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PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application : Seeking Approval of Ohio Power Company's Proposal to Enter into : Case No.

an Affiliate Power Purchase : 14-1693-EL-RDR Agreement for Inclusion in the Power Purchase Agreement Rider :

In the Matter of the Application : of Ohio Power Company for : Case No.
Approval of Certain Accounting : 14-1694-EL-AAM Authority

DEPOSITION

of Pablo A. Vegas, taken before me, Carolyn D. Ross, Registered Professional Reporter, and a Notary Public in and for the State of Ohio, at the offices of American Electric Power, 1 Riverside Plaza, Columbus, Ohio, on Wednesday, September 16, 2015, at 9:07 a.m.

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		4
1	INDEX	
2		
3	WITNESS:	PAGE
4	Pablo A. Vegas	F
5	Cross-Examination by Mr. Bzdok Cross-Examination by Mr. Michael	5 122
6	Cross-Examination by Mr. Oliker Cross-Examination by Mr. Darr	136 156
7	Cross-Examination by Ms. Petrucci Cross-Examination by Mr. Vickers	201 210
8		
9	VEGAS EXHIBITS	IDENTIFIED
10	1 - Exhibit KDP-1, June 1, 2015	29
11	Summary of Major Terms Power Purchase and Sale Agreement	
12	2 - Exhibit KDP-1, October 1, 2015	29
13	Summary of Major Terms Power Purchase and Sale Agreement	
14	3 - American Electric Power Capacity	175
15	Performance Summary, September 10, 2015	
16	4 - American Electric Power August 2015	179
17	Investor Meetings	
18		
19		
20		
21		
22		
23		
24		

Pablo Vegas

5 1 Wednesday Morning Session, 2 September 16, 2015. 3 4 (EXHIBITS MARKED FOR IDENTIFICATION.) 5 (Witness placed under oath.) 6 7 PABLO A. VEGAS, 8 being by me first duly sworn, as hereinafter certified, deposes and says as follows: 9 CROSS-EXAMINATION 10 BY MR. BZDOK: 11 12 Q. Good morning, Mr. Vegas. 13 A. Good morning. 14 Q. Have your position or duties changed from what you described in your amended direct 15 testimony in any way? 16 17 No, they haven't. Α. 18 What did you do to prepare your original Q. October 2014 testimony in this case? 19 20 The October 2014 testimony. Can you be Α. 21 a little more specific in terms of your question? 2.2 Sure. What steps did you take? What Q. 23 did you review? Who did you talk to? What did you 24 do to prepare that testimony?

A. I spoke with our Regulatory staff in AEP Service Corporation; I spoke with my Regulatory and Finance team within AEP Ohio, and talked to them about the proposal to expand the PPA to include the plants that have been proposed, and to identify the right mix of generating units that would — that would deliver the benefits and the values that the proposal is intended to have; and then we brought together in meetings folks from AEP Generation Resources, so leaders from that organization, as well as our legal staff, and then folks on the Regulatory and the AEP Ohio team to discuss their recommendations that they made in terms of which units to include.

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- Q. And when you say "their recommendations," who's they?
- A. The recommendations came from the AEP Service Corp. organization working in conjunction with Gen Resources to identify those units that would meet the criteria and deliver the value.
- Q. Were the recommendations that were made by AEP Service and AEPGR in terms of units, were those identical to the units that had been proposed for inclusion in the PPA in your direct testimony?

A. They are.

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- Q. Okay. What type of analysis did you or people who work for you do of those units prior to accepting those recommendations?
- A. The analysis focused on the forecasted revenues and the forecasted costs of the units proposed, and compared those against the expectations of market prices, future curves, we'll call them, for the energy, as well as expectations of the capacity market revenues that would come during the known period, and some assumptions made on what those capacity prices could be beyond the three-year period.

So essentially looking at those elements, and then also the analysis would have looked at the operating characteristics to make sure that the plants would have the operational profile that would be needed in order to continue to deliver reliable operations. And so taking those factors, putting them together, those are the main — that I can recall, those are the main issues or the main variables that we looked at when analyzing those plants.

Q. Now, the analysis that you described

related to revenues and forecasted energy and capacity prices. Is that the analysis that's sponsored in this case?

A. It is.

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- Q. Okay.
- A. That's the analysis that's sponsored by Dr. Pearce in his testimony.
- Q. Are there any components of that analysis that were not included in his testimony and exhibits, to your knowledge?
 - A. No.
- Q. How about the analysis of the operating characteristics of the plant, who did that?
- A. That would have been done largely by

 Toby Thomas under his direction. Toby's responsible

 for the operations of the AEPGR operating plants, and
 so he would have executed that analysis and asked for
 that information to perform that.
- Q. Are there components of his analysis outside of what's included in his testimony and exhibits in this case?
 - A. Not that I'm aware of, no.
- Q. What type of information did AEPGR provide relative to the operating characteristics of

the plant?

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A. They would provide information around forced outage rates. That's one of the key reliability characteristics, information like ramp rates and, you know, how they perform under various operating conditions. So they would have had that information available to know — to have a perspective on whether the plants would be able to perform reliably under what we expected to be a capacity performance model which we talked about in the proposal as well.

But I'm really not a -- I'm not an expert on plant operations. So I think it would -- Toby would probably have more details around the kind of characteristics that they looked at or the kind of variables they looked at.

- Q. Sure. What -- go ahead. What -- what was your role in engaging the operational characteristics analysis?
- A. My role was to review all of the input that was put forth, the operations input, the financial input, but to review and to make sure that what we were putting forward was going to meet the intent of what the PPA was supposed to provide for

- customers. So my -- I was there to review it and assure that it met the expectations.
- Q. Did you do or engage anybody else to do any analyses relative to either of those two subjects outside of what we've talked about?
 - A. No.

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- Q. Did you receive any assistance in preparing your October 2014 original testimony?
 - A. Yes.
 - Q. From whom?
- A. I had individuals on the Regulatory team. At one point Jeff White helped with preparing some of the testimony, but it was done under my direction.
 - Q. Anyone else?
- A. Jeff was the primary support person that

 I relied on. I don't recall anybody else at this

 time that worked on it.
 - Q. Have we at this point covered all the steps that you took in preparing your original October 2014 testimony? Have we missed anything?
- A. No. No, you haven't, not that I can recall.
- Q. How about the steps you took to prepare

your amended May 2015 direct testimony?

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- A. My amended 2015 testimony. Would have been it would have been very similar steps. It would have been coalescing the same group of individuals; so individuals from Service Corp., Regulatory Service Corp., Legal, AEP Ohio Regulatory, and AEPGR. So it would have been very similar.
 - O. Was there --
- A. And I had the same support from the same individuals, too.
- Q. Okay. Was there any additional negotiation with AEPGR relative to the units or the PPA terms leading up to your May 2015 amended testimony?
- A. Nothing material, just, I mean, confirming and updating numbers and expectations based on the information and the analysis, primarily the financial analysis that would have been performed leading up to those revisions.
- Q. Any new information provided by AEPGR or AEP Services?
- A. I mean, I recall there was new information submitted related to the analysis of other -- the queue of generating facilities that are

being planned in Ohio. So there was new information made available for that update.

- Q. What information specifically are you recalling?
- A. Witness Eric Wittine went out and analyzed those sites that were under development, took pictures of those sites, and looked at the queue again to assess whether or not any changes had been made in the progress of the development of those states.
- Q. Any other new information you can think of, either internal or from AEPGR or from AEP
 Services?
 - A. No. No, none that I can recall.
- Q. Which of the witnesses in this case works directly for you?
- A. Let me look here. We have so many witnesses in this case.
- Q. Let me clarify my question, if I may.

 By "directly," I mean in a direct chain of command under you.
- A. None of the witnesses are in my
 reporting chain of command. Most of the witnesses
 are in the AEP Service Corporation.

Q. When you say "most," is that everybody except for Mr. Fetter?

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- A. Correct. Mr. Fetter and -- I'm not 100 percent sure on Mr. Thomas, if he is in the AEPGR organization or in the Service Corporation, but outside of him all the rest, I believe, are Service Corporation employees.
- Q. Based on your understanding in your position, does the Service Corporation provide -- let me rephrase that.

Does the Service Corporation have the same type of relationship to the Generation Resources as it does to AEP Ohio?

A. Well, the Service Corporation provides support services in whatever area of domain that the individuals are in or the departments are in to each of us, that is correct. So we would each -- so AEP Generation Resources is an affiliated company under AEP parent. AEP Ohio is an affiliated company under the AEP parent.

Service Corporation is a service group that provides services to all affiliated companies within the organization. So yes, they would similarly provide either regulatory, legal, financial

advice to individual companies based on whatever the requirements are.

- Q. So were the witnesses who were involved with this case then, were they -- were they working at your direction or were they working at somebody else's direction?
- A. They're working at my direction. This is an AEP Ohio sponsored case; so this proposal is being put forth and sponsored by AEP Ohio. So the witnesses and the testimonies and all of this were put together at the request of myself.
- Q. You assigned these witnesses their subjects for their testimony?
 - A. Not personally.
 - O. Who did?

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A. What I would do is I would work with leaders within the organization. Rich Muczinski is an executive in the Service Corporation that oversees the Regulatory organization. Joe Buonaiuto is the chief accounting officer, he oversees the Finance organization.

So I would work with them and say, "You know, we need somebody to cover this aspect of testimony, or this aspect of testimony, or to present

this content," and they would identify -- we'd work together, because I know these individuals and I've worked with them over the years. So jointly with their executive leadership, I'd make sure that we have the right people to represent the content.

- Q. Did you have any role in the preparation of those testimonies by other witnesses?
 - A. I reviewed it as it was being prepared.
- Q. Did you meet with these witnesses, discuss it with them?
 - A. Yes.

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- Q. Were there substantive changes made to any of those testimonies at your direction?
- A. I would recommend changes that would help strengthen the wording, the intent, clarify, changes like that to make sure that the testimony was clear, concise, efficient. I was involved -- I mean, I was involved with the review and input into the testimony, sure.
- Q. So from your answer, am I interpreting it correctly that your changes were primarily form and presentation related, but not -- there were not changes made to substantive content at your direction?

A. As an example, if Kelly Pearce were to present a set of analysis, I wouldn't go through his analysis and say, "Change these numbers." I would not make substantive changes like that.

My focus was more on how the overall message of what he was trying to communicate was captured in words and make sure that it was clear and concise. But the substance of each witness was really developed by the witnesses, because it's their area of expertise.

- Q. So the example you're offering for Dr. Pearce, just to be clear --
- 13 A. Yes.

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- Q. -- it would apply to the other witnesses as well?
- 16 A. It would. Yes, it would.
- Q. So you submitted the amended application in this case to the Ohio -- I'm new, so to the Public Utilities Commission of Ohio?
 - A. Uh-huh.
- 21 O. Correct?
- 22 A. Yes.
- 23 Q. Your cover letter, your signature?
- A. Correct.

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- Q. Did you review the amended application prior to submitting it?
 - A. Yes.
 - Q. Do you have a copy handy?
- A. I believe I do. Should be --

6 MR. NOURSE: Of the letter or the --

THE WITNESS: Right here. I have the

letter right here.

MR. BZDOK: The application.

THE WITNESS: Yes. I believe --

11 BY MR. BZDOK:

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- 12 Q. I'm glad you have the letter. We'll talk about that, too.
- 14 A. Yeah. I have the application here.
 - Q. I'm interested in Page 1 of the application the amended application. Right at the beginning, it says that AEP Ohio submits this amended application requesting the Commission's approval of the company's proposal to enter into a new affiliate power purchase agreement between the company and AEPGR through which the company would purchase the output of specific generating units owned by AEPGR.
 - Is that an accurate paraphrase?
- 24 A. It is.

- Q. The -- so just for purposes of maybe efficiency, if I call this the -- the PPA reference there as just the affiliate PPA, you'll know what I'm talking about?
 - A. Yes.

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- Q. Is there some other terminology you'd prefer that I use?
- A. Are you limiting the units included in that term to only those owned by Generation

 Resources, or are you also including those that are in the OVEC component as well which combined make up the total PPA requested?
- Q. For purposes of that question, in terms of what do we call this, I'd propose that we call the proposal to include the OVEC resources and the AEPGR resources listed on Page 12 of your direct.
- A. Uh-huh.
 - Q. We'd call that the affiliate PPA.
 - A. That's fine. That's clear.
- Q. Okay. As to the -- now, in the -- you were a witness in the --
 - A. ESP II case.
- Q. Yeah. I'm looking at 13-2385-EL-SSO and 13-2386-EL-AAM.

19 1 Α. Yes. 2 MR. NOURSE: ESP III. 3 THE WITNESS: That's ESP III. 4 you. BY MR. BZDOK: 5 6 Ο. And that's your understanding --7 Α. Yeah. 8 -- that that's what we're going to call Q. that case? 9 10 Α. Yes. 11 In the ESP III case, you took the 0. 12 position in your deposition and hearing testimony 13 that -- and I'm asking you these questions based on your understanding, your testimony, your role in the 14 company. I'm not asking you for -- to give any 15 binding legal opinions. 16 17 Α. Okay. 18 Q. But you took the position that the -that the OVEC PPA -- strike that. Let me start over. 19 20 Do you have an understanding as the 21 president of the company and the submitter of this 2.2 application that AEP Ohio needs PUC approval to enter

into the affiliate PPA?

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AEP Ohio can enter into an affiliated PPA -- this is my understanding, I'm interpreting what counsel has explained to me -- that AEP Ohio can enter into an affiliate PPA. It has done so under our market rate authority with the FERC, and that FERC jurisdiction applies to those PPAs between AEP Ohio and an affiliated company like OVEC or AEP Generation Resources.

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What we are asking the Commission to approve is the retail effect of entering those contracts, and to also approve the prudence for -- and in this case I'll separate what I asked you before, talking about the AEP Gen Resources PPA specifically, because we've -- we have an affiliated contract in place with OVEC.

- Q. That's where I got hung up a minute ago.
- A. Right. So, yeah, we already have that signed, approved, in place.

In the ESP III case, we were asking the Commission for approval to essentially effect the market purchases, the revenue treatment, and all of that for that OVEC component through the PPA rider. We were asking them to approve us allowing retail recovery of passing through credits to customers or

passing through costs to customers based on the effect of that rider being in place.

In this case, what we're asking for is an upfront prudence approval for AEP Ohio to enter into a new PPA with AEP Generation Resources, and to have the same treatment under that PPA of the revenues and costs as we did in the ESP III. Does that make sense?

- Q. I understand your answer.
- A. Okay. Good.
- Q. But I want to follow up on it.
- A. Okay.

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- Q. If an upfront prudence approval --
- A. Uh-huh.
- Q. -- from the PUC is not required in your understanding, why are you asking them for it?
- A. Because we want to ensure that the retail effect, which is how revenues and costs would pass through the PPA rider, will be approved. It goes part and parcel to the establishment of the affiliated PPA with Gen Resources. AEP Ohio would not otherwise enter into the affiliated PPA with AEP Gen Resources if the Commission were not to support the retail treatment of that PPA through the PPA

rider.

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- Q. I understand your position about the retail treatment of the rider.
 - A. Uh-huh.
- Q. Why in your understanding do you need the PUC to say the PPA itself is prudent?
- A. I believe that the prudence of that contract would directly tie to their approval of the retail treatment of that PPA rider. And if the Commission were to say that's a good idea for AEP Ohio to have an affiliated PPA for these units and for the benefits that we're proposing, then we are also asking them to approve us then getting having the retail effect of that, which is passing through credits, passing through costs as a result of being in that affiliated PPA. So I believe they go hand in hand.
 - Q. Hypothetical --
 - A. Uh-huh.
- Q. -- the PUC says, "We're going to approve the retail treatment for some shorter period of time somehow tied to your ESP or your next ESP, but we're not going to approve -- we're not going to give you a statement that we think this is a prudent thing to do

for the lifetime of these units," then what do you do?

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A. Well, in that circumstance I would need to review that change of terms with the other contract party, which is AEP Gen Resources, and I would need to consider whether that's something that I would be willing to take the risk or not take the risk independently.

So we would have to evaluate whether we would want to proceed under that modified term, but it's something that would have to be done jointly between the two parties involved in that contract, which is both myself, AEP Ohio — through AEP Ohio, and the AEP Gen Resources organization.

- Q. That would be your call on behalf of AEP Ohio as the president, right?
 - A. It would.
- Q. What kind of risks would you be considering in that hypothetical scenario?
- A. Well, the risks would be of the performance of that -- all of the performance of that PPA would then fall solely on AEP Ohio, and none of the benefits would be able to flow through to customers. So we would have to evaluate whether that

shorter term made sense or not. I mean, we'd have to evaluate that.

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I mean, we may have to look at the total term of that contract and change the term of the contract as an alternative. We would have to evaluate different things if the Commission were to have a different perspective on the retail recovery time line.

- Q. If you get everything you're asking for in this case, all of those same risks you referred to fall on the customers, right?
- A. All of the benefits fall on the customers as well as some of the risks, as well.
 - O. Which risks would not?
- A. Those that AEP Ohio would maintain, which the retail recovery of those costs is a risk that AEP Ohio maintains. We still have to get prudence review of the Commission to collect those costs. So if down the road an investment is made and the Commission doesn't find that investment to be prudent or that AEP Ohio's role in overseeing those investments because AEP Ohio would have a role in overseeing those investments wasn't prudently administered, they could deny the recovery of those

costs.

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So the Commission has all the rights to review, audit, and allow the recovery of costs associated with the PPA. Those are risks that AEP Ohio would maintain.

- Q. There were a couple threads in your answer, and I want to follow up on both of them. One of the threads was that AEP would still be responsible for administering the retail aspects of the PPA. Do I have that right?
- A. AEP Ohio is the organization that would be responsible for administering the -- with the Commission the retail aspects of the PPA rider, correct.
- Q. Now, in the ESP III case, you were asked to elaborate on that -- what you meant by that. Do you recall testifying about that same issue in ESP III?
 - A. I do.
- Q. And your answer in that case concerned essentially the allocation of retail impacts among the various customers and customer classes of AEP Ohio. Do you recall that?
- 24 A. I do.

Q. Are there any other risks or responsibilities relative to the administration of the PPA that you are referring to in your testimony today besides --

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A. Yes. In addition, I'm referring to a role -- again, a decision-making role around what investments are made in the PPA units. I'd have a voice in that through OVEC -- through the OVEC board, and I would have a role in that through the operating committee that we proposed to put in place for these resources -- these generating resources between AEP Gen Resources and AEP Ohio.

So I would have an administrative role overseeing recommended operational decisions around these units, because I would be then in turn representing those decisions to the PUCO and asking for allowed recovery of investments that were made through that PPA. I would have actually a role in that process with Gen Resources.

- Q. Your role in that process is a seat at the table --
 - A. That's right.
 - Q. -- for the AEPGR units, correct?
- A. That's correct.

O. And --

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- A. And a seat on the board for the OVEC operation.
 - Q. Now, are you back on that board now?
 - A. It's being proposed that I get back on that board, and so that -- a letter has gone out to the parties, but I believe that the board action takes place at the end of the year. So I would be back on that board at that time.
 - $\ensuremath{\mathtt{Q}}.$ Both as to the OVEC board and as to this AEPGR oversight committee --
 - A. Uh-huh.
- Q. -- your voting interest is a minority voting interest, correct?
 - A. In OVEC it is a minority voting interest. AEP Ohio has rights to just under 20 percent of the OVEC output.

In the -- in the Gen Resources it would be -- I wouldn't characterize it as a minority voting interest, I would characterize it as a 50/50 and a partnership between AEP Ohio and AEP Gen Resources. We would both need to be in agreement on a strategy to move forward with a significant investment or significant operational change.

- Q. Now, you'd be one person out of three on that committee, correct?
 - A. Yes.

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- O. And who are the other two?
- A. If I can refer to my testimony, I'll make sure I specify it accurately.
- Q. Any time you want to refer to anything, you please go ahead and just let me know what you're referring to.
- 10 A. I will. I'm looking for -- I'm looking
 11 for where that operating -- it's referenced on
 12 Page 28, but there's another reference to it.

MR. MICHAEL: While he's looking, can we go off the record for a second, Steve?

MR. NOURSE: Sure.

(Discussion held off the record.)

THE WITNESS: So the other two on the committee will be a representative from AEP Service Corporation that's going to operate primarily in the role of the dispatch and scheduling of the AEPGR units; and then the third person would be a representative from the seller, from AEP Gen Resources, and that person would be responsible for operating the units, as well as the fuel contract

- 1 management. BY MR. BZDOK: 3 Q. So I've sort of slid your way and asked 4 the court reporter also to mark Vegas Deposition 5 Exhibits 1 and 2. Can you take a look at those? 6 MR. NOURSE: Do you have additional 7 copies? 8 MR. BZDOK: Yeah. Yours are here. 9 MR. NOURSE: Thanks. 10 MR. DARR: For the folks on the phone, 11 can you describe this? 12 MR. BZDOK: Yeah. I apologize. 13 folks on the phone, we're looking at Exhibit KDP-1 14 from the original testimony filing and Exhibit KDP-1 15 from the amended filing respectively. 16 BY MR. BZDOK: 17 So my first couple questions are just: 18 You're familiar with this document? 19 Α. Yes. 20 Just to clarify, you're familiar with 0. 21 both these documents, correct?
- 2.2 Α. Yes.
- 2.3 You reviewed them in your process of Q. 24 reviewing and the various witnesses who filed

testimony and exhibits in this case?

