| 1 | BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO | | | |
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| 3 | In the Matter of the : Application of Ohio Power : | | | |
| 4 | Company to Initiate : Phase 2 of Its gridSMART : Case No. 13-1939-EL-RDR | | | |
| 5 | Project and to Establish : the gridSMART Phase 2 : | | | |
| 6 | Rider. : | | | |
| 7 | | | | |
| 8 | DEPOSITION | | | |
| 9 | of Scott S. Osterholt, taken before me, Carolyn D. | | | |
| 10 | Ross, Registered Professional Reporter, and a Notary | | | |
| 11 | Public in and for the State of Ohio, at the Office of | | | |
| 12 | the Ohio Consumers' Counsel, 10 West Broad Street, | | | |
| 13 | Ste. 1800, Columbus, Ohio, on Thursday, July 28, | | | |
| 14 | 2016, at 10:07 a.m. | | | |
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| 22 | ARMSTRONG & OKEY, INC. | | | |
| 23 | 222 East Town Street, Second Floor Columbus, Ohio 43215-4620 | | | |
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| 25 | | | | |

| 1 | APPEARANCES: |
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| 4 | |
| 5 | On behalf of Ohio Power Company. |
| 6 | Office of the Ohio Consumers' Counsel By Terry Etter, Esq. |
| 7 | Assistant Consumers' Counsel 10 West Broad Street, Ste. 1800 |
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| 9 | Carpenter, Lipps & Leland, LLP By Kimberly W. Bojko, Esq. |
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| 11 | Columbus, Ohio 43215 |
| 12 | On behalf of the Office of the Ohio Consumers' Counsel. |
| 13 | Michael DeWine, Ohio Attorney General |
| 14 | By Werner L. Margard, III, Esq. (via speakerphone) Assistant Attorney General |
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| 17 | |
| 18 | Colleen L. Mooney, Esq. (via speakerphone) Ohio Partners for Affordable Energy 231 West Lima Street |
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| 20 | On behalf of Ohio Partners for Affordable Energy. |
| 21 | Allordable Energy. |
| 22 | |
| 23 | |
| 24 | |
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| 1 | APPEARANCES (Continued): | |
|----|--------------------------------------------------------------------------------------------------------------------|-------|
| 2 | | |
| 3 | ALSO PRESENT: | |
| 4 | Andrea E. Moore, Ohio Power Company; James Williams, Sr. Utility Consumer Policy Analyst, Office of the Ohio | |
| 5 | Consumers' Counsel; Wilson Gonzalez, President, Tree House | |
| 6 | Energy & Economics Consulting, LLC; | |
| 7 | Peter Lanzalotta, OCC Consultant (via speakerphone); James Schweitzer, PUCO (via speakerphone | .). |
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| 1 | Thursday Morning Session, |
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| 2 | July 28, 2016. |
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| 4 | STIPULATIONS |
| 5 | It is stipulated by and among counsel |
| 6 | for the respective parties that the deposition of |
| 7 | Scott S. Osterholt, a witness called by the Office of |
| 8 | the Ohio Consumers' Counsel under the applicable |
| 9 | Rules of Civil Procedure, may be reduced to writing |
| 10 | in stenotype by the Notary, whose notes thereafter |
| 11 | may be transcribed out of the presence of the |
| 12 | witness; and that proof of the official character and |
| 13 | qualification of the Notary is waived; and that the |
| 14 | examination, reading, and signature of the said |
| 15 | witness to the transcript of his deposition are |
| 16 | waived by counsel and the witness; said deposition to |
| 17 | have the same force and effect as though signed by |
| 18 | the said Scott S. Osterholt. |
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1 Thursday Morning Session,

- July 28, 2016.
- 3 - -
- 4 (Witness placed under oath.)
- 5 MS. BOJKO: At this time, we'll take
- 6 appearances.
- 7 MR. ETTER: For OCC, Terry Etter.
- 8 MS. BOJKO: Kim Bojko with the law firm
- 9 of Carpenter, Lipps & Leland, on behalf of the Ohio
- 10 Consumers' Counsel. We also have with us Wilson
- 11 Gonzalez and Jim Williams, and on the phone Peter
- 12 Lanzalotta.
- 13 MR. NOURSE: And on behalf of Ohio Power
- 14 Company, Steven T. Nourse. Do you want my address?
- 15 You already have it. We also have Andrea Moore
- 16 attending in addition to the deponent.
- 17 MR. MARGARD: On behalf of the staff of
- 18 the Public Utilities Commission, Werner Margard,
- 19 Assistant Attorney General. Also on the phone is
- James Schweitzer, witness for the staff.
- MS. MOONEY: And this is Colleen Mooney
- 22 on behalf of Ohio Partners for Affordable Energy, and
- 23 I'm by myself.
- MS. BOJKO: Anybody else on the phone?
- 25 (No response.)

1 MS. BOJKO: All right. I think we're

- 2 ready to begin.
- 3 - -
- 4 SCOTT S. OSTERHOLT,
- 5 being by me first duly sworn, as hereinafter
- 6 certified, deposes and says as follows:
- 7 EXAMINATION
- 8 BY MS. BOJKO:
- 9 Q. Good afternoon, Mister -- is it
- 10 Osterholt?
- 11 A. It's Osterholt.
- 12 Q. Great. Could you please state your name
- and business address for the record?
- 14 A. Sure. My name is Scott Osterholt,
- business address is 850 Tech Center Drive, Gahanna,
- 16 Ohio 43230.
- 17 Q. And, Mr. Osterholt, have you ever been
- deposed before?
- 19 A. This is my first time.
- Q. So one thing with regard to the
- 21 deposition is that we need for you to have a verbal
- response. It's difficult for the court reporter to
- take down nods or uh-huhs; so if you could give us a
- 24 verbal response that would be great.
- 25 At any time if you feel you need a

- 1 break, if you could just finish the answer -- or the
- 2 response to the question that's posed and then we'll
- 3 be happy to take a break, but we can't have a
- 4 question pending while you take a break. So just let
- 5 us know if you need a restroom break or some other
- 6 kind of break.
- 7 A. Okay.
- 8 Q. Do you have any questions before we get
- 9 started?
- 10 A. I do not.
- 11 Q. Are you the Scott Osterholt whose
- testimony was filed in this case on April 20th, 2016?
- 13 A. Yes, I am.
- Q. And this case, meaning In the Matter of
- 15 the Application of Ohio Power Company to Initiate
- 16 Phase 2 of Its gridSMART Project and to Establish the
- 17 gridSMART Phase 2 Rider, and that's Case
- No. 13-1939-EL-RDR; is that correct?
- 19 A. That is correct.
- Q. Okay. Did you have any assistance in
- 21 preparing your testimony that you filed on April
- 22 20th?
- 23 A. I was a primary author with assistance
- from a team of people that support me.
- 25 Q. And the team that you're referencing, is

- 1 it a department at AEP? Who is the team?
- 2 A. There's a large group of people from
- 3 AEP, AEP Ohio that supports my efforts in drafting
- 4 that response.
- 5 Q. And would those efforts be in the
- 6 Distribution Risk and Project Management Department,
- 7 or what is the department?
- 8 A. So gridSMART is operated as a
- 9 matrix-style project; so there is resources that are
- 10 outside of my direct responsibility that have helped
- along with my individual team that I'm responsible
- 12 for.
- 13 MS. BOJKO: And at this time I'd like to
- mark as Depo Exhibit 1, the Notice to Take Deposition
- 15 and Request for Production of Documents by the Office
- of Ohio Consumers' Counsel.
- 17 (EXHIBIT MARKED FOR IDENTIFICATION.)
- 18 BY MS. BOJKO:
- 19 Q. Here you go. Have you seen the Notice
- of Deposition before?
- 21 A. I do not think that I have read it.
- 22 Q. If you look on Page 2 of the deposition
- 23 notice, there are two items listed regarding
- 24 workpapers that you were asked to bring with you or
- 25 documents that you used in responding to any data

1 requests. Do you have any documents with you today?

- 2 A. I do.
- Q. And what did you bring with you today?
- A. I brought all of the OCC data requests,
- 5 and I brought the original filed application, the
- 6 signed Stipulation agreement, and I think it's all
- 7 written testimony for this case.
- 8 Q. And all written testimony meaning of all
- 9 intervening parties, as well as the AEP witnesses?
- 10 A. I have written testimony from Osterholt,
- 11 Moore, Schweitzer, Direct Energy, Williams,
- 12 Lanzalotta, and Gonzalez.
- MR. NOURSE: Counsel, I brought all the
- 14 discovery for his reference if he needs it.
- MS. BOJKO: Thank you.
- 16 BY MS. BOJKO:
- 17 Q. Do you have a second binder that's
- 18 discovery responses to OCC; is that correct?
- 19 A. That is correct.
- Q. All discovery responses, not just the
- ones you were responsible for?
- 22 A. That's a very good point. It is the
- ones that I was responsible for.
- Q. Okay. You can put the notice aside.
- What is your title at AEP?

1 A. I am director of Risk and Project

- 2 Management.
- 3 Q. And what are your duties as director?
- A. I have two major responsibilities; one
- is overseeing the company's assessment and
- 6 remediation or risk activities, as well as overseeing
- 7 the gridSMART efforts.
- 8 Q. And you said you had your testimony in
- 9 front of you; is that correct?
- 10 A. I do.
- 11 Q. Could you turn to your testimony? We'll
- 12 be referring to that quite often throughout today.
- On Page 1, Line 11 of your testimony, you mentioned
- that your work involves planning and organizing
- 15 activities to reduce risk associated with AEP Ohio's
- 16 operations. Do you see that?
- 17 A. I do.
- 18 Q. What risk are you referring to there?
- 19 A. Typically those are operational risks,
- 20 things like how could we reduce the risk of poles
- 21 falling and injuring humans, things such as that.
- Q. And let's back up one more minute.
- 23 For -- you're director of Distribution Risk and
- 24 Project Management. Is that a director for AEP Ohio?
- 25 A. That is correct.

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1 Q. And so you're employed by AEP Ohio?
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- 2 A. That is correct.
- Q. And in addition to poles falling, what
- 4 are some of the activities you're referring to in
- 5 your testimony on Line 11?
- A. So we do assessments of all operational
- 7 processes and assets. We look at which of those
- 8 assets and processes involve the most risk. We look
- 9 at what remediation is currently in place. We look
- 10 at what remediation could be put in place. We
- 11 prioritize those, and we work to reduce risk on our
- 12 system.
- Q. And on Line 12 you mention that you
- manage projects and various project implementation
- 15 activities. What projects are you referring to?
- 16 A. So projects could be risk-based
- 17 projects. So let's say we decide hypothetically to
- 18 expand our pole inspection program, we would be
- 19 responsible for ensuring that that gets completed.
- 20 Also on a project management
- 21 perspective, we also are responsible for all
- 22 project -- all project activities essentially with
- the gridSMART Phase 1 and Phase 2 effort if we move
- 24 forward.
- 25 Q. So what implementation activities have

- 1 you managed?
- 2 A. I was directly responsible for the
- 3 entire AEP Ohio gridSMART Phase 1 effort.
- 4 Q. Is that the only one?
- 5 A. No. I was responsible for many project
- 6 management activities in my career, including I was a
- 7 manager of project management for one of the AEP
- 8 subsidiary companies at one point in my career.
- 9 Q. And which subsidiary was that?
- 10 A. AEP Communications.
- 11 Q. On Line 13 you state you're responsible
- for day-to-day management of AEP's gridSMART program
- 13 that you just mentioned, including the implementation
- of Advanced Metering Infrastructure, AMI,
- 15 Distribution Automation Circuit Reconfiguration,
- 16 DACR, and Volt/VAR Optimization. Can you elaborate
- on what your day-to-day responsibilities are?
- 18 A. So for those three projects, I had
- 19 ultimate overall responsibility. So from an AMI
- 20 perspective, responsible for selecting a vendor,
- 21 selecting contractors, ordering material, deploying
- the meters, maintaining the meters, et cetera.
- For Distribution Automation, I was
- 24 responsible for putting out an RFP to select the
- 25 vendors, purchasing the material, developing the plan

for deployment, overseeing deployment, managing

- 2 associated maintenance.
- The same is true for Volt/VAR; so
- 4 responsible for the vendor selection, the contract
- 5 selection, deployment activities, and associated
- 6 ongoing maintenance activities.
- 7 Q. And when you say deployment activities
- 8 and ongoing maintenance, with regard to those two
- 9 items, you're referring to the overseeing of those
- 10 two; is that right? You don't actually physically go
- out in the field and do those activities?
- 12 A. I do not. I oversee those activities,
- 13 that's correct.
- Q. On Page 1 -- let's back up. Will you
- understand what I mean if I refer to Advanced
- 16 Metering Infrastructure as AMI?
- 17 A. Yes, I would.
- 18 Q. And the same with regard to DACR?
- 19 A. That's great.
- Q. And VVO?
- 21 A. Perfect.
- Q. Okay. On Line 18 still on Page 1, and
- it goes over to Page 2, you state that you've
- interacted with many customers in AEP's gridSMART
- 25 Phase 1 territory. Do you see that?

