BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

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In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider.	:	Case No. 14-1693-EL-RDR
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority.	:	Case No. 14-1694-EL-AAM

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PROCEEDINGS

before Ms. Greta See and Ms. Sarah Parrot, Attorney Examiners, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-D, Columbus, Ohio, called at 9:00 a.m. on Tuesday, September 29, 2015.

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VOLUME II

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Tuesday Morning Session,
September 29, 2015.

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EXAMINER SEE: Let's go on the record.

Mr. Vegas, I'll remind you that you remain under oath.

Ms. Fleisher.

MS. FLEISHER: Thank you, your Honor.

EXAMINER SEE: Go ahead.

- - -

PABLO A. VEGAS

being previously duly sworn, as prescribed by law, was examined and testified further as follows:

CROSS-EXAMINATION

By Ms. Fleisher:

Q. Mr. Vegas, my name is Madeline Fleisher. I represent the Environmental Law & Policy Center. Thanks for being here.

So you're aware that AEP Ohio has energy efficiency programs and peak-demand reduction programs, correct?

A. Yes.

Q. And you're aware that those programs are designed, at least in part, to achieve compliance with state requirements for energy efficiency and

peak-demand reduction.
A. That's right.
Q. And energy efficiency programs reduce customer energy use, correct?
A. Yes, they do.
Q. Including at peak demand times, correct?
A. They can, yes.
Q. And all else being equal, lowering load at peak demand times will tend to lower market energy and capacity prices, correct?
A. Yes, it can have the effect of lowering demand prices at peak times.
Q. Are you aware that AEP Ohio files a portfolio plan with the Commission for approval containing energy -- proposed energy efficiency and peak-demand reduction times every few years?
A. Yes, I am.
MS. FLEISHER: May we approach, your Honor?
EXAMINER SEE: Yes.
MS. FLEISHER: And if we can have this marked for identification as ELPC Exhibit 1.
EXAMINER SEE: So marked.
(EXHIBIT MARKED FOR IDENTIFICATION.)
MS. FLEISHER: For the record, this is a

document labeled "AEP Ohio Volume 1: 2012 to 2014 Energy Efficiency/Peak Demand Reduction Action Plan."

Q.   (By Ms. Fleisher) Mr. Vegas, do you recognize this document?

A.   Yes, I do.

Q.   Is this AEP Ohio's energy efficiency and peak-demand reduction action plan for the years 2012 through 2014?

A.   Yes, it is.

Q.   Can you turn to Table 1 on page 2, the number at the bottom of the document. I know there's numbers on top as well.

A.   I'm there.

Q.   Does this appear to be an accurate representation of the AEP Ohio energy savings requirements and peak demand savings requirements for 2012 through 2014?

A.   Yes, it does.

Q.   Can you look at the first sentence in the first full paragraph where it says "EE/PDR." Just to be clear, you're aware that that means energy efficiency and peak-demand reduction.

A.   Yes.

Q.   And it says "EE/PDR is an important resource for AEP Ohio and its customers, growing increasingly important as fuel and commodity prices become more volatile and environmental regulation becomes more stringent." Did I read that correctly?

A.   Yes.

Q.   Is it correct that one effective energy savings from efficiency programs is to reduce the volumetric generation and distribution charges paid by customers?

THE WITNESS: Can you repeat that question?

(Record read.)

A.   Yes, that would be correct.

Q.   And are those volumetric charges a source of customer exposure to fuel and commodity price volatility?

A.   Yes, they are.

Q.   And AEP Ohio never considered implementing additional energy efficiency or peak-demand reduction programs to address price volatility in the context of this proposal, correct?

A.   Yes. Actually, AEP Ohio has overachieved against these targets in each of the plan years that we've executed this plan.

MS. FLEISHER: Your Honors, move to strike as nonresponsive. I was asking about the context of the proposal and whether they considered energy efficiency and peak-demand reduction as part of the proposal.

MR. NOURSE: Your Honor, I think the question asked about additional programs, and he said, yeah, we've done more than what the state law requires. I think that's a fair answer.

EXAMINER SEE: Motion to strike is denied.

Q. Just to be clear, did AEP Ohio consider implementing programs over and above what's contained in the portfolio plan in the context of this proposal?

A. Are you asking in the context of the PPA proposal?

Q. Yes. Sorry. That is what I meant.

A. No, it did not.

Q. Can you look at the next sentence following the one I previously read. It says "Estimates of EE/PDR potential are a key input to the integrated resource planning process, which considers the load forecast and both supply-side and demand-side resources." Did I read that correctly?

A. Yes.

Q. Are you generally familiar with AEP's

operations in regulated states?
A. Generally, yes.
Q. Okay. And are you generally familiar with the integrated resource planning process?
A. Yes.
Q. And in some of the states where AEP operates as a wires company is it correct that it is required to consider demand-side resources as part of the integrated resource planning process?
A. Yes, that's part of it.
Q. AEP Ohio is currently engaged in a radio and television ad campaign to promote its energy efficiency programs, correct?
A. Yes, they are.
Q. You're the star of the TV ads, correct?
A. I'm familiar with them.
MR. MICHAEL: Objection.
Q. I've seen them. They're very good.
And those ads are designed, in part, to increase customer participation in energy efficiency programs, correct?
A. Yes, they are.
Q. And hopefully the result of that will be reducing customer energy savings, correct?
A. That's one of the goals of the program,

correct.

Q. And some of those energy savings may occur during peak demand times, correct?

A. Yes, they could.

Q. Are you aware that AEP files annual reports with the Commission reporting on energy savings and peak-demand reductions achieved through its portfolio plan?

A. Yes, I am.

MS. FLEISHER: May we approach?

EXAMINER SEE: Yes.

MS. FLEISHER: If we can have this marked as ELPC Exhibit 2.

EXAMINER SEE: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MS. FLEISHER: And, for the record, this is a cover letter dated May 15th, 2015, regarding a filing in Case No. 15-919-EL-EEC and the attached document is titled "2014 Portfolio Status Report of the Energy Efficiency and Peak Demand Response Programs, Volume I, AEP Ohio."

Q. (By Ms. Fleisher) Mr. Vegas, do you recognize this document? And obviously take a minute to look through it if you need to.

A. Yes, I do.

Q. Is this AEP Ohio's 2014 status report regarding implementation of its energy efficiency and peak-demand reduction program?

A. Yes, it is.

Q. And can you turn to page 7.

A. I'm there.

Q. And in the text below Figure 3 is it correct that this report states that AEP Ohio's 2009 through 2013 program measures resulted in 306.6 megawatts of permanent peak-demand reduction?

A. That's correct, yes.

Q. And, to the best of your knowledge, that's an accurate report of the peak-demand reduction achieved through the program.

A. Yes, it is.

Q. And does the report also state that the 2014 portfolio yielded 79.1 megawatts of permanent peak-demand reductions in 2014?

A. Yes, it does.

Q. Is it correct that those peak-demand reductions would reduce the future peak load in AEP service territory for the life of the measure that achieved the peak reduction?

A. Yes, but also peak demand growth.

Q. Certainly. I'm just speaking not in

terms of net but rather there would be some reduction attributable to these programs, correct?

A. Yes, there would be.

Q. And in deciding to pursue the proposed PPA, did AEP Ohio ever consider whether the risks of using energy efficiency or peak-demand reduction measures to address potential price volatility would be less than the risks of the proposed PPA?

A. Yes, we did, and it was analyzed that there's very significant uncertainty associated with peak demand response performance in the PJM market, and as evidenced by the Supreme Court case that is outstanding today with relation to whether peak-demand response programs can even qualify for capacity performance or capacity payments at all, clearly indicates that the PJM market is not certain how it's going to ever deal with demand response.

So there's really very little foundation to think that you can count on demand response, peak-demand response, in any sustainable or predictable way to be used as a resource to offset capacity. So we looked at that, looked at what's happening in the PJM market, looked at their decision to potentially suspend demand response as a capacity resource, and decided that it would make no sense to try to use that as a product in place of actual physical steel in the ground resources.

Q. What about consideration of energy efficiency programs?

A. Similar. Energy efficiency can't be dispatched, and so at times when you need the supply, when you need resources, energy efficiency cannot be dispatched and cannot be applied to a peak situation. It may or may not be there. It all depends on customer behavior so it's not a dependable resource and it's not something that's considered as a capacity resource.

Q. Are you aware of whether AEP Ohio has implemented or is considering implementing voltage optimization measures on its transmission and distribution grid?

A. It has. It's piloted some measures of VOLT/VAR optimization.

Q. Do those achieve energy efficiencies or achieve energy savings?

A. They have the effect on certain circuits of lowering the peak demand by a couple of percentage points, yes.

Q. And I'm not sure you addressed this in your prior answer. Did you consider -- let's take them one at a time. Did you consider energy efficiency programs as a way to reduce rate volatility or to mitigate potential rate shock?

A. Energy efficiency programs would not have the effect of really mitigating rate volatility. It doesn't have a sizeable enough measure in terms of the gigawatt-hours we're talking about. If you look at just on this report that you pointed me to, Figure 3, you're talking the benchmark of 431 gigawatt-hours for an entire year where AEP's load is over 44,000 gigawatt-hours; less than 1 percent. So its potential to offer any kind of rate mitigation against volatility is virtually zero.

Q. Does AEP Ohio have net metering customers?

A. Yes, it has some net metering customers.

Q. And those customers may be customers who have installed rooftop solar panels or solar panels, correct?

A. They could be, yes.

Q. Can installation of distributed generation like rooftop solar reduce the volumetric generation and distribution charges paid by a customer?

A. If the sun is shining, they can.

Q. And is it correct that a technology like rooftop solar is characterized by up-front capital costs and significantly lower variable costs over the long term?

A. Yes. It's characterized in terms of generation sources. You can -- there's several models, and EEI probably has one of the better ones, that stacks the characterization of costs of rooftop solar against other generation supply. Rooftop solar is the most expensive generation supply on their stack averaging three to four times traditional baseload generation sources.

Q. Just to be clear, for the record, I'm not entirely sure you answered my question as to the up-front capital costs versus much lower variable costs over the long term. Is that a correct characterization?

A. It has very high capital costs in relation to the fairly low energy value that you get from it because of its inconsistent and intermittent nature as a generation supply.

MS. FLEISHER: Your Honors, move to strike as nonresponsive. I didn't ask about the energy value.

MR. NOURSE: I mean, your Honor, she's

asking about the up-front capital costs, and so he's characterizing them as very high relative to the benefits. It's a perfectly responsive answer.

MS. FLEISHER: Your Honors, I asked about costs. Costs are different than energy value.

MR. NOURSE: The question says up-front capital costs versus.

EXAMINER SEE: And the motion to strike is denied.

Q. (By Ms. Fleisher) Are you aware whether AEP Ohio has two CHP projects proposed by customers pending Commission approval in its service territory?

A. Yes, it does have a couple, I believe.

Q. And are those natural gas-fired projects, do you know?

A. I don't know the specifics of each of the projects, how they're structured.

Q. And is it correct that installation of behind-the-meter generation in AEP's service territory can decrease future peak load for the AEP zone?

A. I've not seen any studies that support that. There's so little behind-the-meter generation in AEP Ohio's service territory I don't see how it would be adequate to have any material effect on

AEP's overall zone, AEP Ohio's overall peak zone.

Q. I'm not asking about your predictions for whether it will be installed. I'm just asking if the installation of behind-the-meter generation would have that effect.

A. I believe at its current level of installation I don't believe it would have any effect on our overall peak load.

Q. And if more behind-the-meter generation were installed, would it have the effect of tending to lower peak load in the AEP service territory?

A. It would all depend on how much is installed, where it's installed, what kind of resources are installed. So I couldn't speculate without more specifics.

Q. And AEP files a long-term load forecast with the PUCO every year, correct?

A. Yes, they do.

Q. And among other things that projects peak demand in its service territory, correct?

A. Yes, it does.

Q. Do you ever review those filings?

A. Periodically, yes.

Q. Do you know whether those forecast reports reflect the effect of energy efficiency programs in AEP Ohio's service territory?

A. Without referring to one, I don't know.

MS. FLEISHER: May we approach, your Honor?

EXAMINER SEE: Yes.

MS. FLEISHER: For the record can this be marked as ELPC 3, and it's a cover letter dated June 24th, 2013, regarding the matter of the long-term forecast report of AEP Ohio and related matters, Case No. 13-501-EL-FOR.

EXAMINER SEE: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. (By Ms. Fleisher) Mr. Vegas, do you recognize this as AEP Ohio's 2013 long-term forecast report filing?

A. Yes, it is.

Q. And can you turn to page 3.

A. Yes, I'm there.

Q. And can you just tell me what this table represents.

A. This table represents the seasonal peak loads historically, what they have been, and then a forecast of what they could be for both the summer and the winter, and it breaks down loads that include interruptible and loads that do not include interruptible loads.

Q. Can you turn to page 4, the next page.

A. Yes.

Q. And can you just tell me, I just wasn't sure myself, how this -- why this table differs or how this table differs from the one on the prior page.

MR. NOURSE: Your Honor, I'm just going to object. You know, I was waiting for her to make the connection to the question that introduced the document about whether EE is reflected in the LTFR filings. He said he didn't know, but he would be willing to look at it if -- you know, there's nothing so far that even connects those dots at all.

MS. FLEISHER: Your Honor, might I have a chance to actually ask the question and see if he happens to remember before counsel objects.

MR. NOURSE: There's nothing in this table I can see that relates to the question that introduced this whole document.

EXAMINER SEE: I'll give you a little leeway. Let's see where it goes.

MS. FLEISHER: Certainly, your Honor.

A. The question is do I know what the difference is. No, I don't see what the difference is between these tables.

Q. Okay. You're not aware.

And do you know whether these load forecasts reflect the effect of energy efficiency programs in --

A. I don't know.

Q. Okay. And do you know what the process is for preparing these long-term forecasts?

A. We have an organization internally that does load forecasts for each of the system areas within AEP and we look at their -- we use their input in order to help develop these forecasts for our own areas.

Q. And is that internal group within the Service Corp. or within AEP Ohio?

A. Within the Service Corp.

Q. And in the course of negotiating or considering and negotiating the proposed PPA, did you ever refer to these long-term load forecasts?

A. I didn't personally. I don't know if anybody on the team did or not.

Q. To the best of your knowledge, is this an accurate -- or AEP Ohio's attempt for an accurate forecast for its service territories?

A. I believe it to be, yes.

MS. FLEISHER: And, your Honor, may we approach with one last exhibit?

EXAMINER SEE: Yes.

MS. FLEISHER: If we can have this marked as ELPC Exhibit 4. And, for the record, this is a cover letter and attachment, cover letter dated April 15th, 2015, regarding in the matter of the long-term forecast report of AEP Ohio and related matters, Case No. 15-501-EL-FOR.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. (By Ms. Fleisher) Mr. Vegas, do you recognize this document?

A. Yes, I do.

Q. To the best of your knowledge, is this AEP Ohio's long-term forecast report filed in April 2015, this year?

A. Yes, it is.

Q. And would you have reviewed this before it was filed?

A. I would have, I would have reviewed it.

Q. And would this have been prepared by the same AEP Service Corp. group that you referenced with respect to the 2013 forecast report?

A. Yes, it would have.

Q. And is that group the same as or have any overlap with the group who prepared the fundamentals forecast that Mr. Bletzacker sponsored as part of his testimony?

A. It's a different part of the organization that does load forecasts.

Q. And I think you answered this at least in part but do you know anything about how they prepared that load forecast?

A. Yes. They look at projections of economic growth that are publicly available. They look at -- they gather information from inside the company and from the operating companies as to what the nature of customer activities are in an area so where we see economic development happening, where we see new businesses moving in or businesses shutting down, where we know industries are curtailing or growing.

They use real information based on what's happening within each of our service areas, factor that into macroeconomic and microeconomic indicators that they can get publicly, and then put together what they believe will be a forecast of load for those areas.

Q. And do you have any reason to believe that they wouldn't consider the effect of energy efficiency programs run by AEP Ohio?

A. No. They likely would include energy efficiency achievement plans based on programs that the company is offering and what the state mandates are expecting and would factor that into their forecast as well.

Q. You can go ahead and put those documents aside.

Are you aware, Mr. Vegas, that Ohio has corporate separation requirements?

A. Yes, I am.

Q. And have you received training in those requirements?

A. Yes, I have.

Q. In negotiating the proposed PPA, did AEP Ohio do any analysis as to whether the proposed transaction would be consistent with Ohio's corporate separation requirements?

A. Yes, we did.

Q. Did AEP Ohio analyze whether the results of the proposed PPA could be that indebtedness incurred by the GenCo could be attributed to the distribution utility?

A. I don't understand your question, the indebtedness of the GenCo be attributed to AEP Ohio.

I'm not sure what that means.

Q. Do you know -- I guess did you consider whether debts incurred by the GenCo as part of operation or ownership of the PPA units could result in a claim against the distribution utility?

A. We analyzed that the contract would provide for a payment structure of costs and investments made by the GenCo from AEP Ohio and that that would create a contractual obligation for AEP Ohio to cover those expenses, cover those investments, cover the cost of those investments, which includes debt, includes equity. So all of that was considered when putting together the proposed PPA.

Q. And in the course of negotiating the proposed PPA, did AEP Ohio consider whether the proposed payments to the GenCo would be necessary to support its future financial viability?

MR. NOURSE: I'm sorry. Can I inquire, at the end you say "support its future viability." Who's "it"?

MS. FLEISHER: The GenCo, sorry. To clarify.

THE WITNESS: Would you read back the question, please.

(Record read.)

A. That really wasn't a consideration. The process of the negotiation was focused on how to solve what we saw as a market issue and customer risk issue and set forth a set of criteria which led to the negotiations, the proposed units, the proposed proposal that we have in front of us.

One of those considerations was not supporting the viability of the GenCo as a business. It was around how to solve the problem that we were facing around uneconomic plants that were suffering because of short-term market issues in PJM and the resulting negative impacts that would have on customers over the long term if those units were to shut down prematurely and the negative impact that would have on the economy, the negative impact it would have on all of those factors.

But the viability of the GenCo was not a consideration or primary purpose in any of the negotiations.

Q. Does that mean you just didn't think about that issue in the course of negotiating?

A. It means it wasn't one of the purposes and one of the primary considerations.

Q. Okay. And I guess I'm asking a slightly different question which is did you think about that issue, not was it your purpose, but was it an issue that you --

A. Was it considered by the negotiation team?

Q. Yeah.

A. No, it wasn't.

Q. And can you grab Sierra Club Exhibit 2, I believe is the draft affiliate PPA.

A. Yes. The summary or the detailed one?

Q. The detailed, yeah.

A. I have it.

Q. And can you turn to page 10 and look at the definition of "Operating Work."

A. On page 10, the definition of?

Q. "Operating Work." Apologies.

MR. NOURSE: I'm sorry, counsel, I have that on page 6.

MS. FLEISHER: Am I looking -- sorry, I'm looking at the number of the top of the page. No. 6 at the bottom of the page.

MS. HENRY: It's 10 on the header, and it's 6 on the footer.

MR. NOURSE: Page 6.

MS. FLEISHER: As long as we're all on

the same page.

Q. (By Ms. Fleisher) This definition includes the filing defense and settlement of claims, suits, and causes of action, correct?

A. Yes.

Q. And if you look just one definition up at "Operation and Maintenance Costs," that means all fixed or variable costs, expenses, losses, liabilities, claims, charges, and associated credits incurred directly or indirectly in the performance of operating work. Did I read that correctly?

A. Yes.

Q. And is the effects of these definitions that operation and maintenance costs paid for by AEP Ohio under the proposed PPA would include costs related to the filing, defense, and settlement of claims, suits, and causes of action?

A. Yes, it looks like they would include that.

Q. And is it your understanding that this would require AEP Ohio to cover the costs of any governmental penalties assessed against the GenCo due to legal violations regarding the PPA units?

A. That would be included in the operational and maintenance costs and the operating work, yes.

Q. And are you familiar that some of the PPA units are the subject of an EPA consent decree?

A. Yes.

Q. Okay.

EXAMINER SEE: Ms. Fleisher, could you speak up at the end of your question.

MS. FLEISHER: Sure. Happy to do so. Sorry.

Q. Really I just want to make sure that you're familiar with consent decrees regarding power plants.

A. Generally familiar but Witness McManus is really the expert on the consent decrees and all of our -- the current status in relation to them.

Q. Are you aware that a consent decree resolving an environmental violation could require capital investments to achieve emissions reductions beyond existing legal requirements?

A. I'm not familiar with it at that level of detail, no.

Q. Okay. Let's say that that were the case; hypothetical. Would AEP Ohio be obligated under the proposed PPA to pay the costs of those capital investments?

MR. NOURSE: I just object to an

incomplete hypothetical offered. Are you saying without AEP's -- Ohio's agreement or knowledge that that would occur?

MS. FLEISHER: I guess we can walk through it from the beginning.

Q. (By Ms. Fleisher) Would AEP -- under the proposed PPA would AEP Ohio's agreement be required before the GenCo could enter into a settlement of a legal suit?

A. Well, first, since we're talking about the PPA units specifically, my understanding of the PPA units, that all consent decree requirements have been fulfilled and that they are fully compliant with current EPA requirements and the requirements of current consent decrees.

Q. I guess I wasn't, that was just a reference point for you with respect to, you know, consent decrees and the forms they can take. But I'm just asking --

A. Well, since we're talking about these units, I think it's important to understand the context that these units that are under consent decree are fully compliant with those consent decrees, and I'm not familiar with any outstanding litigation related to them that could result in the hypothetical you're bringing up.

Q. Okay. Nonetheless, let's talk about the hypothetical. Would AEP Ohio's consent be required before -- under the proposed PPA before AEP GenCo could agree to a consent decree resolving a suit?

A. Yes. AEP Ohio would have complete unilateral authority to approve or disapprove investments in order to comply with a consent decree requirement.

Q. And which provision of the PPA is the basis for that statement?

A. On page 13 at the bottom, Section 4.2, "Capital Improvements" is the major heading for that section. The sentence from -- second sentence, "For major or material projects at a wholly owned Seller Facility, Buyer's prior written approval," buyer being AEP Ohio, "and agreement must first be obtained before proceeding with such Capital Improvements Work."

Q. What about a consent decree that didn't involve capital projects, just legal penalties, would AEP Ohio's consent be necessary before the GenCo could enter into such a consent decree?

A. Yes, AEP Ohio would need to -- would have the opportunity to weigh in on whether it is appropriate to enter into that consent decree.

Q. And what provision is the basis for that statement?

A. It's the operating company provision where AEP Ohio gets management voting rights on all decisions related to all operations and maintenance and all capital investments and so operation and maintenance includes operating work which includes settlements of lawsuits and claims.

Q. Okay. And, to be clear, AEP Ohio has one vote on the operating committee?

A. Yes, they have a -- that's right, they have a vote on the operating committee.

Q. So AEP Ohio could be outvoted by the Service Corp. and GenCo?

A. Only if there is a disagreement between the GenCo and AEP Ohio. But it's unlikely that those circumstances are going to come up as both companies are under the same parent and so what would be the best outcome for AEP and its customers would be the primary consideration in making broad decisions like that, which is why the affiliated contract between AEP Ohio and its own known units is a more stable and understood construct versus an independent third party.

MS. FLEISHER: Could you read back that answer.

(Record read.)

MS. FLEISHER: Your Honors, I'd move to strike as nonresponsive everything starting with "but." I just asked whether AEP Ohio could be outvoted, "yes" or "no" question. Certainly if Mr. Nourse wants to redirect, he can get out whatever context he wants for that, but it wasn't responsive to my question.

MR. NOURSE: Your Honor, I disagree. I think when she asks a broad question like could they be outvoted, I think that opens the door for explaining circumstances where that could or couldn't occur so I think that's an efficient responsive answer.

EXAMINER SEE: Motion to strike is granted. Everything after "but" should be stricken.

MS. FLEISHER: Thank you, your Honor.

Q. (By Ms. Fleisher) Let's take the hypothetical where there is a consent decree entered into by AEP GenCo and that involves a capital project. Under the proposed PPA AEP Ohio would be -- would have to pay the costs of that capital project, correct?

A. If AEP Ohio approved of that capital investment, then they would pay for that capital investment.

Q. Plus a return on equity, correct?

A. And the coverage of that cost.

Q. And what if a consent decree that AEP Ohio agreed to or the GenCo did enter into involved an environmental project to reduce pollution off-site in order to settle a Clean Air Act violation, would AEP Ohio be required to pay the costs of that project under the proposed PPA?

MR. NOURSE: Your Honor, I just object to these broad hypotheticals that have no details. You know, he's not a Clean Air Act expert. It's just I don't understand the point. I don't think it's relevant.

MS. FLEISHER: Your Honors, I mean, I'm not intending to ask him about the details of potential environmental violations because, as he said, he's not the witness addressing those issues, but I think he's certainly positioned to speak to his understanding of what costs AEP Ohio and AEP Ohio's customers would pay in the situation where some violation occurred.

MR. NOURSE: I think you have to have a

fair hypothetical, your Honor, that gives some level of detail that makes it relevant or, you know, worth all of our time talking about here.

EXAMINER SEE: And the witness is certainly capable of indicating whether he needs additional detail or what he's basing his answer on if it's not clear from the question.

Go ahead.

MS. FLEISHER: I think I had a pending question. If that could just be reread might be the easiest.

(Record read.)

A. I'm going to read a section of this to help me understand the question.

Q. Certainly. Take your time.

A. Based on my understanding of how Clean Air Acts are employed, and I read the consent decree language here on page 12, Section 3.1, it references that "Any economically imposed cost at the agreement facilities would be covered under this agreement." Your hypothetical talks about situations off-site in another location; that's not directly addressed so I would refer to somebody who is an expert in negotiating consent decrees and the language in that to understand and interpret whether this language applies to that hypothetical which is not explicitly addressed.

I don't know the answer to your question.

Q. Okay. Just to be clear, I think you said Section 3.1. You meant Section 3.10.

A. 3.10, that's correct.

Q. Okay. And that applies to the specific consent decree mentioned in the first sentence of that provision, correct?

A. I believe it does, yes.

Q. And let's talk about that provision for one minute where it says -- I guess to take a step back, so you're aware that that consent decree might require constraining the dispatch of facilities subject to the decree?

A. Yes, that's correct.

Q. And so here it provides that those dispatch limitations will be reasonably economically imposed and applied on a consistent basis between the agreement facilities and other generating of the units -- of the other generating units of the seller that are not part of this agreement. Did I read that correctly?

A. You did.

Q. And "reasonably economically imposed" is not a defined term in the proposed PPA, correct?

A. I would interpret that to mean what it literally says, that it's reasonable, it's economically imposed, and it's consistent between the facilities and the other generating units that the seller owns that are not part of this agreement. It's a prudence judgment I think that is implied by this.

MS. FLEISHER: Your Honor, I'd move to strike. I just asked whether it was a defined term, not about his understanding of it.

MR. NOURSE: Your Honor -- okay. He's explaining what it means. She asked whether it's defined, so he's explaining his understanding of what it means. I think that's responsive.

EXAMINER SEE: I'm going to allow it to stand.

Q. (By Ms. Fleisher) And can we look at Section 4.2 on page 13.

A. Yes.

Q. And I believe you referenced earlier that this applies -- or provides that AEP Ohio's prior written approval and agreement is necessary before the GenCo can proceed with major or material capital projects?

A. That's correct.
Q. And looking at the Definitions section under Article I starting on page 1 --
A. Yes.
Q. -- is major or material listed in that section?
A. No, it is not.
MS. FLEISHER: Give me one minute. I may be done.
Thank you, your Honors. I'm all done with Pablo.
EXAMINER SEE: Is there another counsel present that did not have an opportunity to cross Mr. Vegas yesterday?
(No response.)
EXAMINER SEE: Mr. Beeler.
MR. BEELER: No questions, thanks.
EXAMINER SEE: Okay. And there was some indication yesterday, Ms. Bojko, that you had cross-examination -- additional cross-examination for Mr. Vegas?
MS. BOJKO: Yes, your Honor. Well, it's not additional, it's on the same subject I've already shared with counsel for AEP the question that was asked yesterday in a supporting document that is

marked "Highly Confidential, Competitively Sensitive."

EXAMINER SEE: And you responded yesterday to that, to Ms. Bojko's request, Mr. Nourse?

MR. NOURSE: We agreed that it was -- I believe what she's going to ask is confidential. Is that what you're asking me?

EXAMINER SEE: I understood you to be in disagreement as to whether Ms. Bojko would have an opportunity for additional cross-examination of this witness.

MR. NOURSE: No. Your Honor, I don't want to deprive anyone the opportunity to go into confidential session and ask questions. Obviously we'd rather ensure that the confidential materials remain confidential.

My only point of clarification, I would request that if counsel have those questions at the end of their cross, they don't say "no further questions," they indicate at that time that they have confidential questions to be reserved for the confidential session. Thank you.

EXAMINER SEE: That's true. And the record did not indicate that there was a request by

Ms. Bojko or any other counsel around the table that they had confidential questions that could cause the release of confidential information into the record. The Bench would request that if that is the case, that you indicate so prior to finishing your public cross-examination of this witness so that every opportunity can be made by counsel to get what they want into the record before we close it.

With that, we'll move forward with this witness. I think everybody has had an opportunity to do public cross of Mr. Vegas.

MR. NOURSE: And, your Honor, could we -- I'm sorry to interrupt. Could we take just a brief recess. If Ms. Bojko's questions are the only ones, we might just confer and make sure none of it can be done on the public record.

MS. BOJKO: As I indicated to you yesterday, I felt very well that it could be but because they're marked Confidential we haven't gone through each document to determine whether it truly is confidential or not. The sensitivity that we have is to keep it confidential.

MR. NOURSE: If we could confer, and I will not confer with the witness, we might be able to work that out if we could -- and I don't have a problem with her since she said she wanted to follow up on that, doing that --

EXAMINER SEE: Okay.

MR. NOURSE: -- under these circumstances.

EXAMINER SEE: Ms. Bojko is the only one that has confidential questions for this witness?

Then, okay, let's take a ten-minute break.

MR. NOURSE: Thank you.

MS. BOJKO: Your Honor, for the future is your preference to mark a confidential document on the public record and then go into confidential or just indicate that we have questions for confidential?

EXAMINER SEE: You need to indicate, at least, at the very least indicate that you have questions that may need to be part of the closed record.

MS. BOJKO: Okay. Thank you.

EXAMINER SEE: And we'll handle the marking after.

MS. BOJKO: Thank you, your Honor.

(Recess taken.)

EXAMINER SEE: Let's go back on the

record.

Ms. Bojko.

MS. BOJKO: Thank you, your Honor. In lieu of going into a confidential session, we have reached an agreement with AEP to ask the witness a couple follow-up questions regarding a discovery response that's in the public domain. May I proceed?

EXAMINER SEE: Go ahead.

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FURTHER CROSS-EXAMINATION

By Ms. Bojko:

Q. Mr. Vegas, do you recall a question yesterday asking if AEP Generation is a nonoperating co-owner of Stuart and Zimmer?

A. Yes.

Q. And that is correct, AEP is a nonoperating co-owner; is that right?

A. That's correct.

Q. And is it --

MS. BOJKO: Well, at this time, your Honor, could I have marked as OMAEG Exhibit 5 an interrogatory from IEU INT-4-016?

