BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

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In the Matter of the : Application of Ohio Edison: Company, The Cleveland : Electric Illuminating : Company, and The Toledo :

Edison Company for : Case No. 14-1297-EL-SSO

Authority to Provide for : a Standard Service Offer : Pursuant to R.C. 4928.143 : in the Form of an Electric: Security Plan. :

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PROCEEDINGS

before Mr. Gregory Price, Ms. Mandy Chiles, and Ms. Megan Addison, Attorney Examiners, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-A, Columbus, Ohio, called at 9:00 on Tuesday, September 22, 2015.

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3280 1 Tuesday Morning Session, 2 September 22, 2015. 3 4 EXAMINER PRICE: Let's go back on the 5 record. Good morning. The Public Utilities 6 7 Commission has set for hearing at this time and place 8 Case No. 14-1297-EL-SSO, being In the Matter of the 9 Application of Ohio Edison Company, the Cleveland 10 Electric Illuminating Company and The Toledo Edison 11 Company for Authority to Provide a Standard Service 12 Offer pursuant to RC 4928.143 in the Form of an 13 Electric Security Plan. 14 My name Gregory Price. With me is Mandy Chiles and Megan Addison. We are the Attorney 15 16 Examiners assigned to preside over this hearing. 17 We will dispense with appearances this 18 morning and continue with the cross-examination of 19 Mr. Phillips. 2.0 Mr. Phillips, I would like to remind you 2.1 you are still under oath. 22 THE WITNESS: Yes. 23 EXAMINER PRICE: Mr. Moore, please

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continue.

MS. MOORE: Thank you, your Honor.

FirstEnergy Volume XVI 3281 1 2 RODNEY L. PHILLIPS 3 being previously sworn, as prescribed by law, was examined and testified as follows: 4 5 CROSS-EXAMINATION (Continued) By Mr. Moore: 6 7 Q. Good morning, Mr. Phillips. 8 Α. Good morning. 9 If I could have you turn to page 8 of 0. 10 your direct testimony, lines 18 through 23. 11 Is that the supplemental testimony? 12 Q. I'm sorry. It's pages -- page 5, line 15, through page 6, line 10, where you talk about the 13 liability issues that could result from performing 14 15 transmission upgrades. 16 Excuse me, could you give me --Α. 17 That is page 8, I'm sorry. Q. 18 EXAMINER PRICE: We are on the 19 supplemental testimony? 2.0 It is the supplemental MR. MOORE: 2.1 testimony, yes, I'm sorry. 22 EXAMINER PRICE: Page 8? MR. MOORE: 23 Yes.

MR. MOORE: It's line 18 through 23.

MR. LANG: Which lines?

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- Q. (By Mr. Moore) You talk there about liability issues that could result from performing transmission upgrades; is that right?
- A. Yes. What I talk about in this paragraph is what reliability issues could be causing to remove lines from service when we are doing upgrades.
- Q. Mr. Phillips, have you heard of the Regional Transmission Plan process?
 - A. Yes.

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- Q. And that's a process that's designed to maintain future reliability and economic performance of the PJM grid; is that correct?
- A. That's the process where PJM performs their studies where they look out a number of years to determine if there is any upgrades that will be needed.
- Q. And those upgrades are needed to maintain reliability; is that correct?
- A. Those are upgrades that they will identify that could be needed based on overloads or voltage issues that are identified from the various different type of studies they do.
- Q. Okay. And those voltage issues, the upgrades that are needed because of those voltage issues are to maintain reliability, correct?

A. What they would be looking at is the future years based on the system topology, what type of issues could be on the system at that time with the various facilities. This paragraph that I was referring to was talking about when you get ready to do upgrades, we were talking about 26, so that would be 26 things that you would be trying to remove out of service at one time. PJM studies do not study something like that.

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- Q. But PJM does study system upgrades that may be needed due to a generator deactivating, correct?
- A. Yes. PJM has a process where they will study if a generator puts into retirement, they will study what potential reliability issues there are on the system.
- Q. And you said that study looks out over future years. Do you know how many years it looks forward?
- A. Just we are talking two different things. So when PJM does the normal RTEP process, they are studying out normally five years. When they are doing the -- when the generator puts in for retirement, they are going to be looking at the timeframe around when the generator is retiring, so

they are two different -- they do similar studies, but the timeframes will be different from the RTEP versus if a generator is retiring.