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1 A. I do see that.
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- Q. How many customers in Phase 1 territory
- 3 have you interacted with?
- 4 A. I do not have a definitive answer to the
- 5 quantity.
- 6 Q. Could you give me a magnitude?
- 7 A. I would say somewhere between 200 and
- 8 600.
- 9 Q. And how many meters were deployed in
- 10 Phase 1?
- 11 A. For Phase 1 we installed originally
- 12 110,000 meters, we added another 22,000, for a total
- 13 of 132,000 AMI meters.
- Q. And the 200 to 600 customers that you
- 15 referenced, are those residential or business
- 16 customers?
- 17 A. That would be a mix.
- 18 Q. More residential or more business?
- 19 A. More residential.
- 20 Q. In what ways did you interact with these
- 21 customers?
- 22 A. We had outreach events, outreach and
- 23 education events. So we have a gridSMART mobile
- 24 display unit. The primary focus of that unit is to
- go out and educate the community about our gridSMART

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1 project. We went to various events, including the
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- Ohio State Fair, the Parade of Homes, we did some
- 3 events including a safety day at the City of
- 4 Whitehall. All three of those events that I
- 5 mentioned, I personally staffed the gridSMART mobile
- 6 to talk to customers for small periods of time during
- 7 those events.
- 8 Q. Any other ways that you interacted with
- 9 customers?
- 10 A. We also had some focus groups, so those
- were small quantities. So we interacted with them
- 12 behind glass; so I was more of a -- you know,
- listening to what they had to say, not actually
- 14 speaking to them.
- Q. So you observed the focus group, you
- 16 didn't interact in the focus group?
- 17 A. That is correct, yep. Helped oversee
- 18 the questions to be asked, but not the person that
- 19 was in the room actually asking the questions.
- Q. And the mobile van, I think you called
- it, were you only in it on those three occasions?
- 22 A. So there was multiple days at the fair,
- 23 I think it was two; and the Parade of Homes was also
- two; and the City of Whitehall was one day.
- Q. And over what period of time --

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1 A. That was over --
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- Q. -- is this a year or two years?
- 3 A. -- a two-year period.
- 4 Q. But it was just those three events that
- 5 you mentioned?
- 6 A. Based on my recall at this time, that is
- 7 all that I recall.
- 8 Q. Okay. And as I understand the mobile
- 9 van, because I've been in the mobile van, it is a
- 10 series of interaction of either trivia pursuit kind
- of games or information about smart meters; is that
- 12 correct?
- 13 A. I'd be happy to describe it. So when
- 14 you walk into the mobile unit, the first unit is a
- video that does a great job of demonstrating the DACR
- technology, it's an interactive video where there is
- 17 a lightboard up on the left of the video screen that
- 18 shows kind of a circuit map of lights going off, the
- 19 DACR system reconfiguring and bringing lights back
- on, but the video also gives a greater review of the
- 21 entire gridSMART program.
- Going behind that video, there is an AMI
- 23 meter display, shows an actual AMI meter and a
- traditional meter, describes some of the benefits.
- Going to the next unit, we have a

display regarding the consumer programs; so we show

- 2 some of the in-home technology. We also have --
- 3 behind that we have a slider program; so it's kind of
- 4 like a -- a display that you would normally see like
- 5 in a kids' museum more focused towards kids. It's
- 6 got two handles on it, you slide it back and forth,
- 7 and as you go over the gridSMART technology, it
- 8 describes it, again, more oriented towards kids.
- 9 We also have another module that looks
- 10 at the web portal, describes how the web portal can
- 11 show AMI -- does show AMI interval data.
- 12 Then the last unit in the back is a
- 13 trivia kind of game where you compete against up to
- three other people for a total of four, and it goes
- 15 through both energy efficiency type questions and
- 16 gridSMART questions.
- 17 Q. And employees of AEP, such as yourself,
- are there to answer questions that customers might
- 19 have; is that correct?
- 20 A. We also employ an event marketing group
- 21 called Event Marketing Strategies. They are
- 22 responsible for getting the mobile unit to the -- the
- 23 locations. They also have staff that man it, they
- train to support our project.
- 25 But typically at all times we'll have

one to two additional AEP resources there to answer

- 2 the more complex questions, and that's -- you know,
- 3 when I described me being there, I was filling one of
- 4 those roles.
- 5 Q. Okay. And you mentioned focus groups.
- 6 So the AEP focus groups that you mentioned, were
- 7 those on gridSMART issues?
- 8 A. So we had some focus groups very, very
- 9 early in the project, and then we had one at the end
- of the project that was tied to a DOE study looking
- 11 more at privacy. And the initial ones were more
- looking at, you know, how should we best brand the
- program, how should we best position the program,
- 14 things like that.
- Q. So is -- do you believe that those focus
- 16 groups were about gridSMART?
- 17 A. They were definitely about gridSMART.
- 18 Q. Okay. And your role in the gridSMART
- 19 focus groups was that of the observer behind the
- 20 glass that you explained to me earlier?
- 21 A. That is correct.
- Q. And are you aware if any focus group
- 23 participant expressed that the company should fund
- its gridSMART project with the project savings?
- 25 A. I do not recall that.

1 Q. Are you aware that some focus group

- 2 participants had concerns about the cost of
- 3 gridSMART?
- 4 A. I am not aware of any comments like
- 5 that. I am -- yes, I'm not aware of any comments.
- 6 Q. Did you look at the results of the focus
- 7 group -- focus group participants that you observed?
- 8 A. Close to the time of the focus group, I
- 9 did look at those results. I have not refreshed my
- 10 memory of those results recently.
- 11 Q. So you're just saying at this time you
- can't recall what the comments were or were not?
- 13 A. That's correct. I can say that they
- were generally enthusiastic about the technology, but
- 15 I cannot recall specifics on individual comments at
- 16 this point.
- 17 Q. Do you recall concerns about costs?
- 18 A. I do recall customers generally being
- 19 concerned with costs in general. I don't recall
- 20 specific comments about customers being concerned
- 21 about gridSMART costs.
- Q. Do you believe the results of focus
- groups are confidential to the company?
- 24 A. I'm not sure I'm qualified to answer
- 25 that confidentiality.

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1 Q. You just don't know?
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- 2 A. I don't -- I do not know.
- Q. Let's turn to Page 2 of your testimony.
- 4 On Line 2, you state that you have firsthand
- 5 experience with the benefits regarding AMI, DACR, and
- 6 VVO. Do you see that?
- 7 A. I do.
- Q. What do you mean by "firsthand"? Is it
- 9 just everything you explained to me before about the
- 10 overseeing of the projects?
- 11 A. So when I was at those events, I did
- 12 hear firsthand knowledge from customers who had
- experienced the benefits of those three programs and
- have shared with us or me directly their appreciation
- of these technologies.
- 16 O. And, again, did you hear in the -- in
- 17 that context -- we talked about the focus group, but
- in the context of the mobile van, did you hear
- 19 concerns about costs from customers at that time?
- 20 A. I do not recall any concerns specific
- 21 about costs to the consumer program from those
- events.
- 23 Q. So the benefits that you're referencing
- on Line 2 are those that you just stated with regard
- to the new technology associated with gridSMART?

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1 A. Yep. So a good example of those is AMI.
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- 2 So one of the things I do recall is customers saying
- 3 they love the idea that they can see more granular
- 4 usage information on the web portal, and that
- 5 information has helped them change or modify their
- 6 behavior in a way to save energy and save money.
- 7 O. And in that context in the mobile
- 8 vehicle, do you engage customers in the cost analysis
- 9 of AMI or SMART Grid deployment?
- 10 A. If that question was asked, we would
- 11 address it, but I do not recall any customers asking
- 12 that question.
- 13 Q. And there's nothing displayed in the van
- that explains the costs associated with the gridSMART
- 15 program; is that correct?
- 16 A. I cannot recall any location inside the
- vehicle or on any displays that state the costs, but
- 18 there could be costs mentioned in videos, but I am
- 19 not certain if it is or is not.
- Q. And then going on Line 5, still on
- 21 Page 2, you state you have a Bachelor's Degree in
- 22 Business Administration from Mt. Vernon Nazarene. In
- what year did you receive that degree?
- 24 A. I am unsure of the exact year, but it
- 25 was in the '90s.

1 Q. And you don't have a master's or

- 2 doctorate; is that correct?
- 3 A. That is correct.
- 4 Q. You mention on Line 6 that you had
- 5 employment with an electric cooperative. Which co-op
- 6 was that?
- 7 A. Pioneer Rural Electric in Piqua, Ohio.
- 8 Q. How long did you work there?
- 9 A. '90 to '94.
- 10 Q. What was your position and job duties
- 11 with the co-op?
- 12 A. I was working in the Engineering Group.
- I was first employed as a co-op student in the
- 14 Engineering Group and held various roles, small
- 15 co-op, 55 employees total; so did numerous jobs from
- 16 traditional engineering work to meter reading to I
- was responsible for the storeroom for about six
- 18 months due to the storeroom person being injured,
- 19 multitude of different responsibilities.
- 20 Q. So during that four-year period, did
- 21 that include -- the four-year period you referenced,
- was that part as a student?
- A. Part as a student, yes.
- Q. Do you know how long you worked there
- 25 after you graduated?

1 A. I do not recall the date that I went

- 2 full-time, but it was in the '92 timeframe, '93
- 3 timeframe.
- Q. On Page 2, Line 6, you also mention
- 5 working with AEP under a contracting arrangement.
- 6 What do you mean by a contracting arrangement?
- 7 A. I was a staff augmentation contractor
- 8 employed by a synergetic design assigned to do
- 9 engineering projects in the southern Ohio -- AEP Ohio
- 10 southern Ohio region.
- 11 Q. So was that after you worked at the
- 12 co-op --
- 13 A. That's right.
- Q. -- or at the same time?
- 15 A. It's after the co-op. I left the co-op
- 16 to come to AEP Ohio in Chillicothe, Ohio under that
- 17 synergetic staff augmentation role.
- 18 Q. So you left the co-op in '94, and then
- went to work on that contract for AEP?
- 20 A. That's correct.
- Q. And which unit of AEP were you working
- 22 under contract?
- 23 A. Back then it was called the Southern
- 24 Ohio Region Engineering.
- 25 Q. And then did you do the synergetic work

for approximately two years, and then joined AEP in

- 2 '96?
- A. That is correct, June of '96.
- 4 Q. And in '96 you joined AEP Ohio in the
- 5 Distribution Region Engineering Group?
- A. That is correct.
- 7 Q. What was your position in the
- 8 Distribution Region Engineering Group?
- 9 A. Engineering technician or technologist.
- 10 Q. And what were your job duties as an
- 11 engineering tech?
- 12 A. I was responsible for designing the
- large distribution pole line upgrades.
- Q. Were you based in Ohio?
- 15 A. I was based in Chillicothe, Ohio.
- 16 Q. And then in 1997 you transferred to AEP
- Ohio's affiliate, Appalachian Power Company; is that
- 18 right?
- 19 A. That's correct.
- Q. And there you led the engineering
- 21 activities for Lynchburg, Virginia district?
- 22 A. Yes.
- Q. And what was your title at that time?
- 24 A. Distribution -- distribution engineering
- 25 supervisor.