EXAMINER SEE: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. (By Ms. Bojko) Mr. Vegas, do you have before you what's been marked as OMAEG Exhibit 5?

A. Yes, I do.

Q. Does that appear to be a discovery response from Ohio Power Company titled "IEU-INT-4-016"?

A. Yes, it is.

Q. And, sir, yesterday I asked you if because the AEP Generation is a nonoperating co-owner of Stuart and Zimmer, that AEP Generation does not have access to data about fuel costs, fuel sources, fuel contracts. Do you recall that question?

A. I do.

Q. And your response to me was "yes, they do"; is that correct?

A. Yes, that was my answer.

Q. And do you see now from the response from AEP Ohio that as a nonoperating co-owner of Stuart and Zimmer AEP Generation does not have the information about coal contracts or the supply of coal per the discovery response?

A. What the discovery response states is that we don't have the contracts for Stuart and Zimmer, but as the co-owners, they are made aware of the rationale for the contracts and so this would include the price and why the contracts are being entered into. So when I responded, they do have data around it, they don't have the contracts themselves, but they do have information about those contracts because they have to be notified that contracts have been entered into, and in the same way we provide the same informational information at Conesville where we are the operator-owner, we provide them information when we go into contracts but, similarly, we don't give them the actual contracts.

Q. But the discovery response says "As a nonoperating co-owner, this information is not available for Stuart or Zimmer." Did I read that correctly?

A. Yes. That information is in response to your question which is the long-term contracts. We don't have the long-term contracts, that's correct.

Q. And those long-term contracts then won't be in AEP Ohio's possession; is that correct?

A. That's correct.

MS. BOJKO: Thank you, your Honors. I have no further questions. But thank you for your indulgence in that.

EXAMINER SEE: Redirect, Mr. Nourse?

MR. NOURSE: Yes. Your Honor, could we take a brief recess? I didn't talk to Mr. Vegas on the last one.

EXAMINER SEE: Okay.

MR. NOURSE: Thank you.

(Recess taken.)

EXAMINER SEE: Let's go back on the record.

Redirect, Mr. Nourse?

MR. NOURSE: Thank you, your Honor.

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REDIRECT EXAMINATION

By Mr. Nourse:

Q. Mr. Vegas, I just want to cover two areas with you, and they both relate to Mr. Petricoff's cross-examination yesterday. First of all, do you recall Mr. Petricoff explaining or asking you a series of questions about a hypothetical involving essentially AEP Ohio as the PPA buyer manipulating offers and bids to essentially raise the clearing price in PJM markets to the alleged benefit of AEP Generation Resources with other non-PPA units such as Gavin?

A. I recall the hypothetical and my response explaining the business rationale why that would not make sense for AEP Ohio to employ those strategies.

Q. So in addition to the business reasons you have already explained through your cross-examination yesterday, I wanted to ask you a couple additional follow-up questions. So under that hypothetical, as you understand it, would the action that was suggested on AEP Ohio's part be unlawful?

MR. DARR: Objection.

MR. PETRICOFF: Objection. Calls for a legal conclusion.

Q. Is it your understanding --

MR. NOURSE: I'll rephrase.

EXAMINER SEE: Okay.

Q. Is it your understanding, Mr. Vegas, based on the hypothetical that Mr. Petricoff pervade yesterday that the action that he was imputing to AEP Ohio would be unlawful?

MR. OLIKER: Objection.

MR. DARR: Objection.

MR. OLIKER: Same question.

MR. NOURSE: I asked him if it was his understanding, your Honor.

EXAMINER SEE: Yeah. You can answer the question, Mr. Vegas.

A. My understanding is that federal law prohibits the type of actions that Mr. Petricoff suggested in his hypothetical yesterday.

Q. Thank you.
And would it be your understanding also that the action of AEP Ohio under that hypothetical would violate the code of conduct that AEP follows?
A. Yes, it would violate the code of conduct that's in place between AEP Generation Company and its regulated affiliates.
Q. And further, Mr. Vegas, is it your understanding that that action attributed to AEP Ohio in that hypothetical would violate PJM's bidding rules?
A. Yes, my understanding is that PJM has rules that restrict and prohibit those kinds of collusions to set market prices.
Q. And is it your understanding that the independent market monitor reviews bidding data and conduct such as involved in the hypothetical and enforces the rules in the PJM markets?
A. Yes, they do review bidding strategies and they do enforce the rules and the law in reviewing those strategies.
Q. And further, Mr. Vegas, do you understand that the PUCO staff accesses such bidding information through PJM on behalf of the PUCO?
A. Yes, I'm aware that they get that

information through PJM and also independently review those bidding actions.

Q. Okay. So what are you -- in summary, what do you conclude concerning Mr. Petricoff's hypothetical?

A. I conclude that not only for the business terms which show that there be no rationale or reasonable expectation that the company would want to do that, that the company would never do something that would be illegal, unethical, and prohibited by both federal law and the rules of PJM and so that hypothetical is not plausible.

Q. Thank you.

And then the second area that I wanted to cover was also based on some questions by Mr. Petricoff. And do you recall that he asked you about the PPA being characterized as a hedge or a financial instrument specifically?

A. Yes, I recall that.

Q. And in that context of his question he was asking about the impact that characterization had on FERC's jurisdiction or oversight for the PPA. Do you recall that?

A. I do.

Q. And does the wholesale contract that

we've been referring to as the PPA in this proceeding have any characteristics of a financial instrument relative to the FERC wholesale oversight of the contract?

A. No, it does not. The FERC wholesale contract covers the terms and conditions between AEP Ohio and AEP GenCo under what I will characterize as a traditional often used contract structure for purchases and sales of wholesale power.

The financial instrument aspect that Mr. Petricoff was asking about is related to how the PPA rider on the retail side of the proposal that's in front of the Commission is affected. It has nothing to do with the wholesale contract or the FERC jurisdiction of that wholesale contract.

Q. All right. So just to be clear, when AEP Ohio in this proceeding and in the ESP III proceeding for -- when we refer to the PPA proposal as a financial hedge or also as an insurance policy analogy, does that characterization relate exclusively to the retail effect of the PPA rider?

A. Yes. It only relates to the retail effect of the PPA rider.

MR. NOURSE: Thank you. That's all the questions I had, your Honor.

EXAMINER SEE: Recross? Ms. Henry?

MS. HENRY: No recross.

EXAMINER SEE: Ms. Bojko?

MS. BOJKO: No, thank you, your Honor.

EXAMINER SEE: Mr. Michael?

MR. MICHAEL: None, your Honor.

EXAMINER SEE: Mr. Oliker?

MR. OLIKER: Maybe one or two questions.

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RECROSS-EXAMINATION

By Mr. Oliker:

Q. Mr. Vegas, you referred to a code of conduct. What provision in the code of conduct were you talking about?

A. The provision that does not allow information sharing between AEP Ohio or any regulated affiliate with a competitive unregulated affiliate that would advantage them.

Q. You agree there would not need to be information sharing for AEP Ohio to bid the PPA units into the capacity market at a rate that is higher than zero.

A. No, there would not need to be any information sharing to do that.

Q. Does the code of conduct also prohibit

AEP Ohio from taking actions that benefit its affiliates?

A. Its competitive affiliates?

Q. Yes.

A. Yes, it does.

MR. OLIKER: No questions, your Honor. Thank you, Mr. Vegas.

EXAMINER SEE: Mr. Darr?

MR. DARR: Nothing, your Honor, thank you.

EXAMINER SEE: Mr. Smalz?

MR. SMALZ: Nothing, your Honor.

EXAMINER SEE: Mr. Kurtz?

MR. KURTZ: No, your Honor.

EXAMINER SEE: I'm going to need a little bit of help on this side of the room. Mr. Casto?

MR. CASTO: Correct. No questions.

EXAMINER SEE: Ms.?

MS. HARRIS: Harris. And no, no questions.

MR. AUSTIN: Mr. Austin. No.

EXAMINER SEE: I'm sorry, the gentleman next to you.

MR. FISK: Mr. Fisk. I'm with Sierra Club.

EXAMINER SEE: Mr. Petricoff?

MR. PETRICOFF: Yes, I have a question or two. Thank you, your Honor.

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RECROSS-EXAMINATION

By Mr. Petricoff:

Q. Good morning, Mr. Vegas.

A. Good morning.

Q. This time I have to shout across the room for you. Going back to that last point about the -- the last point having to do with FERC jurisdiction, given the answer that you just gave to the redirect, could the Commission then impose provisions in the PPA that only had to do with the rider PPA between AEP GenCo and Ohio Power?

A. The Commission could propose elements that would govern how the PPA rider works, and they could also make suggestions on terms and conditions that are in the PPA itself as the PPA has not been executed at this point in time and will not be executed until the Commission supports AEP Ohio entering into that PPA.

Q. Okay. The Commission could order, then, in your view, an amendment to the PPA that covers items that have nothing to do with the federal power sale.

A. Yes, I believe they could -- they could request that if the contract were to be deemed prudent by their judgment, that they would suggest changes to the contract in order to make it prudent in their view.

Q. And then the Commission could continue regulating those provisions of the PPA.

A. Through the PPA rider then, which is where their jurisdiction would fall after the contract is executed, through the PPA rider they could then enforce the execution of that contract by AEP Ohio in terms of how AEP Ohio then seeks to use that rider to collect the retail effects of the contract.

Q. I want to make sure we're on the same page. Let me ask it as a hypothetical. Could the Commission require that a provision be added to the PPA between AEP GenCo and AEP Ohio dealing with matters addressing the PPA rider? In the PPA agreement.

A. They could suggest through their order that they would find it prudent if AEP Ohio were to change terms in that contract with AEP GenCo, and AEP Ohio with AEP GenCo could then determine between themselves whether they agree that those suggestions are reasonable and should be affected.

Q. And if that provision was put in, a provision that had to do with the contract relating to the PPA, could the Commission have continuing jurisdiction over that provision of the PPA?

A. No. The Commission does not have any jurisdiction over the contract. I've never said that it does. What I said is that the Commission can suggest terms that they think would be prudent for AEP Ohio to consider and the AEP GenCo to consider before they execute that contract. Once that contract is executed, it is and continues to be a FERC jurisdictional contract. So the Commission's jurisdiction continues to fall over the PPA rider and the retail impacts of that PPA contract.

Q. So your view is that the Commission could not put in amendments in the PPA agreement that address items other than the sale of federal power -- the sale of power in the wholesale market and have continuing jurisdiction over it because it is basically a federal power -- wholesale sale of power. Let me start over.

MR. NOURSE: Your Honor, I object. Okay. You're going to rephrase?

Q. The PPA is primarily for a wholesale sale of power, correct?

A. The PPA contract governs a wholesale sale and purchase of power, correct.

Q. But the Commission could suggest that there be a provision added to the PPA which could address items that were -- did not have to do with the wholesale sale of power; is that correct?

MR. NOURSE: Your Honor, I just object. It's a completely wide-open vague question. It's an undefined hypothetical. It's not clear what he's asking what could be addressed, and I don't think it relates to the questions I asked in redirect.

MR. PETRICOFF: Well, your Honor, the question had to do with the exclusivity of federal authority in this area and the distinction that was being made was whether or not it had to do with the wholesale sale of power. And I'm asking the simple question which is could you add, could the Commission require that provisions be added to the PPA that don't have to do with the wholesale sale of power over which the Commission could continue to have jurisdiction.

MR. NOURSE: Well, again, your Honor, I have no idea what he's asking. I don't understand the question. It's saying can they do something else. It's completely undefined.

EXAMINER SEE: I'm going to allow the witness to answer the question. If he needs additional information to answer it, he can request it.

A. Do you want me to answer that last question that you just put forth to the Bench?

Q. That would be fine, yes.

A. So my answer is there -- once the contract is executed, I think I answered this before, the Commission does not have jurisdiction over the PPA contract. They can make suggestions on terms in that contract that they think it would be prudent for AEP Ohio to adopt.

If we choose to adopt those provisions and agree with that suggestion, as does AEP GenCo as the cosigner, then those become in the terms of the contract that's then governed by FERC. It doesn't give the PUCO jurisdiction over a federal contract. They're just suggesting terms that they think would be prudent for AEP Ohio to include.

MR. PETRICOFF: I have no further questions.

Thank you, Mr. Vegas.

EXAMINER SEE: Miss Fleisher.

MS. FLEISHER: Thank you, your Honors. Just a couple of questions, and I will try to project.

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RECROSS-EXAMINATION

By Ms. Fleisher:

Q. Mr. Vegas, we previously discussed AEP Ohio's energy efficiency and peak-demand reduction programs, correct?

MR. NOURSE: Your Honor, I object. I don't see how this relates to my redirect.

MS. FLEISHER: If I can conduct just a couple questions to lay a foundation, it relates to bidding into the capacity markets which he did ask about.

MR. NOURSE: I see no connection, your Honor.

MS. FLEISHER: Certainly Mr. Vegas had testified that the bidding strategy issues that Mr. Petricoff raised are addressed by existing rules regarding communications between AEP Ohio and its affiliates. Where I'm headed is that AEP Ohio itself does currently bid capacity resources into PJM in the form of demand response and energy efficiency resources, so I think it's perfectly within the scope to make clear that AEP Ohio participates in the capacity market as well as AEP GenCo.

MR. NOURSE: Your Honor, that has nothing to do with the hypothetical that we were discussing on redirect.

EXAMINER SEE: And I would agree with Mr. Nourse. I don't see the connection. Do you have any other cross for this witness -- for this witness, Ms. Fleisher?

Q. (By Ms. Fleisher) Mr. Vegas, the rules you were referring to regarding or restricting communication of bidding strategies between affiliates, those wouldn't apply to AEP Ohio coordinating its bidding strategy amongst its own various capacity resources, correct?

A. No. AEP Ohio can make decisions on its own resources that it's bidding into the market and does not require communications to affiliates to do so.

Q. And I'm going to ask this -- and you can object if you want -- does AEP Ohio currently bid demand response and energy efficiency resources into the PJM capacity market?

MR. NOURSE: Yeah, I object, your Honor.

I mean, the first question related to this goes back to something she could have asked before and didn't.

MS. FLEISHER: Your Honor, he opened the door by asking about, you know, the rules regarding coordination of bidding strategies.

MR. NOURSE: Your Honor, they were limited to the hypothetical, strictly limited to that context.

EXAMINER SEE: The objection is sustained.

MS. FLEISHER: Thank you, your Honor. That's all I have.

EXAMINER SEE: I'm sorry. Gentleman in the corner?

MR. HORTON: Hi.

EXAMINER SEE: Hi. Who do you represent?

MR. HORTON: I'm with Sierra Club.

EXAMINER SEE: Okay. I believe that's all counsel in the room. I believe it is.

MR. MICHAEL: Staff, your Honor.

EXAMINER SEE: Staff.

MR. BEELER: No recross from staff, thank you.

EXAMINER SEE: Thank you. And I believe Mr. Nourse already moved for the admission of

AEP Ohio Exhibit 1, the direct testimony of Mr. Vegas.

MR. NOURSE: Thank you, your Honor, yes.

EXAMINER SEE: Any objections?

(No response.)

EXAMINER SEE: AEP Ohio Exhibit 1 is admitted into the record.

(EXHIBIT ADMITTED INTO EVIDENCE.)

EXAMINER SEE: Mr. Vegas, you may step down.

THE WITNESS: Thank you.

EXAMINER SEE: Sierra Club.

MS. HENRY: Sierra Club would like to move Exhibits 1, 2, and 3 into the record.

EXAMINER SEE: Are there any objections to the admission of Sierra Club Exhibits 1, 2, and 3?

MR. NOURSE: No, your Honor.

EXAMINER SEE: Sierra Club 1, 2, and 3 are admitted into the record.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER SEE: OMAEG.

MS. BOJKO: Thank you, your Honor. At this time OMAEG would like to move Exhibits 1, 2, 3, and 5.

MR. NOURSE: I'm sorry, I'm just looking

for -- yes, okay. No objection, your Honor.

EXAMINER SEE: Okay. OMAEG Exhibits 1, 2, 3, and Exhibit 5 are admitted into the record.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER SEE: OCC?

MR. MICHAEL: Your Honor, OCC would like to move Exhibits 1 through 7 into the record.

EXAMINER SEE: Any objections?

MR. NOURSE: Yes, your Honor. Exhibits 3, 4, and 5, were fairly voluminous, and 6, I'm sorry, 3, 4, 5, 6, but there were very limited questions, I think they related to primarily two pages. I would ask that OCC make excerpt exhibits for those and submit excerpts for just the pages that were asked about, and the company would have no objection to those modified exhibits being admitted.

EXAMINER SEE: Mr. Michael.

MR. MICHAEL: Your Honor, the entire document was identified. The witness testified that the witness was familiar with the documents, had seen the documents. He asked [verbatim] all questions related to the documents. Other parties asked the witness questions about other pages of the documents. In the witness's responses to other questions he voluntarily referred to the documents. I appreciate

Mr. Nourse's fig leaf, as it were, but it was quite clear that the documents were authenticated. There was a foundation and the witness was familiar with them, so I believe it's appropriate for the Commission in the interest of a full and complete record to allow the documents in their entirety into the record. Thank you.

MR. NOURSE: Well, your Honor -- go ahead.

MR. PRITCHARD: I was just going to indicate that IEU-Ohio would join in OCC's representation. Counsel Mr. Darr did ask questions other than the pages that OCC had asked. We had asked Mr. Vegas about the return on equity in one of the documents.

MR. OLIKER: As did IGS.

MR. NOURSE: Your Honor, you'll note I didn't object to Exhibit 7. That's the one that IEU asked about and that's the one there were multiple pages. The other exhibits Mr. Michael went through and addressed two pages in each of them. You know, there's no relevance of the rest of the material and, you know, there weren't any questions about it. So dumping large documents into the record I think is inappropriate.

I don't know what the comment about a fig leaf was or whether I can respond to that but I'll let it pass.

MR. OLIKER: Could I add another layer to that? This is the first witness in this case. These are AEP investor presentations. There is a very good chance these documents are going to be referred to by other witnesses. For example, Mr. Vegas said please talk about return on equity and debt rate issues with Witness Hawkins. So if we now take a smaller part of this document and then we have to re-mark the entire document again, we're just going to be duplicating our efforts throughout this case.

MR. MICHAEL: And, your Honor, just to emphasize, the witness himself in response to other questions would pick up the documents and refer to them and hold them up, so --

MS. BOJKO: I think in response to Mr. Smalz's questions Mr. Vegas referenced one or two of the documents. OMAEG would join in, support the movement of these documents into the record.

MS. HENRY: And, your Honor, I would also note that if you only include an excerpt, sometimes you may be accused of cherrypicking certain data from it, whereas, if you have the entire document, you're not taking it out of context, you'll have the whole picture, so that will preclude those arguments later.

MR. NOURSE: Well, your Honor, again, I think the fair answer is it depends. Obviously, people can argue about whether it's appropriate to put in a whole document or an excerpt in a given particular circumstance, and I don't think the generalities help move this along, but in this case with these documents there are only two pages and they were very narrowly addressed and, you know, none of the rest of the document was addressed by cross-examination.

MS. FLEISHER: Your Honor, unless it's unnecessary I can think of one more thing which is, as you know, we have an environmental witness coming up. These documents do contain sections regarding environmental compliance and risks so it just supports Mr. Oliker's point that these may be relevant to other witnesses and creates an awkward situation to admit part of the document.

EXAMINER SEE: Taking the parties into account, I'm going to admit OCC Exhibits 1, 2, 3, 4, 5, 6, and 7 in their entirety.

MR. MICHAEL: Thank you, your Honor.

MR. OLIKER: Thank you, your Honor.

MS. BOJKO: Thank you.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER SEE: Environmental Law and Policy Center.

MS. FLEISHER: Yes, your Honor, I'd like to move in ELPC Exhibits 1, 2, 3, and 4.

EXAMINER SEE: Any objections to the admission of ELPC Exhibits 1 through 4?

MR. NOURSE: No, your Honor. In this case I'd like to note that there was other information in the document we'd like to cite on brief so I'm fine with the whole document, but I will add that we do like to save paper whenever that's possible; I don't know about the other end of the table. Thank you.

MS. HENRY: I think ELPC's policy was a full draft for opposing counsel and excerpts for the other parties.

MS. BOJKO: Yes.

MS. HENRY: Just to note that.

EXAMINER SEE: ELPC Exhibits 1 through 4 are admitted into the record.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER PARROT: Mr. Nourse, before we proceed with the next witness I believe you had a statement to make on the record about Dr. Pearce's deposition.

MR. NOURSE: Thank you, your Honor. Yes. We had distributed early this morning the errata to Dr. Pearce's deposition that was taken late last week, and I believe if anyone's present who doesn't have one, we can give you an extra copy now.

EXAMINER PARROT: Mr. Pritchard, did you have a statement?

MR. PRITCHARD: Yes, just a clarification on ELPC's exhibits. It was just indicated that for the parties other than the Bench and AEP we were only provided an excerpt of the relevant pages, and my question is has just the -- if the entire document has been admitted as evidence or not.

EXAMINER SEE: Yes.

MS. FLEISHER: Yeah, and just to be clear, those are all publicly filed in Commission dockets, but I'm also happy to e-mail copies to anyone who would want to. Just send me an e-mail and I'll get back to you.

EXAMINER PARROT: Thank you, Ms. Fleisher.

Company's next witness, please.

MR. NOURSE: Thank you, your Honor. We

call Dr. Kelly D. Pearce to the stand.

MS. HENRY: Your Honor, can we take just a five-minute recess for a moment just to confer with other intervenors before we begin? It will make things more efficient with exhibits. Is that possible?

EXAMINER PARROT: Quickly, please.

MS. HENRY: Thank you.

EXAMINER PARROT: A few minutes. Let's go.

(Recess taken.)

EXAMINER PARROT: Let's go back on the record.

Mr. Nourse.

MR. NOURSE: Thank you, your Honor. Was the witness already sworn?

EXAMINER PARROT: Not yet, I just wanted to make sure you're ready.

Please raise your right hand.

(Witness sworn.)

EXAMINER PARROT: Please have a seat.

\- - -

KELLY D. PEARCE

being first duly sworn, as prescribed by law, was examined and testified as follows:

DIRECT EXAMINATION

By Mr. Nourse:

Q. Good morning, Dr. Pearce.

A. Good morning.

Q. What's your position with AEP?

A. I am the director of Contracts and Analysis within Regulatory Services.

Q. Did you file testimony in this case?

A. Yes, I did.

MR. NOURSE: Your Honor, I previously marked as AEP Ohio Exhibit No. 2 and handed it to the reporter.

EXAMINER PARROT: The exhibit is marked as AEP Exhibit No. 2.

MR. NOURSE: Thank you.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. Dr. Pearce, do you have what's been marked as AEP Ohio Exhibit No. 2?

A. I do.

Q. And was this document prepared by you or under your direction?

A. It was.

Q. Okay. And next I want to ask you about changes, additions, and corrections, and I'd like to caveat that since the time you filed this testimony May 15th the FERC has issued their capacity performance ruling, correct?

A. Yes.

Q. So setting aside any updates that you might entertain for that purpose do you have any other additional corrections or changes?

A. I have two. On page 23, line 7, the sentence that starts "While 15.4" should read "15.2 gigawatt-hours." And at the end of that same sentence it says "on-line by June 2015." That should be '16."

Q. And -- I'm sorry. Were you finished?

A. My second change is --

Q. Well, let's stay with the first change for a second. And I apologize, I thought you were going to change line 7 where it says "gas-fired and renewable" to say "gas-fired, renewable, and other generation."

A. No, 15.2 is gas-fired and renewable.

Q. Okay. All right.

So can you read that sentence as you amended it just to make the record clear?

A. Yes. "While 15.2 gigawatts of new gas-fired and renewable generation cleared RPM for delivery years 2013/14 through 2016/17, only 9.2 is expected to be on-line by June 2016."

Q. Thank you. And the footnotes in that sentence remain the same, correct?

A. Yes.

Q. Dr. Pearce, can you take us to your second change?

A. Certainly. On page 26, the sentence that starts on line 14, "Second, PJM had a genuine concern about the unit performance in the winter of 2014, when forced outages" -- I would like to add the words "of gas units reached" and strike "nearly 40%" and insert instead "approximately 47% of all outages."

MR. OLIKER: Could I have the sentence read completely.

THE WITNESS: Yes.

Q. I was just going to ask you to do that. Go ahead.

A. "Second, PJM had a genuine concern about the unit performance in the winter of 2014, when forced outages of gas units reached approximately 47% of all outages and gas units had challenges obtaining gas supplies on a regular basis."

Q. Thank you, Dr. Pearce. And with those changes and the caveat I mentioned earlier, would your answers to the questions in Exhibit No. 2 be the same this morning?

A. Yes.

MR. NOURSE: Thank you. Your Honor, I'd move for the admission of AEP Ohio Exhibit No. 2, subject to cross-examination.

EXAMINER PARROT: Thank you, Mr. Nourse.

Sierra Club.

MR. BZDOK: Thank you.

- - -

CROSS-EXAMINATION

By Mr. Bzdok:

Q. Good morning, Dr. Pearce.

A. Good morning.

Q. In your direct testimony you present the major terms of the affiliate PPA between AEPGR and AEP Ohio that is the subject of this case; is that correct?

A. Yes.

Q. And you sponsored a summary of those terms as Exhibit KDP-1; is that correct?

A. Yes.

Q. And the actual PPA was admitted today as

Sierra Club Exhibit 2. Were you in the room when that occurred?

A. I believe I was.

Q. Do you have a copy of that actual PPA with you?

A. Yes.

Q. Okay.

MR. DARR: For the record, can we -- you referred to that as the actual PPA. Are you referring to the draft?

MR. BZDOK: Yes. For the record, when I'm referring to the PPA as the actual PPA, my intent was to distinguish it from the term sheet.

Q. But we could call that the draft affiliate PPA or just the PPA for purposes of your testimony; is that fair?

MR. NOURSE: Your Honor, I think the company has referred to it as the proposed PPA, not necessarily the draft PPA.

MR. BZDOK: I'm happy to call this whatever --

EXAMINER PARROT: I'm not going to impose a requirement as to what you call it so let's go, please.

A. Proposed PPA.

Q. That works for me if it works for you.

A. Sure.

Q. Okay. And so you do have a copy of the proposed PPA in front of you; is that correct?

A. Yes.

Q. Under Section 3.1 of the proposed PPA the -- take a moment. Are you there?

A. Yes.

Q. The buyer, AEP Ohio, is producing all capacity, energy, and ancillary services produced by the PPA units; is that correct?

THE WITNESS: Could you read the question.

(Record read.)

MR. NOURSE: I'd just object to the question, the form of the question. You're asking if they produced --

MR. BZDOK: I thought I said "purchasing" but perhaps --

A. I thought you said "produced," but they are purchasing, the buyer is purchasing, not producing.

Q. All capacity, energy, and ancillary services from the PPA units; is that correct?

A. That's correct.

Q. And under Section 3.2 that obligation of seller to provide energy and ancillary services is unit contingent; is that correct?

A. That is correct.

Q. And that means that the -- when the units are on outage, among other things, the seller has no obligation to deliver any energy or any ancillary services to the buyer; is that correct?

A. Not to deliver those per se. As far as what revenues they are still producing depending on the outage, they could still be recognizing capacity revenues, ancillary service revenues, and obviously they have the requirements to work on the units with good commercial and prudent utility practices described under 4.1 to get the units back on line in a -- as reasonably fast as possible.

Q. Sure. So I'm looking at page 8 of the PPA, the proposed PPA, excuse me --

A. Yes.

Q. -- the definition of unit contingent. And that would indicate that the buyers -- I'm sorry, the seller's obligation to provide energy and ancillary services is excused to the extent the facility is on outage; is that correct?

A. That is correct.

Q. Okay. So in sum, the buyer's obligated to pay all of the costs of all of the energy and ancillary services that are provided by the units when they are running and then, when they are on outage, the seller has no obligation to deliver energy or ancillary services to the buyer; is that correct?

A. The units are capable of -- incapable of providing those. As far as no obligation, they have the obligation to try to get the units back up and running in as fast a time frame to continue to provide those assets.

Q. Sure. But no obligation to provide energy or ancillary services.

A. When they're down.

Q. You're agreeing with me?

A. Yes.

Q. And nor is the seller required to provide any makeup energy or other compensation to the buyer when the units are on outage; is that correct?

A. That is correct.

Q. Under Section 5.5 of the PPA, proposed PPA, excuse me, the capacity payments that AEP Ohio will make to AEPGR include a weighted average cost of capital; is that correct?

A. Yes.

Q. And that weighted average cost of capital is multiplied by the net book value of the facilities and divided by 12 to determine the capacity payment; is that correct?

A. Yes.

Q. And that weighted average cost of capital is based on the seller's long-term debt rate and the seller's return on equity weighted according to the percentage of debt and equity; is that correct?

A. Yes.

Q. And the weighted average cost of capital in the PPA rider projections that you prepared is assumed to stay the same over the ten years of the projections; is that correct?

A. Yes.

Q. Under this agreement there is no guarantee that the weighted average cost of capital will in fact stay the same over the ten-year period, is there?

A. No, it will go up and down as the debt of the company and the corporate bond index, Moody's corporate bond index, goes up or down.

Q. So under this agreement AEPGR has the right to update its long-term debt rate with really any frequency at its reasonable discretion; is that true?

A. Yes.

Q. And the ROE is going to be adjusted each year if applicable; is that true?

A. That is true.

Q. Under this agreement all of the risks associated with an increase in the weighted average cost of capital is borne by the customers of AEP Ohio; is that correct?

A. Based on the provision and the formulaic way that the provision is laid out, customers would bear the cost of an increase in the weighted average cost of capital just as they would get the benefit of a reduced weighted average cost of capital.

Q. So you're agreeing with me?

A. I'm agreeing that it is -- it could go up or down, and if it goes up, customers would bear that risk.

Q. Article 5.7(C) of the proposed PPA requires AEP Ohio to pay the full undepreciated net book value of a unit plus its retirement and post-retirement costs to AEPGR if the unit is retired early; is that correct?

A. Sorry. You're looking at 5.7 what?

Q. Let me just ask you. Let me rephrase the question.

Article 5.7(C) requires, in the event of an early termination of this agreement, AEP Ohio to pay the full undepreciated net book value of the PPA units plus their retirement and post-retirement costs; is that correct?

THE WITNESS: Could you read back the question.

(Record read.)

A. Yes, it is.

Q. And that is also true if one or more units is removed from this agreement as to those units; is that correct?

A. Yes. They would -- that's the first part of a two-step process. The units would be removed and there would be that requirement for payment. As section (C) goes on to say under 5.7, that the buyer at their sole discretion can ask for a fair market valuation of the units and, if that comes to pass such that there's additional revenues offsetting that payment, then they would only be responsible for the difference if there is any.

Q. Now, the buyer would pay for that fair market valuation; is that correct?

A. For the valuation, yes, they would.

Q. And AEPGR would conduct the fair market valuation and provide it to the buyer; is that correct?

A. As said, it would be developed by the seller through use of an independent appraisal or other competitive solicitation conducted by seller, so it would be by an independent appraiser or other competitive solicitation, it would be conducted by the seller.

Q. Sure. So the language you're looking at, is that the sentence that says "At Buyer's request and at Buyer's sole expense, the fair market value of the Unit(s) or Facilities, including all of the associated liabilities thereto will be determined by Seller, such values may be developed by Seller through the use of an independent appraisal or other competitive solicitation conducted by Seller to obtain bids to purchase the Unit(s) or Generating Facilities"?