A. Yes.

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- Q. And you were involved in negotiation of the terms represented in each of these term sheets?
 - A. That's correct.
- Q. Okay. My -- I guess my interest in -- on this particular line of questions has to do with the heading "Operating Committee" on the first page of each. So just to streamline this a little bit, I read the language of the Operating Committee term to be such that Ohio Power can be outvoted on unit decisions -- PPA unit decisions by the Service Corporation and the seller. Do you agree with that or do you disagree with that?
- A. I agree with that. In the case of a tie in current terms of opposing votes, the Service Corporation can vote to break that tie and could vote either way, that's correct.
- Q. And in terms of decisions about, say, capital expenditures, this agreement provides AEPGR with a return on an equity for any capital expenditures, correct?
 - A. That's correct.
 - Q. And those costs are borne by the

customers of AEP Ohio through this mechanism, correct?

A. That's correct.

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- Q. So there is certainly the potential for a divergence of interest on this committee for capital expenditure-related decisions. Would you agree?
- A. I don't agree with that, because the operation of this agreement, if it serves only one of the parties and hurts the other party, is not would not be considered a successful agreement or outcome for AEP overall. Both companies are affiliates of the same company, and so any decisions that would hurt one at the cost of the other or benefit one at the cost of the other would not benefit the organization overall.

So I think our interest would actually be aligned in successfully operating and executing this agreement in a way that benefits customers so that there wouldn't be risks of disallowance of investments and allow for prudent operations of the units. I find it unlikely that there would be circumstances where one entity would do something that would hurt the other entity or that would be at

significant odds with the other entity, because it would serve neither entity in that case -- wouldn't serve the combined entity.

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That's the beauty of this construct being within the confines of AEP is that we understand these units, we understand the operations of it, and the benefits and the risks all stay within AEP. So that accountability remains within AEP, not between some unknown third party out there that could have completely different interests than AEP Ohio.

- Q. If that's the case, why have it written in the agreement that significant expenditures could be made on split decisions?
- A. You have to have a decision-making framework established. So you can't have a decision-making framework that leads to impasse. So you have to have some kind of a framework that represents a reasonable approach for evaluating, reviewing, and making decisions around investments.

So I think this operating committee is structured to allow for smooth and effective operations and decision making to occur. I think that's why the structure is proposed as it is.

Q. What if major capital expenditures will

only be -- if you're confident that major capital expenditures will only be made if it's in the interest of both AEP Generation Resources and AEP Ohio and not otherwise, why not require the mutual assent of both entities to move forward on something like that?

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A. Again, the structure was put in place to allow for -- allow for those operational decisions to be made and not to hang up important decisions. So if there is a disagreement and a decision has to be made, then the structure allows for that.

anticipation of issues or expectation of conflict around that. It's put in place with the purpose of making sure that the units can operate safely, effectively, make investments that are necessary, but there's not a conflict of interest inherent with the structure of how the operating committee is made.

A relevant example could be the board of an organization has to have a mechanism to approve decisions. All members of the board are looking out for the fiduciary interest of the company, its shareholders, its organization, its employees, yet decisions could come to a point where somebody has to

make a decision. And if you have a tie and you can't make a decision, then you would impede the operations of an organization. You always need to have a structure that allows for that.

- Q. That's your example of the board of a single organization, correct?
 - A. Sure.

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- Q. Here we're talking about a buyer who's paying and a seller who's collecting, right?
 - A. Uh-huh. Yes.
- Q. You'd agree that's a different type of a situation?
- A. Except for the fact that both those organizations are inside the same company; so it's actually very similar, it's a business transaction between entities inside of the same company. So the interests of the customers of that company, stakeholders of that company are always being kept in mind as these decisions are made.
- Q. Let me switch topics now. No, actually give me a second. When we started on this subject, you had indicated that there were two types of risks that AEP Ohio would face in the future if it didn't have a -- if it had a -- if it had approval of retail

treatment of the rider for something less than the life of the agreement. One of them related to administration of the agreement by AEP Ohio, and then we talked about a few different subjects.

Are there any other topics relative to the administration of the agreement by AEP Ohio that we haven't touched on?

- A. No. I think we've covered the decision-making administration, the representation to the Public Utility Commission for retail recovery and treatment. So I believe we've covered the -- as far as I can think of right now, we've covered all the areas of that administration risk.
- Q. You also mentioned that a risk that AEP Ohio would bear is the potential that the PUC may in the future disallow recovery of costs.
 - A. Uh-huh.

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- Q. Can you elaborate on that?
- A. So in the -- if we take the hypothetical that the Commission approves the -- and supports the entry of this affiliated PPA for the term, then during the execution of that contract the Commission will have regular oversight into the costs incurred, decisions made, and the operations.

If the PUCO believes that AEP Ohio, through their voting interest on this operating committee, did not represent the best interest of customers, there is a risk that the Commission could disallow recovery of costs that were paid to AEP Gen Resources under the execution of that contract.

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- Q. And the venue in which that -- a decision like that might be made would be a future application for approval of --
- A. It would be in a regularly scheduled auditing review that the Commission would have for the operation of this contract, very similar to what the Commission does in the review and audit of fuel contracts today, or historically before when they used to have oversight for fuel contracts. They would have annual review of those contracts and be able to opine on the prudency of them and the execution of them. It would be very similar in terms of construct and timing and rights to information.
- Q. Are we still talking about the hypothetical scenario, or are you telling me how this agreement as the company's proposed is going to work relative to the Commission's audits and review rights?

- A. That last part of the answer was describing how the review and audit process could work, and comparing it to a process the Commission has used for years in looking at fuel clauses in the past. And I'm comparing and saying it's similar in terms of their rights and oversight and timing and access to information that they've had in those circumstances, what we're proposing in this PPA contract is similar to that right.
- Q. So stepping away from the hypothetical scenario now.
 - A. Yes.

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- Q. As the company is -- as the company is making this proposal in this case, do I understand correctly that your testimony is AEP Ohio is proposing a regularly scheduled review and audit in which costs incurred, decisions made, and operations are reviewed by the Commission -- the PUC?
 - A. That's correct.
- Q. And am I also understanding correctly that part of that process, as AEP Ohio is proposing it, would include the PUC's authority to disapprove costs based on the outcome of that process?
 - A. They could disapprove the recovery of

those costs as an outcome of that process, yes.

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- Q. Where does it say that in the testimony or exhibits in this case?
- A. I believe it's in Witness Allen's testimony. If you look at Page 10 of Witness Allen's testimony, beginning on Line 3, the question asks what oversight of the rider would the Commission have.

And beginning with Line 3, Witness Allen explains the ability to review and approve the rates through this rider similar to how they have done in the Fuel Adjustment Clause, which includes the ability to audit the accuracy of the costs and revenues, as well as a prudence review of the actions and the decisions undertaken by AEP Ohio or its agents, and the Commission would have certain oversight rights with regard to the PPAs.

It's that I'm referring to, it's that review for accuracy, prudence of decisions of operations that the Commission would have.

- Q. My question was about disapproval of costs. Where does it say disapproval of costs anywhere in this filing?
 - A. That is implied with the ability to

- approve the costs and the revenues collected under this rider, that's implied.
- Q. So it's implied in Mr. Allen's testimony?
 - A. It is.
- Q. Okay.

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- A. It's explicitly implied.
- Q. It's explicitly implied?
- 9 A. Or implicitly implied. It's as
 10 explicitly implied as it can be, that is what is
 11 meant.
- Q. It could just be stated, right, that would be more explicit?
 - A. It could be. That is what is meant.
 - Q. Is the Commission's authority to disapprove costs embodied explicitly or implicitly in either of the term sheets, Exhibits 1 or 2? Take your time.
 - A. No, it is not. Term sheets -
 Exhibits 1 and 2 that are the Purchase Power and Sale

 Agreements are a summary of the major terms between

 buyer and seller, and does not refer to rights that

 AEP Ohio is describing in its testimony on the retail

 administration of the -- this contract.

So this contract wouldn't be the venue to describe AEP Ohio's administration with the PUCO. This is really the terms and conditions between buyer and seller. Seller does not have an -- does not have a role or a seat at the PUCO in representing the retail interests of this rider, only AEP Ohio does.

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- Q. Is there any other exhibit or discovery response you can call to mind in this case that explicitly or implicitly identifies the PUCO's authority to disapprove costs under the company's proposal?
- A. I believe there is. I will find it. In my testimony on Page 28, beginning on Line 1, where I state that, "This Committee will provide oversight over all major decisions and operation of the PPA Units." "This Committee" is referring to the operating committee. "Subsequently, AEP Ohio can provide, on a periodic basis as determined by the Commission, summaries and/or details of the Committee's actions. Furthermore, Exhibit KDP-1, page 4 provides for the Books, Records and Audit Rights under the Agreement. The results of such audits would satisfy the Commission's review for approval of the costs and revenues passed through the

PPA Rider."

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That implies approval or disapproval.

- Q. So, again, looking at Exhibit KDP-1, Page 4, Books, Records and Audit Rights --
 - A. Uh-huh.
- Q. -- there's nothing in the term sheet that supports that interpretation, is there?
- A. Yes. This term sheet explains what access buyer has to that information, which then my testimony and Witness Allen's testimony explains exposure and provision of that information to the Commission for their decision making.

So the terms in the contract are between me and the buyer, AEP Ohio and the buyer. So if I have rights to that information through the Books, Records, and Audit Rights, and then I in turn explain how we will provide that to the PUCO for their ability to audit, review, and make approval decisions or disapproval decisions, it connects very well the two concepts.

Q. So I think I would agree with you if the seller was providing this information to AEP Ohio to be part of the books and records of AEP Ohio, but that's not what's contemplated in the term sheet, is

it? The term sheet is a right to go to the seller and examine, is it not?

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A. As I read it on the fourth line of the contract on KDP-1, it says seller shall make, or cause to be made, all computations related to the PPA units and all allocations of costs and expenses to these units.

So they shall make and cause to be made all of those cost anal— —— you know, information, and then buyer has the right to examine and to verify the accuracy of those statements, charges or computations. And if any examination by AEP Ohio reveals any problems, inaccuracies, the necessary adjustments will be made.

And then so my access to all that information is then in turn explicitly -- provided, I think, explicitly in this case to the Commission; in my testimony, can provide, on a periodic basis as determined, summaries or details of my actions, as well as the Books and Records and Audits Rights under the agreement. So I'm explicitly saying that I'm going to provide the information that is created here that the seller has to create per the terms to the Commission for their review and audit at the

Commission's request.

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- Q. Has someone advised you that under the terms in your term sheet that you're going to have possession and custody of these records in order to do that?
- A. I'm not interpreting possession or custody. I'm -- I think that's a legal term; so I'm not interpreting that.
- Q. Okay. Let me -- and I'm not asking you for legal opinions.
 - A. Yeah.
- Q. You were involved in the negotiation of this term sheet, correct?
- A. Correct. So the intent is that I would have access to all of those records and information necessary to ensure the prudent operations of the unit, which includes the costs, how those costs were calculated, where those costs were sourced from, the contracts that those costs were flowed through. All of that information that relates to the operation and execution of this contract, I as the buyer have explicit rights to that information.
- Since I have rights to that information and I'm making a commitment to make that information

- available to the Commission, then in turn the

 Commission has rights to review that information as

 well in their prudence review of the execution of

 this contract.
- Q. Okay. So Sentence 1 of Books, Records and Audit Rights is that seller keeps the information, right?
 - A. Uh-huh. Hold on. They're the operator of the unit; so they will keep and be responsible for making sure that those records are maintained -- produced and maintained.
- Q. Second sentence says that they have to make them available to you, right?
 - A. Yes. That's correct.
- 15 Q. Third sentence says you have the right to examine them, right?
- 17 A. Correct.

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- Q. And then fourth sentence and beyond has to deal with --
- 20 A. Any issues.
- 21 Q. -- if you have a problem, how do you 22 handle it, right?
- A. That's correct.
- 24 Q. So how does your -- in your

understanding, how does your right to examine records at AEPGR translate into audit rights to the Commission of those records at AEPGR?

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MR. NOURSE: Counsel, I'm just going to object. I think you're just being argumentative at this point. He's already explained it, and you're saying you're not asking for a legal interpretation, but you're badgering about what has already been explained in testimony — in the multiple pieces of testimony, in the term sheet, in the application, and you haven't even looked at the contract. So he's already given you his full understanding of this issue.

MR. BZDOK: I'm not badgering him, I'm being very nice.

MR. NOURSE: Yeah. Well, you can go ahead and answer, but that's my objection.

THE WITNESS: I believe that what I am proposing in testimony and what Witness Allen is proposing in testimony, which explains that we will provide, as asked, summaries or details of the committee's actions. Those actions include reviewing the detailed books of record for the operation of these units, and that we will in turn allow the

Commission through their audits to see the decisions of these committees, what costs were approved, what investments and decisions were made, and allow then the Commission to make a decision on whether those costs and investments were prudent.

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I think you're getting to the intent of what the audit and review capability is, or the reality of it. And I believe that what I'm representing -- what I am representing is that the Commission will have the right to review and audit costs incurred in the execution of this contract.

And if there is a prudence decision by the Commission, that our -- AEP Ohio's operation was imprudent, they have the right to disallow the retail recovery of those costs.

They do not have a right to disallow the passing of payments to AEPGR from AEP Ohio. That is clearly defined inside the contract as an obligation between buyer and seller. But the Commission does have a right to effect the retail recovery of those costs from customers, and that is what I'm representing with my testimony and is what Bill Allen is representing with his testimony. It is a risk incurred and maintained by AEP Ohio.

BY MR. BZDOK:

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- Q. Are you proposing some kind of periodic or annual proceeding in which this would be done?
- A. What we're proposing is that the Commission can set whatever review period would be reasonable in their eyes to satisfy their audit requirements. That's what my witness proposes is that the Commission, at their discretion I believe is the term that I use, on a periodic basis as determined by the Commission.
- Q. Are you proposing that that would be a process that would include a hearing?
- A. I'm not proposing that. I'm just proposing an audit process that the Commission can determine would be appropriate on their part. That's all we're proposing.
- Q. In the ESP III case, you testified that as to the OVEC unit costs those were FERC jurisdictional, correct?
 - A. They are.
- Q. And the only avenue for the PUC, if it found those costs to be imprudent, would be to file a complaint with FERC, correct?
- 24 MR. NOURSE: I object to that

48 characterization. Do you have testimony you want to 1 2. put in front of him? 3 MR. BZDOK: At this point I'm asking if 4 that's consistent with his memory, but we can 5 certainly refresh it if he doesn't remember. THE WITNESS: Yeah. I would like -- I 6 7 would like to review what I said --8 MR. BZDOK: Okay. 9 THE WITNESS: -- in the ESP III case. 10 That was a while ago. Can we go off the record? 11 (Discussion held off the record.) 12 BY MR. BZDOK: 13 Ο. So just to refresh your memory, I'm 14 looking at Pages 33 and 34 of the Volume I of the 15 hearing transcript from the ESP III case. You were 16 under cross-examination by the Ohio Consumers' 17 Counsel. 18 It is Pages 32 and 33 that I'm showing, or 33 and 34? 19

- 0. 33 and 34.
- The ones you're referring to, okay.
- Q. So just take a minute and see if that refreshes your memory.
- 24 Α. Okay.

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(Witness reviewing transcript.)

A. I'm familiar with this testimony, the questions and answers.

4 MR. BZDOK: Can you read back the last question?

(Record read back as requested.)

7 BY MR. BZDOK:

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- Q. That's the question. And I'm just clarifying, we're talking only about the OVEC units now?
- MR. NOURSE: Object. Are you asking for a remedy for wholesale rates or retail rates? What does your question relate to?

14 BY MR. BZDOK:

- Q. My question was the Commission's approval of the retail costs that are being passed down through this proposal relative to the OVEC units.
- A. I believe the testimony in ESP III that you're referencing had a narrower view of the Commission's rights to prudence, this allowance of those costs, than the testimony presented in the current proceeding that the company is offering suggesting broader rights for the Commission to act

on with regards to prudency of OVEC and affiliated generation units.

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- Q. Why is that? What changed it?
- A. I believe the intention did not change, but the language and the wording that was used in testimony in ESP III had a narrower interpretation of that. And the company, AEP Ohio, has always intended and continues to intend that the Commission does and should have rights to prudence reviews of investment decisions as it effects the retail recovery of those decisions.

The company, AEP Ohio, wants the Commission to be comfortable with their rights of prudence, and our current proposal intends to make that more clear, more explicit.

- Q. Is this a clarification or a change of position relative to the OVEC units?
- A. I think it's a nuance more than anything. We believe that they had rights of the retail recovery in ESP III, but it really wasn't worded in a way that made that very clear.
- Q. As you are contemplating it in your proposal in this case, if costs related to PPA units were passed onto customers via the mechanism you've

proposed and then subsequently found through the audit process you're proposing to be imprudently incurred, are you proposing that there would be some mechanism by which the ratepayers would subsequently be credited for those costs?

A. Yes.

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- O. How would that work?
- A. It would be the result of an audit that would look at a period of costs, and those that were found to be imprudent would be disallowed, and that would be an adjustment then in the PPA rider. So either the credits at that point that are flowing back to customers would be increased to reflect the change in the net revenue and costs, or any collection at that time would be decremented to reflect the change in net revenue and costs. So it would be affected through the PPA rider.
- Q. And just to be crystal clear, your -you are not proposing that any of this would be done
 via a true up or reconciliation type of a proceeding,
 correct?
- A. I'm describing it in the context of the audit and the review of the audit, which then would influence the rider rate process. The PPA rider

would be adjusted at some frequency, we've proposed annually. But in that annual change in rates based on the operation of the contract, the credit or the deficit would then flow through that, the credit or the debit would flow through that rider.

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- Q. Would you be opposed to handle -- to providing for prudence review via some type of true up or reconciliation proceeding involving a hearing?
- A. I would have to consider that offline with the parties.
 - Q. By "the parties," you mean AEPGR?
 - A. AEPGR, AEP Ohio, AEP Service Corp., yes.
- Q. Under the contract as you understand it, or under the terms as you understand them, a finding of a lack of prudence as part of this Commission process, the costs associated with such a finding would be borne by AEP Ohio in terms of diminished recovery from customers, correct?
 - A. That's correct.
- Q. And no portion of those costs would be borne by AEPGR via reduced payment obligations from AEP Ohio, correct?
 - A. Correct.
 - Q. And via the proceedings that you're

talking about in this case, the PUC would have no decisional authority over capital improvement projects at any of these units, correct?

A. Incorrect.

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- Q. How am I incorrect? Why am I wrong?
- A. Because we have proposed and described a process where significant capital improvements that are being contemplated at these units would be brought to the Commission for consideration in advance.
- Q. And can you identify for me where that proposal is made?
 - A. Yes. Yes. It's in discovery actually.
- Q. You just made a statement, "It's in discovery actually." Did you intend for that to be an on-the-record statement?
- A. Yes. I believe it's in discovery. Yes, it's on the record.
- MR. NOURSE: It's fine. If you don't recall, just say you don't recall.
- 21 THE WITNESS: I don't recall where in
 22 testimony it is, but I can certainly answer the
 23 question in this deposition, my understanding of it,
 24 if that's adequate.

BY MR. BZDOK:

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- O. Please.
- A. So my understanding is that we would bring investment decisions of significance. I don't know what that break point is. We'd have to determine what that is and make a recommendation, but of multimillion dollar investments of significance, more than likely over 10 million, perhaps over 50. I don't have a precise number at this point, but large significant capital investments would be brought to the Commission for their prudence and review prior to being made so that their agreement that that is a prudent decision would be done before capital investments are made. I believe that is described in testimony somewhere.
 - Q. Testimony or in discovery?
 - A. I believe in -- well, either in testimony or in discovery. I'm looking in discovery now, but I'm not finding it right now.
 - Q. Are you comfortable moving on, or do you want to keep looking?
 - A. I'm comfortable moving on.
- Q. Okay. If you have a light bulb moment at some other point today and you remember, can you

just stop us and let me know?

A. I will.

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Q. Okay. Just a couple -- let me switch topics. Several related kind of yes-or-no questions.

AEP Ohio would sell all the energy, capacity, and ancillary services obtained under the affiliate PPA into the PJM market, right?

- A. Correct.
- Q. AEP Ohio would not be using any of the energy, capacity, or ancillary services obtained under the affiliate PPA to provide services to their own customers, correct?
 - A. Correct.
- Q. AEP Ohio's nonshopping customers would continue to receive their energy through an SSO even if the affiliate PPA and the rider were approved, correct?
 - A. Correct.
- Q. Approval of the affiliate PPA and the PPA rider would not impact the price of the SSO energy received by nonshopping customers, correct?
 - A. Correct.
- Q. And your customers are currently free to shop for their own energy service, correct?

A. Correct.

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- Q. And approval of the -- the affiliate PPA or the rider would not change your shopping customers' rights in any way, would it?
 - A. It would not.
- Q. In your testimony in the -- sorry, in your deposition in the ESP III case, you testified that if AEP Ohio determined that it would be necessary to seek authority for additional PPAs beyond the OVEC units, your role would be to essentially propose what those assets should be based on benefit to your customers. Do you recall that?
 - A. Correct, I do.
- Q. In the hearing in those cases, you said that in that process of determining what assets to propose, you would be looking out for AEP Ohio's customers to try to come up with the best combination of a portfolio that would address risks related to price volatility and reliability. Do you recall that testimony?
 - A. I do.
- Q. And in describing in responding to my questions earlier today about how you prepared your testimony, you described a process of meetings and

- analysis. Do you recall that?
- A. I do.

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- Q. Is that the process you undertook to fulfill the role in ESP III that you said you would have as we've just described?
 - A. It is.
 - Q. Is there anything else that you did as part of that function outside of what we've already discussed?
 - A. No, there is not.
 - Q. And the -- was the ultimate call of what units to propose for inclusion in the PPA in this case, was that your call as president of the company?
 - A. Yes.
 - Q. And you indicated that the units you're proposing are units that were recommended by AEPGR through the process you've already described, right?
 - A. Correct.
 - Q. Did you consider any other generating units for inclusion in the PPA besides the ones that are being proposed?
 - A. I did not.
- 23 Q. Why not?
- 24 A. They would not have met the criteria

that I put forward in negotiating the units for this PPA; those criteria being units that will have good operational reliability, support economic development, support fuel diversity, and would be at risk economically in the short-term capacity markets — capacity and energy markets of PJM.

