. WATTS: I'm sorry, which attachment, your Honor? 4 5 EXAMINER WALSTRA: MWA-2. 6 MS. WATTS: Okay. EXAMINER WALSTRA: Is that -- whose model 7 8 is that? 9 MS. WATTS: Page 3 of that chart? EXAMINER WALSTRA: Yes. 10 MS. WATTS: Your Honor, that information, 11 12 if I understand your question correctly, relates to 13 all utilities. 14 EXAMINER WALSTRA: Is -- I quess my 15 question is this a -- the "Factor Model Weights" is 16 what you are looking at? 17 MS. WATTS: Yes, that's what I am looking 18 at. EXAMINER WALSTRA: Okay. Is that -- the 19 20 weights that are attributed to each thing, is that what J.D. Power does? Is that, like, a specific 2.1 22 formula that they use? 23 MS. WATTS: I believe that's likely to be 24 correct. Associated with SSO. 25 EXAMINER WALSTRA: Ms. Watts, are you

only talking about the first exhibit or all of them as well?

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MS. WATTS: I was trying to speak generally about all of them. I would note that the next two involve information from J.D. Power that as Mr. Arnold correctly identified when he changed the titles, were — that information was excerpted by Duke Energy and put into an internal discussion document, but the information is still the same proprietary information. It was just revised into a presentation.

And then the very last attachment is of a different nature that requires a separate discussion.

EXAMINER WALSTRA: Right.

MR. SERIO: Your Honor, I do have one clarification. OCC has no objection to the attachments that are indicated "Business Customer."

If the Commission chooses to keep those confidential, we have no objection to them inasmuch as we don't represent business customers. Our concern is related to the attachments that are specifically related to residential customers.

EXAMINER WALSTRA: Mr. Serio, do you have any objection to that page 3 of MWA-2 being kept confidential?

MR. SERIO: Well, your Honor, unless we have absolute certainty that that's something that comes from J.D. Power, "I think so" shouldn't be sufficient to meet the burden of proof necessary to keep it confidential.

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MS. WATTS: Mr. Serio, which specific thing are you unclear about with respect to whether or not it comes from J.D. Power?

MR. SERIO: Well, my understanding is when the Examiner inquired about page 3, as to whether that was a J.D. Power factor model and whether that was something proprietary, the response I heard was "I think so." It wasn't an absolute "yes." And without an absolute "yes," I don't know how you can possibly meet the burden of proof that — and demonstrate that these are the extraordinary circumstances that warrant the Commission deviating from its policy that this type of information should be public without a showing of extraordinary circumstances and potential harm.

MS. BOJKO: Your Honor, I'm sorry.

EXAMINER PIRIK: Mr. Serio, let me ask you -- let me ask you with regard to, for example, page 5 of attachment 2.

MR. SERIO: Yes, your Honor.

EXAMINER PIRIK: And the -- the graphics that are there for other utilities other than the -- than Duke, do you have a problem with eliminating those from the open record? Since they are not a party to this case?

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MR. SERIO: Only to the extent that the Commission might be called on to rely on information from utilities or customers that aren't Duke Energy Ohio customers. To the extent that the company and/or the Commission has asked to rely on information from companies that aren't a part of this case, then the customers that are going to pay the cost should know who was held up as the standard and that they are being asked to pay additional costs because of something going on not in your own service territory, but because of what's going on in these other service territories, and they should know who those individual companies are.

And, again, to the point that MWA-2 is the business customer survey, I believe MW -- so we would only object to the residential customer survey. To the extent it's business customer, I will leave that up to any of the commercial or business representatives to make their arguments. My argument is against anything that's residential customer only.

And, your Honor, I did want to point one 1 2 other thing out. I believe there was an indication 3 there is nothing in the testimony that's confidential and on page 13 there is a couple of lines that are 4 5 blacked out. MS. WATTS: Mr. Serio, we filed an open 6 7 version of that. 8 MR. SERIO: Oh, I'm sorry. I did not see 9 that. Okay. 10 EXAMINER WALSTRA: Ms. Bojko, did you have anything? 11 12 MS. BOJKO: Your Honor, I was going to 13 add that I appreciate Mr. Serio not attempting to 14 represent business interests, but I don't think the arguments would be any different for business 15 16 customers versus residential customers, so. 17 EXAMINER WALSTRA: Thank you. 18 Understanding the arguments and 19 objections made by Duke, we will open up attachments 2.0 2, 3, and 4. 2.1 In regards to the other attachment, 22 Ms. Watts. 23 MS. WATTS: Yes, your Honor. The last 24 attachment has specific information with respect to 25 forward budgeting of the company and deals with

specific programs and dollar amounts budgeted for those, and much of the contracting for that work obviously has not yet begun. So information of that nature released in the public record would have a deleterious effect on potential for issuing RFPs for that work, and ultimately be harmful to customers, as well, because the higher prices that could result from competitors knowing that information would ultimately, presumably, be passed on to customers, and so I would think it would be in the interest of all of us to protect that information.

EXAMINER WALSTRA: Thank you.

Any objections?

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MR. SERIO: Yes, your Honor. If you look at attachment MW -- MAW-7, the company has indicated that the descriptions are not public. And if there's a supplier out there, it doesn't take a lot to look at the description of the item and realize what's going to be involved in doing the work that the company wants to do. The total amount is known, so all that isn't known is the specifics that they are going to spend or propose to spend in each individual year.

EXAMINER WALSTRA: Are you looking at those last two pages?

MR. SERIO: I'm starting at page 1 of 1.

EXAMINER WALSTRA: Okay.

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MR. SERIO: So that gives the descriptions; it just doesn't give the dollar amounts. And if you have the descriptions and you have the total dollars that the company is going to spend over the three-year period, it doesn't really impact that much because a contractor is going to know that, you know, if you are going to do manhole vault capital rebuilds, they know how much it requires to do that type of work because they are the contractors, so all you're determining is how much is going to be done in any one particular year.

And then the second two pages, I don't see anything blacked out on those.

EXAMINER WALSTRA: Right.

MR. SERIO: So the only thing I see blacked out is page 1 of 1 and it's the dollar amounts for the 2015, 2017 -- '16, '17, and '18 budgets. And, as I indicated, once you know what the areas are and you know what the company is going to spend in total, breaking down the specifics doesn't really make that big a difference and doesn't really arise to extraordinary circumstances.

EXAMINER WALSTRA: Thank you.

2114 1 Any other responses? 2 Ms. Watts. 3 MS. WATTS: Yes, your Honor. I'm a little puzzled by Mr. Serio's response here because 4 5 when a contractor bids on a job, they certainly know 6 the scope of the job and the nature of the job, but 7 the price that they bid on that -- on that work is 8 certainly unique to that individual contract and if 9 they know the outside scope of the company's budget, 10 they would certainly build their bid to fit to that dollar amount. I certainly, as a contractor, would 11 12 bid whatever I thought the company was willing to 13 pay. It's -- I can't understand why Mr. Serio 14 wouldn't understand the competitive nature of that information. 15 16 EXAMINER WALSTRA: Thank you. 17 Ms. Watts, for clarification, are the 18 bottom numbers, kind of below the chart, are those marked confidential? 19 2.0 MS. WATTS: The aggregate number was not. 2.1 EXAMINER WALSTRA: Was not? 22 MS. WATTS: Was not. 23 EXAMINER WALSTRA: Those will -- what you 24 have blacked out will remain confidential. 25 MS. WATTS: Thank you, your Honor.

2115 EXAMINER WALSTRA: It's just the numbers, 1 2 right? The titles above are open? 3 MS. WATTS: Yes. EXAMINER WALSTRA: Okay. 4 5 MS. WATTS: Just the budget numbers. EXAMINER WALSTRA: Okay. Thank you. 6 7 Mr. Arnold, did you understand what we 8 marked as confidential and what we did not? THE WITNESS: I do. Just for 9 10 clarification so the columns, the headers are permissible? 11 12 EXAMINER WALSTRA: Correct. 13 THE WITNESS: But just not the individual 14 dollar amounts each year. 15 EXAMINER WALSTRA: Yes. 16 THE WITNESS: Okay. Thank you. 17 EXAMINER WALSTRA: Ms. Hussey, any 18 questions? 19 MS. HUSSEY: No questions, your Honor. 2.0 EXAMINER WALSTRA: Ms. Bojko? 2.1 MS. BOJKO: Yes, your Honor. 22 23 CROSS-EXAMINATION 24 By Ms. Bojko: 25 Q. There are people absent today. Good

morning, Mr. Arnold.

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- A. Good morning.
- Q. Could you look at page 8 of your testimony, please.
 - A. I'm there.
- Q. You reference electric system studies in the -- in line 14 and you're talking about from a planning perspective. Are these the J.D. Power studies? What electric system studies are you referencing there, sir?
- A. The reference on line 14 to system studies, these are internal system studies. This is actually loading capacity of those feeders.
- Q. Okay. And, sir, did you provide those studies in support of your testimony?
- A. As far as the individual ones, no, I did not.
- Q. Okay. And were you involved in the studies?
- A. I was not directly involved. They are done at a feeder analysis, so they're not under my direction, those planning studies. However, my group gets the result of those studies. So they are done by the individual planners.
 - Q. And just to make sure that we're clear,

the studies that you are referencing, the load studies, are completely different than the customer-service-type studies and the J.D. Power studies you talk about later.

- A. Yes, you are correct.
- Q. On page 9 of your testimony, line 19, you discuss the duration of the life of some distribution equipment. Do you see that?
 - A. On page -- I'm sorry, on page 9, line 19?
- 10 Q. Yes.

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- 11 A. Yes.
 - Q. And you state that "equipment typically lasts for about 30 to 50 years if preventive maintenance is performed...." And my question is has Duke consistently performed this preventive maintenance?
 - A. Yes, ma'am.
- Q. And you believe that Duke has performed it to date?
- A. In regards to this specific equipment or in general?
 - Q. Well, you're just talking about general distribution equipment in your response here.
- A. Actually, on line 19 and 20, I'm specifically talking about our downtown Cincinnati

equipment.

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- Q. Oh, so you're talking about -- you say "By way of example." So your 30 to 50 years of the life of distribution facilities and preventive maintenance is only in reference to Cincinnati, downtown Cincinnati?
- A. No. That would be in general for our entire system, but you referenced line 19 and 20 and that's specific to downtown Cincinnati.
- Q. I'm actually referencing -- I was referencing "30 to 50 years if preventive maintenance is performed on a regular schedule" and that sentence starts on 18. So I was talking about that sentence, not line 20.
- A. Okay. I'm sorry, I thought you said
- Q. Okay. Yes, that that's with regard to the entire system?
- 19 A. Yes.
- Q. In general terms?
- 21 A. Yes.
- Q. Okay. So, to date, do you believe that
 Duke's system has been maintained and is maintained
 currently?
- 25 A. Yes, it is.

- Q. On page 10 of your testimony, you talk about technology changes, and when you're talking about these technology changes with regard to cell phones and mobile devices, you're talking about complete power outages; is that right?
- A. You reference page 10. Can you give me lines?
- Q. Line 20. You start talking about customer expectations and you talk about technology and mobile devices. With respect to these kind of technology changes, you're talking about their expectations not to have power outages; is that right?
 - A. That is correct.

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- Q. And power outages for long durations because of charging phones, et cetera?
- A. This is specifically all power outages, so even momentary outages for computers can be a big deal.
 - Q. Momentary outages wouldn't be a big deal for charging cellular phones, would it?
 - A. It would be potentially.
 - Q. A momentary power outage would affect the charging of a cell phone?
 - A. It depends on what the cell phone is

charged at. So if it's completely dead and there is a momentary outage, it's not going to continue charging.

- Q. How long does a momentary outage last?
- A. A momentary outage can be up to 5 minutes.
- Q. It's a problem for 5 minutes and then that problem is cured.
 - A. That's correct.

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- Q. Okay. Let's turn to page 16 of your testimony, please, sir.
 - A. Okay. I'm there.
- Q. At the top on -- starting at the end of line 1 through the rest of line 5 of that question and answer, you talk about that the distribution infrastructure plans and associated recovery mechanism are designed to balance the needs of the Company to maintain its financial stability with its commitment to its customers. Do you see that?
 - A. Yes, I do.
- Q. The company would do this same balancing analysis when it proposes a rate case; isn't that true?
- A. I don't know if I would agree with that totally, because we do have some incremental built

into our DCI plan. So some of these unless we had -- I'm sorry, if we did not have DCI, we may not have the incremental that is shown in my plan.

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- Q. Right. But when the company's proposing and starts putting together its rate case filing, it does a balancing analysis of how much of an increase to request with regard to its customers and what would or wouldn't be acceptable under that level; isn't that true?
- A. As far as the actual rate filing, that would probably be a better question for Mr. Wathen or Ms. Laub.
- Q. So you're saying in the context of a rate case filing, you can't speak to whether the company would balance the needs of its financial stability with the commitment to customers?
- A. I would agree with the commitment to customers. As far as the financial stability, again, that would be a question for Mr. Wathen.
- Q. On the bottom of page 16 you reference "MWA-7." Do you see that?
 - A. Yes, I do.
- Q. Okay. I want to turn to MWA-7 but,
 first, you also say "including estimated customer
 rate impacts." Do you see that?

A. Yes, I do.

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- Q. And so, is it your testimony here on the lines 20 to 22 that in attachment MWA-7 you actually provided rate impacts to customers?
- A. No. MWA-7 does not include estimated customer rate impacts.
- Q. Okay. So do you know whether the company did perform estimated rate impacts for the DCI in the programs that you are proposing?
- 10 A. That would be a question for 11 Mr. Ziolkowski.
- 12 Q. You don't know -- are you sponsoring the
 13 DCI rider?
- A. I am sponsoring the DCI rider, yes, from a distribution perspective.
- Q. And you don't know whether the

 customer -- or, the company proposed the estimated

 customer rate impacts that you testified to on lines

 and 22?
- A. No, I do not.
- Q. Were you here for Mr. Ziolkowski's testimony?
- A. For portions of it, yes.
- Q. Okay. Did you -- did you hear
- 25 Mr. Ziolkowski say it wasn't included in his bill

- 1 impacts that he produced?
- 2 MS. WATTS: Objection. Mr. Ziolkowski
- 3 | did not make that statement.
- 4 MS. BOJKO: I think Mr. Ziolkowski did
- 5 say that the PSR and the DSI riders were not included
- 6 in his bill impacts.
- 7 | Well, I asked this witness if he was here
- 8 and whether if he knew that.
- 9 MS. WATTS: Well, the record will speak
- 10 for itself. I don't think Mr. Arnold's recollection
- 11 of it helps anyone.
- 12 EXAMINER WALSTRA: He can answer if he
- 13 knows.
- 14 A. I don't recall.
- Q. Okay. Let's turn to -- I'm sorry, MWA-7,
- page 1 of 3. Did you produce the chart on this page,
- 17 | sir?
- 18 A. Yes, I did.
- 19 Q. So I understand the chart, the column --
- 20 the third column over titled -- I'm sorry. Before I
- 21 talk about this, it doesn't appear this chart is
- 22 | confidential; is that right?
- 23 A. This -- this chart is confidential. The
- 24 individual dollar amounts are.
- 25 EXAMINER WALSTRA: Below the years in

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Q. I'm sorry. My version I can't tell what's confidential. I apologize.

Okay. So the third column it's titled "Current Annual Budget." Do you see that?

- A. Yes, ma'am.
- Q. Okay. Is this the amount that's already included embedded in base rates currently today?
- A. This would not be embedded in base rates today. This is capital.
- Q. Okay. So is this current annual budget for what?
- A. This would be current annual budget. So you could replace "Current Annual Budget" with "2014 Capital." So these are current programs this year.
- Q. Okay. So I guess I am trying to figure out the DCI rider isn't in existence today, is it?
 - A. That's correct.
- Q. Okay. So these current this current annual budget number, it's a budget for the DCI rider if it gets approved or are you stating it's a capital improvement budget that you would do and then roll into base rates later?
- A. I believe you said that correctly. It's our current annual capital budget, so it would be

included in base rates when it goes in service at a later date.

- Q. Okay. So without a DCI rider, these amounts would be expended as demonstrated on this chart, but then would be included in base rates if they fulfilled the requirements for inclusion in a base rate case; is that right?
 - A. That's correct.

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- Q. And then, so as I understand it, the next one, two, three, four columns, 2015 capital through 2018 capital, that then those four columns are added together to get the total capital line at the end of the line; is that correct?
- A. Just so I'm clear, could I have you repeat that question?
- Q. Sure. For your total capital budget, it doesn't include the current annual budget, 2014, does it? It's merely a summation of 2015, '16, '17, '18 capital budget.
 - A. Yes, you are correct.
- Q. Okay. So for the term of the ESP -- is this on a calendar-year basis?
 - A. This is on a calendar-year basis.
- Q. So it's not exactly aligning with the term of the ESP; is that correct?

- A. That's correct. With our budget cycle being January to January, and the ESP being June to June, it does create some challenges in that regard, but this is based on the Duke capital budget, Duke Energy Ohio, that is.
- Q. And your numbers don't have -- I can't find a value associated with them. Is this in millions?
 - A. This is in millions.

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- Q. So as I understand it, all the capital items and the millions of dollars indicated for each program are incremental to base rates; is that correct?
- A. I'm sorry. I need you to repeat that question for me.
- Q. The -- I am not allowed to say the number. But the millions in the total capital budget is all incremental to what's included in base rates currently; is that correct?
- A. These would be included in our next rate base -- next rate case.
 - Q. If the DCI isn't approved.
- A. That's correct.
- Q. But your proposal is to have these items included in a DCI rider so that would be incremental

to base rates; is that correct?

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- A. I'm struggling with the word

 "incremental" because my understanding of the DCI is
 that when we would come in for a rate case, the

 DCI -- whatever is in the DCI we would put into base
 rates and it would be reset. So I am struggling when
 we say it's "incremental to base rates."
- Q. Well, you do understand there is a current base rate.
 - A. I do.
- Q. Okay. And so, this -- these numbers, these charges or expenses, would be in addition to whatever the company already receives in base rates.
 - A. That would be correct.
- Q. Okay. And the DCI is to be proposed to be collected from all customers; is that correct?
- A. Again, my familiarity with where rider DCI would impact customers, that's something that probably Mr. Ziolkowski would be better to answer.
- Q. Well, it's your understanding all customers will pay for these distribution type of programs, correct?
- A. Again, I would defer that to
 Mr. Ziolkowski.
 - Q. You don't know whether residential

- customers versus business customers versus industrial customers would pay for these?
- A. If they're a distribution customer more than likely they would, but, again, that's a question for Mr. Ziolkowski.
- Q. Okay. There's a line item called "ownership of Underground Residential Services." Do you see that?
 - A. Yes, I do.

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- Q. Okay. Is it my understanding from this that you currently do not own these residential service lines and that you are proposing to replace them and own them?
- A. Currently, we -- there is a couple of questions there. Currently, we do not own the customer residential services. The proposal is to go forward. As they fail, we would replace them. So if the customer has an outage -- I'm sorry, based on when -- let's use the effective date of the DCI, we would replace that service, capitalize it from a Duke perspective.
- Q. So you're not doing any proactive replacement like the -- are you familiar with the riser replacement on the gas side? Are you doing any proactive replacement?

A. I'm not an expert by any means on the gas side. As far as the service, there may be possibilities where we are proactive on those replacements depending on the conditions of those services. And that would be in conjunction with a couple of the other programs that are in that column.

- Q. Are you familiar with the AMRP program on the gas side?
 - A. At a very high level, yes.

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- Q. So is this kind of a comparable activity?
- A. I would not draw those parallels because I am not familiar with that entire program.
- Q. And, sir, is it -- so, is it your understanding or do you not know whether this residential underground service program is going to be collected from all customers including commercial and industrial customers?
- A. Again, I would defer that to Mr. Ziolkowski.
- Q. Do you know whether Duke has a vegetation management plan today?
 - A. Yes, I am.
- Q. And so, on the second line you have
 "Vegetation Clearing R/W Acquisition Facility
 Modification." Is this in addition to the vegetation

management plan that you have currently in place or is this something that will replace that current plan?

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- A. There's two vegetation programs today.

 There is an O&M component which is a large one, and then there's the capital one which I mention here.

 So the current annual budget as you see, and I won't get into, obviously, because of the confidential record I may have crossed the line there with that, but that's an existing program today.
- Q. I'm sorry, you paused. So the O&M vegetation management program is an existing program today?
- A. And so is the capital that's mentioned on this line.
- Q. Okay. Do you know whether the company gets line item cost recovery for the vegetation management plan?
- A. I'm sorry. I didn't hear your entire question.
- Q. Do you know whether the company receives a rider amount for the vegetation management that's collected outside of base rates as well?
 - A. I do not know that.
 - Q. Can we turn to the next page, please, of

that same attachment.

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- A. I'm there.
- Q. Okay. So this is a list, as I understand it, you took the list from the chart on the previous page and you expanded it to include a description of the program; is that correct?
 - A. That's correct.
- Q. I just want to ask you about a couple of these programs. Go down to the "DTUG-Online...Sump Pump, Oil Monitoring" program.
- A. Okay.
- Q. Is this related to gas service?
- 13 A. This is not related to gas service. This
 14 is dissolved gas analysis. So it's actually testing
 15 oil in the transformers.
- 16 O. In the transformers.
- 17 A. Correct.
- Q. Go to the next one, the "Manhole/Vault Capital Rebuild." Do you see that?
- 20 A. Yes, I do.
- Q. On page 24 of your testimony you say it's underground facilities and utilities. Is this for both utilities, electric and gas service?
- A. No. This is just for electric.
- Q. So the manholes, you don't have gas

facilities in those manholes?

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- A. No. They don't mix very well together.
- Q. And would your response be the same to the "Congested Underground Structures"?
- A. I'm sorry. Can you ask the question again?
- Q. I said would your response be the same to the "Worst Congested Underground Structures," that's merely for electric? There are no gas services under there?
- A. That's correct. Just for a point of clarification you said "under there." You mean in the actual compartment or the vault?
 - Q. Yes.
 - A. Okay.
- Q. And would your answer be the same with regard to the manhole lid retro?
- 18 A. That's correct. Those are electric only.
 - Q. And then your last item on this page it's called "Distribution Substation Protection."
- 21 A. Yes.
- Q. As I understand it, this line item would be for security cameras; is that correct?
- A. Yes. You're correct.
- Q. Now, let's turn to page 17 of your

testimony, please.

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- A. Okay. I'm there.
- Q. Isn't it true, sir, that you -- first of all, I think you told me before you are going to do these programs. They are already in the budget for 2014. You are going to do these programs regardless of whether you receive a DCI rider; is that correct?
 - A. For 2014, yes, I would agree.
- Q. Okay. And so, it's true that -- it's also true that rider DCI would not -- if it is approved, it will not prevent any outages from storms occurring; is that correct?
 - A. Can I ask you to repeat that question?
- Q. Sure. The DCI rider itself, if it is approved, that will in no way affect whether there are outages from storms; is that right?
- A. Correct. I mean, there is no way I can prevent a storm, so.
- Q. Right. And when you talk on line 11 of your testimony, still on page 17, you say replacement of obsolete and aging infrastructure. That includes communication systems and the security cameras and things of that nature; is that right?
- A. Specifically if you are referring to the last line item on that attachment, distribution

substation, it is not replacement of those cameras.

- Q. Those are new cameras.
- A. That's correct.
- Q. But there is going to be a replacement of some type of communication systems; is that accurate?
 - A. No.
- Q. No.

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- A. That is not correct.
- Q. It is your understanding that Duke is proposing to include collection for general and common plant in the DCI; is that correct?
 - A. That's correct.
- Q. And you're familiar that staff has opposed the inclusion of such general and common plant; is that correct?
 - A. I'm somewhat familiar with that. That would be more of a question for Ms. Mullins who was up here.
- Q. But that's your understanding that staff opposes the inclusion of general and common plant?
- 21 A. Yes.
- Q. And, sir, do you know when the last base rate case was?
- A. I don't recall exactly.
 - Q. Would you believe, subject to check, that

an order came out in April of 2013?

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- A. Subject to check, I would agree.
- Q. And did you -- are you aware that the company received a revenue increase of 49 million for that case?
 - A. I was not involved with that filing.
- Q. Okay. Do you know the last base rate case prior to that, 2012? It was filed in 2012; the order was issued in 2013.
 - A. I was not involved with that one either.
- Q. As you sit here today, it's your belief that Duke's current distribution system is reliable and in compliance with the Commission's rules and Ohio law; is that correct?
- A. That is correct. Our primary focus is safety, reliability, and reasonable cost for our customers.
- Q. And staff has confirmed that belief in its testimony; is that correct?
 - A. I'm sorry, can I get to you repeat that?
- Q. Sure. Staff, in its testimony, has confirmed that it believes your current system is has met the standards in Ohio law and the Commission rules?
- A. When you say "standards," specific

reliability standards?

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- Q. Yes.
- A. Yes.
- Q. And you are not sitting here today, sir, suggesting that if Duke doesn't receive the DCI rider, that Duke's service would somehow become unreliable; is that correct?
- A. I'm not able to forecast in the future. These are integrity-based programs.
- Q. But it's Duke's intent to maintain a reliable system, as you say in your testimony; is that right?
 - A. Absolutely. My job depends on it.
- Q. And so, regardless of the outcome of this case, you would continue to meet those reliability standards because your job depends on it; is that right?
- A. That's correct. So there is proactive and there's reactive. The reactive piece, we're always going to do. What we are asking is to be proactive.
 - Q. Well, maintenance is proactive, isn't it?
- A. Yes, it is.
 - Q. So you do that currently, right?
- A. Correct. Maintenance is an O&M expense

and maintaining that existing asset. What we are asking for is to start replacing some of these assets because they live beyond their reasonable life.

- Q. Well, vegetation management you do currently, and some of that is capital and some of that is O&M; isn't that true?
 - A. That's correct.

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- Q. Did you do any kind of cost/benefit analysis of the DCI rider at different levels?
- A. No, not myself. Again, that's a question for Mr. Ziolkowski.
 - Q. And did you do any kind of analysis to determine whether a rate base case versus a DCI rider, which of those types of programs or methodology for recovering costs is better for consumers?
 - A. That's a question for Mr. Wathen.
- Q. So, but I asked if you performed any kind of cost/benefit analysis.
 - A. No, I am not a rate expert.
- Q. No. A cost/benefit analysis, did you perform this?
 - A. You mentioned "rate" specific.
- Q. No. I am asking if you did any kind of cost analysis with regard to having the DCI rider in

place versus a rate base in place -- base rate case, not rates, base -- a base distribution case.

- A. That's a question for Mr. Wathen. No, I did not.
- Q. And so, it's your understanding, I believe from one of your prior responses, that if the Commission does not approve a DCI rider, you would go forward with the programs and then you could seek recovery for those programs, for those capital expenditures through a base rate case; is that your understanding?
- A. That is my understanding. Again, we're looking at proactive replacement, not reactive.
- Q. And it's also -- there's no limit or proposal to cap the increases provided in -- in your testimony, is there?
 - A. Can you clarify when you say "increases"?
- Q. Well, the capital investments, there's no cap on those of what you can pass on through the distribution rider, is there?
- A. That would actually be a decision by the staff. As far as the actual capital equipment, the in-service dates would dictate whether it would be included in the next case.
 - Q. No, no. I am talking about this current

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proposal. There is no proposal on behalf of the company to cap the level of expenditures that can flow through the DCI rider; is that right?

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- A. We're talking about the rider here again. That's Ms. Mullins' territory as far as the actual capital expenditures because there is more than what's proposed here.
- Q. No, no. I am -- you're sponsoring the DCI rider. I am asking if you put a cap on that DCI rider we will only pass through, to customers, \$5 million for 2014. Is that -- is that your proposal?
 - MS. WATTS: Objection. Asked and answered. The witness has explained that -- that's not an area of his testimony.
- EXAMINER WALSTRA: He can answer if he knows.
 - A. That's not my area of expertise as far as the rider is concerned.
 - Q. No, but for your program, do you have expenditure caps on your programs that are listed in your chart?
 - A. That's correct. That's what's proposed in my attachments.
 - Q. And they're caps that you cannot pass on

to customers any incremental amounts above those?

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- A. We are talking two different things.

 This is a budget and a forecast, and we are talking about passing on to customers. I would like to clarify which question you're asking.
- Q. Well, that's exactly what I am asking. Is the budget a cap on what you can expend and pass on to customers or is it just a budget and forecast that is likely to change?
- A. All forecasts have potential for changing.
 - Q. So it's not a cap.
- A. I just need clarification because there is a compound question here. Is the cap my spending cap or is it what's getting passed on to customers?
 - Q. Both. Is it a spending cap?
- A. I can't answer that question, I don't know.
- Q. Well, you just told me you believed it was a forecast and it was a budget, so it was likely to change because all forecasts change. So I'm understanding you to say that this is not a proposed cap on any kind of programs.
- A. This is what we propose in our forecast as part of this rate case.