A. That is correct.

Q. So the use of the word "may" would suggest that is an option that AEPGR has but not a strict requirement. Would you agree?

A. Yes.

Q. And this provision you have referred to, in discussions we have had in the past, as an exit fee. Does that sound familiar?
A. I'm familiar with the term "exit fee." I don't recall the specifics of the discussion.
Q. Sure.
MR. BZDOK: May I approach the witness?
EXAMINER PARROT: You may.
Q. Dr. Pearce, I and other parties took your deposition last Thursday; is that correct?
A. Yes.
Q. I want to refer you to page 19. And I'm specifically looking at your answer at starting on line 2. Take a moment and review that answer.
A. Certainly.
Q. And really any other portion of this page you'd like. And then let me know when you're ready.
A. Okay.
Q. And then, again, in the next answer specifically in the context of line 20.
A. Yes.
Q. Does that refresh your memory, sir, as to whether or not you have referred to 5.7(C) as an exit fee provision?
A. Yes, I did.

Q. And you also indicated -- well, you also acknowledged that that exit fee would be a factor that would weigh against removing a unit or units from the PPA in any analysis by AEP Ohio of their continued economics; is that correct?

A. I believe my -- my intent on the description is it would be a consideration and the intent of this section (C) was such that as we near the actual useful life of the units as described under Section 2.4 of the early termination rights, in the event that the parties are unable to reach agreement upon the retirement date of a unit or facility, the parties may mutually agree to remove such unit or facility from this agreement subject to buyer complying with its obligations under Article V.

So by that, if you get close to the end of a unit, you can have honest differences of opinion, if there's additional capital required for continuing a unit into service or go ahead and decide, no, let's go ahead and take this unit out of service, that the provision would allow you to remove that unit and get recovery potentially of the fair market value and then the buyer could agree to meet that value and effectively continue to operate the unit.

Q. So is it fair to say that if you are AEP Ohio and you are evaluating whether or not to continue to maintain one or more of these units in the agreement in light of a projected lack of economics of the unit, you would have to weigh that continued economic loss associated with the unit against the cost of getting out of the unit under the exit fee, correct?

A. You would have to weigh both of those along with the forecasts of the revenues that you might get if you continued to operate the unit and look at the P&L in that situation.

Q. The exit fee could be a reason to stay in the unit even if it is projected to be uneconomic for some period of time into the future; would you agree?

A. It could be an incentive for the buyer to assess whether they want to hold on to the unit for the near term, see if the market improves. It could be an incentive for them to decide to keep the unit for a little while longer.

Q. You're agreeing with me.

A. I'm agreeing that it would be a factor that they would consider.

Q. Do you know as a ballpark matter what the projection is for retirement and post-retirement

costs for the proposed PPA units collectively?
A. For the legal obligations, those are already incorporated in the form of asset retirement obligations so those are on the books. I don't exactly know off the top of my head the amount. I don't believe, as far as the nonlegal obligations, those retirement costs -- I do not know those values.
Q. Does -- some of the exit fee for a unit or for the units as a whole is a figure that is unknown at this time; do you agree?
A. Some of the exit fee? The exit fee would be --
Q. Sir, I think you misheard my question by your response.
MR. BZDOK: And so I would ask maybe that it be reread.
A. Okay.
(Record read.)
MR. NOURSE: I object to the form of the question.
Q. Sure. Let me rephrase. So the exit fee for any individual unit is unknown at this time; is that correct?
A. Okay. While I recognize I characterize it as analogous to an exit fee, what they're going to

pay is the remaining net book value plus an estimate of the retirement obligations which we have I believe committed that we would provide those numbers as we get close to plant retirements.

So I will agree with you that the totality of that number is not known right now, but you can have a forecast today, because we've given the basically depreciation values, capital, forecast life of the plant, it's what that net book value could be in the future so there's one component you don't know today which is the retirement costs. You would know -- you would have a general idea of what the costs could be.

Q. Just so the record is crystal clear, when you say retirement costs, do you mean retirement and post-retirement costs in the answer you just gave?

A. The retirement-related costs.

Q. Are you agreeing with me?

A. I'm agreeing when you say post-retirement costs, the costs related to the retirement of the unit, whether they happen up to the date that the unit ends commercial operation or if there's some of that work, which would likely continue, past the retirement date of the unit.

Q. Okay. I want to talk a little bit about your forecasted -- your forecast of PPA rider revenues and costs if we may. You prepared a forecast of PPA rider revenues and costs in connection with the company's October 2014 application; is that correct?

A. Yes.

Q. You also prepared an updated forecast of PPA rider revenues and costs in connection with the company's May 2015 amended application; is that correct?

A. Certain aspects were updated, yes.

Q. You in preparing those forecasts of PPA rider revenue and costs, revenues and costs, you relied in part upon a fundamentals forecast prepared by Mr. Bletzacker; is that correct?

A. Yes.

Q. And specifically you used forecast energy market prices and capacity prices from the fundamentals forecast as inputs to your PPA rider revenue and cost forecasts; is that correct?

A. His market prices and his capacity prices -- excuse me, energy prices and capacity prices, that is correct.

Q. And you're aware that the fundamentals forecast for Mr. Bletzacker and his group is prepared periodically and made available ubiquitously throughout the company; is that correct?

A. That is correct.

Q. You used a version of that forecast dating from October 2013; is that correct?

A. Yes.

Q. The fundamentals forecast.

A. That is correct.

Q. Okay.

MR. BZDOK: May I approach?

EXAMINER PARROT: You may.

MR. BZDOK: I'm going to ask that this document be marked as proposed Sierra Club Exhibit 4.

(EXHIBIT MARKED FOR IDENTIFICATION.)

THE COURT: Before you pass out all the copies, the Bench needs two copies.

MR. BZDOK: I apologize. I am new here.

EXAMINER SEE: Thank you.

EXAMINER PARROT: Could you identify the document, please, Mr. Bzdok?

MR. BZDOK: Yes, thank you.

Q. So the document I've just handed you is a cover sheet answer to Ohio Consumers' Counsel discovery request supplemental 5th set, request for production of documents RPD-5-055 including a response and also a supplemental response dated September 1 of 2015; is that correct?

A. Yes.

Q. And this also has a stamp indicating this was Exhibit 2 to your deposition last Thursday; is that correct?

A. Oh, yes.

Q. And so this is the annual sheet from the 2013 fundamentals forecast. Do you agree?

A. It appears to be so, yes.

Q. And this was the 2014 -- or, sorry, 2013 fundamentals forecast which you used in the manner that we have just been discussing; is that correct?

A. That's correct.

Q. Okay. Now, you used the energy market prices from this fundamentals forecast without modification in your PPA rider forecast; is that correct?

A. Well, these are the annualized numbers. What we received was we applied scalars, then, to recognize the hour-to-hour and the monthly variation of the values -- against these values.

Q. Sure. So you scaled them but you did not directionally adjust them up or down; is that true?

A. That's true.

Q. And for the capacity prices from this forecast, you did those in two different steps; is that correct?

A. Explain to me the two steps you're talking.

Q. Sure. So you applied capacity price estimates resulting from PJM auction clearing prices up through the 2017-2018 planning year for capacity revenues in your forecast through that time period; is that correct?

A. Yes.

Q. And then after that time period, you applied the capacity prices produced by the fundamentals forecast; is that true?

A. That's correct.

Q. Now, you updated the PPA rider forecast for that May 15, 2015, filing in a couple of respects; is that correct?

A. Yes.

Q. And you did that work over a two-month period leading up to mid-May of 2015 when the amended application was filed; is that correct?

A. Approximately, yes.

MR. BZDOK: May I approach?

EXAMINER PARROT: You may.

MR. BZDOK: I'm going to ask that another document be marked as Sierra Club proposed Exhibit 5 which I am going to identify the same sheet from the supplemental response to the prior discovery request.

EXAMINER PARROT: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MR. BZDOK: And I will also note for the record that this document is marked as Deposition Exhibit 3 from Dr. Pearce's deposition last Thursday.

Q. Sir, is this document familiar to you as the document we reviewed in your deposition last Thursday?

A. It appears to be.

Q. And this is the annual prices sheet from a forecast prepared by Mr. Bletzacker and his group in -- at some point in 2015; is that true?

A. In the -- it's my understanding around the July time frame, yes.

Q. July time frame of 2015, is that what --

A. Yes.

Q. And so if I refer to this document as the 2015 fundamentals forecast, you'll understand what I mean?

A. I will.

Q. Now, you first reviewed this document as part of a review process related to a response to discovery that provided it to the parties; is that correct?

A. Yes.

Q. And based on the cover sheet of Sierra Club Exhibit 4, the prior document, that supplemental response to discovery that you reviewed the 2015 forecast in connection with was provided to the parties on September 1st of 2015; is that correct?

A. Yes.

Q. So your review of the 2015 fundamentals forecast would have occurred sometime prior to September 1 of 2015; is that correct?

A. Sometime prior to that, yes.

Q. And you believe it was approximately close in time to September 1?

A. Yes.

Q. So sometime in August?

A. That's fair.

Q. But you don't remember exactly when.

A. No. We get so many data requests in and you're -- through the required time to fill them so I don't remember exactly when.

Q. Now, prior to reviewing the actual 2015 fundamentals forecast document you were aware that

Mr. Bletzacker and his group were working on an update to their fundamentals forecast; is that correct?

A. I believe I understood that they were updating their forecast at some point, yes.

Q. And do you remember when it was that that first came to your attention?

A. I believe July. It was actually -- I think I may not have heard about it till it was completed so I don't remember exactly when. Perhaps June, in which case they were still working on it, but sometime -- sometime over the summer.

Q. On or before it was completed; is that correct?

A. On or before it was completed? As far as I was made aware that they were working on one. I don't recall specifically when I would have been made aware of that. It's just not the type of thing I would have necessarily committed to memory until it was completed.

Q. To the best of your recollection, based on these time benchmarks we've been discussing, it was June or early-July; is that fair?

A. That sounds like it could have been in that time frame.

Q. Could it have been earlier?

A. It could have been in the sense that in working through the spring on the forecast -- I have discussions with Karl on a regular basis. If he had mentioned working on looking at -- working on something, I just don't recall or I would have committed to memory that they were. What I do know is that they did not have any new forecast as this -- up to and after the date that this May 15th filing was made.

Q. I want to talk to you about capacity prices a little bit. Your understanding of the capacity prices you used from the fundamentals forecast in your PPA rider revenue and cost forecast is that the fundamental forecast capacity prices represent the difference between the overall revenue requirements projected for that generation and the projected energy revenue that those units will receive; is that correct?

THE WITNESS: In the -- could you read the question back?

(Record read.)

A. Understand the difference between the revenue requirement and the revenues received from the energy market, that difference, yes. I understand to a certain extent that's how the Aurora model works. I'll refer you to company Witness Bletzacker to provide you the detail on how that process works.

Q. Sure. But in terms of your understanding having prepared the PPA rider forecast, that's a true statement?

A. The PPA, the proposed PPA revenues values, it's what I just said in my previous response, yes. That's my level of understanding.

Q. Thank you.

And you also acknowledge that for the time period where you used PJM clearing prices to set capacity revenues, those prices are lower than the capacity prices projected in the fundamentals forecast for those years; is that correct?

A. I believe they may be.

Q. Mr. Pearce, just to refresh your memory and make sure that you're solid on that answer, I would ask you to look at pages 62 and 63 of your deposition, the bottom of page 62 and the top of page 63. Take a moment to review that question and answer and let me know if you're solid on your answer.

A. Yes. And I would say what I just said is consistent with that, that is a true statement, I had used certain prices and because I had used the PJM prices I hadn't paid too much attention to, frankly, what the capacity forecasts were for the PJM markets that were already known. I just took those without necessarily comparing them because that's what I was going to use anyway.

Q. And the time period in which we are discussing for this comparison is -- goes through the 2018-2019 planning year; is that correct?

A. Are you talking about from my May 15 filing?

Q. No. I'm talking about your knowledge based on all of the work you've done to date.

A. I don't understand the question. I apologize.

Q. Okay. I'm going to move on. We'll come back to that in another context.

And actual operation capacity revenues for the PPA units will be based on PJM auction clearing prices, correct?

A. Correct.

Q. As it currently stands for the period of time for which data is available, actual capacity -- there is a gap between capacity revenues based on PJM clearing prices and capacity prices and revenues

based on the method used in the fundamental forecast; is that correct?
A. Are you talking about capacity and energy together or just capacity?
Q. Capacity.
A. Just capacity? To the extent that the fundamentals is higher than the capacity to date, yes, I think we just established that, that the fundamentals appeared to be higher than capacity prices.
Q. And you don't know at what point in the future that gap will close, correct?
A. I would lean on Company Witness Bletzacker to make his forecast of where the fundamentals forecast is going and then the clearing price of the PJM capacity prices is determined every year by the auction and I don't know if anybody in the room could say with certainty and say, well, for the next, for example, '19-'20 auction whether those prices would clear above or below the fundamentals forecast.
Q. Just, for the record, when you say '19-'20 auction, you mean 2019-2020?
A. Yes.
Q. I'd ask you just to refresh your memory

to look at page 64 of your deposition. And I'm specifically looking at your answer that starts on page line -- I'm sorry, on line 9 and goes to line 20.

A. Okay.

Q. You indicated that at that time that the time frame for which this gap might close would be, quote, "speculative on virtually anybody's part to some degree"; is that correct?

A. Yes.

Q. And is that still your opinion?

A. As I just said, I'm not sure anybody can -- knows right now what the '19-'20 PJM auction is going to clear at so I would defer to Company Witness Bletzacker's forecast as the best approximation of forward values.

Q. Until the gap does close between these two capacity pricing methods, under this agreement AEP Ohio customers would be on the hook for the amount by which capacity price projections in the fundamentals forecast overstate capacity prices actually resulting from the PJM auctions; is that correct?

A. It will reduce the revenues to the extent that the fundamental price forecast that we've included are greater than what the capacity prices will end up in the PJM market. Alternatively, if the PJM capacity markets wind up higher than the fundamentals forecast, and there's no reason that they couldn't, then our same customers will get the benefit of those additional revenues beyond what we forecasted.

Q. The prediction that at some point the PJM prices would be higher is essentially the same type of speculation that we referred to earlier; would you agree with that?

A. Yeah, it's the same type of speculation of speculating whether they'll be lower or higher. That's why I think the fundamentals are the strongest for the auctions that have not occurred yet.

Q. And the risk is any such speculation is borne by the customer, would you agree?

A. Yes, they would bear the revenues, whatever level of revenues those are.

Q. I want to talk a little about the asserted PPA rider volatility reduction benefit. So I want to refer to your direct testimony at page 16 and also your Table 2 which I believe may be on the next page.

A. Okay.

Q. No, it's also on page 16.

Now, this is a demonstration by you of the benefit you assert the PPA rider would have on reducing energy price volatility; is that correct?

A. Yes.

Q. And Table 2 compares the average annual round-the-clock price at a 5 percent increase in load with the -- and the average annual round-the-clock energy market price at a 5 percent decrease in load, both with and without the PPA rider in effect; is that correct?

A. Yes.

Q. And this is based on the projections in Mr. Bletzacker's fundamentals forecast about energy market prices and the projections in your PPA rider revenue and cost forecast; is that correct?

A. That's correct.

Q. And specifically as to energy market prices, this is based on the 2013 fundamentals forecast energy market prices; is that correct?

A. Yes. The October 2013 forecast, yes.

Q. Now, the reduction in volatility that the PPA rider is being asserted to provide is a reduction in year-to-year volatility as the proposed PPA rider mechanism would operate; is that correct?

A. Yes.

Q. The PPA -- sorry, I thought I heard a voice. The PPA rider is not intended to provide a hedge against hourly volatility, correct?

A. That is correct.

Q. And it is not intended to provide a hedge against daily volatility, correct?

A. Not to my knowledge. I will refer you to Company Witness Allen to talk about the PPA rider itself.

Q. And, to your knowledge, based on the demonstration that you've made in Table 2, the PPA rider is not providing a hedge against monthly volatility; is that correct?

A. When you start getting into monthly, as I do understand the PPA rider while we propose an annual adjustment, I think as presented in the witness testimony of Company Witness Allen, we open it up to a quarterly adjustment. So when you start getting up into monthly, I believe that can aggregate up into a quarterly value. So, yes, I think you could reflect that some limited amount of monthly volatility into a quarterly adjustment if the Commission decides to adjust the PPA rider quarterly.

Q. I'm going to ask you to look at page 81 of your deposition and specifically the question and answer that begins on line 16.

A. You mean on page 81?

Q. Yes, I am.

A. Okay. Line 16.

Q. In that answer you indicate that --

A. I'm sorry. Page 81?

Q. Yes.

A. Line 16 starts a question.

Q. Yes. So I said the question and answer that begin on line 16.

A. Okay.

Yes, and again, as I mentioned, while it's not going to provide a specific granular monthly hedge, I go on to say one specific month in isolation, it's in the aggregate, it would have such a hedge quality and the question and answer that precedes that one, it says that it sounds like it is intended to provide a hedge against monthly volatility, correct. Well, the only issue I have monthly is that, you know, a month by itself can have a significant weighting on a quarter. So, you know, it would be that the granular of month to month. But you're starting to get into the same time frame as quarterly. So that's my point.

Q. Now, the company as I understand it has proposed this as an annual hedge, correct?

A. It has proposed it as an annual hedge with Company Witness Allen providing that he is open to it being a monthly -- a quarterly, excuse me, hedge if the Commission should so determine.

Q. And the demonstration on page 16 of your testimony in Table 2 is a demonstration related to the annual hedge; is that correct?

A. Yes.

Q. Have you done a demonstration related to this potential conditional quarterly hedge?

A. No.

Q. So we don't know what type of an impact that might have on a quarterly basis if the Commission chose to go there; is that correct?

A. Well, actually I do think I have some supporting data for that in my testimony. If you refer to page 18, we did look at a specific quarter what would have happened during the first quarter of 2014 when the polar vortex, and was stated on line 14, the result is the PPA rider would have provided approximately $54 million benefit to AEP Ohio customers even at the low prices that the PJM, the price of -- I'm paraphrasing a little bit to save time, 2,773 which as you know was a historical low, close to it. And then I go on to say that using just an average of PJM capacity prices of 9315 on line 19 it would have benefited by $73 million. So there is an examination of the quarterly benefit the customers would receive then in the subsequent quarter had the PPA been in effect during that time and that's a quarterly analysis.

Q. You did no quarterly analysis for the winter of 2014-2015; is that correct?

A. I did not.

Q. So we don't know what it might have operated in in that subsequent cold winter after PJM had a little bit more experience; is that correct?

A. That is -- that is correct, I have not looked at that.

Q. And you've done no forward-looking projection on a quarterly basis of any asserted reduction in spread in a quarterly average ATC price, correct?

A. I have done no quantitative analysis. On a qualitative basis, as described in my testimony, I think it's just fundamental as the first quarter of '14 data would show, even looking prospectively, if we have a quarter of extremely high prices either due to a winter condition or a summer condition, as prices go up, the PPA rider units would make more money, then that would hopefully -- we sincerely hope transfer into a big credit for customers that they would bear the following quarter. So I think just on fundamental principles I haven't provided a quantitative number, but I think that's reflected in the qualitative descriptions within my testimony.

Q. So when you say the qualitative descriptions within your testimony, you're referring to the testimony on page 18 regarding the polar vortex, right?

A. Yes.

Q. So that's an anecdote not a forward-looking analysis, correct?

A. I wouldn't describe it as an anecdote. That's describing a historical instance that you could very well say may happen again in the future.

Q. Now, looking at the reduction, the asserted reduction in spread between the 5 percent high load and 5 percent low load cases with and without the PPA rider, on an annual basis you produce an impact on that spread for the forward-looking years that ranges between a dollar per megawatt-hour and $9.50 per megawatt-hour; is that correct?

A. Yes.

Q. You are not aware of any empirical information that has been collected by the company as to what customers would perceive the value of those kind of results would be, have you?

A. I believe in the past this Commission has been concerned with volatility. As far as any empirical surveys of, you know, what level of threshold customers are bothered, as I believe I said in my deposition, I would not describe it as a step function, up to this amount of volatility they have no concern and then suddenly at this level they have it. It's going to be the more volatile, the more concern you are going to have on some functional basis.

Q. Sure. And this is a quantification of an asserted reduction in volatility, correct?

A. Yes.

Q. But there's been no quantification by the company of what the value of this to customers might be, correct?

A. I have not quantified it. I could say that looking at lines 3, the average with and without, that I'm going from $54.4 per megawatt-hours, without it to 53.2, so I'm effectively showing that in addition to the volatility benefit our forecast indicates that customers will get this reduction in volatility at effectively negative cost, meaning they're actually going to get money.

So while I haven't quantified an amount, I could say if it's anything of positive value to them, this would support that outcome. If it's so much as one dollar, technically if it's even a negative value, they like volatility, then as long as it's not more than this spread, then they would prefer to have the PPA rider.

Q. And that difference of $1.2 per megawatt-hour, that is based on the 2013 forecast of energy market prices, correct?

A. Yes.

Q. We don't know what these numbers look like with the 2015 forecast of energy market prices, correct?

A. We have not updated our modeling for the July 2015 forecast. We have not.

Q. So we don't know what type of asserted volatility reduction benefit might be out there based on the most current and up-to-date information; is that correct?

A. Without having the specific value directionally, I could say that all the numbers would occur the same based on the basic fundamentals of saying when wholesale prices are higher, customers are paying more money and so the rates are going to go up. The PPA rider is effectively selling into that same market. I mean, it's somewhat analogous to betting red and black at the roulette wheel, they're selling into the same market. So there's going to be an inherent volatility reduction to whichever forecast you use on your prices.

Q. But we don't know if there's going to be an overall reduction in the average price --

A. Well, I think our --

Q. -- correct?

A. -- '13 analysis is still the best we've got and still the best reliable. I have not done the analysis you have just asked about, I have not.

Q. Lower energy market prices in the '15 analysis could directionally impact that average distance you cited in your testimony today, correct?

A. The lower energy market could factored in with, as I understand it, the other fundamentals updates of also forecasts of lower coal prices, both Northern Ap and Illinois basin coal which the PPA units use. Higher forecasts of capacity prices I have not analyzed that. Plus the other aspects of the full PLEXOS modeling and the fixed cost modeling we would have to do to update everything. It's not appropriate to look at any one piece in isolation.

Q. Let's talk about real and nominal dollars. Exhibit KDP-2 presents net totals for revenues or costs of the PPA rider at various cases; is that correct?

A. That is correct. Just as stated in the title of the document, "Dollars in Millions (Nominal)."

Q. The sum of those -- those totals are sums of nominal dollars over a ten-year period; is that correct?

A. Yes. Nine years and three months.

Q. So you're agreeing with me just with a qualification it's nine years and three months?

A. Yes.

Q. But still a sum of nominal dollars over that period, correct?

A. Yes.

Q. Generally speaking, you would not base an investment decision over a, roughly, ten-year period on the sum of nominal dollars; is that correct?

A. Normally, if you're doing a standard investment analysis over a long period, I accept the fact that you would apply some sort of discount factor. The intent here was to show the impacts on customers. We've already basically included the company's forecasted weighted average cost of capital included in the numbers so just presented it on a nominal basis. We have customers come and go. It was a reasonable way to portray this, the information.

Q. You believe it was a reasonable way to portray the year-to-year change, correct?

A. Yes.

Q. But you agree that that, as to the sum of the totals --

A. I think it's reasonable. I recognize that if somebody wanted to specifically interpret that into -- turn it into 2016 dollars and apply an inflation factor as I believe with Company Witness Bletzacker could explain, he uses sometimes like a 1.8 percent, some sort of, you know, small discount factor reflecting inflation, so you could represent the entire thing in 2016 dollars, that too could be appropriate. But I think this also was appropriate.

Q. And that would be a more appropriate

basis for assessing the overall benefit or cost of the PPA rider in total, correct?

A. I won't say for this purpose I see it as more appropriate. I'll say it was a reasonable alternative.

Q. Let's talk about the updates that you made to the PPA rider forecast for the May 15th filing.

A. Okay.

Q. One of the updates you made to one PPA rider forecast for the May '15 filing related to the fuel forecast for the Conesville plant; is that correct?

A. Yes.

Q. You applied the fuel forecast from the weather normalized case for Conesville 2, the other cases for Conesville as well, correct?

THE WITNESS: I'm sorry, could you read the question back.

(Record read.)

A. You're not talking about Conesville unit 2. Could you rephrase your question? I don't understand it.

Q. How did you update the Conesville fuel forecast?

A. We updated the three cases, the weather normalized, the high and low, to all make them consistent with the same fuel forecast for Conesville units 4, 5, and 6 for Conesville.

Q. Okay.

A. Conesville 2 has been retired a while, that's why I said that.

Q. And in doing so lowered the costs for Conesville and thereby improved the net revenues to the PPA rider forecast; is that correct?

A. I haven't looked at which way. We just wanted to make sure that we had all the three cases on the same fuel forecast basis.

Q. Take a look at your deposition transcript at page 31.

A. Okay.

Q. I'm specifically looking at the question and answer that begin on line 5 of page 31.

A. Yes.

Q. And then the question and answer that begin on line 8 of page 31. Take a moment and review those.

A. Yes, it was the lower forecast that we moved them to as the more recent forecast I believe of the three.

Q. And, see, as of last Thursday, it was your belief that that improved the net revenues of the PPA rider overall; is that correct?

A. If it was lower fuel cap costs in it, then yes, it would have.

Q. And you believe the change was somewhere in the millions of dollars; is that correct?

A. I haven't looked at the number, but I'll accept that number.

Q. The update, you also updated the debt rate and the ROE assumption based on information obtained between the October and May filings; is that correct?

A. Yes.

Q. And the new information obtained by you was a Moody's corporate bond index; is that right?

A. Yes.

Q. And that new information became available in early January, correct?

A. Yes, it did.

Q. And that was a one basis point change in the index, right?

A. Yes.

Q. And you indicated that that was a 1 percent impact on the forecast; is that correct?

A. Not 1 percent. One basis point? I said...

Q. Okay. The one basis point change was not a large impact on the bottom line of the PPA rider revenue and cost forecast; is that right?

A. No.

Q. Now, subsequently to the filing in May you also updated the PPA rider revenue and cost forecast to account for the clearing prices based on PJM's base residual auction for the 2018-2019 planning year; is that correct?

THE WITNESS: Could you repeat the question.

(Record read.)

A. Yes.

Q. And you received those results around the end of August; is that right?

A. For the '18-'19 year?

Q. Yeah.

A. Sounds about right, yes.

Q. At page 34 you said end of August/early September. Does that ring a bell?

A. Okay.

Q. And you prepared that update -- do you want to check or do you want to take my word for it?

A. I'm sorry. What page?
Q. Thirty-four.
A. Okay.
Q. So you're agreeing with me?
A. Yes.
Q. And you prepared that update this month; is that correct?
A. Yes.
Q. So your update to the capacity prices in the PPA rider forecast based on the PJM auction results would have occurred very close in time to when you first reviewed the 2015 fundamentals forecast; is that correct?
A. Somewhere in the same time window, yes, it would.
Q. And yet as you were updating the PPA rider revenue and cost forecast to account for the PJM results, you did not attempt to determine what the impact of the 2015 fundamentals forecast would be on the net revenue and cost numbers presented in Exhibit KDP-2; is that correct?
A. No, I did not. And the reason for that was that --
MR. BZDOK: I'm going to move to strike the reason. I only asked the question whether he did

or not.

MR. NOURSE: Your Honor, if he could be permitted to finish his answer.

EXAMINER PARROT: Yeah, let's try not to cut off the witness in mid-sentence, please, Mr. Bzdok.

MR. BZDOK: I apologize.

EXAMINER PARROT: Mr. Pearce.

THE WITNESS: Yes.

EXAMINER PARROT: You may continue.

A. As shown on page 5 of the testimony, on line 1, we have recognized that this was something that was anticipated at the time of our May 5th [verbatim] filing. We provided a range of anticipated revenues coming from those auctions. That was a relatively easy addition to update as I believe I did discuss in my deposition so that's why we updated the capacity values.

Q. You acknowledge that the changes in the 2015 fundamentals forecast have a potential to impact the ultimate bottom line of the PPA rider forecast as much or more than any of the other items you updated for, right?

A. It is possible.

Q. You indicated in the same area of

testimony you were just reading from, or relying on, you felt you had to draw the line somewhere, correct?

A. Yes.

Q. And the place you chose to draw the line was in between the PJM auction results that you received in late-August and the fundamental forecast of 2015 that you received in late-August; is that correct?

A. No, it is not correct. As I stated I believe in my deposition, the place we drew the line as far as doing all of the work was in -- sometime in the April time frame updating for the May '15 time frame. That's when we chose to do the bulk of the work. Because we had in that work provided a range for one set of values that we were anticipating coming, as I just testified, we updated that once those auction results were known, and it was a relatively straightforward calculation.

I would say it was a refinement more than an update.

Q. The potential length of this agreement is, what, 25 years?

A. Thirty-six years.

Q. Thirty-six years. And the PPA rider revenue and cost forecast projection that you did prepare goes out nine years and three months; is that correct?

A. That is.

Q. So for a -- in considering a forward projection of almost 10 years and an agreement of 36 years in length, you did not believe that it was worth it to take the time to update those projections for this agreement based on the 2015 fundamentals forecast; is that how I understand your testimony?

A. I wouldn't characterize it that way. Our standard PLEXOS modeling pretty much companywide in our jurisdictions for this type of analysis, our PLEXOS tends to go out ten years, that's the amount of time that we had the detail on. So I think by us showing that there was forecasted benefit over those years, that was sufficient information to rely on for the purposes of this case. And I should qualify that while it can go out in theory 36 years, most of the units as -- we are forecasting to be retired sometime in the 2030s, 2033 to 2038.

MS. BOJKO: Your Honor, may I have the answer reread? I'm sorry, there's some outside noise and if I could request that the witness not trail off or try to speak up, I'd appreciate it.

(Record read.)

MS. BOJKO: Thank you.

Q. Can PLEXOS go out longer than ten years?

A. It's a canned program. It will be licensed -- I don't know the physical capabilities of being able to actually physically model the software to go out more than ten years. On top of that I don't know as far as us developing all the appropriate inputs into that modeling how far out we would have beyond ten years to provide it the appropriate inputs to go out farther than that.

Q. I'd like to talk a little bit about your role in the formulating of the proposed PPA between these parties. As I understood your role, it was as a facilitator between AEPGR and AEP Ohio; is that correct?

A. Yes.

Q. In that role and based on your understanding of the agreement and the process from that role, would you agree with me that under this agreement, if it is approved for prudence and entered into, AEPGR would receive a contractually guaranteed recovery of all of the costs of the PPA units from AEP Ohio?

THE WITNESS: Could you read the question.

(Record read.)

A. I'm struggling with the word like guarantee. Both the buyer and seller have certain obligations under the contract and if there's seller failures to perform, other various provisions, then they may or may not wind up with the total guaranteed, as you're calling it, return under the agreement.

Q. So what's problematic about my question is the use of the word "guaranteed"?

A. Yes.

Q. Let me ask it this way, under this agreement with the qualifications I've already given, AEPGR would receive contractually required recovery of all of the costs of the PPA units from AEP Ohio; would you agree with that?