- Q. How were you able to make that determination without evaluating any other units?
- A. I set forth that criteria to AEP Gen
 Resources at the beginning of the negotiation and
 working through the process, and they brought back
 that recommendation. I reviewed that recommendation
 and agreed with that analysis.
- Q. Did you ever consider setting forth those criteria to other potential sellers outside of AEPGR and see what they could come up with?
 - A. No.

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- Q. Why not?
- A. Because we wouldn't have had the same interests, as we've discussed earlier in the deposition, of having both entities both working for the best outcome for AEP's customers, nor would we have operational experience with those units that could give us the level of comfort that the

operational and reliable factors could be represented to the best of our understanding.

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Since we have to -- I -- AEP Ohio has to represent these units and their capabilities, I wanted to make sure that we had -- those that were working on this had deep familiarity and I have comfort with those units.

- Q. So from the outset, this always had to be AEP units or else nothing at all?
- 10 A. It was always intended to be AEP units,
 11 yes.
 - Q. What was the timeframe on which -- the process of the discussions you've described with AEPGR in negotiations, what was the timeframe under which that occurred?
 - A. Generally speaking, the timeframe was in the spring and summer of 2014 prior to the application in October. I don't recall dates.
 - Q. Were any -- who was involved on the AEP Ohio side besides yourself in the discussion and negotiation aspect?
 - A. Gary Spitznogle, who's the vice-president of Finance and Regulatory, would have been involved; Andrea Moore would have been involved.

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- Q. I think you may have told me already who she is.
 - A. Director of Rates.
 - Q. Anyone else?

5 MR. NOURSE: Sorry. Did you ask within

6 AEP Ohio --

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7 THE WITNESS: Yes.

MR. NOURSE: -- or on behalf of?

THE WITNESS: Within. I was answering

within. I don't recall anybody else, no.

11 BY MR. BZDOK:

- O. How about on behalf of AEP Ohio?
- A. It would have been a large number of -there's a deposition -- an interrogatory about what
 individuals were involved in that. I don't recall
 where that deposition -- that interrogatory is, but
 it lists the name of individuals in GR, Service
 Corporation, and AEP Ohio that were involved in those
 negotiations.

20 MR. NOURSE: Would you like a reference,

21 Counsel?

MR. BZDOK: If you're going to give me
one, I'd be happy to take it.

MR. NOURSE: From me or --

THE WITNESS: I believe it might have been a Sierra Club interrogatory.

MR. NOURSE: Yeah. Do you have the discovery electronically?

MR. BZDOK: Uh-huh.

MR. NOURSE: If you want to look at Sierra Club 2-14 interrogatory. There's a series of questions right there.

MR. BZDOK: Got it.

10 BY MR. BZDOK:

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- Q. I'm ready to move on.
- A. I'm ready to move on, too.
- Q. Okay. Your answers earlier about not considering or evaluating units other than the ones that are proposed, is all of that also true of the time period between the original direct testimony from October of last year and this amended application and testimony from May of 2015?
 - A. It is.
- Q. I'm interested in comparing with you the two term sheets, the Offers and Scheduling term, which is on Page 2 of Deposition Exhibits 1 and 2. So take a minute and look at that to refresh your memory if you'd like.

My question is: Can you explain for me what the -- what this change is about?

(Witness reviewing exhibit.)

- A. My understanding that the only change between this and that is in the first several words where in the more current updated contract it specifies that buyer, which is AEP Ohio, or its agent, which could be Service Corp. AEP Service Corp., will dispatch the generation and go on to describe that, versus in the first version it specifies only AEP Service Corp. doing it on behalf of Ohio Power Company, the buyer, shall make the offers and do the dispatch.
 - Q. What was the reason for the change?
- A. I'm not sure. It didn't have a meaning change to me; so I'm not sure why the wording changed.
 - Q. It didn't have a what change?
- A. A meaning change. It didn't substantively change the terms of the contract.
 - Q. You don't recall any discussion of this?
- 22 A. No.

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Q. Now, the start date on the terms has also changed, correct?

A. Correct.

- Q. And is that is that a result of this proceeding taking a longer time than originally anticipated?
 - A. Yes.
- Q. Will the agreement start on October 1st whether this proceeding is concluded or not?
 - A. No.
- Q. Just to be super clear, when you say "No," you're saying the agreement will not start on October 1 if this proceeding is not yet concluded?
 - A. Correct.
- Q. I want to look at Page 7 of your direct testimony now in this case. And in case I slip, all of my questions, unless otherwise specified, are by your amended direct testimony, the one filed in May of this year, okay?
 - A. Okay.
- Q. May I get one of those also?

 MR. NOURSE: Yeah. Help yourself.

 MR. BZDOK: Thank you.
- 22 BY MR. BZDOK:
- Q. On Page 7 you're discussing the -- what you believe to be the benefits of this PPA, correct?

A. Correct.

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- Q. And among those benefits, you describe a hedge against market volatility, correct?
 - A. Correct.
- Q. And you make a statement that there may be reforms in the PJM capacity market, but those could come too late to keep assets from retiring prematurely, correct?
 - A. Correct.
- Q. Has -- to your knowledge, has AEPGR notified PJM of any intent to retire any of the units listed on Page 12 of your direct testimony?
 - A. To my knowledge, they have not.
- Q. To your knowledge, has the OVEC group notified PJM of any intent to retire any of the OVEC units listed on Page 12 of your direct?
 - A. No, they have not.
- 18 Q. If the Commission -- could we go off the record for a minute?
- 20 (Discussion held off the record.)
- 21 BY MR. BZDOK:
- 22 Q. Back on the record, please.
- 23 If -- I'm looking at the units on
- 24 Page 12 of your direct. If the PUC does not approve

- the PPA and rider, would one or more of the Kyger Creek units have to retire?
- A. I can't answer that question on behalf of the OVEC organization; so I don't know if they would or would not have to retire. That would be a decision that the OVEC board would have to make.
- Q. Do you recall testifying about this subject in your deposition in ESP III?
 - A. Not offhand.
- Q. Okay. I'm going to hand you my copy of your deposition, looking at Page 110.
 - A. Okay.

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- Q. Take a minute and refresh your recollection.
- 15 (Witness reviewing document.)
- 16 A. I recall that.
 - Q. So you seem pretty clear in that dep at that time that the Kyger Creek plant would not have to close if the PPA rider being proposed in that case was not approved by the PUC, correct?
 - A. My understanding has changed since this deposition, and I think I answered too definitively, because really it's not my decision whether or not any of these units would close back then nor today.

And without the financial long-term stability that the PPA offers to these units, I don't know and I cannot say definitively whether they would or would not close if the PPA rider is not approved.

- Q. I want to just explore the basis for your answer there a little bit if I may.
 - A. Sure.

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- Q. Because you had -- there were a couple different threads in that answer. One thread that I picked up was, I would paraphrase as, it's not your decision.
 - A. That is correct.
- Q. Because AEP Ohio controls 19-and-change percent of the OVEC units, right?
 - A. Correct.
- Q. Are you saying you were too definitive solely because it's not your decision, or are there other reasons why you feel circumstances have changed relative to the question of potential closure?
- A. It's solely because I don't have the ability to represent closure or nonclosure decisions for that plant. So that would not have been a fair representation of my -- my accountability in terms of this question. There are no other circumstances I'm

referring to.

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- Q. Okay. At the time you indicated that your opinion was that it would not close, what facts or understanding were you basing that opinion on?
- A. On the understanding of the terms of the purchase power agreement that's in place between AEP Ohio and the OVEC corporation.
 - Q. What do you mean by that?
- A. That the -- the contract would require

 AEP Ohio to continue to pay for its cost share of the

 OVEC units regardless of whether the PPA is approved

 or not.
- Q. If that is the case, can you describe for me what circumstance would lead the other members or interests in OVEC to close that unit?
- A. This is just an opinion based on my understanding of how decisions to operate the plant are made.
 - O. Understood.
- A. And my -- in my opinion, decisions to maintain the ongoing operations of the plant or to not maintain it would be based on the long-term economic viability of the units in the plant.

If long-term economics indicated that

the plant would continue to lose money or continue to make money, those factors would influence the owners making a recommendation to either maintain and operate the plant or to not and to shut it down. So I think -- I believe it's primarily economics that the owners would rely on.

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- Q. Are you talking about economic viability independent of the existing PPA or economic viability within that existing PPA?
- A. Within the existing PPA, because the existing PPA is how OVEC recovers the costs from its members through PPAs with the other owners.
- Q. And can you give me the nutshell of how that is?
- A. The nutshell is the -- the units are operated by -- AEP is the primary operator of those units, and the investment decisions are brought to the board, approved or not approved. Operational expenses and budgets for the plant are brought to the board, approved or not approved, and the plant is operated.

The costs of operating that plant are borne by all of the owners in their respective ownership share, and the revenues generated by that

plant by selling its output to either customers or to -- into the market are then also attributed back to the owners based on their ownership share. And so it's the economics that each of the owners would experience through their own PPAs between their entities and the OVEC corporation that would reflect the economics those owners would experience.

- O. I could take that back.
- A. Okay.

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- Q. Are the answers that you've given me relative to the Kyger Creek plant in terms of closure or not, depending on the outcome of this case, do those answers apply the same way to Clifty Creek?
 - A. They do.
- Q. Do you have any knowledge or understanding of whether either or both of those OVEC plants would be sold if the PPA and rider were not approved in this case?
- A. I wouldn't have any knowledge of that, no.
- Q. Same questions about the AEPGR units on Page 12 of your direct testimony. Do you have any opinion about whether if the Commission does not approve the PPA and rider in this case, that the

Cardinal plant would be closed?

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- A. I'm not aware of any plans to close the Cardinal plant at this point.
- Q. Irrespective of the outcome of this case?
 - A. Correct.
 - Q. Do you have any opinion about whether the Cardinal plant would have to be sold -- or would be sold if the PPA and rider were not approved in this case?
 - A. I believe it's likely it would.
 - Q. And why is that?
 - A. Because AEP has communicated its strategy is to divest itself of volatile, unregulated assets, which includes the unregulated generation units that are proposed in this PPA. So that's a stated strategy from AEP.
 - Q. Just to save some time, are your answers to those two questions about retirement and sale relative to Cardinal also the same as to Conesville, Stuart, and Zimmer?
 - A. They are.
- Q. What is your knowledge or understanding about who those plants might be sold to?

A. I don't have any specific knowledge about who these particular plants might be sold to.

I only have contextual knowledge of who is purchasing power plants in PJM from investor-owned utilities, but I have no specific knowledge about who these plants would be sold to.

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- Q. Explain your -- what's your contextual knowledge?
- A. Reading the newspaper with regard to the sale of the Duke Energy Ohio assets that were sold in the last year.
- Q. Sure. So I'm -- my intent, maybe not artfully phrased, was who is buying units in PJM based on your understanding from context?
- A. Investment banks and merchant generators are primarily the entities that I read that are buying generation in PJM.
 - Q. Merchant generators from where?
- A. From anywhere in the US, from all over.

 I've heard of purchases from companies based out of

 Texas. I don't recall specifically the other

 location, but from I think anywhere in the US really

 it could be. I'm not aware of any companies in Ohio

 that are purchasing plants.

- Q. Give me just a second.

 (Pause.)
- Q. You make a statement on Page 14 of your testimony, Line 12, you say, "A sale could be to an out-of-state entity that does not have the same long-term commitment as AEP to Ohio and the communities where the PPA Units are located." Do you see that?
 - A. I do.

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- Q. Are you making a claim about the future commitment of these potential entities?
- A. I'm making a claim about historic, current, and future.
 - Q. What's the basis for your claim about the future commitment of potential out-of-state entities that have not been identified?
 - A. It's based on my understanding and direct observation of investment into the community, meaning to charitable organizations in the community made by entities. And those entities are typically not out-of-state entities, they are those that are in state and have a vested interest in the state.

I serve on seven boards, and I observe who serves on those boards with me. Those are

members from companies in Ohio who have a vested interest in Ohio.

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- Q. So in terms of future commitment, you're talking about future commitment to charitable giving within the communities where the plants are located?
 - A. That would be one thing, yes.
 - Q. Are you talking about something else?
 - A. No. Talking about that.
- Q. Anything else? Excuse me. Is that what you're talking about in terms of the future commitment, or are there other things as well?
- A. There's also -- I mean, it could be any economic development benefit. The desire to build and grow more assets in the state of Ohio, I'm referring to that.

A company that has a headquarters here and a large presence has more of a vested interest and benefit for its shareholders or organization to make those investments in the community where it's located. So a company headquartered in another state would have less benefit to itself to make investments in another state where it doesn't have a big presence.

Because community relations is a very

- important part of AEP's organizational business model, I'm assuming that community relations, and from my experience in other companies, is also an important part of their business model.
- Q. Do you have any belief that a potential buyer of one of these units -- excuse me, one of these plants would not be likely to stay and maintain the investment that the new buyer made?
- A. I think it's very likely that they wouldn't stay and maintain the investment.
 - Q. Why is that?

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- A. Because if the economic conditions deteriorate, the financial ramifications would be the same to that buyer as they would be to AEP.
- Q. The current owner is looking to divest itself of these units, right?
- A. No. The current owner is looking to continue to operate and run these units under the terms of the PPA.
- Q. Let me rephrase. That's a fair response.
- The current owner is going to be looking to divest itself of these units, according to you, if these contractual arrangements you're proposing are

not approved, right?

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- A. Correct.
- Q. So wouldn't a new owner who purchased one or more of these plants, despite not having those commitments, be fairly likely to hang around?
- A. Not necessarily. Somebody who buys these plants could be looking to buy them and close them down in order to drive prices up in the market to benefit their other operating plants.
- Q. Are there instances in PJM you can identify for me of that happening?
- A. Not off the top of my head, but there's been thousands of megawatts of plants close down in PJM in the last several years. So we could look up and reference who owned those and who shut them down.
- Q. You're saying it's possible, but you don't have any knowledge --
 - A. It's very possible.
 - Q. -- of it happening?
- A. Not any direct knowledge. I wouldn't have any knowledge as to the rationale why any other company shuts its plants down, but I'm saying that that could be done. You were asking if I believed that they would stick around, I said not necessarily.

There are reasons why they wouldn't, and that is a reason why they — that could be a reason why they wouldn't.

- Q. Are you aware of new buyers buying units in PJM and shutting them down among these thousands of megawatts you're referring to?
 - A. I'm not aware of it.

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- Q. Is it fair to say we really don't know anything sitting here today about the intentions of a potential buyer of any of these plants?
- A. No. I don't think it's fair to say that. I think you could characterize perhaps intentions of buyers of these plants by looking at the operating history of some of the buyers of these plants.

So specifically, Dynegy purchased the Duke Energy Ohio units. They're a company that has speculatively made bets on the price of the energy commodity, have lost on those bets and gone bankrupt. So I think you can make assumptions as to how companies operate and the way they make investment decisions based on their historic track record.

So I don't think it's fair to say you can't say anything about the characterization of the

company's intentions when you look at how they made decisions in the past and then consider how those decisions might apply to future investments.

- Q. Do you have any other examples other than Dynegy?
 - A. No.

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- Q. So other than Dynegy, we really don't know anything about the intentions of any other potential buyer of these plants. Would you agree with that?
 - A. I don't have any other knowledge, no.
- Q. Look at Page 8 of your direct testimony.

 Page 8, the answer to the question, the second

 sentence, you talk about the largest benefit of the

 proposed arrangement being to act as a hedge that

 partially shields your customers from the impacts of

 capacity and energy market volatility, right?
 - A. I do.
- Q. Let's talk a little bit about energy market volatility first. How long are the contracts that you enter -- that AEP Ohio enters for its customers' SSO power needs?
 - A. One and two-year term contracts.
 - Q. Are there any three-year contracts?

- A. I would have to verify. I'm not sure off the top of my head.
- Q. And how far in advance of delivery are those contracts entered into?
 - A. Anywhere from weeks to months.
- Q. So the -- in Ohio, is the layering of the contract -- of different -- of contracts of different terms called staggering?
 - A. Yes, it is.

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- Q. And the different time periods ahead of delivery, is that called laddering?
 - A. I believe it is.
- Q. Why does AEP Ohio do this? Why do you obtain contracts of different terms for delivery at different future points in time?
- A. Contracts of different terms will offer different risk profiles to the bidders. Those different risk profiles will have different prices. And so by staggering and laddering the terms, you will blend multiple risk profiles into a combined product or a price that the customer will pay.
- Q. Does that have an effect of smoothing out price volatility?
 - A. It has a very small effect of smoothing

out price volatility.

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- Q. Why very small?
- A. Because what it does is it takes the general trends of prices and just blends when they take effect. So if prices are going up over a period of three years and you buy a one-year contract that goes up five percent, a two-year contract where it shows seven percent, and a three-year contract where it goes up 10 percent, over the course of blending those it's still going up, it's just going up at a slightly less amount, in contrast to the PPA, which has the effect of being the opposite movement of market prices.

Laddering only blends in the current trend of prices. The PPA has an opposite effect of current -- of market prices.

- Q. The PPA is an all-costs contract, right?
- A. All costs, all revenues, yes.
- Q. How do you determine what -- let me back up.

So you testified in the last case that you believe that customers prefer more stable rates.

- A. I did.
- Q. How do you determine what the value of

that smoothing or that stability is?

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- A. It's based on an understanding of general customer preferences as it relates to electricity prices. It's not a quantitative answer, it's a qualitative answer.
- Q. So depending on a myriad of factors about which your company has made projections in evaluating the possible, you know, economics of this proposal --
 - A. Correct.
- Q. -- there are scenarios where this proposal could have -- could have a positive cost and where it could have -- ultimately result in a net credit, is that --
- A. That's correct. There are three primary scenarios illustrated in this proposal; a low, high, and medium scenario. In the medium scenario, which is what we used for the basis for most of the testimony, there is a net benefit to customers over the life of this contract.
- Q. It's a cost at first, and then it slides over into a benefit?
 - A. Correct. That's correct.
 - Q. And in the high, it's a cost?

- A. At first, and then it slides into a net benefit.
 - Q. And in the low?

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- A. There's a net cost throughout.
- Q. How do you figure out at what point the net cost would be higher than the benefit of the price smoothing or volatility hedging that it would provide?
- A. Well, I don't believe in any of the scenarios it ever does reach that threshold, because in the worst-case scenario where it's always a net cost, what that means is that two-thirds of the supply cost the customers are paying for is based on very low prices. So that means customers are paying low prices for electricity in relation to today and future prices. So paying a small amount of insurance for the potential that the prices go up significantly I don't think ever outweighs the benefit they have from having that insurance.

But the PPA rider offers more than just the financial hedge as I've described in my testimony. There's other benefits that customers get regardless of what the outside price is, too, in terms of economic development, reliability, fuel

diversity. Those are all benefits that they would get in any scenario, regardless of prices; so when you factor that in, plus the fact that in a low-cost scenario — low-cost scenario customers are paying a low price for supply for the majority of their supply, two-thirds, and getting all those other benefits.

- Q. Sure. A low-cost scenario is not the -- when you say a low-cost scenario --
 - A. Meaning market prices.

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- Q. That's not the only scenario in which this rider could have a net cost to customers, right?
- A. In the three that we've proposed, it is the only one that would have a net cost to customers, yes.
- Q. There are any number of scenarios in which, for example, costs associated with these plants were higher than projected, or operation of these plants was lower than projected, or other scenarios in which it could have a net cost other than simply because of low market prices, correct?
- A. No likely outcomes, no. These are plants that have been run by AEP for decades. We know the operations and costs of these plants. Our

forecasts for these costs of these plants is very reasonable. So if there's a high-cost scenario that you're describing, it likely applies to all generating plants in the same nature, which would mean prices for the region are high.

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Q. In the analyses that you described earlier in your testimony today that were done in connection with making these proposals, was there any effort to value -- to value any of these benefits that you assert, to value the -- what the monetary value of the hedging or smoothing would be, what the monetary value of the reliability benefits you posit will be?

MR. DARR: Excuse me. Before you answer that, can I have that question read?

(Record read back as requested.)

MR. DARR: Thank you.

THE WITNESS: Only in the context of general benefits that customers would get from those benefits, not direct quantitative valuations. What I mean by that is we looked at the cost potential in the short-term and then the benefit in the long-term that customers would get, and all likely scenarios lead to a net benefit to customers.

So for the short time that they would have a cost, we evaluated that against the risk of reliability issues, and we have evidence from other large-scale outages that can cost customers billions of dollars in economic damage when large outages happen. We looked at what significant increases in prices could occur based on real historic evidence, and evaluated those price increases against the short-term costs that customers would incur, and found the costs to be much lower than the potential increases in prices.

So we did not value the value of the hedge itself, we compared it against the other factors that we knew were variables, and in our judgment felt that the price in the short-term of this hedge or this insurance product is very reasonable in relation to the significant benefits that it offers and the significant protection that it offers against those risks.

BY MR. BZDOK:

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Q. So you valued the short-term costs, if I'm understanding you correctly, during the net cost period under your projections --

A. Yes.

- Q. -- against the costs of the potential downside risks you've described?
 - A. Yes.

- Q. And I've seen certainly in the testimony -- so I've seen in the testimony some numbers about -- a for instance about a transmission issue or a for instance about a price spike. Is -- is this comparison that you're describing something other than that?
- A. No. It's using that data that we've provided around the transmission costs, around the volatility of capacity and energy prices. That's the those are the risks that are being mitigated by entering into the PPA.
- Q. There's no sort of systematic analysis of what's the value of smoothing and, therefore, what's it worth paying for?
- A. No.
 - Q. What's the value of variability, what's the incremental cost that's worth paying for it?
 - A. No.
- Q. I'm going to switch topics a little bit.