1 Q. And what were your job duties at

- 2 Appalachian Power?
- 3 A. Oversee the distribution engineering
- 4 design work, including pole line redesign and
- 5 upgrades, as well as new homes, new business.
- Q. And were you with Appalachian Power
- 7 until you returned to AEP Ohio in 2006?
- 8 A. No. In 1999 I -- I transferred from
- 9 Lynchburg, Virginia to Columbus, Ohio working for AEP
- 10 Communications, a nonregulated telecom company owned
- 11 by AEP, and my role was manager of project
- management.
- Q. And then after AEP Communications, you
- 14 returned to AEP Ohio?
- 15 A. So in -- in the early 2000s, AEP
- 16 Communications was eliminated as a company. The
- 17 assets were transferred to our Telecom/IT Department,
- and I transitioned to manage the remaining assets in
- the IT/Telecom group until 2006 when I went back to
- 20 AEP Ohio.
- Q. You said transitioned to our. Are you
- 22 referring to AEP?
- A. Sorry, yes, AEP's.
- Q. Not AEP Ohio; AEP Service Corp.?
- 25 A. Well, the assets were actually moved to

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all of the individual operating companies whose
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- 2 jurisdiction they fell within, but they were managed
- 3 essentially by an AEP Service Corp. group.
- 4 Q. So you were a Service Corp. employee at
- 5 that time?
- A. That is correct.
- 7 Q. From early 2000s to 2006?
- A. That is correct.
- 9 Q. Then in 2006 you came -- you went to AEP
- 10 Ohio as a work scheduling supervisor?
- 11 A. That is correct.
- 12 Q. And what were your job duties as a work
- 13 scheduling supervisor?
- 14 A. Responsible for scheduling all
- distribution work in the Central Ohio area.
- 16 Q. The completion of maintenance and
- infrastructure upgrades, things of that nature?
- 18 A. Ensuring all projects got completed both
- 19 from small to large, yes.
- Q. And then in 2009 you became manager of
- 21 Advanced Distribution Infrastructure for AEP Ohio; is
- that correct?
- 23 A. That is correct.
- Q. And what were your job duties there?
- 25 A. Overseeing AEP Ohio's gridSMART Phase 1

- 1 demonstration project.
- Q. Is that the only project you worked on
- 3 then at the time?
- 4 A. That -- that was my primary
- 5 responsibility. At one point in time I helped with
- 6 the Distribution Investment Rider, setting up the
- 7 tracking mechanisms, but generally I'd say 98 to 99
- 8 percent of my time was dedicated to the gridSMART
- 9 Phase 1 project.
- 10 Q. And then you took over your current
- 11 position this year; is that correct?
- 12 A. That is correct.
- Q. When was that exactly?
- 14 A. In January.
- Q. And it's my understanding that you're
- the responsible witness for all sections of the
- 17 Stipulation except Sections 7 and 13; is that
- 18 accurate?
- 19 A. My list of sections that I'm sponsoring
- is shown on Page 2 and 3 of my testimony.
- Q. And if you look at Line 20, you
- specifically do not address 7 and 13; is that
- 23 accurate?
- 24 A. That is correct, but there's also parts
- of 3, parts of 6 that I do not support. Witness

1 Moore also addresses parts of Section 3 and parts of

- 2 Section 6.
- Q. And it's your understanding that the
- 4 Stipulation adopts the application as filed except as
- 5 modified by the Stipulation?
- 6 A. That is my understanding.
- 7 Q. Turn to Page 4 of your testimony,
- 8 please, Line 21, Phase 2 benefit-to-cost ratio
- 9 remains the same. Do you see that? You say, "...the
- 10 gridSMART Phase 2 benefit-to-cost ratio remains the
- 11 same under the Stipulation."
- 12 A. I see that.
- 13 Q. So the cost-benefit ratio is the same as
- 14 proposed in the application; is that correct?
- 15 A. That is correct.
- 16 Q. And the Stipulation provisions did not
- modify the benefit-to-cost ratio; is that correct?
- 18 A. The numeric output of 2.8 on a cash
- 19 basis and a 2.0 on a net present value basis did not
- 20 change, but the underlying assumptions behind those
- 21 conclusions were modified to reflect all changes
- 22 associated with the Stipulation.
- Q. And as you state on Page 5, the
- 24 benefit-cost ratio shown by the Business Case remains
- 25 the same even with those updates that you just

- 1 referenced?
- 2 A. That is correct.
- 3 Q. What is the total cost to customers of
- 4 Phase 2 under the Stipulation?
- 5 A. So for Phase 2 for the 15-year Business
- 6 Case evaluated, we reflect that total cost estimate
- 7 to be \$516 million.
- 8 Q. And what did you just look at to obtain
- 9 that information?
- 10 A. I was looking at the Business Case
- 11 attached to the back of my written testimony on
- Page No. 9 in the Cash View -- or in the table under
- 13 Cash View, the 15-year costs total on the left side
- in the Cash View section is 516 million.
- Q. And the Business Case that you just
- 16 referenced attached to your testimony is
- 17 Exhibit SSO-1, was updated the same day that you
- 18 filed your testimony; is that correct?
- 19 A. That is correct.
- Q. And was this updated to reflect the
- 21 Stipulation?
- 22 A. It was.
- Q. And what was the 15-year costs of
- 24 Phase 2 in the original application?
- 25 A. 465 million.

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1 Q. And you are referencing Attachment A
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- that was filed to the application; is that correct?
- 3 A. That is correct.
- 4 Q. And Attachment A is the Business Case
- 5 that was filed with the application?
- A. That is correct.
- 7 Q. So your Exhibit SSO-1 took the Business
- 8 Case attached to the application and updated it to
- 9 reflect the Stipulation provisions; is that right?
- 10 A. That is correct.
- 11 Q. Okay. And under the -- the Stipulation,
- the DACR deployed per circuit is \$427,000; is that
- 13 correct?
- 14 A. Our current estimate is that the DACR
- 15 averages across the large number of deployed circuits
- 16 \$427,000 per circuit, yes.
- 17 Q. And that per-circuit cost is an increase
- in \$37,500 per circuit from Phase 1; is that correct?
- 19 A. That is my understanding, yes.
- Q. And it's also your understanding that
- 21 for the DACR there will also be an ongoing 3 percent
- 22 O&M charge pass through the rider each year for the
- 23 life of a circuit?
- 24 A. That is correct, that is our estimate.
- Q. You know what I mean by O&M?

- 1 A. I do.
- Q. Okay. Sorry, I didn't mean to cut you
- 3 off.
- 4 A. That's okay.
- 5 Q. Okay. On Page 5 of your testimony,
- 6 Line 21, you state that it's expected to take 48
- 7 months for completion. Is there an actual completion
- 8 deadline or requirement in the Stipulation?
- 9 A. I am not aware of a -- a requirement.
- 10 Q. And just for the record, I'm sorry,
- Page 5, Line 21 is discussing AMI deployment; is that
- 12 correct?
- 13 A. That is correct.
- Q. So would your answer be the same with
- 15 regard to the -- with DACR as well as VVO, that
- 16 there's expected completion dates, but not a required
- 17 completion date?
- 18 A. That is my understanding as well.
- 19 Q. On Page 6 of your testimony, you discuss
- 20 feasibility studies for Phase 2 deployment of AMI and
- 21 DACR technologies. Do you see that?
- 22 A. I do.
- Q. What's the difference between the
- 24 feasibility study in Section 1.B of the Stipulation
- and the full system feasibility study in Section 1.D

- 1 of the Stipulation?
- 2 A. Section 1.B of the Stipulation is
- 3 focused on showing how the meters were selected for
- 4 the AMI deployment and how the circuits were selected
- for the DACR deployment. And, you know, that study
- is shown to -- is supposed to show how we selected
- 7 those in a way that maximizes the total benefits for
- 8 those deployments.
- 9 Q. Versus the feasibility study in
- 10 Section 1.D, what is that to do --
- 11 A. So 1.D is looking at a larger
- 12 deployment. So if we were to go forward with the
- gridSMART Phase 3 project after gridSMART Phase 2 is
- 14 completed, what other circuits, meters would be
- 15 advantageous to pursue.
- 16 Q. So the studies -- the feasibility
- 17 studies concern feasibility of deployment based on
- 18 the scope of AEP Ohio's original application; is that
- 19 correct?
- 20 A. It is looking at the original scope and
- 21 showing the details behind how those technologies
- 22 deployment areas were selected to maximize the
- 23 benefits.
- Q. And the original application proposed
- 25 894,000 AMI meters; is that correct?

- 1 A. That is correct.
- 2 Q. And were those for residential and
- 3 commercial accounts?
- 4 A. They were.
- 5 Q. Small commercial accounts?
- 6 A. The AMI deployed would include generally
- 7 all customers within a defined geographic area. And
- 8 I say generally because there are some very complex
- 9 accounts that there's some unique circumstances where
- 10 AMI would not be feasible and we'd have to continue
- 11 with an even more complex metering situation, but
- 12 that is a very rare occurrence.
- 13 Q. And the original application -- oh,
- 14 excuse me. Let me ask one more follow-up question to
- 15 that.
- 16 So if an account already had a smart
- meter, interval meter, that would be excluded. You
- 18 wouldn't put a new smart meter under this program
- just because they were within the defined geographic
- 20 region; is that fair?
- 21 A. I guess that's a fair question, and the
- answer would be we would -- we would typically leave
- the gridSMART meter that was there, but I can't
- imagine a circumstance where there is a gridSMART
- 25 meter in a non-gridSMART area. But if there was, we

- 1 would leave it there.
- Q. Well, a large customer -- a large
- 3 commercial customer might already have an interval
- 4 meter --
- 5 A. They may have a --
- 6 Q. -- some kind of smart meter?
- 7 A. Do you call -- if the metering situation
- 8 was optimum, we would leave it in those rare, unique
- 9 circumstances.
- 10 Q. The original application proposed DACR
- 11 being added to 250 circuits; is that right?
- 12 A. That is correct.
- Q. And then on Page 6, Line 2 of your
- 14 testimony, you state that that technology will be
- included on 250 circuits, and prioritized circuits
- that are likely to result in the greatest customer
- 17 reliability benefits.
- 18 And as I understood your prior answer,
- 19 that will be determined by the feasibility study
- included in Section 1.B of the Stip?
- 21 A. That is correct.
- 22 Q. And the original application proposed
- 23 VVO being added to 80 circuits; is that correct?
- A. That is correct.
- 25 Q. But the Stip doubled that amount to 160

- 1 circuits?
- 2 A. That is correct.
- 3 Q. And in Phase 1 AEP deployed 17 circuits
- 4 with regard to VVO; is that correct?
- 5 A. That is correct.
- 6 Q. So will the feasibility study analyze
- 7 VVO for the 80 or 100 circuits?
- 8 A. The feasibility study will address AMI
- 9 and DACR only.
- 10 Q. So how will the 160 circuits for VVO
- 11 technology be defined or selected?
- 12 A. We will select those circuits based on
- deriving the maximum customer benefits.
- Q. And the feasibility studies are to be
- 15 completed within a year after the Commission approves
- 16 the Stipulation?
- 17 A. The study will be completed no later
- 18 than one year -- one year after the Stipulation is
- 19 approved.
- 20 Q. So deployment of AMI and DACR will occur
- 21 while AEP Ohio's conducting the feasibility study?
- 22 A. There may be an opportunity for a phased
- 23 approach of the middle of the feasibility study as
- 24 per Section 1.B to allow some early deployment.
- 25 Q. But you envision the feasibility study