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- Q. But the RTEP process takes into account generator deactivations, correct?
- A. When they are doing their studies, if a generator has identified that they were going to be retired before when the study period is, then the study would account for that generator being removed, correct.
- Q. So then PJM will do -- through this RTEP process PJM will study different scenarios and analyze various grid conditions like could lead to problems in the way power is flowing through the transmission system; is that right?
- A. What PJM will do is they would model the conditions as far as what transmission facilities were in service, what generators were in service, that type of thing, or generators that were retiring. They will model the system conditions, and then they will model what the results are when that generator retires.

What they would not be modeling is when those upgrades have to be taken out of service, they don't model that piece. They are modeling what would

occur when the generator is removed or other issues they see, they will identify what those overloads are.

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But this paragraph is talking about what happens then when you have to do those upgrades. So PJM would identify the upgrades. Then you have to make those upgrades, so the upgrades are either a combination of replacing a transformer, reconductoring a line, or rebuilding a line, or building new -- new equipment. So it's a combination of those.

But PJM is not studying what the conditions are when you are trying to remove all those items from service to do that work. What they studied is when issues are there when a generator retires. Now they identify the overloads, now, it is up to PJM and the transmission owners to identify what upgrades need to be made and that's why when you have so many overloads like this, normally PJM is not -- you don't have the ability to take as -- as we identified in this case 26 overloads so you can't take all 26 of those out at one time. That causes severe conditions on the system. So PJM is why you end up doing a lot of new facilities because you can't take all of those lines out of service.

So PJM studies what's needed to get the also of overloaded facilities. Then you have to decide what upgrades you are going to do and when you are doing those upgrades, that will require you to take additional lines out of service, that PJM is not studied. That wasn't part of the original study. they just identify what lines would be overloaded.

EXAMINER PRICE: Can I have that question back again?

(Record read.)

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EXAMINER PRICE: I would like to caution you at this time to please listen carefully to counsel's question and answer counsel's question directly and only counsel's question. If you have additional information you would like placed on the record, I am sure Mr. Lang will handle that during redirect.

MR. MOORE: Thank you, your Honor.

Q. (By Mr. Moore) So, Mr. Phillips, these
PJM studies that PJM does for the regional ROSE
transmission -- regional transmission expanding
planning process, for example, they could study how a
transmission line is carrying electricity through the
system, and if that transmission line is carrying the
maximum amount of electricity, that would signal that

they would need to provide an upgrade; is that correct?

- A. Through their various studies, their studies they do will model what the flows are on the system, you know, how much current is flowing on the various lines through the various pieces of equipment, and it would also measure what the voltages are and then based on the scenarios they run with gen to live load and the various contingencies, they then identify through those studies if there are low voltage or if lines are exceeding their -- their limits.
- Q. they could also look at whether substation equipment is overloaded; is that right?
 - A. Yes.

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- Q. And then when PJM identifies a potential problem like this, it will work with transmission owners to determine the best solution to that problem; is that right?
- A. Yes, PJM would work with the transmission owners to determine the appropriate solution.
- Q. And a solution could be installing new transmission lines, for example, correct?
 - A. That is a potential solution, yes.
 - Q. Or installation of devices that could

maintain voltage levels, would that be another solution?

- A. Depending on what the problem was, it could be new lines. It could be new substations. It could be new transformers.
- Q. And all these improvements that are identified through this process are reviewed and approved by the PJM board before being implemented into the PJM RTEP plan; is that right?
 - A. Yes.

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- Q. And then the transmission owners are obligated to build these new transmission projects; is that right?
 - A. Yes.
- Q. PJM hasn't studied whether closure of Davis-Besse and Sammis could lead to reliability issues, correct?
- MR. LANG: Objection, your Honor. Asked and answered I think three times yesterday.
- 20 EXAMINER PRICE: Sustained.
- Q. Are you familiar at all with PJM's capacity market construct?
- A. No. In my job I do not get involved with that.
- Q. So PJM's capacity market wasn't involved

at all in your transmission planning grid study?