 You discuss the January 2014 polar

 vortex in your direct -- amended direct testimony at

- Pages 8, 9, 13, 15, 16, and 21; is that correct?
- A. Uh-huh. That's correct.
 - Q. You -- at Page 8 you talk about how the vortex created price spikes in PJM, right?
 - A. Correct.

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- Q. And then you've got a figure showing that on Page 9 and another on Page 10, right?
 - A. Correct.
- Q. And then Pages 15 and 16 you offer an argument for how the PPA protects -- would protect your customers from volatility due to polar vortex-type events.
- A. Correct.
- Q. What's the basis of your knowledge about the impact of that particular polar vortex on AEP

 Ohio customers and operations?
 - A. I'm not sure I understand your question.
 - Q. You were in this position then, right?
- 19 A. Yes.
- Q. That was, I am imagining, kind of an all-hands-on-deck situation here, right?
- 22 A. Yes.
- Q. Can you describe for me what sorts of involvement you had --

A. Yes.

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- Q. -- in that all-hands-on-deck situation? It was out of the ordinary course of your duties?
- A. Yes. I received notice through our Transmission organization that PJM had called an emergency condition situation, and as a result had asked us to prepare for blacking out electric service due to overconstraint overloading on the electric grid. So I had to deploy resources in my organization to substations in AEP Ohio to prepare to turn off power to customers should that overloading condition be mandated by PJM.
 - Q. Did that happen?
 - A. No.
- Q. What other out-of-the-ordinary-course activities were you involved in during that period?
 - A. Related to this PPA, none.
- Q. I don't want to limit the question that way. What do you mean? How about outside of related to this PPA?
- A. Just in general dealing with cold-related outages and operations in the distribution system, freezing of circuit breakers, things like that, and dealing with the power impacts

of those.

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- Q. Was there any kind of coordination between AEP affiliates related to responding to, addressing, dealing with that situation that you were involved in?
 - A. No. Not that I was involved in, no.
- Q. Any coordination that you've supervised or that you had knowledge of but were not involved in?
- 10 A. No.
 - Q. Did your customers experience increased electric bills during the vortex?
 - A. I don't know. I don't set the generation supply prices for all my customers.
 - Q. So you have no knowledge as to whether they increased?
 - A. I won't have any direct knowledge.
 - Q. How did the --
 - A. I do have knowledge that retailers who experienced very high costs due to the polar vortex have the right to pass those costs onto customers. I know that, because I can read the terms and contracts of -- and I was informed that other retailers do have the right to do that. So it's fair to assume that

- some of my customers did have to pay a higher cost because of that.
 - Q. Did the staggering and laddering dampen the price spikes for your customers?
 - A. I don't believe they would have had any effect.
 - Q. Why not?

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- A. Because SSO customers pay a fixed -whatever the price is for -- that is set during those
 auction dates. So those auction dates were
 established before the polar vortex. And then
 non-SSO customers who are my customers would pay
 whatever the retail contracts allowed them -- allowed
 those retailers to pass through in terms of cost, and
 those in some cases could have passed along higher
 costs.
- So the laddering that you're describing only applies to my SSO customers. My non-SSO customers it has no effect on at all.
- Q. Right. My question was about your SSO customers.
- A. Okay.
- Q. So now I'm confused. It did have an impact on --

A. No. I answered -- my SSO customers, it would not have. In the short-term, it would not have. In the long-term, it could have.

Q. What do you mean?

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A. Well, when a retailer bids into our auctions, they have to assume the risk of the delivery period. So after those retailers incurred significantly high costs from PJM, they would have to factor in that higher risk into their next bid.

So in that auction and during those days, my customers -- my SSO customers would have paid whatever the terms of the prior auction delivered. Future auctions will now price in this significant risk; so they will likely have to pay a higher premium for those risks.

- Q. So for SSO customers following the vortex, you're asserting there's some kind of a risk premium baked into it?
- A. I'm assuming that a business would price in a risk premium into their offers, and the polar vortex created a lot of risk for the delivery of power during those days for those providers.
- Q. Have you reviewed any data numbers that --

- A. No. I don't get access to that. That's confidential information by retailers.
- Q. So this is an assumption only based on your general business experience?
- 5 A. Based on general business knowledge, 6 yes.
 - Q. And you don't have any opinion about what the magnitude of that --
 - A. I don't.

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- 10 Q. Let me just finish the question so it's clear on paper.
- 12 -- what the magnitude of that assumed risk premium would be?
- A. I don't have any opinion on that or any information on that.
- Q. Now, the -- the AEPGR side incurred increased costs during the vortex, too, didn't it, based on your general understanding?
 - A. I believe it would, yes.
 - Q. What kind of increased costs?
- A. Increased prices from the energy market, increased real-time prices of energy.
 - Q. Any other costs you are aware of?
 - A. I'm not aware of all the PJM costs that

would have been incurred by the retail company.

There may be others, but I'm not aware of them.

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- Q. A number of the PPA units were on outage at times during the vortex, right?
- A. I'm not familiar with which units were available or not. I just know the percentages of availability of the PPA units.
 - O. And what are those?
- A. 64 percent and 73 percent, but it's in my testimony. The average capacity factor during the period exceeded 64 percent, it says on Page 21, Line 11 of my testimony; and similarly the OVEC units also performed well during these periods with average capacity factors of 73 percent and 61 percent. So that's where I refer to the availability.
- Q. During the analysis process that you described earlier in your testimony for proposing these units for inclusion in the PPA, what kind of due diligence was done with respect to the performance of these plants or units during the vortex other than a general aggregate capacity factor?
- A. Detailed availabilities of the units would have been made available.

- Q. And how was that information used?
- A. To create the aggregate capacity factors and to see if in total if they provided a reliable benefit. It's one of the benefits of the PPA as proposed, it has 20 units embedded in it, 11 at the OVEC plants and nine at the other four. So that kind of diversity provides a lot of operational benefit by having so many units. If any one unit or two units are out, the total value of the proposal is still there.
 - Q. What time period were those aggregate capacity factors derived from?
 - A. They were derived from the quarters first quarter of both 2014 and the first quarter of 2015.
 - Q. Your testimony about price volatility was specific to January -- the month of January?
 - A. Correct.

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- Q. But your analysis of availability was for a longer period of time?
- A. So the analysis of the price volatility showed January's price volatility, but in the prior page you'll see a broader period of time for monthly averages. On Page 9, you'll see monthly averages for

- energy prices. So it shows both periods -- both a longer period and the month of January to show the extreme movement in the month of January.
- Q. Sure. And then on Page 8, you have, you know, testimony about what the --
 - A. Average prices were, yeah.
 - Q. In January?
 - A. Correct.
- Q. So if we're looking at these units as a way to hedge against price volatility using January of 2014 as the example --
 - A. Uh-huh.
- Q. -- throughout your testimony why -- did anybody look at the availability of those units in that same month?
- A. Yes.

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O. And what was the outcome of that?

I don't recall the details of that.

That would be a good question for Witness Thomas who oversaw the operations of those units.

At the time of the event, we do state that 89 percent of all the units that AEP Ohio slated to retire were online. It said that all of the units ran during the first quarter of '14. So as far as

the details for the month of January for the PPA units, Witness Thomas would have those details.

- Q. Hypothetically, if I told you that
 Clifty Creek was out January 4 to 24, Cardinal was
 out January 7 to 26, Stuart 2 was out January 10 to
 20, Stuart 3 was out January 5 to 8, and Zimmer was
 out January 5 to 10, hypothetically what would your
 reaction be to that in terms of the ability of these
 units to provide the hedge you describe?
- A. It would be pretty good, because we're offering 20 units and you just listed five.
 - Q. Three plants and two units.
 - A. So five units.
 - Q. Depends on how you --
 - A. Yeah. There's 20 units being proposed.
- Q. Right.

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- A. So what I'm saying, it would be a very good hedge to have 75 percent of units running.
- Q. That assumes you're waiting a 500 -well, no. Never mind. I understand what you're
 saying.
- 22 A. Yeah.
- Q. Your 75 percent in your answer just now, to clarify, was a number of units --

- A. Correct.
- Q. -- not capacity, right?
- A. Correct.

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- Q. Do you have any knowledge or was any consideration done in the analysis of what the aggregate capacity factor was for these PPA units in January 2014?
- A. I believe Witness Thomas did that analysis, but I'm not aware what the outcome was.
- Q. Give me just one second. One of the benefits that you cite in your direct testimony a couple different places is maintaining diversity of generation.
- 14 A. Uh-huh.
 - Q. Did you get that as an answer?
- 16 A. Yes.
- Q. What is the scope of that diversity? Is
 it diversity within the AEP fleet? Diversity within
 Ohio? Diversity within PJM? What are you referring
 to there?
- A. Referring to diversity within AEP, within Ohio, and within PJM.
 - Q. All of the above?
- A. Correct.

Q. What's your general understanding of the makeup of the generation portfolio in Ohio?

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- A. Just at a high level, approximately 60 percent or so, I believe. Sixty to 70 percent of the energy delivered is delivered through coal, and the balance in nuclear -- natural gas, then nuclear, then renewables is the sequence, I believe, of the generation delivery in Ohio.
 - Q. How much natural gas of that?
 - A. I don't know the specific number.
- Q. In your deposition in ESP III, you said 30 percent.
 - A. Okay. I'll accept that.
- Q. What -- how much of the portfolio at a minimum in Ohio needs to be coming from coal in order to guard against the volatility you describe relative to energy prices and gas prices?
- A. I'm not really an economics expert; so I don't have -- I don't have a number that will say this is the right number to reflect the amount of coal necessary in the state. I wouldn't know how to answer that question. There's too many ways to interpret the right number based on what criteria, what factors, what goals, what objectives. I don't

know.

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- Q. Sure. So you've testified -- it is --
- A. It's too broad.
 - Q. Go ahead. What?
 - A. It's too broad a question.
 - Q. You've testified in this case that there is a price risk to customers during -- you've testified in this case that there is a price risk to customers related to the retirement of coal and an increasing composition of the portfolio coming from natural gas, correct?
 - A. Correct. Because the price of natural gas is significantly more volatile than the price of coal.
 - Q. And so the narrower focus of my question is at what point does that problem become unmanageable?
 - A. I'll answer generally. A trend of removing a more stable fuel price from the portfolio of supply will have the effect of continuously increasing the price risk and volatility -- price volatility risk that customers experience.
- To finish your question, to the point at which it's too much volatility is really up to the

interpretation of the customers. But my position and the company's position is that mitigating that risk is in the best interest of customers, that customers don't seek price volatility in electric rates.

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- Q. So why not put more coal units into the PPA to further protect the customers from this risk that you've asserted?
- A. What we tried to put forward was what we believed to be a significant-enough insurance hedge. And we believe that one-third of our customers' retail load, which is what the PPA units represent in aggregate, represents a sizeable hedge, a sizeable insurance policy.

We also understand that the State has a desire to continue to leverage the competitive markets to deliver supply and to have a competitive markets influence, the price of competitive supply. So two-thirds being influenced by that -- by the competitive market and one-third being influenced by a more stable price profile provides a very good balance, in our opinion, that would benefit customers.

Q. So was the goal of the process to get to a third of the load, or was the goal to get these

units and these units constitute a third and that seems reasonable?

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- A. The goal was not to get to a third. The goal was to pick units that met the criteria I described earlier. Those units ended up constituting one-third, and in our assessment that met a reasonable hedge, met a reasonable insurance policy.
- Q. Same questions on the topic of reliability. At what point in a diminishing percentage of coal in the State's generation profile do you start to run an unmanageable risk to reliability?
- A. I believe that any closings of coal plants before baseload generation that can replace it is developed creates reliability risks for our customers. If that replacement is only done with natural gas, as you're proposing --
 - Q. I'm not proposing anything.
- A. Or as your -- I interpret that you're assuming that natural gas would replace coal, that's my assumption.

So if natural gas is a baseload type of generation that would replace coal, then over time there are risks that continue to -- there would be

increased risks to reliability because of the general risks in terms of deliverability, storage of that fuel as a baseload fuel.

But, again, similar answer, I can't say at what percentage makes that is too much risk. I can just say each incremental closure of a coal plant creates more risk.

- Q. So is that true of the units that AEP's closed to date?
- A. Yes.

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- Q. Is the grid at reliability risk now?
- A. With the closure of the units that have closed, there is more reliability risk because the replacement has only been with transmission solutions, not with new generation.
- Q. Go ahead. Continue if you were going to say something.
 - A. I'm done.
- Q. So, I mean, theoretically if you closed one megawatt of coal, you're increasing a reliability issue, but at what point does this become an increase sufficient to justify measures like life-of-unit contracts?
- A. I think we're at a point right now where

- the risk of any future coal closures in Ohio presents real reliability risks in the short-term.
- Q. What knowledge do you have about the companies or units that were selected to provide power to AEP Ohio's SSO customers under your current ESP?
- A. I was provided the list of auction winners when they were announced publicly. So I'm -- I don't remember them right now, but I was provided that list of auction winners when it happened.
 - Q. Okay. And that's public information?
- 12 A. Correct.

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- Q. What -- who do you recall from that list? Let me try it a different way. Answer if you know.
 - A. I recall a handful of the names of companies. I remember AEP Generation Resources winning some of it. I recall in the most recent one, I think British Petroleum, Won Some Tranches, I believe a company out of Canada, Won Some Tranches, I believe Constellation. I mean, we can get the list, it's public record.
- Q. What AEPGR plants or units were successful? You mentioned --

- A. I wouldn't know, that's confidential.
- Q. Okay. Do you know if any of the PPA units -- the AEPGR PPA units are currently involved in meeting that obligation?
 - A. I don't.
 - Q. That's confidential to you, not just --
 - A. And the public.
 - Q. I'm sorry?
- 9 A. And the public. It's confidential to me 10 and the public.
- 11 Q. Okay.

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- 12 A. Their bidding strategies are
 13 confidential to me and the public.
- Q. And, again, I'm just clarifying, because this is -- I'm new here.
- 16 A. Yes.
- Q. I understand their bidding strategies would be confidential.
- 19 A. Which includes the units.
- Q. Okay. I'm just assessing. Give me a minute. Can we go off the record?
- MR. NOURSE: Okay.
- 23 (Discussion held off the record.)
- 24 (Luncheon recess taken.)

104 1 Wednesday Afternoon Session, 2 September 16, 2015. 3 4 BY MR. BZDOK: 5 Ο. Back on the record. 6 Mr. Vegas --7 Α. Yes. 8 Q. -- I would like to discuss with you some of the reliability arguments that you make at 9 10 Pages 24 and 25 of your direct testimony. 11 A couple quick questions first: Do you 12 have any experience evaluating transmission grid 13 reliability? No, I don't. Α. 14 15 How about experience with modeling Q. 16 transmission grid? 17 Α. I don't. 18 Q. How about evaluating investments in transmission systems? 19 20 I do get involved in evaluating investments in transmission for the benefit of 21 2.2 reliability. 2.3 Q. What's the nature of that involvement? 24 Α. Understanding the necessity for the

investment, the impact of the investment, and the alternatives considered through those investments.

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- Q. Is that through participation in some kind of PJM stakeholder or otherwise?
- A. It's -- sorry. Finish your question.

 No. It's involved with reviewing and approving capital investments made into the transmission system that are recommended by our Transmission organization.
 - Q. And is that a different AEP affiliate, the Transmission organization, or is that within AEP Ohio?
 - A. It's within AEP Ohio and also an independent, TransCo Transmission Company, that is a separate affiliate. Both there's a transmission company called AEP Ohio TransCo, and then there's the AEP Ohio transmission business, which is inside of AEP Ohio. Both of those entities invest in and maintain and support the transmission grid in Ohio.
 - Q. Did you have any involvement in the scenarios that were utilized in Mr. Bradish's transmission reliability study?
- A. I did not have any involvement in those scenarios.

- Q. Did you have any involvement in deciding for purposes of that study what additional transmission investments may be needed if the PPA units are retired?
- A. No. I left that analysis to Witness Bradish.

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- Q. Did you or anybody else under your direction do any analysis of transmission reliability outside of Mr. Bradish's testimony?
 - A. Not that I'm aware of.
- Q. Have you considered in evaluating the benefits of including these units in the PPA -- to what extent did you -- let me try that again.

In framing the reliability concerns that you have framed in your testimony, to what extent did you consider PJM's use of reliability must-run contracts in addressing reliability concerns for specific units?

- A. I don't recall assessing reliability must-run contracts as an alternative as those are not -- in my understanding of those contracts, those are not something that PJM can impose.
- Q. Were they considered at all in assessing the potential magnitude of the reliability risks that

- you assert in your testimony do or will exist relative to these -- the future of these units?
 - A. Not that I'm aware of, no.
- Q. Page 25 you talk about economic impacts, right?
 - A. Yes.

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- Q. If the plants are sold and not retired, then the economic benefits would not be lost, right?
- A. If they are sold and not retired, then the economic development benefits would remain.
- Q. Has there been any -- so -- strike that.

 Under the PPA and PPA rider as proposed,

 if the PPA units are not able to run, the ratepayers

 pay for their capital and fixed O&M costs anyway,

 correct?
 - A. That is correct.
- Q. If the energy output of the PPA units -let me rephrase.
 - If the units are dispatched less than projected, then the cost impact of that lower dispatch would be borne by AEP customers under this contract, correct?
 - A. Correct.
- Q. If a unit suffers a prolonged outage, a

- PPA unit, would AEP Ohio customers continue paying its fixed costs?
 - A. Yes.

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- Q. How about performance penalties if those are incurred?
- A. Similarly, they would be paid for by AEP customers.
 - Q. If the heat rate increases, AEP Ohio customers would pay the higher fuel cost per megawatt hour, correct?
 - A. AEP customers would pay for all of the costs associated with -- all the prudent costs associated with the operation of the plants.
 - Q. So in the case of heat rate increases, they'd be paying those extra costs -- AEP Ohio customers would be paying those extra costs up to the point of some potential PUC action. Is that what you're saying?
 - A. Yes.
- Q. If a PPA unit is retired, do the AEP
 Ohio customers under this agreement pay for all of
 the remaining net book value in the unit?
 - A. Yes.
- Q. Do they pay for the retirement costs?

Do they pay for costs that AEPGR has incurred or committed prior to the approval of the PPA and PPA rider?

- A. Those costs that have been approved prior to the approval of the PPA rider would be reviewed in advance of approval as what we have proposed. And if approved, then, yes, they would be paid for by customers.
- Q. So even if one of these units is retired on Day 2 of this agreement, AEP Ohio customers would still be on the hook for the entire net investment and the retirement costs, correct?
 - A. I think in that scenario, probably not.
 - Q. Why not?

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- A. Because that would be misrepresenting the intention on how to operate these plants, and I would assume that the Commission would probably have a say in that.
- Q. If the PPA units, because of conditions different than projected, are no longer competitive to keep in service, can AEP Ohio require AEPGR to stop making capital investments in them?
- A. Yes. AEP Ohio can -- AEP Ohio can bring to the decision-making process a recommendation like

that if it did not make sense to make further capital investments because of the risk of retail recovery or benefit to customers, then, yes, we absolutely could bring that to the table, and it is very likely then that those capital investments would not be made.

- Q. Why is it very likely?
- A. Because it would not serve anybody's interest to make investments that can't be recovered and that don't benefit customers.
- Q. They can be recovered unless the PUC takes action at some point in the future, right?
- A. Well, let me think. In the scenario that you've been describing around significant investments or retiring of plants, those are examples of decisions that we would bring to the PUC before making them and get explicit PUC approval on those decisions so that it would be clear what the expectations were.
 - Q. And that --
 - A. And what the impacts would be.
- Q. And that's under the process for prior --
- 23 A. Yes.

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Q. -- Commission vetting of decisions that

- you described earlier in your testimony --
- A. Yes.

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Q. -- today?

Have you been, in the time since then, able to think of where in the testimony or discovery that appears?

- A. No.
- Q. And I'm trying to phrase this in a way that doesn't sound wrong. When you talked about that process earlier, you talked about that being related to capital investment decisions.
 - A. I did.
- Q. That prior approval process. I'm hearing you now including retirement-related decisions in that as well.
 - A. Yes.
- Q. Are there any other type of decisions for which you're proposing which you're proposing would be brought to the PUC for approval prior to the decision being made or implemented?
- A. I would characterize any decision that reflects a significant financial or operational change to the company, we would bring to the Commission for their approval.

- Q. And what are the criteria that would be used to make that determination?
- A. Size of the investment or impact to the ongoing operations of the plant.
- Q. And is that some kind of an explicit commitment that's being made to the Commission, or is that sort of an internal ground rule within the buyer, the seller, and the Service Corp.?
 - A. Both.

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- Q. And how would that explicit commitment to the Commission be embodied? Is that going to be part of the order? Is it going to be something --
- A. It could be part of the terms that the Commission sets for approval of the PPA.
- Q. You're proposing it as a condition of approval then?
 - A. I'm suggesting that it could be.
- Q. Are the notes you were just making related to your answer to one of my recent questions?
- A. No. My notes were the question of where in my testimony is the specific reference so I can find that for any future questions.
- Q. Okay. I want to switch topics now. I'm kind of jumping around as I'm finishing some things.

Page 3 of your direct testimony.

- A. You said Page 3?
- Q. Yes. At the bottom, again, mentions benefits to AEP Ohio customers, Ohio's economy, and then it talks about providing retail price certainty that Ohio businesses desire, and then you reference the endorsement of the OVEC PPA proposal in the ESP III case by the Ohio Energy Group carrying on to Page 4. Do you see that?
- A. I do.