1 being conducted first to determine the circuits and

- then the deployment to occur?
- A. Yes.
- 4 Q. So as I understand the purpose of the
- 5 feasibility study -- well, what do you think the
- 6 purpose is of the feasibility, to select the
- 7 appropriate circuits to put the new technology?
- 8 A. To select the deployment areas so that
- 9 the maximum customer benefits -- the maximum benefits
- 10 are achieved.
- 11 Q. And how are those feasibility studies
- 12 conducted?
- 13 A. The -- can you state that question a
- 14 different way, please?
- 15 Q. How does the feasibility study get
- 16 conducted? Is it conducted internally by AEP Ohio?
- 17 Go through the process with me.
- 18 A. So we currently contemplate that we
- 19 would bring on a consultant that would help us
- 20 administer the report or, you know, draft the
- 21 documents, but they would engage our engineering
- 22 personnel to review some of the assumptions behind
- 23 the scene that we've already preliminarily developed.
- 24 Things like for DACR looking at circuits that have a
- 25 high opportunity for improvement; so circuits that

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1 have a larger number of customer minutes of
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- 2 interruption on the circuit today, things such as
- 3 that.
- 4 Q. So the assumptions behind the scene that
- 5 you just referenced, those would actually be
- 6 assumptions based on something you just said, like
- 7 high customer interruptions?
- 8 A. Correct.
- 9 Q. And how long would the feasibility study
- 10 take?
- 11 A. No more than one year.
- 12 O. And will the costs associated with the
- feasibility study be included in the rider?
- 14 A. Yes, it will.
- Q. Will there be a formal PUCO review of
- the feasibility study under the Stipulation?
- 17 MR. NOURSE: I'm sorry, are you still
- 18 talking about the 1.B feasibility study in that
- 19 question?
- MS. BOJKO: Yes.
- MR. NOURSE: Okay. Thank you.
- 22 THE WITNESS: I am unsure of that
- answer. I am aware that it needs to be submitted. I
- am unsure of the process that happens after that.
- 25 BY MS. BOJKO:

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1 Q. And just so we're on the same page, I
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- was referring to 1.B, because 1.D would happen at the
- 3 end of Phase 2; is that correct?
- 4 A. I am not aware of a timeline associated
- 5 with Section 1.D of the Stipulation, with the
- 6 exception of there is nothing withholding our ability
- 7 to file for a Phase 3 while Phase 2 is under way.
- 8 Q. Do you believe that there will be a --
- 9 under the Stip a formal PUCO review of the 1.D
- 10 feasibility study?
- 11 A. I am unsure of that answer.
- 12 Q. Under the Stipulation, will parties have
- an opportunity to comment on the feasibility studies?
- 14 A. I am unsure of that answer.
- 15 Q. Is it possible that the feasibility
- 16 studies will conclude that AMI, DACR, or VVO should
- 17 not be deployed as provided in the Stipulation?
- 18 A. Section 1.D is looking at a Phase 3 and,
- 19 yes, it is in theory possible that there would be no
- 20 further deployments that would be -- there would be
- 21 an advantage to move forward with.
- Q. What about under 1.B feasibility study,
- is it possible that that feasibility study will
- 24 conclude that AMI, DACR, or -- I guess you said VVO
- is not under the study; so just AMI, DACR -- is it

1 possible that the study will conclude that AMI, DACR

- 2 should not be deployed as provided in the Stip?
- A. The primary purpose of 1.B is mainly to
- 4 share the way that the deployment areas were selected
- 5 in a way that shows the benefits.
- 6 Q. So there's not a possibility that you
- 7 wouldn't go forward with implementing the number of
- 8 meters established in AMI or the number of circuits
- 9 for DACR with regard to the feasibility study?
- 10 A. That is my understanding.
- 11 Q. It will occur, it's just determining
- 12 where it will occur?
- 13 A. That is correct.
- Q. What happens if the feasibility study
- 15 concludes that there should not be further AMI or
- 16 DACR deployment for 1.D?
- 17 A. Can you restate that question, please?
- Q. Sure. What happens if the 1.D
- 19 feasibility study concludes that there should be no
- further deployment of AMI and DACR?
- 21 A. The company would want to review that
- 22 report in totality evaluating the underlying
- assumptions and determine next steps, whether a
- 24 Phase 3 is advantageous or not.
- Q. At this time, are you assuming that

- 1 there will be a Phase 3?
- A. At this time I would expect that 1.D
- 3 full system feasibility study to show that there are
- 4 advantageous deployments of AMI, DACR, and VVO that
- 5 are still remaining within the AEP Ohio service
- 6 territory.
- 7 Q. So the answer is yes, you are
- 8 anticipating a Phase 3?
- 9 A. I am anticipating a Phase 3.
- 10 Q. And, I'm sorry, maybe I misspoke. The
- B.1 feasibility study's only for AMI and DACR?
- 12 A. That is correct.
- Q. But the phase -- but the feasibility
- 14 study included in D.1 of the Stipulation is for all
- three; AMI, DACR, and VVO?
- 16 A. That is correct.
- Q. Let's go back to your testimony on --
- 18 who will make the determination of whether to move
- forward with the Phase 3, do you know?
- 20 A. We would have to submit a separate
- 21 filing, and I guess that's not my area of
- 22 responsibility regarding what happens after that, but
- I would assume that that is another regulatory
- 24 process.
- Q. Who at the company would review the

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1 feasibility study and make the decision of whether
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- 2 it's beneficial to propose a Phase 3?
- A. AEP Ohio would be responsible for
- 4 deciding whether they wanted to pursue another -- or
- 5 another deployment of gridSMART.
- Q. Okay. Who at AEP Ohio would make that
- 7 decision?
- 8 A. Ultimately that would be the AEP Ohio
- 9 president.
- 10 Q. Okay. Let's turn back to Page 13 of
- 11 your testimony. In the paragraph beginning on
- 12 Line 15, you provide an estimate of the energy
- efficiency that will be gained from VVO deployment.
- 14 Do you see that?
- 15 A. I do.
- 16 O. What is the methodology used to estimate
- the energy savings or benefits of VVO deployment?
- 18 A. So when we had originally deployed the
- 19 VVO technology in gridSMART Phase 1, we did at least
- 90 days of on/off testing during peak to evaluate
- 21 what the savings are associated with VVO. So said
- another way, on day one we turned it on, we evaluated
- the consumption; day two, we turned it off; day
- three, we turned it on, back and forth to come up
- with that 3 percent.

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1 It was also independently reviewed by
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- 2 Battelle, and they assessed a 3 percent as accurate.
- 3 Q. So was that done based on the 80
- 4 circuits contained in the original application?
- 5 A. It was based on the 17 circuits that
- 6 were in deployment.
- 7 Q. The 3 percent was based on 17 circuits?
- 8 A. It was based on all learning that we had
- 9 in AEP Ohio to that point.
- 10 Q. From Phase 1?
- 11 A. Correct.
- 12 Q. So you have no idea what the effect on
- energy efficiency may or may not be with regard to
- the 160 VVO circuits proposed in the Stipulation; is
- 15 that correct?
- 16 A. Of course we cannot know until they are
- deployed, but we have made assumptions based on
- 18 historic data from Phase 1. We've also learned from
- 19 Phase 1.
- 20 Q. Is it your understanding that VVO is not
- 21 necessarily a SMART Grid technology?
- 22 A. VVO is often listed in a portfolio of
- 23 SMART Grid technologies, but I do agree that it can
- 24 be deployed as a stand-alone project as well.
- 25 Q. It can be deployed without smart meters

- being deployed?
- 2 A. It can.
- Q. Do you know why AEP Ohio decided to
- 4 deploy VVO with DACR and smart meters as opposed to
- 5 doing it on a stand-alone basis?
- 6 A. Consistent with our gridSMART Phase 1
- deployment, we evaluated the technologies that had
- 8 the most benefits in total, and part and parcel of
- 9 moving forward with another phase, the phase we
- 10 reference here, Phase 2, and these three technologies
- 11 have the most benefits and were the reason why they
- were selected in pursuit of this effort.
- 13 Q. If VVO was deployed without smart meters
- on a stand-alone basis, you would expect it to have
- 15 the same energy efficiency gain that you reference in
- 16 your testimony; is that correct?
- 17 A. That is correct.
- Q. And I know you have the Stipulation in
- 19 front of you because you've been referring to it; so
- 20 if you could turn to Page 7 of the Stipulation.
- MS. BOJKO: Do you have a copy?
- MR. NOURSE: Yeah.
- 23 BY MS. BOJKO:
- Q. Page 7 of the Stipulation, let me find
- 25 the -- under Section 3 with regard to VVO states that

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1 AEP will prioritize deployment timelines for company
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- 2 selected circuits with the Ohio Hospital Association
- 3 members for VVO deployments over the term of the
- 4 Affiliate PPA, when determining the implementation
- 5 plan. Do you see that?
- 6 A. I do.
- 7 Q. Do you know whether AEP has implemented
- 8 the Affiliate PPA?
- 9 A. I am not aware of that answer.
- 10 Q. Are you familiar with the Affiliate PPA
- 11 case?
- 12 A. In -- at a very, very high level.
- 13 Q. Well, what if there is no Affiliate PPA,
- 14 how will this Stipulation provision be enacted? What
- term will VVO be deployed over?
- 16 A. I'm not in a position to answer that
- 17 question.
- 18 Q. So if we go back to the -- that
- 19 provision on Page 7, does that mean that the circuits
- 20 serving OHA members will be the first to receive VVO?
- 21 A. Doesn't necessarily mean the first. It
- does -- my understanding is that we would help
- 23 prioritize circuits that have OHA hospitals on them
- 24 to try to move them to a quicker deployment where
- possible.

1 Q. Do you know how many Ohio Hospital

- 2 Association members there are?
- A. I do not.
- 4 Q. Any idea of the magnitude?
- 5 A. I could guess, but --
- 6 Q. Five members, hundreds of members?
- 7 A. I think it's less than a hundred, but I
- 8 don't know.
- 9 Q. Do you know how many Ohio Hospital
- 10 members are AEP Ohio customers?
- 11 A. I am not aware of that answer, either.
- 12 Q. Do you know whether each hospital is
- 13 served through its own dedicated circuit?
- 14 A. I am not aware -- I'm not sure of that
- answer.
- Q. Could a hospital be served by more than
- 17 one circuit?
- 18 A. It could be.
- 19 Q. And it's your understanding that AEP
- 20 Ohio will collect the costs of the VVO deployment
- 21 through the gridSMART Rider; is that right?
- A. That's correct.
- Q. And customers are paying for the rider;
- 24 so customers are paying for the VVO deployment,
- 25 right?