Q. But it's a forecast and you expect it to change.

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- A. I didn't say "I expect the forecast to change," but the forecast can change.
- Q. You're not suggesting that the company is tied to the numbers that are in your chart with regard to spending levels, are you?
 - A. No. I would agree with that.
- Q. Okay. And as far as the second part of my question, you don't know what, if anything -- you don't know whether the charges the customer will receive is somehow limited or capped by your proposal.
- A. As far as passing on to the customers through this, again, that's a question for Mr. Ziolkowski or one of our rate folks.
- Q. Okay. But when you are sponsoring the DCI rider, it's your understanding that all costs that Duke expends will be passed on to customers.
 - A. That's correct.
- Q. And so, we're talked a little bit about base case proceedings today. It's not your understanding that Duke has committed to freeze distribution rates and not have a base rate case in the foreseeable future, is it?

2142 I haven't been involved in the previous 1 Α. 2 cases. 3 Well, it's not a previous case; it's a Q. future case. Has Duke agreed in this case, if you 4 5 get the DCI rider, to not come in for a distribution base rate case? 6 7 Α. That's not my area of expertise. I don't 8 know. 9 MS. BOJKO: I have no further questions. 10 Thank you, sir. THE WITNESS: Thank you. 11 12 EXAMINER WALSTRA: Mr. Serio. 13 MR. SERIO: Thank you, your Honor. 14 CROSS-EXAMINATION 15 16 By Mr. Serio: 17 Q. Good morning. 18 Good morning. Α. 19 First, I would like to get a little bit 2.0 of understanding of your background and your 2.1 responsibilities. You're the Director of Engineering 22 and Construction Planning, correct? That's correct. 23 Α.

What exactly does that mean?

I'm the director for Ohio and Kentucky

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for distribution, engineering, and construction planing. So my responsibility is the engineering and delivery of reliability and integrity programs for Ohio and Kentucky, as well as in my responsibility is relocations, line extensions to new customers.

- Q. So, as you indicated earlier, your job is to make sure that service on the distribution system is reliable, correct?
 - A. Correct.

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- Q. Now, if money was not an option and they said go build a system that is 100-percent reliable, for the most part can you do that?
- A. I could do that, but that would not be fair to our customers.
- Q. Okay. So there has to be a balance between what you spend and how reliable service is, correct?
 - A. Oh, I absolutely agree.
- Q. And, in fact, your testimony says that the reason you need the DCI rider is that customers are clambering for better service, so you need to spend more money to improve service, correct?
- MS. WATTS: Objection. That's not what his testimony was.
- 25 EXAMINER WALSTRA: He can clarify.

- A. I don't recall mentioning "clambering."
- Q. Are customers asking for you to improve service reliability?
 - A. I do mention that in my testimony.
- Q. So customers are asking you to improve service reliability, so you're proposing the DCI program of a couple hundred million dollars over the next three years to improve service reliability, correct?
 - A. That is one of several reasons, yes.
- Q. Okay. Now, today, Duke is able to maintain its system in a reliable manner without the DCI rider, correct?
 - A. That is correct.

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- Q. All the recovery that Duke has for any capital or O&M spending is done through base rate cases and cost recovery in those base cases, correct?
 - A. That's correct.
- Q. Now, if the Commission denies you rider DCI, the company would continue to have the option of using base rate cases to recover capital investment and O&M costs in the future for any service-reliability spending, correct?
- A. From a reactive perspective, I would agree.

- Q. Now, when you talk about "reactive" versus "proactive," am I correct that reactive is done to maintain, and proactive is done to improve?
 - A. I would not agree with that.
- Q. So, today, under the base rate model, does the company do anything to improve service reliability?
 - A. Yes, we do.

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- Q. Okay. So under the base rate model, you also do proactive spending on capital and O&M spending, correct?
 - A. Can I ask you to repeat that question?
- Q. Sure. Today, using base rate cases to recover your costs, the company does proactive spending to maintain and improve service reliability, correct?
- A. I would agree with "maintain." I don't necessarily know if I would agree with "improve."
- Q. So, today, the company does not spend money to improve service reliability; is that your testimony?
- A. I believe that we do it to maintain.

 Now, when you say "improve," for those individual customers, I would agree that their reliability is improving. As far as our standards, I would not

Duke Energy Ohio Volume VIII 2146 agree that that would move the needle as far as when 1 2 you blend that across our reliability standards. 3 You've talked about reliability Ο. standards. You're familiar with CAIDI, SAIFI, and 4 SAIDI? 5 Yes, sir. 6 Α. 7 Q. Can you explain what CAIDI is? 8 I believe I explain it in pretty much Α. 9 detail in my testimony. 10 Q. Pages 7 and 8, right? 11 Α. That is correct. 12 MR. SERIO: May I approach, your Honor? 13 EXAMINER WALSTRA: You may. 14 MR. SERIO: I would like to mark, for 15 purposes of identification, OCC Exhibit 33, a 16 one-page document entitled OCC Interrogatory 07-148. 17 EXAMINER WALSTRA: So marked. 18 (EXHIBIT MARKED FOR IDENTIFICATION.) 19 Do you have that in your hand, 0. 2.0 Mr. Arnold? 2.1 Α. Yes, I do. 22 And you are the Mr. Arnold that's Q. 23 indicated as the person responsible, correct?

> Q. So you're familiar with this document,

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Α.

Yes, sir.

correct?

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- A. I am.
- Q. And this document shows the CAIDI, SAIDI, and SAIFI standards from 2005 to 2013, correct?
 - A. Yes, sir.
- Q. And there's two different sides there.

 One says "Excluding MEDs (storms)," the other says

 "Including MEDs (storms)." Can you tell me what

 "MEDs" are?
 - A. Those are major event days.
- Q. Okay. And what does it mean to include or exclude major events days?
 - A. That would be included in the formulas for CAIDI, SAIFI, and SAIDI.
 - Q. And am I correct that if you exclude MEDs then your performance should look better than if you include them? Meaning fewer outages.
 - A. I would agree as far as predictability.
 - Q. Well, on a historic basis, if you exclude major storms, wouldn't it be safe to assume that your -- should have fewer outages and that the outages should have been shorter than if you include the impact from those storms?
- A. When we say "outages" it can be a result of several things, including auto damages, other

things that I can't control as well.

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- Q. I understand. But we're just -- the only heading you put on this was major -- MEDs, and that's storms, correct?
 - A. That's correct.
- Q. So, generally speaking, if you exclude storms, would I expect -- everything else is going to stay the same, correct? Outages from auto accidents and things like that?
- A. As far as the MEDs, I'm fairly certain it just includes storm. I can't say when we say "major event days" that it wouldn't include anything other than storms.
 - Q. Okay.
- A. But since it specifically says here "storms," I would agree with your statement.
- Q. All right. Let's look at CAIDI first.

 If the CAIDI number -- what does the CAIDI number indicate?
 - A. As in my direct testimony on page 7, I can read it or --
 - Q. Just give me your -- you don't have to read it exact. What you understand it to be.
- A. That's the customer average interruption duration index.

2149 So that means how long a customer 1 0. 2 experiences an outage, correct? 3 I would agree with that. Α. 4 Ο. And from an individual customer standpoint, the shorter an outage the better, 5 6 correct? 7 I would agree. Α. 8 Ο. Okay. Now, SAIFI measures what? 9 Α. Frequency. So the SAIFI is how often a customer 10 Q. experiences an outage, correct? 11 12 Α. Correct. 13 0. So from a SAIFI perspective, the customer 14 wants a smaller number, correct? 15 Α. I would agree. 16 And then SAIDI represents what? Q. 17 That's the system average. Α. 18 Okay. And the difference between SAIDI 0. and SAIFI is that SAIFI is individual customers and 19 2.0 SAIDI is an average of all customers, correct? 2.1 I would not agree with that. 22 I'm sorry. CAIDI is individual customers Q. 23 where SAIDI is the system average. 24 Α. I would agree with that.

So SAIDI, like CAIDI, the smaller the

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Q.

number, the better, correct?

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- A. I don't know if I necessarily agree with the lower the number the better. I think it's important that you understand how CAIDI is calculated, because you could actually have less frequencies which would make your CAIDI number go up.
- Q. And, in fact, that's what -- that's the company's claim is what occurs as you reduce SAIFI, you are going to get an increase in SAIDI, correct?
 - A. It can be one of several results of that.
- Q. But am I correct that the company believes that there is a correlation between SAIDI and SAIFI -- SAIFI and CAIDI?
- A. I'm struggling with the word "correlation."
- Q. Okay. Let me try it a different way. If you reduce how often you have those short interruptions, the interruptions that are left, by definition, are going to be the longer ones, correct?
- A. As far as correlating, I think you need to correlate SAIFI and SAIDI in order to get CAIDI.
- Q. Okay. Let me ask this way: Of the three standards, which are the two that the Commission has in its rules that the company has to comply with?
 - A. It is CAIDI and SAIFI.

- Q. Okay. CAIDI and SAIFI, that's the two first columns after the year, correct?
 - A. Yes.

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- Q. Now, SAIFI is how often they occur and CAIDI is how long they occur. So if, in a year, I eliminate a lot of the short-duration outages, I'm going to improve the frequency, correct, because there is going to be fewer outages?
 - A. When you say "short duration"?
 - Q. Momentary, a few seconds.
- A. Momentaries aren't included in those calculations.
 - Q. What's the shortest outage that's included?
 - A. Five minutes.
 - Q. Okay. You eliminate the five-minute outages, as a result, the ones that are left are going to have a longer duration, correct? That's math.
 - A. I would agree with that.
 - Q. In fact, that's the company's argument whenever there is a reliability case is that if you're improving SAIFI, to some measure the CAIDI is going to go -- get -- the number is going to be larger because you're eliminating the easy fixes as

far as frequency goes.

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- A. As far as -- as far as your statement there, I think if you look at exactly what's reported here, you can see our SAIFI has dropped, but our CAIDI has increased.
- Q. Okay. Now, the SAIFI has dropped from 1.49 to less than 1 since 2005, and the company has been able to do that by being reactive and collecting their capital and O&M costs under base rate distribution cases, correct?
- A. There's quite a few other things that go along with that.
- Q. But all your spending for O&M and capital improvements during this period from 2005 to '13, has been in base rate cases, correct? You haven't had the DCI rider, correct?
 - A. That's correct.
- Q. So money that you've spent to improve the system to bring these numbers down, you've been able to do this by using base rate cases, correct?
- MS. WATTS: Mr. Serio, are you separating
 out SmartGRID from --
- MR. SERIO: Well, your Honor, if the witness wants to do that, he can without counsel testifying on his behalf.

EXAMINER WALSTRA: Overruled.

- A. Can I have you repeat your question?
- Q. Looking at the document that you provided to OCC in discovery, the SAIFI number that's decreased, the cost recovery for that you've been able to do as a result of base rate cases, correct?
- A. No, because we do -- we had a SmartGRID filing as well.
 - Q. When was your SmartGRID filing?
- A. I was not involved with the SmartGRID filing specifically. So, as far as dates, et cetera, I'm not familiar with those.
 - Q. Do you know if it was back in 2005?
 - A. Subject to check.
 - Q. You do or don't know? I am asking you.
- 16 A. I do not know.

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- Q. So how do you know that there's been any recovery for SmartGRID outside of base rate cases?
- A. I am somewhat familiar with there were certain reliability standards that had to be met as part of the SmartGRID approval by staff.
- Q. Is all of the service reliability improvements that are reported on this as a result of the SmartGRID program?
 - A. I would say no because you mentioned the

word "all."

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- Q. Can you tell me if any reliability improvements are a direct result of just the SmartGRID program?
 - A. No, I cannot.
- Q. Have you done any analysis that shows that SmartGRID improved reliability by X and other programs improved reliability by Y?
- A. I mentioned earlier, I wasn't involved with the SmartGRID filing.
- Q. There is nothing in your testimony that would break out SmartGRID versus non-SmartGRID service reliability improvements, correct?
 - A. That's correct.
- Q. Is there anything in the application or in the testimony of any other Duke witness in this case that shows the improvements in service reliability in the past from SmartGRID versus none SmartGRID?
- A. I don't know.
- Q. Now, we've -- I think you indicated with
 Ms. Bojko that the company system today is safe and
 reliable, correct?
 - A. Yes.
- Q. And the company has an obligation to

maintain a safe and reliable system, correct?

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- A. At a reasonable cost, yes.
- Q. If there's no DCI rider and it required you to spend \$100 million next year to maintain a safe and reliable system, would the company spend it?
 - A. Can you repeat that?
- Q. Sure. If there is no DCI rider next year and you need \$100 million to maintain service reliability, will you get authorization to spend \$100 million to maintain customer service reliability?
- A. I'm struggling with the dollar amount, the "\$100 million." We will maintain reasonable service for our customers at a reasonable cost.
- Q. You'll maintain a safe and reliable system, correct?
 - A. That's correct.
- Q. And if it takes X dollars to do it, the company will spend those dollars to maintain the system, correct?
- A. That's correct. But I can't predict future outages and the request of this DCI is an integrity-based program.
 - Q. Can you predict what's going to happen to the system whether you have the DCI or not?

- A. The purpose of the DCI is the assets who have that are beyond a reasonable life that are fully depreciated be updated, as I mentioned several times in my testimony and in attachments, so it's a proactive replacement.
- Q. Does the company replace aged equipment today that is completely depreciated that has a risk of failure?
- A. When you say "risk of failure," if it fails, absolutely.
- Q. Okay. So if a piece of equipment fails, you replace it today, correct?
 - A. If it fails, yes.

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- Q. And if you have a piece of equipment that you are fairly certain is going to fail today, do you ever replace that before it fails?
- A. Yes, I would. Not from a programmatic perspective, though.
 - Q. So "programmatic" means you are going to do it on a more wide-scale basis.
 - A. That's correct. So we've identified and I mentioned several times in my testimony, different specific assets that we see programmatic issues with.
 - Q. Now, to the extent that you're calling the DCI program more preventive, has the company

indicated with any certainty that that would result in an improvement in service reliability as a result of implementing the DCI program?

- A. Absolutely for those customers.
- Q. So customers will absolutely see a service reliability improvement.

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- A. For that individual customer, preventing a future outage, yes.
- Q. Will that improvement be something that can be quantified and measured?
 - A. For that individual customer, yes.
- Q. And how would that be measured? Would it be in the CAIDI or SAIFI?
 - A. It could be either.
 - Q. Has the company proposed any guaranteed service reliability improvements to CAIDI or SAIFI as a result of the DCI program?
 - A. From a reporting perspective, as far as our standards, no.
 - Q. And, in fact, hasn't the company indicated that any improvement reliability is just an incidental impact and it's not something that can be measured?
- A. That's correct. We believe some of these programs may have a direct impact on our reliability

standards but, again, we are preventing a future outage, a possible future outage based on data, so it's -- it's hard to predict the future outages, it's like preventing a storm.

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- Q. So customers say to you "We want you to improve service reliability." You want to implement the DCI that's going to spend hundreds of millions of dollars to improve it; yet, you're not telling the customer with certainty that they are going to see an improvement in service reliability, correct?
- A. I think, to get specific, we would probably need to look at individual programs, because I would disagree with your statement.
- Q. Does CAIDI or SAIFI measure the individual programs?
 - A. From a program level, no.
- Q. And the only service reliability indices that the Commission uses are done on an overall basis, not on an individual-item basis, correct?
 - A. But it means a lot to those customers.
- Q. I understand that. What happens to individual customers is measured within CAIDI and SAIFI, correct?
 - A. It can be pulled from that, yes.
 - Q. All customers in the distribution system

are going to be asked to pay for CAIDI -- for the DCI 1 2 rider, correct?

Again, that's a question for Α. Mr. Ziolkowski or Mr. Wathen.

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- Accepting, subject to check, that all distribution customers are going to pay it, are all distribution customers going to see a service reliability improvement?
- We have 700,000 customers. I can't tell you, one by one, which ones will and which ones won't.
- So customers who are going to be asked to pay the DCI rider, may, in fact, see no service reliability improvement, correct?
- Α. Just like today. If we have a transformer go out and it affects my house, you may not see the improvement on your end.
- But today we're not paying the DCI rider, 0. correct?
 - Α. That would be in base rates today.
- 0. Now, on page 8 of your testimony -- I'm sorry. On page 2, on line 10, of your testimony you indicate that the DCI rider is necessary to continue to provide "safe, reliable, and reasonably priced 25 service, " correct?

A. Yes.

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- Q. But you've indicated, even without it, the company could continue to provide safe, reliable, and reasonably-priced service, right?
 - A. Reactive, yes.
- Q. Do you have the word "reactive" anywhere in your answer to question to the question beginning on line 6 and in your answer through line 18? Does it say "reactive" anywhere in there?
- A. It does not specific to "reactive," but it does say "enhance and improve."
- Q. So your testimony is that the DCI will enhance and improve service reliability.
 - A. Of those individual customers, yes.
- Q. On page 8 of your testimony, line 6 through 10, you list some factors there. You have customer expectations, planning criteria, requirements mandated by either regulatory authorities or reliability councils, or government-mandated projects. Do you see that?
 - A. I do.
 - Q. Those are four separate items, correct?
- A. They are four separate, but they can be intertwined.
 - Q. I would like to go through those

individually so I can understand what they mean.

A. Okay.

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- Q. Okay. Customer expectations is what?
- A. Specific to this question, these are factors that the company must consider in providing safe, reliable, and reasonably-priced electric service. So customer expectations is exactly that.
- Q. Okay. And customer expectations are determined how?
- A. There's several -- there is surveys that we do for the staff of the PUCO. There's J.D. Power that we initiate on our own, as well as the individual customers.
- Q. Is there anything attached to your testimony or anywhere in the application or anywhere in any other Duke witness's testimony in this proceeding that quantifies any reactions that you get from individual customers with regard to service reliability?
- A. There's several. Again, these are surveys, so it doesn't get down to individual customers but individual customers have to partake in those surveys.
- Q. Other than the surveys, is there anything in your testimony, the application, or other company

testimony that would show what individual customers have said about service reliability and their desires to see improvements?

- A. No. That was the purpose of including the surveys.
- Q. Okay. So from customer expectations, everything that the company has in this case is built into the three surveys, correct, the PUCO surveys, the J.D. Power, and the quarterly surveys?
 - A. Subject to check.

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- Q. Now, what's Duke's planning criteria?
- A. Duke's planning criteria, and similar to the question, Ms. Bojko asked our planning criteria is looking at the loading on those individual circuits. So some of our circuits have a couple hundred to a couple thousand customers. So it's looking at the individual loading on those individual circuits, potential future upgrades, et cetera.
- Q. And what is the requirements mandated by regulatory authorities or reliability councils?

 Let's break it into two parts.
 - A. Okay.
- Q. Who are the regulatory authorities or reliability councils?
- A. You break it into two parts, but it's

very similar. The regulatory authorities is where we are today.

- Q. So the PUCO would be the regulatory authority.
 - A. Yes, sir.

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- Q. And that would be the PUCO service reliability under SAIFI and CAIDI.
 - A. Correct.
- Q. Okay. So the requirements from the PUCO. Is there any reliability council other than the PUCO?
- A. Reliability councils, so our company is part of several different reliability councils, and NEETRAC, and I mention them throughout my testimony and I believe some of the discovery questions. So trying to keep up with our customer expectations, we take information from those reliability councils to identify potential risk on our system. So not only would that include the staff of the Commission, but it could also be some of the trade groups that we are part of.
- Q. And the trade groups would be all other utilities like yourself, correct?
 - A. I wouldn't limit that to just utilities.
- Q. Who else would be included other than utilities?

- A. There is several partners from a education perspective that do studies for us, testing cable, et cetera.
- Q. And then what's government-mandated projects?

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- A. Government-mandated projects, those specifically that I mention here, when we talk about safe, reliable, and reasonably-priced service, those could be road projects where we need to relocate our facilities. We take that into account for providing safe, reliable, and reasonable service to our customers.
- Q. Okay. Page 9 of your testimony, you indicate, on lines 7 through 9, that the "biggest challenge relating to aging infrastructure, obsolescence of equipment, and the need to regularly review," those are the biggest challenges, correct, age of the -- age of the equipment and the fact that it's obsolete.
- A. Those are the largest. They are not all of them, but they are the largest ones for us.
- Q. Does -- is Duke in any way able to quantify what service reliability problems they have that are directly related to aging infrastructure?
 - A. I do that throughout my testimony and in

1 the attachments.

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- Q. Is there any item that shows directly what outages are caused as a result of aging infrastructure today?
- A. Can I ask you to repeat that question for me?
 - Q. Sure. Is there anything in your testimony that says that these many outages were caused as a direct result of aging infrastructure?
 - A. From an outage follow-up perspective, yes.
 - Q. Does Duke have a formal process that you can determine if an outage was caused as a result of aging infrastructure?
 - A. Yes.
- 16 0. You do.
- MR. SERIO: Can I approach, your Honor?
- 18 EXAMINER WALSTRA: You may.
- MR. SERIO: I would like to mark this as OCC Exhibit 34.
- 21 EXAMINER WALSTRA: So marked.
- 22 (EXHIBIT MARKED FOR IDENTIFICATION.)
- MR. SERIO: You know what, your Honor, I
 don't have sufficient copies. I am going to show
- 25 this to the witness, and if we can get it cleared up

I won't need it to be marked as an exhibit. I am handing the witness OCC Interrogatory 203 from this proceeding, and I will indicate that there's a yellow highlight I added that was not part of the original Duke response.

- Q. Could you take a look at that request, sir.
 - A. Yes.

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- Q. And that request asked if there was a formal process to determine if Duke could determine if an outage is a result of aging infrastructure, correct?
- A. Other than what you have highlighted, there is a lot of additional information.
- Q. I understand. But does Duke have a formal process according to the response?
- A. I would like to read the whole response, because I think just the highlighted response does not do justice to the answer.
 - Q. Go ahead.
- A. "There exists no formal process to determine if the cause of the outage was a result of an aging distribution system. Aging distribution system refers to unique older equipment where similar replacement units are no longer manufactured or in

However, after an outage occurs, and it is determined that a replacement unit is needed, Company crews contact the Company's inventory management team.

Currently, Duke Energy Ohio has units that are in service for which, due to their size or configuration there are no direct replacements." And then I go into specific example here.

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- Q. Okay. So is Duke able to, right now, in a formal manner, able to keep track of how many -- of how many outages are caused as a result of aging distribution?
- MS. WATTS: And, your Honor, I would like to object just only to the extent Mr. Serio keeps using a term "formal," and I am not sure we are clear on what is intended by that characterization.
- Q. Do you have a process where you can -EXAMINER WALSTRA: Hold on. I think,

 first of all, I think that should be marked as an
 exhibit. I realize you don't have copies, if you can
 get them to us later.

MR. SERIO: Yes.

EXAMINER WALSTRA: The witness will probably still need a copy.

Q. Is there anything in your testimony where

you've quantified the outages that were caused as a result of aging infrastructure?

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- A. As far as the aging infrastructure and the individual outages, I did not specify, but I do specify the equipment.
- Q. So you can't tell me how many outages occurred as a result of aging infrastructure on the Duke system in 2013?
- A. If you want a formal report -- when you say "formal," I am looking at it as a reporting mechanism, there is not a reporting mechanism, a formal reporting mechanism.
- Q. Is there any numbers anywhere in your testimony or the application that says in 2013, this many outages result -- occurred as a result of aging infrastructure failure?
- A. I'm hesitating when you say "formal," because I am looking at a report that tells me here's all the specific equipment. For the individual equipment, yes. But it's not in my testimony.
 - Q. Is it in the application?
- A. There was a specific discovery request that we opened up for folks to come visit and go through those individual programs, because there are multiple files and we have multiple datasets on that.

Is there anything in your testimony or 1 0. 2 the application where you list how many outages 3 occurred as a result of aging infrastructure? Α. Specifically, no. 4 5 0. Now, does the company track the accuracy of how many outages occurred, after the fact, as a 6 7 result of aging infrastructure? 8 Α. Again --9 MS. WATTS: Objection as to the form of 10 the question. Q. Let me rephrase it. 11 12 Do you know what DOMS is? 13 Α. Yes. 14 Can you explain that? Q. 15 Α. Distribution outage management system, 16 that is our reporting information system. 17 And that's a predictive tool, correct, Q. 18 that predicts what might happen in the future? 19 Α. No, it does not. 2.0 Well, is it considered a predictive tool? Q. 2.1 It's considered a predictive tool from 22 determining where the outage occurred from a line

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Q. Do you ever go back and track how accurate DOMS is as far as its predictability?

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- A. When we respond to every outage, we do.
- Q. Do you compile the data that shows how accurate it is?
- A. I'm not a DOMS expert. I've got a high level view of the system.
- Q. Is there anything in your testimony or the application that tracks the accuracy of the DOMS data as far as how accurate it is as a predictive tool?
- A. In my application -- my testimony, no.

 Again, I want to specify that the predictive tool is
 the location of the outage and the nearest device;
 it's not tied with our asset system. It is merely
 the switch or device the customer is tied to.
- Q. You can go back, after the fact, to determine if DOMS accurately predicted that, correct?
- A. We could, but there's no reporting process for that.
- Q. Does the company compile the data even if you don't report it? Do you compile the data internally to determine how accurate DOMS is after the fact?
- A. Again, I'm not a DOMS expert.

Q. As far as you know there's nothing in your testimony or the application that shows that you go back after the fact and do any of that analysis?

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- A. DOMS is our outage management tool. It is not our asset tool.
- Q. Now, you talk about obsolete equipment also. Do you have any process of determining if an outage is a result of obsolete equipment?
- A. I don't have the response that we just discussed, the discovery question, but that uses a specific example, yes.
- Q. Do you -- is there anything in your testimony or the application that lists how many service outages were the result of obsolete equipment?
 - A. As far as specific numbers, no.
- Q. There's no numbers anywhere that say generally this many outages occurred as a result of obsolete equipment anywhere in your testimony or the application, correct?
 - A. I would agree with that.
- Q. Now, on page -- page 9, line 15, you indicate "the majority of outages experienced by customers are due, at least in part, to the aging of the distribution system." When you say "majority,"

what do you mean by that?

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- A. Specific lines, did you mention those?
- O. Line 15.
- A. I would like to read the whole sentence to you.
 - O. Sure.
- A. "Indeed the majority of the outages experienced by customers are due, at least in part, to the aging of the distribution system."
 - Q. Okay.
- A. It doesn't say "only." Just "aging of the distribution system."
 - Q. First, I am asking what does the word "majority" mean?
 - A. "Majority," typically if we have a failure on the system, whether it be a piece of equipment, a specific device, the aging infrastructure, typically if it's overloaded, that would be the majority of the outages. And outage is not going to occur unless something fails.
 - Q. If there's 100 outages, how many would occur, for every 100 outages how many would occur as -- in part, due to the aging infrastructure?
 - A. I can't predict that.
 - Q. On a historic basis, generally speaking,

for every 100 outages, how many -- your majority, resulted because of the aging distribution system?

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- A. "Majority" is a pretty subjective term.

 I can't give you a number.
- Q. So there's nothing in your testimony that provides a number that says this many resulted as a result of aging infrastructure.
- A. No, but I did want to clarify a point.

 We're talking the DCI rider. The request is for integrity. So it's replacing equipment. It is not replacing all equipment because all equipment failed.
- Q. Now, on page 9 of your testimony, line 16 through 21, you talk about equipment that's over 30 years old. And I believe you indicated with Ms. Bojko, even if it's 30 to 50 years old, you have maintained it in a manner that's still safe and reliable, correct?
- A. I would agree with that statement currently.
- Q. Now, you also indicate there are portions of the underground network in downtown Cincinnati, that equipment dates back to the 1920s. Is your testimony that Duke has maintained and replaced and repaired that equipment as necessary since the 1920s?
 - A. Can I ask you to repeat the last part of

that question?

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- Q. Sure. The equipment there, you're talking about stuff that was initially put in place in the 1920s, correct?
 - A. Correct.
- Q. And has Duke, over the years, spent money to maintain, repair, and replace as necessary?
 - A. From an O&M perspective, yes.
- Q. From a capital perspective, has the company replaced any of the equipment they put into effect in the 1920s in downtown Cincinnati?
 - A. I would hope so.
- Q. So anything that's still in place from the 1920s still works, and it works because the company spent the money to maintain it over the years, correct?
 - A. Yes.
- Q. Do you know in minutes or frequency how many outages by year are caused as a result of aging infrastructure? Do you keep track of that?
 - A. Can I have you repeat that question?
- Q. Sure. With regards to either the duration or frequency of outages, do you track the minutes or the number of outages that are related to aging infrastructure?