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- Q. Did AEP Ohio and the Ohio Energy Group enter into a settlement agreement related to the ESP III docket?
 - A. No.
 - Q. And did -- any kind of an agreement whatsoever relative to that docket?
 - A. Not that I'm aware of, no.
- Q. Was there any type of agreement or understanding about how the Ohio Energy Group's customers might be treated if the Commission had approved rate recovery of that PPA rider?
 - A. No.
- Q. Were there any discussions or informal understandings of any kind related to that topic?

- A. No, there weren't.
- Q. On Page 12 of your testimony, you list retirement dates for all of those units, correct?
 - A. Yes.

- Q. Where did the retirement dates come from for the AEPGR units?
- A. They were -- they came from AEPGR, and are based on the current depreciation life of the assets.
- Q. So are those -- so how firm are those dates if they're based on depreciation lives?
- A. It's an accounting provision that defines when the book life of the assets ends, and that's the basis for it. So it's as firm as that definition is.
- Q. The life of these agreements continues with the life of the plants, not -- it doesn't terminate with the end of their depreciation lives, right? In other words -- that was not an artful phrasing.
- The -- these dates on Page 12 are not necessarily the termination dates for the PPA, correct?
- A. I'd like to reference something if I

could before answering that.

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- Q. Absolutely. Please just let me know what you're referencing.
- A. I'm looking at the purchase -- the Power Purchase and Sale Agreement.

MR. MICHAEL: Just so the record's clear, you're actually looking at the term sheet, right, Mr. Vegas, not the agreement itself?

THE WITNESS: I'm looking at the Summary of Major Terms Power Purchase and Sale Agreement, KDP-1, Page 1.

On the Term -- I'm looking at the first page. On the Term it says that the agreement of the term is through the entire commercial operational life of all the units, including any post-retirement period necessary to fill asset obligations. The currently planned retirement dates are set forth in Attachment A.

Those attachments is at the -- it's at the end of that -- of the summary, and those dates align with those in my testimony. So -- yes, they do. So what I'm representing here is that, absent any changes, the expectation is that the term of this PPA ends on those retirement dates. That's my

- interpretation, the term is through the entire life, and the current planned retirement date is set forth here, and those are those dates.
 - O. Those are tentative dates?
- A. No. Nowhere does it say they're tentative dates. Those are the current retirement dates planned.
 - Q. And if the lives are extended, the agreement's extended?
- A. Only if a mutual agreement is held
 between the buyer and the seller, and that would also
 be one of those subject areas that AEP Ohio would
 bring to the Commission in advance of changing,
 because that's a material change to the terms of
 operation.
- MR. MICHAEL: Could we go off the record real quick?
- 18 (Discussion held off the record.)
- 19 BY MR. BZDOK:

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- Q. Your cover letter for the amended
 application references an April 23, 2015, earnings
 call. Do you see where I'm looking there?
- 23 A. I do.
- Q. And a statement by the -- by Mr. Akins,

- the AEP CEO. Were you -- did you participate in that earnings call?
 - A. No, I didn't.

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- Q. How do you know -- did you review the transcript or the presentation?
 - A. Yes, I did.
- Q. Do you recall seeing him make a reference right at the beginning of that call to -- it was more or less kind of like a shout-out to employees for -- who are working on units that either are or are soon to be in retirement. Do you recall that?
 - A. I do.
- Q. And he talked about them operating Swiss cheese boilers. Do you remember that statement?
 - A. I do.
- Q. What is your understanding of what a Swiss cheese boiler is?
- A. It's a boiler that has not been invested in for a significant period of time because of its intended plan to retire.
- Q. Swiss cheese is sort of an informal way of connoting a piece of equipment with holes in it.

 Is that the idea?

A. Yes.

- Q. When do they become Swiss cheese boilers, is it a certain age or is it at some other situation --
 - A. No.
- Q. -- within the arc of the life of the unit?
- A. It occurs when you stop investing proactively in their maintenance and upkeep, because you don't have a mechanism to recover them -- to cover those costs or you don't intend to continue to operate it and expect high reliability from it.
- Q. Has that situation occurred, whether it is still occurring or not, has that occurred with any of the proposed PPA units at any point in their life histories?
 - A. Not that I'm aware of, no.
- Q. Was the -- how was the -- how was the capital and major maintenance history of those units evaluated by -- on behalf of or by AEP Ohio as part of this proposal?
- A. The capital investments and the

 operation plans -- operation budgets were always set

 based on an expectation of continued operation

through their full life.

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- Q. Is that a representation that someone made, or is that a conclusion of some kind of an assessment that was done for you?
- A. It reflects my involvement in capital decisions at those plants in the years leading up to their separation as a separate company. I had direct involvement in investment decisions with all of those units, and the strategy for investment during the time that I oversaw that and was responsible for it, the decisions were made to keep investing and keep those units running with the expectation of reliable operations through their full life.
- Q. And what timeframe are we talking about for your involvement?
- A. The year of the corporate separation which occurred in December of 2013, I believe -- 2012. I need to check.
 - Q. So for you, is that 2010 to 2013?
- A. For me personally, it's from the beginning of 2012 when I came into this role through that point in time.
- Q. Okay. How were the historic and future ordinary capital expenditure and major maintenance

- schedules for these plants included in the assessment of -- the assessments you were describing earlier in terms of what units to propose for the PPA?
- A. They were factored in, because those historical spend patterns and planned spend patterns were the basis for what the costs were going to be for those units. So those detailed cost estimates would have been part of the analysis that AEPGR did and the AEP Service Company did when they analyzed the costs and the benefits of the specific units.
- Q. How, if at all, is that evaluation or assessment included in the work of a witness in this case, if at all?
- A. It would be included in the schedule of costs that are included in Witness Kelly's testimony for each of the units.
- MR. NOURSE: Dr. Pearce.
- 18 THE WITNESS: I'm sorry. Dr. Pearce,
- 19 Kelly Pearce.

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- 20 BY MR. BZDOK:
- 21 Q. So there were a set of dollars that were 22 included in the economic evaluation of the impact of 23 the PPA rider; is that correct?
- A. What I'm saying is that the cost to

maintain those plants -- specific costs which are based on the budgets, the capital plan, the O&M plan, would have been the basis for the costs that he used and presented in his testimony.

- Q. Were the -- was the substance and adequacy of the capital and major maintenance plan reviewed and vetted as part of the assessment?
 - A. Yes.

- Q. By who?
- A. It would have been reviewed by Witness Thomas, Toby Thomas, to assess whether what was being represented as the expected costs, and the expected capital and O&M would have accurately and adequately funded the investment to keep the plants operating reliably for the duration.
- Q. Give me a minute. I've just got to go back over and make sure I didn't miss anything.

18 (Pause.)

- Q. Thank you, sir. That concludes my questions.
- A. Okay. You're welcome.

MR. NOURSE: Who's going next? Bill.

MR. MICHAEL: I'll go, yeah.

CROSS-EXAMINATION

2 BY MR. MICHAEL:

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- Q. Mr. Vegas, who do you report to?
- A. I report to Robert Powers, executive vice-president and chief operating officer for AEP.
 - Q. Okay. Is AEP Ohio a wholly-owned subsidiary of AEP?
 - A. It is.
 - Q. And were any presentations made to AEP's board about the PPA?
 - A. No presentations, but updates on the filing and the schedule and activities related to the filing were communicated to the board.
 - Q. So the board did not approve the filing of the amended application, correct?
 - A. Correct.
- Q. I wanted to talk to you a little bit
 about the prudence review and access to books,
 records, and the audit process. As AEP Ohio is
 proposing it, will the Commission's access to books
 and records be the same as AEP Ohio's access to books
 and records?
- A. I don't know for sure. What I
 understand is that AEP Ohio will represent all of the

details that are made by the operating committee and the underlying content, information, numbers, costs, estimates that are developed as part of the records keeping process. We would make that information available to the Commission for their review and audit.

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Specifically, what documents those would be or if they're the same documents we would look at, I don't know if they would be the same or if we would take those and we would put them in a format for the Commission to see and help prepare them. My assumption is we would prepare them for the Commission to interpret.

- Q. Okay. If the Commission wanted access to all the source documentation under AEP Ohio's proposal, would the Commission have access to the source documents?
- A. I hadn't considered that; so I don't know the answer to that at this point.
- Q. Okay. So AEP Ohio would have access to source documents that at least potentially the Commission would not have access to, correct?
- A. That's not what I said. I just said that I haven't considered that option, and I'm not

- sure what the answer to your question would be.
- Q. Okay. At least as it stands now, AEP

 Ohio's proposal is not to give the Commission access

 to all the source documents, correct?
- 5 MR. NOURSE: Objection. I think that 6 mischaracterizes what he just explained.

7 THE WITNESS: Yeah.

MR. MICHAEL: Well, he can tell me I'm wrong then.

10 MR. NOURSE: That's why I objected.

THE WITNESS: Yeah. What I'm saying is we would provide all of the information that we get that the -- and that the Commission needs in order to do a prudence review. I'm not saying that isn't those documents or that it is. I'm saying that I haven't considered what documents they are, just that all of that information would be made available to them.

19 BY MR. MICHAEL:

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- Q. Would the documentation to which the
 Commission would have access for their prudence
 review include coal contracts?
- A. Yes. It would include information in our coal contracts, yes.

- Q. Okay. Are coal contracts set between the individual units and suppliers?
- A. The coal contracts are purchased by AEP Gen Resources, yes, and it's for operation of one or multiple units; so, yes.
- Q. Okay. Would the Commission have access to information on coal purchases only by the PPA units?
 - A. Yes.

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Q. Would AEP Ohio let the Commission access coal purchases made by units other than the PPA units?

MR. NOURSE: I just object. You're doing a hypothetical without really knowing the whole circumstances that may be involved and calling for speculation on a legal issue ultimately. If you want to give your understanding, go ahead.

THE WITNESS: My understanding is that the Commission wouldn't need access to coal contracts not related to PPA units as they have no impact on the operation of PPA units.

BY MR. MICHAEL:

- Q. Okay. So I believe you --
- A. I don't know why they would need access

1 to those contracts.

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- Q. Okay. I believe you testified earlier that some of the coal purchases are for multiple units, correct?
 - A. Correct.
 - Q. So how would the Commission be able to tell whether or not the coal purchases are for the PPA units or non-PPA units?
 - A. AEP Ohio would commit to provide all of the coal contract information for all of the PPA units to the Commission.
 - Q. Mr. Vegas, if you'd please turn to

 Page 3 of your direct testimony, and I direct your

 attention to Line 18, please.
 - A. Yes.
- Q. You describe on that line, Mr. Vegas, that the hedge is, quote, "necessary," correct?
- 18 A. Yes.
- 19 Q. It is not required, correct?
- 20 A. No.
- 21 Q. In whose judgment is the hedge 22 necessary?
- 23 A. In AEP Ohio's judgment.
- Q. And describe for me, if you would, how

the hedge works when market prices are low.

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A. When market prices are lower than the cost of operating the -- the full cost of operating the plants, then the hedge would be the difference between the cost of operating the plants and the revenues collected from the market, there would be a cost.

And the inverse is true; when market prices are higher than the cost of operating the plants, the hedge would then be a credit in the amount between the costs and the revenues collected from the market.

- Q. So when the market prices are low, the PPA rider will not move in an opposite direction to market prices, correct?
 - A. Yes, it will.
- Q. Okay. I apologize. But I -- I understand how it purportedly works on the upside, but I don't understand when prices are low how the hedge is moving in an opposite direction to market prices.
- A. So in the case of market prices being lower than the costs, the hedge has the effect of raising the costs; so it moves in the opposite

direction, market prices are lower than it, so it applies a cost, so in effect raises the cost. And the inverse; when market prices are high, it's a credit, so it in effect lowers the total cost that customers pay.

- Q. So when market prices are low, customers are going to pay less for their energy?
 - A. Correct.

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- Q. And if market prices are lower than the cost of the PPA contract, they're going to have to pay even more because that cost is going to be passed on to them, correct?
- A. They would pay an aggregate -- they would pay an aggregate, a lower cost, because the hedge is for approximately a third of the supply portfolio that is used to serve them. So the large majority of their costs in any scenario is going to be based on market costs. In fact, all of their -- they will pay for their supply whatever the full market cost is because they're being served at market cost. So in your scenario if market costs are low, they will be paying that lower cost in total.

Then in that case where there is a charge through the PPA rider, then they would pay the

- charge of the PPA rider in addition to that low supply cost.
 - Q. Okay. If you would please turn to

 Page 7, Mr. Vegas, of your direct testimony. I'd

 like to direct you first to Lines 5 and 6 on Page 7.
 - A. Yes.
 - Q. When is the PJM capacity market going to be reformed to achieve a sustainable structure and capacity prices increase?
- 10 A. I hope, for the benefit of customers,
 11 soon.
 - Q. I appreciate that.
- 13 A. I do.

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- Q. Do you have any idea about when that is going to occur more specific than soon?
 - A. I don't, because PJM has changed their rules every year. Every year they have tried to fix something wrong with their market model, and then that fix creates another problem, so then they make another fix, and they're constantly changing the rules of their market. So they continue to do that and are doing that up to this through 2015.
 - So I don't know when they will fully fix it, but it's this constant changing of rules,

- requirements that is making it very difficult for generators to operate successfully in their market.
- Q. Same page, Mr. Vegas, Line 9. You say the market reforms could come too late. Do you see that --
- A. I do.

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- 7 Q. -- statement?
 8 When is too late?
 - A. It would be reforms that would follow the closure of the PPA units.
- 11 Q. If you could turn to Page 9 of your 12 testimony, Mr. Vegas, Lines 1 and 2.
- 13 A. Yes.
 - Q. How many gas-fired units in the PJM units do not have firm gas supplies?
- A. I don't know personally. My
 understanding is the majority do not, more than half.
 - Q. Okay. And this question is sort of directed to Lines 1 through 6 when you talk about natural gas prices and the lack of -- purported lack of firm supplies.
- 22 A. Yes.
- 23 Q. When you make those assertions, had you taken into consideration develop of the Marcellus

- shale gas supplies?
- A. Yes.

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- Q. And the Utica shale gas supplies?
- 4 A. Yes.
- Q. And additional investment in infrastructure to move gas from those shale plays to plants?
 - A. I'm not aware of those investments.
 - Q. Okay.
- 10 A. My understanding is that there have not been significant investments in that.
- Q. If you could please turn to Page 11,

 Mr. Vegas, of your direct testimony, Line 10.
 - A. Yes.
 - Q. Please describe for me, if you would, Mr. Vegas, how the affiliated PPA will provide the PPA units with a, quote, "known revenue stream"?
 - A. What that statement is referring to is the fact that the structure of the PPA has AEP Ohio paying the actual costs incurred by AEP Gen Resources to operate these PPA units. So since those costs will be known, the revenue stream to the PPA units will be known as well.
- Q. Okay. And because it's known, it's

guaranteed, correct?

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- A. No. It's not guaranteed.
- Q. Can you explain to me why it's not, please?
- A. Because the PPA units, AEP Gen

 Resources, they are assured of being paid the

 revenue, but AEP Ohio is not assured of collecting

 that revenue. So there is -- so maybe I

 misunderstood your question.
 - So you're saying -- are you asking if the revenue stream is guaranteed through Gen

 Resources?
- 13 Q. Correct.
 - A. Yeah. The contract provides for paying for the actual cost of those units, that is correct.
 - Q. And AEP Ohio would be responsible for paying that known revenue stream irrespective of whether or not the PUCO makes a disallowance, correct?
- 20 A. That's correct. Yes.
- Q. Okay. Could you please turn to Page 13,
 Mr. Vegas, of your direct testimony, and I'll direct
 you to Line 21, please.
- 24 A. Yes.

- Q. When did Ohio's transition to deregulated generation rates begin?
- A. For -- it began in 1999 with the passage of Senate Bill 3, but the impact to AEP Ohio's generators began after that fact, after the completion of the most -- the last retail stability price agreement that AEP Ohio entered into with the PUCO. I don't recall the exact date of that.
- Q. And it was the Ohio General Assembly that was responsible for moving Ohio in the direction of transitioning to deregulated generation rates, correct?
 - A. Correct.

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- Q. If you could please turn to Page 16, Mr. Vegas, of your direct testimony. I'll direct your attention to Line 20, please.
 - A. Yes.
- Q. When are -- when is the capacity market expected to increase significantly?
- A. Beginning with the most recent cleared base residual auction, we see a fairly significant increase in capacity prices, the 2018/2019 auction that cleared or completed last month.
- Q. Okay. And do you expect that trend to

continue?

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- A. I do. If I could clarify one point. It might be more accurate to say within the supplemental auctions that more recently occurred that start to reflect prices in '16, '17 and '18, start to see that trend of price increases occurring beginning in '16 where the market cleared at about \$120 -- \$124 a megawatt day, then increases again to 134, and then again to 150 something.
- Q. Excuse me. If you'd please turn to Page 21 of your direct testimony, Mr. Vegas. I'm going to direct your attention to Lines 16 and 17.
 - A. Yes.
- Q. You discuss there a purported flaw in the PJM capacity market and that flaw's affect on investment capabilities, correct?
 - A. Yes.
- Q. And I'm wondering, can investors make short-term investments based on long-term price signals?
- A. Yes. I think it's safe to say that an operator could make short-term investments with a view of long-term price signals.
- Q. If you'd please turn to Page 24 of your

direct testimony, Mr. Vegas, Line 22 I would direct your attention to.

A. Yes.

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Q. You begin that line with "PJM is responsible..." And I'm wondering what is the source of PJM's responsibility for providing adequate generation capacity?

And to clarify that, what I mean is: Is there a rule? Is there a statute? Is there a regulatory body that says PJM has that responsibility? So that's my question to you?

- A. Yes. FERC has established PJM as a responsible entity to ensure adequate supply and reliability in the bulk transmission system. So FERC, through federal law, has created that accountability.
- Q. Okay. I have no further questions, Mr. Vegas. Thank you.
 - A. Okay. You're welcome.

MR. OLIKER: Excuse me.

MR. DARR: Joe, do you need to jump in?

MR. OLIKER: Frank, do you mind if I

take 10 minutes to ask him a few questions and could

24 be done with it?

136 1 MR. DARR: That's fine. Go ahead. 2 MR. NOURSE: Okay. 3 THE WITNESS: Who is this? 4 MR. NOURSE: Joe Oliker. 5 THE WITNESS: From? 6 MR. NOURSE: IGS. 7 THE WITNESS: Okay. 8 9 CROSS-EXAMINATION 10 BY MR. OLIKER: 11 0. Good afternoon, Mr. Vegas. Just a few 12 questions for you. 13 Good afternoon, Joe. You indicated earlier that AEP is 14 Ο. familiar with these plants because it's operated them 15 16 for decades. Can you expound upon that a little 17 more? 18 Α. Since these plants were created, I'm speaking to the AEPGR units, they have been under the 19 20 ownership umbrella of AEP Ohio and under the 21 operational responsibility of AEP Ohio. And so there 2.2 is a familiarity with the operational characteristics 2.3 and costs and profile of these plants for a long time

since their creation.

Q. Were the plants operated by different people before and after they were transferred from AEP Ohio, the utility, to AEP Generation Resources?

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- A. Largely, no. Most of the employees that were employees of AEP Ohio that operated the units locally within the power plants were transferred over to the AEP Gen Resources company and continued to operate those plants.
- Q. And the individuals that make investment decisions for those plants, are they still the same?
- A. In some cases, they are; and in some cases, they have changed over time.
- Q. Did they change because of the ownership of the plants?
- A. So they -- so I'll answer specifically that the head of the AEP Gen Resources business was appointed to that position, and that included then responsibility for investment decisions in the units. So that was a new person in that reporting chain.

Plant managers remain largely the same, and executives between plant managers and the head of AEP Gen Resources, some remain the same, and some changed depending on individuals leaving the company, staying with the company, moving into different

- roles, but not necessarily specific to the restructuring of the business unit.
- Q. Okay. You've talked a little bit about the capacity performance product that now exists at PJM. What is your familiarity with that product?
- A. I'm familiar with its intentions and with what its purpose is.
- Q. Would you agree -- are you familiar with the term "out of management control event"?
 - A. Outage?
- 11 Q. Out.
- MR. NOURSE: Out of.
- 13 BY MR. OLIKER:

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- Q. Out of, sorry.
- 15 A. Okay. Out of management control event,
 16 I'm not specifically familiar with that term, no.
 - Q. Could you please explain your understanding of the obligations that the capacity performance product places on a resource?
 - A. I would reference from my deposition —
 I mean, from my interrogatory responses a white paper
 that specifically describes the PJM capacity
 performance proposal. It was submitted by PJM staff
 on August 20th, 2014, and within that document it

- describes what those performance requirements are.
- Q. Would you agree that a natural gas-fired power plant that provides the capacity performance product must deliver at all hours, no excuses?
- A. I would change it a little bit. I would agree that they have to meet the same requirements as any other baseload generation facility to qualify for the capacity performance payments, yes.
- Q. Is it your testimony that if a natural gas-fired power plant is cleared as a capacity performance product, that power plant cannot provide reliable generation to the grid?

THE WITNESS: Could you read back the question for me?

(Record read back as requested.)

THE WITNESS: No. That's not my testimony. My testimony observes that gas plants have different operation characteristics than coal plants, and those differences make them less reliable in certain circumstances.

21 BY MR. OLIKER:

- Q. Okay. Let's funnel that down a little
 more. If a -- strike that.
- If a natural gas-fired power plant does,

in fact, provide the capacity performance product, would you agree that that resource is as reliable as a coal-fired resource?

A. I would not.

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- Q. And why is that?
- A. Because of those operational characteristics that are different between a coal plant and a gas plant. A gas plant cannot store fuel on site to the same extent a coal plant can. A gas plant, without a firm contract for a commitment, cannot be guaranteed to get fuel at the time when it's needed. Those are different operational characteristics that are different between a coal and a gas plant.
- Q. Do you believe that a natural gas-fired generator would -- let me step back.