- 1 A. Effectively, yes.
- 2 O. And AEP will also collect loss
- distribution revenues through a separate mechanism,
- 4 is that your understanding?
- 5 A. That's my understanding.
- 6 Q. And customers will pay for that loss
- 7 distribution revenues through that separate
- 8 mechanism; is that correct?
- 9 A. Those questions are better addressed by
- 10 Witness Moore.
- 11 Q. Do you know whether loss distribution
- 12 revenues have been factored into the projected costs
- of the gridSMART Phase 2 that we talked about
- 14 earlier?
- 15 A. That's another question that would be
- best addressed by Witness Moore.
- Q. So I'm assuming you don't know how it's
- 18 calculated, is that a fair assumption?
- 19 A. I think that's best addressed by Witness
- Moore.
- Q. And on -- you discuss a gridSMART
- 22 Collaborative in your testimony; is that right?
- 23 A. I do.
- Q. And that collaborative that you discuss
- in your testimony is the same collaborative that's on

- 1 Page 7, Section 4, of the Stipulation?
- 2 A. It is.
- Q. Okay. And the last sentence of
- 4 Section 4 of the Stipulation says, "The gridSMART
- 5 Collaborative shall be established and administered
- 6 monthly through the project deployment timeframe for
- 7 all stakeholders." Do you see that?
- 8 A. I do.
- 9 Q. What does that mean? Does that mean
- 10 that it's a timeframe for stakeholders or that
- 11 stakeholders are to be involved in the collaborative?
- 12 What does that reference mean?
- 13 A. I guess you could read it different
- 14 ways. My understanding is that a collaborative would
- be in effect through the deployment timeline; so from
- 16 the time we start deploying the first meter through
- the time we're completed with the last VVO in DACR
- 18 installation.
- 19 Q. For Phase 2?
- 20 A. Correct.
- Q. And who's going to be invited on this
- 22 collaborative that I see you get the pleasure of
- 23 running, leading?
- 24 A. It will be a multitude of stakeholders,
- 25 similar to what the Energy Efficiency Collaborative

is currently doing today including, but not limited

- 2 to, the intervening parties.
- Q. Intervening parties or signatory
- 4 parties?
- 5 A. I guess I don't know the answer to that
- 6 question.
- 7 Q. Are there any projected costs for the
- 8 collaborative?
- 9 A. We have included additional costs when
- 10 we did the revision of the Business Case, but I don't
- 11 have stand-alone costs for Section 4.
- 12 Q. So the answer is yes, you envision that
- there are additional costs?
- 14 A. Yes.
- Q. And those have already been incorporated
- in the total project costs?
- 17 A. That is correct.
- 18 Q. Total Phase 2 project costs?
- 19 A. Revised project costs, correct.
- 20 Q. Included in the revised Business Case
- 21 attached to your testimony as Exhibit SSO-1?
- A. That's correct.
- Q. So given that they've been included in
- 24 the Business Case, I can then assume that those
- 25 project collaborative costs would be collected from

1 customers through the SMART Grid Rider; is that

- 2 correct?
- 3 A. That is my understanding.
- Q. Go back to your testimony on Page 7,
- 5 please. You use the term -- Line 13, Page 7, Line
- 6 13, you use the term "significantly reduces." Do you
- 7 see that?
- 8 A. I do.
- 9 Q. Have you quantified the reduction?
- 10 A. We expect the frequency of outages to be
- 11 reduced by up to 30 percent.
- 12 Q. And how did you arrive at that number?
- 13 A. We arrived at that number based on
- 14 historical performance of the Phase 1 circuits,
- 15 lessons learned on how we could select circuits
- better to potentially drive that number up, as well
- as industry data specifically from the DOE DACR 2012
- 18 study.
- 19 Q. And that's the same study that you
- 20 reference on Page 11, Footnote 2?
- 21 A. No, it's a different study.
- Q. Did you cite to the additional -- the
- 23 study you're referencing with regard to the DACR in
- your testimony?
- A. No, I did not in my testimony.

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1 Q. Okay. So that -- it was a study
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- 2 commissioned by the US Department of Energy?
- A. Correct.
- 4 Q. And when was that completed?
- 5 A. So the study I'm referencing is titled
- 6 "Reliability Improvements from the Application of
- 7 Distribution Automation Technologies-Initial
- 8 Results." It is from December 2012. And for
- 9 reference it was provided to the OCC as part of their
- 10 request for data RPD-1-12, in the October 18th, 2013,
- 11 timeframe.
- 12 Q. Thank you.
- 13 Let's go to Page 10 of your testimony,
- 14 Line 10. Page 10, Line 10, you discuss the secondary
- 15 metric if AEP's unable to meet its SAIFI metric. You
- 16 know what I mean by SAIFI?
- 17 A. I do.
- 18 Q. Okay. Is there a penalty for not
- meeting the SAIFI metric, the first metric?
- 20 A. After meeting the first time, we have an
- obligation to file a plan. So there's two metrics.
- 22 There's the SAIFI metric. If that isn't met, then
- 23 the secondary metric applies, which is the
- 24 performance of the system. If neither measure is
- 25 met, the company must submit to the staff the reasons

1 for both measures, why they were not met, as well as

- 2 an action plan in order to meet the measures the
- 3 following year.
- 4 If the commitment is missed two years in
- 5 a row, the company's required to file a report
- 6 explaining its failure and show cause as to why the
- 7 misses should not constitute a violation of the
- 8 Stipulation. Thereafter, the Commission can
- 9 determine whether the company has violated the
- 10 Stipulation.
- 11 Q. Okay. Just for the record, you're
- reading from the Stipulation, Section 2 on Page 6?
- 13 A. That is correct.
- Q. Okay. But my question was: Is there a
- penalty for not meeting the first metric, the SAIFI
- 16 metric?
- 17 A. It is my understanding that if the SAIFI
- 18 metric is missed on the first time, that there is no
- 19 penalty.
- 20 Q. And the company is proposing to base the
- 21 successful operation of the DACR systems on a
- 22 three-year rolling average after the DACR has been in
- place for six months?
- 24 A. That is correct.
- 25 Q. So is it your understanding there's no

- 1 metric for three-and-a-half years?
- A. No, that is not correct.
- Q. Okay. So there's no metric for six
- 4 months, and then you'll start the three-year rolling
- 5 average; is that correct?
- A. Somewhat. Let me restate it.
- 7 So after a DACR circuit goes in service,
- 8 after it's in service for the six months, that's when
- 9 that circuit could be evaluated as compared to its
- 10 three-year average. We have to submit our reports by
- June 30th -- no, by August -- August 15th for the
- 12 period ending June 30th.
- 13 If during that one-year period from June
- 30 of the previous year to June 30th of that year, if
- 15 there is at least -- at least 10 circuits that are in
- service during that period for the more than six
- 17 months' period, that's when the first report would be
- 18 due.
- 19 O. But if the DACR circuit hasn't been in
- 20 place for longer than six months, there would be no
- 21 three-year rolling average to compare it to; is that
- 22 right?
- 23 A. So when we put a circuit in service and
- it's got six months of history as performing as a
- DACR circuit, what we're evaluating is that six-month

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window or greater, one year if we have the full one
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- year, we're comparing that year's performance or that
- 3 period of that year's performance to the rolling
- 4 three-year average before that timeframe.
- Q. Of the circuit without DACR?
- A. Correct.
- 7 Q. Okay.
- 8 A. So we're comparing itself with DACR to
- 9 itself without DACR and seeing what the improvement
- 10 is.
- 11 Q. Going back to the Page 11, the
- 12 Footnote 2, this is the study commissioned by the US
- 13 Department of Energy that you referred to with regard
- 14 to customer minutes of interruption costs. Were you
- involved in that study?
- 16 A. I was. Well, I was not involved in the
- 17 DOE study. I was involved in the application of
- assessing what that study says in relation to what is
- 19 the societal value of the DACR outage improvement.
- Q. To AEP Ohio?
- 21 A. That's correct.
- Q. But I wanted to know if you were
- 23 actually involved in the DOE study.
- 24 A. I was not involved in that -- in that
- 25 study itself, no.

1 Q. Okay. So you didn't work for the US

- 2 Department of Energy at the time?
- 3 A. No.
- 4 Q. Nor did you work for the -- I guess the
- 5 Berkeley National Laboratory?
- 6 A. I did not. Sorry for the confusion on
- 7 that.
- 8 MS. BOJKO: Okay. I'm switching to a
- 9 different subject. I think it might be a good time
- 10 for a five, 10-minute break.
- MR. NOURSE: Sure. Okay.
- 12 (Recess taken.)
- 13 BY MS. BOJKO:
- Q. Let's go back on the record.
- 15 Let's discuss time-of-use rates. On
- 16 Page 16 of your testimony, you mention three
- 17 time-of-use programs that AEP is currently offering
- 18 customers who have AMI meters. Do you see that?
- 19 A. I do.
- Q. Are those time-of-use programs only
- offered in the Phase 1 area?
- 22 A. They are.
- Q. And the customers have to have AMI
- 24 meters in order to participate; is that right?
- 25 A. That is correct.

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1 Q. And how long has AEP offered these
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- time-of-use programs listed on Page 16 of your
- 3 testimony?
- 4 A. I'm uncertain of the exact timeframe,
- but back, let's say, to the 2010, maybe '11
- 6 timeframe.
- 7 Q. How many customers does AEP have on each
- 8 of these programs? Let's start with SMART Shift.
- 9 A. I am unsure of how many customers are on
- 10 that program today.
- 11 Q. How about SMART Shift Plus?
- 12 A. Same answer.
- Q. And same answer for SMART Cooling?
- 14 A. I do not know the specific number today.
- Q. Do you have any magnitude?
- 16 A. I do. So I would say SMART Shift,
- around 1,000; SMART Shift Plus, a couple hundred;
- 18 SMART Cooling, around a thousand plus or minus,
- 19 subject to check.
- Q. Has AEP evaluated the results of these
- 21 programs?
- 22 A. To some extent.
- Q. And do you have savings numbers for
- these programs?
- 25 A. I do not have that data with me.

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1 Q. Do you know whether AEP Ohio asked the
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- 2 Commission to stop offering these programs?
- A. I am aware that we have.
- 4 Q. And you're aware that AEP sought
- 5 Commission permission to stop offering the programs
- 6 before the Stipulation was signed in this case?
- 7 A. I am.
- 8 Q. And is it your understanding that the
- 9 Stipulation provides for a transition plan where CRES
- 10 providers would offer time-of-use plans?
- 11 A. I am.
- 12 Q. That's what the Stipulation does?
- 13 A. It sets up a transition from AEP Ohio to
- 14 the CRES providers, yes.
- 15 Q. So even under the Stipulation, AEP Ohio
- would no longer be offering these programs; is that
- 17 correct?
- 18 A. There's a contingency in there if the
- 19 Commission deems the competitive market to not be
- 20 deemed significantly competitive, then we would be in
- 21 a position to offer a simple time-of-use program.
- 22 Q. And competitive market significantly
- competitive with regard to time-of-use programs
- 24 specifically or in general with regard to whether
- there are CRES offers in the -- in the market?

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1 A. So within -- so it's a report -- it will
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- 2 be a report that would be filed containing the latest
- data available concerning CRES TOU offerings.
- 4 Q. And you are reading from Page 8 of the
- 5 Stipulation; is that right?
- A. That is correct.
- 7 Q. So to answer my question, the
- 8 competitiveness of the market was based on
- 9 competitiveness for TOU offerings; is that correct?
- 10 A. That is a process administered by the
- 11 Public Utility Commission. I probably would not be
- the best person regarding what is their
- 13 determinations.
- Q. But, I mean, it's your understanding
- that it's the -- that it's the TOU market we're
- 16 talking about being competitive, not the CRES
- 17 electric market being competitive?
- 18 A. That is correct.
- 19 Q. Okay. And the simple program that
- 20 you're referencing is that that's outlined in -- on
- 21 Page 8, and that was discussed with the Commission's
- finding and order in 12-3151; is that correct?
- A. What section are you referencing?
- Q. It's Page 8, B.iii.
- 25 A. Yes.