A. They would receive recovery as obligated by the buyer.

Q. AEPGR does not currently have contractually obligated recovery of all of the costs of the PPA units from any other entity; is that correct?

A. To the extent that the current units have been sold into the PJM capacity auctions, I would say with PJM as the counterparty that they have some contractual rights right now to receive capacity payments from PJM as a counterparty as they sell energy. PJM would be the counterparty right now.

Q. That is an obligation to pay some of the costs, but there's no contractual obligation by anybody to pay all of the costs; is that correct?

A. That is correct.

Q. Under this agreement as proposed and in your understanding of it in your role, AEPGR would also receive a contractually obligated recovery of a rate of return on all of the fixed costs of the PPA units from AEP Ohio; would you agree with that?

A. Yes.

Q. And AEPGR does not currently have a contractually obligated -- a contractual obligation with any other entity to recover a rate of return on all of the fixed costs of the PPA units; is that correct?

A. They do not.

Q. Under this agreement as you understand it, based on your role, AEP Ohio would also take on all retirement and post-retirement costs related to the PPA units for AEPGR; is that correct?

A. They would.

Q. AEPGR does not currently have any other entity who is obligated to take on all retirement and post-retirement costs related to the PPA units; is that correct?

A. None that I'm aware of.

Q. And if AEP Ohio wants to terminate this agreement, they need to pay AEPGR the remaining net book value of the units net of any market value assessment as an exit fee, correct?

A. Per the terms of that condition, yes.

Q. And if that occurs as to a unit or units, AEPGR would not actually be required to sell the unit or units; is that correct?

A. On page 16 of the proposed PPA, if this exercise is to do an evaluation, and I won't read the whole thing, but just going down about a little bit over halfway, "Seller retains the right of first refusal to match any bona fide offer that complies with all the terms of any competitive solicitation." So it's a fairly consistent right of first refusal to match it.

So in that instance the buyer, in this case AEP Ohio, presumably would be indifferent between what they would have gotten if units had been sold or the seller chooses to exercise its right of first refusal and say I will credit you this and retain the units.

Q. So let's unwind that a little bit, if we may.

A. Okay.

Q. Earlier in your testimony today you agreed with me that AEPGR in a situation where fair market value is being assessed has an option based on the use of the word "may" to obtain an independent appraisal and has an option to conduct a competitive solicitation but is not required to do those things; is that correct?

A. That's -- the sentence does include the word "may," I will agree with that. As far as providing -- I will add that I'm not an attorney. As far as what the extent of that word would apply for that sentence, I'm not going to apply a legal opinion on it.

Q. In your understanding, in your role as a facilitator of this process and based on your knowledge of this provision, AEPGR is not required to conduct a competitive solicitation; is that correct?

A. I can't speak as an attorney. I understand that the word "may" may provided some optionality to it. That's as far as I can go with my understanding of that.

Q. And so based on your understanding AEPGR is not required to offer a right of first refusal to anybody, right?

THE WITNESS: Could you read that back.

(Record read.)

A. Well, I'm sorry. So they wouldn't be offering it. In my mind they would be the one exercising it.

Q. Sure. So if AEPGR is not required to have a competitive solicitation, then there is no requirement to deliver on an offer of right of first refusal, right?

A. I'm still having trouble with that.

Q. Sure.

A. Go ahead.

Q. I'm happy to cut through if we can maybe simplify this, but if you want to answer, please go ahead.

A. There would be an evaluation of the value of the unit, if it was done such that the unit could be sold, then the buyer would have the right to effectively match that offer so, I mean, that would occur regardless. And I don't -- I'm confused by saying that the seller could somehow waive that right.

The seller has to exercise that and recognize some sort of fair market value, however you got there, and credit that to the buyer.

Q. Bottom line, if there is a fair market valuation going on, AEPGR is not required to conduct that in such a way that would lead AEPGR to be required to sell the unit or units under discussion, correct?

A. Would not be required to sell the units, I will agree with that.

Q. AEPGR could collect from AEP Ohio the exit fee and then continue to operate the units with a substantial portion, potentially, of the net book value of those units and their retirement obligations having already been paid for.

A. If it chose to exercise that right and, again, there could be honest differences of opinion between the parties of whether a unit's worth pouring more capital to, maybe extending life or not, then they have a right to exercise that. Understanding for all of that under Section 2.4, in the event the parties are unable to reach agreement upon the retirement date of the unit or facility, the parties may mutually agree to remove such unit.

So the -- in this case the buyer,

AEP Ohio, is going to have a unilateral right to even initiate that entire process.

Q. Bottom line, they're not required to sell the units, right?

A. No, no. This is seller -- there's no provision in here that is going to force a buyer to sell the assets.

Q. They could keep operating them even after collecting this money required of AEP Ohio, correct?

A. The difference between the net book and the whatever the appraised market value is, yes, they could.

Q. The difference between, just so the record's clear, net book plus retirement costs net of fair market, right?

I'm looking at the first sentence of paragraph (C).

A. Sure.

Q. And I guess fourth or fifth line down.

A. If you'll look at the bottom of that same provision, page 16, it specifically says "Where there is a disagreement over," and I'll read slow, "Where there is a disagreement over a retirement date for Units or Facilities, and this agreement is terminated under Section 2.4, in the event Seller intends to continue operating, such Unit or Facility after it is removed from this agreement in accordance with Section 2.4, Seller will also apply a credit to Buyer's invoice referenced above with respect to allocating the retirement-related cost of such Units or Facilities to account for the additional time Seller intends to operate the Units or Facilities after it is removed from this agreement."

I'll stop there.

Q. "Comma, in relation to the period of time Buyer purchased energy and capacity from such Units or Facilities thereunder," correct?

A. That's correct.

Q. So that's a partial retirement cost credit --

A. Yes.

Q. -- would you agree?

A. Yes.

Q. From your role as facilitator of this process and advising the parties in coming together for this agreement, what do you believe is the most significant material concession that AEPGR made to AEP Ohio in this agreement?

MR. NOURSE: Your Honor, I object. I don't think, you know, getting into the specifics of negotiation, you know, in a private contract negotiation is relevant. I think offers that were made in that context back and forth were developed through privileged advice of counsel, and it's simply not relevant here, your Honor. We're proposing putting the proposed PPA in front of the Commission and, you know, sponsoring and defending the reasonable commercially viable provisions, so I don't think there's any relevance to going down this slippery slope of particular exchanges, you know, getting into draft contracts along the way and all the rest. It is simply not relevant and it should be -- the confidentiality should be preserved.

MR. BZDOK: May I respond?

EXAMINER PARROT: You may.

MR. BZDOK: On the issue of privilege, I was very clear in my question that I was asking him for his opinion and his opinion alone in his role as facilitating this agreement and having advised the parties and helping them come together. So I'm only asking him for his opinions in his role, not for any assessment or any disclosure of privileged information.

As to relevance, we've had a long discussion about some very, very significant guarantees and concessions and requirements that AEP Ohio has delivered to AEPGR in this proposed agreement and my question's what kind of concessions came back in return. So it's highly relevant as to the fairness of this agreement.

MR. NOURSE: Your Honor, we've not put at issue, we've not portrayed this as, you know, some pounding the table negotiation result. We haven't tried to claim that, you know, we squeezed blood out of the counterparty or anything like that. We're putting forth the proposed PPA as fully and transparently disclosed to the parties in all of its glory and detail in front of the Commission. We're putting witnesses up to defend the actual provisions that are being proposed, and I think it's completely irrelevant what kind of exchange went back and forth in asking this witness, regardless of whether he was a facilitator or, you know, directly involved in attorney-client privileges to describe the blow-by-blow, get into a compromise of offers or, you know, start talking, going down the slippery slope getting into draft documents and back and forth.

It's counterproductive and it's a complete waste of time in addition to violating the confidentiality of those negotiations.

MR. BZDOK: May I respond?
EXAMINER PARROT: I'm going to cut it off at this point. Dr. Pearce, I'm going to direct you to answer the question with the clarification that Mr. Bzdok already gave. We're not asking you to divulge anything that may be considered privileged communication, anything of that sort of nature. Hopefully we're not getting into confidential information either. I think you can answer the question as posed without meaning to do that. With that I would direct you to answer question, please.
THE WITNESS: Yes, your Honors. Could I have the question read back, please?
EXAMINER PARROT: You may.
(Record read.)
A. Speaking from my role, I have not formed an opinion of any major concession from either side that sticks out.
Q. From your role as facilitator of this agreement and also your role as the director of contracts and analysis for AEPSC, in your opinion, what is AEP Ohio getting from AEPGR that it could not get from any of a number of other sellers of generation?
A. Well, first and foremost I think is, and

this is I believe touched on by Company Witness Vegas, there's a history of these units associated with they used to be owned by Ohio Power and, of course, they still have the OVEC rights.

Q. Anything else you can think of other than the history between the companies and these units in particular?

A. I don't know what other specific offerings there may be out there.

Q. Part of your job as director of contracts and analysis is to evaluate various contractual opportunities that may arise from time to time out in the market for AEP companies; is that correct?

A. On occasion.

Q. And so as part of that, you have experience evaluating proposed opportunities relative to benchmarks or norms or your general experience in the field, correct?

A. Yes.

Q. Based on that experience, what other seller of generation, in your opinion, would not leap at the chance to get a deal even remotely as good as this one?

A. Well, I don't know the desires of other sellers in the marketplace to either leap at this or walk away from it.

MR. BZDOK: A moment in place, your Honor.

Q. A couple more. PLEXOS model is a newer version of the Strategist model; am I understanding correctly?

A. I'm not sure about the relationship between Strategist and PLEXOS. PLEXOS is the model that we use for hourly dispatch that replaced what we used to use is -- a lot of people remember good old PROMOD that was around for decades, and there was also some groups in the company that used GenTrader. That's what PLEXOS, from my perspective, replaced.

MR. BZDOK: Appreciate the indulgence.

Q. Sir, are you involved in analysis related to requests by AEP companies for certificates of public convenience and necessity?

A. I may have provided some support from time to time on that. I just don't -- I do a lot of things. I'd have to hear more about it.

Q. From the whatever level of awareness you do have are you aware that forecasts related to certificates of public convenience and necessity by AEP companies typically stretch out to 30 years?

A. I'm sorry. Could you repeat?

MR. BZDOK: Go ahead and read it back.

(Record read.)

A. I have seen forecasts that stretch out that far. Approximately that time frame.

MR. BZDOK: Sir, I thank you for your time. I will be reserving some confidential questions, but that is all the public questioning I have for you at this time.

EXAMINER PARROT: At this point let's take an hour break for lunch. We'll come back at 1:35 p.m. Thank you.

(Thereupon, at 12:33 p.m., a lunch recess was taken until 1:35 p.m. of the same day.)

- - -

Tuesday Afternoon Session,
September 29, 2015.

- - -

EXAMINER PARROT: Let's go back on the record.

Ms. Bojko.

MS. BOJKO: Yes, your Honor, thank you very much.

- - -

KELLY D. PEARCE

being previously duly sworn, as prescribed by law, was examined and testified further as follows:

CROSS-EXAMINATION

By Ms. Bojko:

Q. Good afternoon, Mr. Pearce. My name's Kim Bojko. I represent the Ohio Manufacturers' Association's Energy Group. I believe you were present for some of Mr. Vegas's testimony; is that correct?

A. Yes.

Q. And, sir, throughout your testimony you reference long-term and near to immediate term. Do you recall that?

A. Do you have a specific reference?

Q. Sure. Page 5 is a reference. There's a

couple different places on page 5.
A. Yes.
Q. Near to immediate term to you, sir, is one to five years, correct?
A. Approximately, yes.
Q. And long term would be anything from after five years, correct?
A. Generally speaking.
Q. Starting on page 7 of your testimony and then going over to the top of page 8, you discuss that AEP Generation plans to establish a new subsidiary and transfer assets. Do you see that?
A. Yes.
Q. Is it your understanding, sir, that they would create that subsidiary and transfer the assets owned by AEP Generation after the PPA contract is finalized and executed?
A. They would do that as part of that process.
Q. You don't believe that they would do that if the PPA rider is not approved by the Commission, do you?
A. If the PPA rider is not approved by the Commission, AEPGR is at its leisure to set up its subsidiaries as it chooses to. I don't know whether

they would or not.

Q. The assets we're referring to are either the assets fully owned by AEP Generation or the percentage of the assets owned by AEP Generation; is that correct?

A. Yes.

Q. And the final PPA contract will be executed after the Commission approves the collection of the costs for the PPA units associated with the rider; is that your understanding?

THE WITNESS: Could you repeat the question.

(Record read.)

A. It would be done after the Commission issued an order agreeing on the prudency of this agreement, yes.

Q. And Cardinal 1 is part of the PPA contract; is that correct?

A. Yes.

Q. Cardinal units 2 and 3 are not part of the PPA contract; is that correct?

A. That is correct.

Q. And those units are owned by Buckeye?

A. Yes.

Q. However, all of the Cardinal units 1, 2, and 3 are operated by the Cardinal Operating Company; is that accurate?

A. Yes.

Q. And on page 9 of your testimony you describe that because Cardinal 1 is part of the affiliate PPA units, the Cardinal station agreement applies to the PPA proposal; is that correct?

A. I believe I used the term on page 9 in my testimony "It is consistent to have AEP 'stand in the shoes' of AEPGR with respect to that Agreement."

Q. Meaning that AEP Ohio will take on some of the requirements associated with the Cardinal station service -- or Cardinal station agreement; is that correct?

A. That is correct. They will take on some obligations and with that they will also get some revenue stream from that agreement.

Q. Okay. And that's because Cardinal 1, which is part of the PPA transaction, is operated by the Cardinal Operating Company; is that correct?

A. Yes.

Q. And let's talk about these obligations. In essence the Cardinal station agreement requires AEP Ohio to bear the net costs of acquiring power from the PJM market when Buckeye needs the power because of the Cardinal units 2 and 3 are out of service; is that correct?

A. It is correct that if Cardinal 2 and 3 are out of service and Buckeye has submitted a schedule for approximately 87 percent of the power, then that would come from -- presumably, it could come from the other units within the PPA or the PJM market.

Q. And did you agree with me that AEP Ohio bears the net costs of acquiring power from the PJM market when Buckeye needs that power?

A. That would be netted against the revenues. It would still be a net revenue. In exchange for that what we are proposing under this agreement is that AEP Ohio is going to get the other 13 percent of Cardinal 2 and 3 when they are operating, which is approximately 158 megawatts.

Q. So the answer to my question is yes, that AEP Ohio will have to bear those net costs when they have to go to market to procure power for Buckeye when Cardinal units 2 and 3 are out of service.

A. They will bear net costs unless it comes from the other units in the unit, in which case if there's enough generation from the other units within the PPA, then they wouldn't have to go to the market.

There would still be enough generation coming out of, for example, Cardinal 1, the Conesville, Stuart, and Zimmer plants to provide that backup power. And, of course, in return for that then the customers will get the 13 percent, approximately 13 percent slice off the top when the units are up and running.

Q. The Cardinal station agreement is between Cardinals 1, 2, and 3 and they're all operated by Cardinal Operating Company; is that correct?

A. Yes.

Q. So the Cardinal station agreement is not between Buckeye and the PPA units; is that correct?

A. It's between -- Cardinal Operating Company, Buckeye, and AEPGR.

Q. GR. It's not between AEP Ohio, there's not proposed to be a new agreement that will be between Buckeye and AEP Ohio, is there?

A. Not at this time. They would stand in the shoes.

Q. And Buckeye is not somehow a party to the PPA contract that's proposed in this proceeding, are they?

A. No.

Q. So as I understand the Cardinal station agreement, if Cardinal units 2 and 3 are out of service, and Buckeye requires backup power, AEP Ohio would have to go to PJM to procure or acquire that power as stated on line 23, page 9 of your testimony, correct?

A. Yes. The power will come from PJM with the offset of the sale of the other units of the PPA rider going into the market. So there would be a netting effect is what I'm saying.

Q. All right. You weren't suggesting somehow that the power was coming from the AEP generating units, were you?

A. No. It would be the PPA units.

Q. Okay. Purely a financial transaction because of the netting of the revenues and costs, not that the power would be coming from the other, Zimmer, Stuart, the other AEP generating units; is that correct?

A. They would be netted in the PJM market, yes.

Q. Okay. And you talked about net revenues, if it's a cost, that net cost will be borne by AEP Ohio, correct?

A. Yes. Either a cost or revenue, yes, it would.

Q. And Cardinal units 2 and 3 will be

included in the same PJM subaccount as the affiliate PPA units and that's where that netting would occur; is that correct?

A. That's the current plan.

Q. And any nonperformance payments that occur with regard to Cardinal units 2 and 3 bond index will also be passed on to AEP; is that correct? AEP Ohio?

A. And the netting of the costs or the netting of the benefits would flow through the contract to AEP Ohio, that is correct.

Q. And that would include nonperformance payments, correct? If any.

A. If any, yes.

Q. And then those are the -- after they're passed on to AEP Ohio, then those costs are in turn passed on to AEP Ohio's customers through rider PPA; is that correct?

A. As far as once it gets to AEP Ohio and then how that would pass through the rider, I will refer you to Company Witness Allen.

Q. But that is your general understanding of the PPA rider when you were creating a forecast of the PPA rider --

A. Yes.

Q. -- impacts on customers, correct?

A. Yes.

Q. And let's turn to page 18 of your testimony, please. On page 18 of your testimony you discuss variability; is that correct? Beginning on line 3 with the question.

A. Page 18, line 3.

Q. That whole section you're talking about variability in prices; is that correct?

A. Of my testimony? It's talking about the impact during the polar vortex.

Q. The variability of the market and variability of the prices; is that what you're discussing here?

A. It's getting into the historical impacts of what would have been a benefit to the customers during the polar vortex.

Q. Okay. And from your impact analysis it's your understanding that the PPA rider will change based on the market, that the credit or the charge is dependent on the market; is that correct?

A. That is correct.

Q. And you understand that AEP's application is, as you stated earlier today, that the proposal is that the application will be updated annually; is

that correct?

A. Yes.

Q. Okay. So as proposed, let's take that situation, the annual as-proposed, the applicable PPA rider charge or credit will be in effect from June 1st through May 31st; is that correct?

A. That's my understanding.

Q. So if a severe weather high-price event occurred in July, the PPA rider would not be adjusted to reflect any results of an event such as the one discussed in your testimony until the following June; isn't that correct?

A. It would be adjusted the following June based on the annual proposal of the company. Now, with that said, if, for example, since we expect a lot of revenues from these units over the summer season, then that could provide a benefit for the following summer if prices then get hot again and customers' bills rise.

MS. BOJKO: Your Honor, I move to strike everything that starts with "with that said." It's nonresponsive to my question. He answered my question.

MR. NOURSE: Well, your Honor, she's asking a blanket question about what would or wouldn't happen the next June, so I think his expectation was part and parcel of his answer.

EXAMINER PARROT: I agree. The motion to strike is denied.

MS. BOJKO: Thank you, your Honor.

Q. Let's turn to page 19 of your testimony lines 14 and 15. Are you there?

A. Yes.

Q. Okay. Here you discuss customers also getting the offsetting benefits of the lower wholesale price and, as I just understood our discussion regarding the PPA rider adjustment, you agree with me that the rider is either a credit or charge additional to whatever that market price is; is that correct?

A. Yes. Assuming that's how the customers are served, that's correct.

Q. And isn't it also true, sir, that if a customer has a fixed price electric contract, this could also cause them to no longer have a fixed stable price, "this" meaning the -- let me strike that, I'll start over.

So isn't it true that if a customer has a fixed price electric contract, the PPA rider could cause them to no longer have a fixed stable price; is

that correct?

A. In terms of price, as far as the rate they pay and it's a fixed rate, then as this moves up or down, it can perhaps -- you would expect that it would affect that rate that they pay. As far as price as far as total bill, though, they're going to have a certain volume of electricity, say a thousand kilowatt-hours a month as an average fee. If you get into a period where, such as the polar vortex or a hot summer month where their usage goes from a thousand kilowatt-hours, for example, to 2,000 kilowatt-hours, even that fixed per kilowatt rate the price they pay in terms of their total bill is going to go up dramatically. If this is an offsetting credit, even though their rate will go down it will help offset their total bill for electricity, it could do that.

Q. Or it could cause a significant increase in their total bill they pay by an additional charge; isn't that true?

A. Accepting that prices and loads tend to have a very positive correlation, I would expect that this rider has a negative correlation, so what you're saying I would not expect to be the normal case of operation. If their loads go up, they pay more even at a fixed rate, this rider is going to come in after the fact and provide them a credit off of that higher bill. So it would help stabilize the price that they pay for electricity in terms of their total bill.

Q. Okay. My question, sir, wasn't related to whether their load increased. So my question is, is if they have a fixed price electric contract, the PPA rider could be an additional charge placed on top of that fixed-price contract; isn't that true?

A. If you're talking in terms of a fixed rate that's modifying the rate, then it's going to adjust that rate opposite to the volume of the load change that I would expect. So their total bill or price that they pay on that basis, basically one can help offset the other.

Q. Or it can increase the cost. If a customer has a three-year fixed contract and the costs to run these plants are in excess of the revenues, it's going to be an additional charge placed on top of their three-year fixed contract, is it not?

A. If the price that they pay -- if it is a charge, it is going to add to it. If it is a credit, it is going to subtract off of that, and I would expect a natural negative correlation that the natural reduction would correspond -- the natural reduction in the price that they pay would help offset the volumetric increase during high-priced, high-volumetric usage periods.

Q. And you keep adding "high volume" to my scenario.

A. Okay.

Q. I'm not talking high volume. I'm talking in a regular three-year contract, whether it's a credit or a charge, that will be in addition to the customer's three-year contract; isn't that true?

A. It would be addition to or subtraction from the rate in that three-year contract. It would vary on a periodic basis.

Q. Okay. And the three-year fixed contract, the customer is paying its supplier. It's not paying AEP Ohio; is that correct? Assuming that they're a shopping customer.

A. They're a shopping customer. I mean, yeah, as far as the process of who collects the bill and passes it through, I'm --

Q. But the contract's with the supplier.

A. Yes.

Q. So it's not going to change. Your theory of the plus or minus is not changing the contract that a customer goes out and enters into with the supplier; is that true?

A. It doesn't change the rate that the contract -- that the customer pays the supplier, I agree with that.

Q. Nor will it change what the customer has to pay the supplier, because that contract is between the customer and the supplier; isn't that correct?

A. That's correct.

Q. Okay. But what it could do is upset the fixed-price contract, the stability of that that that customer negotiated and entered into with that supplier, isn't that true, by adding an additional charge if the costs of the plants exceed the revenues that the plants get from the PJM market?

A. And that's where I'm struggling. You're saying a stability. If you turn in terms of the fixed stability of the total bill of the customer, this contract would provide more stability in the sense of the entire bill. It would adjust the rate that the company pays net of, because what he pays his supplier is between him and his supplier, but what he would get through this credit would be a natural offset to that.

Q. Okay. So if a customer entered into a three-year contract in 2015, so that contract's 2015 to '18, and if the Commission approves this PPA say starting 2016, that customer no longer has a guaranteed fixed-price contract that they can count on multiplying that fixed price to their volumetric usage in order to calculate and budget for their electric services; isn't that true?

A. This would be an offset to that. This would be an offset to that rate that they pay. That could vary.

Q. You keep saying "an offset." It could also be an addition or a charge to that.

A. It could be an addition or offset on a rate basis, not necessarily on a total bill basis is my point.

Q. Thank you.

On page 18 you just explained to me that you're discussing the polar vortex and in this discussion of your polar vortex this is assuming that all PPA units were running during the vortex, your estimation here; is that correct?

A. Well, this isn't an estimation. This is based on how they actually ran, because I looked backwards, how they ran during that three-month period.

Q. So when you say if, and you use the scenario if they paid X price and if the capacity had been sold at the average clearing price, and you looked at the different prices, that was actually what occurred in the market during that period?

A. Your previous question I thought had been, you know, did I make some assumption about how the units ran. My point was I didn't make any assumptions. I used the units as they ran. What I'm saying is under our proposal they get whatever the PJM RPM prices are, so if the PPA had been in effect and they had sold the capacity for those known PJM capacity prices, this is the amount of generation that would have been recovered during that period.

Q. Okay. Thank you for that clarification. But you didn't actually look at the revenue that was received by the PPA generating units in your analysis here on this page.

A. Actually, we did. And it was a lot more than this. Because the problem is because AEP Ohio had not, you know, they had slowly transitioned off portions of their load to the market and part of the load was still served from the AEP's standard offer, those revenues exceeded, far exceeded the RPM revenues.

So if I had used the actual, just pulled the books from AEP Ohio, I would have had much bigger numbers than the $54 million that I used saying, well, let's set that aside because that's in '13, but that's not what the proposal would be going forward, so we used the very low, almost historic low RPM prices to come up with the $54 million. Otherwise it would have been a much bigger credit.

Q. I think you misunderstood my question. You said you did use the revenues, but then I just heard in response to the question you did not pull the books. You did not actually use actual revenues; isn't that true?

A. Okay. I'm sorry, I thought your previous question was -- said did I look at it, not did I use it.

Q. With that clarification, did you use it? Did you use the actual revenues? That was what I intended to ask.

A. We used the actual RPM lower -- which was lower revenue than what it would have been if we had used the books.

Q. And did your assumptions also consider the OVEC units, or are you just talking about the PPA units?

A. Oh, no. This was with the OVEC units as well.

Q. It's your understanding, sir, that the AEP Generating units operate or jointly operate three of the PPA affiliated units; is that correct? That AEPEG operates the three Conesville units?

A. Yes.

Q. And Cardinal is operated by the Cardinal Operating Company which is what we discussed earlier?

A. Yes.

Q. And then that the Stuart and the Zimmer are not operated by AEP Generation?

A. That's correct.

Q. And the OVEC units are not operated by AEP Generation; isn't that correct?

A. That's correct.

Q. Okay. So under the proposed PPA contract AEP Generation currently operates or jointly operates only three of the PPA units; is that correct?

A. Are you referring to the Conesville units?

Q. Yes. Those are in Mr. Vegas's list of the 20 units. It's my understanding that only three of those units are operated by AEP Generation; is that correct?

A. That is correct.

Q. And Mr. Vegas punted a couple questions to you, so I'll ask you foundation first. It's true that PJM dispatches the generating units; is that correct?

A. That is correct.

Q. Okay. And isn't it true that PJM schedules resources sufficient to meet the forecasted demand and adds a 15.7 percent reserve margin?

A. Are we talking about hour-to-hour dispatch?

Q. We're talking about the reserve margins that PJM either -- they're cleared in the BRA auction.

A. Oh, in the capacity market that's correct, they provide enough capacity plus a reserve margin that's dictated by the results of the auction.

Q. And the targeted reserve margin is the 15.7 that I just mentioned; is that true?

A. Yes.

Q. And the actual reserve margin, however, is approximately around 20 percent; isn't that true?

MR. NOURSE: I object. For what auction are you talking about? When you say "actual."

MS. BOJKO: We just said the targeted BRA capacity auction reserve margin is 15.7, but the actual reserve margin that PJM establishes is approximately 20 percent.

Q. Is that true?

MR. NOURSE: I object to the form of the question. When you say "actual," are you talking about a specific option?

EXAMINER PARROT: Or which delivery year are you talking about?

MS. BOJKO: It's a general rule of PJM, your Honor, and I was asking PJM-type questions yesterday and they were punted so I'm trying to get his familiarity with PJM in general. But we could talk about the specific last 2018-'19 base residual capacity auction where the auction itself cleared at 19.8 percent and the total for the RTO zone, and the total BRA auction cleared at 20.2 percent, I believe, off the top of my head.

Q. (By Ms. Bojko) Is that correct? Is that your recollection, sir?

A. I recall the 19.8 percent number for PJM, yes.

Q. And it's your understanding that generally PJM conducts these auctions and tries to maintain a reserve margin of approximately

20 percent? Is that your understanding of the market?

A. Well, based on the administratively drawn variable resource requirement curve, they let the overall reserve margin just basically be a function of what the auction results are that resulted in the 19.8 percent that you just mentioned.

Q. And it's typical, it's typical to exceed the 15.7 percent target reserve margin that PJM establishes; isn't that correct?

A. It has tended to be the case. Now, an important thing is the -- with the transition to the capacity performance product, even the '18-'19 auction still allowed over 15 percent of the cleared megawatts to be the, what has been the historical base product, that does not have the capacity performance product.

So as far as that being an indicator of the future, we're going to have to wait and see what happens in the '20-'21 time frame when they then would require a hundred percent of the auction to clear at the capacity performance product.

MS. BOJKO: Could I have my question reread, please.

(Record read.)

Q. Historically. I used the word "typically," maybe I should have used the word "historically." Historically the reserve margin has exceeded 15.7 percent; isn't that true?

A. Historically it has tended to clear higher than the target margin.

Q. And even with the capacity performance model being implemented in the last BRA auction, as you just pointed out, it was 19.8 percent reserve margin; is that correct?

A. My point was that --

Q. No.

A. -- it was not 100 percent implemented. So I can't accept your premise to say it was implemented. It was implemented partially. It was not -- it has not fully been implemented nor will it until '20-'21.

Q. And with the partial implementation of the capacity performance model can you now answer my question that the reserve margin was 19.8 percent; isn't that correct?

A. That is correct.

Q. And isn't it true from 2007 to 2017 there have been or are scheduled to be 35,040 megawatts of generation additions in PJM?

A. I don't know the basis for that number.
Q. And isn't it true prior to the last BRA auction that we just discussed, 2,922 megawatts of new generation and generation upgrades were offered into the PJM capacity auctions over the five prior auctions and 2,012 of those were committed; isn't that true?
A. I don't know.
Q. And you discussed the capacity performance product so I'm assuming that you're familiar with it, sir; is that correct?
A. Somewhat.
Q. You discuss it somewhat on pages 28 and 31 of your testimony; is that correct?
A. Yes.
Q. And since the filing of your testimony it's your understanding that FERC has approved PJM's capacity performance resource tariff; is that correct?
A. Yes.
Q. And it was partially -- the capacity performance product, as you mentioned, was partially implemented in the 2018-'19 BRA capacity auction; is that correct?
A. Yes.

Q. And it was also partially implemented in the last two incremental auctions; is that correct?

A. The transitional auctions?

Q. Transactional, incremental --

A. Yes.

Q. -- supplemental, pick your word. Is that correct?

A. Yes.

Q. And are you familiar with PJM's RMR reliability must-run mechanism?

A. Somewhat, yes.

Q. And it's your understanding that that RMR contract allows PJM to enter into an agreement with any units determined necessary to maintain reliability after they have provided a notice of retirement of that unit?

A. It allow -- it does not require units to accept that contract.

Q. And let's turn to KDP-1, which is the term sheet; is that accurate? The PPA term sheet.

A. Yes.

Q. And is it fair to say that this term sheet is a summary of the purchased power agreement that was produced as part of IEU RPD-1-002 which I believe you referenced today as Sierra Exhibit 2?

THE WITNESS: Could you read the question again.

(Record read.)

A. Yes.

Q. And IEU RPD-1-002 is what we've called today the proposed purchased power agreement; is that accurate?

A. Yes.

Q. And that term sheet was drafted prior to the PPA contract being drafted; is that accurate?

A. The term sheet was completed prior to the PPA agreement.

Q. Okay.

A. That's correct.

Q. And the PPA contract, as I understand it, was drafted sometime in 2014 prior to the October 2014 case being filed; is that accurate?