Are you aware that PJM has requirements that apply to a natural gas-fired generator that provide the capacity performance product?

- A. Yes.
- Q. And are you aware that there is specific requirements that relate to natural gas-fired generation that provide the capacity performance product?

- A. Yes.
- Q. And do you believe a natural gas-fired generator would provide the capacity performance product if they do not have firm pipeline transportation or dual fuel capability?

6 THE WITNESS: Can you read the question

7 back?

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(Record read back as requested.)

THE WITNESS: Yes. I believe they

10 could.

- 11 BY MR. OLIKER:
- 12 Q. And why is it that you believe they
 13 could?
- A. Because the requirements don't state they have to.
 - Q. Do you believe it would be prudent for a natural gas-fired generator to provide the capacity performance product if they did not have firm transportation or dual fuel?
 - A. That's a judgment that the owner operator of that plant would make.
- Q. And are you aware of any PJM
 requirements to demonstrate your ability to provide
 electricity during all hours if you are a natural

gas-fired generator?

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- A. Those are not the -- those are not the terms that I'm familiar with, no.
 - Q. Okay. You mentioned before that you believe less than half of the generation in PJM has firm transportation; is that correct?
 - A. Correct.
 - Q. What is the basis for that knowledge?
 - A. Conversation with executives that oversee generation at AEP and have an understanding of the way generation is bid and operated.
 - Q. Are you familiar with the level of natural gas-fired generation that cleared in the most recent transition auctions?
 - A. Yes.
 - Q. And what number is that, if you know?
 - A. I'm looking it up. I have data for gas generation that cleared in the '17/'18 auction. I don't have data for more recent than the '17/'18 auction. I don't have the '18/'19 data.
 - In the '17/'18, the total capacity was 5,843 megawatts, 5.8 gigawatts -- I'm sorry -- and added to 20.4 of combined cycle; so that's roughly 26.3 gigawatts of generation.

- Q. Are you looking at the '16/'17 or the '17/'18, Mr. Vegas?
- A. I'm looking -- oh, I'm sorry. I'm adding up multiple years, my fault.

Okay. What I'm looking at, just so

everyone's clear, I'm looking at the -- from

interrogatory -- Sierra Club Interrogatory 2-84,

Attachment 1, I'm looking at the incremental capacity

resource additions that were added between 2007 and

2018. So that is just incremental capacity resources

that came online.

- 12 Q. I'm sorry, I didn't mean to interrupt
 13 you.
- 14 A. I was finished.
- 15 Q. My question is a little different.
- 16 A. Yes.
- Q. Do you know how much natural gas-fired generation cleared in the 2017/'18 capacity performance transition auction?
- 20 A. I -- I don't know the total number cleared.
- Q. And I'll ask you the same questions for the 2016/'17 transition auction.
- A. No, I don't. I don't know the total

1 amount cleared.

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- Q. Okay. And do you know how much natural gas-fired generation exists within PJM?
 - A. No, I don't.
- Q. Okay. Are you familiar with the term
 "uplift"?
 - A. Generally, yes.
 - Q. What is your definition of uplift?
- 9 A. Well, I guess I'd have to say in
 10 context, yes, I mean, uplift, to raise. But in what
 11 context?
- Q. Okay. Would you agree that uplift
 results in PJM from the dispatch of generation out of
 merit order?
- 15 A. I'm not familiar with that in that 16 context.
- 17 Q. What context are you familiar with it?
- A. I'm -- I was just familiar with the -what the word uplift means.
- Q. Could you provide an example of how you're familiar with it?
- A. The word uplift means to raise something up.
- Q. And you're not familiar with what uplift

- means in respect to the energy markets?
- 2 A. No, not in the context you described.
 - Q. Are you familiar with the word "balancing operating reserves payments"?
 - A. Yes, generally I am.
 - Q. Could you give us an explanation of what you believe that is?
 - A. Payments that are made by PJM to generators that provide balancing services to the grid or operating reserve or operating reserve services to the grid, balancing and operating reserve services.
 - Q. And you would agree that some of those payments can result from dispatching generation out of merit order, if you know?
- 16 A. I'm not familiar with the dispatch rules.
- MR. NOURSE: He's saying merit order.
- 19 You got that.

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- 20 BY MR. OLIKER:
- Q. Okay. Would you agree that one of the anticipated effects of the capacity performance product is to lower energy prices relative to the current market design?

MR. NOURSE: Can you repeat that

2 question?

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(Record read back as requested.)

MR. OLIKER: Market design.

THE WITNESS: I understand that to be

6 PJM's belief.

BY MR. OLIKER:

- Q. And do you have an opinion of whether PJM is correct in that belief?
- A. I don't share that belief because the process, as PJM described it, is that capacity prices would increase over time so that new generation is built, and that that new generation that is built would serve energy at a lower energy cost.

energy — what is happening today will happen in the future, which is that resource insufficiencies which are created by retirements of coal plants and nuclear plants will create very high energy prices and high capacity prices both; the high energy prices in the short-term to make up for the lack of resources, and the high capacity prices in the long-term to incentivize generation build. So I believe that for periods of time in the near future, the period that

we're discussing, this PPA, we will see both energy prices and capacity prices increase.

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- Q. Is it your understanding that during the polar vortex, a large part of the price increases that were experienced was a result of outages?
- A. Yes. There was higher demand than there was availability, and that resulted in significant price increases in energy prices.
- Q. All else being equal, would you agree if you decreased the amount of outages, the prices will go down?
- A. There's more -- there's more than just that that influences the price of real-time energy.
- Q. Okay. Let's flip back to the polar vortex, January 7, 2014. If the forced outage rate was half of what it was on that date, do you believe energy prices would have been lower?
- A. I do believe they would have been lower, yes.
- Q. Okay. Let's talk about the same response in your testimony.
- Are you familiar with what was previously proposed as the stopgap proposal?
- A. Proposed by whom?

- Q. By PJM.
- A. I'm not very familiar with the stopgap proposal.
 - Q. Have you heard of it?
 - A. Yes.

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- Q. What is your familiarity with it?
- A. Only that an interim proposal was put forth, and then a final rule was put forth or final proposal was put forth. I'm not familiar with the substance of what was in the stopgap proposal.
- Q. Okay. Sorry to go back to firm pipeline transportation, but would you agree that as a natural gas-fired power plant, its firm pipeline transportation can be reliable baseload generation?
 - A. Yes, it can.
 - Q. And are you familiar with what is known as an operational flow order?
- A. No.
- Q. Okay. And you talk about the uncertainty related to AEP Generation Resources' power plant. Would you agree if it appears the plants will recover their fuel and operation and maintenance expense plus depreciation, AEP Generation Resources won't retire the plants?

- Α. And capital investment? Were you including capital investment in your list of costs? Q. I'm including the depreciation component in each year as the portion of capital investment. So you're excluding the return of cap- -- the return on the investment? That's correct, as well as interest and Q.
- 7 8 income tax.
- 9 MR. NOURSE: And I object. Are you giving a timeframe for this decision, or is this just 10 11 an open-ended question?
- 12 MR. OLIKER: Could be the next three 13 years.
- 14 MR. NOURSE: Okay. Can you try to restate the question, Joe? 15
- 16 MR. OLIKER: Sure. Sure.
- 17 BY MR. OLIKER:

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- 18 Ο. If AEP Ohio -- I'm sorry. Let me 19 rephrase that.
- 20 If AEP Generation Resources has a 21 forecast of future revenues and costs that's called a 2.2 profit and loss statement, and if it appears that the 2.3 fuel, operation and management expense, and 24 depreciation is less than the projected revenues, and

we're excluding interest, return on equity, and federal income taxes, under that hypothetical, which is focused on the next three years, would you agree that AEP Generation Resources will not retire the plants?

- A. No. I would not agree with that.
- Q. Why is that?

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- A. First, it's not my decision whether AEP Gen Resources retires their plants or not. Second, it's a bad business decision to continue to run plants that have no return on their investment.
- Q. Okay. Well, let's talk about what happens if they retire. Would you agree that there is a total amount of net plant that's been invested in those?
 - A. There has been.
- Q. A portion of is financed by debt and a portion is financed by equity, correct?
 - A. Correct.
 - Q. If those plants retire, AEP Generation Resources does not have to pay back the equity, correct?
 - A. Correct.
 - Q. But they do have to pay back the debt

- and the interest expense, correct?
- A. Correct.

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- Q. So wouldn't you agree that if it appears there is a likelihood of recovering a portion of that investment in each year, it would be more sensible to continue to operate the plants than it would be to retire them?
 - A. No. I would not agree to that.
 - Q. And why is that?
- 10 A. In my business judgment, that wouldn't be good financial management of shareholder assets.
- Q. Well, let me ask it very basically: If
 you have a decision to lose a billion dollars or \$2
 billion, which one would you pick?
 - A. I'd pick neither.
- Q. That's the only option you have,

 Mr. Vegas, 1 billion or 2 billion. Which would you

 pick?
- 19 A. I would pick the smaller.
 - Q. Okay. Thank you.
- In your testimony, you talk about

 stringent standards for import capacity. Are you

 referring to the requirement to have firm

 transportation --

THE COURT REPORTER: I'm sorry, could
you repeat that?

BY MR. OLIKER:

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Q. Your testimony includes the statement,
"PJM filed to establish more stringent standards for
imported capacity after thousands of megawatts of
imports cleared PJM, but exceeded the firm
transmission capability of the existing transmission
system."

In this statement, are you referring to the requirement that a unit be pseudo tied to PJM if it is an external resource in order to bid into the capacity market?

- A. Yes.
- Q. And you agree that those rules went into effect over two years ago?
- 17 A. Yes.
 - Q. Okay. You also talk about the credit rating risk that AEP Ohio would be taking on through this transaction, correct?
- A. Could you refer me to where in my testimony?
- Q. Sure. Give me a minute. I believe we are on Page 29 of your May testimony, Line 8.

A. Yes.

- Q. Where it says, "Either of these actions would impact the Company's credit rating, which would increase the cost of investments in its distribution infrastructure."
 - A. Yes.
- Q. Now, in this statement, are you indicating that it's a good thing that AEP takes on this risk?
- A. No. We're responding to the question whether AEP Ohio has risk in this transaction, and we're pointing out that it does.
- Q. Okay. And let's assume for a second that AEP's credit rating does go up.
 - A. That it's adversely impacted?
 - Q. Yes. That AEP's credit rating is adversely impacted. Would you agree that that could impact the cost of either debt or equity for AEP Ohio?
- 20 A. Yes, it could.
- Q. And if that were the case, next time AEP

 Ohio filed a distribution rate case, that would flow

 through to your distribution customers, correct?
 - A. That's correct.

- Q. So in the event that AEP's credit rating is diminished, the person that really loses out is the customer, correct?
 - A. Correct.

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- Q. Okay. Just give me one more minute.

 You also discuss an impairment that AEP is taking -
 AEP Generation Resources is taking for certain book

 value, correct?
 - A. Correct.
- Q. For purposes of calculating the revenue requirement in this transaction, do you know if the impairment was reversed?
 - A. To my knowledge, it was not.
- 14 O. And --
- 15 A. The impairment being referred to is not related to the units in this PPA.
- 17 Q. Where is it the impairment relates to?
- A. To those units that were slated for retirement in May of 2015 and which have retired.
- Q. You cite the PJM 2014 Winter Report in your testimony, right, Mr. Vegas?
- 22 A. Yes, I do.
- Q. Have you reviewed the 2015 Winter
- 24 Report?

- A. Which report? The 2015 -- what did you call it?
 - Q. Winter Report.
- A. Winter Report. No, I haven't reviewed that report yet.
- Q. Is there -- is there a reason why you didn't review it?
- 8 A. No.

- 9 Q. Would you agree that generation in the 10 winter of 2014-'15 performed significantly better 11 than the prior winter?
- 12 A. Yes, it is my understanding.
- Q. Would you agree that cold-related forced outages were actually higher than natural gas interruptions?
- A. I'm not aware of that. I just don't have knowledge of it.
- Q. Did you review the level of forced

 outages for all power plants in PJM during this past

 winter?
- A. I did not.
- Q. That's all the questions I have. Thank you, Mr. Vegas.
- A. Okay. You're welcome.

156 1 THE WITNESS: Mr. Darr. 2 3 CROSS-EXAMINATION BY MR. DARR: 4 5 Q. Mr. Vegas. 6 Α. It's your turn. 7 Give me an idea what your timetable is 8 at this point. 9 Α. I'm good. I just have to be upstairs in this building at 3:30; so I'm good. 10 11 Q. Okay. 12 Just a few minutes before that. 13 MR. MICHAEL: Get to those other 14 questions then, I held back on him. BY MR. DARR: 15 16 0. Throughout your testimony, Mr. Vegas, 17 you used the term volatility. 18 Α. Yes. 19 Could you give us the definition of 20 volatility that you're using throughout your 21 testimony? 2.2 I'm using it generally to reflect 23 significant increases or decreases in -- against what

you could call an average over a longer period of

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- Q. In that sense, you're not using it in the -- you're using it in what I would describe as a common parlance?
 - A. I am.
- Q. And not in the sense of a statistical test of volatility?
 - A. Correct.
- Q. With regard to the statistical test of volatility, are you familiar with that apart from your Master of Business Statistics course?
- A. Only in that context in terms of, like, financial volatilities and betas and things like that. No, I'm not applying the statistical definition of it to this.
- Q. So when you're describing volatility, for example, of January 2014, you're describing the significant changes in price that occurred over that month, correct?
- A. Correct. Against the average during a prior similar period in a prior year, correct.
 - Q. Now, with regard to the PPA and the PPA rider, I'm going to refer to them in the collective for a moment, what is the product that a customer --

a retail customer is purchasing through this proposed rider and transaction? What do they get?

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A. So the product that they get is very specifically a credit or a cost that will be in direct inverse proportion to the volatility change in price that occurs in both the real-time market.

So as energy and services are sold each day, price volatility that occurs during that day and over a longer period, they get that same inverse credit or charge from a long-term perspective in terms of capacity trends. So as capacity prices trend upwards or downwards in relation to the fleet of PPA units, they would get an inverse cost or credit. So they get essentially a financial product that moves in inverse proportion to the volatility in real-time pricing and long-term capacity pricing.

- Q. Okay. So the difference or differential that we're looking at is a calculation based on the accounting costs that are identified in the draft PPA and some sort of calculation of the energy, capacity, and ancillary revenues received by AEP Ohio for the resale of those products purchased under the PPA?
 - A. Correct.
 - Q. Now, there are additional AEP Generation

Resources units that are not included in the purchase power agreement, and one of those is a hydro unit.

Why was that not considered, if you know?

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- A. I don't specifically know. However, I would -- I would assume that it wasn't considered because of its operational characteristics and its ability to be dispatched in a way that would conform with the capacity performance that was expected to be a requirement.
- All of the units that were put on the table were expected to have an operational profile that would satisfy the capacity performance requirements of PJM.
- Q. What about the two gas units that were not included?
- 16 Again, I would -- similar, I believe, Α. 17 based on their operational characteristics as well as 18 their financial characteristics. So the 19 qualifications or criteria that we looked at were 20 those that were challenged economically in the 21 current capacity pricing situation and operationally 2.2 have the characteristics that we need. So I would 2.3 have put the gas plants probably not meeting the 24 requirements on both the financial and the

1 operational.

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- Q. Okay. And then there was one coal plant, Gavin.
 - A. Correct.
 - Q. That's not included. That is a baseload unit, correct?
 - A. It is.
 - Q. Is that unit not financially challenged?
 - A. I believe its financial characteristics are different than the ones -- are better than the ones that are in this PPA proposal, and as such were excluded from that.
 - Q. When you say that its financial characteristics were better, are you looking at it as a -- at the variable cost or some other metric to decide whether or not that unit is better or worse?
 - A. My understanding is that they looked at both the fixed and the variable costs in making assessments for all of the units. So I don't know which would have been distinguishing for Gavin, but they would have encompassed both fixed and variable.
 - Q. You did not seek bids, from our prior discussion, for this product that we've been discussing today, correct?

A. That is correct.

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- Q. If you were to seek bids, what is the product description that you would use?
- A. Well, it would be similar to I think what I discussed earlier in the deposition, and those characteristics would be plants that are known well by AEP operators, have strong reliability characteristics, are at risk of premature closing because of short-term capacity prices, continue to provide fuel diversity and continued operation to provide strong economical development support for Ohio.
- Q. So with those caveats or that description, is it fair to say that only an AEP-owned generating unit could meet all of those requirements?
 - A. Yes.
- Q. So by definition, a bidding process would not have generated any different result in your mind?
 - A. Correct.
- Q. You also in this proposal did not provide -- propose a levelization of the benefits.

 And by levelization, I'm using it in the same manner that Mr. Taylor suggested in his testimony in the ESP

1 III case.

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A. Can you remind me of Mr. Taylor's affiliation?

- Q. OEG.
- A. Thank you.
- Q. Are you comfortable with my using the term levelization?
 - A. I am.
 - Q. The company didn't propose that, correct?
- 11 A. Correct.
 - Q. Is there a reason why the company did not propose a levelization approach to this rider?
 - A. At the time, and in the updated amendment, we see the benefits accruing positively to customers in a relatively short amount of time. The expected case -- which I use Witness Pearce's middle-of-the-road case as the expected case -- shows directly financial benefits beginning to accrue to customers in the '16/'17 PJM year.

So in my judgment, those benefits would quickly get to customers which would only delay the benefits or -- of the effects of levelizing a very short amount of time, but I'm not saying that it is

something that the company would not be open to considering if that was a requirement of approval.

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- Q. And how long a period would the company consider a levelization approach, essentially placing the company with the responsibility of ponying up the credit? Pardon the slang, but that's the best I could come up with.
- A. I think for a reasonable period would be a fairly short -- you know, a period of one, two, three years really is really at the most what would be reasonable. And I think there are accounting considerations beyond that that limit the ability -- the company's ability to recognize revenues in a certain way and to book revenues.

So I think there's some accounting factors to be considered, and Witness Mitchell would certainly be able to be more clear on that point.

But I think you'd have to stay inside that window for a level of reasonableness.

- Q. Would you accept, subject to check, that a regulatory liability, I believe, can be created for a period of up to 10 years?
- A. I believe that a regulatory liability can, but I don't believe that that's true for a

- receivable. I believe there's different rules that apply to receivables.
- Q. Okay. And do you know what that different rule is?

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- A. I don't know the rule, but I've heard less than three years in conversations with individuals, with specifically Witness Mitchell. So that's the framework that I'm using to very loosely and not on firm ground respond.
- Q. Apart from the regulatory liability or regulatory asset point -- question, the accounting question, are there any other reasons why the levelization could not go beyond a three-year period?
- A. I would -- I would want to evaluate -if we were to look at a levelization structure, I'd
 want to evaluate the total financial -- potential
 financial risk, carrying costs, you know, financial
 metrics of that nature to understand what the impacts
 would be to AEP Ohio during that period of time.
 Those would be the kinds of factors I would want to
 look at and understand better before agreeing to some
 kind of structure.
- Q. Given that risk structure, wouldn't that risk structure be the same kind of risk/benefit

analysis that a customer would make in terms of deciding whether or not to accept this hedge or insurance as you've described it today?

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- A. I think it's difficult to compare apples to apples a corporation like AEP Ohio and its financial risk management practices and our accountabilities to credit agencies and shareholders and other stakeholders to an individual or resident. I think it's a tough comparison to make that it's equivalent.
- Q. Well, isn't the risk management question the same in as much as the risk of levelization would fall on the company under one alternative, or in the alternative that you proposed, the risk of over or underperformance of the PPA-R falls on the customer? Aren't those questions mathematically the same?
- A. They're mathematically the same, but the difference I think in your comparison is that we're proposing to provide all of the unlimited upside benefits to customers. We're not proposing to keep the unlimited upside benefits, or you're not proposing that you would in a levelization structure.

So you're asking us to take risks in the short-term with no potential upside benefits in the

- long-term, where what we're offering is to give all upside benefits to customers throughout the period of this contract. So it's really not an equal comparison, you're only describing risks, you're not describing benefits.
- Q. Okay. So if there were some benefit sharing, would that change your answer to my question?
 - A. It might.

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- Q. And how would it change it?
- A. It would change the risk/reward calculation that I would use in evaluating the impact to AEP Ohio.
- Q. So, for example, if AEP Ohio -- let's assume that the rider is approved. And if AEP Ohio agreed that this could continue as a term of the ESP, and there were a risk-sharing mechanism built into it such that if AEP Ohio, for whatever reason, was able to realize a benefit -- a financial benefit from the rider over and above the levelization, that would change your calculus in terms of whether or not levelization makes sense?
- A. It would have an impact on the calculation, yes.

- Q. Just for a point of reference, have you reviewed the IMM reports the PJM IMM reports with regard to state of the market, either the one of the recent ones such as the one that was just issued or the one that preceded that?
- A. Very -- I think I read one of them, but I'll be honest, I wouldn't consider myself super familiar without having a chance to review it again.
- Q. In terms of identifying a witness for AEP Ohio, is Mr. Wittine the witness --
 - A. Wittine.

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- Q. -- the witness that I should refer to?
- A. Dr. Pearce would be a better witness for PJM market monitor analysis or interpretations.
- Q. Are you familiar with the current operating revenues -- let me rephrase this.

Are you familiar with the current earnings situation with regard to the generating and marketing segment of AEP? What I'm referencing here is AEP, the corporate entity. As I understand it, you report for SEC purposes on a market segment -- on a segment basis.

A. Yes. I've seen the financial -- I've seen the external earnings reports that have been

communicated to Wall Street that include that segment.