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1 Q. You referenced the -- if it wasn't
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- 2 significantly competitive, the TOU market, that AEP
- Ohio would offer a simple TOU program; is that right?
- 4 A. That's correct.
- 5 Q. And that simple TOU program is
- 6 consistent with 12-3151 proceeding?
- 7 A. That's correct.
- 8 Q. Initially CRES providers would offer
- 9 time-of-use plans similar to those that AEP offers
- during the initial period; is that correct?
- 11 A. Yes, but very similar; exact programs,
- 12 different pricing.
- 13 Q. Exact programs, different pricing?
- 14 A. Correct.
- Q. And the pricing would be determined by
- the CRES providers?
- 17 A. That is correct.
- 18 Q. Do you know whether any CRES providers
- 19 currently offer time-of-use plans in AEP service
- 20 territory?
- 21 A. I am not aware of current offerings by
- 22 CRES providers -- current TOU offers by CRES
- 23 providers in the AEP Ohio service territory.
- 24 O. So when does the CRES TOU market have to
- 25 be evolved to be sufficiently competitive under the

- 1 Stipulation?
- 2 A. That review would happen approximately
- 3 15 to 18 months after the approval of the gridSMART
- 4 Phase 2 Stipulation.
- 5 Q. So basically there are no current CRES
- 6 TOU offerings, and within 15 to 18 months of the
- 7 Stipulation there would either have to be TOU
- 8 offerings or the company would implement a simple TOU
- 9 rate?
- 10 A. I'd like to clarify. When I stated that
- I wasn't aware of any CRES TOU programs in Ohio
- 12 service territory, that doesn't mean that there
- aren't any. I'm just not aware of any. Everything
- 14 else you said appears to be correct.
- Q. Do you know how many CRES providers
- 16 currently offer services in AEP service territory?
- 17 A. I do not have an exact number. I kind
- of have an estimate about how many there are.
- Q. What's your estimate?
- 20 A. Somewhere in the 20 to 35 range.
- Q. And you don't have any idea of the 25 to
- 22 35 that -- if they have active offers currently?
- A. Active TOU offers?
- Q. No. Active CRES -- active CRES offers.
- 25 A. I am not aware of how active those CRES

- 1 providers are in the markets.
- Q. What happens during the 15 to 18-month
- 3 period that you just referenced, that's when the CRES
- 4 providers would offer exact programs, but at
- 5 different pricing during the transition period?
- 6 A. Up to that 15 to 18 months, yes, that is
- 7 what happens during that period.
- 8 Q. And during that same transition period,
- 9 AEP Ohio would develop a single time-of-use program
- 10 to replace its current three programs; is that
- 11 correct?
- 12 A. It's my understanding that we are
- 13 required to file that within three months of
- 14 approval.
- 15 Q. So you file it within three months, but
- then it would only go into effect if the Commission
- does not find that the market is sufficiently
- 18 competitive?
- 19 A. That is my understanding.
- Q. Okay. And do you know how many CRES
- 21 providers have committed to offer the exact programs
- 22 at different pricing?
- 23 A. I am aware of at least one.
- Q. And who is that?
- 25 A. Direct Energy.

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1 Q. Any other signatory parties that you're
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- aware of that plan on offering time-of-use rates?
- 3 A. I do not specifically recall.
- 4 O. And if the Commission does determine
- 5 that the market is sufficiently competitive with
- 6 regard to the TOU programs, then AEP will not offer
- 7 any TOU program or rate; is that correct?
- 8 A. That's my understanding.
- 9 Q. And so when do you believe that the
- 10 Commission will make the determination of whether
- 11 there is a sufficiently competitive market?
- 12 A. I'm not in a position to answer that
- 13 question.
- Q. Would it need to be done in this
- 15 proceeding?
- 16 A. I do not know the answer to that
- 17 question.
- 18 Q. Has there been an estimate of the costs
- 19 for Step One of the Transition Plan outlined on
- 20 Page 17 of your testimony?
- 21 A. Yes.
- O. And what is that cost?
- A. Like the other costs we discussed, all
- 24 the costs associated with the Stipulation were
- estimated in total, not in part.

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1 Q. So you already estimated the costs
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- 2 associated with the Time-of-Use Transition Plan, Step
- 3 One through Step Five?
- 4 A. Correct.
- 5 Q. And that's embedded in the Business Case
- 6 that was modified and attached to your testimony?
- 7 A. Yes.
- 8 Q. And you don't know the breakdown of the
- 9 costs at this time?
- 10 A. I do not.
- 11 O. So those costs associated with the
- 12 Time-of-Use Transition Plans will be paid by
- 13 customers; is that right?
- 14 A. Those costs would flow through the
- 15 rider.
- Q. Are CRES providers contributing any
- funding to the costs associated with the Time-of-Use
- 18 Transition Plans?
- 19 A. I'm not aware of any CRES funding.
- Q. And these costs associated with the
- 21 time-of-use program will be collected from all
- 22 customers through the rider regardless of whether
- they participate in one of the time-of-use programs;
- is that correct?
- 25 A. That question's best addressed by

- 1 Witness Moore, but that is my understanding.
- Q. And in Step Two, AEP will develop
- 3 initial information technology systems and processes
- 4 to allow CRES providers to offer the time-of-use
- 5 rates; is that correct?
- A. That is correct.
- 7 Q. And those systems and processes will be
- 8 limited to facility -- limited to facilitating CRES
- 9 TOU offers that are aligned with the three programs
- 10 that AEP already has in place?
- 11 A. That's correct.
- 12 Q. Does AEP already have in place the
- 13 necessary systems to facilitate CRES TOU offers?
- 14 A. No.
- Q. What systems are needed to accomplish
- 16 that?
- 17 A. I'm not aware of the specific systems
- 18 required.
- 19 O. But there would be an initial need for
- 20 system upgrade or changes?
- 21 A. There are changes to both system and
- 22 processes, correct.
- Q. What if a CRES currently has a TOU
- offering, does your system support that?
- 25 A. We would not be in a position to provide

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1 them with the interval data from the AMI meter until
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- 2 the CRES data portal is completed, which is listed as
- 3 Step No. Five.
- Q. So what is -- what do they receive -- if
- 5 they have a TOU offer today, what would they be able
- 6 to receive data-wise?
- 7 A. It is my understanding that they would
- 8 not be able to pro- -- we would not be in a position
- 9 to provide them that data until the CRES data portal
- is completed; so they would get the standard usage
- just like in a regular meter, standard 30-day usage,
- 12 not the interval data.
- 13 Q. So meaning that even if a CRES had a TOU
- offer today, they wouldn't be able to utilize -- or
- the customers wouldn't be able to utilize the TOU
- 16 program because they can't get the data?
- 17 A. Again, I'm not aware of any
- 18 abnormalities or unique circumstances, but there
- 19 probably are some, I'm just not aware of such.
- Q. So I'm right, though, that the current
- 21 system doesn't support a current TOU CRES offering?
- 22 A. I'm not positive on the answer, but I
- think the answer is no.
- Q. And similar to your responses when we're
- 25 talking about Phase 1, all of the costs associated

with all these programs, you don't have it separately

- 2 identified, but they are included in the total update
- 3 of the Business Case?
- 4 A. That is correct.
- 5 Q. And the total amount for all of the
- 6 steps will be passed through the rider to customers?
- 7 A. That is correct.
- 8 Q. And Step Three is an education piece; is
- 9 that correct?
- 10 A. Education and conversion, yes.
- 11 Q. If you go to Page 18, Line 1, AEP -- it
- 12 states that AEP will work with CRES providers to
- 13 educate customers about the CRES TOU offers and
- 14 provide existing time-of-use customers an opportunity
- to switch to the CRES TOU offer. Do you see that?
- 16 A. I do.
- 17 Q. First AEP will work with CRES providers
- 18 to educate customers about the CRES TOU offers. What
- 19 will be the process for educating the customers about
- 20 those offers?
- 21 A. I think that is still to be determined.
- 22 I think we -- yes, I confirmed the company agrees to
- 23 seek input from interested parties in the gridSMART
- 24 Collaborative and develop a plan of customer
- 25 communications during this phase.

1 Q. So AEP will seek input and then work

- 2 with the CRES providers?
- 3 A. Correct.
- 4 Q. What kind of educational programs do you
- 5 envision?
- 6 A. I -- I think that is still to be
- 7 determined, but I would guess that it would be
- 8 something like a direct mail piece or something
- 9 similar.
- 10 Q. And if it is a direct mail, would the
- 11 costs of a direct mailing be additional to the
- 12 Business Case that you've already outlined and
- incorporated the Stipulation costs for?
- 14 A. There are costs for the customer
- 15 outreach and education.
- 16 Q. Is already embedded?
- 17 A. There are costs that are included in
- 18 that, correct.
- 19 Q. So there's already a placeholder in the
- 20 Business Case for such costs?
- 21 A. That is correct.
- 22 Q. And, again, those costs are all paid for
- 23 by customers regardless of whether they participate
- in these programs?
- 25 A. That is correct.

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1 O. So will customers be switched
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- 2 automatically from their existing TOU program from
- 3 AEP Ohio to a CRES TOU program?
- 4 A. To my understanding, the answer is no.
- 5 Q. And would the cost of switching
- 6 customers from one program to the other already be
- 7 anticipated and contained in the updated Business
- 8 Case totals?
- 9 A. Can you ask that question differently?
- 10 Q. Sure, okay.
- 11 So there's a cost to the switch, I'm
- 12 assuming; is that correct?
- 13 A. I don't think the actual execution of a
- 14 conversion of that cost is embedded in the -- in the
- 15 rider. I think that would be handled under the
- 16 normal CRES operational activities.
- 17 O. So the cost of the switch would flow
- 18 through a different rider?
- 19 MR. NOURSE: I'm sorry, Kim, are you
- 20 asking about the switch -- an individual customer
- 21 switching to a time-of-use tariff?
- MS. BOJKO: That's my understanding of
- 23 the second part of the step is that AEP will offer
- 24 existing customers an opportunity to switch to the
- 25 CRES time-of-use rate. So I'm asking if there's a

- 1 cost associated with that switch.
- THE WITNESS: From my view, and this
- 3 could be -- well, it's my understanding currently
- 4 that once the material goes out and says here's some
- 5 other CRES offerings of a similar TOU, that if the
- 6 customer decided to do that, they would do that and
- 7 the gridSMART team would basically be blind to it and
- 8 it would just happen through normal course of
- 9 business. That's my understanding.
- 10 BY MS. BOJKO:
- 11 Q. You're suggesting that they are
- currently a customer with AEP Ohio, and that if they
- 13 wanted to take advantage of the CRES TOU program they
- 14 would switch to that CRES provider, and that would
- fall under the normal switching rules?
- 16 A. That is my current understanding, and
- 17 they would have to be an AEP Ohio customer to be on
- the gridSMART programs; so...
- 19 O. Okay. If the Commission does determine
- 20 that the market is sufficiently competitive, AEP will
- 21 have no obligation to provide a TOU program, is that
- 22 your understanding?
- 23 A. That is my understanding.
- Q. And does this mean that AEP will not
- 25 provide a time-of-use program or just that AEP does

- 1 not have to provide a time-of-use program?
- 2 A. It's the latter, that we would not have
- 3 to.
- 4 Q. So if an AEP customer was on one of your
- 5 current SMART Shift programs or SMART Cooling program
- 6 or SMART Shift Plus program, if they did not want to
- 7 transition to a CRES time-of-use program, would AEP
- 8 no longer retain those programs even if they still
- 9 had some customers on those programs?
- 10 A. In that scenario, did the Commission
- 11 deem the CRES TOU market competitive or not
- 12 competitive?
- 0. Yes.
- A. Competitive.
- 15 Q. They deemed it competitive.
- 16 A. If they deemed it competitive, that
- 17 means that the Commission would be -- the Stipulation
- 18 states that we would eliminate these programs and
- 19 they would -- if they made no other choice, they
- 20 would switch back to our standard rate.
- Q. Your default service rate?
- 22 A. Yeah.
- 23 Q. And if the Commission did not deem the
- 24 market sufficiently competitive, those customers on
- 25 those three programs would be switched to the one