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- A. That would not be something that would be part of this study, that's correct.
- Q. Okay. If you could turn to page 5 and 6 of your supplemental testimony, I believe, lines 15 on page 5 to about line 10 on page 6 where you talk about plans providing reliability benefits.

Would you agree that having a generator on the system gives operators another way to address reliability problems?

- A. Yeah. A generator on the system would produce megawatts and that is a device that PJM can use to redispatch.
- Q. Can you explain what you mean by redispatch?
- A. When PJM in realtime -- the way it works is what PJM does, you measure realtime that's happening on the system, and you are also required by the NERC standards to also monitor for what the next contingency is, meaning that you are already looking ahead if something is going to happen on the system. And you have to control for that next contingency realtime so that if it does happen, you know, there is not going to be any issues on the system, and then you can start to prepare for that one after that.

So one of the procedures that PJM uses to -- when they have those -- have a contingency that could cause an issue, they will use redispatch generation, and what that means is wherever the overloaded facility is on one side of it, they will move up a generator or generators. On the other side they will move down, meaning they will take one generator and ask them to reduce their output and maybe ask another generator to increase their output so they can change the flows so you do not see that overload.

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- Q. Would you agree that a new generation facility could provide the same benefits to the system?
- A. If a new generator had that ability to redispatch then, yes.
- Q. A natural gas plant that is capable of providing dispatch would be able to provide that benefit then, correct?
- A. In natural gas plants that were capable of that feature, yes.
- Q. So the Oregon Clean Line plant that we spoke about yesterday, that could possibly be able to provide reliability assistance; is that correct?
 - A. If it had the capability to redispatch,

then it would be able to provide that.

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- Q. Do you see anything or are you aware of anything that would prevent it from providing reliability assistance?
- A. I don't know the details of the plant, but, you know, if it has that capability, but if it did, then it would be able to be redispatched.
- Q. And the same would be true with the power plant that's being constructed in Carroll County; is that right?
- A. I know the plant in Carroll County

 that's -- I don't know if it's being constructed yet,

 but I know the plant that's in the generation

 interconnection process. And although that one is

 not interconnected to the ATSI area, it's

 interconnected to the AEP area, AEP line, not to the

 ATSI lines. But if it had the ability to redispatch,

 then it could provide redispatch. It's in the -
 it's in the AEP zone, so the effect it would have on

 the ATSI zone may not be as direct as the ones

 directly in the ATSI zone.
 - Q. Is the Lordstown power plant in the ATSI zone?
- A. The proposed Lordstown plant is in the ATSI zone, yes.

Q. Are you aware of any reason why that power plant wouldn't be able to provide reliability benefits such as redispatch?

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- A. If it was built with that capability, then it should be able to provide that benefit.
- Q. Would you agree that a natural gas plant can ramp up and down quicker than a coal-fired plant?
- A. In our transmission operations group, we don't get involved as far as those -- that information with the generators so I'm -- I'm not exactly sure what the different ramping rates are for -- for generators.

Now, when you talk about that impact, as far as when you are talking about redispatching for contingencies that PJM is monitoring for, unless it's a really long ramp time, it really wouldn't make any difference because PJM is making decisions now for contingencies in the future so they have time to move the generators around.

- Q. What do you mean by "move the generators around"?
- A. So what they are studying for is for contingencies in case something happened in the future. So when I move generators around, we may have time to take one generator and ramp them down

and take another generator and ramp them up because it's not something that's happening realtime. It's something that's happening they are working on for the future.

- Q. But there are emergency situations where a natural power -- excuse me -- a generation power plant would need to be redispatched or ramped up quickly in an emergency situation in order to provide additional power, correct?
- A. PJM does have different generators that they have for regulation control, and those are predefined, and they would use those generators to form regulations for small changes in loads and those type of things.
- Q. Are you at all familiar with the rate or speed at which different power plants can ramp up and down?
 - A. No.

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- Q. If you could turn to page 6, lines 20 to 21, of your supplemental testimony. You say there that "Ohio is a large net importer of power, according to data maintained by the Energy Information Administration"; is that right?
 - A. Yes.
 - Q. And I assume you are implying that that

could contribute to reliability issues; is that right?

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A. What I am referring to there to is that currently in Ohio that means we have not enough generators to supply the load, which means then you are relying on generators out of -- out of the territory to provide that. So one of the benefits that the generators provide is when they are closer to load, they have the reactive support. they provide -- they can react quicker to when you have system disturbance, that type of thing.