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- Q. And have you also reviewed the SEC documents that may have been filed reflecting segment information?
- A. I don't recall if I've reviewed those most recent SEC filings.
- Q. Are you familiar with the fact that over the second quarter -- quarter to quarter for 2014 and 2015, the earnings of the generating and marketing segment went from \$98 million to \$82 million?
 - A. That sounds correct.
- Q. And are you familiar with the fact that over the six months, January to June, 2014 and 2015, earnings increased from 261 million to 269 million?
 - A. That sounds correct as well.
- Q. Now, in terms of these plants, prior to June of 2015 each of these plants was part of the FRR capacity component of PJM, correct?
 - A. Correct.
- Q. And by FRR, we're talking about a fixed reliability requirement?
 - A. Fixed resource requirement, yes.
- Q. Thank you. Thank you for correcting

that, yes.

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And under the arrangements between AEP Ohio and AEP Generation Resources, those plants were under contract for services provided to AEP Ohio, correct?

- A. Correct.
- Q. And there were pass-through provisions for revenues received by AEP Ohio --
 - A. Correct.
 - Q. -- to Generation Resources?
 - A. To Generation Resources, correct.
- Q. And could you describe for us what those pass-through provisions were?
- A. Generally speaking, AEP Gen Resources was obligated to serve a specific percentage of AEP Ohio's SSO load during the ESP II period. That percentage changed in each of the years, and the -- as the SSO load was auctioned off, portions of it were auctioned off, it was a diminishing amount of generation obligation that AEP Gen Resources had to provide to AEP Ohio SSO customers.

During that period, AEP Ohio collected from customers through retail rates the costs of those generation services that AEP Gen Resources

- provided to our SSO customers, and we paid AEP Gen
 Resources for those services.
 - Q. And when you're talking about Generation Resources, you're talking about a diminishing portion of the energy component, correct?
 - A. Yes. Capacity was always covered by the fixed resource capacity requirement that had already been obligated through June of 2015.
 - Q. Right. Under the arrangement, basically AEP Generation Resources had the obligation for providing all capacity resources for all of the AEP Ohio load, correct?
 - A. Correct.

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- Q. With the caveat of there may have been some -- and I don't think there were -- but there may have been some CRES provider that provided capacity?
 - A. Excluding that, yes.
- Q. That arrangement ended on June 1, 2015, correct?
 - A. That is correct.
- Q. And is it fair to say that under the prior arrangement, AEP Generation Resources was receiving both the base generation component, the fuel component, and any capacity component that may

- have been assigned to load that had gone to a CRES
 provider?
- MR. NOURSE: Could we repeat the question, please?
- 5 (Record read back as requested.)
- 6 BY MR. DARR:

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- Q. And I should have added that had also -- or had gone to an SSO provider, auction winner.
- A. I'm getting -- I'm getting stuck on the definition -- the breakdown of base versus fuel versus capacity. We continued the -- the fuel clause remained in effect during that time period, and we continued to collect fuel expenses incurred in the delivery of power. We continued to collect capacity revenues in proportion to whatever the State mandated amount of capacity, you know, price was. On base generation, I'm -- I'm not sure.
 - Q. That's fair.
 - A. Okay.
- Q. We can go back to the contracts that were approved by the Federal Energy Regulatory

 Commission and trace what went through --
- A. Yeah.
- 24 | Q. -- correct?

Α. Yes.

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- Q. The capacity revenues that you were obligated to transfer to AEP -- when I'm speaking now of you, I mean AEP Ohio -- was obligated to transfer to AEP Generation Resources was established by the capacity order, correct?
 - Α. Correct.
 - And those were established at a rate of Q. \$188.88 per megawatt day?
 - Α. That's correct.
- 11 Now, through 2014, is it fair to say Ο. 12 that the earnings of AEP Ohio were at -- were 13 reported to be 12.1 percent?
 - Subject to check, that sounds correct.
 - Ο. And in August '15 investor meetings, for the first half of the year --
- 17 Α. Of 2015?
- 18 Q. Of 2015, yes.
- -- AEP was reporting -- AEP Ohio was 19 20 reported to have a return on equity of 11.2 percent.
- 21 Is that also correct?
- 2.2 Α. That is correct.
- 2.3 Now, is there any question about AEP Q. 24 Ohio's ability under its current distribution and ESP

- rates to provide distribution facilities to meet current service standards?
 - A. No. There is no concern with that.
- Q. Is there any concern about the company's ability to make the transmission investments that it might need to make to maintain service under the current ESP and distribution rates?
 - A. No, there isn't.

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- Q. Has there been any supply shortages due to a failure of an SSO or CRES provider?
 - A. Can you repeat the question?
- Q. Sure. Have there been any supply shortages -- let me try that again.
 - A. Okay. Supply shortages.
- Q. Supply shortages due to a failure of a standard service offer auction winner or a CRES provider to perform?
- A. Just to answer very clearly, even if there were, PJM's financial market model is a financial model only. So even if a CRES or an SSO auction winner had a shortage of physical supply, their obligation to PJM is to make up the financial impact of that, and PJM ensures the reliability of generation supply.

- Q. And there haven't been any problems with regard to that other than emergency -- an emergency event like January 7th, 2014?
 - A. That's correct.

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- Q. Now, the auctions have just been completed -- complete the transitions by PJM for 2016/'17, 2017/'18, correct?
- A. The -- those two transition auctions just completed.
- Q. And AEP recently reported publicly the effects of those transition auctions on its revenues, correct?
 - A. That is correct.
- Q. And as a result of that, there has been an incremental improvement for 2016 of \$116 million; is that correct?
 - A. I believe that's what it was reported, yes.
 - Q. And there's been an incremental increase in revenues for 2017 of \$126 million, correct?
 - A. That number sounds correct as well.
 - Q. And would you agree -- are you familiar with the materials that were distributed through the AEP website that outlined the effects of the capacity

- 1 performance transition auction?
- A. I'd have to see them to validate whether

 I was or not. I'm not sure which ones you're

 referring to.
 - Q. Let's mark this as Deposition Exhibit 3.

 (EXHIBIT MARKED FOR IDENTIFICATION.)
- 7 BY MR. DARR:

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- Q. Do you have in front of you what's been marked as Deposition Exhibit 3?
- 10 A. I do.
- 11 Q. Have you seen this before?
- 12 A. I have seen the content, but not this slide.
- Q. And the slide you're referring to is
 Page 3 of Deposition Exhibit 3; is that correct?
- 16 A. That's correct.
- Q. And does this fairly and accurately
 represent the information that you're familiar with
 indicating the effects of the capacity performance
 auctions by PJM on the AEP revenue?
- 21 A. Yes, it is.
- 22 Q. That's all we'll use that for.
- 23 A. Okay.
- MR. BZDOK: Could I borrow your copy

just for a second to look at it?

BY MR. DARR:

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- Q. The inclusion of the OVEC component in the proposal that was filed in May of 2015, you indicated earlier that there was a decision made, a review process entered into, and then the filing in May of 2015. All of this was responsive to the Commission's decision in February of 2015 with regard to your original OVEC proposal, correct?
 - A. That's correct.
- Q. With regard to the OVEC facilities, has there been any material change other than the extension -- proposed extension to 2040 to the proposal with regard to just the OVEC component?
 - A. No, there hasn't.
- Q. So if we went back and looked at the agreement between AEP Ohio and OVEC, we would be relying on the same agreement, correct?
 - A. That's correct.
- Q. With regard to the documentation over at least the first three years of the proposal, has there been any change in the calculations associated with the performance of that part of the PPA, if you know?

- A. My understanding is that the updated forecast that Dr. Pearce presented for the amended May filing had updates for OVEC units as well as AEP Generation Resources units based on current budgets and current forecasts.
 - Q. And that answers my second question.
 - A. Yes.

- Q. So you adjusted both the forecasted revenues and the forecasted costs?
- A. Correct. That's my understanding, but I would like to confirm that with Dr. Pearce.
 - Q. Based on the record that was developed in the prior case, I believe that there was approximately an \$8 million net credit to customers estimated by AEP Ohio. Do you know whether or not that credit, based on the changes that you just described, has increased, decreased, or remained the same?
 - A. I believe it's increased.
 - Q. Do you know how much?
- A. No, I don't, but I'm sure we could get that.
- Q. Would you agree with me that the generation mix of AEP -- I'm talking about the

- corporate generation mix -- changes over time?
- A. It does.

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- Q. And, in fact, the generation mix for AEP now includes additional natural gas, correct, natural gas generation?
 - A. It does.
 - Q. And relatively speaking, the amount of coal generation is decreasing?
 - A. It is.
 - Q. And the amount of energy efficiency is increasing as part of the generation mix?
- A. I would have to verify that. I know what's happening with the AEP Ohio energy efficiency programs, and that is increasing or had been increasing per State requirements. I'm not sure personally what's going on with the rest of the AEP fleet.
 - Q. Would that be something that we could identify in, for example, investor statements -- statements to investors?
- A. Perhaps. It would be fair to characterize that for AEP Ohio, yeah.
- Q. Okay. Let me hand you what's been marked as Deposition Exhibit No. 4.

(EXHIBIT MARKED FOR IDENTIFICATION.)

2 BY MR. DARR:

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- Q. Do you have in front of you what's been marked as Deposition Exhibit No. 4?
 - A. I do.
 - Q. Do you recognize this?
 - A. Yes. This is the investment report that was given to investors in August of this year.
 - Q. And have you reviewed this previously?
 - A. I have reviewed this.
 - Q. And in terms of the documents provided by AEP Ohio -- AEP to -- for investor meetings, do these fairly and accurately represent the statistical information that's available from the company?
 - A. They do.
 - Q. Turning your attention to Page 5 of this document. I'm not asking for you to read this in or anything like that, but is it fair to say that energy efficiency and demand response is increasing as part of the portfolio of AEP?
 - A. Yes, it is.
- Q. Is it also fair to say that hydro, wind, solar, and pumped storage, renewable resources, are increasing as a percentage of the portfolio?

A. Yes, it is.

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- Q. And it's also fair to say that natural gas is increasing as part of the portfolio, correct?
 - A. That is correct.
- Q. And in terms of the overall portfolio, is the portfolio increasing or decreasing over time in terms of total megawatts?
 - A. The total portfolio is decreasing.
 - Q. Okay. How is it decreasing?
- A. The retirements of coal units are not being replaced megawatt by megawatt with a combination of the other three sources that are listed here.
- Q. So, in effect, the portfolio is becoming more diverse simply because of the fact that you're having retirements or in part because you're having retirements of coal plants, particularly those in —that were closed in May of 2015?
 - A. That's correct.
- Q. A couple of times today you indicated that there was information which you did not have access to because of either confidentiality requirements or some other requirement. Can you describe for us what the restrictions or constraints

are that you're talking about?

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A. In general. I don't get any visibility to costs, revenue, earnings, or operational decisions that are employed by or used by the competitive generation business. And then — so AEP Ohio is a regulated entity. Me representing AEP Ohio, I don't get visibility to that.

Then I was also referring to there's specific information, like bidding strategies, the number of units, the costs that they're bid at that I don't believe anybody gets access to outside of that competitive generating unit.

Q. And that would -- that would apply to both -- let me start again. Let's start with the first category.

There's certain information which is segregated by business unit; is that correct?

- A. Correct.
- Q. And what is the source of the rule or requirement that causes that segregation?
- A. We -- I'm not sure the source, but we have an internal -- we call it a rules of the road, which describe what information can be shared between a competitive energy affiliate, the service

corporation who provides services to that unit and to regulated units, and then to any regulated units. So we have kind of those three entities.

And that training provides clear delineation of what kind of information can be shared between any one of those units at any point in time.

That's the source of -- that I'm referring to.

- Q. Now, the secondary reference that you made to information with regard to billing strategies --
 - A. Bidding.

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- Q. Bidding strategies, excuse me. The context that I remember that from this morning related to bidding strategies of those that were bidding into the SSO auctions.
 - A. Correct.
- Q. Is -- are you using that in another context as well, or is it limited to that first context?
- A. It would be the SSO auctions or into the capacity auctions.
 - Q. And there you're talking about capacity auctions where AEP Generation may be bidding in?
- A. Correct.

- Q. Now, would these same restrictions apply to the business activities of your competitive retail affiliate?
 - A. Yes, they would.
- Q. And by that, we're talking about AEP Retail, AEP Energy?
 - A. AEP Energy.
- Q. Would both sets of requirements apply, or only the first set dealing with the sharing of --
- A. I believe both sets would apply because -- I don't even know. Both sets would apply.
 - Q. Now, with regard to information that would not be available to you, would you have available to you under these rules of the road that you just described production cost information?

MR. NOURSE: For what, anything?

17 THE WITNESS: For PJM AEP Generation

18 Resources units.

19 BY MR. DARR:

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- Q. For AEP Generation Resources units?
- A. No. I would not have access to that information.
- Q. What about individual generator heat rates?

A. No.

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- Q. What about historical generator volumes?
- A. I would have access to that data up to the end of 2013 when that information was available to me. After that point in time, all the production cost information and the operational information I don't get access to.
- Q. And that will be true going forward as well?
- A. Not under the PPA. Under the PPA, we have a different expectation of information sharing.
- Q. Okay. What's the basis of that expectation, other than the agreement itself?
- A. The expectation would be that in order for me to have a contract where I'm financially obligated for those units, I become a buyer of the product, then it entitles me to more visibility and access to production costs, unit bidding, all of the types of decisions and information that would be necessary for me to be a buyer of those services from AEP Gen Resources.

Today I'm not, at least not outside of an SSO auction which is done at an arm's-length transaction, I won't have any need or right to that

information. But under the contract, I would have a need and a right to that information.

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- Q. Okay. You used the term arm's-length transaction. What did you mean by that?
- A. What I mean is that when we facilitate the auction process for the SSO, we have a third-party administrator come in and do it. Through a well-defined, structured process, bids are accepted and offered in to serve AEP Ohio's SSO load. That's what I mean by a third-party or an arm's-length transaction.
- Q. So essentially what you're telling us today is that the rules of the road that would apply to your relationship with AEP Generation Resources would be altered or changed by the adoption of the PPA?
 - A. Yes. They would have to.
- Q. Do you know if AEP Generation Resources enters into bilateral contracts today?
- A. I'm not aware of -- I'm not aware of bilateral contracts that they are involved in. I'm sure they do. It's a normal type of contract to enter in. So I wouldn't be surprised that they do, but I'm not aware of them.

- Q. Are you aware of any information-sharing arrangements similar to what you've just described for the PPA that may exist for bilateral contracts between AEP Generation Resources and a third party?
 - A. No, I'm not.

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- Q. I want to just spend a couple minutes talking about the arrangements between AEP Ohio and its SSO auction bidders. A successful bidder is basically a price taker with regard to the price that emerges from the auction; is that correct?
 - A. Correct.
- Q. And as a price taker, it assumes all supply risk for that portion of its tranches -- or for those tranches that it's successful with?
 - A. I believe that's correct.
- Q. And for those tranches that it's successful with -- successful purchasing, it also assumes any wholesale price risk associated with procuring that generation, correct?
 - A. That's correct.
- Q. With regard to the customer -- the retail customer, the retail customer is also a price taker, correct?
 - A. The retail customer can shop for what

price it chooses to take.

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- Q. Good point. So in a sense in that sense, the retail customer can elect to either take the SSO price or the alternative CRES price if one is available?
 - A. Correct.
- Q. And that CRES customer -- or that retail customer can elect to take any one of a number of different products with regard to how the price is set for his generation, correct?
- A. Based on what's available, yes, they can elect to take any option that's available in the market.
- Q. And those options could include, for example, a contract for a firm price for a set period of time?
- A. It could.
- Q. The customer could take a contract -- or enter into a contract that moves with a -- an index, correct?
 - A. That is correct.
- 22 Q. And the customer could come up -- could 23 enter into a contract that might include a 24 combination of both fixed and variable charges,

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- A. It could, yes, if those products were available, yes.
 - Q. Are you familiar with whether or not there are fixed contracts available?
 - A. I am.
 - O. Are there?
 - A. Yes, there are.
 - Q. What about variable contracts?
- A. Yes.
 - Q. What about block and firm contracts?
- A. I believe there are, but I'm not -
 depending on what customer class they're available

 for. I'm not aware of block -- block load offers for

 residential customers.
 - Q. What about for commercial or industrial?
 - A. I believe they are, yes.
 - Q. And these price -- now we will tap into your Master of Business Degree. These price structures basically are risk assignments, correct?
 - A. Yeah. Risk is a significant component.
- Q. And for the customer that wants to avoid risk, they -- over a set period of time, they could enter into a fixed contract to set that price?

A. They could.

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- Q. And those that are less concerned about the risk or more willing to take on risk could enter into a market tracking contract?
 - A. They could.
- Q. Or by the same token, based on risk assessment they could block some and allow some to vary?
 - A. That's right.
- Q. Now, with regard to the purchase power agreement rider, the customer would pay whatever its contract price is, whether it's under the SSO or the contract with the CRES provider, and then would adjust that price by the amount of the credit or charge, correct?
 - A. That's correct.
- Q. There was something I didn't quite understand in your testimony at Page 14, Lines 2 through 4. There you refer to premature closure by replacement with a variable-cost unit. What are you referring to, the variable-cost unit?
 - A. Referring to natural gas plants.
- Q. And you also refer to them as being a higher variable-cost unit. What's your basis for

concluding that they are a higher variable-cost unit?

- A. Using the projections that Dr. Pearce put out on the price of energy forecasts in the future, which is tied directly to the price of natural gas. So the assumption that I'm using in that statement is that natural gas prices go up, which drives those higher energy costs in the forecast, and those are the units that would be replacing the coal plants that retire.
- Q. So the reference to higher in this instance refers -- is tied to Dr. Pearce's projections of forward gas prices?
 - A. That's correct.

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Q. Another clarification I'd like to ask for relates to Page 23, Line 11. You state at that point, "The lack of new Ohio generation identified in the PJM Generation Queue is alarming enough..."

The PJM generation queue that you're referring to here, is that -- what specifically are you referring to?

A. I'm referring to the generation queue that is identified in Witness Wittine's testimony that lists the generation that has been identified at various stages of approval and development.

Q. And going back to my question earlier about the source of this: Is this relying on the State of the Market Reports or some other source if you know?

- A. Is what relying on it, my observation on alarming queue?
- Q. Either that or Mr. Wittine's statement about what is in the queue.
- A. That comes, I believe, from -- directly from the PJM -- from a PJM source that identifies generation by location and by state of development.
- Q. I'm familiar with that in the IMM State of the Market Reports. Is there another source that you may have relied upon here?
- A. Let me just make a quick reference to that testimony to validate if there is another one that I was referring to. I am not certain which specific report in PJM that this table data comes from, but Witness Wittine could certainly provide that detail.
 - Q. Thank you.
- A. I'm referring to Page 5, the table at the top of his testimony.
 - Q. Another clarification I'd like to ask

you about is on Page 29, Line 6. There you discuss the allocation of financial risk, and indicate that AEP Ohio's at risk for the PPA rider balance being disallowed in a future proceeding or the affiliated PPA not being renewed.

Starting with the disallowance, this is the discussion that you and counsel for Sierra had this morning, correct?

A. It is.

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- Q. The review process that you were discussing this morning appeared to be a conversation or discussion or review between AEP Ohio and the Commission. Is that a correct description of what you were describing?
 - A. It is.
- Q. If there were a disallowance, would AEP Ohio have an opportunity to contest that disallowance?
 - A. I believe it would.
- Q. If the Commission completed a review and allowed in a cost and a third party wished to contest that allowance, would this process that you described allow for that third party to contest the allowance?
 - A. The process I'm envisioning is between

- AEP Ohio and the Commission and not other parties; so the answer would be no.
 - Q. So it would be bilateral between the Commission and AEP Ohio?
- A. That's the process I'm envisioning coming out of this, yes.
 - Q. Earlier today you also indicated it was always intended that the PUCO have the opportunity to review the prudence of investment decisions. And I want to follow up on that a little bit.
 - A. Yes.

- Q. You indicated that this would be limited to significant investment decisions, and then you were asked the question: Well, what's significant?

 Do you recall that?
 - A. I do.
- Q. I want to drill down another direction on this, and that is would a decision to expand or contract or convert the facilities constitute a significant investment decision?
 - A. It would.
- Q. Would this review process take place
 before or after a -- an expansion, contraction, or
 converting of the facilities?

A. I would envision it would happen before that decision was made.

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- Q. What about the decision to modify the financing of the transaction, either by altering, for example, the debt/equity structure or a mechanism to define what the return on the investment is?
- A. If I could answer the last part of that question, I don't believe modifying the return on the investment is something that would be subject to change as that would be a -- kind of a predefined formula established in the contract. But if that or some other significant financing were to be proposed to be changed, that would be something that I would anticipate bringing to the Commission in advance because that would be a significant change.
- Q. All right. I believe you discussed with counsel for Sierra environmental upgrades. You've already identified certain environmental upgrades in the budgets. If there were additional environmental upgrades, would those be part of the review process?
 - A. Yes, they would.
- Q. You indicated to counsel for Sierra that fuel would be an issue. What about fuel mix?
 - A. I think the operating committee and

predominantly the operator would make the most -- would be the best evaluator of fuel.

If I could back up and ask a question first. Are you referring to a potential co-firing situation where a coal plant is fueled by both gas and coal, or are you talking about a coal plant being fueled by different sources of coal?

- Q. I was speaking of the latter.
- A. Okay.

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- Q. We talked about conversion before. Any of these plants would have to be converted to go to a dual fuel?
- A. I would expect that decisions around how to fuel plants would be done predominantly by AEP Gen Resources with knowledge of AEP Ohio, but that would not be an issue that would be a Commission approval -- preapproval scenario.
- Q. What about decisions about consumables, for example, environmental consumables?
- A. To the extent that those decisions don't have a material affect on retail rates, I don't envision those would have to be something preapproved.
- Q. How about something like labor

contracts?