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1 simple time-of-use rate offered by AEP?
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- A. I don't know if that's true. I
- 3 haven't -- I personally haven't thought through that
- 4 scenario on how that would work.
- 5 Q. But the intent is to either eliminate
- 6 completely the three programs or only offer the one
- 7 simple program that we talked about?
- 8 A. Yeah. My lack of understanding would be
- 9 would those customers revert to this new one or would
- 10 they revert to a standard service offer.
- 11 Q. And then have to affirmatively select
- 12 the new one?
- 13 A. I'm not sure of the rules associated
- 14 with that. I would have to review with our Choice
- 15 Operations Team.
- 16 Q. The goal of the -- the Stipulation,
- 17 assuming that the Commission deems the market
- 18 sufficiently competitive, would be to only have CRES
- 19 providers offer time-of-use rates for residential
- 20 customers in your service territory; is that correct?
- 21 A. I think that I would -- that CRES would
- be the primary offers of those programs.
- 23 Q. Well, if it is sufficiently competitive,
- you don't plan on offering any, right?
- 25 A. We do not currently plan on offering any

- 1 as of today.
- Q. And what happens under the Stipulation
- 3 if in two to four years after the Commission has
- 4 determined that there is a market sufficiently
- 5 competitive, the CRES providers rescind all of their
- 6 time-of-use or -- or dynamic rate offerings?
- 7 A. I don't think that question is best
- 8 directed to me. That might be something best
- 9 directed by the Public Utility Commission.
- 10 Q. So the Stipulation doesn't speak to
- 11 that?
- 12 A. It does not.
- 13 Q. And the Stipulation doesn't speak to
- 14 what happens to customers if there are no time-of-use
- offerings available; is that correct?
- 16 A. I mean, I think it sets up a framework
- for maximizing opportunity for TOU programs to
- 18 continue on the short term. In your scenario of long
- 19 term, I don't know if that is addressed, but in short
- 20 term I think it does try to establish a process to
- 21 ensure that it does happen.
- 22 Q. And the Stipulation actually directs the
- 23 Commission to grant the 13-1937 application and
- 24 approve AEP's single time-of-use program proposed in
- 25 the Stipulation if the Commission determines that the

1 market's not sufficiently competitive. Is that your

- 2 understanding?
- 3 A. I don't think I'm best to answer that
- 4 question.
- 5 Q. So you aren't the person to answer what
- 6 happens if the Commission refuses to comply with the
- 7 directives set forth in the Stipulation?
- 8 MR. NOURSE: I would object to the
- 9 characterization of the directives of the Commission,
- 10 but if you understand you can go ahead and answer.
- 11 THE WITNESS: Yeah. I mean, I read
- 12 those words that say that. I do see that it would --
- 13 it does say that if it's deemed approved, such tariff
- 14 will be discontinued, or else I see where it says if
- it's deemed as successful -- or sufficiently
- 16 competitive that it would deem the -- so, yes, I do
- 17 see that written out.
- 18 BY MS. BOJKO:
- 19 O. Well, I mean, the Commission can do what
- 20 it wants; is that fair?
- 21 A. Yes. That was the nature of my pause.
- 22 O. And the Commission could also direct AEP
- 23 to continue offering all three of the time-of-use
- 24 programs that it currently has in place, right?
- 25 A. That is my understanding.

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1 Q. And does the Stipulation provide the
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- 2 Commission with any guidance for how it's supposed to
- 3 determine whether the market's sufficiently
- 4 competitive?
- 5 A. I am not aware of any guidance provided
- 6 here within the Stipulation.
- 7 Q. And the Stipulation provides that AEP
- 8 and the staff will file a report with the Commission
- 9 describing the latest data available on CRES
- 10 time-of-use offerings; is that right?
- 11 A. That is correct.
- Q. What data will be in that report?
- 13 A. That data has not been discussed.
- Q. So the Stipulation doesn't specify?
- 15 A. It does not.
- 16 Q. And Step Five in your testimony talks
- 17 about the development of a comprehensive data portal;
- is that correct?
- 19 A. That is correct.
- Q. What's the difference between the data
- 21 portal and the portal described in Step Two?
- 22 A. Step Two I don't see the portal
- 23 described.
- Q. Well, the development of the system and
- 25 process, you see them as two distinct items?

- 1 A. I do.
- Q. And is the -- the data portal's also
- 3 embedded in the updated Business Case, the costs
- 4 associated with that; is that correct?
- 5 A. That is correct.
- 6 Q. And the data portal that you're
- 7 referencing in Step Five is the more comprehensive
- 8 AMI information that will be visible to CRES
- 9 providers with the customers' interval data
- information contained in it; is that correct?
- 11 A. Yes.
- 12 Q. And that -- not even a form of that
- exists today is my understanding from your prior
- 14 testimony?
- 15 A. That's correct.
- Q. And I know you've provided estimates of
- 17 costs associated with this time of use in the updated
- Business Case, but if the expenses or the costs
- 19 exceeds what you've estimated, whatever the actual
- 20 costs to offer the data portal and to do the -- the
- 21 upgrades required will be passed on through the
- 22 rider; is that correct?
- 23 A. That is my understanding.
- Q. On Page 20 of your testimony, on Line 5,
- you discuss gridSMART Phase 2 resulting in

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operational savings. Do you see that?
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- 2 A. I do.
- Q. And you say it will result in
- 4 significant operational savings, correct?
- 5 A. That's correct.
- 6 Q. And you also mention savings regarding
- 7 meter reading. And is that physical, manual meter
- 8 reading that you're referencing there?
- 9 A. I am.
- 10 Q. Is meter reading the only operational
- 11 savings associated with the proposed gridSMART
- 12 program?
- A. No, it is not.
- Q. Have you quantified the significant
- operational savings referenced in your testimony?
- 16 A. I have.
- Q. You have? I'm sorry.
- 18 A. I have.
- 19 O. And what is that?
- 20 A. We currently estimate over a 15-year
- 21 Business Case, the operational savings would be \$200
- 22 million.
- Q. And what other operational savings
- 24 besides the meter reading?
- 25 A. Reduce truck rolls for automated service

- 1 orders.
- 2 Q. Okay.
- A. Also included are the disconnection and
- 4 reconnection savings, includes reduction of bad -- of
- 5 collectible -- or increases collectible revenue.
- 6 It's also finding lost revenue associated with theft
- 7 and additional revenue associated with consumption on
- 8 inactive meters. Those are the primary ones that I
- 9 can think of at this time.
- 10 Q. You said increasing collectible
- 11 revenues?
- 12 A. Correct.
- Q. And what is that referencing?
- 14 A. Versus writing off bad debt.
- 15 Q. Well, how does an AMI meter increase the
- 16 revenue customers pay?
- 17 A. If we are able to remotely disconnect a
- 18 meter quicker than we have done in the past, that
- 19 will allow the outstanding balances to stay lower and
- 20 potentially reduce the writeoff.
- 21 Q. So quicker disconnects you're saying
- 22 reduces the uncollectible expenses?
- 23 A. If we are able to disconnect more
- 24 customers electronically than we would manually, that
- 25 would provide that opportunity.

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1 Q. And quicker disconnection, is that
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- 2 assuming that AEP continues to receive its waiver for
- disconnection notices that it currently has in place
- 4 with regard to Phase 1?
- 5 A. That is correct.
- 6 Q. And does AEP envision to continue to
- 7 collect disconnection and reconnection fees even in
- 8 light of the AMI capabilities?
- 9 A. The answer is best addressed by Witness
- Moore on fees.
- 11 Q. Good thing she's here to hear all the
- 12 punting.
- And the \$200 million, it's about 199 I
- think is where it is in the base case, but is that
- the 200 you're referring to in operational fees?
- A. Also the one million right below it.
- 17 There's an O&M piece and a capital piece.
- 18 Q. And where are you looking, the page?
- 19 A. It's in my written testimony, the
- 20 attachments, Page 9, the table under Cash View,
- 21 15-Year Benefits.
- Q. So the \$200 million meter reading
- 23 operation -- operational cost savings represents
- roughly 39, 40 percent of the \$516 million
- investment; is that correct?

1 A. Can you restate it so I can try to do

- 2 the math in my head?
- Q. Well, now the math changed. Hold on.
- 4 Okay. So the 200 million in cost -- operational cost
- 5 savings represents 39 percent of the \$516 million
- 6 investment; is that right?
- 7 A. It does.
- 8 Q. Have you done an analysis to see how
- 9 that percentage of meter reading and operational cost
- 10 savings compares with other deployments of SMART Grid
- 11 nationwide?
- 12 A. We have not.
- Q. And how is the cost savings being
- 14 returned to customers?
- 15 A. Those questions are best addressed by
- 16 Witness Moore.
- 17 Q. All questions regarding customer credits
- 18 best addressed to Ms. Moore?
- 19 A. That's correct.
- Q. Do you know what happens to any
- 21 operational savings achieved that is above the amount
- of the credit estimated for customers?
- 23 A. I think that varies based on the
- 24 activity, but that is also best addressed by Witness
- Moore.

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1 Q. Has AEP Ohio conducted any cost-benefit
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- 2 analysis for gridSMART 2 other than the analysis
- 3 included with the application and the Stipulation?
- 4 A. No.
- 5 Q. Turn to Page 25 of your testimony. Here
- 6 you're discussing the Stipulation related to bidding
- 7 the VVO in the PJM capacity auction; is that correct?
- 8 A. Yes.
- 9 Q. Has AEP to date advocated inside PJM
- 10 that VVO become eligible to bid into capacity
- 11 auctions?
- 12 A. I am not aware if we have or have not.
- 13 Q. Are any third-party equipment vendors or
- 14 gridSMART service providers contributing any dollars
- to the company's Phase 2 project?
- 16 A. No.
- 17 Q. What is the projected life of the
- 18 Phase 1 meters?
- 19 A. That question is best addressed by
- Witness Moore.
- 21 Q. How -- Phase 1 meters were deployed
- around 2009; is that correct?
- A. Started in December 2009.
- Q. How long before those meters become
- 25 outdated?

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1 A. That calls for speculation. I'm not
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- 2 sure. We're still using them today.
- 3 Q. I'm not -- I didn't hear the end of
- 4 your --
- 5 A. We're still using those same meters
- 6 today.
- 7 Q. Do you believe that the technology has
- 8 changed over the last seven years?
- 9 A. Technology always continues to evolve.
- 10 Q. You're not still installing the same AMI
- 11 meters that you did in Phase 1, are you?
- 12 A. We are still installing the same type,
- different version; so the current version that's
- 14 available for sale today.
- 15 Q. And the different version would be
- 16 updated with regard to technology assuming; is that
- 17 correct?
- 18 A. Yes.
- 19 O. How many versions have there been since
- 20 Phase 1 deployment?
- 21 A. We started with Version 210, we
- currently can purchase a 310 or a 410.
- Q. And do they only jump by hundreds?
- 24 A. With this vendor, that's what it --
- 25 they're doing so far.