So we are already short of generators in Ohio, and as we have more generators retire, you are losing that ability of those generators to provide those same reliability features that we talked about that are providing reactive support being close to loads, and when we do have disturbance, they can provide support that's needed.

- Q. Is this something that PJM accounts for in its planning process?
- A. PJM's planning process does -- all they do is run a model based on where its generated, so they do not control where the generators are going to be installed. So in their planning process, they can't dictate where the generator is going to be, so

they will plan the transmission system around where they generators are built.

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But what that does is when you do have generators further from the load, there is the increased risk associated with that area where the load is that when lines trip. They are -- let me back up. There is more risk lines can trip and separate that generation.

So PJM, that risk part they do not address. They will address through their studies to wherever the generation is to try to make sure the system is reliable as far as overload, but that does not address the risk that those generators might be at more risk for tripping and not being able to serve load in that area because they are further away.

EXAMINER PRICE: Has PJM raised this as an issue?

THE WITNESS: I believe if -- I believe if PJM was able to plan the system where they could put generation and transmission, they would say that that would be the best way to do that because then they could cover all those type of risks.

EXAMINER PRICE: Well, I think you are speculating now. You can finish your answer, but I think you are speculating. Why don't you go ahead

and finish your answer, and then you can answer my question.

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THE WITNESS: Since PJM has not -- cannot control where the generators are at, I don't know if they've said anything in particular about that since it's not an issue they can address.

EXAMINER PRICE: So the answer to my questions is no, PJM has not identified this as an issue; is that correct?

THE WITNESS: I don't know -- I don't know if they have talked about those risk levels or not.

EXAMINER PRICE: To the best of your knowledge, has PJM identified this as an issue?

THE WITNESS: I do not.

EXAMINER PRICE: Thank you.

Thank you, Mr. Moore.

Q. (By Mr. Moore) Mr. Phillips, I don't think my question was has PJM -- could PJM pick, choose where they want generators to be. My question is do they account for such a situation where a state is a net importer in their reliability planning process?

MR. LANG: Objection, your Honor. I believe that was the last answer. That was the last

question and the last answer.

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EXAMINER PRICE: Overruled. He didn't answer the question.

A. The PJM process is that they will study the system for where the generators are located and what the transmission is, and they will study if -- if there is any overloads or that type of process.

That's -- that's what they will study.

EXAMINER PRICE: Let me ask a follow-up question then. When they study the transmission system and they identify that generation centers may not be located close to load, do they not build more transmission or plan to build more transmission to account for the fact that generation is not close to load?

THE WITNESS: Through their studies they will identify whatever transmission is needed so that there is not overloads on the system.

EXAMINER PRICE: And in that sense they maintain reliability irrespective of the distance between generation centers and the load, correct?

THE WITNESS: Yes. They will make sure transmission stalls if there's an overload.

EXAMINER PRICE: Thank you.

Q. (By Mr. Moore) Mr. Phillips, what do you

mean by the word "large" on line 20 of page 6 of your supplemental testimony?

- A. When I looked at the data for that, that was in the range of 15 to 20 percent.
- Q. You said you got this from -- the footnote says you got it from Table 10 of the EIA Excel spreadsheet, correct?
 - A. Yes.

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MR. MOORE: Your Honor, may we approach?

EXAMINER PRICE: You may.

- Q. Mr. Phillips, are you familiar with this spreadsheet?
- A. Yes. Except when I look at the net trade index ratio which, you know, ends up being -- you know, helps discern what the percent of imports are, those numbers have been rounded so you don't see the full impact of the percentage.
- Q. Just to be clear for the record -- I guess let me state what this is. This is "Table 10, Supply and disposition of electricity, 1990 through 2013" for Ohio from the EIA website.

EXAMINER PRICE: Would you like this
marked?

MR. MOORE: Yeah. I think it's Exhibit
14.