A. If you could reask the question.

(Record read.)

A. No, the proposed PPA agreement was not yet completed as of the date of the October '14 filing.

Q. Do you know when it was completed, what the date of completion of the contract was?

A. I think it was shortly thereafter. I'll say the October-November time frame, and then I believe it was provided as a supplemental data request when it was finalized.

Q. So you believe it was in 2014, October-November 2014?

A. That's my best recollection.

Q. And I believe you stated previously you don't believe that the contract is actually finalized because it's not executed; is that correct?

A. Well, it's not executed, obviously there's no signatures yet. As far as final, I think it's in nearly final form in all significant respects.

Q. Okay. And the PPA contract, it's your understanding that it would supersede -- its terms would supersede the term sheet that's attached to your testimony; is that correct?

A. That is correct.

Q. Okay. Let's turn to page 8 of the PPA contract. I want to discuss a little more the unit contingent, the unit contingent provision that you discussed with Sierra's counsel this morning. The unit contingent -- excuse me, take a step back. The unit contingent provision is actually 3.2 on page 10, but on page 8 there's a definition of unit contingent. Do you see that?

A. Yes.

Q. And is it your understanding that unit contingent is defined as units unavailable due to outage, force majeure, or buyer's failure to perform; is that correct?

A. Yes.

Q. And then if we turn to outage is a capitalized defined term in that unit contingent definition; is that correct?

A. That is correct.

Q. We turn to page 6, you will see that outage is defined to include -- one second.

Outage is defined to include partial unavailability of a unit for forced outage, maintenance outage, and construction; is that correct?

A. That is correct.

Q. Okay. It also includes another provision, another clause that says "any other condition or circumstance that reduces electrical output." Is that correct? It's subsection 8 --

A. Yes.

Q. -- under the outage definition.

A. Yes, that is correct.

Q. And it's your understanding, you had a little bit of discussion earlier this morning, but it's your understanding that with the definition of unit contingent in Sections 3.2, unit contingent section, as well as 3.9, which is the failure of delivery section, that the seller's delivery or provision of energy, capacity, and ancillary services is excused if the plants are unavailable due to an outage, force majeure event, buyer's failure to perform, or any other condition or circumstance that reduces electrical output; is that correct?

A. That is the -- that is the same terminology, that is correct, as what the words say and it's the same terminology that I believe we lifted from the Lawrenceburg agreement as far as a general definition of unit contingent contracts, which several contracts can be.

MS. BOJKO: Your Honor, I move to strike anything about the Lawrenceburg's exact agreement. I didn't ask anything about the Lawrenceburg agreement. I'm talking about the PPA contract, and I believe it's not helpful to the record. It only confuses the record because Lawrenceburg hasn't even been introduced this morning as we sit here today.

MR. NOURSE: Your Honor, I think there's

been testimony that Lawrenceburg was used as a starting point, and I think he was just commenting that it's a commercially reasonable provision to explain how this contract works.

MS. BOJKO: I asked no explanation. I asked if it was in the agreement.

EXAMINER PARROT: I'm going to grant the motion to strike with respect to the reference to the Lawrenceburg agreement.

MS. BOJKO: Thank you, your Honor.

Q. (By Ms. Bojko) And you called it makeup power earlier this morning, or somebody did. I just want to make sure I understand it. You do not believe that the seller, so AEP Generation, does not have to provide what I would call replacement power or a financial penalty during the time the units are unavailable as a result of the things we just talked about, the outage, the force majeure, the buyer's failure to perform, or any other condition or circumstance that reduces the electrical output; is that correct?

A. There is no provision as far as selling this that would make it deviate from a standard commercial term that would not require that else -- otherwise, and I think it's good for AEP Ohio that it doesn't have such a condition because, again, to the extent that it attempted to impose such rights on the seller, in this case AEPGR, then the price would have probably been higher. So I think it was very reasonable to have the unit contingent contract. It was reasonable across both sides.

Q. And just so I understand it, you believe -- or, it's your understanding that the delivery or the performance of the contract is excused if the unit is unavailable regardless of how long the unit is unavailable; is that correct?

A. There is no specific time frame of the unit outages. As far as all of the units under this agreement, I have looked back several years across all of the PPA units, the OVEC units, I never saw one year that had like a zero percent equivalent unavailability. They have tended to all be available for several years back. So I'm not anticipating there to be some significant outages in that respect.

MS. BOJKO: Your Honor, I move to strike anything after "I looked back." I asked him about what this contract does or does not contain, and I'm focusing on the words of the contract, not talking about what has or has not happened in the past for the units. I'm trying to understand the PPA as it was drafted.

MR. NOURSE: Well, your Honor, I mean, we have an expert witness here, you know, he's being challenged about the terms and why they're the way they are so he's explaining why they're reasonable as part of his answer. I think he's entitled to that flexibility and latitude.

EXAMINER PARROT: I believe it completes his answer so I'm going to deny the motion to strike.

Q. (By Ms. Bojko) Okay. But I'm not sure you answered my question. The seller is excused from performance, does not have to provide replacement power or a financial penalty or compensation regardless of how long the unit is unavailable due to forced outage, maintenance outage, construction, force majeure, buyer's failure to perform, and any other condition or circumstance that reduces electrical output; is that true?

A. As is true with several of these type of PPA agreements, that is a true statement.

Q. And during that period that the plants are unavailable, AEP Ohio will still be paying the O&M and the other costs related to the plant during the entire time that plant is unavailable; is that correct?

A. Yes. As far as the fixed costs, as Company Witness Vegas discussed this morning, we're seeking a regulatory compact on this agreement so, similar to regulated state where the fixed costs of a unit are paid even when it's going through a traditional maintenance outage, the expectation is that the customers or the buyer continue to pay those fixed costs during an outage even if the units are not producing power. All units have maintenance outage.

Q. Okay. And it will also pay the costs of the actual maintenance to fix the outage problem, not just the fixed costs that go into O&M, we're talking about the maintenance costs associated with either getting the unit running, back up and running, or just the day-to-day costs of the unit while it's idle; isn't that correct?

A. It is correct that those are very traditional terms, either under a PPA or in a regulated vertically integrated utility, that those costs are being borne while the unit is out of service.

Q. And isn't it also true, sir, that you believe that fuel acquisition is synonymous with fuel procurement?

A. Reasonably so in my perspective.

Q. Okay. And let's look at the definition of fuel cost on page 4 of the PPA document, sir. The definition of fuel cost says "without limitation, all fixed or variable costs, expenses, losses, gains, liabilities, fuel hedging, claims and charges related to the acquisition, sale, storage, inventory, transloading, handling, balancing, transportation and delivery of fuel and all other expenses recorded to FERC accounts," et cetera.

Is that accurate, sir?

A. Yes.

Q. Okay. And then I'd like you to look at the definition of operation and maintenance, O&M costs on page 6. The operation and maintenance costs talks about fixed and variable costs, expenses, losses, liabilities, claims, charges and associated credits incurred directly or indirectly in the performance of operating work including a ratable portion of retirement costs, but not including fuel costs. Do you see that?

A. Yes.

Q. And it references operating work which is also a defined term in writing; is that right?

A. Yes.

Q. And the operating work is defined to mean "operation, maintenance, use, repair, or retirement of a Facility on or after the Start Date, including but not limited to labor; parts; supplies; insurance; permits; related taxes; community relations; procurement of ancillary services, fuel, and other consumables; fuel acquisition or sales, transportation balancing, storage"; and it goes on from there; isn't that accurate?

A. Yes.

Q. So now if we could turn to page 11 of the PPA contract, Section 3.5. As I understand this section, the buyer dispatches the units, but the seller operates and controls the units; is that accurate?

A. Yes.

Q. And the buyer only dispatches the percentage of the output that they receive from the seller which is based on the seller's ownership shares of the units that they're dispatching; is that accurate?

A. That is.

Q. Okay. And AEP Ohio would be responsible for all of the imbalance charges that occur; is that correct?

A. Yes.

Q. Now, if we go to the end of 3.5, in this section it discusses --

A. I apologize, I do need to correct. You said they're responsible for all imbalance charges. I should qualify as in that same expense it goes on to say "Provided, however, that any such imbalance charges resulting from Seller's uncomputed failure to dispatch or cause the Facility Operator to dispatch the energy associated with the Seller's capacity entitlement that are designated by Buyer will be the responsibility of the Seller."

Q. Right. So in the first part of that paragraph we're talking about the buyer dispatching, then we talk about the buyer being responsible for imbalance charges, and then we talk about seller's unexcused failure to dispatch; is that right?

A. Yes. In which case the seller would be responsible for what could be potentially some additional imbalance charges. That was my only point.

Q. But the buyer's dispatching the units; isn't that right?

A. Yes.

Q. Okay. Go to 3.6 now, the sixth line

down, the sentence starts with "Buyer shall have the right to designate an agent for coordinating." Do you see that?

A.   Yes.

Q.   This agent could be AEP Corp.; is that accurate? That might have been discussed by Mr. Vegas. Is that your understanding, that the buyer could designate AEP Service Corp. to be the coordinator?

A.   The buyer could coordinate with the Service Corp., that is correct.

Q.   And isn't it true that the contract does not prohibit or explicitly preclude AEP Generation from being the agent?

A.   Based on the sentence you just read, I don't see any specific requirement that they couldn't. I could say that that was not envisioned, I don't believe, by that, that they would tend to use Gen Resources as their agent for those functions.

Q.   So you don't know anything that would prohibit or explicitly preclude AEP Generation from being the agent in that, correct?

A.   As you heard I think Company Witness Vegas refer to as well, we have a code of conduct so there would have to be -- there may be additional restrictions outside of this contract that would prevent that from occurring.

Q. Okay. Just to clarify and make sure, there's nothing in the agreement, to your knowledge, that precludes AEP Generation from being that agent; is that correct? I think you answered outside of the agreement. I want to make sure there's nothing in the agreement.

A. Speaking as a nonattorney, the specific sentence you read and elsewhere in the agreement, I would accept that that is not explicitly precluded in the agreement. With that said, putting specific language in here to make it state that it can't do that, to me that is in line with if on Section 10.4 of the operating committee, that AEP Ohio Power decided to designate Gen Resources as its agent on the operating committee, which obviously it wouldn't do, that's a conflict of interest, it's not explicitly but I don't think that would happen is my point, as far as making it explicitly it could not happen.

Q. And that's also answering as a nonattorney.

A. That's answering as a nonattorney.

Q. In 3.6 as I understand it, thanks to you in our deposition, buyer is responsible up to the delivery point and after the delivery point; is that correct?

A. Yes. Understanding that in this case with the intent to liquidate the generation right at the busbar of the plant, you know, as far as costs up to the delivery point, the delivery point is right at the generation station so I don't anticipate there being really any significant costs to the delivery point and, really, beyond the deliver point which it would only be if the seller decided to do something else with the power that they're going to see any costs past the delivery point.

Q. And for clarity of the record, I probably didn't complete my question.

A. Oh, sorry.

Q. No, no. Regarding transmission costs, the buyer is responsible up to the delivery point and after the delivery point. That was how you answered that question; isn't that correct?

A. Yes.

Q. Thank you.

Now let's turn to Section 4.2, please. 4.2 is titled "Capital Improvements"; is that correct?

A. Yes.

Q. Okay. And capital improvements and expenditures would be included in the costs that AEP Ohio has to pay under the definition of capital improvements work related to a facility in this section; isn't that correct?

A. They would pay for the capital improvements as defined in that section after which their prior written approval and agreement was obtained for such capital improvements work which is in the exact same section. So they would basically be paying for work that they had prior provided their written approval to perform.

Q. I'm just asking if capital improvements and capital expenditures are embedded in the definition of capital improvements work in Section 4.2.

A. Yeah, if capital improvements say capital expenditures, yes, I would agree with that.

Q. And let's turn to page 15 which is 5.7, please. Under "Other Miscellaneous Payments" the buyer shall pay the seller any other costs and credits as described in the agreement, or any other costs or credits reasonably associated with the facilities which may be billed monthly; is that

correct?

A. Yes.

Q. And the example provided in this section is regarding ancillary services; is that correct?

A. That is correct.

Q. And so in addition to the capacity payment that's embedded in Section 5.5 under the pricing in Article V, AEP Ohio is also responsible for all ancillary services; is that correct?

A. There's two types of ancillary services. The major type is going to be the revenue stream that the units get paid for providing ancillary services such as regulation and reactive. There are a few very minor, very miscellaneous ancillary services, admin. type fees in PJM that get allocated to generation, and, yes, those would flow through that section if they weren't already netted out on the PJM bill, but it's going to be very small dollars.

Q. So I think you said they would flow through the generator. So the buyer in this agreement, which is AEP Ohio, they are responsible for the cost of those ancillary services associated with the facility capacity that you just mentioned; isn't that correct?

A. To the extent that there are some

specific ancillary services associated with PJM, again, admin. fees is the one, pretty trivial dollars that would flow through, yes, those would flow through to the buyer in this case, AEP Ohio, and of course they would get the larger dollar amount which are the ancillary services that those units are providing into the market that the more substantial revenues provide a regulation providing reactive services.

Q. Okay. I understand you want to tell me the other half --

A. Okay.

Q. -- but the ancillary costs are what's included in 5.7.

A. That's right. Specific ancillary services associated with the very small PJM admin. fees would flow through the buyer, I agree with that.

Q. And the PPA contract does not preclude or prohibit AEP Generation from selling one or more of the units; is that correct? One of the PPA units.

THE WITNESS: I'm sorry. Could you read that?

Q. I can rephrase. The PPA contract does not preclude or prohibit AEP Generation from selling one or more of the PPA-affiliated units; is that

correct?

A. Excuse me.

Not that I can find at this time.

Q. Okay. And if we look at page 23 over to 24, Section 13.5, it talks about assignment. Isn't it true that an assignee has to affirmatively agree in writing to assume all of the obligations of the agreement?

A. Yes.

Q. And you would agree, sir, that if the purchaser does not agree to be bound by the terms, that an event of default occurs under Section 8.16 of the agreement.

A. Well, again, speaking as a nonattorney, if the seller doesn't agree to the terms, then the transaction wouldn't occur.

Q. Well, look at page 18, Section 8.1, little Roman Numeral vi, and it states, the last couple sentences state the "Person fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a Party by operation of law" -- sorry, strike that.

If you read Section 6, it states that if a party doesn't assume -- if an assignee doesn't assume all of the -- to be bound by the terms of the

agreement, then it is an event of default under 8.16.
A. I'm sorry. Where are you looking?
Q. 8.16.
THE WITNESS: Could you read back the question.
(Record read.)
A. Yes. Speaking as a nonattorney, I mean, if a party had agreed to those terms and then it had been transferred and then this event happens, then that would be a condition of default, speaking as a nonattorney. That's what it appears like to me.
Q. And as a nonattorney, it appears that Section 8.2 would then set out the remedies if there was a default; is that accurate?
A. Yes.
Q. Okay. So let's turn to Section 2.3, it's on page 9 of the PPA contract. Are you there?
A. Yes.
Q. All right. Section 2.3 is the early termination right and this allows the buyer, so AEP Ohio, to terminate the agreement early if there's a significant disallowance; is that correct?
A. Yes, it is.
Q. And I think you may have agreed to this earlier, but if an early termination occurs, the

buyer must pay the seller an amount equal to the sum of then undepreciated net book value of the units and the expected retirement related costs associated with those units; is that correct?

A. Yes.

Q. Okay.

A. Yeah.

MS. BOJKO: Your Honor, before I forget I have a confidential document so I will reserve time for confidential. But I don't want to ask you any more questions until we go into the confidential section on this piece.

Q. Sir, is it your understanding that this agreement is between AEP Ohio and AEP Generation and that the customers that are paying for some of the costs associated with this agreement would have no say in whether the units retire or remain in operation; is that correct?

A. This contract is between the buyer and seller so AEP Ohio would have the say.

Q. Not the customers, right?

A. AEP Ohio's customers?

Q. Right.

A. Not directly.

Q. Not directly? Not at all, because, as

Mr. Vegas testified earlier, that any kind of prudency review or any decisions of that regard would be made solely between AEP and the Commission; isn't that right?

A. Yes. They would make the prudency decisions, but obviously input into what would be considered prudent or imprudent I think would be a strong input for Mr. Vegas to bring back as a party to this agreement.

Q. But the customers, I'm talking about the customers. The customers have no input into that decision; isn't that correct?

A. As I understand it, the audit process would be similar, I think Mr. Vegas referred to like a fuel audit.

Q. Okay.

MS. BOJKO: I'm sorry, could I have that, he trailed off, that last piece.

(Record read.)

MS. BOJKO: Thank you.

Q. You talked a little earlier about the KDP-2, your forecast, and that it only extended through 2024; is that correct?

A. Yes.

Q. And it's your understanding that the term of the PPA contract is through the life of the unit, the last life of the unit; is that right?

A. Yes.

Q. You mentioned some earlier dates, but the last unit is scheduled to go through 2051; is that right?

A. That is correct.

Q. Okay. So even if some of the units retire earlier or, you used the word "early," but even if they just retire on their scheduled retirement date of 2033, whatever it may be, the whole PPA contract still extends to 2051 until the contract retires, right?

A. The PPA, yes. Now, those units that retire could be removed from the agreement.

Q. And there's a whole process set up in here about how you remove an actual unit from the agreement; is that right?

A. Yes.

Q. But even if they retired, they're still paying those post-retirement costs and any other costs until, in fact, they would be physically removed from the agreement, right?

A. As far as the retirement cost, the asset retirement obligations are going to be the main costs. Those are legal requirements, and those are booked along the way. They're basically collected, ready to spend at the time, and those are the legal obligations.

The non-ARO are basically costs that we are not legally required to do. So there may be very small costs, it could even be negative, at the end of the life of the unit if we've got it close to net book value, then the parties could say we've got an offer to buy the land for a different purpose, we take the agreement out and there's maybe no retirement cost whatsoever.

Q. Okay. But my point is that those agreements and associated costs, whatever they may be that you just explained, those will still be passed on to AEP Ohio and AEP -- and subsequently to the PPA rider for the life or for the life of the last unit unless or until a unit is actually -- there's an amendment to the agreement and it's actually removed from the agreement; isn't that correct?

A. Yes. And my anticipation is that as those units retire, that they would go ahead and be removed from the agreement at some time shortly after their retirement.

Q. And all those decisions, the retirement and the removal from the agreement, those are done by the operating committee set forth in the purchased power agreement; is that correct?

A. Well, it was set forth by the operating committee and also then you take back to Section 2.4 that it just basically by mutual agreement they want to agree that, you know, we want to go ahead and just take the unit out of service, then they can do that through the Section 2.4 provision.

Q. Okay. Those decisions are either by the operating committee, which is made up of the parties and an AEP Service Corp., or just the parties themselves, is that what you're saying, through Section 2.2?

A. Yeah. The -- yes. The operating committee in Section 10 talks about review and approve decisions regarding retirement or early retirement of any of the facilities. Section 2.4, because it says "In the event the Parties are unable to reach agreement upon the retirement date of a Unit," so in that instance, while I think a discussion about the specific retirement of the date of the unit, the operating committee would be the practical forum to have that discussion, there is, in my view, then that would be an instance where the

Service Corp. operating committee would essentially abstain and then it reverts to 2.4 where, okay, the two parties now can't mutually agree or, excuse me, they haven't agreed on a retirement date but then they can mutually agree to remove the unit. And that's if there's a disagreement in the first place. And I don't see that there's, practically speaking going to be one, if the unit's retiring they want to go ahead, finish shutting down the unit and staying it out of the agreement.

Q. But just so we're clear, the 2.4 says that if they're unable to reach an agreement by retirement, they may mutually agree to remove a unit so there still has to be some kind of agreement for the parties and there's nothing in this provision that says what happens if there's not mutual agreement; isn't that correct?

A. That is correct.

Q. Let's back up a little bit to your forecast. I understood you made a forecast and you produced KDP-2. KDP-2 as an attachment to your October testimony. And then you did a revision in response to discovery, so that was a Revised KDP-2. And then as I understand it, you provided a Third Revised KDP-2 attached to your May testimony; is that

correct?

A. Is there a, is there a middle one in there? I'm not...

Q. We'll take it by pieces. First you did attach a KDP-2 to your October testimony in 2004 [verbatim]; is that correct?

A. That's correct.

Q. And then --

MS. BOJKO: Your Honor, at this time may we have marked as OMAEG Exhibit 6 discovery responses, it's to IEU INT-1-003, there's a supplemental response to 003 and then there's also our response to IEU RPD-1-003 with two supplemental responses all together.

EXAMINER PARROT: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

Q. (By Ms. Bojko) Mr. Pearce, do you have in front of you what's been marked as OMAEG 6 which is IEU INT-1-003 responses, multiple responses, and then the corresponding RPD-1-003 with --

A. I do.

Q. -- multiple supplemental responses?

A. I'm sorry. I didn't mean to cut you off. Yes.

Q. And, sir, you are the responsible witness listed on the bottom of both of these interrogatories and requests for production of documents; is that correct?

A. Yes.

Q. I'm assuming since you're the responsible party that you've seen these before; is that correct?

A. Yes.

Q. If we look at the supplemental response to interrogatory 1-003, it states that due to the Conesville coal cost assumptions, which I just think you discussed this morning with Sierra's counsel, that due to that you created a revised forecast and provided it in discovery; is that correct?

A. Are you looking at RPD-1-003?

Q. I'm actually reading from INT-1-003 Supplemental Response.

A. Yes, I see that.

Q. And there's a similar indication on RDP, which may be where you were reading from, -1-003 Supplemental Response January 20th, 2015, that basically states the same thing, that there was a Revised KDP-2 exhibit; is that correct?

A. Yes.

MS. BOJKO: And just for the record, your Honor, in places in this document it implies that it's competitively sensitive information, but I believe that only refers to Attachment 1, and it's my understanding that this supplemental attachment and exhibit is not confidential; am I correct?

MR. NOURSE: Correct.

MS. BOJKO: Okay. Thank you.

EXAMINER PARROT: Thank you.

Q. Is the document produced in response to interrogatory 1-003 and RPD-1-003 from IEU's set, first set, is that what is attached as Supplemental Attachment 2 which is your forecasted PPA rider credit graph as well as the, what's called the workpapers, it's the PPA rider impact?

A. I'm sorry. You're referring to which supplemental response here?

Q. I'm referring to actually your KDP-2 and the graph that's associated with that.

A. Okay. That is my -- appears to be my supplemental attachment.

Q. Okay. And this is what I -- this attachment, Supplemental Attachment 2, is what I believe to be a production to discovery that was a revised forecast between your October filing and between your May filing; am I accurate in that assumption?

A. Yes.

Q. Okay.

A. Well, revised. Yeah, it was in some sense only a correction in the fact that we had used a different forecast between the three cases.

Q. Okay.

A. So as shown in what you just handed me, the supplemental response dated January 20th, 2015, this work was performed prior to January 20th, 2015.

Q. Okay. And in this supplemental Attachment 2 the forecast includes the four forecasts that you included in your KDP-2 attachment to your May filing meaning it has the 5 percent higher load forecasts, the average of high load forecast, the weather normalized case, and the 5 percent lower load forecast; is that correct?

A. Yes.

Q. And in this forecast that you've produced there is a credit -- or, excuse me, there is a charge to customers for the weatherized -- normalized case for the first four-and-a-half years of the rider in the magnitude of $229 million; is that correct?

A. Over what period?

Q. Four-and-a-half years. It's June 2015 through 2019.

A. And how much did you say?

Q. $229 million.

A. Yes, June 1st of '15 through the end of 2019.

Q. And for the 5 percent lower load factor case there's a charge of $664 million to customers from June 2015 through '19; is that correct?

A. How much did you say?

Q. 664 million.

A. I come up with 664 for the 5 percent low case just as I come up with a $664 million credit in the 5 percent high case for that same period.

Q. Okay. And for the entire forecasted period from June 2015 through 2024, the two cases that I mentioned, the weather normalized case and the 5 percent lower load forecast case of the PPA units, there's a net cost to customers; is that correct?

A. Over what period?

Q. The entire forecast.

A. In the weather normalized case?

Q. Yes, for the weather normalized case it's 236 million; is that correct?

A. Yes.

Q. And then for the 5 percent low load

forecast it's $1.1 billion; is that correct?

A. Yes.

Q. And --

A. Well, it shows a positive for the average and a $1.5 billion benefit on the 5 percent high case.

Q. Sir, is it your understanding from working in the markets that Ohio is currently a net importer of electricity?

A. I haven't looked at that recently. I would refer you to I think Company Witness Wittine.

Q. I'm sorry. To who?

A. Wittine.

Q. Wittine? He'll know the answer to that question.

MS. BOJKO: If I may have one moment, your Honor.

Your Honor, I have no further questions on the public. Just so the record's clear, I have additional documents and questions that are confidential that weren't necessarily -- I didn't point them out like I did that one section.

EXAMINER PARROT: Okay.

MS. BOJKO: Thank you, your Honor.

Thank you, Mr. Pearce, for your time.

EXAMINER PARROT: Mr. Stinson?

MR. STINSON: Thank you, your Honor.

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CROSS-EXAMINATION

By Mr. Stinson:

Q. Good afternoon, Mr. Pearce. I'm Dane Stinson. I'm representing the Office of the Ohio Consumers' Counsel in this proceeding.

First I want to begin by asking you if you're generally familiar with AEP Ohio's last ESP order.

A. For questions of any in depth on that I would refer you to Company Witness Allen.

Q. I don't think I'm going to get too in depth if you'd bear with me just a bit.

And are you generally familiar with the capacity order, the capacity charge order that was issued at about that same time? It was Case No. 10-2929.

A. I'm somewhat familiar with the 10-2929 case.

Q. Thank you.

I want to go back to page 18 of your testimony and you were having a discussion with Ms. Bojko about the revenues you used to determine the amounts on that page of your testimony, the potential revenues of PPA units' capacity had been sold at PJM RPM. Do you recall that conversation?

A. Yes.

Q. You said that the revenues you used were less than the actual revenue on the books. Do you recall that?

A. Yes.

Q. And so the actual book revenue was greater than what you used?

A. For AEP Gen Resources it would have been, yes.

Q. And was the reason for that because AEP Ohio's capacity charge approved then in Case No. 10-29 was higher than PJM's RPM?

A. At that point, yes.

Q. Thank you.

Let's just look at the term sheet attached to your testimony as KDP-1, and particularly the early termination provisions on page 5 of that exhibit. Now, I believe you testified earlier here today that the PPA agreement would extend out to the expected retirement of one unit, the Zimmer unit, in 2051 that appears on Attachment A, KDP-1, page 7, correct?

A. Yes.

Q. Now, I want to assume that the Commission approves a PPA rider in this proceeding for a three-year period and then does not renew or approve an ESP or a PPA rider in an ESP after that three-year period. My question is, at that time does the early termination provision on page 5 apply such that the buyer must pay seller an amount equal to the sum of the net book value and retirement related costs associated with the PPA unit at that time?

A. You're referring to Section 2.3?

Q. Right.

A. Yes. The buyer at that point in time would have the rights as described here and I believe is discussed by Company Witness Vegas. He's the best one to determine exactly what his options would be going forward as to whether to exercise that right or not.

Q. Thank you.

Let's turn to page 5, line 8, where you're discussing the necessity of the generating facility in light of future reliability concerns including supply diversity. Now, in your testimony you consider supply diversity to be the cost-based supply of generation with the competitive supply; is

that correct?

A. Yes. That's one of the ways I believe you could look at supply diversity.

Q. Your testimony does not consider or discuss fuel source diversity; is that correct?

A. No, not that I can recall.

Q. Thank you.

On page 7, lines 7 through 10, you discuss generally the different units that would be included into the PPA. Who decided what units would be included in the PPA, do you know?

A. I think that was discussed by Company Witness Vegas.

Q. Okay. Did you have any input into that decision?

A. No. Based on the criteria they set forth, these were the units that were decided.

Q. Now, AEPGR only owns Cardinal unit 1 and Conesville units 5 and 6; is that correct?

A. Yes.

Q. And it jointly owns Conesville 4, Stuart units 1 through 4, and Zimmer 1; is that correct?

A. Yes, that is correct.

Q. And it jointly owns the other units with DP&L and Dynegy; am I correct?

A. Yes.

Q. Now, if there's a decision to retire those jointly-owned units, must that decision be unanimous?

A. Yes, it must be.

Q. Okay. What's the corporate relationship among AEP, Inc., AEPGR, AEPSC, and AEP Ohio?

A. AEP, Inc., I think of as the parent company of the others.

Q. And the other three are wholly-owned subsidiaries of AEP?

A. You said AEP Ohio?

Q. AEP Ohio, AEPSC, and AEPGR.

A. Yes.

Q. And those three are affiliates then.

A. Yes.

Q. Page 8, you talk about how the units will be dispatched, and you indicate that the Regulated Commercial Operations Group of AEPSC would bid AEP's regulated generation facilities into PJM; is that correct?

A. Are you looking at a particular line?

Q. Lines 13 through 17. Well, let me back up about that. You state that AEPSC acting as agent for AEP Ohio would provide guidance to AEPGR,

correct?

A. That is correct.

Q. And what do you mean by "guidance"?

A. What would be the guidance?

Q. Yeah, what do you mean by that term?

A. I think it's more spelled out in the proposed PPA in Article 3.5, the "Scheduling and Dispatch" section buyer or its agent will dispatch the generation by reviewing and determining the parameters associated with PJM generation offers, including how this generation will be offered to PJM, for the energy and ancillary services associated with buyer's contractual capacity and seller."

Q. And so the Regulated Commercial Operations organization of AEPSC would provide that same function for AEPGR and the AEP Operating Companies, correct?

A. Yes. Yes. It would be the same people that's over the regulated Appalachian Power, Indiana-Michigan Power, vertically-integrated utilities that do those functions.

Q. And the -- you state that the Regulated Commercial Operations Group is separate and distinct from the Commercial Operations of AEPGR, correct? On line 17.

A. Yes, they are.

Q. And by that you mean that they're subject to a code of conduct?

A. Yes, that is correct.

Q. But AEPSC will have oversight of the bids offered by both the PPA units and the regulated facilities, the AEP Operating Companies?

A. AEPSC, are you talking about what I'm calling the Regulated Commercial Operations?

Q. Right.

A. Yes. Yes, they have oversight over the PPA units and, yes, those other units of APCo and Indiana-Kentucky, yes, they would.

Q. Is there any code of conduct that would keep the information between the regulated units and the PPA units distinct, the information regarding the two?

A. Not that I'm aware of, as far as the information flowing that way, because it would basically be from the unregulated units providing the status of the units and so forth to the same folks who did the regulated units. Then I don't know that there's going to be any specific requirements insulating that information. It is the other way that obviously information should not flow in that situation.

Q. On page 9, line 21, talking about the Buckeye units and the Cardinal unit 1, the Cardinal units 2 and 3, do you see that beginning at line 16?

A. What page are you on?

Q. Page 9, line 21.

A. Yes.

Q. And you state that this revenue net of production costs will be provided to AEP Ohio, and am I correct that that revenue net of cost would be flowed through the PPA rider?

A. That is what is anticipated, yes.

Q. Under the PPA agreement will AEPGR be able to enter into a third-party bilateral contract to sell the affiliated units' energy?