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1 Q. So -- so 210 was installed, and there
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- 2 have been two new versions since that one?
- A. That's correct.
- Q. Is there a plan to replace the 210
- 5 version with Version 410 any time in the near future?
- 6 A. There's no plan systemwide changeout.
- 7 Q. Is Phase 2 geographic region different
- 8 than Phase 1 geographic region?
- 9 A. Yes.
- 10 Q. Any overlap?
- 11 A. No.
- 12 Q. If -- do you know that the Phase 1 --
- what the depreciation was of the Phase 1 meters?
- 14 A. Witness Moore will address that
- 15 question.
- 16 Q. So do I take your response that you
- intend to use the same manufacturer for Phase 2
- 18 meters that you used for Phase 1 meters?
- 19 A. Yes, with an asterisk. So the meter
- 20 provider that we use and had been using is a General
- 21 Electric, GE meter. The GE meter business was
- 22 purchased by Aclara. Effectively it's the same thing
- 23 with a different brand name now. The communication
- 24 provider is still SSN, Silver Spring Networks.
- Q. Do the Phase 1 and Phase 2 meters have

- 1 the same functionality?
- 2 A. Generally it's the same functionality.
- 3 Like you discussed earlier, it is a newer version
- 4 with a little bit more advanced components, but
- 5 generally it effectively does the same purpose.
- 6 Q. Could the newer technology, newer
- 7 version of the meters be used for anything different
- 8 than the Phase 1 meters?
- 9 A. Not that I'm aware of.
- 10 Q. Do you --
- 11 A. Beyond being more -- have more memory on
- 12 board and a little bit more faster processing speed,
- I mean, generally what happens when technology
- evolves, just general stuff.
- 15 Q. And AMI meters are different than AMR
- 16 meters, correct?
- 17 A. Correct.
- 18 Q. And AMR meters are used for what
- 19 purpose?
- 20 A. That reduces meter reading costs.
- Q. Because they can be read remotely; is
- 22 that correct?
- 23 A. They can be read by a driveby.
- Q. And is it your understanding that AMR
- 25 meters are being -- are replacing -- what would you

- 1 call a non-AMR meter?
- 2 MR. ETTER: Traditional.
- 3 BY MS. BOJKO:
- 4 Q. Traditional meter. AMR meters are being
- 5 used to replace traditional meters as part of the
- 6 DIR -- Distribution Investment Rider program; is that
- 7 correct?
- 8 A. That is correct.
- 9 Q. And if the AMR -- if there's an AMR
- 10 meter in the geographic region of Phase 2, would you
- 11 replace the AMR meter with an AMI meter?
- 12 A. Yes.
- 13 Q. And even -- is that true even if the AMR
- meter was just installed pursuant to the DIR program?
- 15 A. Yes.
- Q. Would the cost of that upgrade from an
- 17 AMR meter to an AMI meter flow through the gridSMART
- 18 Rider or the DIR Rider?
- 19 A. Replacement of an AMR with an AMI would
- 20 be handled under the gridSMART Phase 2 Rider.
- Q. Previously this morning you stated that
- 22 the VVO circuits would be determined on -- would
- 23 be -- the determination of where to replace -- or
- 24 where to place the VVR -- VVO would be done on those
- 25 circuits that could maximize customer benefit. Do

- 1 you recall that?
- 2 A. Yes.
- 3 Q. Sorry. Who makes that determination?
- 4 A. AEP Ohio.
- 5 Q. And how would that determination be
- 6 made? Because there's no feasibility study for VVO,
- 7 correct?
- 8 A. Yeah. We would look at circuits served
- 9 by the same station transformer that have the largest
- 10 average load, consideration is given to include all
- 11 station transformers within the same station. We
- 12 would look at the complexity of existing station
- equipment, and cost to replace that equipment is part
- of the consideration. Compatibility of existing
- 15 distribution line equipment and cost to replace is
- 16 considered.
- Q. Okay. Where are you reading from?
- A. OCC Data Request INT-5-072, Part A.
- 19 Q. I'm sorry, INT-5-?
- 20 A. -072.
- Q. Thank you.
- I want to go back to the Stipulation,
- 23 Section 2. You were explaining to me earlier the
- 24 first and second metric with regard to DACR. Do you
- 25 recall that?

- 1 A. I do.
- 2 O. So if -- if both metrics are missed two
- 3 years in a row, you explained to me that that would
- 4 be a violation of the Stipulation; is that correct?
- 5 A. That is not correct.
- 6 Q. I'm sorry.
- 7 A. The company's required to file a report
- 8 explaining its failure and to show cause as to why
- 9 the misses should not constitute a violation of the
- 10 Stipulation, and the Commission could determine
- 11 whether the company has violated the Stipulation.
- 12 Q. Thank you for the clarification.
- 13 So what is the penalty if AEP misses its
- 14 commitment two years in a row?
- 15 A. That's where the Commission will
- 16 determine -- if the company has violated the
- 17 Stipulation, they can determine what is appropriate
- 18 action at that point.
- 19 O. So there's no penalty defined in the
- 20 Stipulation?
- 21 A. I didn't say that. I said that the
- 22 Commission will determine if and what action should
- 23 be forthcoming.
- Q. Well, the only penalty or consequence,
- at least listed in the Stipulation, is that the

1 company has to file a report explaining its failure;

- 2 is that right?
- 3 A. That's what's listed here, but, again,
- 4 the Commission can determine what they want to do if
- 5 we missed it two years in a row.
- 6 Q. And if the Commission does find a
- 7 violation of the Stipulation, what happens?
- A. That's up to the Commission.
- 9 Q. So is there a penalty for violating the
- 10 Stipulation contained within the Stipulation?
- 11 A. I feel that's a circular question, but
- there is definitely no penalty listed here, but there
- is an action for the Commission to determine what's
- 14 appropriate if AEP Ohio misses its commitment two
- 15 years in a row.
- 16 Q. Is the Stipulation terminated if a party
- violates the Stipulation?
- 18 A. The Commission can determine what to do
- 19 at that point. It doesn't call out that action.
- Q. So there's no automatic penalty or no
- 21 automatic termination of the Stipulation if the
- 22 metrics are missed two years in a row?
- A. I do not see one.
- Q. And you also don't see in the
- 25 Stipulation a typical default or termination clause

- 1 that might be in a contract?
- 2 MR. NOURSE: I object to the
- 3 characterization as typical, and it sounds like a
- 4 legal question. If you have an answer, go ahead and
- 5 provide it.
- 6 THE WITNESS: I would just add I'm
- 7 supporting this -- these Stipulation sections
- 8 referenced, not the legal boilerplate or any
- 9 associated similar topics.
- 10 BY MS. BOJKO:
- 11 Q. And just so we're clear, you're not an
- 12 attorney; is that right?
- 13 A. That is correct, I'm not an attorney.
- Q. But you're not aware of anything in the
- 15 Stipulation that has automatic termination of the
- 16 Stipulation; is that fair?
- 17 A. I'm not aware of one, that is correct.
- 18 Q. And you, sitting here today, don't know
- 19 what would happen to the Stipulation if there -- if
- 20 the Commission did, in fact, deem that there was a
- 21 violation of the Stipulation?
- 22 A. I can't hypothesize on what they would
- 23 do.
- Q. Well, not what they would do. I'm
- 25 saying if the Commission determines that there is a

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1 violation of the Stipulation, you're not aware of any
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- 2 provision of the Stipulation that would create a
- 3 result of a violation of the Stipulation?
- A. I don't think I followed that question.
- 5 Sorry.
- 6 Q. Okay. You're not -- I'll try again.
- 7 You're not aware of any -- you are
- 8 supporting the provisions of the Stipulation; is that
- 9 fair?
- 10 A. That's correct.
- 11 Q. Okay. You're not aware of any provision
- of the Stipulation that addresses what happens if the
- 13 Stipulation's violated?
- 14 A. I am supporting Section 2 of the
- 15 Stipulation covering the Distribution Automation
- 16 Circuit Reconfiguration reliability improvement
- 17 commitment. I am not aware of any associated action
- 18 associated with us missing our commitment two years
- in a row beyond the Commission determining what to do
- 20 next.
- Q. And in general, you are not familiar
- 22 with any provision of the Stipulation, the provisions
- that you're supporting, Recommendations 1 through 18,
- that address violations of the Stipulation?
- 25 A. At this time, I cannot recall any such

- 1 similar thing, no.
- Q. If I may just have, like, five minutes,
- 3 we might be close to done.
- 4 A. Okay.
- 5 (Recess taken.)
- 6 BY MS. BOJKO:
- 7 Q. We discussed the AEP simple -- I think
- 8 you called it simple time-of-use program. If they
- 9 are -- if AEP does actually continue a time-of-use
- 10 program, you will offer one simple time-of-use
- 11 program; is that right?
- 12 A. That is correct.
- Q. Okay. And does that simple time-of-use
- program require an AMI meter?
- 15 A. That was the intention, yes.
- Q. And interval meters are not necessarily
- 17 AMI meters; is that right?
- 18 A. That's correct.
- 19 O. We also discussed an AMR -- the
- 20 operational cost savings with regard to AMR. And you
- 21 did agree with me that there were some operational
- 22 cost savings; is that correct?
- 23 A. There are some operational savings with
- 24 AMR.
- Q. Are those operational cost savings

1

associated with AMR passed on to customers?

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2.
                   That's outside this case, and it's
      outside of my area of responsibility.
 3
 4
              Q. So you don't know?
              A. I do not know.
 5
                   MS. BOJKO: That's all I have. Thank
6
7
      you so much for your time, sir.
8
                   THE WITNESS: Sure.
                   MR. NOURSE: All right. Anybody else on
9
10
      the phone have questions?
11
                   MS. BOJKO: We just asked.
12
                   MR. NOURSE: Oh, you did, okay.
13
                   MS. MOONEY: No, no questions.
14
                   MR. NOURSE: Sorry, okay.
15
                   MR. MARGARD: No questions.
16
                   MR. NOURSE: Sounds good. We'll see you
17
      all Monday.
                    THE COURT REPORTER: You're going to
18
19
      read?
20
                   MR. NOURSE: Yes.
21
                    (Thereupon, the deposition concluded
22
                   at 12:38 p.m. Signature not waived.)
23
24
25
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| 1 | State of Ohio : | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 2 | : SS: County of : | | |
| 3 | | | |
| 4 | I, Scott S. Osterholt, do hereby certify | | |
| 5 | that I have read the foregoing transcript of my deposition given on Thursday, July 28, 2016; that | | |
| 6 | together with the correction page attached hereto noting changes in form or substance, if any, it is | | |
| 7 | true and correct. | | |
| 8 | | | |
| 9 | Scott S. Osterholt | | |
| 10 | | | |
| 11 | I do hereby certify that the foregoing | | |
| 12 | transcript of the deposition of Scott S. Osterholt was submitted to the witness for reading and signing that after he had stated to the undersigned Notary | | |
| | | | |
| 13 | Public that he had read and examined his deposition, he signed the same in my presence on the day of | | |
| 14 | , 2016. | | |
| 15 | | | |
| 16 | | | |
| 17 | Notary Public | | |
| 18 | | | |
| 19 | | | |
| 20 | My commission expires,, | | |
| 21 | | | |
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| 1 | CERTIFICATE | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--|
| 2 | State of Ohio | : | |
| 3 | County of Muskingum | : SS: : | |
| 4 | | D. Ross, Registered | |
| 5 | Professional Reporter and Notary Public in and for the State of Ohio, duly commissioned and qualified certify that the within named Scott S. Osterholt w | | |
| 6 | by me duly sworn to testify to the whole truth in the cause aforesaid; that the testimony was taken down by me in stenotype in the presence of said witness, afterwards transcribed upon a computer; that the foregoing is a true and correct transcript of the testimony given by said witness taken at the time and | | |
| 7 | | | |
| 8 | | | |
| 9 | place in the foregoing caption specified and completed without adjournment. | | |
| 10 | I certify | that I am not a relative, | |
| 11 | employee, or attorney of any of the parties hereto, or of any attorney or counsel employed by the | | |
| 12 | parties, or financially interested in the action. | | |
| 13 | IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Columbus, | | |
| 14 | Ohio, on this 29th day | of July, 2016. | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | Carolyn D. Ross, Registered Professional Reporter and | |
| 19 | | Notary Public in and for the State of Ohio. | |
| 20 | | | |
| 21 | My commission expires April 3, 2019. | | |
| 22 | | | |
| 23 | (CDIC OIII) | | |
| 24 | | | |
| 25 | | | |

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Case No(s). 13-1939-EL-RDR

Summary: Transcript Deposition Transcript of Scott Osterholt Filed on Behalf of the Office of the Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Etter, Terry L.