3299 1 EXAMINER PRICE: It will be so marked. 2 (EXHIBIT MARKED FOR IDENTIFICATION.) 3 And I have highlighted two portions of Q. 4 the "Net Interstate Trade," and the definition of "A 5 negative Net Interstate Trade value indicates net import of electric power." 6 7 So, Mr. Phillips, is this the spreadsheet 8 that you used in gathering your data for your 9 supplemental testimony? 10 Α. Yes. 11 And if you look at your 2013 for net 12 industry trade, what is the value there? 13 Α. As I indicated that is a rounded number, and when I looked at the numbers when we had them out 14 to two decimal places, I believe it was like 085. 15 16 There it's been rounded to .9. 17 MR. LANG: Could I have the question read 18 back, please. 19 EXAMINER PRICE: You may. 2.0 (Record read.) 2.1 EXAMINER PRICE: Mr. Moore, are you 22 talking about the net interstate trade or the net trade index? 23 24 MR. MOORE: Right. 25 Q. (By Mr. Moore) I was going to say I think

3300 1 you were looking at the net trade index ratio. I'm 2 talking about the net interstate trade that's 3 highlighted there. 4 Oh, I apologize. So what is the value for 2013 for net 5 Ο. interstate trade? 6 7 Α. That would be a -- net trade is 8 -24,581,566. And as the definition below, that 9 10 indicates net negative interstate trade value and 11 it's a net import of electric power, correct? 12 Α. Yes. 13 Ο. And the 2012 net interstate trade is negative 34,957,108; is that correct? 14 15 THE WITNESS: Could you read that back to 16 me. 17 I could restate. 2012 is also a negative Q. number; is that correct? 18 19 Α. Yes. 2.0 Q. And 2011 is a negative number; is that 2.1 correct? 22 Α. Yes. In fact, every number dating back to 1990 23 Q. 24 is a negative number; is that correct?

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Α.

Yes.

3301 1 So Ohio has been a net importer of 0. 2 electric power since 1990; is that correct? 3 Α. Yes. 4 Do you know if Ohio has been a net 5 importer of electric power for any years prior to 1990? 6 7 Α. No. 8 EXAMINER PRICE: Do you know how many 9 years on this chart Ohio imported more than 10 24,581,566 megawatts hours prior to 2013? 11 THE WITNESS: I would just need to count 12 through. 13 EXAMINER PRICE: Take your time. 14 THE WITNESS: Thirteen, if I counted 15 correctly. 16 EXAMINER PRICE: Thank you. 17 (By Mr. Moore) Okay. On the same page 6 18 of your supplemental testimony, line 22, you state 19 that Ohio -- or lines 21 and 22 state, "This deficit 2.0 is trending upward and is exacerbated by retirements 2.1 of Ohio generation that are outpacing additions of 22 new Ohio capacity"; is that right? 23 Α. Yes. 24 On the next page you go on to state that

"Another 1,925 MW of coal generation is scheduled to

be deactivated later in 2015"; is that right?

- A. Could you read that back again?
- Q. On lines 2 through 3 of page 7 of your supplemental testimony states, "Another 1,925 MW of coal generation is scheduled to be deactivated later in 2015."
- A. Yes.

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- Q. What plants make up that 1,925 megawatts?
- A. That was Muskingum River, Pickaway, Miami Fort, and Hutchings.
- Q. And then you state on the next line,
 "Meanwhile, only 1,207 MW of natural gas generation
 was placed into service in Ohio between 2005 and
 2014," correct?
- A. Yes.
- Q. Do you know what plants made up that 1,207 megawatts?
 - A. Dresden and Fremont.
- Q. Do you know how many of the 1,925
 megawatts of coal is being deactivated in the ATSI
 zone?
 - A. None of the 1,925 was in the ATSI zone.
- Q. Are any of the new natural gas plants that are going into service in the ATSI zone?
 - A. Yesterday we discussed several new

plants. Only two of those plants that are being proposed -- as I mentioned, until they are built, they're not built, so there's a high probability they won't be built based on PJM statistics. But there is only two in the ATSI territory. That was the Oregon and the other proposed plant is Lordstown.

- Q. What about any of the 1,207 megawatts of natural gas that went in between 2005 and 2014, is any of that in the ATSI zone?
 - A. Fremont is.