- A. Formally, no.
- Q. On page 10 of your testimony, lines 4 and 5, at the top of the page, you talk about a problem with replacement parts becoming more difficult to find, correct?
 - A. Yes.

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- Q. Now, is there anything in your testimony that indicates how many parts are obsolete or old and you can't find replacements for them?
- A. I believe we reference some examples, but we don't give a specific listing of all of them.

 Similar to where you're referencing in my testimony, this was a specific example.
- Q. Is there any system -- is there any parts that have gone bad in Duke's system over the last couple of years that you couldn't find a replacement part for?
- A. No, because we're going to continue with safety, reliability, and reasonable costs for our customers.
- Q. So to the extent you are concerned about replacement parts becoming more difficult to find, that's something that might occur in the future; it's never occurred in the past.
 - A. How I would answer that question is

whether it's a direct fit or not, it could be an additional cost where we may pay a premium for that specific piece of equipment.

- Q. Do you have any kind of quantification of the premium that you've spent, by year, in making these parts fit the older parts that are obsolete?
 - A. Specifically, no.

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- Q. So there's no quantification of the additional dollars you spent.
- A. We would have some examples of individual units like I mentioned here, but as far as a formal reporting, no.
- Q. Is there any number in your testimony or the application that would give me a dollar amount that was spent in doing that additional work?
 - A. I don't recall.
- Q. New, on page 10 of your testimony, you indicate that "customers today are more sensitive to power quality than they have been in the past." Is that your testimony?
 - A. Yes, it is.
- Q. So you're saying that -- strike that.

 Would you accept, subject to check, I

 think you did, the company had an electric

 distribution rate case with an order issued in 2012?

A. Subject to check.

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- Q. And would you -- is it your testimony that customers are more sensitive to power quality today than they were in 2012?
 - A. I think it increases year to year, yes.
- Q. And do you have any kind of quantification of how customers are more sensitive to power quality today than they were in 2012?
 - A. No, I do not.
- Q. There's nothing attached to your testimony or the application that would show that, correct?
 - A. From 2012 to current?
 - Q. Yes.
 - A. No.
- Q. Now, on page 10, you also indicate at the bottom of the page, customers expect restoration to be made more quickly, and when you say "more quickly," more quickly than what?
- A. Most customers I've talked to, you can never get the power turned back on soon enough.
- Q. Is there any analysis that would show what customer expectations were with regard to service restoration in 2012 versus today?
 - A. We have some of that data in some of the

2178 attached surveys, but I can't say I have, subject to 1 2 check, that it would compare 2012 with today. I 3 believe the surveys were either 2013 or 2014 as far as restoration times. 4 5 MR. SERIO: Your Honor, I'm going to get 6 into the surveys. If you wanted to take a break, this would be a good place. It's up to you. 7 8 EXAMINER WALSTRA: Yeah, we can take a 9 10-minute break. 10 (Recess taken.) 11 EXAMINER WALSTRA: We'll go back on the 12 record. 13 Go ahead, Mr. Serio. 14 MR. SERIO: Thank you, your Honor. (By Mr. Serio) Mr. Arnold, on page 11 of 15 0. 16 your testimony line 16 through 20, if you would look 17 at that, I think that's where you talk about the 18 different surveys that the company does? 19 Α. Yes. 2.0 And am I correct that the first one is Ο. 2.1 the J.D. Power annual study, correct? 22 Α. Yes. 23 And that's attached to your testimony,

Yes, it is.

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correct? In fact, isn't that attachment MWA-2?

- Q. Okay. Then you talk about Duke Energy also conducts its own surveys of residential and various business customers, correct? Are those -- is that second survey attached to your testimony?
- A. The one that's specifically referenced there, no, it is not.
- Q. Okay. And then the third survey is the quarterly surveys that you reference on line 21, correct?
- 10 A. That's correct.

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- 11 Q. And that would be the one that you do for the PUCO, correct?
- 13 A. That's correct.
- Q. And that's attached to your testimony as MWA-5, correct?
- 16 A. Subject to check, I'll agree.
- Q. Well, if you could turn to MWA-5, I think

 MWA-5 is the Quarter 1-14 Update?
- 19 A. Just for confirmation, MWA-5?
- 20 Q. Yes.
- 21 A. Okay. I'm there.
- Q. As part of your preparation for this
 proceeding, did you read the testimony of OCC Witness
 Williams?
- A. I don't recall.

MR. SERIO: Can I approach, your Honor?

EXAMINER WALSTRA: You may.

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MR. SERIO: To make this easy, attached to Mr. Williams' testimony is a copy of the same update but it's for 2013. Do you need copies of Mr. Williams' testimony? I have them if you need them.

EXAMINER WALSTRA: No.

 $$\operatorname{MR.}$ SERIO: I am going to give him a copy of Mr. Williams' testimony.

Q. I am handing you a copy of the prepared testimony of James Williams that will be entered into the record as an exhibit later in the proceedings, but I will go ahead and mark it now so there is no confusion. I would like to reserve No. 35.

EXAMINER WALSTRA: So marked.

MR. SERIO: Mr. Williams' testimony.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. If you could turn to the attachment of Mr. Williams' testimony, and specifically it's attachment JDW-15.
 - A. Okay. I'm there.
- Q. That's the same quarterly survey as is attached to your testimony, only this one is for 2013 and yours is for 2014, correct? I'm sorry. Yeah,

2013 and 2014.

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- A. I would agree his is 2013, yes.
- Q. So you are familiar with the 2013 reliability survey, correct?
 - A. No, I am not.
 - Q. You're only familiar with the 2014 reliability survey?
 - A. Yes, the one that was included in my direct testimony.
 - Q. To the best of your knowledge, the quarterly surveys that the company does, is there anything different in 2014 versus 2013?
- A. Since I haven't read the 2013, I can't answer your question.
 - Q. Okay. Well, then, my questions are going to apply to both, and I think if you look at Mr. Williams' attachment, and if you look at yours, and you look at the first page of both documents, those both show "Completed Survey Counts," correct?

MS. WATTS: Your Honor, I am going to object, unless Mr. Serio is willing to give the witness some time to look at the document he has just been presented with before he is going to be asked questions about it.

EXAMINER WALSTRA: I think he is going

through it page by page, so.

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MR. SERIO: I was going to go through the pages and walk him through it to show that they're similar, but he can take all the time he wants. I will accommodate the witness.

EXAMINER WALSTRA: Overruled. If the witness needs more time, just let us know.

- Q. If you look at the first page of both documents, am I correct that the only difference in the data is that it's looking at different quarters? With Mr. Williams' is for Quarters 2-12 through Q1-13, and yours is Q1-13 through Q1-14?
- A. I wouldn't agree they are different, because they are actually -- his is looking at Q1-13 and mine is looking at Q1-13 as well.
- Q. Okay. It's the same type of data, just for different time periods.
 - A. I would agree with that.
- Q. Okay. Now, am I correct that this survey does both residential regulated and residential nonregulated, correct?
 - A. Subject to check, I would agree.
- Q. Okay. I am going to focus on the residential regulated, and I think in both of them every other page is regulated and then nonregulated,

correct?

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- A. I would agree.
- Q. Okay. So if we look at page 2, this asks
 "How many brief interruptions of 5 minutes or less
 have you experienced at your home in the past 12
 months," for both documents, correct?
- A. I'm struggling with his because his pages aren't marked, so I want to be sure I'm on the same page.
- Q. I am looking for the question for both, and the question is brief interruptions of 5 minutes or less for regulated customers.
 - A. Okay. I think I'm there.
- Q. Okay. Would you agree with me that both surveys, the majority of the customers have experienced three or fewer outages of 5 minutes or less in the last 12 months?
 - A. Can I ask you to repeat your question?
- Q. Sure. Would you agree with me for both surveys, the majority of customers have experienced three or fewer outages of 5 minutes or less over the 12-month period covered by each of the surveys?
- A. I think where I'm struggling is the surveys aren't comparable. They have got a different Y axis.

- Q. So let me point to you. If I look at the top of each document where it says "Regulated Customers," it lists the different quarters and then this is one that says, "YE" and then a number, either "12" or "13." That would be year ended, correct?
 - A. Yes, sir.

- Q. So let's focus on the year ended data. And for the 2013 -
- A. I can't follow you. It's black and white.
- Q. It's the fourth bar over. Comparable to yours.
 - A. I would request color to be fair, sir.

 MR. SERIO: Can I approach, your Honor?

 EXAMINER WALSTRA: You may.
 - MR. SERIO: I have a copy of the 2013

 Quarter 1 update that's attached to Mr. Williams'

 testimony that's colored, but I only have one other

 one.
- Q. The document I just handed you is
 identical to what is Mr. Williams' testimony except
 it's in color, correct?
 - A. Yes. Thank you.
- Q. All right. So if we are looking at year end '12 data from the 2013 document, that would be

the fourth bar over or the red bar, correct?

- A. Just for clarification year end 2012?
- Q. I am in the Q1-13 update.
- A. And you mentioned year end 2012 which is red.
- Q. Yes, yes. The red bar or the fourth bar over from the left, correct?
 - A. I would agree, yes.
 - Q. And then if you look at the Q1-14 update that's attached to your testimony, the year end '13 is also the fourth bar over, correct? I'm sorry. The fifth bar over.
 - A. I would agree.

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- Q. And that's the yellow bar. So if you add up the numbers --
- A. What color bar did you mention?
- 17 Q. The yellow bar in your exhibit.
- A. Mine is more of a salmon color, but yellow.
- Q. Salmon, yellow. It's the fifth bar over, correct?
- 22 A. I agree.
- Q. So if you were to add up that fifth bar over, for 0, 1, 2, and 3, for either -- for your document, and then the fourth bar for 0, 1, 2, and 3,

that would be the majority of customers, correct?

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- A. Right now we are only looking at the 2013 survey.
- Q. Start with 2013 survey. Fourth line over. I'll walk you through it. For zero interruptions, it's 20 percent, correct?

MS. WATTS: Objection. Mr. Serio, are you asking if this is the majority of Duke Energy Ohio customers or the majority of the responding customers?

MR. SERIO: The majority of the respondents to the survey.

MS. WATTS: Thank you.

- A. Can I have you repeat the question?
- Q. Sure. If you look at the fourth -- the fourth bar over, the red bar, in the attachment to Mr. Williams' testimony, the 2013 update, zero is 20 percent, correct?
- A. If it's the fourth one over, and I am looking at regulated customers, which would be on page 3, it's about 24 percent.
- Q. 24 percent, okay. And then 1 would be about what, 8 percent?
- A. Subject to check, I would agree.
 - Q. Okay. And then approximately another

17 percent for 2?

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- A. Subject to check, I agree.
- Q. And then approximately, what, 13 percent for 3?
 - A. I agree.
 - Q. So if you add those up, that's a majority of customers, correct, that were surveyed?
 - A. Explain when you say "majority".
 - Q. You use the word "majority" in your testimony. Do you recall?
 - A. That's correct.
 - Q. Applying that same standard here, would you agree that the majority of the customers surveyed indicated that less than that 0 to 3 interruptions of 5 minutes or less is what they've actually experienced during the last 12 months?
 - A. Without having a calculator, I would agree it's greater than 50 percent.
 - Q. Okay. And if I did the same exercise for the 2014 update that's attached to your testimony, with 0, 1, 2, and 3 outages looking at the year end '13, which would be the fifth column over from the left, would you agree that a similar exercise would show that that's a similar majority?
 - A. I would agree with the statement that the

majority, yes, but I wouldn't agree that they are similar.

- O. It's a different number.
- A. 0, 1, 2, and 3 are different.
- Q. Right. It's a different number, but it's still a majority.
 - A. I would agree.

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Q. Okay. Now, if we look at page 4 which is both for regulated customers on both documents, and this time the question is "How many brief interruptions of 5 minutes or less would you consider acceptable during a 12-month period?" Do you see that for both documents?

EXAMINER PIRIK: Mr. Serio, are you referring to page 5?

the fourth page back in Mr. Williams' attachment.

Unfortunately, those didn't come labeled, and I did

not realize until after testimony was filed that they

were not numbered.

MR. SERIO: In MWA-5, it's page 5.

EXAMINER PIRIK: Actually, if you label the first page of Mr. Williams', which is the cover page, as 1.

MR. SERIO: It would be the same fifth page.

EXAMINER PIRIK: Then it's the same numbered pages. So you need to label the pages and they would help the witness if he had a labeled set.

THE WITNESS: The one that you reference as 5 is actually 4 in his.

MR. SERIO: When I did mine, I didn't count the front page. So if you add a number to it, and I will do it with my questions from here on in.

- Q. So if you look at page 5 of your attachment and page 5 of Mr. Williams' attachment, they both ask the same question of regulated customers, correct?
 - A. I would agree.

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- Q. Now, if you did the same exercise of adding the percentages for 0, 1, 2, and 3, for year ending '12 and year ending '13, would you agree with me that for both the majority of customers would consider 3 or fewer interruptions of 5 minutes or less acceptable during a 12-month period?
- A. I would agree that the majority of customers. Again, they are not similar.
 - Q. Right. We can do the math ourselves.
- A. If you go beyond 3, they are significantly different.
 - Q. Now, if I -- if you want -- I don't want

to go through every one of these, so I would ask you, if you look at pages 7, 8, 9, 10, would you agree, as you flip through the documents, that they are the same in both documents just different years and different results, but they are asking the same questions?

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- A. 7, 8, 9, and 10, is that my numbers or his numbers?
- Q. If you use -- if you go to your page 6.

 EXAMINER PIRIK: Here is the problem,

 Mr. Serio. In the copy I have of Mr. Williams'

 testimony there are no page numbers. It appears as if the witness has a copy that has page numbers on it.

MR. SERIO: If you look at your No. 6 and Mr. Williams' No. 7.

isn't going to be clear because the only record we have is what we have before us. His document needs to match our document for the record. You can't keep saying "his number this" and "that number that" because the document we have on the record that's given to the court reporters doesn't have numbers on it.

MR. SERIO: Can I approach, your Honor?

I will correct the numbers on his copy. When Mr. Williams' testimony is provided to the court reporter, we will make sure there are numbers.

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EXAMINER PIRIK: What's the last number?

MR. SERIO: 36, I believe, is the last page.

EXAMINER PIRIK: That's good.

- Q. (By Mr. Serio) Okay. If you look through the two documents and go page by page, would you agree with me that it's the same questions as asked to customers both in the 2013 and 2014 documents?
- A. Are you asking me to go page by page and make sure they're the same?
- Q. You can go through as many of the pages as you need to, I believe that they are, and you can do as many spot checks as you want.
- A. Well, since this is the first time I saw it, I would like to go page by page. It's the first time I've seen it.
 - Q. Go ahead.
- A. Since this is the first time I have seen this survey today, and I am, by no means, a survey expert. I would agree that the questions are similar. However, the responses, if you look at the one that Mr. Williams submitted, since we're talking

about year end survey results, there are two
footnotes on page 2 that say "Use caution when
interpreting results; low sample sizes." And on the
survey that I was referencing, there's just one
footnote from Q1 of '13. So I'm hesitant on
comparing the two surveys.

- Q. How long have you had your position, sir?
- A. I have been in this position since July of 2012.
- Q. And the data in Mr. Williams' survey goes back to 2012, correct? Second quarter of 2012?
 - A. Yes, sir.

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- Q. That's when you had your current position, correct?
- 15 A. Q2 of 2012, no, I did not.
- Q. When, in 2012, did you take your position, sir?
- A. I believe the record has July of 2012 is what I mentioned.
- Q. Okay. So the third quarter of 2012 of
 Mr. Williams' document would be the time period
 covering your current position, correct?
- A. Can I ask you to restate that please?

 I'm sorry.
- Q. The third quarter of 2012 would include

the time period when you had your current position, correct?

- A. That is correct.
- Q. Now, prior to providing testimony in this proceeding, had you ever seen the PUCO survey results for the Q1-14 updates that's attached to your testimony?
 - A. I believe you said prior to --
- 9 Q. Prior to providing testimony in this 10 case.
- 11 A. No, I did not.
- Q. So when did you first see the PUCO reliability survey results?
- A. As part of preparing my direct testimony.
- Q. Would that be true also for the J.D.
- 16 Power results?

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- A. No. I had seen those previously.
- 18 Q. How come you've never seen the PUCO

 19 reliability results prior to providing your testimony
 20 in this proceeding?
- 21 A. Can I ask you to repeat the question?
- Q. Sure. MWA-5, you indicated that prior to preparing testimony, you'd never seen these residential survey results, correct?
- A. This level of detail, no, I did not.

- Q. And I am asking you why you had never seen this level of detail prior to preparing for your testimony.
 - A. I don't know.

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- Q. Yet, your testimony says that customers want greater service reliability; yet, prior to putting your testimony together, you never looked at the residential survey that the Commission requires the company to do.
 - A. It was not part of my job, no, sir.
- Q. Do you know if anybody else whose testifying in this case has familiarity with the PUCO reliability survey?
 - A. I don't know.
- Q. But it was attached to your testimony.

 That means you're the sponsor, correct?
- A. That's correct. I'm familiar with the one that's attached to my testimony.
 - Q. But you're also responsible for the third quarter 2012, going forward, correct?
 - MS. WATTS: Objection. That one wasn't attached to Mr. Arnold's testimony.
 - Q. But that covers the period of your current position, correct?
- A. Yes, it does.

- Q. So why didn't you go back and look at the prior survey that would cover the period coinciding with your taking your current position?
 - A. I don't know.
- Q. Do you know which survey was the most current at the time that the company's most current reliability standards were put in place?
 - A. No. I don't know.
- Q. Now, if you would look at page 17 of 36 --
- A. Which one?

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- Q. Of both documents.
 - A. Okay. I'm there.
 - Q. Okay. In looking at your document and comparing the two, the question is the same, "During a specified period of system stress, such as a hot summer day, what is the maximum amount that you would be willing to pay and have included in your electric bill in order to avoid a one-hour electric service outage to your residence?" Do you see that?
 - A. I do.
 - Q. And it's the same question in both surveys, correct?
 - A. The question is the same, I would agree.
- Q. Now, the question that asks "in your

electric bill, " do you know if that's monthly or annual?

- A. I'm not a survey expert so I don't know.
- Q. But it's attached to your testimony. Do you understand what the attachment to your testimony refers to?
 - A. I do.

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- Q. And does it refer to monthly or annual bills?
- A. I don't recall exactly, but I do believe it is monthly.
 - Q. Okay. So to the extent that it indicates a dollar amount there, that would be the customers are willing to pay that dollar amount to avoid a one-hour interruption, correct?
 - A. That is my understanding, yes.
 - Q. So the largest dollar amount is more than five, and that was with no cap, correct? On both surveys?
 - A. When you say larger than five, you mean more than five?
 - Q. Yes. So if I took the 0 through \$5 maximum, would you agree with me that it's almost 90 percent for all categories of both surveys that say that customers will be willing to pay \$5 or less

per month in order to avoid a one-hour electric service outage, correct?

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- A. Is this all quarters and year end or any specific timeframe?
- Q. Generally -- I think there might be one or two instances where's it's slightly over the 10 percent, but the more than \$5 category is generally 10 or less, correct?
- A. "10 or less," do you mean 10 percent or less?
 - Q. 10 percent or less.
- A. Subject to check, I would agree.

 However, in the one from 2013, it does have Q4 2012,
 the survey did not have enough respondents. So I
 don't -- I don't know if we can draw comparisons
 between the two surveys because of that data point.

 However, the other months, I would agree.
- Q. Now, when the company determined that customers have higher service reliability, did the company consider how much customers are willing to pay per month in order to avoid service interruptions as is indicated in these two surveys?
- A. That was one of many factors, yes. The other reason it was included in this survey was looking at reliability, as well, and outage.

Q. Right. But in determining if customers are willing to pay more money for better service quality, doesn't the question, such as the one posed on page 17, give you a direct response of what customers think as far as how much they are willing to pay in regard to service reliability?

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- A. Of the ones surveyed, I would agree.
- Q. Well, when you do a survey, you do it based on accepted scientific survey methods, right? Or do you just pick the first 200 people you walk across?
- A. I don't know the details of how the survey is conducted.
 - Q. So you have no idea how any of the surveys attached to your testimony are conducted.
 - A. I didn't say that.
 - Q. Can you tell me how the survey, the PUCO reliability survey that's MWA-5 to your testimony, how it was conducted?
 - A. That's a pretty general question.
 - Q. How do you pick the people that you ask the questions?
 - A. I don't know.
- Q. Do you know how J.D. Power picks the people that they ask for the survey that's attached

to your testimony, I think it's MWA-2?

- A. No, I do not. It's one of many components of my testimony.
- Q. Right. But you're supposed to understand all the components to your testimony, correct?

 You're the one testifying to them.
- A. That is correct. But I would not agree that I have to know the details behind how the survey is actually conducted.
- Q. So is it possible that the survey results were determined by picking the first 100 people that someone came across on the street?
- MS. WATTS: Objection. The witness has already answered that he doesn't know how the survey respondents were selected.
- MR. SERIO: Your Honor, it's attached to his testimony. He is -- he is the only witness testifying about it. If he doesn't have some understanding of the survey results --
- EXAMINER WALSTRA: He can answer if he knows.
 - A. Our surveys are conducted in accordance with the requirements of this Commission.
- Q. And would you assume that the requirements from the Commission are that the survey

should somehow be reflective of the customer base in whole?

- A. I don't know the specific details.
- Q. I am not asking you specific details.

 Generally speaking, would you assume that the PUCO requires you to have your surveys be done on a basis so that the results reflect customers as a whole?
 - A. Of the respondents of the survey?
 - O. Yes.

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- A. Yes.
- 11 Q. Now, do you know how many customers were surveyed in the Duke quarterly surveys?
 - A. Which survey?
 - Q. MWA-5, residential customers.
 - A. Yes, I know how many surveys were completed.
 - Q. Okay. So if I took the completed survey number and added them all the way across, that would be how many customers responded for all the quarters, correct? Looking at page 2 of 36 on either survey.
- A. And you are looking on specifically page 2 of 36?
- 23 O. Yes.
- A. When you say "all the away across," are you talking about adding each quarter up?

Q. Yes.

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- A. If I add all the quarters up for Q1 through Q4, it gives me the year end '14.
- Q. And that would be the total number of customers that responded for each of the quarters that's listed in either of the surveys, correct?
- A. Number of respondents, I would agree, completed surveys.
- Q. All right. Let's take that aside and let's look at MWA-2. Now, MWA-2 is the J.D. Power study that you referenced on page 11, line 16 of your testimony, correct?
 - A. You said page 11, line 16?
- 14 Q. Yes.
- 15 A. Those specific lines speak to the J.D.

 16 Power annual electric utility residential or business

 17 customer surveys.
 - Q. Okay.
 - A. That was in my testimony. As I stated at the beginning, this has been corrected. This is actually a Duke Energy summary of those studies.
 - Q. Is the complete J.D. Power study attached to your testimony?
- A. The complete survey?
- 25 Q. Yes.

A. No, it is not.

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- Q. Okay. But if I look at MWA-2, page 3 of
 - A. Okay. I'm there.
 - Q. The factors that are listed there would apply to the actual J.D. Power's study, correct?

 Customer service, power reliability, billing and payment, corporate citizenship, price and communication.
 - A. I would say subject to check.
- 11 Q. Now, those are the six factors that J.D.
 12 Power asks customers about, correct?
 - A. Since I did not use the entire J.D. Power for -- J.D. Power study for my testimony, at this point I would say, subject to check, I would agree.
 - Q. Okay. If we look at those six factors, which of those factors apply to the DCI rider when it comes to customers' opinions about the DCI rider? Would you agree the power quality and reliability applies?
- 21 A. Yes.
- Q. Does billing and payment apply?
- 23 A. Yes.
- Q. Can you explain how billing and payment applies to the DCI rider?

- A. They would receive the DCI rider on the bill.
 - Q. Does billing and payment have anything to do with service reliability?
 - A. Yes, it does.

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- Q. How does billing and payment impact the customer's service reliability?
- A. Depending on -- and I mentioned this a couple of times about reasonable cost, and I don't believe this Commission would approve anything that would be unreasonable, so billing and payment would be part of this.
- Q. How does billing and payment differ from price?
 - A. Price is a component of payment.
- Q. So you're saying that billing and payment and price are both included in how much a customer pays?
 - A. Can I ask you to repeat that?
 - Q. Yeah. So you're saying that both price and billing and payment are factors that J.D. Power asked customers about that are included as far as the -- how much customers pay in the DCI?
- MS. WATTS: Objection as to the form.
- MR. SERIO: I'll rephrase it, your Honor.

EXAMINER WALSTRA: Thank you.

- Q. What's the distinction between price and billing and payment?
- A. Price would be a component of the billing and payment.
- Q. Price is how much you actually pay for the service, correct?
 - A. That is correct.

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Q. Would you agree that billing and payment would be the form of how you get charged, getting a bill in the mail and actually putting a stamp on it and sending it back?

MS. WATTS: Your Honor, I am going to object to Mr. Serio's questions here, because these are elements in the survey where customers were questioned about their satisfaction with those individual elements. Mr. Serio's questions seem to suggest they relate to one another in the survey and they don't necessarily do that. They are individual elements of satisfaction.

MR. SERIO: And, your Honor, I am trying to determine which individual factors of satisfaction would apply to the DCI question of whether customers are asking for greater service reliability and whether they are willing to pay for it.

EXAMINER WALSTRA: Overruled.

- A. Can I ask you to repeat the question?
- Q. Would you agree that billing and payment has more to do with getting a bill in the mail and how you pay it, versus the price having to do with the cost of the service itself?
- A. It's not exactly my area of expertise, but my personal opinion would be no.

MR. SERIO: Your Honor, unless there is a J.D. Power expert to take the stand, I would move to strike the J.D. Power study completely because he can't answer questions about what's the components in the study, and the company's relying on a study to justify a program that I can't get answers to.

EXAMINER WALSTRA: Ms. Watts.

MS. WATTS: Your Honor, the witness has just spent probably close to an hour answering questions about this study. The study was provided to support a couple of specific statements in his testimony and he does have knowledge of the contents of the study and it's not necessary for him to know exactly how it was performed in order for him to rely upon it. The study was conducted in the course of the normal company's business operations.

Mr. Arnold is justified in relying on his

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colleagues in conducting a reasonable study in that process. And I think that it's a perfectly reasonable exhibit to accompany the other parts of his testimony.

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MR. SERIO: Your Honor, the majority of the time was spent on the quarterly surveys and he was able to answer those questions. We just got to the J.D. Power study and he cannot answer questions about what the different components mean. If I can't get answers to the components, then I'm at a real disadvantage as far as arguing whether customers do or don't want greater service reliability based on this study.

And the company has based its determination entirely on the J.D. Power study and has not considered the quarterly reliability study. So if he can't answer those questions and they don't have a witness that can, then it has no part in the record. It can't be authenticated and it should be stricken.

21 EXAMINER WALSTRA: I am going to overrule 22 it.

- Q. Mr. Arnold, what does "Communications,"
 14 percent mean?
 - A. You are on page 3.

2207 1 Q. Page 3? 2 Α. That's communications from the company. 3 And what does the 14 percent mean? Q. Α. I did not focus on the communication part 4 5 of the survey. Ο. Do you know what "customer service" 6 7 means? 8 Yes, I do. Α. 9 And what does it mean? Ο. Customer service is how we treat our 10 Α. 11 customers. 12 Q. Do you know what the 10 percent means? 13 As the survey say, it's the factor model 14 weights. That's how the survey is conducted. these are the weights. 15 16 What does the "weight" mean? Ο. 17 Α. Percentage. 18 I understand it's a percentage. What 0. 19 does that percentage mean? 2.0 Α. How much the questions are weighted in 2.1 the calculation. 22 So in determining how satisfied a Ο. 23 customer is with service, with your service overall,

10 percent has to do with customer service?

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- Q. The customer service, 10 percent, the total represents what customers think about the company, correct?
- A. In addition to communication, I would agree.
- Q. All six factors, together, are what customers think about the company, correct?
 - A. Perception, yes, I would agree.
- Q. So when customer service is 10 percent, what does that 10 percent mean?
- 11 A. As I mentioned, it's the weight. It's 12 the average.
 - Q. I understand it's a weight or an average. What does that mean in general terms? If I'm going to explain to the Commission what that 10 percent means, what does it mean to them?
 - A. I am not the expert on how the survey was conducted.
 - Q. So you have no idea how this survey was conducted at all?
 - A. No, I do not.