A. Are you referring to the PPA units?

Q. Yes.

A. Well, no. Under this agreement, I mean, the proposed PPA is that they're selling the output of these units to the buyer which is AEP Ohio.

Q. I'm sorry, I misspoke then. Under the PPA agreement would AEP Ohio be able to enter into third-party bilateral contracts to sell the affiliated units' energy, capacity, and ancillary services?

A. There's nothing to prevent that. So, for example, rather than liquidating in the market, if it's on down the road there was a prospective buyer of those outputs, that, you know, were offering a very strong price to AEP Ohio, that perhaps they felt like this is maybe favorable even relative to the day ahead and the spot markets in PJM, and so they wanted to enter into that type of arrangement, they could. It's their power, energy and capacity and ancillary services. And the results of that payment stream would flow through, my presumption, the PPA rider just as if they continue liquidating it at the busbar.

Q. That was my question, whether that would be flowed through the PPA rider.

A. Yes, it would. My understanding.

Q. This may have been asked and I apologize if it was but why was the forecast limited to a period of nine years and three months?

A. Our standard PLEXOS modeling tends to go out only ten years. I understand that there's some other models that the company may have, they tend to be less sophisticated, not to put some of the other models down, but PLEXOS is our -- I'll say our most sophisticated model. So if there's other models that may go out farther for CPCN or Excel based or whatever, but this model tends to go out ten years.

Q. Are you aware of a model called REMI?

A. I've heard the term, but no. That's it.

Q. You're not familiar with it. Do you know if AEP Ohio considered using that model in its forecasting?

A. No. I went to the Corporate Planning and Budgeting, and since they replaced PROMOD with PLEXOS, this is our model of choice for this type of analysis, for the work that I've been involved with.

Q. Going to figure 1 of your testimony on page, I believe it's 12, and if the assumption of the -- or the 5 percent lower load forecast load assumption is correct, AEP Ohio distribution customers would pay a charge under the PPA rider for the nine years of the forecast beginning 2016, correct?

THE WITNESS: Could you read back the question.

(Record read.)

A. If you had that sustained load model and, as you could see in the text box on there, some presumption around CO2 tax which is on the order of $700 million, I believe.

Q. Was it Mr. Bletzacker who proposed the 5 percent low and high load forecast?

A. Yes. What we were trying to do was effectively capture year to year what can be volatile weather movements. Our standard scalars are an average of five years so when you have weather events like the polar vortex, they tend to get averaged out. So that's why we have been careful on Figure 1 to present it as a range with a line from the high and low.

We believe that the midpoint is a fair point to look at as far as, okay, you know, one year could move down, it could move up, the midpoint, if you take the midpoint over the range, and those are the same four points that are reflected in my Exhibit KDP-2.

So, for example, the midpoint of the range would appear it indicates the $574 million and that is after it's been reduced by approximately $768 million of carbon tax beginning in 2022.

MR. STINSON: Your Honor, I move to strike everything after the word "Yes."

MR. NOURSE: Your Honor, I think he was asking about the 5 percent low and high forecast so Mr. Pearce is trying to be helpful and explain what occurred.

MR. STINSON: I asked a specific question, and the first sentence or word was the answer. The rest was not responsive.

EXAMINER PARROT: I'm going to allow the answer to stand. I think it completes --

MR. STINSON: Pardon me?

EXAMINER PARROT: I believe it completes the answer.

Q. And is it true that the 5 percent high-load factor and the 5 percent low-load factors were used to take into account variations in weather and economic conditions?

A. On a year-over-year basis that is correct.

Q. Let's assume that economic conditions do not change in a given year. Does the 5 percent increase or decrease assume severe weather during the entire year?

THE WITNESS: Could you read back the question.

(Record read.)

A. Well, it's basically an increase in load so it wouldn't necessarily be a weather change over the entire year. For example, again, it could be some polar vortex in the first quarter with I'll say more normal weather the rest of the year but that would -- over the course of the year would result in a 5 percent load increase for the entire year.

Q. And you mentioned the polar vortex. How long did the polar vortex last let's say in 2014, the winter of 2014?

A. How long did the polar vortex last?

Q. Yes.

A. I've heard multiple responses to that question myself. If you talk about a specific small-term period of very high loads, people tend to focus on the January 6th through the 8th time frame. However, there were other various cold spells in January. Somebody was arguing there was one in March.

In some sense there's a polar vortex going around the pole all the time. It's a question of how often the jet streams allow it to go down.

So without being a meteorologist I can't say exactly how many polar vortexes happen. I can say that as far as our analysis around what would have been the impacts on customers due to the PPA riders, I know it was just a combination of it got darn cold, however you got there, a polar vortex, a deep freeze, an arctic blast, and so looking over the entire quarter of 2014, the results would have been the 54 to 70 million dollars presented in the testimony.

Q. But you would agree that the polar vortex is defined by some as lasting from January 6th to January 8th of 2014, correct?

A. I have heard that as focused and that is why it's important that we did not just point to, oh, over this three-day period customers would have gotten a benefit. We took it out more than just those three days. We took it out over the month of January. We took it out the entire first quarter of 2014 it showed there would have been a substantial benefit to customers.

Q. Did you take it out the entire year of 2014?

A. No. We did that one quarter.

Q. Did you consider the winter of 2014-2015?

A. We have not updated it for any previous or any subsequent periods.

Q. Now, in your professional experience are you aware of any other occasion on which a polar vortex, as that term is used, are you aware of any occasion on which another polar vortex occurred?

A. Again, I'm not -- if you're getting into the precise term of a polar vortex, I'm going to leave that to meteorologists. I can respond to a broader question of if you're asking me has it ever gotten cold and have temperatures got hot. I believe the term used by some even at PJM is what they called the deep freeze that occurred in the mid-'90s with rolling blackouts. Again, the term used then was "deep freeze." I've heard -- I don't recall the term "polar vortex" being specifically used before this. I don't know if it's something the press latched onto or what.

Q. Thank you.

A. And just to complete my answer, there have been other periods between that mid-'90 period and what we're calling the polar vortex here of a combination of cold winter weather and high wholesale prices, whatever was the cause of the temperatures getting really cold.

Q. Page 13, line 19, you state that, "However, during shortage events, when real-time reserve margins are below the PJM target levels, energy prices can go as high as $2,700 per megawatt-hour beginning with the PJM 2015/16 delivery year that begins June 1."

A. Yes, I do.

Q. How many times have real-time reserve margins gone below the PJM target levels, to your knowledge?

A. The one time that I am aware of was during the polar vortex.

Q. Any other times?

A. Not that I'm aware of.

Q. On page 15, Figure 2, are those figures based solely upon Mr. Bletzacker's analyses?

A. Yes, they are.

Q. Did you adjust those in any way?

A. No.

Q. I believe you were discussing with Ms. Bojko concerning a weather-related event that would occur in July of a given year and, under the PPA rider, the PPA rider would not be adjusted until the following June. Do you recall that?

A. I recall that conversation.

Q. During the next June period, the following June period when the rider is adjusted, could prices, energy prices and capacity prices, at that point either increase or decrease?

A. They could.

Q. And on page 16, Table 2, we're going to look at line 2, is that just another representation of the 5 percent lower load forecast on Figure 1?

A. Yes.

Q. Page 17, line 15, you mention the benefits of those same low wholesale prices. Isn't it true that the PPA did not create the benefit of the low wholesale prices in that situation?

A. In that situation they're not creating the benefit of -- they're not having any impact on low wholesale prices at that point in time. It's just the wholesale prices at least when they're low adding it in, even if there's a charge during that period, customers will still get the benefit of those low wholesale prices.

Q. And they would still pay the PPA charge, correct?

A. That would be the trade-off for them is the fact that if prices are cheap and that's a good thing for customers, that even if there's a slight adder on top of that, that is basically the risk that offsets the other periods when if prices blow out and there's a lot, at least they're getting what would be the credit that would help reduce their prices when wholesale prices increase.

Q. But the lower wholesale prices are a

function of the market, not the PPA rider.

A. As the high wholesale prices would be.

Q. As a part of your analyses, did you do any studies as to whether the economy was strengthening or weakening during the term of the PPA?

A. I'm going to refer you to Company Witness Bletzacker for those.

Q. I'm sorry. I'm having a hard time hearing.

A. I'm sorry. I'm going to refer you to Company Witness Bletzacker for those questions.

Q. On page 20, line 6, you mention the assumed $15 per metric ton of CO2 emission tax adder. Is that also an issue for Mr. Bletzacker?

A. It depends on what you're asking about it.

Q. Well, did you have anything to do with forecasting that figure? First of all, did Mr. Bletzacker propose that figure, the $15 figure?

A. Mr. Bletzacker and perhaps with input from Mr. McManus would have provided the $15 per metric ton.

Q. Did you do anything to adjust that figure?

A. The 15 was increased a very small, nominal amount, that was '22 and then '23 and '24 and then we incorporated that through our PLEXOS modeling as a cost of dispatch. So we reflected both, two things, two that, you know, if it occurs, that it would have reduced the impact or reduced the dispatch of the units and then, on top of that, the actual costs, the variable costs of the units at the $15 per ton rate which works out to be somewhere in the 13 to 15 dollars per megawatt-hour range.

Q. Exactly what did you do to do any adjustments to Mr. Bletzacker's $15 per metric ton figure?

A. What I'm saying is we didn't adjust it per se but we utilized it as an input into our modeling and carried it the rest of the way through.

Q. You used the $15 in your model.

A. Yes.

Q. Page 21 on line 21 you state that the region is in the middle stages of a very large wave of plant retirements. Would you agree that most of those retirements would occur by the end of 2015?

A. I would agree most of them occur between -- yeah, between the end of the '15-'16 time frame.

Q. Do you know how many megawatts would retire after the 2015?

A. According to some PJM data I saw I think it's going to be -- there's still about 10 percent, a little bit less of that value slated for retirement.

Q. On page 23, line 8, you state that "While 15.2 gigawatts of gas-fired and renewable generation cleared RPM for deliver year 2013/14 through 2016/17, only 9.2 gigawatts is expected to be on-line by June of 2016." Do you see that?

A. Yes.

Q. And you cite to footnote 9. And that indicates it's an affidavit by Michael Rutkowski; is that correct?

A. That is correct.

Q. That affidavit was filed as a part of a PJM proceeding?

A. Yes.

Q. And it was offered in support of the American -- or, the PJM Utilities Coalition?

A. That's correct.

Q. On that same page at line 9 you use the -- from 9 to 10 you use the word "past experience indicates that a fraction of those resources in the planning queue actually come to fruition." What past

experience are you referring to?
A. I think, as Company Witness Wittine would describe, that a lot of units that -- that you go through a couple of steps in the PJM planning process, ultimately get built and achieve commercial operation.
Q. So that's a reference to Mr. Wittine's testimony?
A. Yes.
Q. On page 24, lines 17 to 21, at the end of that sentence you also have a footnote that refers to Mike Kormos' testimony in Polar Vortex to FERC, April 1, 2014, page 3. Do you have any citation to that proceeding?
A. I'm sorry. Where are you looking?
Q. Footnote 13.
A. Not with me. I do not sitting up here, I do not have the citation.
Q. I'm sorry. I didn't hear you.
A. Okay.
Q. Do you know if that testimony was offered in support of what party, do you know?
A. I believe it might have been on behalf of PJM itself.
Q. Are you certain of that?

A. I would have to go back and look.

Q. On page 24, line 21, and carrying over to page 25, we have some figures there that 9,700 megawatts resulted from outages at gas-fired generation plants and another 9,300 megawatts were due to natural gas supply interruptions.

A. Yes.

Q. By my calculations that leaves another 21,200 megawatts remaining from the 40,200. Do you know the fuel source for those megawatts for those outages?

A. I believe, basically, on that report the -- there was a breakdown of coal, nuclear, some were just designated as "other," but what I find interesting about that is as effectively 47 percent of those assets -- outages came from coal and you're asking me about what was the breakdown of the fuel supply. Gas-fired, according to that same reference, was only 29 percent of all resources, so despite gas being 29 percent of the PJM resources, it accounted for 47 percent of the outages.

Coal, on the other hand, did have some outages, but I believe they were 34 percent of the outages even though they were 41 percent of the resources. So gas did not perform as well as coal during that period.

MR. STINSON: Could I have the answer reread, the question and answer reread, please.

(Record read.)

MR. STINSON: Your Honor, I'd move to strike everything beginning with "but what I find interesting."

MR. NOURSE: Your Honor, Mr. Stinson asked about megawatts, the fuel source for those outages. Dr. Pearce recited the answer and broke it down in terms of the percentages and tying that to the fuel source. He got just what he asked for. And he explained that he just made an observation about the data that he was asking for along the way.

EXAMINER PARROT: I'm going to grant the motion to strike.

Mr. Stinson, how much more do you have for this witness?

MR. STINSON: Not much, your Honor.

EXAMINER PARROT: We'll finish that and then at that point we'll take a break.

Q. (By Mr. Stinson) Now, going to the term sheet again, Exhibit KDP-1, page 4, and particularly the "Audit Rights" provisions.

A. Yes.

Q. It provides that the buyer has the right to examine the records of the sellers, correct?
A. Yes.
Q. Does the PUCO have that right?
A. I believe that was covered by Company Witness Vegas.
MR. STINSON: If I could have just a moment, your Honor.
EXAMINER PARROT: You may.
MR. STINSON: Nothing further, your Honor.
EXAMINER PARROT: All right. Let's go off the record. We'll take a ten-minute break.
(Recess taken.)
EXAMINER PARROT: Let's go back on record.
Mr. Oliker.
MR. OLIKER: Yeah, before I begin, your Honor, I do have confidential questions so I would like to reserve that opportunity for this witness.

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CROSS-EXAMINATION

By Mr. Oliker:
Q. Good afternoon, Dr. Pearce.
A. Good afternoon.

Q. My name is Joe Oliker. Good to see you again.

I think you indicated to counsel for the Ohio Consumers' Counsel that the retirements that you've identified on page 21, those will mostly already be completed by the end of this year; is that correct?

A. Yes. Most of them, yes.

Q. So you agree that nearly all of those retirements have already had any impact that they may have on capacity prices.

A. Well, absent the remaining 8 percent of, or so, 8 to 10 percent I'll say range, that have not yet happened.

Q. Thank you.

And on page 25 you state approximately 12,000 megawatts of coal-fired generation scheduled to retire in 2015 and '16, many of these retiring units help keep the lights on both this winter and last winter but will be unavailable in the near future. Would you agree that during the polar vortex over 5,000 megawatts of generation slated for retirement had a forced outage?

A. I haven't looked at the specific number of those units that have retired, that were scheduled to retire that were out. What I would say in response, there was a lot of retirement so it sounds like there were a lot of units that were scheduled for retirement that were running during the polar vortex.

Q. Dr. Pearce, are the exhibits that were marked yesterday with Mr. Vegas, are they still up there on the stand?

A. Not that I have.

MR. OLIKER: Could counsel, do you have an extra copy of OMA 3?

MR. NOURSE: OMA 3?

MR. OLIKER: Yeah.

MR. NOURSE: Should.

MR. OLIKER: Could you provide that to the witness, please.

MR. SATTERWHITE: Approach?

EXAMINER PARROT: You may.

Q. (By Mr. Oliker) Dr. Pearce, the document that's been marked OMA Exhibit 3, that contains the 2015 PJM Winter Report, correct?

A. Appears to, yes.

Q. And if you turn to page 18 of that document, would you agree under Figure 15 there is statistics regarding the performance of retiring generation during both the polar vortex of 2014 and the coldest day in 2015 which was February 20th?

A. I'm sorry, you're at page 18?

Q. Yes.

A. I see that.

Q. And the total forced outage rate for January 7th, 2014, of the retiring units was 5,222, correct? And that's the fourth line down.

A. Yes.

Q. And on February 20th, 2015, the number was 3,496.

A. I see that.

Q. And within both of those numbers is also the identification that in 2014 over a thousand megawatts was never called, correct?

A. Yes.

Q. And, likewise, in 2015 nearly 2,000 megawatts was never called, correct?

A. It was never called as is the second line down showing the generation online which was approximately 50 percent both periods that was scheduled to retire and was online and, by my math, adds up to almost 13,000 megawatts.

Q. And you're referring to the two years, correct?

A. Yes.
Q. Okay. Thank you.
And also during the polar vortex 34 percent of forced outages was the result of coal units, correct?
A. I'm sorry?
Q. 34 percent of the forced outages during the polar vortex was the fault of coal units.
THE WITNESS: Could you reask the question.
(Record read.)
A. You're asking me if I'm aware of that?
Q. Yes.
A. Yes, I am aware of that.
Q. Okay. And then if we -- and that was about 13.6,000 megawatts, right?
A. Yes, give or take.
Q. And then if you were to look at February 20th of 2015, coal units were responsible for 41 percent of the outages, right?
A. Where are you looking at?
Q. On page 21.
A. Yes, I see that.
Q. And if we were to compare the performance of units in -- natural gas units and coal units

between 2014 and 2015, would you agree that natural gas units improved their performance more than coal units?

A. I would say that they -- on a percentage drop basis, if that's the measure you're using for improvement, that they moved in the direction of getting somewhere in the same vicinity, maybe a little bit worse, if we just looked at the total megawatts of the outages, approximately the same as the coal.

Q. Well, let's compare it.

A. Okay.

Q. You divide natural gas outages into two categories, right?

A. Yes.

Q. There's natural gas interruptions and then there's natural gas outages.

A. Yes.

Q. And the latter category is largely the result of equipment failure, correct?

A. Yes.

Q. And if we compare the natural gas plant outages between 2014 and 2015, would you agree that there is over a 6,000-megawatt improvement?

A. Yes, if you look at only the gas plant outages in isolation. The problem is if the natural gas plant is unavailable, the grid might need the power and it's unavailable, whether's due to an outage or due to, well, I couldn't get natural gas, it's still a problem for the grid.

Q. Okay. And the total, it's about 19,000 megawatts of natural gas outages in 2014, whereas, very close to 10,000 megawatts of natural gas outages involving both categories we've discussed in 2015, correct?

A. If you look at it on a megawatt basis, I understand what you're saying. What I'm doing is recognizing that the overall February 2015 event didn't have as many outages in total, that what I'm seeing is that the gas on a percentage basis during the 2014 was 23 percent, 24 percent, that's 47 percent that we talked about, and that in the February '15 event 30 percent plus 13 percent, that's 43 percent. So on a percentage basis they improved a little bit.

Q. And then --

A. Coal did go the other way because coal was approximately 34 percent of the outages and, again, with a lot of units probably slated for mass retirements and not as much capital investment, it would be not unanticipated that their performance might start declining right before retirement, those climbed to 41 percent of the total.

Q. Just to clarify that, they didn't just improve on a percentage basis. The outages reduced significantly for natural gas on a megawatt basis as well, correct?

A. Yes. Because the total megawatts of outages were less. So, yes, they did improve. I just say to take the whole picture I would look at the 40,200 megawatts on January 7th and the 24-8 on February 20th of 2015 in looking at the total number of outages.

Q. Okay. And during the polar vortex one of the largest reasons why we saw price spikes was due to the forced outages we've been discussing, correct?

A. It was that, the weather, yes.

Q. Okay. All else being equal, if you reduced forced outage rates, electrical energy prices will decrease, correct?

A. If you reduce forced outages, electrical prices will decrease? As a fundamental concept, I would agree with that.

Q. Great. Glad we agree.

Okay. And can you turn to page 26, lines

16 and 17, where you submitted an errata this morning regarding PJM's concerns with respect to natural gas supplies.

A. I'm sorry, in my testimony or the report?

Q. Your testimony.

A. Okay. Sorry. Twenty-seven?

Q. Page 26, I believe it's lines 16 and 17, which was submitted as an errata this morning.

A. Yes.

Q. You're familiar with the term out-of-management control event, correct?

A. Yes, I am.

Q. And you would agree that during the polar vortex this past winter -- and this past winter, a natural gas unit could declare an out-of-management control event when their gas supply is interrupted and, therefore, avoid a penalty under the PJM capacity market rules.

A. Yes, it could.

Q. Okay. And do you agree that now that the capacity performance product has been approved, a natural gas unit that is, in fact, interrupted on its pipeline supply can no longer declare an out-of-management control event to avoid its delivery obligations?

A. It cannot do that, I believe, starting June 1st of 2016.

Q. Thank you.

A. So this coming winter there is still that possibility that if we get another very cold snap, gas units may not show up just because they've got nonfirm gas. I'm saying this coming winter they may have nonfirm gas and they could continue to declare an out-of-management control event and you could have a lot of natural gas not show up this coming winter, December of this year, into the first quarter of 2016.

Q. And this winter is predicted to be an el nino winter, correct?

A. I'm sorry.

Q. Have you ever heard of the weather phenomenon el nino?

A. I've heard of it.

Q. And you agree they believe this winter will be an el nino winter.

A. I don't know who they are.

Q. The weather forecasters.

A. I haven't.

Q. Do you have an opinion?

A. I have an opinion. I don't have an

opinion on what the weather is going to be this winter.

Q. If it is, in fact, an el nino winter, would you agree that gas prices will be very low?

A. An el nino winter?

Q. Yes.

A. If by el nino we have mild winter temperatures, that is going to not necessarily create some huge large demand for gas spikes, for gas demand.

Q. Okay. And sticking with the capacity performance product, do you agree that if a gas plant is not behind a local distribution company and they have firm transportation, they are going to be able to provide reliable service if they were called upon to operate?

A. Barring an event on the pipeline as far as a compressor station goes out or something of that magnitude.

Q. Okay. On page 23 you indicate that only 9 gigawatt-hours of natural gas generation will come on-line by June 1 of 2016, and am I correct that the basis of this statement was an affidavit that you discussed earlier with counsel for OCC?

A. I believe so.

Q. And that affidavit was submitted while the capacity performance product was being litigated, correct?

A. Yes, it was.

Q. And would you agree that one of the reasons for the capacity performance transition auctions was to incentivize the acceleration of generation construction as approved by the final capacity performance product?

A. I think it was an incentive to accelerate the capacity performance market which then a subsequent result could be, to your point, an acceleration of some construction.

Q. And you have not analyzed the amount of generation that may now come online as a result of the capacity performance product relative to the 9.2 gigawatt-hour projection included in your testimony, correct?

A. I have not looked at how much of that may have been accelerated in time to attempt to offer bids into that '16-'17 auction, no, I have not.

Q. And regarding your May testimony, you agree you included a forecast of capacity performance revenue because although the final outcome was not certain, it was not a current issue to merit inclusion, correct?

A. It was of sufficient merit to provide a range of outcomes and that's what we did in our -- in the testimony.

Q. Do you agree that when your testimony was filed, the price of natural gas for the preceding six months was trading below $3 per MMBtu at the Henry hub?

A. That sounds about -- that sounds reasonable.

Q. But you did not think that that was enough of a current issue to reevaluate the gas prices in your testimony?

A. I'm sorry. My modeling was of coal units. It was Company Witness Bletzacker who's fundamentals would have incorporated the entire market. I just took his prices for energy and capacity.

Q. And those prices are largely dependent on the price of natural gas, right?

A. I used coal prices. These are coal units. As far as if you're asking me about the interplay between natural gas and coal prices, I would refer you to Karl Bletzacker as a better expert than me on that.

Q. Do you agree that as the price of natural gas decreases, the power prices that would be in the fundamental forecast would also decrease? If you know.

A. I would expect there to be some downward pressure on prices but, again, I'll defer to Company Witness Bletzacker.

Q. Okay. On page 22 going on to page 23, you indicate that generation should have on-site fuel. Would you agree that rail constraints can sometimes have an impact on the ability of a power plant to replenish the coal pile?

A. I'm sorry. What lines are you looking at?

Q. I think you're on the bottom of page 22 going on to page 23 where you refer to on-site fuel requirements, and I'll give you the line reference, where it's "the events of winter 2014 demonstrate a need for substantial amounts of generation with on-site fuel," and with respect to that statement and the need for on-site fuel, would you agree that rail constraints can sometimes impact the ability of a coal unit to keep a coal inventory?

A. Certainly rail constraints can inhibit the amount of coal you're getting into a plant. I know it -- just in general that a lot of our coal plants we tend to keep a reasonable amount of day's inventory such that they can tend to ride through any near-term issues with rail work and so forth.

Q. The problem is particularly true when you're dealing with Powder River Basin coal, correct?

A. I haven't looked at Powder River Basin coal in particular in these units. All of these units tend to burn Northern Ap or Illinois Basin coal so they would not be impacted by the logistics of trying to get PRB to the plants.

Q. They do burn some PRB, correct?

A. Not at present.

Q. Not at present, okay? Are you familiar with the utility Consumers Energy in Michigan?

A. I don't believe so. If I've heard the name, I don't recall.

Q. Did you know that certain power plants in Michigan had to curtail in the summer, fall, and winter of 2014 due to an inability to get coal as a result of rail constraints?

A. You know, if they did, I could accept that they did that. I would look back at their coal management practices to see if there was some failure on their part to keep adequate fuel inventory or what

was the unusual nature of the failure to deliver.
Q. Staying on page 26, sorry to jump around, when you're referring to changes to import rules, you're referring to the modification to the pseudo-tied rules in the capacity market, correct?
A. I'm sorry. Again, what lines are you on?
Q. I believe it is page 26, line 18 and 19.
A. Okay. Yes.
Q. And were you in the room yesterday, Dr. Pearce?
A. Yes.
Q. Do you remember a conversation I had with Mr. Vegas about pseudo-tied rules in his testimony?
A. I was here. Could you refresh me?
Q. Maybe I can just do it this way --
A. Okay.
Q. -- I thought I could short-circuit that one, these rules that you reference in your testimony were implemented over two years ago, right?
A. I believe so, yes.
Q. So they would have already had any impact we're going to see on capacity prices, right?
A. I would agree with that.
Q. Okay. Can you turn to page 17 of your testimony, Dr. Pearce. And on line 19 you state "As

these wholesale prices are expected to rise and are reflected in retail rates, the PPA rider is expected to provide retail customers a net credit in their bills for the difference between the cost of the PPA Rider and the revenues received from the PJM markets."

You agree this statement is predicated on AEP --

A. I apologize. I'm having a hard time hearing you. What page and line?

Q. Line 19.

A. On page 17?

Q. Yes.

A. Okay.

Q. I'll let you read that.

A. Yes, I see that.

Q. And would you agree this statement is predicated on the assumption that the PPA-related units' operating and maintenance costs and fuel costs rise slower than market prices?

A. I don't know that that necessarily has to be the case. I would say that based on Exhibit KDP-2, we did reflect that as wholesale markets started climbing, and they generally do if you assume carbon's going to come in at 2022, that basically markets come up, yes, there is going to be an increase in cost because of that CO2 tax if it occurs. But you see as far as the average of high and low load cases that while we see a decline in revenues, we still see a net benefit credit to customers in 2022, '23, and '24.

Q. So is the answer to my question if the cost of generating electricity increases faster than market prices, then your statement on page 17, line 19, is not true?

A. No. I mean, I think my statement on line 19 is true as well. I'm saying that as those prices rise, the PPA rider will provide retail customers for the net credit on their bills for the difference between the PPA rider and the net revenues received without getting into, in that sentence, specifically directional comparison between how much the wholesale prices rise versus how much I may have my variable costs increase.

And I think to your point, I think I've shown at the back, okay, I am forecasting that apparently the cost increases as much or more as the prices in those years, yet I still show a positive benefit in '22, '23, '24. So it could result in a slight reduction and a net credit.

Q. Okay. Let's take this one step at a time.

A. Okay.

Q. Do you agree that the revenues that are available to AEP Ohio under this proposed transaction are going to -- or, the margin, let's talk about the margin, the margin that's going to be available to AEP Ohio under this proposed transaction is going to be a difference between the cost of producing energy and the market revenues?

A. Agreed.

Q. Okay. And Mr. Bletzacker has included a projection of a carbon tax, correct?

A. Yes, he has.

Q. And that would start in 2022 which is the implementation date of the EPA's final rule, correct?

A. Correct.

Q. And they've assumed that carbon tax to be $15 per metric ton, right, of CO2?

A. Yes.

Q. And do you agree that that translates to about 13 to 15 dollars per megawatt-hour depending on the type of coal you burn and the heat rate of the unit?

A. I agree with that.

Q. Okay. And Mr. Bletzacker has forecasted that power prices will rise in 2022 in the on-peak hours by about $8, correct?

A. Yes.

Q. And in the off-peak his projection is it will rise by about $11, correct?

A. I don't have the breakout of the peak and nonpeak in front of me, but I'll accept that number as reasonable.

Q. And that indicates that the AEP PPA units' cost of production would rise faster than the market price increase, correct?

A. Yes.

Q. And if we take a look at KDP-2, which I think you just talked about a minute ago, and look at the weather normalized case --

A. Yes.

Q. -- in 2022, you would agree despite the fact that, and this is on the third line down for net PPA rider credit, excluding PJM CP, including CO2 tax, despite the fact that energy prices are going to rise by 8 to 11 dollars a megawatt-hour, we're going to see a charge under this projection.

A. If the specific weather normalized forecast comes to pass, yes, we show that it could impact on that year $8, again, based on the high percent load case, it could still even with that impact create a value of $207 in the 2022 case. $207 million.

Q. Earlier you had a discussion with counsel for the Sierra Club about the impact on the PPA rider of the 2015 forecast, right?

A. Yes.

Q. And your conclusion was that you believed that under that forecast the energy revenues would be directionally lower, correct?

A. Yes.

Q. And you also offered a comment about coal prices that may have some sort of offset, correct?

A. Yes. I mentioned that while the energy revenues may be somewhat lower, I believe under that same forecast the cost side would be lower so there would be basically lower revenues and lower costs so there would be an overall impact on the margin, which we have not analyzed, and also the fundamentals forecast had higher market prices in it as well which would be additional capacity revenues.

Q. Okay. What you just referred to is going back to our earlier discussion that as market prices go down and the cost of dispatch goes down, then

there may be less of an impact on margin, right?
A. Yes.
Q. Okay. And if we wanted to determine the actual impact of that coal price per ton change, we would multiply the MMBtu change by the heat rate of the unit, right?
A. Yes, that would be part of the math to get you there.
Q. Because, ultimately, what we're looking at is a heat rate is the amount of British thermal units you can burn to produce a kilowatt-hour of electricity, right?
A. Agreed.
Q. So and we refer to them as Btus, right?
A. That's correct.
Q. And the reason why we see coal prices as either dollars per ton or MMBtus is because to look at the price for each Btu it would be a really small number, right?
A. Yes.
Q. Okay. But in the 2015 forecast and the 2013 forecast, coal is included as a cost per ton, right? Do you have -- Dr. Pearce, before we move forward, do you have the 2013 or 2015 forecast on the stand with you?

A. I have the -- I believe I have both.

Q. Excellent. Can you just confirm that the coal prices that we have in these documents, which is Sierra Club Exhibit 4 and 5, are priced in dollars per ton?

A. Yes, they are.

Q. And that number isn't necessarily that helpful for determining the dispatch cost of a unit. You have to convert it, right?

A. Yes.

Q. Okay. And the reason why when you're looking at a dollar-per-ton price it includes the dollar per ton plus the Btu content of the coal, right?

A. It includes the Btu content of the coal, yes, it does.

Q. Because ultimately Btus are what we're going to burn, right?

A. Uh-huh.

Q. So if we wanted to convert these coal prices to dollars per Btu, what we would do is we would, because it's priced in tons, we would multiply, make sure I have my math right -- first, before we get there, the MMBtu price we talked about, that's a million Btus, right?