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- Q. How many megawatts is Fremont? Do you know?
- A. I can't recall exactly how many megawatts Fremont is.
- Q. But between Fremont and possibly Oregon and Lordstown, it could be three plants, one for sure and two possible other plants, that could be going into service in the ATSI zone, correct?
- A. The Fremont plant is already in service, and there are other -- they are the other two projects that I mentioned that are proposed that are in stages in the PJM interconnection process.
- Q. And since none of the 1,925 megawatts that was deactivated was in ATSI, that means this is a net positive increase of power in the ATSI zone,

correct, between 2005 and 2014?

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- A. No, that would be incorrect.
- Q. Why is that incorrect?
- A. What plant came on in -- between 2005 and 2014 was the Fremont plant, and so it's -- I can't remember its exact size, but there was only 1,200 that came on in Ohio, and we just talked about there were over 2,400 megawatts of generation that retired in 2012 and 2015 in ATSI, so that does not net out positive.
- Q. On page 6 of your supplemental testimony if you could turn to that, page 6, lines 6 and 7 and 8, so you would agree if a generation plant is moved closer to load, it would decrease the potential for outages, correct?
- A. If generation plants are closer to load, to loads that they are helping to serve, then you have less exposure as far as how far away as far as lines tripping out.
- Q. How would you define a higher load center?
- A. Well, the load is spread all across the footprint, so if you are trying to just take some geographical area and say whether it's higher or lower, it would just -- again, if you took an area

map and that area had more customers like that but there's load spread out throughout all over.

- Q. So it's based on population then, correct?
- A. Population would drive the load, plus, you know, the type of industry there is.
- Q. But where you have more population base, that's a higher load center, correct?
- A. In some cases it could be because other times you have, you know, industry plans or whatever that are not in the city so they are out in there, so that requires a big load pocket also.
- Q. Okay. So you would agree that Cleveland is a big load center in the ATSI region?
 - A. Yes.

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- Q. So if generation is moved closer to Cleveland, that would increase the potential for outages?
- THE WITNESS: Could you reread that question.
- 21 (Record read.)
 - A. No, it would not increase outages.
- Q. Let me restate that. If a generation
 plant is moved closer to Cleveland, would it decrease
 potential for outages?

MR. LANG: And, your Honor, I would object to the hypothetical to the extent that I am not -- the hypothetical appears to be asking whether a generating plant can be moved, which I am not -- I think that would be mischaracterizing the physical state of the world, and when he is asking him about, you know, kind of moving it closer, then there's no discussion in the hypothetical as to closer to what.

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EXAMINER PRICE: Well, I believe he was probably referring to constructing new generation, so your first part of your objection.

As to the second part of your objection, on line 6 he states, "The simple fact is that increasing distance," so he does not refer to increasing it more than what at all. I think that's -- he's identified this as part of his testimony he is talking about so overruled.

MR. LANG: Could we have the question read back then, please.

EXAMINER PRICE: You may.

(Record read.)

A. If you had a generation plant that was closer to Cleveland, and "closer," I am not exactly sure what that means, meaning as opposed to how far away, but if it were comparing moving from distance A

to distance B and B is closer to Cleveland, and that generators by the flows on the system are feeding Cleveland, then there would be less exposure on transmission lines between the load and that generator.

MR. MOORE: Could I have that answer read back, please.

EXAMINER PRICE: You may.

(Record read.)

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- Q. So if there is less exposure on generation lines, that would decrease the potential for outages; is that correct?
- A. What I am referring to is the lines, so the longer the line length you would have, it has more exposure to weather, those type of things, so it has more exposure to switches tripping.
- Q. Do you know how close the Lordstown power plant -- or excuse me. Do you know where the Lordstown power plant is located?

MR. LANG: Objection, your Honor.

There's been ample testimony that the Lordstown power plant does not yet exist, so his question is assuming a fact not yet in evidence, in fact contradicting the

24 evidence that's in the record.

EXAMINER PRICE: I think the difficulty

is, you know, we are bound saying the potential retirements of plants and the potential construction of plants. Considering he has testified quite a bit about the potential of retirement of plants, I don't think it's unfair for counsel to ask him about plants that are potentially going to be constructed.

MR. LANG: And that I absolutely agree with, your Honor. It's asking about plants that where the question assumes that the plant exists today that I object to. To the extent -- and that question, I believe, was assuming that the plant exists in a particular location today, which is directly in conflict to the record in this proceeding. That's what I am objecting to.