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- Q. All right. Let's look at page 4 of 14.

 This is "Large Utility Results" and then it says

 "Duke Energy Brands," correct?
- A. That's correct.

- Q. What does "Large Utility Results" mean?
- A. Large utility results, that's large utility companies.

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- Q. What constitutes a large utility company?
- A. Again, that's getting into the details behind the scenes, and I'm not aware of.
- Q. So you don't know what size factor limits a utility from being large versus one that's not considered large?
 - A. From a J.D. Power perspective, no.
- Q. Do you know if the Duke Energy brand was considered large?
- A. The Duke Energy brand as far as the affiliates, yes.
 - Q. What does Duke Energy brand incorporate there?
 - A. I'm sorry. Can I ask you to repeat that?
 - Q. What does Duke Energy brand mean?
 - A. My opinion, what Duke Energy brand means is there's four in the right there, it's Duke Energy Carolinas, Duke Energy Midwest, Duke Energy Progress, and Duke Energy Florida.
 - Q. You know for a fact that "Duke Energy Brands" stands for the four combined?
 - A. I would not say I know that for a fact.

- Q. You don't know that for a fact, so you're just guessing.
- A. That's my opinion. That's what I mentioned.
 - Q. And what's your opinion based on?
- A. Based on what I know about the surveys and how they are conducted.
- Q. Two questions ago, you indicated you didn't know how this survey was conducted, correct?
- A. As far as the details, I have my opinions on how the survey is conducted, but I don't have the exact details. This is an excerpt of the study.
 - Q. There's --

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MS. WATTS: Your Honor, I am going to object again. Mr. Arnold indicated that information was demonstrated on the exhibit itself.

MR. SERIO: Your Honor, I am entitled to ask him questions about something attached to his testimony to determine how much or how little he knows about it.

- Q. If I look at page 4 of 14, there are a number of graphic numbers on that chart, correct?
 - A. That's correct.

Q. Do you know what those mean?

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A. Those are actually, and it's mentioned in my survey -- I'm sorry, in my direct testimony.

Sorry, my copy of my testimony is marked out there.

So, for example, Duke Energy Midwest is in red. I'm not sure if the copy you have is in color or not. The "666" actually represents that —the top line indicates on a national average, overall satisfaction is flat and slightly declining.

Q. Okay. There's an axis that goes 6 to 700. What do those numbers mean?

EXAMINER WALSTRA: What page are you on?

MR. SERIO: I am on page 4 of 14.

- Q. On the far left-hand side there is a vertical line, the bottom of the line is a 600, the top of the line is a 700. What do those mean?
- A. Subject to check, I believe those are index points.
 - Q. And what does a 600 index point mean?
- A. That's the overall customer satisfaction index.
- Q. Okay. What's the worst number you could get on the customer satisfaction result?
- A. Based on this and, again, I don't prepare these surveys, I'm not the expert, but it looks like

1 600 would be the floor, and it may go lower than that.

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- Q. And do you know what the top score would be?
- A. Based on this survey, it looks like the way this graph is depicted, 604.
- Q. Okay. And can you show me what number here is Duke Energy of Ohio?
- A. Duke Energy Ohio is not broken out independently. It's Duke Energy Midwest and it's in red.
- Q. So to the extent that you're asking Duke Energy of Ohio customers to pay the DCI, we don't know, from the J.D. Power study, what Duke Energy of Ohio customers think about their service reliability, do we?
- A. The way the survey was structured, it's based on the midwest.
- Q. Are customers in the midwest going to pay the DCI or only customers of Duke Energy Ohio?
 - A. Customers in Ohio.
- Q. So this says that based on results for the midwest, you're asking Ohio customers to pay greater costs because customers in the midwest are asking for better service quality, correct?

1 MS. WATTS: Objection as to the 2 characterization of what the company's application 3 asks for. 4 Does the company application ask Ohio 5 customers to pay the DCI? Can I ask you to ask that question again? 6 7 Q. Does the company's application ask Ohio 8 customers to pay the DCI rider? 9 Yes, it does. Α. 10 Q. Does it ask midwest customers to pay the DCI rider? 11 12 Α. No, it does not. 13 0. So you're asking the Commission to 14 approve a rider for Ohio customers based on a survey 15 result that does not break out Ohio customers, 16 correct? 17 This survey specifically does not break 18

- out Ohio customers. However, if you look at Attachment 4, it does break this survey down.
- Q. Okay. We will get to Exhibit 4. Can you turn to page 5 of 14 of MWA-2. Is Duke Energy Ohio broken out on this page?
 - Α. No, it is not.

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24 If I look at Attachment MWA-2, page 6 of 25 14, is Duke Ohio listed on that page?

A. No, it is not.

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- Q. If I look at page 7 of 14, is Duke Energy
 Ohio listed on this page?
 - A. No, it is not.
 - Q. If I look at page 8 of 14, is Duke Energy Ohio listed on this page?
 - A. No, it is not.
 - Q. If I look at page -- page 9 doesn't have anything. If I look at page 10 of 14, is this broken out for Duke Energy of Ohio?
 - A. No, it is not.
- 12 Q. If I look at page 11 --
- MS. WATTS: Objection, your Honor. The document states that it represents midwest. I don't think we need to go page by page to establish that.
- EXAMINER WALSTRA: I think you have made your point, Mr. Serio.
- MR. SERIO: Okay.
- Q. Let's look at MWA-3. Is MWA-3 broken out in any parts for Duke Energy of Ohio?
 - A. No, it is not.
- Q. So let's go to MWA-4. If I look at

 MWA-4, page 4 of 20, does it break Duke Energy of
- Ohio out on that page?
- 25 A. MWA-4, 4 of 20?

- 2215 1 Q. Yes. 2 Α. It does. 3 And which line is Duke Energy of Ohio? Q. 4 I'm sorry. I stand corrected. It's Ohio 5 and Kentucky. Is Duke asking Kentucky customers to pay 6 7 the Ohio DCI rider? 8 No, it is not, but I'll mention the purpose of these surveys was to show customer 9 perceptions of --10 MR. SERIO: Your Honor, I object. 11 12 didn't ask him the purpose. I asked him a specific 13 question. 14 Q. If you could turn to page 6 of 20. MS. WATTS: Your Honor, I would like to 15 16 request that the witness be allowed to finish his 17 answer. 18 EXAMINER WALSTRA: Overruled. You will have a chance for redirect. 19 2.0 Was there a pending question? I'm sorry. Α.
 - 0. I am ready to move to the next question.
 - If I look at page 6 of 20, does this page indicate Duke Energy of Ohio customers broken out in any way?
- 25 Α. This one has Ohio and Kentucky.

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Q. Would you agree with me that every page in MWA-4 combines Ohio and Kentucky? And you can look through them individually.

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- A. That's what the headings say.
- Q. So there is no page in MWA-4 that breaks out just Ohio customers, correct?
 - A. Subject to check, I would agree.
- Q. Yet, MWA-5 which is the PUCO reliability study, that's only asked of Duke Energy Ohio customers, correct?
 - A. For the purposes of this, yes.
- Q. Now, on page 11 of your testimony, on line 13, you indicate Duke continuously evaluates customer satisfaction. Would you agree with me that the quarterly surveys that you do, as a result of the PUCO requirements, give you continuous customer evaluations as to your service reliability?
 - A. Not as a sole source, no.
- Q. Do you do any other surveys on a quarterly basis?
- A. We meet with customers daily, so we are doing customer surveys on a daily basis.
 - Q. Are any results of your daily customer contacts included in your testimony?
- A. I don't recall.

Q. Can you point to any page of your testimony? And I'll wait for you to go through your testimony if you need to, sir.

- A. Can I ask you to repeat the question?
- Q. Sure. Is there anywhere in your written testimony that you can point to where there's any kind of analysis showing what you meeting with customers on a daily basis says about service quality?
 - A. I don't believe so.

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- Q. Would you agree with me there is nothing in the application or the testimony of any other Duke witness that indicates the results of customer -- daily customer contacts with regard to service quality?
 - A. I don't recall.
- Q. Now, on page 14 of your testimony, you reference attachment MWA-5 and -6, and you indicate those are excerpts from the most recent PUCO-required residential and nonresidential surveys, correct?
 - A. That's correct.
- Q. And it says here that "the Company does not use those surveys for planning purposes...." Can you tell me why the company does not use the surveys of its own customers for planning purposes?

A. I believe we had a discovery question along those same lines. There's a complete sentence in my testimony: "While, the Company does not use these surveys for planning purposes, they are useful as tools to indicate what our customers expect in terms of power quality and service."

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- Q. What's the difference between planning purposes and customer expectations in terms of power quality and service?
- A. The planning that I mentioned in my testimony is in regards to distribution planning, so feeder upgrades, et cetera.
- Q. And wouldn't planning for upgrades, et cetera, impact power quality and service reliability?
 - A. I would agree it could potentially.
- Q. So the company does not use its own customer surveys for planning purposes even though they are a useful tool to determine what customers think about power quality and service quality?

MS. WATTS: Objection as to the term "its own surveys." Which specific surveys are you referring to, Mr. Serio, in that question?

MR. SERIO: I am referring to the quarterly surveys that the company does that's referenced in MWA-5 and -6.

2219 MS. WATTS: I further object then. 1 Ι 2 think the witness just answered that question anyway. 3 EXAMINER WALSTRA: Overruled. We don't use those surveys solely as 4 5 determination. Yet, the company is relying on surveys as 6 a justification for the DCI rider and the need for 7 8 service liability improvements, correct? 9 MS. WATTS: Again, I would object as to 10 Mr. Serio's representation about what the company is relying upon. 11 12 EXAMINER WALSTRA: Overruled. 13 Α. There's several factors in addition to 14 the surveys. 15 Q. Can you point to where, in your testimony 16 you are looking at factors other than customer 17 surveys or their feelings with regard to service 18 reliability? 19 MS. WATTS: And I object to the use of 2.0 the word "feelings" here as well. 2.1 MR. SERIO: I'm sorry. I didn't hear 22 that. MS. WATTS: I believe Mr. Arnold has 23 24 established he has a great deal of experience and it 25 amounts to a lot more than just his feelings about

reliability.

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EXAMINER WALSTRA: Overruled.

- Q. Your experience since July of 2012.
- A. Can I ask you to repeat the question for $\ensuremath{\text{me}}\xspace$
- Q. Sure. Can you point to where in your testimony you're indicating that something other than the customer surveys are the basis for asking for the DCI rider?
- A. I talk about obsolescent equipment and that's actually on page 9, line 11. I talk about customer expectations. Although I think we disagree, I talk about J.D. Power surveys. Those are a few.
- Q. Are you familiar with Revised Code section 4928?
- 16 A. Tam not.
 - Q. The company is asking for a rider in this case, correct?
- 19 A. That's correct.
 - Q. Do you know under what provision of the law the company is asking for the rider?
 - A. I do not.
 - Q. Is it your understanding that in order to get the rider, the company has to make a showing that there is an agreement between the company's

expectations for service reliability and customers' expectations regarding service reliability?

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- A. That would be a question for Mr. Wathen. I do not.
- Q. You do not. But you are the witness on the DCI rider, correct?
 - A. I am here to support the DCI rider, yes.
 - Q. So you don't know if there's a requirement in the statute that the company's expectations and customers' expectations should be aligned?
 - A. I'm not an attorney to know.
- Q. Now, what's the difference between the quarterly surveys, MWA-5 and -6, being a useful tool and also being something you rely on for planning purposes? What's the distinction?
- A. Are you referencing a section in my testimony?
- Q. Page 14, lines 7 through 14 where we were previously.
 - A. Specific lines?
- 22 Q. The lines -- lines 7 through 15, your 23 answer there.
- A. The last statement, lines 13 through 15,
 25 I can read if you would like.

Q. Your reference on sentence 11 through 13, I am asking you what the difference is between it being a useful tool and being something that you rely on?

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- A. I'm struggling with how the question is worded, useful tool and something I rely on. This mentions right here that "customer tolerances for service interruptions...."
- Q. Line 11 through line 13. The company does not use the surveys for planning purposes, but they are a useful tool. What's the difference between using them for planning purposes and them being a useful tool?
- A. It gives us a picture of, specifically, in the surveys, the outage time and what customers are willing to pay in addition to not have an outage.
- Q. So you agree me that the quarterly surveys give you an idea of what the customers are willing to pay, correct?
 - A. Among other things.
- Q. Okay. Can you look at page 15 of your testimony, line 23. You reference Revised Code 4928.143(B)(2)(a). Do you know what Revised Code section 4928.143(B)(2)(a) is or what it requires?
 - A. I know what's in my direct testimony, but

I don't know anything beyond that.

- Q. Did you put it in your testimony?
- A. I did, sir.

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- Q. You put it in your testimony; yet, you don't know what it means.
- A. I know the Ohio Revised Code and the distribution of structure plans and associated recovery mechanisms, et cetera.
- Q. Do you know if that section of the code requires the company's expectations and customers' expectations regarding service quality to be in alignment?
- A. As I mentioned previously, I don't know the details of the code.
- MR. SERIO: Your Honor, I would move to strike the reference to section 4928.143(B)(2)(a) from the testimony since he has no idea what it means.

EXAMINER WALSTRA: Ms. Watts.

MS. WATTS: Well, your Honor, if
Mr. Serio would give Mr. Arnold a moment to look at
the reference. It specifically states that he
understands that the alignment has to be made. It
doesn't necessary -- beyond that, Mr. Arnold is not a
lawyer and he isn't here to parse sections of the

1 Revised Code.

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MR. SERIO: Your Honor, generally, when someone references the code, even if they are not a lawyer, they have got at least a layman's understanding of what they put in their testimony. He does not know what that section means even as a layman or even as counsel has advised other than the objection. So I can't ask him any questions about something he can't answer, so it shouldn't be in his testimony. I move it be stricken.

MS. WATTS: Mr. Serio, the layman's understanding is laid out right there in the testimony.

EXAMINER WALSTRA: We are going to overrule it, but we will give it the proper weight that it deserves.

MR. SERIO: May I approach, your Honor?

EXAMINER WALSTRA: You may.

MR. SERIO: I don't need it as an exhibit because the Revised Code is the Revised Code.

MS. WATTS: I don't need to look at it. Thanks, Joe.

Q. I am handing you a copy of the Ohio Revised Code section 4928.143(B)(2)(b). Could you look at that paragraph, sir.

EXAMINER WALSTRA: Sir, his testimony references (B)(2)(a).

- Q. I'm sorry, (B)(2)(a). I gave you the wrong thing.
- MS. WATTS: Mr. Serio, do you have the Administrative Code as well?
 - Q. Have you looked at that copy of the Revised Code?
 - A. Yes, I have.

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- Q. Now, that section of the Revised Code requires that the company's interests and the customers' interests regarding service reliability be in alignment?
 - A. I would agree with that.
- Q. And to the extent that they are required to be in alignment, is that why the company does customer surveys to determine what customers think about service reliability?
- A. For the survey respondents, I would agree.
- Q. And I believe you indicated previously that the customer quarterly surveys are the only surveys that you do of Duke Energy Ohio customers with regard to their expectations of service quality and price, correct?

- A. Can I ask you to repeat the question?
- Q. Sure. And you would agree with me that the quarterly survey results, MWA-4 and -5, are the only surveys in this proceeding of Duke Energy Ohio customers with regard to their views of service reliability and the price they are willing to pay for service?
- A. The other surveys include Duke Energy
 Ohio customers. It's just diluted amongst the
 midwest and Kentucky customers.
- Q. And we don't know how many Ohio customers and how many non-Ohio customers are included in the other surveys, correct?
 - A. I don't know.
- Q. So we don't know how diluted they are, correct?
- 17 A. I'm not the survey expert.
 - Q. Yet, the quarterly surveys are
 100 percent Duke Energy Ohio customers, correct?
 - A. Subject to check, I would agree.
 - Q. On page 14, at the bottom of the page, beginning on line 16, you talk about nonresidential customer surveys. Do you see that?
 - A. I do.

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Q. Did Duke consider the nonresidential

customer surveys when it was determining whether customers would be willing to pay for the DCI rider?

A. No, we did not.

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- Q. Now, on page 15 of your testimony, top of the page, line 5, you reference "Similar surveys were performed for residential customers." Which surveys are you referring to when you say "Similar surveys were performed for residential customers"?
- A. This whole section goes back to 14, line 3. These are Commission reliability surveys.
- Q. So it's your testimony that the Commission reliability studies, MWA-4 and -5, indicate that customers have increasing expectations of reliability and power quality, correct?
 - A. Can I ask you to repeat that?
- Q. Sure. So MWA-4 and -5 are the basis for your testimony that Duke Energy Ohio residential customers have increasing expectations of reliability and power quality, correct?
 - A. That's correct.
- Q. On page 15 of your testimony, lines 11 and 12, you indicate "...the majority of Duke Energy Ohio's customers appear to be satisfied with the Company's reliability and power quality..., " correct?
 - A. I would agree with your statement, but

there is room for improvement.

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- Q. Now, which surveys are you referring to when you say that the majority of customers appear to be satisfied with the company's reliability and power quality?
- A. The general statement here is what do these surveys indicate. So it's not specific to just the Ohio surveys. And this is actually the -- this would be Attachment 4.
 - Q. MWA-4?
- A. Yes, sir.
- 12 Q. MWA-4 is one of the PUCO quarterly surveys; is that correct?
- A. Sorry, I grabbed the wrong survey. So

 MWA-3. So this is one of the excerpts from J.D.

 Power.
 - Q. Okay. So the Commission surveys say that customers want increased expectations of reliability, but the J.D. Power survey says that they are satisfied.
- 21 A. Can I ask you to repeat that?
- Q. Okay. I'll do it this way. Page 15, lines 5 through 7, those refer to MWA-4 and -5, correct?
- A. That's correct.

- Q. And page 15, lines 11 and 12, that refers to MWA-3 or MWA-4 and -5?
 - A. That refers to MWA-3.
 - Q. Okay. Thank you.

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Now, at the top of page 16 of your testimony, you indicate rider DCI is "designed to balance the needs of the Company to maintain its financial stability with its commitment to customers. When you talk about maintaining the company's financial stability, what are you referring to?

- A. Financial stability is maintaining day-to-day operations and also seeking recovery mechanisms appropriately.
- Q. Does the company have financial stability today to the best of your knowledge?
 - A. I would agree with that statement.
- Q. Did the company have financial stability yesterday to the best of your knowledge?
 - A. I would agree.
 - Q. And that occurred without a DCI rider, correct?
- 22 A. I would agree.
- Q. Now, on line 7 of page 16, you indicate the company's implementing new initiatives, correct?
- A. That's correct.

- Q. But those include a lot of ongoing maintenance capital, correct?
 - A. That's correct.

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- Q. So to the extent that you consider it ongoing, that means you're just adding to a program that you have in place right now, correct?
 - A. That's correct.
- Q. On page 17 of your testimony, line 11, you talk about replacing obsolete and aging infrastructure?
 - A. I see that.
- Q. That's something that you do today, correct?
 - A. That's correct. As it fails.
- Q. Now, on pages 18 and 19 of your testimony, beginning on line 18 of page 18, you list each of the various programs, correct?
 - A. That's correct.
 - Q. Okay. Now, beginning with the "Transformer Retrofit Program," is that a new program or is that a program that's enhancing an existing program?
- A. That is an existing program that we're requesting incremental to -- it is an existing program that we are requesting additional funding

for.

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- Q. And the retrofit program would involve the company replacing transformers, correct?
 - A. No, it does not.
- Q. What would this involve, the retrofit program?
- A. The transformer retrofit program, as stated on my testimony on 19 and 20, goes into great detail, but it is actually adding cutouts ahead of CSP transformers, which are completely self-protected transformers, to potentially mitigate future outages.
- Q. As a result of implementing the retrofit program, will the company be able to reduce its operating and maintenance costs?
 - A. Eventually, once it's completed, yes.
- Q. Does the company have any plan to pass those savings, O&M cost savings to customers other than waiting until there is a rate case?
 - A. It would be in our next rate case.
- Q. So that means if the company was able to reduce its O&M costs as a result of the transformer retrofit program by, let's say, a million dollars, the company would get to keep that million dollars until the next rate case, correct?
 - A. I want to draw your attention, there's 19

programs.

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- Q. Yes.
- A. Some of these programs have a significant amount of O&M expenditures along the way.
- Q. We are going to go through these one at a time.
- A. But one program would have direct impact on the other.
- Q. Okay. So my question to you was if the company was able to save a million dollars in O&M costs, the company would get to keep those costs until its next rate case, correct?

MS. WATTS: Objection. Mr. Serio, did your question assume that it is as balanced as Mr. Arnold testified with other programs? You are assuming it's a million dollars net?

MR. SERIO: My question said if the company saved a million dollars from the transformer retrofit program in O&M costs, would the company get to keep that million dollars until its next rate case?

A. And that's more of a financial question probably for Peggy Laub. But my understanding, this is my opinion, is that would be at the next rate -- rate case.

- Q. So the company would get to retain it until then, correct?
- A. As I mentioned, Ms. Laub would be the expert on that.
- Q. Has the company done any analysis to determine how much O&M cost savings there would be from the transformer retrofit program as proposed in the DCI?
 - A. No, we have not.

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- Q. Has the company done any analysis to determine how much service reliability improvement customers will see as a result of the transformer retrofit program?
- A. For those individual customers, there would be potential service reliability increases.

 However, overall, from the standards perspective, when I say "standards reliability standards," it may or may not improve that.
- Q. All right. The second item is Vegetation Clearing/Right-of-Way Acquisition/Facility Modification." Do you see that?
 - A. Yes.
- Q. And that involves Duke identifying dead or high-risk trees or vegetation in the right-of-way, correct?

- A. Within or along the right-of-way.
- Q. Does Duke today identify dead or high-risk trees or vegetation within or along the right-of-way?
 - A. Yes.

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- Q. And when you identify dead or high-risk trees or vegetation, does the company take steps to remove or trim them back today?
 - A. Yes, we do.
- Q. And the company would do the same thing under the DCI program for vegetation clearing, right-of-way acquisition, facility modification, correct?
- A. There was a lot there. Can I ask you to repeat that?
- Q. The company is going to do the same thing under the DCI program that it's doing today, correct?
 - A. We're asking for incremental.
 - Q. And what are you asking incremental for?
- A. We, in southwest Ohio, see a significant amount of ash trees that are infected with the Emerald Ash Borer, so we are requesting additional funding. We actually have a list of additional locations that, because of funding, we cannot get to.
 - Q. Has the Ash Borer been -- is the Ash

Borer there today in trees?

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- A. Without being a scientist, I would agree.
- Q. And has the company been removing trees infected with the Ash Borer today?
 - A. We have.
- Q. So you are just asking for more money to do the same thing you are doing today?
 - A. We are asking for more money for additional.
 - Q. Does the company anticipate any O&M cost savings as a result of getting additional dollars for the vegetation clearing/right-of-way program?
 - A. We do not.
 - Q. Today, if you don't trim a tree and it causes damage, that results in the company expending O&M dollars to repair the damage, correct?
 - A. I will need you to explain when you say "damage."
- Q. If a tree falls on a line, the line gets knocked down, that interrupts service, correct?
 - A. Potentially.
- Q. And you got to send a crew out to repair the damage, correct?
 - A. Correct.
- Q. Now, if you are removing more trees,

shouldn't that reduce the number of instances where you got to send a crew out to repair the line?

- A. I can't forecast the future event.
- Q. So even if you get more money for the vegetation clearing program, there's no assurances that you're -- that you are going to get any cost savings from it, correct?
- A. If there would be any associated cost savings, those would be included in the next distribution rate case.
- Q. So, again, if there were any savings, the company would get to retain them until the next rate case, correct?
 - A. That's your opinion.
 - Q. I'm sorry?
- A. That's your opinion.
- Q. Well, it's not just my opinion. Didn't you also agree that the company wouldn't pass them back until the next rate case?
 - A. Yes.

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- Q. So if they don't pass them back, that
 means they get to keep them, correct?
- A. I would agree.
- Q. Okay. Now, No. 3, "Underground Cable Injection" program, and this involves infusing

dielectric gel into the cable, correct?

- A. Dielectric, yes.
- Q. And does the company do that today?
- A. Yes, we do.

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- Q. And the company has been doing that without a DCI currently, correct?
 - A. On a moderate level, yes.
- Q. Now, if the company gets to expand and inject more of its underground cable, would that result in any O&M cost savings?
 - A. Potentially.
- Q. And does the company have any plans to return those O&M cost savings to customers other than at the next rate case?
 - A. It would be at the next rate case.
- Q. So the company would get to retain the cost savings until then, correct?
- A. And I want to go back on a previous comment. There are other programs where O&M will actually increase. So we have got to look at all programs together.
- Q. And to the extent O&M increases, isn't that built into the DCI that's asking customers for more money?
- A. O&M costs are not part of the DCI rider.

Q. There's no O&M costs in the DCI rider, correct?

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- A. No, sir. That's capital.

 EXAMINER WALSTRA: Mr. Serio --
- Q. Do you know which programs are going to have O&M cost increases?
- A. Some of them, I believe I mentioned in my testimony, subject to check, but I can go through each individual one as we proceed.
- Q. So far, of the three we've talked about, do you anticipate O&M cost increases for any of those three?
- A. As part of the transformer retrofit program, there's a few items that's included and this is on page 20 of my testimony. Squirrel guards, covered lead wires, that's an O&M function. So it's a capital program that has O&M expenses associated with it.
- Q. And shouldn't there be a cost savings when you put those guards in place that reduces the need to go out and do repairs?
 - A. Possibly preventing a future outage, yes.
- Q. Well, you just indicated that was going to result in an O&M cost increase. Shouldn't it result in an O&M increase?

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                  Eventually once the program is completed.
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             Q.
                  If you install one of them, it would
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      improve -- it would save O&M cost savings for any
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      service disruptions that you avoid at that one
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      location, correct?
                  At that one location, but, again, we're
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      predicting a future outage.
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                  EXAMINER WALSTRA: Mr. Serio.
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                  MR. SERIO: Yes, sir.
                  EXAMINER WALSTRA: Do you still have a
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      ways to go?
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                  MR. SERIO: Yes, sir. There's another 16
      programs.
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                  EXAMINER WALSTRA: That's what I thought.
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                  (Laughter.)
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                  MR. SERIO: Sorry, your Honor. If the
      company wants to withdraw them, we can get done real
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      quick.
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                  EXAMINER WALSTRA: I'm thinking this is a
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      good time to break for lunch. We can go off the
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      record.
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                  (Discussion off the record.)
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                  (Thereupon, at 1 p.m., a lunch recess was
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      taken.)
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2240 1 Friday Afternoon Session, October 31, 2014. 2 3 EXAMINER WALSTRA: We will go on the 4 5 record. 6 MS. WATTS: Can we have a second, your 7 Honor? We need to shift gears here just a minute. EXAMINER WALSTRA: Sure. 8 9 Just to clear up everything now that we 10 are on the record, I think both Sierra Club's witness 11 and OEG's witness both have outgoing flights this 12 afternoon and to try to accommodate that, we are 13 going to have their witnesses go forward now and we 14 will get back to Mr. Arnold as soon as we can. This 15 was done over -- I guess Duke did object to the 16 interjection of witnesses for the record. 17 MS. WATTS: You're asking if we object? 18 EXAMINER WALSTRA: I was saying that, yes, I get we should put a formal objection on the 19 2.0 record. MS. WATTS: Well, we would like to note 2.1 22 our objection that Mr. Arnold is having to have his 23 testimony split, but, other than that, we are willing 24 to go forward with Ms. Jackson. 25 EXAMINER WALSTRA: Okay. Thank you.

2241 1 MS. WATTS: Thank you. 2 (Witness sworn.) 3 EXAMINER WALSTRA: Thank you. You may be seated. 4 5 And were you ready, Ms. Watts? Sorry. MS. WATTS: She --6 7 EXAMINER WALSTRA: I know you said you 8 needed a few minutes. MS. WATTS: Oh, I'm sorry. Thank you 9 10 very much. I'm ready to go. EXAMINER WALSTRA: Thank you. 11 12 13 SARAH E. JACKSON 14 being first duly sworn, as prescribed by law, was examined and testified as follows: 15 16 DIRECT EXAMINATION 17 By Mr. Mendoza: 18 Good afternoon, Ms. Jackson. Ο. A. Good afternoon. 19 20 Q. Would you please state your full name and business address for the record. 2.1 22 My name is Sarah Elizabeth Jackson. My Α. 23 business address is 485 Massachusetts Avenue, Suite 2 24 in Cambridge, Massachusetts 02140. 25 Q. And what is the name of your employer,

Ms. Jackson?