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- A. Similar answer, same answer; to the extent they don't have a material affect on rates, they wouldn't need to be preapproved.
- Q. Okay. So it becomes very important to know what the materiality level is, correct?
 - A. Sure.
- Q. And at this point, your definition of materiality is that it would have a substantial impact on the rate or charge?
- 11 A. It does. That would be the primary
 12 criteria.
 - Q. But in terms of setting a materiality threshold of a billion dollars, a million dollars, or someplace in between, can't really do that at this point; is that fair?
 - A. I think that's fair. I think we would need to discuss that more -- in more depth around the terms of structuring the review and audit process.
 - Q. You also say on Line 7 that the company faces the risk of not having the affiliated PPA renewed. I don't understand what this means. Could you explain it to us, please?
 - A. I believe what we're saying here -- I

think it may be a little bit misleading in terms of the words. I believe the intent here -- my intent is the PPA rider renewed, not the PPA, because the PPA, would be established for the term defined. There would be a renewal process required for that PPA.

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So I think this is a mis- -- a miswording on what's intended. And what I am intending to say is that the PPA rider could not -- might not be approved -- or may not be renewed in a future ESP period.

- Q. So the condition under this proposal would have the option in the future ESP of suspending or terminating the rider; is that correct?
- A. We hope not. But we expect that in their approval now that they would be indicating the intention to approve that rider in the future, otherwise we wouldn't -- because that is a significant risk. But it is a risk, yes, that they could in a future time, a different Commission with different decision criteria could say this is not in the best interest and not renew it.
- Q. And if that were to occur under the draft purchase power agreement, there's a potential of the acceleration payment by AEP Ohio to Generation

- Resources for the net book value of the facilities, correct?
 - A. If at the point of that decision it's decided to terminate the contract and to shut down the power plants, then, yes, that's correct.
 - Q. So there's another condition besides regulatory disapproval, the plant -- the operating committee would also have to make a decision to shut the plants?
 - A. Correct.

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- Q. Could it shut some and not others?
- A. I think at that point, yes, a variety of options would be evaluated by the owners; shutting down, selling, converting, whatever other options might be available, but, yes.
- Q. Also with counsel for Sierra Club, you mentioned that there was that the rider was reconcilable. Do you recall that?
 - A. Yes.
- Q. And one of the things that you mentioned was that it could be reconciled for disapproved investments; is that correct?
 - A. That's correct.
 - Q. I thought a couple minutes ago that any

- decisions about investments would be made preconstruction. So under what circumstances do you see -- preconstruction or preinclusion, under what circumstances do you see a reconciliation taking place because of a disapproval?
- A. It could be in the circumstance of something that was below the materiality threshold to bring for preapproval, that upon a prudence review was determined to be imprudent as one example.
- Q. Would this rider also account for changes -- excuse me -- would it also be reconciled for changes in sales or changes in volumes of generation purchased?
- MR. NOURSE: I object. I don't understand your question.
- MR. DARR: Does Mr. Vegas understand?
- 17 THE WITNESS: If I could ask a
- 18 clarifying. Are you referring to changes in volumes
- 19 of generation purchased and sold between AEP Gen
- 20 Resources and AEP Ohio?
- 21 BY MR. DARR:

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- 22 Q. Yes.
- A. As those volumes increase and decrease, then the cost would increase and decrease. So, yes,

- that would have an effect on the -- what needed to be credited or collected through the PPA rider.
 - Q. Would it also be reconciled for increases or decreases in the formula rates that would take -- that may occur over the life of the rider?
 - A. Yes, it would.

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- Q. Would it also reconcile for any judicial findings with regard to the lawfulness or reasonableness of either the rider or any components of the rider?
- 12 A. I don't know. I'm not sure how that
 13 would affect --
 - Q. Yeah. You have not addressed that yet.
 - A. Have not addressed that yet. My assumption would be yes, absent -- my assumption at this time would be yes.
 - Q. Thank you.
- A. You're welcome.
- MR. NOURSE: All right.
- 21 THE WITNESS: Two-minute break.
- MR. NOURSE: Just a quick break, and
- we'll start back about 3:00.
- 24 (Recess taken.)

201 1 MR. NOURSE: We're back. Gretchen, you 2 going to go next? 3 MS. PETRUCCI: Yes. I'd be happy to. 4 5 CROSS-EXAMINATION 6 BY MS. PETRUCCI: 7 Q. Can you tell me when AEP Ohio completed 8 divestiture of the PPA units that are now with AEPGR? In December of 2013. 9 Α. You said '13? 10 Ο. 11 Α. Yes. 12 Thank you. Do you know when the Q. 13 divestiture of those PPA units with AEPGR began? 14 Α. Earlier that year, that same year. 15 Q. If you could turn to Page 4 in your 16 testimony from May of this year. 17 Α. Yes. 18 Q. On Lines 3 and 4, you indicate that the PPAs will provide, among other things, reasonably 19 20 priced power for years to come. 21 Α. Yes. 2.2 What time period are you talking about? Q. 23 For the time period through the life of Α.

the -- of the -- this contract, through the full life

1 of that contract.

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- Q. AEP has not done forecasts of the prices beyond 2024, has it?
 - A. That's correct.
 - Q. Okay. And then with respect to what Dr. Pearce included in his testimony, there were four scenarios provided, isn't that correct?
 - A. I'm taking a look.
 - O. It's on KDP-2.
- 10 A. KDP-2. There we are. Oh, yes, there's the weather normalized case, yes.
- 12 Q. Okay. And when you referred earlier to the medium case --
- A. I was referring to the average of high-load and low-load forecasts.
- Q. Thank you. With respect to
 reconciliation of the PPA rider, I believe you stated
 earlier that you -- that AEP is proposing an annual
 reconciliation.
- A. That's correct. And I believe Witness

 Allen also notes in his testimony that more frequent

 reconciliation would be acceptable as well, quarterly

 as an example.
- Q. Okay. Thank you.

What is the more frequent reconciliation that would be acceptable?

A. Quarterly.

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- Q. Who manages each of the PPA units currently?
- A. There's a plant manager underneath the AEP Generation Resources organization that's responsible for the operations of the units, and then those plant managers report to an executive that have overall operational responsibility, and that executive is Toby Thomas.
- Q. And then the OVEC units are separate, correct?
- A. That's correct. They're a different business entity, and they report up under a different reporting structure.
- Q. Now, with the terms of the PPA agreement that's been discussed earlier, it's going to be AEP Ohio that's going to have what you described I think as a 50/50 opportunity or a 50/50 say in the authority for arranging generation, delivery, and receipt of energy for those AEPGR PPA units, right?
 - A. Correct.
 - Q. So the current management of those

- PPA -- the AEPGR PPA units is going to change if this PPA agreement is approved, correct?
 - A. Not necessarily, no.

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- Q. Isn't -- you indicated earlier that you personally are going to be on the operating committee and that you would have a 50/50 say, isn't that accurate?
 - A. That is correct.
- Q. And currently you don't have a 50/50 say on the management of those AEPGR plants, do you?
- A. I have no say in the operations of those plants today, that's correct.
 - Q. Okay. And then also on to this agreement, AEP Ohio is going to have the authority to dispatch the AEPGR units in the PPA, correct?
 - A. AEP Ohio or its agent, yes, our service company, that's correct.
 - Q. And that agent would be doing it on behalf of AEP Ohio, correct?
 - A. That's correct.
 - Q. And during this time, if this PPA is approved as it's been proposed, during this same time period the AEPGR units are going to remain divested?
 - A. That's correct. They'll remain owned by

AEP Generation Resources.

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- Q. I had a quick clarification about the megawatts that are involved in the plants. Your testimony on -- I'm sorry, in your chart --
 - A. Page 12.
 - Q. Thank you. You're ahead of me.
 - -- lists the OVEC units as having 440 megawatts, and Mr. -- Dr. Pearce's testimony has a different megawatt figure. Is one to be relied upon versus the other, do you know? I can give you the page reference if you need Dr. Pearce's.
- A. I do. Thank you. Could you give that to me?
 - Q. On Page 10.
 - A. On Page 10.
- 16 Q. Lines 16 to 17.
- 17 A. Thank you. Page 10. That's Page 16.
- 18 Q. Page 10, Lines 16 to 17.
- A. I would rely more accurately on

 Dr. Pearce's. Mine looks like a rounding of the

 total nameplate capacity of those units, and

 Dr. Pearce's is more than likely a more precise

 measure of percentages allocated to AEP Ohio.
- Q. Okay. Thank you.

Next, if we can turn back to your testimony on Page 13, and on Lines 13 through 19 you listed the benefits from the PPAs. Is that an order of -- is that a ranking of the benefits or is it just a plain list?

> Α. It's just a plain list.

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- 0. You also describe the bubble associated -- that each of the PPA units is on the economic bubble. That's Page 16 of your testimony. Are some of the units more on the bubble than others?
- Yes. All of the units have different Α. cost profiles; so they would all have different positions on that economic line.
- Q. Okay. Which one's more on the bubble than -- what I'm looking for is maybe which one or two at the top of the bubble and which one or two at the bottom of the bubble.
- I don't know those specifics. I would ask either Witness Pearce or Witness Thomas, but probably Witness Pearce would be the best candidate to give you that -- the best witness to give you that information. I'm not sure the ranking of these units economically.
 - Q. Okay. In that answer were you only

referring to the AEPGR units, or were you also referring to the OVEC units?

- A. Also referring to the OVEC units.
- Q. Okay. And would Witness Pearce or Witness Thomas also be able to answer with respect to the OVEC units?
 - A. Witness Pearce would.
- Q. Okay. Thank you. I'm trying to go quickly here, and I'm jumping around.
- Which of the units -- the PPA units qualify as a capacity performance resource?
- A. That's confidential information. I don't know. I'm not aware which ones specifically cleared in the bidding process. We've released that information in aggregate which is part of the information that was shared by counsel for IEU, but the specific units have not been released publicly.
 - MR. NOURSE: Gretchen, I'll add, there's some discovery responses as well.
- MS. PETRUCCI: That was going to be my next question. And it just may not have filtered down to me yet.
- 23 MR. NOURSE: Okay. You can call me
 24 later if you want to, I can direct you. There's some

- that are pending and some that are already out, but
 it doesn't go unit by unit at this point, but --
- THE WITNESS: Eventually it will have
- 4 to, but --

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- 5 MR. NOURSE: Yeah.
- 6 BY MS. PETRUCCI:
 - Q. Turning to Page 23.
- 8 A. Yes.
 - Q. Line 7 you refer to two plants that have been identified as under construction in Ohio in the PJM generation queue. Which two plants are those?
- A. I'm referring to -- I think to help

 answer that question, I'm looking at Witness

 Wittine's testimony. That's where I took that

 information from.
- Q. Okay. That's fine.
- Were you meaning -- my next question is,
 because you referred to two wind projects on Page 24
 on that first line, I was wondering if you were --
- 20 A. No.
- 21 Q. -- referring to those two wind projects or not?
- A. Can you tell me the page of that one again?

- Q. On Page 24, Line 1.
- A. Yeah. Those two were -- are two wind projects that are actually in service. So the point I was trying to make is that except for those two wind projects, none have actually been put in service since the RPM model has been put in place.

And then the two plants that I'm referring to on Page 23 are the ones that are under construction, and I believe they're the Middletown Energy Center and the Oregon Clean Energy, I believe, or maybe -- no. Hold on. I would check with Witness Wittine on which specific plants are in the construction phase.

- Q. Okay. Thank you.
- A. They came from his testimony. I believe -- actually my understanding is the Carroll County and the Middletown Energy Center.
- Q. Okay. I'm quickly looking over to see if we have time for anything else. One moment. I think that's all. Thank you very much.
 - A. You're welcome.

MR. NOURSE: Thanks. And Mr. Vickers.

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CROSS-EXAMINATION

BY MR. VICKERS:

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Q. Yeah. In an effort to get everyone out of here on time, let me just triage a couple questions here.

When we're discussing the Commission oversight of the PPA process, what opportunities, if any, does the company envision for intervenor participation in that process going forward?

- A. At this time, we haven't contemplated an intervenor process in that review. It's been considered a process between the PUCO and AEP Ohio.
- Q. And any -- would there be any effect on AEPGR if rider costs were not allowed by the Commission going down the road, would there be any issue?
- A. If the disallowances became so material that it would qualify under the contract definition as a significant regulatory change in the terms, then the -- then AEP Ohio would have the right to terminate that contract.
- Q. And is there at this point a specific definition of what would count as material or not?
 - A. There's not.

- Q. Do you have any idea? Would that be a dollar amount? Would that be some other --
 - A. It would be a threshold.
 - Q. Okay.

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- A. Something that would materially affect the financials of AEP Ohio.
- Q. And do you have any kind of estimate of what the minimum thresholds of that would be?
 - A. I don't.
- Q. If -- well, so thinking about that some more, if there was an amount that didn't reach this material level such that the agreement would be terminated but that might still be a substantial amount of money, could that affect AEP Ohio's credit rating in any way?
 - A. I suppose it could.
- Q. And if that were to happen, would the consequence of that -- in other words, if greater costs for AEP in general due to a change in -- bad change in the credit rating, would consumers then see that reflected in other riders or affecting their rates?
- A. The change in our financing costs can only be adjusted in a rate case or an ESP -- a full

ESP proceeding. So it would have to require some formal process like that to be reflected into rates. But I believe something that would affect -- would be material enough to affect our credit rating would probably be something that would be a candidate that would be material enough to cancel the contract over, because changing -- for a change to occur to a company of AEP Ohio's size credit rating, it needs to be a pretty significant change.

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Q. When you're thinking about the length of the PPAs, and just -- I apologize if we've gone over this a little bit, but I just want to get some final clarification.

Why have the PPA extend all the way until retirement at this point? Is there a specific reason that retirement versus sort of just a long-term agreement to be re-evaluated down the road? Why this sort of certainty of retirement?

A. The driver is so that investments that are made for the -- investments which are made are made for the life of those generating units have a predictable and reasonable path for recovery. That's the main reason.

So by tying the contract to the life of

the units, it's clear then for the operator, AEP Gen Resources, that they can make investments to keep the plant operating sustainably for the benefit of customers through their — through the plant's useful life. So that's why we chose end of life — or the full life of the units as the term for the contract.

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- Q. The -- so we talked a little bit about the idea of stabilizing rates and sort of the hedging purported benefits of the agreement. And I think sort of implicit in that -- and we've talked about it a little bit today -- is that at times the customers would end up not seeing the full benefits of low wholesale market prices when they're low, you know, with the idea of stabilizing rates so that when they're high they don't see the full impact of the higher rates. So there's a tradeoff there between stability and capturing the lower market prices.

 Would you agree with that, that that tradeoff is something that the PPA contemplates?
- A. Not in the way you characterize it, because I believe that the large majority of the impact of the market is still what the customer's going to experience based on the fact that their price will reflect at least two-thirds of the total

cost to be based on a pure market price. So if they don't lose -- I mean, there is an effect that the rider has of giving you an opposite impact to the bill of what's happening with market prices, but I don't think it's a -- you're trading low prices for a higher cost.

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I think that it's -- there's -- in the case of very low prices, customers get the -- for the large part, the benefit of those large prices and pay a small insurance product in order to give them assurance that if it goes very high, they'll have a little bit of a mitigation against that as well, about a third of a mitigation.

Q. Okay. So what -- I guess when we're thinking about that, that sort of insurance, again, the premium on that insurance, regardless of whether or not that sets the entire -- accepting that two-thirds of it will still be the market rate, but is there -- sort of what's the threshold at which that premium is no longer worth the insurance that it buys, the security that it provides?

So, you know, is there a particular value that that premium needs to stay below in order for this to be beneficial to customers that doesn't

quantify this in any way?

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- A. Well, it's been quantified in the sense that using all of the four forecasts that Dr. Pearce presented, I believe that the projected amount of credit or cost that is passed through during all of those scenarios warrants the approval of the PPA rider in all of those scenarios, in the worst case all the way to the best case.
- Q. And was there some sort of target that the company was looking to see such that, you know, if it was over \$100 million in premium costs, that that would no longer be worth it, or was it a billion dollars, or was there any sort of number used in figuring out that value?
- A. No. We didn't have a target number when we assessed that value. We just ran the numbers based on these load assumptions, saw what the impact would be on customer rates, and assessed that those impacts were not significant in the worst cases and as such that the benefits, which were much more than just a financial hedge, were well worth the costs, the potential risk.
- Q. So, yeah, I guess I'm trying to understand a bit better what you mean by significant,

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      that the impacts were not significant. Did you
      have --
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              Α.
                   It's the rate impacts that were
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      communicated in the -- in the proposal, in the
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      testimony. So if you look at Witness Allen's impacts
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      on rates, that would be what I'm referring to.
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              Q.
                   Right. Right. And so what would make
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      an impact significant or not significant? Kind of
      what -- was there a threshold there?
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              Α.
                   No. There wasn't a threshold defined.
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                   Okay. See if there's anything else we
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      can get in in two minutes. I think we'll just leave
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      it at that. Thank you very much.
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              Α.
                   Okay. You're welcome. Thank you.
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                   MR. NOURSE: All right. Thanks,
16
                I think we're concluded today for
      everyone.
17
     Mr. Vegas. Thanks a lot.
18
                   (Thereupon, the deposition concluded
19
                   at 3:23 p.m. Signature not waived.)
20
21
2.2
23
```

		217		
1	State of Ohio :			
2	: SS: County of :			
3				
4	I, Pablo A. Vegas, do hereby certify			
5	that I have read the foregoing transcript of my deposition given on Wednesday, September 16, 2015; that together with the correction page attached hereto noting changes in form or substance, if any, it is true and correct.			
6				
7	it is true and correct.			
8				
9	Pablo A. Vegas			
10				
11	transcript of the deposition of Pablo A. Vegas was submitted to the witness for reading and signing; that after he had stated to the undersigned Notary			
12				
13				
14	he signed the same in my presence on the day, 2015.	of		
15				
16				
17	Notary Public			
18				
19				
20	My commission expires,			
21				
22				
23				
24				

218 1 CERTIFICATE 2 State of Ohio SS: 3 County of Muskingum 4 I, Carolyn D. Ross, Registered Professional Reporter and Notary Public in and for 5 the State of Ohio, duly commissioned and qualified, certify that the within named Pablo A. Vegas was by 6 me duly sworn to testify to the whole truth in the cause aforesaid; that the testimony was taken down by 7 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 8 testimony given by said witness taken at the time and 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 17th day of September, 2015. 15 16 17 Carolyn D. Ross, Registered Professional Reporter and 18 Notary Public in and for the State of Ohio. 19 20 My commission expires April 3, 2019. 21 (CDR-79219) 22 23

ARMSTRONG & OKEY, INC. Registered Professional Reporters 222 E. Town St. - 2nd Floor Columbus, Ohio 43215 614/224-9481

September 17, 2015

Mr. Pablo Vegas % Steve Nourse AEP

Re: In the Matter of Ohio Power Company 14-1693-EL-RDR & 14-1694-EL-AAM

Dear Mr. Vegas:

Enclosed is the transcript of your deposition taken on September 16, 2015, for examination pursuant to 4901-1-21(K) of the Ohio Rules of Practice before the Public Utilities Commission of Ohio.

The rule requires that your deposition be read by or to you. Any changes in form or substance which you desire to make shall be entered by me with a statement of the reasons given for making them.

If your deposition is not signed within 10 days of its submission to you, I am required to sign it and state the fact of the refusal to sign with the reason, if any, given therefor; and the deposition may then be used as though signed, unless on a motion to suppress the Commission holds that the reasons given for the refusal to sign require rejection of the deposition in whole or in part. By copy of this letter I am advising the attorneys in the case of the submission of your deposition.

Please have your deposition signed in the presence of a Notary Public and return to us by certified mail.

Thank you for your promptness in this matter.

Sincerely,

ARMSTRONG & OKEY, INC.

Cc: Ms. Williams

		217		
1	State of Ohio : : SS:			
2	County of :			
3				
4	I, Pablo A. Vegas, do hereby certify			
5	that I have read the foregoing transcript of my deposition given on Wednesday, September 16, 2015; that together with the correction page attached hereto noting changes in form or substance, if any,			
6				
7	it is true and correct.			
8				
9	Pablo A. Vegas	-		
10				
11	I do hereby certify that the foregoing transcript of the deposition of Pablo A. Vegas was submitted to the witness for reading and signing;			
12				
13	<u> </u>			
14	he signed the same in my presence on the day of, 2015.			
15				
16				
17	Notary Public			
18				
19				
20	My commission expires,,			
21				
22				
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24				
	I and the second			

ERRATA SHEET

Please do not write on the transcript. Any changes in form or substance you desire to make should be entered upon this sheet.

I have read the entire transcript of my deposition taken on the day of,, or the same has been read to me. I request that the following changes be entered upon the record for the reasons indicated. I have signed my name to the signature page and authorize you to attach the same to the original transcript.				
Page	Line	Change	Reason	
			·	
			•	
		·		
Date		Signature:		

	218			
1	CERTIFICATE			
2	State of Ohio :			
3	: SS: County of Muskingum :			
4	I, Carolyn 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 Pablo A. Vegas was by			
6	me duly sworn to testify to the whole truth in the			
7	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			
8	foregoing is a true and correct transcript of the testimony given by said witness taken at the time and			
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 14	IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Columbus, Ohio, on this 17th day of September, 2015.			
15				
16	CONTROL DE SECURITION DE LA CONTROL DE LA CO			
17	Carolyn D. Ross, Register and			
18	Notary Public in and for the State of Ohio.			
19	DECICE OF			
20				
21	My commission expires April 3, 2019.			
22	(CDR-79219)			
23				
24				

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

9/23/2015 12:32:11 AM

in

Case No(s). 14-1693-EL-RDR, 14-1694-EL-AAM

Summary: Deposition of Pablo A. Vegas electronically filed by Mr. Tony G. Mendoza on behalf of Sierra Club