EXAMINER PRICE: Fair enough.

Please rephrase your question as a hypothetical, assuming the Lordstown is constructed.

- Q. (By Mr. Moore) Assuming the Lordstown plant is going to be constructed, do you know where it's planning on being constructed?
 - A. Yes.

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- Q. And where is that?
- A. It is going to be constructed in the Youngstown area off of the two substation -- or two transmission lines.

- Q. You said near Youngstown, correct?
- A. In that area, yes.

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- Q. So would the Lordstown plant be closer or farther away from Cleveland than Sammis?
- A. If you are referring to a physical distance, it would be closer to Cleveland. However, electrically Sammis has nine different lines that come out of it that travel, and most of those go up into the ATSI territory. So electrically I don't know if there would be a difference because there is so many lines coming out of Sammis.
- Q. Do you know where the Carroll County plant is planning on being constructed?
- A. I know the general area it's going to be, off of the -- AEP's, connected into their system off of the TIDD-Canton central line.
- Q. Do you know where that's going to be, farther, closer to Cleveland than Sammis?
- A. I do not know if that would be closer or not on that one.
- Q. Could you turn to page 7 of your supplemental testimony, lines 12 through 15. You say that "Further, potential natural gas generation would lack the important qualities of baseload nuclear and coal plants with significant on-site fuel supply to

3310 withstand extreme weather events and other 1 interruptions of just-in-time fuel supply," correct? 2 3 Α. Yes. 4 When you state "extreme weather events," 5 are you referring to the polar vortex that occurred in January of 2014? 6 7 Α. That would be an example of an extreme 8 event. 9 Ο. Are you familiar with PJM's capacity performance product? 10 11 I know that name. The details behind it, 12 I am not. 13 Ο. Are you aware that the product is meant to ensure that power plants that PJM relies upon for 14 winter reliability, like natural gas plants, have 15 16 firm supplies? 17 MR. LANG: Objection, your Honor. EXAMINER PRICE: Grounds? He's testified 18 19 he is not familiar with the details of the product. 2.0 Can I have the question back again. 2.1 (Record read.) 22 MR. MOORE: I believe my question was "will have firm supplies"? 23 24 EXAMINER PRICE: He can answer if he 25 knows.

A. I do not know what the rules are with the capacity performance.

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- Q. Well, besides the rules, are you aware of why PJM proposed the capacity performance product?
- A. I don't get involved with that so I am not -- I am not aware exactly what all their process was when they were doing them.

EXAMINER PRICE: So when you made your statement on page 7 at line 12, you made that without consideration at all to the capacity performance product offered by PJM; is that correct?

THE WITNESS: That is correct. That -the statement I was making there was based off of PJM
did a report at the beginning of this year where they
discussed the last two winters, the performance that
PJM saw with generation, and the statement that they
made in the report was that when you looked at the
polar vortex and then you looked at the performance
this past winter, that although overall the
performance of the generators were a little bit
better than in the polar vortex, the outage rates for
the generation was still higher than what the norm
is.

The one item that they said was consistent between the vortex and now was the outages

that they saw for natural gas lines from curtailments, and they indicated that had maybe even gotten a little worse, and because of that one of the things they are implementing now is, they are going to be doing winter studies to look at the performance of generators, and one of the items that they have added, they are actually going to -- where normally they do contingencies on the electrical equipment tripping out, they are actually looking at adding contingencies around gas lines being curtailed and tripped up because of the issue they see with that.

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EXAMINER PRICE: So you are aware of the post -- the post-polar vortex and extreme weather report, but you are unaware of the capacity product, whether that came out of the report, capacity performance product?

THE WITNESS: I read the report that talked about the results of what happened in the winter, but I have not kept up or involved myself with the capacity products since that's -- would affect the generation side of the business and the transmission would be details that I would be working with or involved with.