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- A. Synapse Energy Economics, Inc.
- Q. And you have appeared in this proceeding on behalf of Sierra Club?
 - A. Yes, I have.
- Q. And can you identify the document in front of you for the record?
- A. It's my direct testimony filed in this case.
- Q. And that document has been premarked as Sierra Club 4a, correct?
- 12 A. That's not premarked on mine, but I think
 13 so.
- Q. And was this testimony prepared by you or under your direction?
- 16 A. Yes, it was.
- Q. Do you have any changes, additions, or corrections to your testimony?
- 19 A. Yes, I do.
- Q. Could you tell us those?
- 21 A. On page 11, line 2. It begins "mixed
- 22 and." The "and" should be an "of."
- Q. And do you have another one?
- A. Yes. On page 19, line 17, after the word
- "million" there's supposed to be an open parenthesis

2012 dollar sign, close parenthesis.

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- Q. Okay. And is there one more?
- A. Yes. The same omission was made on page 21, line 22. After the word "million" open parenthesis 2012 dollar sign closed parenthesis.
 - Q. Okay. Thank you.

And aside from that typographical correction, those two additions, if I were to ask you the questions today that appear in your direct testimony, would you answer them the same?

- A. Yes, I would.
- MR. MENDOZA: I would like to have

 Ms. Jackson's public testimony marked as Sierra

 Club 4 and her confidential testimony as Exhibit 4a.

15 EXAMINER WALSTRA: So marked.

16 (EXHIBIT MARKED FOR IDENTIFICATION.)

MR. MENDOZA: At this time I tender

Ms. Jackson for examination.

19 EXAMINER WALSTRA: Thank you.

MS. WATTS: And, your Honor, if I may.

21 It occurs to me we have one sort of logistic issue

22 here. Ms. Kingery had managed the redactions of

23 Ms. Jackson's testimony and she is not here with us

24 right now. There is a proposed redaction document

25 that was circulated with all the parties, and so I

don't know where we are in terms of confidentiality in that respect.

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MR. MENDOZA: And I reviewed

Ms. Kingery's proposed redactions, and had a few -- I

agreed with most of them, but had a few changes, and

we can either do that now or, on Monday, Mr. Allwein

will be here for Sierra Club and we can handle it

then, if we would like to move along. I am open to

whatever process.

MS. BOJKO: I'm sorry. Just so I understand Ms. Kingery's redactions. The yellow was Sierra Club, and now you have since gone back and anything blocked in red is what you are deeming to be confidential?

MS. WATTS: That's correct.

MS. BOJKO: Thank you.

MR. MENDOZA: And I would say the only objection to Ms. Kingery's suggestions is the issue of annual cash flow, which I believe we've discussed. There were -- perhaps she made these before that ruling was made, and I think there are about eight instances where the annual cash flow number is -- or, a variation of it is proposed for redaction, and we would request that those be made public. And I could go through those now or we could put it to Monday if

we want to streamline.

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EXAMINER WALSTRA: Realizing we'll make probably the majority of the arguments when Ms. Kingery is able to be here, but I guess keeping in line with our ruling, I believe a couple of days ago, in regard to the cash flow line, and I think, like, the ultimate aggregate, the fact that we ruled those open, we will treat those numbers as open.

MS. WATTS: Okay.

EXAMINER WALSTRA: We will address a lot of the other stuff that's in the attachments, we can address that perhaps on Monday when Ms. Kingery is here.

MS. WATTS: That's fine. Thank you, your Honor. And just so you know, most of my cross-examination will be public information. I don't intend to deal too much with anything confidential.

EXAMINER WALSTRA: Okay. That's fine. Appreciate that.

MS. BOJKO: Your Honor, for clarification with the dates, then, associated with those cash flow lines, I would assume that those would be open? I think that's what we did yesterday.

EXAMINER WALSTRA: I believe those were

Duke Energy Ohio Volume VIII 2246 1 open as well. 2 MS. BOJKO: Okay. Thank you. 3 EXAMINER WALSTRA: Ms. Hussey. MS. HUSSEY: No questions, your Honor. 4 5 EXAMINER WALSTRA: Ms. Bojko. MS. BOJKO: No questions, your Honor. 6 7 EXAMINER WALSTRA: OCC. 8 MR. SERIO: No questions, your Honor. 9 EXAMINER WALSTRA: Mr. Kurtz. 10 MR. KURTZ: Thank you. A little bit. 11 12 CROSS-EXAMINATION 1.3 By Mr. Kurtz: 14 Good afternoon, Ms. Jackson. Q. Α. Good afternoon. 15 16 This is obvious and easy. You testified Ο. 17 that the PSR proposal shifts all risks to ratepayers? 18 Yes, I do. Α. 19 Okay. Doesn't it also shift all benefits Q. 2.0 to ratepayers? 2.1 Α. It would. 22 Okay. Really, the return on equity that Duke has on this OVEC asset would be fixed, it would 23

be -- they are giving up all upside profit potential

as well as being protected on the downside; is that

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2247 right? 1 2 Α. Yes. 3 EXAMINER WALSTRA: Mr. Kurtz, could you turn on your microphone. 4 5 MR. KURTZ: Sorry. Α. It's also a little hard to hear you. 6 7 Q. Thank you. Sorry. 8 You indicate that the PSR proposal is 9 contrary to Ohio's policy of transitioning to a fully 10 competitive market; is that correct? Yes, that's what I testified. 11 Α. 12 Q. You are a lawyer also? 13 Α. I am not a lawyer. 14 Okay. Are you familiar with Senate Bill Q. 15 221? 16 I am not. Α. 17 That's the law authorizing ESPs in Ohio? Q. 18 Are you familiar with that? 19 I am familiar with the concept, yeah. Α. 2.0 Q. Are you familiar that under Senate Bill 221 -- well, first of all, do you know what Senate 2.1 22 Bill 3 was? That's the one from 1999? 23 24 Ο. Yes. That was the full transition to a 25 fully competitive deregulated market; is that your

understanding?

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- A. Yes.
- Q. And 221 modified Senate Bill 3 in significant respect; do you agree?
 - A. I am not familiar with 221.
- Q. 221, among other things, you probably agree with this, has renewable portfolio standard mandates?
 - A. I don't know, but.
- Q. Would that be contrary to a fully competitive market requiring a certain type of power to be purchased by consumers?
 - MR. OLIKER: Objection.
- MS. BOJKO: Objection.
- MR. OLIKER: The witness just indicated she doesn't know Senate Bill 221, so you can't ask questions about that subject.
 - MR. KURTZ: Well, the witness, the main theme in her testimony is the PSR is contrary to Ohio's policy of transitioning to a fully competitive market, and Senate Bill 221 is not that.
- MS. BOJKO: Objection. I am going to object to counsel's characterization of the law in testifying.
- 25 EXAMINER WALSTRA: If the witness knows,

she can answer.

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- A. I'm not familiar with Senate Bill 221, so I can't speak to it.
- Q. Well, in general, is a requirement, a state requirement that consumers buy a certain type of power, renewable power, inconsistent with a fully competitive free market?

MS. BOJKO: Objection.

EXAMINER WALSTRA: If the witness knows.

- A. I mean, I think that supporting resources like renewables is outside of the market.
- Q. So that would be inconsistent with a fully competitive market also?
 - A. I wouldn't say that.
- Q. What about mandating energy efficiency for customers, is that inconsistent with a fully competitive market?
 - A. I wouldn't say that either.
- Q. What about allowing a utility that dedicates the output of a power plant to get full cost re that dedicates the output of a power plant to Ohio consumers and the utility, in exchange, gets full cost recovery? Is that inconsistent with a competitive market?
 - A. Could you restate your question?

Q. Yes. If Duke Energy Ohio got permission from the Commission to build a new power plant and dedicate the output of that power plant to Ohio consumers, is that inconsistent with a competitive market?

- A. I don't think that Duke Energy can build a new power plant in Ohio.
 - O. You think --

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- A. Duke Energy Ohio could.
- 10 Q. You think that's the case, they could not?
 - A. My understanding is that they cannot directly supply generation to their customers, by owning generation.
 - Q. Well, their current generation is being divested and sold to Dynegy. Do you think there is a prohibition against them building new power plants under Ohio law?
 - A. It's building new power plants?
 - Q. Yes. Do you think that they are prohibited?
 - A. I am not sure, Mr. Kurtz.
- Q. You talk about long-term environmental risks associated with the OVEC facility; is that correct?

A. Yes, I do.

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- Q. If the PSR was for a shorter term and was not the life of the unit, would that mitigate some of your concern?
- 5 A. It would -- I suppose it would depend on the term.
 - Q. Would a nine-and-a-half-year term be better than the life of the unit, all else equal in your opinion?
- 10 A. I think that you would have to look at
 11 the analysis of what future emission reductions might
 12 be required at the plants before you could know that
 13 for sure.
- Q. Well, would nine and a half years be better than the life of the unit?
- 16 A. I suppose a shorter term would be easier to look at than 25.
- 18 Q. You testified to EPA's proposed Clean
 19 Power Plan, the section 111(d) rule; is that correct?
 - A. I mention it, yeah.
- Q. Is it really nothing more than mentioning it?
- A. Well, can you point me to the place in my testimony where I talk about it.
- Q. No. I mean, I know it's in there. I

2252 don't know exactly where. 1 2 I think I discussed it at length. 3 Okay. You just mentioned it in passing. Q. MR. KURTZ: Okay. Thank you, 4 5 Ms. Jackson. Nothing further, your Honor. 6 7 EXAMINER WALSTRA: Thank you. 8 Mr. Oliker. 9 MR. OLIKER: No questions, your Honor. EXAMINER WALSTRA: Mr. Hart. 10 MR. HART: No questions. 11 12 EXAMINER WALSTRA: Duke. 13 MS. WATTS: Thank you, your Honor. 14 15 CROSS-EXAMINATION 16 By Ms. Watts: 17 Q. Good afternoon. 18 A. Good afternoon. 19 Ms. Jackson, in preparing your testimony 20 for this case, you reviewed Ohio law, correct? 2.1 Just what was included in the Α. 22 application. 23 Q. Thank you. 24 And you are not an attorney, correct? 25 Α. I'm not.

Q. And you've not been involved in energy policy matters in Ohio previous to this case, correct?

A. I haven't.

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- Q. And so, I think Mr. Kurtz asked you this question, but you were not involved in working on SB 221 as it was winding its way through the legislature, correct?
 - A. No, correct, correct.
- Q. And you've not advised parties or legislators or other interested stakeholders in Ohio with respect to Ohio energy legislation, correct?
 - A. Correct.
- Q. And you can't offer an opinion on what may be included in a standard service offer in the form of an ESP, correct?
 - A. Yeah, correct.
- Q. Is it fair to say your work at Synapse -Synapse primarily involves energy policy as it
 relates to environmental issues?
- A. I wouldn't say "primarily." I address a number of issues at Synapse, including market rules and regulations, focused mainly in New England, in the ISO New England area, and I do review a lot of environmental policies and how they impact energy

resources. I've done a number of other types of work, too, at Synapse.

- Q. Okay. Can you ballpark the percentage of time you spend in each area at all?
- A. It varies depending on what our workload is, but generally I work about 30 percent of the time, if I had to guess, on market issues in New England; and maybe 40 percent on issues, as you brought up, the environmental the application of policies to energy resources; and what does that leave me with, 30 percent of other. That's my best guess right now.
 - Q. We'll take it.
 - A. Okay.

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- Q. And when you mention market issues in respect of the New England area, are you talking in particular with respect to the NEPOOL ISO?
- A. Yes. The NEPOOL is a stakeholder process, the New England Power Pool process that advises the ISO on decisions about market rule changes, transmission planning, reliability issues, things like that.
- Q. Just for purposes of the record would you explain what the "NEPOOL" acronym stands for?
 - A. It's the New England Power Pool.

And you have not previously had any 1 Ο. 2 clients that require consultation or services with 3 respect to PJM, correct? 4 Α. That's right. 5 0. And you're testifying on behalf of the Sierra Club in opposition to the company's proposed 6 rider PSR, correct? 7 8 Α. Correct. 9 And that's the only rider you are 0. addressing in this proceeding. 10 Α. 11 Yes. 12 MS. WATTS: Just a minute, your Honor. 13 Your Honor, may I approach? 14 EXAMINER WALSTRA: You may. 15 MS. WATTS: I would like to ask this be 16 marked as Duke Energy Ohio Exhibit 22, I believe. 17 EXAMINER WALSTRA: So marked. 18 (EXHIBIT MARKED FOR IDENTIFICATION.) 19 EXAMINER WALSTRA: 22 is right. 2.0 Q. Ms. Jackson, you have before you what has 2.1 been marked as Duke Energy Exhibit 22. 22 Α. Yes. And have you seen this before? 23 Q. 24 Α. I have not. 25 Q. You're aware that the Sierra Club is an

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      Intervenor in this case, correct?
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             Α.
                  Yes, I am.
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                  MR. OLIKER: Could we have copies of the
      exhibits, please?
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                  MS. WATTS: I didn't bring extra copies
      of it because it's docketed.
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                  MR. MENDOZA: Would you mind identifying
 8
      it so we can pull it up?
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                  MS. WATTS: I'm sorry. It's the Sierra
      Club's Motion to Intervene.
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                  MR. MENDOZA: In this case?
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                  MS. WATTS: In this case. Mr. Mendoza,
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      let me know when you have it.
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                  MR. MENDOZA: I'm ready. Thank you.
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             Q.
                  (By Ms. Watts) Ms. Jackson, do you have
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      any reason to believe your counsel would misstate its
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      interest in this proceeding?
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                  I don't have any reason.
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                  Would you turn to page 2 of that
             Q.
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      document, please.
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                  I'm there.
22
                  You note there that the Sierra Club has
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      indicated that its interest in this proceeding
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involves modifications to the alternative energy

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rider.

- A. I see that, yes.
- Q. You are not testifying with respect to that, correct?
 - A. Correct.
 - Q. Are you offering an opinion with respect to any issue related to Duke Energy Ohio's source of generation?
 - A. No, I'm not.
 - Q. Does Duke Energy Ohio provide generation to any of its customers?
 - A. Directly?
- 12 Q. Yes.

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- A. I guess I would have to say I'm not sure.
- Q. Okay. So you're not aware of how generation is supplied to Duke Energy Ohio customers?
 - A. I mean, other than through CRES providers and SSO auctions, so maybe you have to define what you mean by "directly."
 - Q. Well, with respect to supply -- CRES suppliers or CRES providers and SSO auctions, those would be two ways. Are there any more?
 - A. Not that I'm aware of.
 - Q. Thank you.
- Is it your understanding that Duke Energy

 Ohio proposes, through rider PSR, to provide

generation from the Ohio Valley Electric Corporation to its customers?

- A. No, I don't believe so.
- Q. And is it okay with you if I refer to the Ohio Valley Electric Corporation as "OVEC"?
 - A. Yes.

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Q. Okay. Thank you.

Would you turn to page 4 of that Duke Energy Ohio exhibit.

- A. I'm there.
- Q. And in particular I would like to direct your attention to the second paragraph which I believe states that the Sierra Club has an interest in reducing the "nation's reliance on outdated coal generation..." Do you see that?
 - A. Yes.
- Q. And so far as you know, has that interest with respect to that particular issue and this case caused the Sierra Club to generate a letter-writing campaign?
 - A. I'm not sure.
- Q. And you're aware, having spent quite a few hours in this room now, that Duke Energy Ohio has a 9-percent contractual -- contractual entitlement to the energy and capacity that OVEC generates, correct?

A. Yes.

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- Q. And if rider PSR should not be approved, that 9-percent ownership is not changed in any way so far as you know, correct?
 - A. That's my understanding.
- Q. Turning to your testimony, on page 3 of your testimony you list four major conclusions and recommendations regarding rider PSR, correct?
 - A. Correct, going on to page 4.
- Q. Looking at the first bullet, you mention that you believe rider PSR is inappropriate because it shifts the risk of Duke Energy's contractual obligation with OVEC to customers who will essentially become owners of generation they are not directly using. Is that a correct reading of your testimony?
 - A. It is.
- Q. You use the word "essentially" in that statement. Is that because you understand that customers will not -- will not actually own generation if rider PSR is approved?
 - A. Yes, that's my understanding.
- Q. And just to be clear about this, is it your understanding that Duke Energy Ohio customers own any generation?

- A. No, I don't believe so.
- Q. And Duke Energy Ohio retail customers will not have any ownership rights to the OVEC-owned generating plants if the PSR is approved, correct?
 - A. That's right.
- Q. And you've been present in the hearing room for much of the testimony that's -- that's gone on before today, correct?
 - A. Much of it, yes.
- Q. So you know that rider PSR, as proposed by the company, is intended to pass the net benefits through to Duke Energy Ohio retail customers, correct?
 - A. And the net costs, yes.
- Q. I believe you just said as much in response to Mr. Kurtz.
- A. Yes.

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- Q. On page 5 of your testimony, you mention, at line 15 that rider PSR would shift costs from Duke's portion of OVEC to customers for the next 25 years and would require customers to pay for generation that's not competitively bid into the SSO auction. Do you see that reference?
 - A. Yes, I do.
- Q. But you would agree the energy and

capacity from OVEC is bid into the PJM market, correct?

- A. Yes. My understanding is it will be bid in when it looks favorable.
 - Q. Fair. Thank you.

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Turning again to that statement on page 5 and beginning at line 19, you state that rider PSR forces customers to take on substantial risk without allowing them to -- any control over cost, strategic decisions, or bidding strategies. Do you see that?

- A. Yes, I do.
- Q. Do any Duke Energy Ohio retail customers currently have control over the costs and strategic decisions or bidding strategies of generation?
- A. No. Retail customers shouldn't have to have control over those costs because they shouldn't be exposed to those costs directly.
- Q. Okay. So is it your understanding then that retail customers presently have no control over such costs?
- A. Well, I believe the costs that you are referring to are the costs that would flow from the OVEC generation.
- Q. Well, I am asking generally whether retail customers have control over such costs.

A. I think through shopping options and through the structure of the SSO auctions, there's some control of that, but.

- Q. Is there any other control?
- A. I think I'm not sure what you're asking. Could you maybe --
- Q. What do you understand "control" to be as you've used it in your testimony?
 - A. What do I mean here?
 - Q. Uh-huh.

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- A. I mean that customers won't have any control over the decisions that Duke is making in regards to the OVEC generation. So I think -- I think the point I'm making here is that customers, in a competitive arena, would not be subject to the costs and I guess also the benefits that come from a merchant -- a -- I'm sorry, market resources decisions and the options of what they do with their resources, and here those customers are going to be subject to that -- those costs and those revenues, those potential revenues; however, they would have no control over what decisions are made for how that resource is bid into the PJM market.
- Q. Okay. I'm not sure I fully understand, so I need to back up a little bit.

A. Okay.

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Q. With respect to customers having control over costs and decision making, I believe -- and please correct me if I don't say this right, I think you said that the customers don't have a control over costs with respect to decisions that Duke is making. Is that a correct --

- A. I think that's what I said.
- Q. Okay. And so, what decisions is Duke making, in respect of OVEC, that you would like to see customers have control over?
- A. Well, I think if they are going to be paying for this generation, they should have they should theoretically have a chance to challenge bad decisions that are made about how it's bid into the market or if it's bid into the market.

So I think if an uneconomic decision is made, the customers are going to be responsible for that. And they under, this PSR proposal, won't have any recourse for that because my understanding is that this won't be reviewed by the Commission each year, that this is a rider that will continue for 25 years.

Q. Okay. So the only decision that you're concerned about in this respect would be whether the

energy and capacity are bid into the market or not, prudently?

- A. I don't think that's the only decision.

 I mean, I think it's -- that decision will affect the costs and revenues that could be passed through to customers. But there are other decisions that, you know, whether to keep going with this type of -- of generation. I think that there's a dispute about how the re -- how the OVEC entitlement can be handled in the future, so I am not going to try to go into that, but whether it's prudent to continue that relationship with OVEC is another decision that customers won't have.
- Q. If the Commission approves the rider for the proposed term, for whatever term, that decision is effectively already made, correct?
- A. Right. And my understanding is it will continue for 25 years.
 - Q. Okay.

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- A. Or until the entitlement ends.
- Q. So, hypothetically, if the Commission approves the rider for 25 years, the decision to continue the rider has effectively, from a regulatory standpoint, already been made, correct?
 - A. Oh, yeah. I think I know what you're

saying. Yes.

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- Q. Okay. So the -- in addition to whether to continue to the rider and whether to bid the energy and capacity into the market or not, is there any other decision that you would like to see customers have?
- A. I don't think so. I think I covered them all.
 - Q. Thank you.

With respect to a shopping customer who purchases generation from a supplier, what control does that shopping customer have over the supplier's decision with respect to where that supplier obtains generation?

- A. I will say just insofar as they can choose different suppliers who make better decisions and whose prices reflect that decision.
- Q. Okay. And just to be clear, when Ohio transitions to a fully competitive market, you believe that customers will have the ability to choose energy providers and that will permit them a degree of control over their risk factors, correct?
 - A. Yes, that's what I testified.
- Q. Okay. I just wanted to make sure I understood where we were with that.

In this instance, when we are talking about control in respect of a CRES providers's risk factor, are we talking about their risk as they compete in an SSO auction or some other risk factor?

- A. Could you -- could you repeat the question?
- Q. Sure. I think you testified that you believed that when we -- when Duke -- sorry. When Ohio transitions to a fully competitive market, that customers will have the ability to choose their energy providers and that will permit them a degree of control over the risk factors -- over their risk factors, correct?
 - A. Correct.

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- Q. And so that I understand, I'm trying to further understand what risk factors you are referring to with respect to the customer having control?
 - A. That's your question? What they are?
 - Q. Yes.
- A. Well, I think I've -- in comparing it to what's happening under the PSR with the OVEC generation, the risks of that -- in that situation are that the customers will bear these costs and will receive any potential revenues and, yet, they have no

control over what happens there.

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I think in a competitive environment you have the choice of a different provider, and the decisions are sort of wrapped up in what -- what makes you choose that provider and so, in that way, you are working out your risk factors to the way -- the way that satisfies you as the customer.

- Q. And it -- would it be your understanding that CRES providers would be subject to the same market risk factors as rider -- as OVEC would be?
- A. I think, yeah, it depends on their -- what their portfolios are, sure.
- Q. And if rider PSR is approved, customers will still have an opportunity to choose suppliers, correct?
 - A. That's right.
- Q. And I apologize if you have already been asked this question by others, but I am going to ask it one more time for purposes of clarity. Do you agree that the company is not, through this proceeding, seeking approval to use the OVEC capacity entitlement to displace any of the load procured in the SSO auction?
 - A. That's my understanding, yes.
 - Q. Thank you.

And the company is not, through this application, seeking approval for an arrangement between the company and competitive retail energy service providers to supply any of their energy or capacity needs, correct?

- A. That's my understanding, yeah.
- Q. And you state that rider PSR is not an appropriate mechanism for the company to manage market price risk in a competitive market environment, correct?
 - A. Yes. I do say that.
- Q. But you don't currently have an understanding of how Duke Energy Ohio might be managing that risk, correct?
 - A. Its market price risk?
- O. Correct.

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- A. My only understanding currently is that it's proposing this PSR to shift that risk away from it and on to the customers.
- Q. And on page 14 of your testimony you begin a discussion of environmental compliance risk, correct?
- A. Yes, correct.
- Q. Now, you have not visited the OVEC plants, have you?

- A. No, I have not.
- Q. And you've not discussed environmental compliance risk with any principal at OVEC, correct?
 - A. That's right, correct.
- Q. And you didn't do any independent analysis regarding forecasted wholesale energy or capacity prices for this case, did you?
 - A. No, I did not.
- Q. And you have not done any independent analysis regarding forecasted OVEC net benefits, correct?
- A. Correct.

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- Q. So you just relied upon information from the company.
 - A. Yes, I did.
 - Q. On page 14 of your testimony at line 13, you begin a discussion of rule 111(d) of the Clean Air Act, correct?
 - A. Correct.
 - Q. And that discussion and other environmental compliance risks that you mentioned is provided to point out that you believe that the trajectory of the net present value of the proposed rider PSR can turn out differently than the way the company is proposing it will turn out, correct?

- A. That's a fair assessments of my testimony, yes.
- Q. And would you agree with me that trajectory can change in either direction?
- A. I would agree that forecasts are uncertain, so, yes, you can have things go either way. But I would say that, you know, with respect to these plants, the fact they are very old coal plants suggests that their costs could increase at a greater rate than the company is currently forecasting.
- Q. Okay.

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- 12 A. It's a risk.
- Q. I understand. And section 111(d) is a proposed rule, correct?
- 15 A. Correct.
- Q. And the rule may become final in June of 2015, correct?
- 18 A. Correct.
- Q. It may also not become final in June of 20 2015, correct?
- 21 A. I suppose that's a possibility.
- Q. And once it's enacted, it will require action on behalf of each of the states, correct?
- A. Correct.
- Q. And can you tell me what states will be

required to do to respond once the rule is final?

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- A. It's hard to know entirely what each state will have to do, but the basic plan under the proposed rule is states will have to draft compliance plans which are essentially blueprints showing how they'll achieve the targets that EPA has set for them for emission reductions.
- Q. Do you have any idea how long such plans might take to come into fruition?
- A. The way it's been proposed, the states have a couple of options. They could draft individual plans which are supposed to be -- which are supposed to be submitted to EPA at the end of June, 2016. Individual states can request a year extension, and I don't know what the likelihood is that those would be granted.

And a second option is for states to work together in groups -- groups of states in which they would draft one compliance plan together and that plan, I believe they have a deadline of June, 2018, as proposed.

- Q. Some of those activities you mentioned would require legislative acts within those states, correct?
 - A. It depends on what kind of measures a

state chooses to undertake to meet the plan's requirements.

- Q. But some of them require legislative activity.
 - A. Some of what?

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- Q. Some of those plans within the states.
- A. The plans would not. If particular measures if a state chose a particular measure to meet the 111(d) targets and that measure wasn't allowed in that state, there may have to be legislation to allow that measure to be a part of the plan.
 - Q. Okay. Thank you.

Do you have any specific knowledge with respect to what the state of Ohio intends to do when that rule becomes final?

- A. Not at this time I don't.
- Q. And have you had any discussions with anybody in Ohio in state government with respect to activity related to that?
 - A. I don't believe so, no.
- Q. And you've not performed any studies on the impacts of environmental regulation on energy prices, correct?
- A. I have not.

- Q. And you're not aware of what generation may be retiring specifically in PJM?
 - A. I'm not sure specifically, no.
- Q. Okay. And you would agree with me retirements could potentially affect wholesale market prices in the PJM market, correct?
 - A. Sure.

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- Q. And you have not performed any studies of the impacts of generation retirements have on the wholesale market price for energy and capacity, correct?
 - A. I have not.
- Q. And you are not aware of any new generation being built in Ohio to replace retiring generation, correct?
- A. I think yesterday somebody said a plant just got approved somewhere in Ohio, but, other than that, I don't have any specific knowledge of plants being built in Ohio.
 - Q. Thank you.
- On page 15 of your testimony and continuing on to page 16, you discuss a number of different regulations that could increase compliance costs at the OVEC plants, correct?
- A. Yes, correct.

2274 Those include effluent limitation 1 0. quidelines, correct? 2 3 Yes. Α. Ο. Disposal of coal combustion residues? 4 5 Α. Yes. Cooling water-intake facilities? 6 Ο. 7 Α. Yes. 8 0. And National -- you have to help me with this, NAAOS, I want to call them "NAAOS." 9 10 You can call them "NAAQS." Α. Would you --11 Q. 12 Α. "National Ambient Air Quality Standards." 13 Q. Thank you. 14 And particulate matter and sulfur dioxide standards? 15 16 Α. Yes. 17 And cross-state air pollution which we Q. 18 call CASPR, right? 19 Α. Yes. 2.0 And at least some of those were taken Q. 2.1 into account when the company performed its net 22 present value, correct? 23 Α. Yes, I believe they were. And I also 24 think you left out ozone.

Q. Okay. Thank you.

And you note on page 15 that the company tracks CO-2 price, correct?