A. Yes.

Q. So if we wanted to determine the actual discount cost for a kilowatt-hour of electricity, we just divide that number by a million and then multiply it by the heat rate, right? And that's the price of one kilowatt-hour.

A. I'll write that down. So you're saying what, if we did what?

Q. If we would take the dollar per MMBtu price, divide it by a million, then we take that number and multiply it by the heat rate, then that is the cost of one kilowatt-hour, right?

A. Yes.

Q. Okay. And we've set out a few parameters. Now, if we wanted to convert a dollar per ton to a dollar per MMBtu or just the Btu, what we would do is first we would take the Btu per pound which is what's listed on the dollar per ton, right?

A. Yeah.

Q. And we'd just multiply that by 2,000 which is the amount of pounds in a ton, right? That would be the first step.

A. Yes.

Q. And then we would divide that number, which is the -- by -- I'm sorry. Let's take a step back.

You multiply the Btus by 2,000, right? Btu content by 2,000.

A. You would divide it by 2,000?

Q. You multiply by 2,000.

A. 2,000, you're saying 2,000 pounds per ton.

Q. Yes.

A. Okay.

Q. And you just write that number down. Then ultimately you would take the dollars per ton and divide it by the previous number we just found, right? And that's the...

A. I'm sorry, did you --

MR. OLIKER: Could I have my last question read back, please?

A. Was it a question?

(Record read.)

A. And that's the -- yeah, I'm sorry, I didn't understand that you had asked me a question.

Q. Okay. Maybe an easier way to do this, first let me ask you from a high level.

A. Okay.

Q. Assuming about 1,200 Btus coal content, would you agree that for every $2.50 change in the coal price there's about a 10-cent per MMBtu impact?

A. I'd have to go through the numbers. You said a 1,200 --

Q. Btu content of 1,200, which is what a lot of coal is, right? 12,000, I'm sorry.

A. 12,000, okay. Sorry. Okay. So if I have 12,000 Btus per pound, okay.

Q. And anytime you move the dollars per ton up $2.50, or down, there is a change of 10 cents per million btus. I could give you a calculator if it helps.

A. I've got one. If you change the -- you said if you change the what?

Q. If you change the price per ton by $2.50, whether it's up or down.

A. Okay. You're saying if I moved the cost up or down by two-and-a-half dollars per ton, what happens?

Q. That it's got about a 10-cent per MMBtu change.

MR. NOURSE: Can I inquire, does that assume the -- that's for the same coal, the same Btu content?

MR. OLIKER: Yes, we're assuming 12,000 Btu.

A. And said about a 10-cent --

Q. Per MMBtu.

A. -- per MMBtu. Yes, I would accept that.

Q. Let's put that number aside for a second and let's talk about heat rates. Would you agree that a typical heat rate for a subcritical coal unit is going to be somewhere around 10,000 to 11,500?

A. 10 to 11,000.

Q. For a subcritical unit, right? Yeah, let's use 10,000 because it makes the math easy.

A. Okay.

Q. You would agree that with a 10,000 heat rate a 10-cent per MMBtu change equals a dollar per megawatt-hour. And you get that by simply dividing the 10 cents by a million and multiplying it by 10,000.

A. So you're saying -- what did you say again?

Q. That assuming a heat rate of 10,000, a 10-cent per MMBtu movement in price changes the dispatch cost by a dollar per megawatt-hour or a cent per kilowatt-hour.

Actually, a tenth of a cent.

A. About a dollar per megawatt-hour?

Q. Yes.

A. Yes.

Q. Okay. And, okay, now that we've laid that out, if we compare the 2013 and 2015 forecasts on dollars per ton, you would agree that the changes at its highest about $12 per ton less for the first four or five years in the 2015 forecast?

A. Let me lay them side by side, I can't...

I would agree with you what?

Q. That the dollar-per-ton price change, the highest change we see in coal price reduction is about 12, maybe 13 dollars in the first four or five years if we're comparing the 2013 forecast to the 2015.

A. Okay.

Q. And many of the coal prices actually go up if we compare the 2013 to the 2015 forecast as well.

A. There's a lot of different coal prices in here.

Q. So some go up, some go down, right?

A. I'm not sure I sought any particular one out but I'll --

Q. How about --

A. I'll accept that, subject to check.

Q. How about in 1,200 Btu per pound, 1.5 cap compliance, 2018 and 2019, that one is higher, is it not?

A. That one is.

Q. Okay.

A. Again, now, it's a Central Ap., I think the units we're talking about here tend to burn NAPP coal or Illinois Basin coal.

Q. Is it NAPP high sulphuric or NAPP medium sulfur that they burn, as far as you know?

A. As far as the specific sulphur content, I'm going to have to refer you to Company Witness Thomas.

Q. So the NAPP high sulfur and the medium sulfur, you're looking at a price change of about between 6- and 9-dollar reduction between the '13 and the '15 forecasts? And that's considering both columns, for the first three years.

A. Well, for like -- for '17, 2017, I see the NAPP high-sulfur coal going up to 71.14, if I'm looking at the numbers right, and I see the 2016 forecast down at 55.89. So I'm seeing over a $15 spread in those numbers.

Q. That one's fair.

Okay. Even assuming that, at about every $2.50 translate to a dollar per megawatt-hour, right?

Assuming the 12,000 Btus.

A. Based on just this simple comparison of the fuel cost, yeah, I think that's what we've come up with.

Q. Okay. So another way to look at that is $10 per ton change would be about $4 a megawatt-hour, right?

A. Yes.

Q. But if we compare the power price change in these forecasts, the on-peak for 2016 goes from about $56 per megawatt-hour down to 35.34. So that's almost $21 per megawatt-hour, correct?

A. Yes.

Q. And talking about the assumptions that we've been discussing earlier, that's either a unit no longer dispatching or it's the reduction of about $16 per megawatt-hour of margin, right?

A. If you were to try to look at that in isolation, I understand that that's basically holding all else in equivalent, and I don't believe you can do that with any great degree of accuracy.

What I would do was take the entire '16 fundamentals forecast and effectively start building up a PLEXOS run from the ground up. So not only including these fuel costs but then layering in the effects on dispatch, lay in the effects of does that help my O&M costs go down, presumably to your point it may be they don't run the unit quite as much. Capacity costs, if we're implementing any additional LEAN initiatives, I mean, we would have to run the whole gamut to conclusively come up with exactly how much that forecast of the energy prices would have.

Q. Would you agree the margins would be compressed substantially in the peak hours?

A. Based on the drop in the peak prices here, yes, I agree I would expect that the energy revenues potentially be reduced somewhat.

Q. Okay. And looking at the off-peak, 2016 the off-peak pricing under the 2013 forecast is $34 a megawatt-hour whereas in the 2015 forecast it's 26.65, correct?

A. Yes.

Q. It's been $8 per megawatt-hour change, correct?

A. 7.50, I'll give you 7.50.

Q. Would you agree that there are a few of the units in the PPA that are not going to clear in the off-peak hours based upon these assumptions?

A. Again, I'd have to run through the modeling to see exactly how these prices, once we applied appropriate scaling factors and everything and forecasted the dispatch, exactly how much they would clear.

Q. So either they will not clear or the margins will be substantially compressed?

A. Based on lower prices, I would expect the margins to go down somewhat, all else equal.

Q. Okay. And this price differential we've been talking about, would you agree if we go out in the on-peak to 2020, between the 2013 and the 2015 forecast, you're looking at a change of between -- a reduction of 20 to 15 dollars a megawatt-hour?

A. Somewhere in that vicinity.

Q. And the difference between the 2013 and the 2015 forecast in the off-peak hours you're seeing in the 2015 forecast through 2020 about an 8- to 10-dollar megawatt-hour reduction in the off-peak, right?

A. How much did you say?

Q. Eight to $10.

A. Eight to $10? I'm looking for a number, I see some like in the 7 range.

Q. Seven to 10?

A. Seven, six even.

Q. Okay. Switching gears to the

debt-to-equity assumptions that you utilized for modeling the impact of the PPA rider, first, you agree you used a 50/50 debt-to-equity ratio?

A. Yes.

Q. And there were actual debt and equity rates that were assumed for the life of the PPA rider, correct?

A. That is correct.

Q. Those numbers were held constant, correct?

A. Yes.

Q. And they reflect the numbers that are contained in the application I believe which are 4.74 for debt and I think 11.26 for equity, right?

THE WITNESS: Could you read the question, please?

(Record read.)

A. 11.24 percent for equity.

Q. Thank you. Would you agree that as part of the proposal that the Commission's reviewing those debt and equity numbers could both change?

A. Yes.

Q. Okay. Per the formula provided in the application, right?

A. That's correct.

Q. And you agree that the PPA between AEP and AEP Generation Resources that's been proposed would allow AEP Generation Resources to transfer the PPA related units so long as the purchaser is willing to assume all of the obligations under the agreement, correct?

A. Yes.

Q. Okay. Now, if the purchaser -- first let me ask you, is there anything that prohibits the purchaser from utilizing 90 percent debt if it were to buy the PPA-related units?

A. Nothing in this contract per se. The -- yeah, nothing that I can recall in this contract.

Q. So assuming the purchaser of the PPA units did heavily leverage the transaction with 90 percent debt, 10 percent equity, would you agree that the PPA rider revenue requirement that is paid to the purchaser would still be based on a 50/50 capital structure?

A. Yes. Just as if a -- correspondingly if another party under that hypothetical took it and/or AEPGR subsidiary had 70 percent equity and only 30 percent debt would still be bound by the same 50/50 cap structure.

Q. Are you familiar with the word arbitrage?

A. Yes.

Q. Would you agree that the way the proposed transaction is set up, it does provide an arbitrage opportunity for an enterprising hedge fund or somebody else to come in and recognize the spread difference between a transaction funded by 90 percent debt and the 50 percent equity ratio that would be used in the transaction?

A. I believe anybody looking at that, you're going to have to be looking at the risk that you're acquiring to attempt to do a -- any kind of arbitrage opportunity. As I've heard our old traders say, don't go try to pick up nickels on the highway. So in this sense I don't anticipate -- there's still risks for the buyer under this agreement, so as far as them attempting to leverage this off to a very highly leveraged capital structure, I don't envision that happening.

The really intent of freezing the 50/50 cap structure was just because we tend to move the assets into its own subsidiary of AEPGR, it will have its own capital structure, but rather than have to remove a lot of discussions between AEP Ohio looking over their shoulder, exactly what's your cap structure, what's your target, and having those discussions with the staff at the Commission or whatever about the capital structure, it was nice and clean to just say we're going to freeze it at a reasonable amount that is targeted around what we have for our regulated utilities at 50/50 and, therefore, customers are not harmed to the extent that they're paying based on a 50/50 cap structure and don't have to get into a lot of discussions about, well, we want you to be at 55 percent debt or -- and/or the seller saying I'm trying, but I need to be 65 -- 55 percent equity.

Q. Okay. Let's -- staying in that vein, I think you indicated that the ultimate goal if the transaction is approved is to create a new entity.

A. Yes.

Q. And to put the PPA-related units in the entity, correct?

A. Yes.

Q. That entity will have to be capitalized, right?

A. They will be.

Q. And is there anything that would prohibit AEP Generation Resources from capitalizing the entity with, say, 70 percent debt and 30 percent equity?

A. Other than allowing the market to let it do that in terms of, you know, they have to go out and borrow the money from the bank, you know, there's nothing in the contract itself that explicitly requires that.

The ability for them to actually attempt to heavily leverage these assets or this agreement I would refer you to Company Witness Hawkins.

Q. But assuming the AEP Generation Resources did capitalize the new entity with 70 percent debt, then would you agree that there would be an additional benefit that flowed to AEP Generation Resources for the 20 percent differential in the debt rate and the equity rate?

A. If they could attempt to do that, there would be potentially additional benefit to do that, there would also be additional, I believe, risk in attempting to do that.

Q. I don't want to stay on this too long. You discussed the Cardinal operating agreement I believe with counsel for OCC.

A. Yes.

Q. And as I understand it, if there's an outage at units 2 and 3, then AEP Ohio would have to either provide generation from the other PPA-related units or buy it in the wholesale market.

A. That is correct.

Q. So --

A. To the extent Buckeye wanted it and provided a schedule so they requested the power, that is correct.

Q. Just let me ask you a hypothetical. If, for example, there was a day when the LMP prices were $500 a megawatt-hour, lasted for 24 hours. Now, if 2 and 3 went out, then either the PPA-related units would provide the power or you would have to buy $500 a megawatt-hour on the market, right?

A. That is correct under your scenario, understanding that in your same scenario with $500 per megawatt-hour prices if Cardinal 2 and 3 are up and running and we're going to endeavor under those prices absolutely to try to keep them up and running, that what the benefit will be, they'll be able to take approximately the 158 megawatts from Cardinal 2 and 3, the last 13 percent of the units, sell that at those $500 prices and that credit would flow through to the buyer, in this case AEP Ohio, who would then provide it through the PPA rider.

Q. Okay. Well, sticking with assuming they're out. They're not running. If the power is provided from the wholesale market, it's just the market price times the amount of hours, right?

A. Yes.

Q. And that cost would flow through the PPA rider, right?

A. Again, that cost to the extent it's borne from the PJM market or it could be provided from the other AEP units, and to the extent that, of course, that they provide any power even with the units down, they still get paid, it's just basically paid tied to the cost of the Cardinal units themselves. Their fuel costs.

Q. In my hypothetical that we've been discussing, for each of those hours it would cost AEP Ohio $500,000 if it had to buy power in the LMP market.

A. It would, if it was not supplied by the other units, it would cost them the, whatever the megawatts were out, so your 500, times that, less the actual revenues that they would continue to receive from Buckeye for the cost of production tied to the cost of Cardinal even though it's out of service.

Q. Okay. That kind of ties in to my next question. But if it's provided from the PPA units, then those units will no longer be earning that $500 per megawatt-hour in the market that otherwise would have flowed through the PPA, right?

A. There could be a potentially lost opportunity cost, at least that lost opportunity doesn't hit your accounting books but, again, all the hours that Cardinal 2 and 3 are on, and because the Cardinal station operating agreement actually controls the units, operates them in conjunction with Cardinal 1, there's going to be a lot of control about trying to keep those units on during those events. In which case it will be net revenues of, to use your $500 per -- times 158. So basically they'll get $79,000 an hour.

MR. OLIKER: Your Honor, I'd move to strike everything after his initial response to my question which was completely unrelated.

MR. NOURSE: Well, I think his question was asking about the earnings impacts so Dr. Pearce is explaining that it's not necessarily a loss and there could be the lost opportunity impact and so he -- I think it was responsive. He's asked about the earnings impact.

MR. OLIKER: While Mr. Nourse would like to tailor the question that broadly, it was not so.

MR. NOURSE: I'm just reading it from the transcript. I'm sorry.

EXAMINER PARROT: I'm going to allow the answer to stand.

Mr. Oliker.

Q. (By Mr. Oliker) Dr. Pearce, switching gears to the capacity revenue you calculate in your projections, you'll agree that you calculated the capacity revenue available for each unit by multiplying the projected capacity price by the installed capacity level for each unit as reduced for forced outages and deratings?

A. Yes.

Q. And you're familiar with the term called the fuel derate?

A. Generally.

Q. You would agree a fuel derate can impact the installed capacity level for a unit.

A. Can you give me in this context what you mean by "fuel derate"? I just want to make sure we're on the same page.

Q. Just one example would be if you burned a lot of PRB coal, you could reduce the installed capacity level of the unit, right?

A. If you burned PRB coal with a lower MMBtu per pound and didn't make any adjustments to offset that, you could reduce the output of the plant.

Q. And you did not personally review the installed capacity levels of any of the plants that you calculated capacity revenue for to determine if they were impacted by a fuel derating.
A. No. Our forecast included the presumptions that the fuel that they've been burning would continue to be, so we don't have any reason to expect that there's going to be a fuel derate in the context that you're using, as I understand it, for any of these units.
MR. OLIKER: Could I have a minute, your Honor.
EXAMINER PARROT: You may.
Q. Briefly, were you in the room yesterday, Dr. Pearce?
A. Yes.
Q. Did you hear the discussion between counsel for the Ohio Energy Group and Mr. Vegas about the impact of a hundred basis point movement of a debt rate?
A. I heard that conversation.
Q. As well as the movement to the equity rate of a hundred basis points.
A. Yes, I believe so.
Q. Did that conversation capture your

understanding of what an impact to the revenue requirement would be if you moved the debt rate or equity rate?

A. I'll certainly say I was listening to the president of AEP Ohio. As far as his specific characterizations, you're probably going to be sorry, in the interest of time, but it would probably be safer if you walk me through it again to make sure I concur.

Q. Well, for purposes of the debt rate you agree you merely multiply whatever the debt rate is by the portion of the invested capital that is attributed to debt.

A. The rate base, yes.

Q. Yes. So here you just multiply the rate base by 50 percent and then times that by the debt rate, right?

A. Agreed.

Q. So to determine the impacts of a hundred basis points, you just take 1 percent and multiply it by half the rate base.

A. Yes.

Q. And the equity's a little trickier because you have to take the tax, right?

A. Yes.

Q. So with that you multiply, determine the change of a hundred basis points by one-half of the rate base, but then you take that number and you have to gross it up for the gross revenue conversion factor, right?

A. Yes.

Q. That number's not confidential, is it?

A. I think we provided it confidentially, but could we just speak in general terms? I mean --

Q. Typically speaking, the gross revenue conversion factor is somewhere between 1.5 or 1.6.

A. Okay, let's use 1.5.

Q. So you simply multiply 1.5 by the 100 basis points by the half of the rate base, right?

A. Yes, to reflect the increase in income tax which of course doesn't go to shareholders, it goes to the IRS.

Q. Okay. But those, that change would flow through the PPA rider, correct?

A. Yes, it would.

Q. Okay.

A. As would, obviously, decreases in either the debt rate or the Moody's bond index which would then reduce the ROE.

MR. OLIKER: Okay. Thank you,

Dr. Pearce. I believe the remainder of my questions will be confidential.

EXAMINER PARROT: Mr. Pritchard, how much -- what's your estimate for this witness?

MR. PRITCHARD: I'm guessing it's going it take me, I'll say an hour. My deposition took two hours, but I've streamlined some of the questions and added some different things. So I'd say an hour and I wouldn't expect it to be significantly less than that.

EXAMINER PARROT: If we can do your best to go and finish this within an hour or so, we'll go ahead and let you, if you want to get it over with today, we'll turn to you. If not.

MR. PRITCHARD: I defer.

MR. DARR: Look around the room before you answer that question.

MR. PRITCHARD: I'd defer to everyone else. It doesn't matter to me.

EXAMINER PARROT: My intention is not to keep you all here any later than 6:30. That's why I'm asking the question.

MR. PRITCHARD: I'm not positive I can be done by 6:30. I have several exhibits to introduce and depending on how quickly the answers and whether

I need to resort to the exhibits, it could be longer than an hour.

EXAMINER PARROT: Anybody else that wants to go this evening?

MR. YURICK: 10 to 15 minutes max.

EXAMINER PARROT: Mr. Pritchard, if you don't mind, I just don't want to upset you if you were expecting to go in a certain order. I think you all planned your cross to some extent so --

MR. PRITCHARD: I am not upset if I get skipped.

EXAMINER PARROT: We'll come back to you then tomorrow.

Okay. Mr. Yurick.

MR. YURICK: I will be short.

MR. BZDOK: Your Honors, may we go off the record for just a moment?

EXAMINER PARROT: Yes, we may.

(Discussion off the record.)

EXAMINER PARROT: Let's go back on the record.

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CROSS-EXAMINATION

By Mr. Yurick:

Q. Sir, do you go by Mr. Pearce or Dr. Pearce?

A. Whichever one is fine.

Q. Well, I'll go with the more formal. Dr. Pearce, I'd like you to take a look at your direct testimony filed May 15th, 2015, at page 5. Can you get there?

A. Yes.

Q. I want you to go down to line 11 through 13 and then on the next page lines 1 through 2. And you say you "submit that the PPA Rider will provide such diversity by providing customers a balance of long-term generation and cost-based prices via the PPA Rider and generation of market prices, which competitive suppliers and auction participants are likely to provide over the near-to-immediate term." Do you see that, sir?

A. Yes, I do.

Q. I wanted to ask you a question, I'm a little bit confused by the term "customers" in line 12. Do you mean PJM customers by the word "customers"?

A. No. I'm talking about the customers of

AEP Ohio.

Q. Well, my understanding of the way the PPA rider will work is AEP customers won't actually be provided any cost-based generation because all of that cost-based generation provided by the PPA units will go to PJM; isn't that right?

A. It won't be used to directly serve their load. It will be liquidated in the market, and they'll get the financial proceeds of such for the PPA rider.

Q. So they may get the financial benefit of generation at cost term prices but they aren't actually going to benefit from that generation in terms of they're still going to have to provide -- customers are still going to have to arrange for their generation costs.

A. Customers continue to get the same options that they would have absent the PPA rider. Yes, we're not attempting to interject ourselves in that. They get the benefit of this on top of that.

Q. So I'm correct in that customers are still going to have to arrange for generation because all of this generation that is generated by the PPA units is going to PJM.

A. It is.

Q. If you could look at page 17 of your testimony. And if you get there, the answer on lines 1 through 6, you say "The Commission stated on page 25 of the ESP III Order that one factor it would consider is the necessity of the generating facility, in light of future reliability concerns, including supply diversity," so let's just take that sentence first. When you use the term "reliability concerns," you're talking about the reliability concerns of PJM as a whole, correct?

A. Well, I believe I'm quoting the ESP III order language itself. So when I say "in light of future reliability concerns," that's a paraphrasing of their order so, I mean, I want to be clear here. I don't want to speak for the Commission and exactly what they meant for future reliability concerns.

Q. Okay. Do you not understand what the Commission meant by "future reliability concerns"?

A. I was focusing more on the second part of it talking about including supply diversity, so I would read it, my interpretation as a nonattorney reading what the Commission was concerned with, is it would, for example, premature generation facility retirements have consequences in the state of Ohio on reliability.

Q. Let me ask you this. As applied to the PPA assets, any kind of reliability concerns that those PPA assets would address would be reliability concerns of PJM, correct, because all that capacity's going into PJM?

A. The generation, the electrons are going into PJM.

Q. Yes. You said that you focused on the second part of the test which says in light of future reliability concerns including supply diversity. So you focused on the supply diversity; is that correct?

A. Yes.

Q. That supply diversity that you focused on, that's the supply diversity into PJM, isn't it?

A. In that sense it was the supply diversity across customers getting the benefits of the -- both what I would see as the wholesale market prices coupled with the cost-based rider credit under this.

Q. To the extent that these PPA assets would add to generation supply diversity or energy supply diversity, it would have to be the diversity of PJM because that's where all the power and energy is going, right?

A. That's -- PJM is where all the power and energy goes.

Q. Right. So if I'm a customer of AEP Ohio, these PPA assets don't change my supply diversity at all other than the fact that, well, maybe I get an economic benefit from them but my actual generation supply options don't change as a result of the PPA, right?

A. They don't change as far as the first step of them acquiring a supply through the SSO or competitive --

Q. That's my question.

A. I mean therein lies where the supply diversity comes in is because on top of them not getting those alternative options, this will provide that second layer of at least a credit to help defray what those competitive markets do.

Q. Right, I suppose in a very esoteric sense the supply diversity of the earth has an effect on everyone. But I mean for purposes of this case and the PPA rider, none of the generation or energy is really going to affect the diversity of any AEP Ohio customer's supply option, right, because it's all going to PJM?

A. It doesn't affect their supply options but --

Q. Right.

A. -- let's be clear here, it's a little bit narrower.

Q. Oh, I'm being clear. I don't know if I'm saying what you want me to say.

A. Let me clarify what I think I said.

Q. But I think I'm clear.

A. Let me clarify what I said. If this metric is, well, it all is going into PJM, the way PJM works every customer in the state is basically buying their power really from PJM. PJM is a clearinghouse.

Q. Correct.

A. What they do is basically all the generation goes in and then somebody is the load-serving entity for each retail customer, and they're the ones buying. So for PJM there's this -- it's all going into PJM, it's all going out.

So on that sense these PPA units are also going to sell into that same PJM market --

Q. Sure.

A. -- and then they're going to realize a credit and then they're passing it through, as the company's proposing, through the PPA rider so the customers will get there.

Q. Sure.

A. So saying the electrons are not designated going specifically to these customers, I would argue that even in the construct we have today that it all goes through PJM still today.

Q. And customers from other states also take from PJM, correct?

A. Oh, yes.

Q. And in a theoretical or esoteric sense the reliability of the entire grid is affected by all customers on the grid across the United States, right?

A. Okay.

Q. So, but I mean for purposes of the actual generation and energy that's being produced by the PPA assets, those aren't serving specifically any Ohio customer, right? They're just being -- that output is being sold into PJM.

A. They're being sold into PJM and a credit provided back to customers.

Q. Now, you talk about diversity is a way to reduce some forms of volatility; is that correct?

A. Yes.

Q. In the next couple of lines.

A. Yes.

Q. Now, wouldn't you agree with me that from an economic perspective, that one way to lower prices would be to accept the risk of some volatility?

A. It would depend -- it would depend on a number of factors. That could be the outcome.

Q. So risk, though, in the utility industry or any commodities-based industry, risk has a price, correct?

A. Yes.

Q. So if I was willing to accept the risk, one would assume, all other things being equal, that I would get a lower price, correct? It might be a more volatile price, but it's likely to be lower because I don't have somebody paying or I'm not paying a risk premium.

A. I understand what you're saying. And, I mean, to your point, yes, there's obviously a risk versus return comparison that's done in various financial markets. Where that can go with you, and to use a good example I believe is a variable interest rate mortgage, that somebody could accept a lower rate but understanding that over time that rate can climb well above what somebody could get as a locked interest rate.

Q. Correct. If you look at the next question and just the first part of the answer, the question is: "So will the PPA Rider produce a hedge against high market prices?" You say "Yes. The approximate 3,100 megawatts of generation under the proposed PPA Rider is more than a third of the size of the AEP Ohio connected retail load." Do you see that answer?

A. Yes, I do.

Q. Now, the only real relevance since AEP Ohio customers are not being directly served with the generation or energy from the PPA assets of the size would be the size of the return; isn't that right? Because what customers are really getting is the benefit of an economic return on that generation; is that a true statement?

A. Well, the customers are getting the benefit of the return on the generation, which we've shown, they're getting the reduced volatility, and they're getting the other economic benefits that I believe other witnesses are attesting to as far as potentially less reduced transmission investment, potentially indirectly, if they're customers that are affected in a positive way by ensuring that these plants stay open and running, there's all the ones we presented in this case by a multitude of witnesses.

Q. I appreciate that. But what I'm getting at here is the size of the hedge doesn't have so much to do with the size of the megawatts of generation, it has more to do with the size of the economic return on that generation because what's being -- what's being given to customers or what is being provided to customers of AEP Ohio is this beneficial, as you say, economic hedge. It's not really any generation; isn't that right?

A. Oh, I think the size of the generation is key. While I wasn't directly involved in it, my understanding is with the last ESP case as far as discussing, you know, OVEC alone going through the PPA rider, one of the criticisms was, well, 423 megawatts relative to this size of load. It's not going to be that much of a hedge just because, you know, how much money it could make spread across that much load; it's a very small proportion.

What I like here is I think the 3,100 megawatts that are proposed, when you look about 8,600, 8,700 megawatts of the load, it's a very nice ratio. It's basically saying we're going to hedge about a third of the risk and then, to the extent that customers want to try to, you know, explore even longer options with CRES providers or whatever they want to do on top of that, if they want more, but it's providing, I'll say, a nice foundational amount of risk premium based on the 3,100 megawatts.

Q. Well, Doctor, I agree with what you said, that one of the criticisms of the small amount was that it wasn't much money, but that's really the critical factor here is what I'm getting at. It's the amount of economic benefit that is going to theoretically or be projected to produce X amount of dollars. It's not really, if the same amount of dollars were to be generated by 500 megawatts or 5 million megawatts, the benefit to customers comes from the economic sale of that generation and hedging that against what they're paying for services; isn't that right?

A. You're trying, in my mind, to separate two things that are --

Q. I'm just asking questions.

A. Well, okay. The reason I'm having difficulty giving you a specific answer is it sounds like you're trying to completely disassociate the number of megawatt-hours with the revenue received, and I'm saying those two are linked.

Q. Oh, no, I would agree --

A. As the market goes up, if it goes up a whole lot, and saying what does it matter if I have a hundred megawatts or I have 3,100 megawatts, it matters a heck of a lot because when the market shoots up, I'm going to make a lot bigger credit per customer with 3,100 megawatts than I would with that hundred megawatts. They're linked.

MR. YURICK: I think I'm done at this point, your Honors. Thank you very much.

EXAMINER PARROT: Mr. Smalz.

MR. SMALZ: Thank you, your Honor.

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CROSS-EXAMINATION

By Mr. Smalz:

Q. Dr. Pearce, I understand from your earlier testimony and earlier testimony by Mr. Vegas that the PPA agreement does not take effect until it's signed by AEP Ohio and AEP GenCo; is that correct?

A. Yes.

Q. And it cannot -- it will not be signed by AEP Ohio and AEP GenCo until and if the PUCO, the Commission, approves the proposed PPA; is that correct?

A. Until they approve the prudency of this being a good thing for AEP Ohio to enter into.

Q. And is it then true that no charges or credits can be assessed to customers before that whole process is completed, before the Commission does that prudency review?

A. It can't occur until the Commission would issue an order in this case.

Q. Okay. And so there's no possibility of retroactive charges to customers; is that correct?

A. I would not anticipate such a thing, speaking as a nonattorney.

Q. You would not anticipate it. Is it possible?

A. No. I mean, I don't know of any way that that would be legally possible with an executed agreement.

MR. SMALZ: I have no further questions, your Honor.

EXAMINER PARROT: Thank you.

I'm looking at one of you back on the wall there, Ms. Fleisher, Ms. Petrucci.

MS. FLEISHER: That's fine.

EXAMINER PARROT: If you want to come to the table, that's up to you, I guess. You won't have to shout across the room.

MS. FLEISHER: I'm not a great shouter.

CROSS-EXAMINATION

By Ms. Fleisher:

Q. Dr. Pearce, my name is Madeline Fleisher, I represent the Environmental Law & Policy Center.

A. Hello.

Q. So just a couple questions about the PLEXOS modeling that you did. So am I correct that that model didn't involve the dispatch of any other resources besides the PPA units?

A. PLEXOS did not, not for this one.

Q. So the running of that model wouldn't have involved adding any demand side resources such as energy efficiency or demand response; is that correct?

A. Not for our purposes. As far as a two-step process, Mr. Bletzacker would have included such things as energy efficiency or would have included his modeling, I'll defer to him on that, he has developed basically market prices as saying these are the market prices and then all we're doing is taking the defined units that we have provided in our proposal and dispatched them against those market prices, so at that point we're not really looking at loads anymore.

Q. So lowering, in your testimony regarding the plus or minus 5 percent load forecasts, that would lower revenues by affecting the prices coming out of Mr. Bletzacker's forecast; is that correct?

A. As load changed up or down for however much that would affect prices, I would refer you to Company Witness Bletzacker.

Q. With respect to the proposed PPA, I think you answered some questions about the unit contingent provision, which I will not rehash, I was just wondering, are you aware of the FirstEnergy's proposed PPA in the proceeding down the hall?