A. Yes.

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- Q. And "by company" in this instance you mean Duke Energy Ohio, correct?
 - A. Yes.
- Q. And further down on page 15, you again note that the company estimates include costs for planned environmental projects, correct?
 - A. Yes.
 - Q. Which company are you referring to there?
- A. Duke provided us a response, but the -- the response, I believe, was from OVEC.
 - Q. So either Duke Energy Ohio or OVEC provided estimates related to certain of these rules, correct?
- A. Correct.
 - Q. And on page 16 you say that you can't fully evaluate cost estimates for environmental projects, but that at least the 316(b) rule, which involves cooling intake structures, those estimates are probably reasonable, correct?
- A. Yes, I think that -- without -- without knowing more, it would be hard to really say, but it looks like a reasonable estimate.

Okay. And, again, on page 16, you're 1 Ο. 2 discussing NAAQS, and after providing some 3 explanation, you note that the USEPA has designated four areas in Ohio as "nonattainment" areas, correct? 4 5 Α. I know that's in there. Can you point me to the line? 6 7 Q. Yeah. You will probably find it faster 8 than I can. 9 MR. MENDOZA: It's page 18, lines 9 10 through 10. MS. WATTS: Thank you, Mr. Mendoza. 11 12 But for now, those nonattainment areas do 0. 13 not include where the Kyger and Clifty Creek plants 14 are located, correct? 15 Α. That's correct. My understanding is 16 those plants -- the counties where those plants are 17 located don't have monitors so the attainment status 18 couldn't be determined. 19 Okay. Do you know when that next round 2.0 of designations will occur? 2.1 My understanding is that EPA is planning

A. My understanding is that EPA is planning the next round in 2017 based on monitoring and/or dispersion modeling.

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- Q. That date could change, correct?
- A. I don't have any reason to believe that

it would change, but.

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- Q. But you don't have any certainty that it will occur exactly at that time either, do you?
- A. I can just say that's what the EPA has stated it plans to do.
 - Q. Okay. Thank you.

And you've also provided a discussion around another EPA rulemaking that deals with the 8-hour ozone NAAOS, correct?

- A. Yes.
- Q. And this rulemaking relates to a standard that was set in 2008; isn't that correct?
- 13 A. This rulemaking would pertain to an update of that standard, yes.
 - Q. And the standard in 2008 was 75 parts per billion?
 - A. It was, yes.
 - Q. And the proposal, in 2010, was to lower that 75 parts per billion to 60 to 70 parts per billion, correct?
 - A. Yes, correct.
 - Q. And then in 2011, the EPA withdrew its proposal and said that it would wait until the regular five-year cycle was up to start the review, correct?

A. Correct.

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- Q. And the review is continuing as of today?
- A. As of today, yes. I believe that the -- a policy assessment was released by the EPA staff recommending the same 60 to 70 part per billion range as was proposed in 2010.
 - Q. And when was that policy assessment?
- A. I want to say the end of August this year.
- Q. And with respect to particulate matter standards, you state the EPA will make final area designations by December, 2014?
 - A. Yes, that's my understanding.
- Q. And right now, do you have any knowledge about whether or not the areas of Kyger and Clifty Creek will be -- will fall within such area designations?
 - A. I don't know.
 - Q. Would anyone know this right now?
- A. The Ohio environmental department might have an idea, but.
 - O. You mean the Ohio EPA?
- 23 A. Yes.
- Q. Okay. If the areas where the Kyger and
 Clifty Creeks are located are determined to be within

dispersion area and the plants are found to be in nonattainment for the particulate matter rules, do you have any knowledge or understanding of what exactly those two plants would need to do to come into compliance?

- A. I don't know specifically. They would probably need to adjust the way their equipment runs or potentially add new equipment to help reduce the emissions of particulate matter and precursors to that.
- Q. But you don't know anything about specific business plans that would be required for that purpose.
 - A. No.

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- Q. Is it correct that the EPA withdrew its last draft update to the ozone NAAQS?
 - A. Yes, that's correct.
- Q. And you don't have any idea why it was withdrawn?
- A. I think you stated earlier they asked -- that they decided to wait until the five-year cycle.
- Q. Okay. But do you know why they decided to wait for that five-year cycle specifically?
- A. I don't have any insight into why they decided that.

1 0. Would you agree with me that there are 2 political considerations with respect to such 3 decisions? Α. About ozone? 4 5 Ο. Yes. Yes. 6 Α. 7 Q. And will the next Presidential election 8 possibly affect the outcome of that rulemaking? You said the Presidential election? 9 Α. 10 Q. Yes. It's possible, though these are 11 12 science-based standards, and so I think that now that 13 the science and the staff policies has come out in favor at the same level that it would be difficult 14 15 for the next administration to request much outside 16 of that recommendation. 17 Wow, I hope that's true. I'm sorry. Q. 18 And might political considerations impact 19 other potential USEPA policy with respect to the 2.0 Clean Air Act? 2.1 I think there are always political 22 considerations. 23 Are there any other factors that 0.

influence the outcome of such rulemakings?

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interest. I think that you might also find that as science evolves and we learn more about the effects of the different pollutants that are supposed to be regulated through these rules that may be driving standards maybe to be more stringent.

Q. Thank you.

Let's look at the CO-2 price report that's attached to your testimony, please.

Specifically page 25 of that report.

- A. I'm there.
- O. I'm not. Just a second.

Can you agree with me the analysis of emission caps suggests a wide range of possible prices?

A. Yes.

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- Q. And factors to consider in looking at emission caps include the stringency of any future climate policy, correct?
 - A. Correct.
- Q. Is that federal policy that we are referring to there?
- A. I think it refers to both federal and any state actions around climate.
 - Q. And other factors could include the existence of complimentary policies, either state or

federal?

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- A. Yes.
 - Q. And technology available?
- A. Yes.
- Q. And how quickly capital stock can be phased out in favor of other technologies?
- A. Yes.
 - Q. Any others?
 - A. No. I think this is a good list.
 - Q. Thank you.
 - The study on emission caps recognizes that prudent utilities consider potential future policies, correct?
 - A. Yes. I would agree with that.
- Q. And referring to page 27 of the study, the study assumes a zero carbon price for any state other than the RGGI states in California, correct?
 - A. Yes.
 - Q. And could you tell us what RGGI states are again?
 - A. That's the -- let me RGGI, Regional Greenhouse Gas Initiative. It's a northeast -- regional cap and trade system in the northeast.
- Q. Okay. Why were zero carbon prices assumed for that period of time and for that

population of states?

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- A. You mean the states other than RGGI and California?
 - O. Correct.
- A. Because, at the moment, there's no carbon regulations requiring a price.
 - Q. Now --
 - A. Other than in those areas.
 - Q. Okay. Thank you.
- This -- this report is something that you worked on, correct?
- 12 A. I worked on a piece of it, yes.
- Q. Okay. So you didn't -- you had some,
- 14 let's say, some help writing?
- 15 A. Oh, yes.
- Q. Okay. And you expect federal regulatory
 measures will put economic pressure on
 carbon-emitting power plants in other states
- 19 beginning in 2020, correct?
- 20 A. Yes.
- Q. And you're not aware of why the year 2020 was selected, correct?
- 23 A. I'm not specifically aware of why because
 24 I didn't -- I didn't write that particular piece, but
 25 my best guess is that that is when we expect the

- 111(d) rule to take effect.
- Q. Okay. And what variables could change to impact if and when that occurs?
 - A. Impacting the start date of a price?
- 5 Q. Yes.

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- A. Changes to regulatory timelines, carbon legislation, other types of rulemaking, public pressure.
- 9 Q. Beginning on page 20 and through page 22 10 of that report, there's a section entitled "CO-2 11 Price Forecasts," correct?
 - A. Page 20, you said, yes, "CO-2 Price Forecasts in Utility IRPs."
 - Q. And on page 21 of the study, the section of the study entitled "CO-2 Price Forecasts," it's -- that study is based upon 91 utilities that were sampled, correct?
 - A. Yes.
 - Q. And the information that was obtained from those utilities was largely integrated resource plan material, correct?
 - A. Correct.
- Q. Okay. You went back and tried to get data from earlier years, 2003 to 2007, but you weren't able to find carbon pricing in those years

mostly because consideration of carbon pricing began in 2008, correct?

- A. That's my understanding. Just to be clear, the "you" isn't me here; Synapse.
- Q. Thank you. I appreciate that clarification.

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And there were possible 3,412 utilities that could be sampled, correct?

- A. Yes, that's what it says here in Table 2.
- Q. And 11 states were not represented because they have no filing requirements for long-term planning, correct?
 - A. That's my understanding, yes.
- Q. And 10 states are not represented because they have long-term plans, but not integrated resource plans, correct?
 - A. Correct.
- Q. Do you know whether states that -there's any overlap between the states that don't
 require integrated resource plans with states that
 are competitive retail states?
- A. I'm not 100 percent sure. I know that there are some states that have -- that do require IRPs but are also part of the competitive market. So I'm not -- I'm not sure of the extent of the overlap

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Q. Okay. Thank you.

Were you present when Mr. Mendoza cross-examined Mr. Wathen?

- A. Yes.
- Q. And do you recall Mr. Mendoza presenting

 Mr. Wathen with a table that showed the hourly

 generation of certain plants?
 - A. Yes.
 - Q. And he asked about days and hours and the generation that was the output from those plants on certain days?
- 13 A. Yes, I remember that.
- MS. WATTS: Your Honor, may I approach?

 EXAMINER WALSTRA: You may.
 - Q. Ms. Jackson, do you have a Sierra Club 3 up there with you?
 - A. It's not marked Sierra Club, but it looks like what I've seen.
- Q. Okay. Good. That's not what I just
 handed you. I just want to make sure -- what I just
 handed you we'll have marked as a Duke exhibit.
 - A. Oh. What is Sierra Club 3, I'm sorry?
- Q. Would you take a moment to look at both of those, please.

MS. WATTS: And, your Honor, the document I distributed would be Duke Energy Ohio Exhibit 23, I think.

EXAMINER WALSTRA: It will be so marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

EXAMINER WALSTRA: Ms. Watts, is there a title to this exhibit?

MS. WATTS: The "Hourly Megawatt Output by Unit (Clifty Creek and Kyger Creek.)" Is that what you're looking for?

EXAMINER WALSTRA: That will work. Thank
you.

- Q. (By Ms. Watts) What I would like you to do is essentially turn to page 8 of the document that's marked Duke Energy Ohio Exhibit 23.
 - A. Okay. I'm there.
- Q. And starting on day 22 you'll see that there's some light highlighting there, I think it turns pink.
 - A. Uh-huh.

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- Q. Could you take some of those days and cross-reference them with Sierra Club 3 just to make sure that the information relative to those days is the same as what's in Sierra Club 3?
- A. Yes. It's a different format so it will

take me a minute. So far it looks good. I haven't looked at every single unit, but they look the same.

- Q. Okay. And then I need to give you one more piece of information. It's Sierra Club Exhibit 2.
 - MS. WATTS: Your Honor, may we approach?

 EXAMINER WALSTRA: You may.
- Q. With respect to Sierra Club Exhibit 2, would you turn to page 10, please.
 - A. Yes, I'm there.

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- Q. And would you agree with me that on Exhibit 2, on page 10, the January 6, 7, and 8 were the days that the polar vortex occurred that we've been discussing?
- A. My understanding the polar vortex was an event that took place all winter. If you meant the cold days as identified on this table it's the 6, 7, 8, 22, 23, 24, 27, 28, and 29.
- Q. So January 6, 7, and 8 were the coldest days of that cold spell, correct?
 - A. I'm not sure. I think so.
- Q. Okay. All right. So Duke Energy
 Exhibit 3, beginning on page 1, the days that are
 highlighted in pink are all of the same cold days as
 shown on Sierra Club Exhibit 2, correct?

A. I think so. No. You guys are missing 26 and 28. But the other days are the same.

Q. Okay. Thank you.

And you would agree with me that the Kyger Creek and Clifty Creek plants were all -- were both -- all the units were running on each of those days, correct?

- A. No. Unit 3 was not running on any of the early days.
- Q. Without putting you on the spot, would you agree with me that the majority of the plants were running on each of those days?
 - A. The majority, yes.
- Q. Okay. Thank you.

MS. WATTS: I have no further questions, your Honor.

17 EXAMINER WALSTRA: Thank you.

MS. WATTS: I would like to move into evidence Duke Energy Ohio Exhibits 22 and 23.

MR. MENDOZA: Is there going to be

21 redirect?

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EXAMINER WALSTRA: Yeah. We'll wait for

23 after the --

MS. WATTS: Sorry.

25 EXAMINER WALSTRA: Staff.

2290 1 MR. BEELER: I don't have anything on 2 cross. 3 EXAMINER WALSTRA: Go ahead. MR. MENDOZA: Just a few questions. 4 5 REDIRECT EXAMINATION 6 7 By Mr. Mendoza: 8 I won't ask too much about Duke 23, but 0. 9 really quickly, Ms. Jackson, could you confirm for me 10 on every day in January, at least one of these units was -- putting aside the issue of lower-than-maximum 11 12 load, but just on every day that at least one of the 13 units was out of -- was at zero load on every day in January, 2014? 14 Yes, I can confirm that. 15 Α. 16 Okay. And do you know if Duke has a seat Ο. 17 at the Board of Directors of OVEC? 18 I've heard that they do. Α. 19 And would you imagine that the Board of 2.0 Directors of a corporation has influence over the 2.1 operations of the corporation? 22 Α. I assume so. 23 Ο. And might that influence include taking 24 measures to reduce costs of operation? 25 Α. Sure.

- Q. And might that influence also include taking measures to increase revenues?
 - A. I would think so.

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- Q. Okay. Let's talk about 111(d) quickly. If a state doesn't draft a plan that EPA deems adequate, is that the end of the matter?
- A. No. The -- in -- under the proposed rule and the way these things work, typically, the EPA would step in and enforce its own plan on that state.
- Q. And so, would you say that's a fairly common process under various areas of the Clean Air Act?
- A. It happens -- it's a requirement under many of the acts. I don't think it's happened all that often.
- Q. And what is the name of, you know, the state plan and the federal plan just so we have the terminology?
 - A. In general or under 111(d)?
 - Q. Just in general, under the Clean Air Act.
- A. Under the -- under the NAAQS program it would be the State Implementation Plan, and a federal version of that would be a Federal Implementation Plan.
- Q. Okay. And I think you told Ms. Watts

2292 that you think retirements could affect capacity 1 2 prices in the future, correct? 3 Sure, yes. Α. 4 And would you also say that new Q. 5 generation coming on line could affect capacity prices as well? 6 7 Α. Yes. 8 MR. MENDOZA: Okay. I have no further 9 questions. 10 EXAMINER WALSTRA: Thank you. 11 Ms. Bojko. 12 MS. BOJKO: No. I have no questions. 13 EXAMINER WALSTRA: Thank you. 14 Mr. Serio. 15 MR. SERIO: No questions. 16 EXAMINER WALSTRA: Mr. Kurtz. 17 MR. KURTZ: Just a little bit. 18 19 RECROSS-EXAMINATION 2.0 By Mr. Kurtz: 111(d), Ms. Jackson --2.1 Q. 22 Α. Yes. 23 0. The states have flexibility in how to 24 comply under the proposed rule; is that your

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understanding?

A. As it's proposed, yes.

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- Q. If the state of Ohio chose to comply to reduce its carbon intensity from what --
 - A. I can't hear you very well. I'm sorry.
- Q. If the state of Ohio chose to comply with 111(d) to reduce its carbon intensity from about 1,700 pounds of CO-2 per megawatt-hour in 2012, is that about the baseline?
 - A. I don't have all the baselines.
- Q. About 1,300. If Ohio chose to comply by building all renewable resources, what would be the cost on the coal facilities?
- A. I don't know what the specific cost would be. The effect would be to reduce generation from those facilities.
- Q. Couldn't you comply by building renewables and reducing the carbon intensity and have no impact on the coal generation in Ohio?
- A. I think that would be unlikely because the renew -- the new renewable energy you build would affect the dispatch of those plants.
- Q. Well, it's possible -- it may or may not affect dispatch, but if you build renewables the direct cost on the coal facilities is zero, isn't it?
 - A. You're asking if the coal companies would

be -- the coal plants would be building renewables.

- Q. No, no. The state of Ohio's implementation plan was to build a thousand megawatts of wind generation, for example?
 - A. Okay.

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- Q. To get a thousand megawatts of zero carbon generation into the Ohio footprint, thereby reducing the carbon intensity. I mean, I may not have the exact math right, I don't know how many megawatts it would take, but that would have zero impact on the coal generation, wouldn't it?
 - A. No, I don't agree.
- Q. It would have zero direct costs on the coal generation.
- A. I don't know what you mean by "direct cost," but their -- their generation would be reduced and that would have an effect on those plans.
- Q. You are assuming generation would be reduced because they would not dispatch it in the PJM model? Is that what you're assuming?
- A. I'm assuming when you build new generation that you are displacing some amount of your existing generation.
- Q. Well, the non-dispatchable wind would dispatch whenever the wind blows, but the coal

generation would dispatch whenever the energy price cleared the PJM market; isn't that your understanding of how it works?

A. Essentially, yes.

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- Q. So there would be zero direct cost on coal generation if the state of Ohio elected to comply with 111(d) through new renewable generation?
- A. I don't think you can look at it that way. I think that there will be an effect on all existing generation if you're going to build a thousand megawatts of new generation.
- Q. What if the state of Ohio elected to comply by doing all energy efficiency, what would be the cost on the coal generation?
- A. I couldn't give you a figure, but it would have the same effect of reducing the need for that existing generation.
- Q. It would reduce the need, but it wouldn't have any direct cost on coal at all, would it?
- A. I think if you run your coal plant less, you are going to earn less and that will have an effect on your bottom line.
- Q. The amount of time you run your coal plant will be a function of its operating costs versus the PJM LMP clearing price for energy; isn't

that right?

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- A. Yes, but your -- if your capacity factor is reduced because you are operating less, then you have less generation over which to spread your fixed costs.
- Q. Well, sure. Just because there's less demand in Ohio doesn't mean the coal plants in Ohio will dispatch less; they sell into the wholesale market. Isn't that right?
 - A. That's right.
- Q. Okay. What if -- so there's no real -there's no physical device, like a scrubber for SO-2,
 or an SCR for NOx, or a precipitator for -- for fly
 ash, there's no device to reduce carbon from an
 existing coal plant, is there?
 - A. There's carbon capture and sequestration.
 - Q. Well --
- A. And there's efficiency upgrades that can help.
- Q. Efficiency can help. You can get more megawatt-hours per ton for MMBtu, but there is no carbon sequestration for existing coal units; there's no technology for that. If there were, 111(d) would be that.
- A. Right. I mean, you theoretically could

install carbon capturing sequestration, but what you're saying is it's not required at this point.

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- Q. It's not the best controlled technology, it's not a realistic technology; is that right? My point is the cost of 111(d) on coal generation really remains to be seen how much, if any, there will be under the state implementation plan. Would you agree with that?
- A. I would dispute your "if any," because I don't see how a rule designed to reduce carbon dioxide emissions from the electric sector wouldn't have an effect on the part of that sector that reflects 75 percent of those emissions.
- Q. Well, strike the "if any." The amount certainly remains to be seen, correct?
 - A. Sure, correct.
- Q. And you would expect -- you understand there is going to be significant legal challenges to the outside of -- the outside-of-the-fence proposal of the EPA to --
- A. I expect there will be many legal challenges.
 - Q. Right.

MR. KURTZ: Thank you, Ms. Jackson.

Thank you, your Honor.

2298 1 EXAMINER WALSTRA: Thank you. 2 Mr. Oliker. 3 MR. OLIKER: No, thank you. 4 EXAMINER WALSTRA: Ms. Petrucci? 5 MS. PETRUCCI: No questions. EXAMINER WALSTRA: Mr. Hart. 6 7 MR. HART: No questions. 8 EXAMINER WALSTRA: Ms. Watts. 9 MS. WATTS: Just a few questions, your Honor. 10 11 12 RECROSS-EXAMINATION 13 By Ms. Watts: 14 Ms. Jackson, you responded, on questioning by your counsel, you understood that Duke 15 16 Energy Ohio had a seat on the board at OVEC, correct? 17 Α. That's what I think I've heard in this 18 setting. 19 Okay. You don't know much about it more 2.0 than just what you've heard while being here in the 2.1 hearing room. 22 That's right. Α. 23 Ο. Okay. And were you here when Mr. Brodt 24 from OVEC testified? 25 A. For part of his testimony.

You understand that decisions by a --1 0. 2 decisions by a board, in particular the OVEC board, 3 most decisions require majority vote? Α. I'm not sure, but I imagine that's true. 4 5 0. Okay. And do you know how many -- how many votes Duke Energy Ohio has on the OVEC board? 6 7 Α. I'm assuming just one, but I'm not sure. 8 0. Okay. And did you also hear Mr. Brodt talk about a continuous-improvement process at OVEC? 9 I don't think I heard that part actually. 10 Α. You have no reason to dispute that OVEC 11 Ο. 12 undertakes efforts to reduce costs, correct? 13 Α. I don't have any reason to dispute or confirm that. 14 15 Ο. Okay. And, again, with respect to 16 111(d), you wouldn't expect anything to happen in 17 respect of that legislation realistically until 2020, 18 correct? 19 Which legislation? Α. 2.0 111(d)? Q. 2.1 Α. The regulation? 22 Yes, regulation, I'm sorry. Q. 23 Α. The regulation is set to take effect, 24 essentially reductions need to be in place by 2020. 25 Q. Okay. That could change as well,

2300 1 correct? 2 Α. Sure. 3 MS. WATTS: Thank you. I have nothing further. 4 5 EXAMINER WALSTRA: Staff? MR. BEELER: No questions, your Honor. 6 7 Thanks. 8 EXAMINER WALSTRA: Thank you. You may 9 step down. 10 Mr. Mendoza. MR. MENDOZA: We would move that Sierra 11 12 Club 4a be admitted as well as Sierra Club 4, 13 although we still need to work out those redactions 14 with Duke, which we will do over the weekend, 15 hopefully, and have that for Monday. 16 EXAMINER WALSTRA: Any objections? 17 MS. WATTS: No objections. EXAMINER WALSTRA: It will be admitted. 18 19 (EXHIBITS ADMITTED INTO EVIDENCE.) 2.0 MS. WATTS: Duke 21, 22, I think it was, 2.1 and 23. 22 EXAMINER WALSTRA: Yes. 23 Any objections? Hearing none, they will 24 be admitted. 25 (EXHIBITS ADMITTED INTO EVIDENCE.)

2301 1 EXAMINER WALSTRA: We'll take a quick 2 5-minute break. The court reporters need a quick 3 break. (Recess taken.) 4 5 EXAMINER WALSTRA: Would you like to call 6 your witness. 7 MR. KURTZ: Yes, your Honor. We call 8 Mr. Baron. 9 (Witness sworn.) 10 EXAMINER WALSTRA: Thank you. You may be 11 seated. 12 13 STEPHEN J. BARON 14 being first duly sworn, as prescribed by law, was examined and testified as follows: 15 16 DIRECT EXAMINATION 17 By Mr. Kurtz: 18 Would you state your name and business address for the record. 19 2.0 Α. Stephen Baron. My business address is J. Kennedy and Associates, 570 Colonial Park Drive, 2.1 22 Suite 305, Roswell, Georgia 30075. You have in front of you a document 23 Ο. 24 entitled the Direct Testimony of Steven J. Baron with 25 eight exhibits.

2302 1 Α. Yes. 2 Q. Okay. Was this testimony prepared by you 3 or under your direct supervision? 4 Α. Yes. 5 0. If I were to ask you the same questions as those contained herein, would your answers be the 6 7 same? 8 Yes, they would. Α. 9 Any corrections or additions? Not that I'm aware of. 10 Α. MR. KURTZ: Your Honor, could we have 11 12 this marked as OEG Exhibit 2, and I tender the 13 witness for cross. EXAMINER WALSTRA: So marked. 14 15 MR. KURTZ: Maybe this is Exhibit 3. 16 Could we have this marked as OEG Exhibit 3. 17 EXAMINER WALSTRA: 3 it is. 18 (EXHIBIT MARKED FOR IDENTIFICATION.) 19 EXAMINER WALSTRA: Ms. Hussey. 2.0 2.1 CROSS-EXAMINATION 22 By Ms. Hussey: Good afternoon, Mr. Baron. 23 Ο. A. Good afternoon. 24 25 Q. You discuss rider LFA beginning on

page 20 of your testimony; is that correct?

A. Yes.

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- Q. Okay. And as you understand it, Duke is proposing to discontinue rider LFA effective June 1, 2014?
- A. The company is proposing to discontinue it, yes.
 - Q. Okay. And by "the company" you mean Duke Energy Ohio?
 - A. Duke Energy Ohio.
- 11 Q. Okay. And are you proposing that the LFA
 12 rider be gradually phased out over the term of the
 13 ESP?
 - A. Yes, that's correct. Well, we've referred to it as "phase-down" because it drops each year.
 - Q. Okay. And the rationale behind that would be the promotion of gradualism to mitigate significant rate increases?
- A. Yes, yes. That was a principle reason for the alternative proposal that we're making.
 - Q. Okay. Thank you.
- 23 And you've also recommended that the
 24 Commission discontinue the application of rider LFA
 25 to rate DS customers; is that correct?

A. That is correct. The -- there is, I think, about 19,000 DS customers who are currently subject to that rider and they would be removed and the calculation would be done in a revenue neutral manner for just DP and TS.

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- Q. Okay. And you state in support of your proposal to eliminate rider DS customers from the rate classes to which rider LFA applies on page 23, line 16, that "The OEG proposal immediately... eliminates thousands of smaller DS customers from the Rider who tend to have lower load factors and would otherwise face higher rates with the Rider in place"; is that accurate?
 - A. Yes, that's correct.
- Q. Are you familiar with the recommendation advanced by Staff Witness Donlon on rider LFA in his testimony filed in this case?
 - A. Yes. I have read that.
- Q. Okay. And to your knowledge has staff suggested that the LFA rider should be phased out over the term of the ESP by reducing it 33 percent in year one, 33 percent in year two, and 34 percent at the end of the ESP?
- A. Yes. That's my understanding and the -- in addition to that, as I understand Mr. Donlon's

proposal, it would continue to include DS customers in the calculations.

Q. Okay. Thank you.

MS. HUSSEY: Your Honors, I have offered a copy of Mr. Donlon's testimony in this case to Mr. Baron and to counsel, and I believe the Bench has copies as well. To my understanding, I believe that staff intends to introduce it as Staff Exhibit 5 at some point.

MR. BEELER: That's correct, your Honor.

EXAMINER WALSTRA: It will be so marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Mr. Baron, could you turn to page 3 of Mr. Donlon's testimony.
- A. Yes.

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- Q. And on that page there's a chart entitled estimated impacts of illuminated -- of eliminating the LFA rider; is that accurate?
 - A. Yes. I see that.
- Q. Okay. And do you have any reason at all to believe that Mr. Donlon has misrepresented any of the figures in the flow chart?
- A. No. It appears, I think I cited an impact for a TS customer, a high-load factor TS customer that I've calculated approximately a

- 1 14 percent increase. So this appears to be consistent.
 - Q. Okay. Largely consistent, then, with what your testimony is?
 - A. Yes, I believe so.
 - Q. Okay. Could you take a look at Schedule DS on the chart for me. And do you see that the approximate number of customers on Schedule DS with the load factor of over 50 percent appears to be 3,711?
 - A. Yes, I see that.

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- Q. And it appears Mr. Donlon has also noted, immediately beneath the chart, that generally customers above 50 percent LFA currently benefit from the rider. We're talking about load factor in terms of 50 percent; is that accurate?
- A. Yes, that's what the note below the table shows.
 - Q. Okay. Would you agree with that statement?
- A. Yes. I haven't done that specific calculation on the current rider, but it doesn't surprise me.
- Q. Okay. So then under your proposal, as opposed to the company's, is it your understanding

that the DS customers would lose any benefit they've previously received under rider LFA?

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- A. Yes. The -- basically, under our proposal -- under my proposal, for DS customers it would be the same as the company which is a one-time elimination of the LFA rider so that customers on DS who, assuming 50 percent is the breakeven load factor, customers above 50 percent on DS would experience an increase relative to where they are under the current rider, all else being equal.
- Q. Okay. And in contrast to that, under your proposal, customers in the DP and TS classes that are presently benefiting from the rider will continue to do so, only with a phase-down approach?
- A. Well, it would have -- I've calculated under our -- under my proposal, I've just recently calculated actually, I think I was asked in my deposition about a breakeven load factor and I have calculated that since my deposition and it's about 67 percent, so the economics of the LFA change when you pull out the DS customers.

And so, it's -- but the -- because of the loss of DS customers and the revenue neutral calculation, it has the effect, under my proposal, of reducing the benefits of the LFA rider to higher-load

factor customers in every year. And like so -- it does have an effect, if that's what you were asking.

Q. Okay. It does have an effect. However,

under the DP and TS classes, there will still be -they will still benefit if they are above that load
factor threshold --

A. Yes.

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Q. -- under your proposal.

A. That's correct, that's correct.

Q. Okay. And from your understanding of Mr. Donlon's proposal, would any customers under any rate class who are presently benefiting under rider LFA, have those benefits terminated as of June 1, 2015?

A. No, not as I understand Mr. Donlon's proposal.

MS. HUSSEY: Okay. Thank you. That's all I have.

EXAMINER WALSTRA: Ms. Bojko. Oh.

MR. SECHLER: Thank you.

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CROSS-EXAMINATION

23 By Mr. Sechler:

Q. Mr. Baron, good afternoon. Would you agree with me that IRP is a type of demand response

program?

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- A. That the IRP?
- Q. Yes.
 - A. Yes.
- Q. And you would agree with me one of the goals of DR programs in general should be to maximize the number of customers that participate in the programs?
- A. From -- maximize to the extent that it makes economic sense for the customer to participate and so forth, yes. I mean, there's a rational optimized basis for participation; it's not just a singular objective of having the largest participation rate.
 - O. Understood.
- A. That wouldn't be an objective just singularly by itself.
- Q. Would you agree with me, generally, that another goal of DR would be to maximize benefits for all customers in the service territory?
- A. Yes. I think when you broaden the term "benefits" sort of from an economic standpoint of overall, the economic benefits in the service area, when you consider the impact on customers who -- who are exchanging reliability for reduced power costs in

the form of a credit; when you consider the reliability benefits that all customers in the service area and, in the case of PJM, it really — some of the benefits are local, some are RTOwide; when you consider other economic benefits to Ohio in terms of the impacts of costs that large participate — customer — manufacturing customers who have — have large numbers of employees and economic — the more efficient operation in terms of incorporated demand response, when all of those are factored in, yes, that is the ultimate calculation that would be done. It's not — but it's broader than just a rate calculation.

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- Q. And, generally speaking, you're in support of aggregating customers to participate in DR-type programs; would that be correct?
- A. I don't -- maybe you could clarify what you mean by that and what you are referring to.

In terms of, for example, the current protocol that's used in PJM where curtailment service providers aggregate customers who -- that they have signed up and offer that to PJM, if that's what you're referring to, certainly that makes sense. I'm not testifying on that one way or the other, but I certainly don't oppose it.

- Q. Okay. A couple of basic questions about your IRP proposal. Does your IRP proposal propose to change the current minimum load requirements needed to participate in the program?
- A. No. For this large customer program, my proposal is basically to maintain the current threshold which is 10 megawatts. Duke Energy Ohio has the PowerShare program which would be available for customers who are much smaller than that.
- Q. And does your IRP proposal change the current terms regarding length of customer IRP commitments or when and under what circumstances the customer could opt out of IRP?
- A. I haven't -- I'm not proposing any changes to that. To the extent that Duke has certain contract provisions that it enters into with participating customers, I'm not proposing any changes one way or the other.
- MR. SECHLER: Thank you, Mr. Baron. No further questions from me at this time.
- 21 EXAMINER WALSTRA: Thank you.
- Ms. Bojko?
- MS. BOJKO: Thank you, your Honor.
- THE WITNESS: Could you move the mic a

25 little closer.

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2312 1 MS. BOJKO: Sure. Can you hear me now? 2 THE WITNESS: Yes, I think so. I'll let 3 you know. 4 5 CROSS-EXAMINATION By Ms. Bojko: 6 7 Q. Good afternoon, Mr. Baron. Good to see 8 you again. 9 Good afternoon. Α. 10 Q. Let's turn to page 3 of your testimony. You talk about uncertainties with regard to 11 12 generation service in Duke's territory on line 20. 13 want to ask you a couple of questions about that. 14 It's your understanding, sir, that Ohio is in a deregulated state; is that correct? 15 16 Α. Yes. 17 Q. And the utilities are required to 18 separate their distribution and their generation 19 functions, and distribution companies are not allowed 2.0 to own generation; is that your understanding? 2.1 Certainly going forward that's my 22 understanding that the -- that each of the major 23 companies will have -- either have or in the process 24 of divesting.

Q. And the reason why you say "going

forward" is because you are aware that Duke Energy Ohio still owns a small 9 percent entitlement into OVEC generating units; is that your understanding?

- A. No. I was really thinking of the prior ESP when they were in the -- they still owned, and AEP, to some extent too, in the past. That's really what I was referring to.
 - Q. Okay. So --

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- A. Not the OVEC.
- Q. Okay. So it's your understanding that the Ohio utilities have either separated their generation distribution functions or are in the process of doing just that.
- A. Yes. They've all separated the functions. What I was really referring to was whether they've divested into -- out to another entity.
- Q. Okay. And it's your understanding in Duke -- Duke's service territory specifically that the entitlement that Duke does own to the OVEC generating units, the output of that, that's not being used to serve Ohio customers; is that your understanding?
 - A. That's my understanding.
 - Q. Okay. So in Duke's territory today, they

basically have two options. One, they can either shop with a certified retail electric service supplier; or, they can take service pursuant to the standard service offer; is that your understanding?

A. Yes.

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- Q. And the standard service offer is done by a series of laddering auctions; is that correct?
- A. Yes. The proposal that Duke is making is that there will be a series of auctions.
- Q. Okay. And those auctions then -- the result of those auctions is then averaged so that a customer gets a fixed SSO rate; is that correct?
- A. During the -- right, during the term of the ESP, that would be my understanding.
- Q. Okay. And that's currently under the ESP as well as how it's going to be under the proposed ESP.
- A. Yes. I'm talking about the proposed ESP, yes.
 - Q. Okay. And also on that page, line 21, you state that "It is important to maintain some level of stability for large customers"; do you see that?
- 24 A. Yes.
 - Q. And the stability you are talking about

in that line is rate stability; is that correct?

A. Yes.

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- Q. Okay. And you would agree with me that that's important for other customers as well, just not necessarily large customers?
- A. Yes. I was referring specifically -- I would agree with you, yes. And I was referring in that statement to -- specifically to the large customer interruptible program which obviously is geared towards large customers. But there --
- Q. But it would be something that a large customer other than one that's under an interruptible program would likely be -- would take into consideration when selecting their options under -- their energy options, I guess?
- A. Well, you're speaking of -- maybe I didn't -- I am not following entirely. You're speaking of rate stability or back to the rate stability again or?
- Q. Right. I'm just saying that even customers that are not on an interruptible program would likely take into consideration options that they have for rate stability versus the risk of not rate stability and different product offerings in the market to do that, right?

- A. Yes. I think that seems reasonable.
- Q. And those customers would -commercial/industrial customers would likely look for
 different product offerings from CRES suppliers that
 take in different hedging strategies to do just that.
 - A. That seems reasonable.
- Q. On page 4, I read this page of your testimony, and maybe I misunderstood a response that you had to Mr. Sechler, but I understand your testimony on this page to be talking generally about demand response programs, in that the demand response programs in general do provide regional benefits to customers regarding both reliability of the service as well as the price of capacity; is that correct?
- A. Yes. They clearly provide regional reliability benefits. If I -- if -- I certainly wasn't suggesting otherwise.
 - Q. Okay.

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A. In the first instance, customers who provide demand response or interruptible load provide the -- an increase in reliability, starting in the local zone and, at some point, there are benefits that might fan out to all of the RTO, but certainly initially it's the local zone. It's Ohio customers to the extent that their -- that reliability could be

threatened by the loss of a local generating unit or a transmission line or something of that nature.

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- Q. And, sir, through your testimony I understood your position that DR programs could also help the reliability of the system during cold weather events; is that how I read your testimony?
- A. Yes. As a matter of fact -- that's consistent with where I understand, based on reading PJM documents, that PJM is focusing -- that in the past PJM's demand response program and their generation performance focus has been on the summer months, but obviously this past winter we've seen, in January and February, a number of emergency events where, due to the extreme cold weather, there were -- it was really insufficient capacity. So, yes, and under -- so more -- the ability to interrupt customers annually seems to be taking on a much more significant aspect in -- within PJM.
- Q. And although OMA as well as others have actually recently proposed offering year-round DR programs into PJM, it's true that currently those programs do not exist; is that correct?
- A. I believe -- I think in the -- starting in the '14-'15 delivery year, there is annual demand response in P -- as part of the PJM portfolio. I

don't know -- I don't recall sitting here what the percentage of megawatts, but they have -- PJM has implemented an annual demand response program category that customers can participate in. And that requires unlimited -- it's really consistent with what I'm proposing. Is that what you are speaking of?

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- Q. Go ahead. Go ahead, sir. I thought that was a recent proposal that was just put out in the PJM White Papers. I didn't --
- A. The annual demand response, I believe, is effective delivery year '14-'15. There's basically three categories of emergency demand response.

 There's limited which is the summer months, and there are certain restrictions on the number -- frequency and duration of interruptions; there's the extended summer that would go June through October plus the following May; and then there is annual and that's demand response.

PJM has just recently issued a white paper in October in response to the litigation concerning opinion -- FERC Opinion 745, that would establish a new category, performance capacity, and there -- demand response would qualify for that as well and it has -- it's much more -- it's annual,

unlimited interruptions for emergencies. The duration of an interruption would be up to 72 hours for a customer. And so, maybe, I think maybe perhaps that's what you are referring to?

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- Q. No, no. Actually, there's a current stakeholder process going on at the -- at PJM that they just accepted comments regarding DR-type programs, energy efficiency, as well as demand response, in the -- for the capacity market and they just recently accepted comments on that with regard to the polar vortex response.
- A. I may have misunderstood what you are referring to.
- Q. That's fine. We'll get to the 745 order in a little bit because I know we like to talk about that.

As I understand, your recommendation in this case is that you would like for Duke to maintain the existing interruptible program; is that correct?

A. Yes. With -- with a major modification that it is -- that the customers are subject to inter -- unlimited emergency interruptions annually as opposed to the more restrictive, limited program which is only applicable during June through September, ten interruptions for six hours maximum.

Q. Okay. So you're proposing for -- to expand the interruptible program to include winter demand response interruptions, emergency only, similar to what we were just discussing with regard to the PJM?

- A. Yes, the -- yes, that's correct.
- Q. And your testimony also has a recommendation for LFA rider as you have discussed with Ms. Hussey; is that correct?
 - A. That's correct.

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- Q. And but your testimony does not -- you do not testify to or discuss the price stability rider that the company is proposing; is that correct?
 - A. The price stability, no.
- Q. Okay. And going now to your interruptible modification, would your expanded program only be available to customers that are currently participating in the interruptible program, or would it be open to all customers?
- A. There -- it would be open to all customers subject to the threshold size limitation that I've proposed. Currently there's, I think, four customers, two to four customers, I am not a hundred percent certain, that comprise about 502 megawatts that are on the program now. But the proposal I am

making is it would be open to -- subject to, I think there was a cap originally of 200-some-odd megawatts, maybe 250, and I'm not proposing to change that.

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- Q. Your testimony, I think -- I just want to clarify, your testimony, I thought, said four customers, and, now, you are telling me that it's somewhere between two and four; you are not exactly sure?
- A. My understanding is it was four. There was some -- I think in my deposition there was a question about whether it was only two, but what appears to be certain is -- to the best of my understanding, it's four customers and a total of 52 megawatts.
 - Q. Okay. And 52 megawatts that you have recently researched and --
- A. Actually, that may be confidential. I don't know.
- MS. SPILLER: I think it was disclosed in open discovery, sir.
 - THE WITNESS: All right.
- Q. Okay. And I guess while we're talking
 about it, let's go through, you are referring to -- I
 think you were searching for a document up there, and
 I want to make sure we're on the same page. The

- existing interruptible program was established in the stipulation for the last ESP case which was in 11-3549-EL-SSO; is that correct?
 - A. And that was what I was looking for.
- Q. Okay. I do have a copy here, sir, for you. Would you like a copy?
 - A. I'm certain I have it but.
 - O. For the record --

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- 9 A. Yeah, that would be fine, unless I can find it.
- MS. BOJKO: For the record this was previously marked as OMA Exhibit 2.
- May I approach, your Honor?
- 14 EXAMINER WALSTRA: You may.
- MS. SPILLER: Ms. Bojko, are you on the stipulation or order?
- MS. BOJKO: Oh, I'm sorry. I am actually on the order. I apologize. It's OMA Exhibit 2 is the order. Sorry.
- Q. (By Ms. Bojko) If you turn to page 35 of the opinion and order in the last ESP stipulation, I think you might find the criteria you are searching for, sir.
- A. Yes. That is what I was looking for.
- Q. Okay. So let's talk a little bit -- as I

understood your previous testimony to prior counsel, you said you are not proposing to change the current, and I want to make sure that all the elements under your proposal are going to remain the same.

You believe that this -- the new interruptible program, I'll call it the "expanded," is that fine, your expanded interruptible program, would apply to shopping or nonshopping customers; is that correct?

A. Yes.

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- Q. Okay. And it would remain at the 10 megawatt at a single site, which I think you alluded to earlier; is that right?
 - A. Correct.
- Q. And it would be -- customers would have an annual option to participate or not participate; is that correct?
 - A. Yes.
- Q. Okay. And then that nomination -- oh, that's the original. It couldn't take effect before June 1 but that element is really no longer applicable.

A customer must be registered with PJM and abide by all PJM requirements for the demand response program; is that still in your program?

- A. Yes. Unless and until PJM change -there's some flux going on in that regard that
 could -- but, yes, as of now, that would be under the
 PJM rules.
- Q. Well, presumably, even if PJM changed its rules, it would still have to abide by the rules, right?
 - A. Yes.

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- Q. And it must not have previously sold or committed its -- committed to PJM or another party, the demand response resource that it's going to interrupt for this interruptible program; is that right?
 - A. Yes.
- Q. Okay. And Duke will be the curtailment service provider; is that accurate?
 - A. Yes.
- Q. And then, also under the expanded plan,
 Duke would be required -- since they are no longer an
 FRR entity, they would be required to bid the
 capacity resource into the PJM market and then credit
 the rider mechanism with any revenues that they may
 receive for compensation of participation in that PJM
 market.
 - A. That is correct.

Q. And then your new proposal, your expanded proposal, would also credit -- it would be the same credit, one-half of CONE; is that correct?

- A. One-half of net CONE, yes.
- Q. Net CONE, thank you.

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And, okay, so let's talk a little bit about the 250 megawatts you just discussed. Is your proposal to maintain the 250-megawatt limitation, or is it to expand the interruptible program to more than 250 megawatts?

- A. At this point, my proposal, as I indicated, was to continue the program with the modifications I specified which would -- and so I'm not proposing to change the 250 maximum.
- Q. Okay. But you wouldn't oppose an expansion of the program beyond the 250 megawatts, would you?
 - A. I wouldn't -- I wouldn't oppose it.
- Q. Okay. And your expanded program would also have the interruptible credit recovered through Duke's rider DR-ECF which is an economic-development-type rider; is that correct?
- A. That's -- yes, the answer is yes, it would continue the DR-ECF and that's where the credit and the costs and any revenue credits would be

included.

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- Q. And it's your understanding, sir, that beyond the four customers that are participating in the interruptible program currently offered by Duke, that there are likely other commercial customers participating in demand response programs; is that accurate?
- A. Yes. I would assume so. Certainly --well, Duke has a PowerShare program which is a demand-response-type program. And other customers certainly could be participating through a CSP independently of this program through the PJM program.
- Q. Okay. And "CSP," you are talking about a curtailment service provider, a third-party provider; is that right?
 - A. Yes.
- Q. And so, it's also possible, you've named two, through a PowerShare program offered by Duke, through a curtailment service provider, but it's also possible customers could be participating in the market themselves; is that right?
- A. Yes. I believe there is a -- basically, a customer can become its own CSP, effectively, and participate in that manner through PJM.

- Q. And it's your understanding that some marketer suppliers also provide that service to their customers; is that accurate?
- A. Yes. I think that's -- I assume that's the case.
- Q. And also, the 10 megawatts per one site, sir, you're familiar -- are you familiar that this is the same threshold that was in the other OEG's witness's testimony for a recommendation regarding opting out of the PSR program; are you aware of that?
- A. I -- I believe -- I actually haven't read that, so I'm not familiar, but I think I may have seen -- it's possible. I have a general recollection of that, but I honestly -- that's not an issue that I've addressed, so I'm trying to remember whether I've seen that number or not.
- Q. Going back to rider DR-ECF. It's your understanding that this rider's paid by all customers; is that correct?
 - A. Yes.

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- Q. And it's a nonbypassable rider?
- A. That's my understanding, yes.
- Q. And one of the rationals you provide for continuing the program is that the current PJM pricing alone may not provide sufficient pricing

incentive for customers to participate; is that accurate?

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- A. That's one of them. I think a key factor that's evolving, as we speak, are the changes that are occurring in the -- in the entire capacity market with respect to demand response because of the -- the D.C. Circuits, vacation of Opinion 745, PJM has issued a White Paper talking about an alternative arrangement for demand response that would shift it back effectively to the states and to LSEs. There's a lot of uncertainty today as I -- as I understand and perceive it that would contribute to the support for the Ohio Commission establishing a program which is what I'm recommending.
- Q. Okay. I promise we'll get to that D.C. Circuit decision, but on page 8 of your testimony, it's on this page that you talk about the pricing differential and that's what I want to focus on.

 Your -- the rationale -- one of your reasons for continuing this program is because you state that PJM pricing may not provide sufficient incentive and -- is that right?
 - A. That is absolutely correct.
- Q. Okay. And you are referring -- when you make those assertions, you are referring to the kW

credit provided under PJM's programs compared to the credit provided under Duke's current IRP program; is that correct?

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A. Yes. Basically the Duke -- the Duke program and that which I'm recommending continue is a credit based on 50 percent of net CONE. Over the years, the RPM reliability -- PJM reliability pricing model has not produced capacity rates at that rate, though there appears to be a strong push towards moving -- modifying the capacity market to move it up to that rate, but it's not -- it's not there now.

And so, the RPM rate I think for the '16-'17 year is dropping precipitously compared to the current year or '14-'15, and then even the '17-'18, it sort of bounces back up. So it really does bounce around a lot.

And from my experience representing large customers who participate in these types of interruptible arrangements, whether it's in PJM or outside of PJM, the stability of the interruptible credit is an important factor. I mean, customers — interruptible — receiving interruptible credit is not just something people line up for a handout. They have to respond and curtail their operation and that requires investments and takes risks. They have

to install equipment and do a lot of other changes in order to participate. So stability of the rate is important based on my experience.

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- Q. Okay. So you would agree with me that the PJM programs provide a different incentive pricing than what the Duke IRP program provides; is that right?
- A. Based on the RPM -- the base residual auction results that have -- that are in effect for the next three years, the 50 percent of net CONE is greater, yes.
- Q. Okay. And you have already told me that the IRP, Duke's interruptible program, is paid through a rider paid by all customers. How is the PJM compensation -- who pays the PJM compensation to customers?
- A. That's -- that's paid for, as I understand it, through a -- effectively through the locational reliability charges that LSEs pay to PJM.
- Q. So PJM actually pays the customers; is that right?
- A. PJM pays the credit to the DR customer.

 The load at each of the LSEs, in the case of Duke, by virtue of being supplied by competitive —

 competitive suppliers and bidding into SSO load, have

to pay to support that like they pay to support a generating unit.

Q. Right.

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- A. It's basically equivalency -- PJM today treats demand response in the same manner as any other supply resource like a generating unit.
- Q. So, today, PJM compensates either the customer or the curtailment service provider for giving them that load, and Duke pays the interruptible credit to the customer; is that --
- A. Well, as I think I explained in my previous answer, PJM doesn't generate the money; it's basically a passthrough entity. It charges load customers for whatever it pays for when it -- when it procures generation to supply each of the zones in PJM like the Duke Ohio zone, it -- it pays generating units for that, and then it charges those customers in the zone capacity charges to recover that. So, in that sense, ultimately, customers' load pays the cost whether it's through PJM or through Duke, customers ultimately pay, load pays.
- Q. Okay. And they pay but it's a lot lower rate is, I think, what you are telling me.
- A. It's a different rate. Certainly I agree that 50 percent of net CONE is higher than the

current RPM rate, though, as with these changes that are occurring in PJM, some of -- my understanding is part of PJM's White Paper my -- would -- can affect interim auction results that will affect delivery year ultimate -- the final zonal capacity price paid by load in Duke and other companies probably starting in delivery year '15-'16.

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- Q. Okay. Let's get to the D.C. Circuit decision that you are referencing. It's your understanding that the D.C. Circuit decision was specifically deciding the issue of whether incentive pricing for demand response was proper at the same level of other generating sources in the energy market; is that correct?
- A. It's -- I read the order, and it's my understanding that the D.C. Circuit vacated the rule based on its belief that FERC had overstepped its bounds in establishing these pricing protocols, allowing customers to participate in -- on economic -- from demand -- the demand response economic program in the wholesale energy markets.
 - Q. In the energy market.
- A. In the energy market. The rationale from what material that I've read, including PJM itself in the White Paper that I referred to which is -- was

issued just a couple of weeks ago, PJM said that though the D.C. Circuit decision only affected specifically Opinion 745 related to the energy markets, there is certainly reason to believe and a strong concern that a rationale will apply to the capacity markets.

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And, in fact, FirstEnergy has an expedited or emergency complaint before FERC now, basically attempting to implement the same, remove demand response from the RPM model.

- Q. Actually, sir, those are -- those two events that you just talked about, you have them in reverse order. First what happened was FirstEnergy filed a complaint, and then PJM came out and said because of the risk of litigation, we're going to give alternatives in case it is interpreted that this may apply to the capacity market. It wasn't saying it's conceding that it's going to apply. It's saying given concerns that are raised, they are going to have an alternative option in place; isn't that right?
- A. Yes, I agree. The FirstEnergy complaint was filed in May. The D.C. Circuit decision came after that. Well, I think about the same time. And the PJM paper that I spoke of came in October, a

couple of weeks ago. The concern expressed by PJM is that the FERC has to make a decision as to whether -- what it's going to do in regard to appealing the D.C. Circuit decision or whether to actually modify the protocols affecting demand response.

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MS. BOJKO: I mean, I have -- I would actually, at this time, think it would be appropriate since we were referring to it, ask that the Bench take administrative notice of the United States Court of Appeals for the District of Columbia Circuit, Case No. 11-1486, and it was decided, to help, in May -- May 23, 2014. Would the Bench like copies?

EXAMINER WALSTRA: Please.

MR. KURTZ: Your Honor, we agree.

EXAMINER WALSTRA: Noted.

MS. BOJKO: I mean, just to make the record clear since he is referring to it.

THE WITNESS: I know there is not a question before me, but I agree with you.

EXAMINER WALSTRA: The Bench will take notice.

Q. (By Ms. Bojko) And so, as I understand it, sir, just so we have the events in chronological order, this order came out and then FirstEnergy filled out a complaint saying, because of the order,

they think it needs to be considered -- or, they are asking for the order to be expanded, in fact, to include the capacity markets?

- A. Yes. And I think, I read the FirstEnergy complaint, and I think, essentially, for the legal reasons cited by the D.C. Circuit, there was there's certainly reason to raise an issue as to whether the capacity market would also be affected by that same rationale.
- Q. And your -- is it your understanding, sir, or are you aware that the D.C. Circuit Court decision just got stayed?
- A. Yes. So that the FERC can have time to make a decision with regard to whether or not to appeal.
- Q. Right. So, as of now, due to the stay, the rule actually has not been vacated, so there's not the immediacy that you were referring to a little bit ago.
 - A. Yes. But I think -- the answer is yes.
 - Q. Okay.

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A. But it's not, I should add just for — and I think I stated it in my testimony that this is not an issue that has just come up with respect to the D.C. Circuit decision. It has also been raised

by the independent market monitor for PJM, and so it's not something that's just all of a sudden arisen. The issue is regarding the market design with respect to demand response.

- Q. Right. But the issue is in no way resolved at this point anyway.
 - A. That is correct.
 - Q. Okay.

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- A. That is correct.
- Q. So we have to operate under the existing rules and laws that are in place, and if it does get appealed to the Supreme Court, then the -- then the order would remain in place until it's resolved --
 - A. Well --
 - Q. -- due to the stay?
- A. I agree with you from what you said factually, but I think in terms of a policy issue -- decision before the Commission that's an -- it's an important factor that, in my view, supports the idea, the proposal that OEG is making to continue -- to continue with a state program.
- Q. Okay. And let's turn now to page 11 of your testimony, and on 11 of your testimony, line 16, you talk about continuation of reliability benefits of interruptible load for Ohio, and I think, as we've

discussed this afternoon, those benefits really are for the region, for the PJM zone.

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- A. No. When I said "region," I meant Ohio.

 When I said "region" -- I said there are reliability

 benefits that are provided to all of PJM, but when I

 use the word "region," I meant Ohio and the Duke area

 of Ohio.
- Q. Okay. And the benefit, sir, of the existence of demand response would exist regardless of at or how the customers are compensated for that DR; is that correct?
- A. Well, I don't know -- if you assume that a customer is going to behave exactly the same, no matter what the level of compensation, then the answer to your question is yes. But you've answered it in the question, essentially.

If the question is does the -- does the level of the credit and the form -- formation of the program for, for example, going from a limited term to an annual program, subject to unlimited emergency interruptions any time during the year including the winter, does that have an effect on reliability? The answer is, of course, it does. It improves it.

Q. And, actually, on the bottom of page 11, you agree that demand -- demand response resources

helped to reduce market prices for all consumers; is that correct?

A. Yes. That's --

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- Q. And that would be all types of demand response programs, right?
- A. Yes. I think everything else being equal, the evidence that I have reviewed is -- is that the existence of demand response in the RPM model, as it exists today, lowers what otherwise would be the clearing price. That's -- the independent market monitor has done a number of analyses on that very subject.
- Q. And if we can turn to page 12 of your testimony. You've also stated that the interruptible programs is a form of economic development; is that correct?
- A. Yes. That's correct to the extent that customers participate, and the customers, the 52 megawatts that are currently in the program receiving credits, to the extent that that facilitates more economic operation of their facilities, it creates economic value in Ohio, jobs and so forth.
- Q. And you are aware that there are other economic development mechanisms in the state of Ohio, I believe we've discussed them before, such as

reasonable arrangements?

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- A. Yes. I'm familiar with reasonable arrangements.
- Q. And is it your understanding that a customer could take service pursuant to the interruptible program and then could also participate in a reasonable arrangement or other economic development program?
- A. I believe that's true. I think
 they're -- essentially they're independent of each
 other because the interruptible program is -- is
 related to the ability of a customer to curtail
 subject to the requirements of the program. If it's
 annual emergency, it's any time there is a emergency
 on an unlimited basis. It's independent of the
 reasonable arrangements.
- Q. And your proposal, your expanded interruptible program would not change that, right? You are not suggesting that there be a prohibition or limitation on participation in economic-development-type programs in addition to the interruptible?
- A. No, I'm not addressing that. I'm certainly not making any recommendation to restrict it in that fashion.

Q. And on the bottom of page 12 of your testimony, you -- here you cite to the AEP case. You were a witness in the AEP case, testifying on the same subject matter; is that correct?

A. Yes.

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- Q. And AEP also proposed to eliminate their interruptible program, and you participated in that to propose a continuation and modification or, you actually proposed options, in the AEP case, of two different types of interruptible programs; is that right?
 - A. Yes, that's correct.
- Q. And the the AEP program, as it exists today, is at a level of \$8.21 kW; is that correct?
 - A. Yes.
- Q. And what is the current net half,
 50 percent of net CONE, that would be applicable in
 the Duke's current case?
- A. My calculation is that it's about \$4.88 per kW a month.
- Q. Okay. And it's your proposal, I believe, that you are expanding the program to be the annual program that we've discussed, but you -- you are proposing to keep the 50 percent of net CONE as the credit; is that right?

A. That is correct.

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- Q. And I think you've stated this, or it could be implied, but the current interruptible program, because it was only related to summer months, it would not have helped or didn't provide any assistance during the January, 2014, polar vortex event?
- A. You're saying the current limited program?
 - Q. Yes.
- A. That may or may not be true because under the limited program customers are not obligated to curtail in the nonsummer months, but they can curtail and receive if they are participating in the full emergency program, which they get economic benefits from curtailment in terms of avoided LMP.

So customers have the option to curtail in the nonsummer months even if they are in the limited program, but they are not required to; whereas, under an annual program they would be required to curtail.