A. Somewhat.

Q. And are you aware of the details of the unit contingent provision in that proposed agreement?

A. I am not.

Q. Are you aware of any -- you deal with contracting issues, correct?

A. Yes, some.

Q. Are you aware of any unit contingent provisions that would involve a limitation of 180 days past which the seller would have an obligation to provide replacement power?

A. None that I can recall. Most of the units that, I mean, the agreements that I've dealt with, as I said, Lawrenceburg, the unit contingencies are patterned after that, I don't recall any of the other units -- the type of PPAs that I've dealt with as having those type of load obligations beyond a certain date.

Q. In your testimony you refer to the Regulated Commercial Operations group, if that's the right terminology, that would be I guess the candidate to handle bidding of these resources in PJM; is that correct?

A. They would, the Regulated Commercial Operations group, they'll provide the analysis, the daily reviews, and the offer segments which will then be submitted into the PJM market in the offer process.

Q. And that would be for energy and capacity?

A. Yes, they will do the capacity piece as well, make decisions about what to offer and how much.

Q. Do you work with that group on a regular basis?

A. Yes, I do.

Q. Do you know if they handle any bidding for AEP Ohio currently?

A. They do the OVEC units right now because those are actually owned, I mean, the entitlement is still actually owned by AEP Ohio.

Q. And do you know whether AEP Ohio offers any demand response or energy efficiency resources in the capacity markets?

A. I'm not -- I don't know or don't recall what I've seen on that front.

Q. And in your analysis of the projected revenues from the PPA units, you didn't consider including any generation beyond AEP's ownership stake in the units, correct?

A. That's correct.

Q. Okay. And is that because AEP Ohio wasn't seeking to include anything beyond its own ownership stakes within the PPA?

A. Well, I think that was gone through, as I understand it, by Company Witness Vegas as far as the selection of this fleet of units for this proposal.

Q. Okay. Just to be clear, so that -- so you're agreeing that because Company Witness Vegas indicated that AEP Ohio is not looking to include anything beyond those units, that's why you didn't include them --

A. Yes.

Q. -- in your analysis. Okay.

And so your projections wouldn't say anything about how altering the balance of the PPA to, say, include more generation from Stuart, for example, would alter the revenue projections, correct?

A. No, we didn't do any analysis for the portions of Stuart that we don't own. I mean, we were looking at the portions that we do own.

Q. And did you ever analyze the PPA units individually to assess sort of how their comparative performance was?

A. As we built our PLEXOS modeling up, we dispatched all the units, but we have the detail by plant.

Q. And did you ever sort of sit down and look at that to compare them?

A. I've gone through each of the various units, yes.

Q. Would you have an opinion as to which of the PPA units might be the best performers?

A. The best performers?

Q. In terms of bringing in the most potential revenue.

A. Based on our forecasts through the period, yeah, I mean, some units perform better than others.

Q. And which of those would be that performed better?

A. I mean, on the forecast for the period I'd say the Conesville 5 and 6 was pretty good.

Q. Any others besides Conesville 5 and 6?

A. Well, they're all good, anyway, in terms of relative terms Conesville 5.

Q. Which child do you love more?

(Laughter.)

Q. Sorry to be jumping around. I'm trying not to repeat.

A. That's okay.

Q. And for the plant cost projections, so that includes -- those include capital costs and variable operations and maintenance costs, correct?

A. Yes.

Q. And would either of those categories include projected costs related to potential legal liability?

A. Legal liability? I don't know that we've included anything in the forecast for legal liability.

Q. And just to cover my bases, I think you said this already, but just an umbrella question, for any questions regarding load or demand projections I should ask Witness Bletzacker, correct?

A. Load or demand projections of his fundamentals forecast, yes.

Q. Okay. Are there any load or demand projections that you would have knowledge about?

A. Load or demand --

Q. That are relevant to this case.

A. No.

Q. And with respect to the proposed PPA, would you agree that Company Witness Vegas indicated that one risk to AEP Ohio regarding that agreement is that costs could be -- or, items flowing through the PPA rider could be disallowed by the Commission?

A. Yes.

Q. And could the disallowance of costs affect AEP Ohio's credit rating?

A. It would just depend on the magnitude, whether it had any material effect or not.

MS. FLEISHER: I believe that's all I have for the public. I may have some for confidential just depending on what other parties ask.

EXAMINER PARROT: Thank you, Ms. Fleisher.

Mr. O'Brien, did you have any questions?

MR. O'BRIEN: No questions, your Honor.

EXAMINER PARROT: Ms. Harris?

MS. HARRIS: No questions.

EXAMINER PARROT: Mr. Casto?

MR. CASTO: No questions.

EXAMINER PARROT: At this point I think we'll take a 5-minute break, and then we'll come and pick up with Ms. Petrucci. And then at that point once we finish with her cross, we'll conclude for the evening. Sound like a plan?

Okay. So let's take a five-minute break.

(Recess taken.)

EXAMINER PARROT: Let's go back on the record.

Ms. Petrucci.

MS. PETRUCCI: Thank you very much.

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CROSS-EXAMINATION

By Ms. Petrucci:

Q. Good evening, Dr. Pearce.

A. Good evening.

Q. Let's start first with the Cardinal station agreement that you reference in your testimony at page 9. You indicated that the PPA is going to have AEP Ohio "stand in the shoes" of AEPGR. That's at lines 17 and 18 on page 9.

Does that mean that AEPGR is stepping out of the Cardinal station agreement altogether?

A. As I understand it, AEPGR will continue to be a member of the Cardinal station agreement, it's just that AEP Ohio will be picking up some of the rights and obligations that -- based on the PPA.

Q. Earlier you discussed the fact that under the PPA AEP would be able to enter -- purchase the energy and capacity and ancillary services and then enter into a bilateral contract with a third party to sell that. If Appalachian Ohio were to enter into such an agreement, would any charges under that bilateral agreement be netted in the PPA rider?

A. The PPA itself doesn't prevent them as the buyer, once they've taken delivery point, of selling it and that bilateral contract, if they felt like, and that is hypothetical and I don't anticipate it's necessarily going to happen. In fact, I'd be surprised if it did, but if they felt they got a strong price at a different delivery point and there was some amount of transmission cost incurred, yeah, it would be post the delivery point so I believe AEP Ohio would incur those charges.

Q. And would it then be going through the PPA rider through that netting process of cost and revenues?

A. My anticipation -- AEP Ohio would attempt to flow through those costs in some mechanism to customers because they would also get all the revenues of that transaction from the counterparty.

Q. And we today have no idea what any of those revenues or charges could be under such a bilateral agreement, correct?

A. Well, again, our forecast is that they're just going to liquidate it at the busbar so there wouldn't be any charges. If somebody offered them a price, and this is just a hypothetical which I don't anticipate happening, but hypothetically if somebody said I'll buy it but I want you to deliver it to a different delivery point and there's transmission costs in between, you're going to factor that in your price so you're going to say well that price better be enough to meet or exceed what I'm going to get by just liquidating but also cover these transmission costs so the net revenues would be the same or higher.

Q. Today we don't have any idea on what that might -- those dollars might be.

A. I would say that based on our assumption of them netting that, I can say while I don't know that particular aspect of transmission costs the revenues that would cover that cost would equal to or exceed, the net of the two, the forecast that we have provided.

Q. By that do you mean that the forecast that you've provided is a rough estimate of what might happen if some bilateral agreement were entered into after AEP Ohio purchases the energy and capacity and ancillary services from AEPGR for the PPA units?

A. Our forecast is as though the units are liquidated at the busbar. Just to use a very simple example, if I said, hey, they're going to get $50 per megawatt-hour by just liquidating it at the busbar, if somebody comes and says, well, I'll give you $52 for the power if you deliver it to me over here, so it sounds like they'd make $2 more, but if they crunch the numbers and say, yeah, but I have to incur $3 of transmission costs, so my net's 49, so I wouldn't do that.

But if they say deliver the power over here and I'll pay you $55 for the power, then I would go through the numbers and I would say I paid $2 in transmission costs, I still made $53 rather than just liquidating it at the busbar at 50, I'm going to make more money even though I don't have a transmission cost. So my point is I don't know exactly what the transmission costs would be. It would just be old tariff rates that are in the public domain but it would be uneconomic for AEP Ohio to make that decision unless they believe they could actually make more money, gross revenues, such that they could net off any transmission costs and come out better. They should be the exactly -- they should be the same or even better revenues if they elected to do that type of transaction.

Q. If we could take a look briefly at page 12 and Figure 1, this chart is depicting the range of the impact of your forecast dollars over the nine and a quarter years --

A. Yes.

Q. -- based on the four scenarios that are depicted on KDP-2, correct?

A. That is correct.

Q. So --

A. I apologize for this.

(Discussion off the record.)

THE WITNESS: Excuse me, I apologize, could you repeat your question?

Q. Very simply, I want to make sure that the record's clear. If you take a look at let's say 2015, the difference between the blue diamond and the red square is the differential that is being depicted on this graph that's also shown between the four sets of boxes on KDP-2.

A. Yes, it is.

Q. Okay. And so then the same would apply for each of the years that's listed on Figure 1, correct?

A. Yes.

Q. So, for instance, for year 2021 your forecast reflects that there is a possible difference in what would come about from the PPA rider of a $50 million charge to customers or it could be as much as a benefit of roughly $375 million of a credit to customers.

A. That is correct.

Q. And AEP Ohio is indicating through the various witnesses' testimonies that the average of high and low load, the purple dot on this particular chart, is what is most likely to occur, or is it intended to be just the forecasted amounts that's being relied upon by the companies?

A. That is the midpoint of the range which provides a, I believe a reasonably reliable expectation of what could occur over the period.

Q. But you're also indicating that the 5 percent lower, which is the red square, is also a reasonable forecast, correct?

A. I'd say it's on the lower range of the forecast that we utilized for these values.

Q. And lower range, do you mean because the dollar figures are resulting, in this particular situation, to charges to the customers?

A. Yes. What we wanted to, what we wanted to provide was the fact that -- recognition that all of these forecasts change on a regular basis. There's been much made about the '15 forecast. The next forecast could go the other direction. So we wanted to provide a reasonable range of expectation.

With that said, with a reasonable range of expectation we move to around the center of the range as being an appropriate area for planning purposes and decisions around this PPA rider.

Q. And I believe earlier you also indicated that for shopping customers who have entered into a fixed rate contract with a CRES provider at the time if the PPA goes into effect as you have requested, that those shopping customers would receive potentially either an additional amount that is either a credit or a charge.

A. Yes, they would.

Q. And are you familiar with the duration of CRES contracts at all?

A. My understanding is that they can be for one year, perhaps a little bit longer.

Q. Okay. Are you familiar with the fact that they can be as long as three years?

A. I've heard of some that can be as long as three years, yes.

Q. So, for instance, for a customer that has entered into a contract for a three-year period currently, if the PPA as requested is approved, then there's the potential that a change in the amount in which the company pays for generation would occur, either a credit or an extra charge, because of the PPA; is that accurate?

A. As I understood it, you said the amount that the customer pays for generation, and to my point, if it was a fixed rate, this charge could affect that rate, obviously it would if it was fixed, it could be a charge, could be a credit, you hope it's a credit most of the time, but what the customer pays for generation is their entire bill and their bill is the kilowatt-hours times a rate even if it's fixed, and that varies month to month.

So if a customer's rate is changing in such a way that high load periods such as the polar vortex occur and they have electric heat, they're going to see their electric bill go way up, that's the total price they're paying for electricity. Subsequent to that this rider could provide the benefit of even though it lowers their rate and changes their rate over time, it actually does it in a good way because it lowers the rate and it says, yes, you pay more in your bill because even though your rate was fixed, your volume wasn't fixed, you paid more, now you're going to get a credit later on, assuming that the units produced them any good credit for that period, so from that standpoint it can actually help stabilize and provide some higher level of certainty to customers in terms of the total amount that they pay for their electricity.

Q. Now, you haven't done an analysis of the -- how the PPA would actually affect specific customers or customer groups' bills, have you?

A. I have not done any specific quantitative study. I believe based on qualitative principles customers' usage tends to go up higher with prices.

I mean, load and prices have a significant positive correlation, so I would anticipate, on the wholesale level, so I would anticipate as customers' usage goes up, the wholesale prices go up. When wholesale prices go up, this agreement is intended to make more money because they're selling generation into that same market and would provide a credit back to customers.

Q.   And in your prior answer you also are assuming that an individual customer's usage is going to change depending on whether the PPA results in a credit or a charge to the customer; is that correct?

A.   I haven't looked at the price elasticity of it, but at least by the fact that they, particularly as you start getting into our larger, more sophisticated customers knowing that they may see a credit during very high market price periods, might that lead to small changes, but I would not get into that effect. I have not looked at that specific effect.

Q.   So if a customer's usage remains essentially the same over a couple months before the PPA takes effect and a couple months after the PPA were to take effect, and if the PPA resulted in a charge to the customer -- let's also assume that the customer is a shopping customer with a fixed-rate CRES contract.

In that situation that particular customer is not going to receive charges for generation based on low wholesale prices, are they?

A. They would still -- well, I'm sorry, I need to understand your scenario. Are you saying a customer --

Q. Let me start again.

A. Yeah, okay.

Q. Let me start again. We have a shopping customer with a fixed rate contract, so that a couple months before the PPA takes effect they're paying the cost of generation based on that fixed amount in their CRES contract, then we have the PPA going into effect, and then the PPA results in an additional amount of charge to the customer for generation. In that scenario over the duration of that period of time of a couple months before the PPA and a couple months after the PPA, the customer is not actually getting the benefit of low wholesale prices if they were considered low at that time, correct?

A. Where I'm getting confused by your question is you're asking me about if the customer gets the benefit of low wholesale prices. I don't know based on the -- you just said they have a fixed-price contract. Is that -- are you -- is one of your assumptions it's some CRES provider that's tying their offer to the customer at wholesale prices or -- that's where I don't understand your question.

Q. Would, in fact, the PPA cause the customer who is incurring a charge because of the PPA to somehow receive a benefit from low wholesale prices? That's my question.

A. Okay. If the customer has a charge that is based on, over time, over time presumingly their CRES provider or the SSO offering is providing them rates relative to wholesale prices, then you laid on top of three-year period PPA rider and through the amount charged they would get the benefit of the wholesale price, this would be an additional effectively risk premium that they would pay on top of that to help offset potential times in the future when the markets increase and wholesale prices increased where it would be a credit.

Q. And earlier you discussed the reconciliation proposal that has been put forth at the present time, my understanding is it's anticipated to be done annually; is that accurate?

A. Our company's baseline proposal was a baseline adjustment with the stated agreement that if the Commission so desired it could be done on a quarterly basis. And I'm paraphrasing, I'll defer to Company Witness Allen for the specifics on that.

MS. BOJKO: Excuse me, may I have the answer read back.

(Record read.)

MS. BOJKO: Thank you.

Q. (By Ms. Petrucci) The reconciliation, if done annually, let's just assume that since that is what has been put forth at this time, it has the possibility of actually affecting whether or not a credit would result from the PPA; isn't that accurate?

A. Well, the frequency of the true-up is not going to affect the amount of the credit or the charge. To me it just affects effectively the lag, if you will, which most of us deal with regulatory lag and are used to that concept. So whether it's a year under the company's proposal or three months, that's what it's going to affect. It's not the amount of the credit of when you get it back, but how long it takes you to get it back after it's received.

Q. Isn't the fact that the reconciliation would take place only once in a year and the fact that it's based -- the rider is based on forecasted revenues and charges, doesn't it -- don't those two components collectively make it possible that any forecasted credit might not actually come to fruition because of a reconciliation?

A. Oh, because of the reconciliation. Yeah, the reconciliation will always be between what was forecasted and then the actual results.

Q. Does this mean you're agreeing with me that there's the potential that the reconciliation would then not result in a future, what had been anticipated as a possible credit because of the amount that has to be reconciled?

A. To the extent that there's a forecasted credit and even if it is a credit but not as much, then that difference, that would be picked up in it, again, I'll refer you to -- the mechanics of that to Company Witness Allen.

Q. With the forecast that you provided you have not presented any indication as to how an energy-intensive customer might be affected by a PPA -- the PPA rider being calculated on a kilowatt-hour basis; is that correct?

A. My purview of my testimony is the PPA between buyer and seller. As far as customer impacts, definitely go to Company Witness Allen for those questions.

Q. Was the PPA rider AEP Ohio's idea?

A. I believe it was.

Q. And does that mean that AEP Ohio's customers have not requested the PPA rider?

A. I don't know who originated the original request.

Q. Do you know who receives more financial certainty as a result of the PPA rider? Actually -- yeah, would it be AEP Generation Resources or AEP Ohio's customers?

A. Could you explain what you mean by "financial certainty"?

Q. Well, you've indicated that the PPA will provide a financial hedge and will you agree with me that that provides some financial security, for instance, to AEPGR?

A. AEPGR gets -- would accept a standard cost-based type contract with that type of rate of return.

Q. And it's a very lengthy period of time in which that contract is going to -- anticipated to be in effect, correct?

A. That's -- yes, based on the proposed time period.

Q. And as a result the AEPGR is getting a fixed hedge over that time period; would you agree with that? Because the -- I'm sorry, because the agreement is promising to have a cost-plus provided?

A. Yeah, I guess I had not thought of it as a hedge in their terms. This is going to be a cost-based contract for the sale of the output similar to a regulated jurisdiction. To me the hedge benefit really accrues to the benefit of the load side, the customers who are effectively exposed to the wholesale markets then would get the hedge offsetting of this cost-based agreement.

Q. But do you agree with me that AEPGR, in fact, is going to receive financial security or certainty by virtue of having this lengthy PPA agreement?

A. Oh, providing -- yes. I think that's a positive benefit for both sides. As far as the financial certainty of understanding that they can work with AEP Ohio, understanding AEP Ohio still has broad rights on their capital investment, fuel acquisition, various functions through the PPA, but basically in a partnership between them and AEP Ohio customers, they can move forward to manage the units in the most economic sense possible looking at long-term markets for making investment decisions.

Q. Okay. So taking that into consideration and comparing what AEPGR's receiving under this PPA versus what you've forecasted for AEP Ohio's customers, who do you think is receiving more financial certainty over the forecasted period?

A. I don't think I can quantify a financial certainty to say who's getting more. I would say the agreement I see as mutually beneficial to Gen Resources, it seems to me it would be a fair contract with reasonable commercial terms both ways between the buyer and the seller. The buyer is getting some benefits in terms of providing its power cost base. Of course, for that it's giving up the opportunity to make more on that in the wholesale markets going forward and customers are going to get the benefits of, if and when wholesale markets are climbing up, this naturally offsetting hedge against those higher prices.

Q. And going back to Figure 1 in your testimony for a moment, that, again, is a depiction of what you've anticipated could be the range on a yearly basis over those nine-and-a-quarter years of the benefit to AEP Ohio's customers, correct?

A. Yes.

Q. And under the PPA agreement if you were to try and graphically depict the equivalent for AEP Generation Resources, it wouldn't be this varying range, would it? Because the agreement is guaranteeing a payment of certain fixed amounts plus costs.

A. Oh, as stated in the agreement, they're going to get the proposed return on equity that is indexed, yes, that's what they're going to get.

What the customers, while this range is broad, again, we tend to argue that it's -- over time it's going to tend to be in the middle of this and the substantial difference between Gen Resources and the load side is -- or customers is our customers are buying load in the market, so they have that exposure that Gen Resources doesn't have, they're a generator.

So basically by effectively exposing them to buying power out of the market through CRES providers or SSO, but effectively providing them the benefits of this PPA rider, we're basically providing customers an opportunity to say, well, you're a buyer in the market, you're taking some risk, through this we're also going to make you a seller in the market. You're going to -- on your behalf certain generation is going to be sold into that same market.

So just fundamentally if I'm buying in that market and I'm selling in that same market, again, I'm going to be netting the two out to some extent so I'm helping to reduce the volatility and increase the certainty on wholesale markets. This is a range but my point is this will move in a negative correlation with what I anticipate customers are buying so when I net those two together, the range of expectations to customers will go down significantly as I illustrated in Table 2 on page 16.

Q. And for AEP Generation Resources they're not going to be subject to that market risk anymore by virtue of the PPA; isn't that accurate?

A. As a seller they are not.

Q. Okay. So then let me make sure I wrap this up there. So with the PPA AEP Generation Resources will no longer be subject to that market risk, but the AEP Ohio customers will become subject to that market -- the market risk within what you've -- within that range that you've predicted; is that accurate?

A. They'll become subject to a hedge that helps naturally offset the market risk that they have as buyers of electricity. So they get -- both sides get the benefit of, in my mind, more certainty on both sides.

Q. But do you agree with me that the -- that AEP Generation Resources receives more certainty than the AEP Ohio customers?

A. I apologize, I believe I asked -- you asked and I answered that, that I said I haven't tried to quantify nor do I know of a defined quantitative calculation of certainty that would apply in this situation.

Q. Thank you.

On page 23 of your testimony you discuss on this page some of the new construction and what you believe that it's not likely to affect reliability. Are you familiar with the Oregon clean energy center facility that's under construction in Oregon, Ohio, currently?

A. I am not.

Q. Okay. Are you familiar with the Carroll County energy facility that is also under construction in Carroll County, Ohio?

A. No.

Q. Are you familiar with any additional natural gas plants being developed in Ohio?

A. No.

Q. If you can turn to page 31 in your testimony, lines 13 to 17.

A. Yes.

Q. And here you're discussing the capacity performance, PJM capacity performance program.

A. Line 15, yes.

Q. Is the PJM capacity performance going to provide additional revenue to AEP Generation Resources?

A. It has from the transmission auctions that have occurred.

Q. And, therefore, the additional revenues have the ability to offset costs at the PPA units; isn't that correct?

A. It could, yes.

Q. Now, the PPA rider is going to be in addition to other riders that AEP Ohio charges its customers, correct?

A. I don't anticipate the PPA rider -- I'm not aware that it would propose to replace any other riders. I would refer you to Company Witness Allen.

Q. I'm making another note.

Is AEP Ohio making any commitment with respect to not altering any other of its rider charges during the time period that the PPA rider would be in effect?

A. That's beyond the scope of my testimony.

Q. Let's turn to the term sheet, KDP-1 for a moment, for a couple moments, please.

A. Okay.

Q. You've discussed a number of provisions with respect to the PPA, I'm going to try not to go back to all of them. With regard to the retirement costs that could be recovered through the PPA and then through the PPA rider, that includes decommissioning costs of any or all of the PPA units, correct?

A. I apologize, where are you looking at?

Q. Well, I was thinking specifically about the terms section because the terms section indicates that it's through the entire commercial life including any post-retirement period.

A. That is correct.

Q. Okay. And so by saying that is correct, you're agreeing with me that the retirement, recovery of retirement costs could include decommissioning costs of the units.

A. I'm not sure it's in the terms section, but as we propose, we're collecting asset retirement obligations, all the legal obligations as we go as proposed, and then to the extent that there are any nonlegal retirement costs, then we would propose collection of those as well.

Q. Okay. And among those could be decommissioning costs; is that correct?

A. Shutdown costs of the units.

Q. Could it also include site remediation costs?

A. It could. Of course, to the extent that there are willing buyers for, for example, the land and the facilities on it, there may be no such cost in terms of it may have effectively zero nonlegal retirement costs.

MR. PRITCHARD: Could I -- sorry. I was just going to ask if I could have the last two questions and answers read back.

(Record read.)

Q. And that's speculation on your part because you don't know, as we sit here today, whether or not there would be a buyer at any price for the land that would cover remediation costs, correct?

A. That is a -- I have not performed any quantitative analysis of the exact amount of nonlegal retirement obligations besides I can say based on some of the sites that I believe that have retired, you know, MATS retirements and so forth, we're getting to get a lot of experience with that and there may not be many costs that are covered by the asset retirement obligation costs which we have already built and are slowly collecting an account for, such as the ash pond, asbestos removal, stuff we're legally required to do.

Q. Did your forecast -- well, actually your forecast only covers the nine-and-a-quarter years so there is no -- nothing in the forecast that discussed -- that includes an amount for site remediation for any of the PPA units; isn't that accurate?

A. Our forecast includes all of the, again, the legal required obligations, retirement obligations as we accrue funds to perform those activities. Our proposal is such that to the extent that we have any that we would start collecting that a few years before the unit retires so that would be out beyond the forecast period, that's why we don't have anything included. Again, it could be fairly minimal dollars.

Q. And under the PPA there isn't anything that prohibits AEP Ohio and AEPGR from agreeing to terminate the PPA when the rider is actually providing a credit to AEP Ohio customers; is that correct?

A. Well, the agreement itself is FERC jurisdiction between the buyer and seller, so I believe Company Witness Vegas already responded to, you know, if there was any discussions between them, any input from the Commission about what addendums or whatever they were going to make to the contract, that would be between the buyer and the seller.

Q. I'm not quite sure I understood your answer.

A. Okay.

Q. I'm wondering if there's something in the PPA that would prohibit AEP Ohio and AEPGR from agreeing to terminate the PPA at a time when the rider, the PPA rider, is actually providing a credit to AEP Ohio customers.

A. No. I don't know of any such provision that would, in the PPA itself.

Q. Okay. And then on page 2 of the term sheet in the fuel section, in the middle of the paragraph there it indicates that the buyer, which is AEP Ohio, has --

A. I'm sorry. What section are you on?

Q. The fuel section.

A. Yes.

Q. Page 2 of the term sheet. Are you there?

A. Yes.

Q. Okay. In the middle of the paragraph it indicates that buyer, which is AEP Ohio, can monitor and approve purchases using the competitive methods that the seller conducts. Do you see that?

A. Yes.

Q. By virtue of this language AEP Ohio is having some level of oversight, don't you agree, with respect to the purchase of the fuel?

A. Yes.

Q. And then moving to the offers and scheduling section, there it indicates that AEP Ohio or an agent will dispatch the generation from the PPA units. The term sheet doesn't specify who will be the agent of AEP Ohio for purposes of dispatching the generation from the PPA units, correct?

A. Not that I'm aware of. Like I say, basically, based on my testimony we said that in this case we're anticipating it to be the regulated commercial operation organization which is part of Service Corp. which is the same organization that dispatches the other vertically-integrated operating company fleet, Appalachian Power, I&M, and Kentucky

Power.

Q. And you anticipated my next question.

A. Yes.

Q. Thank you. And, again, by virtue of this provision, the buyer or its agent being able to dispatch the generation, there's some level of oversight that AEP Ohio will have with respect to the PPA units, correct?

A. Oh, yes, a great deal. Yes.

Q. Now, if there are nonperformance charges assessed by PJM associated with the PPA units, those will be netted through the PPA rider; isn't that correct?

A. They would be, yes, they would flow to AEP Ohio presumably through the PPA rider. And, of course, under, like for example the capacity construct, there could be additional payments for overperformance and similarly those revenues would flow through the PPA rider.

Q. Okay. I'm crossing off another question, thank you.

A. Okay.

Q. I know everybody's getting tired.

Now, also if one of the PPA units was to be converted to a natural gas unit, would the costs associated with that conversion be charged through the PPA and then flow through to having a charge to customers associated with those costs?

A. Under that scenario if there was actually some future consideration for the operating committee that one of the units was a good candidate for repowering for natural gas, it would be vetted in that forum. As per Section 4.2 there would obviously be a lot of capital expenditures associated with that so the buyer, in this case AEP Ohio, would have unilateral right to agree or disagree to do that. And then to answer your question as that capital was invested and it went into plant in-service, then yes, the return on that would flow through the rider along with assuming it was proposed and analyzed carefully, as far as a really strong economic decision, then they would get all the benefits of that repowered natural gas unit.

Q. Does the forecast that you prepared include costs for capital improvements of any of the plants during the 9.25 years of the forecast?

A. Yes.

Q. And are those capital improvements that have been planned to take place during the 9.25 years?

A. Yes.

Q. Does the forecast include costs for any capital improvements that are foreseeable but not necessarily planned at this point during those 9.25 years?

A. Well, I think by "planned" the company's put its best estimate of what it foresees the market to be during that period, it has included enough capital to cover what it anticipates as far as any environmental needs during the period, nonenvironmental work as far as when tubes may be redone in a given boiler, just part of our long-term forecasting process of capital expenditures.

MS. PETRUCCI: If I can just have a minute to see if I have covered everything.

I have not.

Q. I want to go back again to the bilateral contract situation we talked about a little earlier. If the PPA is put into place and AEP Ohio purchases the energy, capacity, and ancillary services from the PPA units but then decides to sell that through an -- and enter into a bilateral contract with a third party, if under that bilateral agreement AEP Ohio fails to perform or there is some sort of other penalty that is assessed to AEP Ohio, is that penalty going to be flowing through the PPA rider and be netted under it and potentially become a charge to customers?

A. You know, at that level we're getting out so far into hypotheticals of bilaterals and terms and conditions, I don't feel I can give you an informed response of how all that would work.

Q. There isn't anything in the PPA agreement, the draft agreement, or the PPA rider as it exists now, that would prevent or preclude those damages from flowing through the PPA rider and being imposed upon AEP Ohio's customers.

A. Well, I think once the Gen Resources has delivered the power at the busbar to AEP Ohio, now it's an AEP Ohio Power product. To me as far as if they elect to do something beyond just liquidating it at the market, then there's going to be some discussion with AEP Ohio with the Commission, the PUCO, about other options and how that would affect the PPA rider and audits and so forth.

So, yeah, that to me is almost beyond this agreement. This agreement says we're delivering power, capacity, ancillary service to a delivery point, they're going to be bought by the power. So what they do with that, that could be a subsequent agreement and you're asking me to opine on what would be in that subsequent agreement and I'm just saying that could be anything. I can't really give you an opinion.

Q. But are you agreeing, then, with me that there's nothing in the PPA draft agreement that has been presented that prevents the flow-through of any penalties under a bilateral contract if one were to be entered into and the penalties were triggered?

A. It does not, nor should it, since the delivery point as combined by the parties is the busbar of the generators, that's where AEP Ohio is going to take title to the power and the proposal is this is a prudent decision for the Commission. If they go on and make other arrangements to do other things with the power, that's going to be between AEP Ohio and whoever they're talking with. And I won't opine on what the Commission's involvement would be or how that would affect on the PPA rider.

Q. And then I just want to confirm. I believe you stated earlier, and there was a little trouble, difficulty hearing back here, but I believe you indicated that the draft PPA agreement which has been marked as an exhibit in the matter is in nearly final form in all significant respects; is that accurate?

A. Yes.

MS. PETRUCCI: Thank you. Those are all the questions I have.

EXAMINER PARROT: Thank you, Ms. Petrucci. All right, I think we will conclude for the evening. We will reconvene tomorrow at 9 a.m. Thank you.

(Thereupon, the hearing was adjourned at 7:01 p.m.)

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CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by me in this matter on Tuesday, September 29, 2015, and carefully compared with my original stenographic notes.

____
Maria DiPaolo Jones, Registered Diplomate Reporter and CRR and Notary Public in and for the State of Ohio.

My commission expires June 19, 2016.

____
Karen Sue Gibson, Registered Merit Reporter and Notary Public in and for the State of Ohio.

My commission expires August 14, 2020.

(79415-mdj/kg)

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Summary: Transcript In the Matter of the application of Ohio Power Company hearing held on 09/29/15 - Volume II electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.