Q. I'm sorry. You believe that under the stipulation and the opinion and order that approved that in the Duke ESP, that there was a voluntary aspect to their interruptible program?

- A. That's not -- no, that's under -- I was referring to the PJM rules that govern the limited program.
- Q. Okay. I'm sorry. That was probably a poor question on my part. I meant to ask you, under the Duke current interruptible program, there's no provision for voluntary interruptions, so the Duke program would not have assisted PJM during the polar vortex; isn't that correct?
- A. That's correct in terms of reliability.

 That's absolutely correct. I was referring to the

 PJ -- the more expanded PJM program.
- Q. Right. And that was actually a distinguishing factor between the Duke program and the existing program, and the AEP existing program; isn't that right?
 - A. That's my understanding.
- Q. Okay. Let's turn to page 15 of your testimony. You discuss a little bit here about customers in different areas of the state of Ohio receiving a disadvantage if interruptible programs are not uniformly offered throughout the state; is that right?
 - A. Yes.

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Q. Okay. You would agree with me, sir, that

large manufacturers or other industrial and commercial customers receiving an IR -- receiving an interruptible credit could similarly be disadvantaged or some customers could receive an economic advantage over others that are not receiving such credit; is that correct?

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- A. Well, to the extent that if you hold —
 if you eliminate the cost of being interruptible that
 I was discussed earlier, if you just think of it
 as a credit, perhaps what you said is correct. In
 terms of weighing that with the cost of being
 interruptible, I guess you would have to do it on an
 individual customer basis to know that.
- Q. Well, I mean, a customer receives the credit regardless of whether they are actually interrupted; isn't that correct?
- A. Yes, but when you sign up to be interruptible, subject to emergency interruptions, you have to be -- you have to make those investments and be prepared to be interrupted whether or not you are interrupted, and that's a cost.
- Q. Absolutely. But given that there are only four large interruptible customers, it's fair to say that many other large customers will have similar equipment on their system already, and they would be

similarly situated with regard to the preparedness of being able to interrupt or not interrupt?

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A. I haven't done any analysis of how many. I think I would have to read into your question that there are other customers on the Duke system who are participating in the PJM demand response program but are not in the Duke-specific IRP program.

I can't imagine -- if that's not the case, I can't imagine a customer making investments to be interruptible and not participating in some interruptible program.

- Q. Right. I'm talking other than Duke's interruptible program. So they don't receive the Duke credit that the net CONE -- half of net CONE, but they do participate in other programs. So there's a varying level of credit that may put one commercial and industrial customer at an advantage over another.
- A. Well, I assume that's the choice of the customer. I mean, to the extent that the Duke program had a cap of 250 megawatts and, today, there are 52 megawatts participating, I assume there's there's availability and it was a choice of a customer. So whether that can be construed as a disadvantage, if a customer chooses Program A instead

of Program B, I don't think I agree with that.

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- Q. Well, if the customer receives an economic-development-type program over another customer, that would be a price reduction and, similarly, they would have a price advantage over another customer, right?
- A. Well, I guess from -- if the question is simply Customer A receive -- has some kind of benefit from an economic development program and Customer B does not, and therefore, A has a lower rate, that's -- that's an arithmetic calculation. But I can't -- I don't draw any -- I don't think I can draw any conclusions as to whether Customer B is disadvantaged by that. Perhaps Customer B is advantaged by help -- by being a supplier to Customer A and keeping Customer A in business.
- Q. Well, but then, all of the rationales that you've just stated also true —— are also true with regard to the northern region of Ohio versus any other part of Ohio; isn't that correct? There could be many other factors involved that wouldn't necessarily make them advantaged depending on the location in the state of Ohio.
- A. I would agree there are many factors affecting a customer's economic behavior. I

certainly can agree with that.

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- Q. Well, let's turn to page 16. Let's talk about the PowerShare program now. I'm a little uncertain in your testimony whether you're proposing to continue the PowerShare program or eliminate the PowerShare program.
- A. Oh, I'm proposing to continue it. I'm not making a recommendation, per se, but I'm certainly not opposed -- not proposing to do anything to change the PowerShare program.
- Q. Okay. So under your proposal, there would be two interruptible-type, demand-response-type programs. One would be the continuation and expanded interruptible program, and then the second would be the PowerShare program.
- A. Yes. The PowerShare program today is tied to the limited-term demand response, limited interruptions during June through September. The IRP program that I'm recommending would have annual emergency be subject to unlimited annual emergency interruptions. Those are those are key differences.
- Q. And it's your understanding that the PowerShare program was created through Duke's energy peak demand response portfolio program?

A. Yes, that's my understanding.

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- Q. Do you know what the credit is that customers receive from that PowerShare program?
- A. I don't know exactly. I've seen brochures talking about credits of -- I think I saw one reference for \$3 per kilowatt month if you sign up by a certain date, but I don't know for sure what the specific credit would be for a particular customer under certain -- particular set of circumstances. Certainly, if they signed up today, I couldn't tell you.
- Q. But you believe it is probably less, at least, than the current 50 percent of net CONE?
 - A. Yes. I would expect that is the case.
- Q. I think we've talked about most of these. You did say that your continued program would be to bid it into the PJM and then flow through, through the rider, the same as it's done today, any revenues from PJM, that's your proposal?
 - A. Yes.
- Q. Okay. Let's change to LFA rider for a minute. Your proposal -- I believe you're agreeing with the company in part, and you're not agreeing with the company in part because you're proposing that it be eliminated for DS customers, but you're

not proposing that it be eliminated for DP and TS.

Is that how I understand it?

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- A. Yes, and in addition to phasing down the effect of the LFA rider even within the DP and TS group.
- Q. Okay. So where you agree with Duke is the elimination for at least one class, DS customers?
- A. The 19,000 secondary customers on rate DS.
- Q. And you understand that the purpose of eliminating, or the proposal, at least, the rationale stated by Duke, was that it would eliminate the subsidy that would flow between the different rate classes; is that one of the reasons they've given for eliminating it?
 - A. I think I've read that, yes.
- Q. And it's your understanding if a customer previously received a 10 percent increase with the establishment of the LFA, that they would receive a corresponding 10 percent decrease with the elimination of the LFA rider?
- A. Well, I don't think you can -- I mean, in general, let's take a DS customer. If a DS customer was paying -- if a lower load factor DS customer was paying an LFA charge and it's eliminated, that would

have the effect of decreasing the rates.

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I don't think you can -- things are -- based on my review of the typical bill analyses presented in this case, it's not uniform that there's no rate change actually being effectuated in this proceeding, so. But with respect to the LFA itself on DS customers, that rider, whether it provided a net credit or a net charge, would be eliminated. It would have corresponding effects on rates.

- Q. So, sir, as I understand what you just said, you are not sure if the math is as simple as I put it, that if you got a 10 percent increase, you get a 10 percent decrease, but that's the concept that Duke is proposing to put forward.
- A. Well, yes. I -- like I said, the -- for customers who previously would be -- would have been subject -- on DS who would have been subject to the LFA rider, and that rider resulted in a net charge, meaning the increase in the demand charge was greater than the decrease in the emergency charge from the rider, then those customers would experience a decrease in their bill. And, likewise, DS customers, as I think I responded to the staff, DS customers who are higher-load factor, who are getting a net benefit, would receive an increase.

Q. So, I don't know if I heard your response to Ms. Hussey exactly completely. What do you believe the impact is going to be on the elimination for the DS class?

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A. Well, for the DS class, for lower -- for lower load factor customers, I think there would be a decrease in the current bill because the LFA -- assuming the LFA on net for those low load factor customers on DS would -- would have been -- is a net charge and it's eliminated.

For those DS customers that -- for which the LFA rider provided a net credit at eliminating it, those customers will receive an increase and similar to, under the company's proposal, what would happen to customers on DP and TS.

And I think the staff exhibit that I —
testimony, Mr. Donlon has a chart, I cited some
numbers, and for, you know, for higher load factor
customers we're talking about substantial increases
for TS, high load factor customers, regardless of
size. They could be small customers. We're talking
14 percent increases, the same with DP.

Q. And so, as I understand, you're saying for DS customers, let's just focus on the DS class for a minute because I understand your gradualism

arguments for the DP and TS. But for the DS customers you're saying that basically there will be winners and loses because some of them are high load factor customers and some of them are low load factor customers.

- A. Yes. I think that's what -- that's what the staff's exhibit -- or, paper shows.
- Q. And is that what you were -- in reference to, you said the breakeven load factor is 67 percent, is that what you were talking about with regard to the DS class?
 - A. No.

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- Q. No.
- A. Under -- the 67 percent is under the proposal that I am making for the new LFA that would be limited only to DP and TS.
- Q. Okay. Thank you for that clarification.

 And do you have an idea -- for the DS

 class, specifically, do you have an idea of how many

 customers would receive a benefit for that versus how

 many customers would receive a not benefit of that

 elimination?
- A. I haven't done an analysis, but, again, based on the table in Mr. Donlon's testimony, it appears that if you assume, as he has, that customers

above 50 percent load factor receive a benefit, and customers below do not, I think he's calculated that 20 percent of the customers above that load factor would receive increases of, I think if I understand this right, 12 percent. Those below that 50 percent load factor would receive, all else being equal, decreases from the current LFA, as I understand it.

- Q. Okay. So then, as you read this, under your proposal, it appears that 15,000 customers would receive a benefit from the elimination.
 - A. Yeah.

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- Q. And 3,000 customers --
- A. Yeah. And I want to correct myself. I am looking at Mr. Donlon's table. That last column is customers with 83 percent load factor, so the 12 percent is just for that specific. It's not an average.
- Q. Okay. So, now, let's just -- if we're assuming that 50 percent receive a benefit under your proposal, the 3,711 number here would actually see a decrease in their bill, while 15,000 customers would see an increase in the bill from elimination of DS.
- A. By elim -- by eliminating DS from the calculation.
 - Q. Did I say that wrong?

Yes. I think, based on Mr. Donlon's 1 Α. 2 analysis, about 15,000 customers on DS are below 3 50 percent, which is -- appears to be the breakeven load factor. 4 5 0. Okay. I said that in reverse. 15,000 would see a benefit from the elimination and 3,000 6 7 would see --8 On DS. According -- that's how I am -- I believe that's what his table shows. 9 Okay. 10 Q. I hope I haven't misstated his testimony. 11 12 MS. BOJKO: We'll confirm that with 13 Mr. Donlon. I wanted to make sure that was clear. I 14 said it opposite of what it should have been. I believe that's all I have. Thank you, 15 16 Thank you for your time this afternoon. THE WITNESS: Thank you. 17 18 EXAMINER WALSTRA: Thank you. Mr. Serio? 19 2.0 MR. SERIO: Thank you, your Honor. 2.1 22 CROSS-EXAMINATION 23 By Mr. Serio: 24 Good afternoon, Mr. Baron. Ο. 25 Α. Good afternoon.

Q. Page 4 of your testimony, top of the page on around line 4, you talk about the value of its large customer interruptible program. Who's that value for? PJM? Duke? Industrial customers themselves?

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- A. The value is for -- I think as I've testified earlier this afternoon, the value is for the Duke zone in terms of reliability, and it also provides -- it does provide reliability benefits to the RTO itself which is PJM, but in the first instance an Ohio-specific program from -- for the Duke zone would benefit re -- would increase, all else being equal, reliability in the Duke zone to the extent this is additional interruptible load.
- Q. Now, the bottom of your page, line 22, you talk about the benefit or price reduction is measured in terms of PJM costs. Does that mean that PJM is getting the benefit, line 22 on page 4?
- A. What I am referring to -- I am referring to the credit that customers -- participating interruptible customers receive. When I use the word "benefit," I'm referring to the credit.
- Q. Okay. So the benefit on page 4, at the bottom of page 4, is for the customers themselves that are in the program.

A. Excuse me. I misstated. I see -- you're referring to the last line of my testimony?

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- Q. Actually it's line -- yes, line 22 and 23.
- A. Yes. The sentence "this will preserve the benefits" I'm referring to the reliability benefits provided by an interruptible load to Duke's territory and -- and in the first instance and general reliability benefits thereafter. Exactly the same answer I gave you to your prior answer.
- Q. The benefits that go to PJM, how do those flow to Duke in particular?
- A. When I say benefits, I'm talking about benefits to customers. Reliability benefits -- PJM doesn't receive the benefits. Customers receive the benefits. And local interruptible demand response available load provides, in the first instance, local Duke zone reliability benefits. That's what I'm speaking of.

Now, because Duke is in the entire RTO, to some extent when an interruptible -- interruptible load in New Jersey interrupts it, provides benefits to Duke's customers as well and likewise that would be true throughout the zone, throughout the RTO.

25 That's what I was referring to.

But specifically into my testimony here,

I'm referring to the enhanced reliability benefits in
the Duke zone.

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- Q. Okay. On page 6 of your testimony, lines 9 through 12, you identify uncertainties there and risk associated with Duke's approach. Are you saying that Duke's approach is increasing uncertainty and risk?
 - A. Yes. What line were you referring to?
 - Q. Lines 9 through 12 on page 6.
- A. I guess the answer to that question is I tend to look at it having -- continuing the large interruptible rate program for Duke provides benefits, reliability benefits and some of the other benefits that I spoke of. The -- so I guess its reasonable to conclude that absent those which is what would occur under Duke's proposal to eliminate it, the -- those benefits would be diminished, all else being equal.
- Q. Duke -- under your -- if you continue the program, Duke would have interruptible load. Now, once a bid is accepted at PJM how does the interruptible load impact the short-term bid price?
- A. Well, in the way -- in the RPM base residual auction demand response provides megawatts

of supply in the same manner as generating units.

And so essentially the -- the thousands -- when you think of PJMwide, thousands of megawatts of demand response load increased the supply, and so all else being equal, the cleared RPM rate is lower. The -- I've reviewed studies that the market monitor has done where they've modeled what the clearing price would be absent the demand response. In other words, he took it out of the supply demand equilibrium result, and the prices, the RPM prices, the cleared prices go up tremendously, I think in some cases more than double, so that's what -- I think that's what I'm referring to there.

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- Q. The program itself has only been in place three years of the current -- the current ESP, correct?
- A. Yes. As of June, it will be three -June, '15, three years, right?
- Q. Right. Now, on page 8 of your testimony, on line 20, when you talk about sufficient incentive for customers, you're indicating that essentially it's not enough money for industrial customers to make it worth their while to participate.
- A. I'm -- I'm saying that the -- obviously to the extent that the 50 percent of net CONE

provides a higher credit. There is an issue as to whether absent that there would be sufficient participat -- as much participation so at the lower available alternative rate, either -- the participating directly in the PJM demand response program directly and receiving compensation.

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There is a broader issue also with respect to all of the changes, some of which I think I talked about earlier today and there's a tremendous amount of uncertainty as to the continuation of the program, certainly in its current form, whether it, in fact, needs to move back to the state as opposed to the wholesale — the Federal Energy Regulatory Commission for setting the prices.

- Q. Obviously a large customer that's going to participate wants the largest possible financial incentive to participate, correct? Now --
- A. Relative to -- I -- yeah, I mean, obviously -- I'm not sure -- relative to what? But I think I understand what you're saying.
- Q. If they are going to participate, they want the greatest potential dollar incentive they can get, correct?
 - A. I think that's fair.
 - Q. Has anybody done any kind of analysis to

determine where the point might be where large industrial customers are going to say it's no longer worth my effort or is that just a number that -- between what Duke's program does and your suggestion of 50 percent CONE? It's a lot of guesswork.

A. I'm not familiar with any such analysis. The only thing I can tell you is that Duke, under the settlement that we read a few minutes ago, there is a cap of 250 megawatts on this program, 52 megawatts are actually participating.

There are changes afoot in PJM, one of which is in the '15-'16 delivery year, customers are going to be subject to, under the PJM rules, 30-minute notice interruption. That's going to be --that's going to have some effect on the ability and interest of customers to participate. In other words, they have to be able to interrupt their load at their production process, their steel mill or their chemical process or what have you within 30 minutes.

MR. SERIO: Okay. Thank you.

That's all I have, your Honor.

EXAMINER WALSTRA: Thank you.

MS. SPILLER: I guess I'm up, your Honor.

25 Thank you.

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CROSS-EXAMINATION

By Ms. Spiller:

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- Q. Mr. Baron, how are you, sir?
- A. I'm doing all right.
- Q. Good. Just a few questions for you, if I may. You do recall a discussion with Ms. Hussey, sort of a compare and contrast of the company's proposal, your proposal, and staff's proposal?
 - A. Yes.
- Q. And I believe, sir, in response to one of her questions you made reference to a revenue neutral calculation. With respect to rider LFA is that revenue neutrality in respect of Duke Energy Ohio?
- A. Yes. It's in respect of Duke Energy
 Ohio, and it's in respect of all of the other rate
 schedules that are not subject to the rider. So it's
 revenue neutral with -- today revenue neutral within
 DS, DP, and TS.

Under my proposal it would be revenue neutral within DP rate -- DP and TS but not -- but only within those groups. In other words, there's not a contribution by Duke or any other rate class.

Q. So under your recommendation, sir, you would expect the revenue neutrality to continue, correct?

A. Yes.

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- Q. And you were asked some questions by Ms. Bojko concerning the SSO supply procurement process. Is it your understanding, Mr. Baron, that SSO auction bidders will factor in wholesale energy and capacity prices into their bids?
- A. Yes. I would assume that would be the case.
- Q. And would you expect that to be the same for competitive retail electric service providers?
- A. Yes, I would agree that they would factor that in.
- Q. So as changes in the wholesale market prices occur or are anticipated in respect of energy and capacity, would those changes influence the prices that Duke Energy Ohio retail customers pay for retail generation supply?
 - A. Yes.
- Q. Ms. Bojko also asked you, and she referred to your expanded interruptible program and there was reference, sir, to the company's rider DR-ECF, and to your knowledge, is that currently a nonbypassable rider?
 - A. Yes. That's my understanding.
 - Q. And under your proposal, we can call it

the expanded interruptible program, would you expect cost recovery to continue as it is now?

- A. Yes, that would be the case.
- Q. Sir, do you still have before you -- I believe the last reference to your testimony that you were discussing with Mr. Serio was page 6. Do you have that, sir?
 - A. I can turn to that.
 - Q. Thank you.

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- A. I've got it.
- Q. And I do have to ask the questions of you concerning line 10 and the references there to the uncertainties and the risks associated with Duke Energy Ohio's chosen rate-setting approach. Am I to interpret it that this that there are risks and uncertainties with how Duke Energy Ohio has decided to structure this ESP, or are these external risks and uncertainties influencing where the company is today?
- A. Well, the answer is, first, I was referring to the -- to the IRP issue here, but the uncertainties are being created by external factors.
- Q. Okay. And those external factors, sir, are the ones you identified previously in this particular part of your response?

A. Yes.

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- Q. And to your knowledge, Mr. Baron, did those risks and uncertainties exist in 2011 when Duke Energy Ohio agreed to use a competitive bidding process plan for -- in 2011 for this its third SSO?
- A. Well, there -- some of the risks and uncertainties might have existed. If 111(d) did not, the polar vortex did not, the implications on the -- for -- that will emanate from PJM's capacity performance proposal which is tied to that were not there at the time. There may be other environmental rule changes. I haven't focused on those.
- Q. And what about the issues with respect to demand response as a capacity resource you discussed with Ms. Bojko?
- A. In 2011, to my knowledge, that was not an issue and it's clearly an issue now as to when that will -- those -- that demand response will participate in the RPM model as a supply resource.
- Q. And could the outcome of the demand response issues that are currently before the D.C. Circuit Court, could those affect the results of the base residual auctions that have already cleared?
- A. It's my understanding based on reading the PJM White Paper from I believe it was October 6

that it wouldn't affect the BRA auction that's

occurred, but it could. As I understand it, they are

talking about changing the participation of demand

response in interim auctions which ultimately will

affect the final zonal capacity price to the end of

the year.

7 MS. SPILLER: Thank you. Nothing 8 further, your Honor.

EXAMINER WALSTRA: Thank you.

10 Staff?

11 MR. BEELER: Nothing, your Honor. Thank

12 you.

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13 EXAMINER WALSTRA: Any redirect?

MR. KURTZ: Thank you, your Honor.

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16 REDIRECT EXAMINATION

17 By Mr. Kurtz:

- Q. Mr. Baron, real quickly, put the interruptible in perspective a little bit. What did you say the one-half of net CONE translates into in dollars per kW a month?
- A. My calculation it's roughly \$4.88 a kilowatt-month.
- Q. Okay. And what did you say the Duke
 PowerShare demand response interruptible credit is?

A. I had seen some numbers of \$3. It wasn't clear that was a -- what the final to some extent for large customers, there may be some other factors that would influence that, so it could be certainly different, but so I haven't seen -- the number I saw in one of the documents, brochures, was \$3, but it seemed to be for a particular time period or.

- Q. It wouldn't have been 3.50? Is that a number you saw?
 - A. Yes.

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- 11 Q. Let's use \$3.
- EXAMINER WALSTRA: Could you turn your microphone on?
- A. I just -- let me see if I have it in front of me.
 - MS. BOJKO: Objection, your Honor. We've now introduced a new number that we haven't talked about the whole time and.
 - Q. Let's use the \$3 number.
 - A. I am looking at my Exhibit SJB-8, and the number on -- this is an excerpt, page 6, and the number there is \$36 a kilowatt-year from this brochure.
 - Q. Which is \$3 a kW month?
- A. Right.

Q. Okay. Let's use -- 4.88 minus \$3 is a \$1.88 -- a \$1.88 a kW a month difference under the large interruptible programs versus the PowerShare program, correct?

- A. Correct.
- Q. Times 52,000 kW participating in the current Commission-approved large industrial program?
 - A. Yes.

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- Q. Times 12 is \$1.173 million more money credit for the large industrial -- large interruptible program versus the PowerShare program?
- A. Yes. And, of course, it's important to recognize that the program for that extra money there is unlimited annual emergency interruptions.
- Q. So for the extra \$1.2 million you get
 52 megawatts of year-round interruptible polar vortex
 protection versus summer only under the PowerShare.
 - A. Yes, exactly.
- Q. Okay. You were asked a lot of questions about Witness -- Staff Witness Donlon's load factor adjustment proposal.
 - A. Yes.
- 23 Q. In your opinion is his proposal reasonable?
- 25 A. His proposal is a reasonable -- it is a

reasonable proposal to mitigate the -- what I consider to be unreasonable rate shock of 14 percent increases for higher load factor customers so it is a -- it is a plan that would mitigate that rate shock, and it's a different plan. It has different features, but it's designed to accomplish the same thing as my proposal which is to mitigate the rate impact.

MR. KURTZ: Thank you, your Honor.

EXAMINER WALSTRA: Thank you.

Ms. Hussey? Or Mr. Sechler?

MR. SECHLER: No further questions from

me, your Honor. Thank you.

EXAMINER WALSTRA: Ms. Hussey?

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16 | RECROSS-EXAMINATION

17 By Ms. Hussey:

- 18 Q. I just have one quick question for you,
- 19 Mr. Baron.

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- 20 A. Yes.
- Q. You discussed with Ms. Spiller that you expect that Duke will remain revenue neutral under your approach to rider LFA; is that correct?
- 24 A. Yes.
- Q. And would you expect that Duke will

remain revenue neutral under Staff Witness Donlon's proposal?

A. Yes, they would.

MS. HUSSEY: Okay. Thank you.

MS. BOJKO: Yes, your Honor. Thank you.

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RECROSS-EXAMINATION

By Ms. Bojko:

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- Q. I understand you just did quick math on the stand with your counsel but --
 - A. Did I make a mistake are you suggesting?
- Q. I'm not suggesting anything. I guess to put this -- keep this in perspective, first, do you know how many customers take on PowerShare versus how many customers take on the interruptible program?
 - A. I do not.
- Q. So I mean, the calculation we did really isn't an apples-to-apples calculation; isn't that fair?
- A. No, it is an apples-to-apples because

 Duke indicated in a discovery response which I

 believe I've referred to in my testimony that one of
 the options for customers who participate could go to

 PowerShare --
- 25 Q. I see.

A. -- so this is the impact.

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- Q. Sorry, sorry. Your analysis was if these customers don't take on the interruptible program, they would take there's a couple underlying assumptions. I just want to make sure we're clear. If they don't take on the interruptible program, they would take on the PowerShare program as opposed to doing some other demand response through PJM directly or through another curtailment service provider, and it's in that limited circumstance you're saying there would be a difference different credit for those four customers of \$1.2 million?
- A. Right, but I think that's the proper economic analysis. I mean, Duke is not offering its PowerShare program as a gift. There's a valid basis for it and which I'm not opposing. And so -- and they've -- and they've stated that those customers, those 52 megawatts, can move the PowerShare. So it's not a hypothetical. It's a realistic calculation.
- Q. Right. And I -- I didn't understand you to say that those customers would go down to the PowerShare program. I mean, there are other options available; isn't that right?
- A. Well, they could they could try to sign up with a CSP and hopefully receive, you know,

RPM -- whatever the CSP offers.

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- Q. Okay. And you haven't done any analysis of the cost/benefit of that compared to doing the PowerShare program, have you? You haven't done the similar analysis like you just did for your counsel with regard to the IRP versus PowerShare? You haven't gone out to the market to see what a curtailment service provider might offer and then compared that to the PowerShare program?
- A. Well, no, I haven't, you're correct. But this -- this is -- the calculation is an absolutely legitimate calculation to say if customers who are not on Duke's IRP program can move to the PowerShare program and the rate impact is a \$1.88 per -- roughly per kW, then it is 1.1 or 2 million dollars a year. I mean, that's a legitimate calculation and obviously anything could happen. They could decide they are not going to be interruptible and then there are reliability changes that affect customers and some nonqual -- I haven't quantified that but clearly that would be reasonable to assume. So I'm not disputing your point, but I don't know that it's -- it's relevant to look at this calculation that I just did.
- Q. And, sir, I didn't understand the calculation question to you to mean what we've just

established, that it was IRP program versus the
PowerShare program so thank you for that

clarification.

And it's also your understanding -- well, there are four -- only four customers taking pursuant to the interruptible, right?

- A. That's my understanding, yes.
- Q. Do you know how many customers are eligible for the interruptible program on Duke's service territory?
 - A. For the IRP program?
- 12 Q. Yes.

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- 13 A. The 250-megawatt cap is a megawatt cap as
 14 I understand it.
 - Q. Terrific. Do you know how many customers are actually eligible to participate?
 - A. Oh, how many 10 megawatt or above?
 - Q. Yes.
 - A. No, I don't. I'm sorry.
 - Q. And also just so we're clear, in your mathematical calculation when you did it, you said it's a difference of \$1.2 million and that \$1.2 million is paid by customers; is that right?
- 24 A. Yes.
- MS. BOJKO: Okay. Thank you. I have

2372 nothing further. 1 2 EXAMINER WALSTRA: Thank you. 3 Mr. Serio? MR. SERIO: Nothing, your Honor, thank 4 5 you. EXAMINER WALSTRA: Mr. Oliker? 6 7 MR. OLIKER: No questions, your Honor. 8 MS. PETRUCCI: No questions. 9 MS. SPILLER: Nothing, your Honor. EXAMINER WALSTRA: Staff? 10 11 MR. BEELER: No questions. 12 EXAMINER WALSTRA: Thank you for your 13 time. Good luck with that flight. THE WITNESS: I appreciate getting on. 14 15 Thank you. 16 EXAMINER WALSTRA: In regard to your 17 Exhibit, one quick thing was your testimony was 18 already previously introduced. 19 MR. KURTZ: Oh, okay. 2.0 EXAMINER WALSTRA: So it will be Exhibit 2.1 2, but it hasn't been moved for admission. 22 MR. KURTZ: Okay. Well, I move for the admission of OEG Exhibit 2, Mr. Baron's testimony and 23 24 exhibits. 25 EXAMINER WALSTRA: Are there any

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      objections?
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                  Hearing none, it will be admitted.
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                   (EXHIBIT ADMITTED INTO EVIDENCE.)
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                  MR. KURTZ: Thank you, your Honor.
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                  EXAMINER WALSTRA: And --
                  MS. BOJKO: Your Honor, just to clarify
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      you did say you were taking administrative notice of
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      the D.C. decision?
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                  EXAMINER WALSTRA: We'll go off the
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      record.
                   (Discussion off the record.)
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                   (Thereupon, at 5:03 p.m., the hearing was
      adjourned.)
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CERTIFICATE I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Friday, October 31, 2014, and carefully compared with my original stenographic notes. Karen Sue Gibson, Registered Merit Reporter. (KSG-5952)

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Summary: Transcript in the matter of Duke Energy Ohio hearing held on 10/31/14 - Volume VIII electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.