EXAMINER PRICE: Do you know whether the capacity performance report was the result --

3313 1 capacity performance product was the result of that 2 report? 3 THE WITNESS: I do not know for sure, no. 4 EXAMINER PRICE: At this time we are 5 going to adjourn for one hour. We will please return at 10:55. 6 7 Let's go off the record. 8 (Recess taken.) 9 EXAMINER PRICE: Let's go back on the 10 record. 11 Mr. Moore. 12 MR. MOORE: Thank you, your Honor. 13 Q. (By Mr. Moore) Mr. Phillips, earlier you 14 spoke about a report that you read from PJM about the winter reliability issues surrounding the polar 15 16 vortex; do you remember that? 17 Α. Yes. 18 Ο. Are you aware of any changes made to 19 remedy that problem? 2.0 Other than capacity performance? Α. 2.1 MR. LANG: Objection, your Honor, just 22 ambiguous to "that problem." 23 MR. MOORE: I can restate. 24 EXAMINER PRICE: Rephrase. 25 Q. Are you aware of any changes made to

remedy the issues that PJM encountered during the polar vortex, reliability issues?

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- A. The only thing I am aware of where I read they were looking at doing different contingency studies for the winter for gas lines, that type of thing, curtailments.
- Q. So you are not aware of any actual plans they have to implement anything to solve any of these problems; is that right?
- MR. LANG: Objection, mischaracterizes the testimony.

EXAMINER PRICE: Rephrase.

- Q. Other than the studies that you just mentioned, you are not aware of anything else that PJM is doing to remedy the issues that occurred during the polar vortex?
 - A. That is correct.
- MR. MOORE: I have no further questions,

 your Honor.
- 20 EXAMINER PRICE: Thank you.
- MR. MOORE: Thank you.
- 22 EXAMINER PRICE: Mr. Oliker?
- MR. OLIKER: Your Honor, I have very few, if any, questions. I would like to defer to the
- 25 Sierra Club and will potentially render my questions

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1	unnecessary.
2	EXAMINER PRICE: Okay. Sierra Club.
3	MR. FISK: Thank you, your Honor.
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5	CROSS-EXAMINATION
6	Q. Good morning, Mr. Phillips.
7	A. Good morning.
8	Q. You did not review Mr. Cunningham's
9	testimony before it was filed; is that correct?
10	A. No, I did not review his testimony before
11	it was filed, that's correct.
12	Q. Okay. And you were not involved in this
13	proceeding before the companies filed their
14	application in August '14; is that right?
15	A. That is correct.
16	Q. Okay. When did you become involved in
17	this proceeding?
18	A. Around the first of April of this year.
19	Q. Okay. And you have reviewed responses
20	that Mr. Cunningham sponsored to discovery requests
21	from other parties in this proceeding; is that right?
22	A. I don't know if I reviewed a complete
23	set, but I have reviewed some, yes.

the responses you did review are factually accurate;

Q. Okay. And with one exception you think

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is that right?

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- A. I believe -- I know one where he had the lines listed, you know, listed like "Wood" where it should have been "Woodville," and off the top of my head I also remember where one of the lines had it listed as being in, I think it was, Allegheny's territory and it should have been AEP's. Recalling off the top of my head, that's what I remember right now.
- Q. Okay. So outside of that, you don't recall any other factual errors that you perceived in Mr. Cunningham's discovery responses that you reviewed?
- A. I recall those. I don't recall if, you know -- I made -- in my supplemental testimony I made a couple of corrections for some costs. I don't remember if those were listed in any of the discovery requests or not. So those would have been -- those are the items I remember.
- Q. Okay, okay. And in your testimony you provide estimated cost of transmission upgrades that may be needed if both Sammis and Davis-Besse were to be retired; is that right?
 - A. That is correct.
- 25 Q. Okay.

3317 1 MR. FISK: Your Honor, may we approach? 2 EXAMINER PRICE: You may. 3 MR. FISK: I ask that this be marked as Sierra Club Exhibit 57. 4 5 EXAMINER PRICE: So marked. MR. FISK: Thank you. 6 7 (EXHIBIT MARKED FOR IDENTIFICATION.) 8 Okay. Mr. Phillips, you have been handed Q. 9 an exhibit that's been marked Sierra Club 57, and it 10 is the companies' response to Sierra Club Set 1-INT-6; is that correct? 11 12 Α. Yes. 13 Ο. Okay. And the witness identified on this 14 response is Mr. Cunningham; is that right? 15 Α. Yes. 16 Okay. And have you ever seen this Ο. 17 document? 18 Α. Yes, I believe I have seen this 19 discovery. 2.0 Okay. And the request here asked whether Q. 2.1 the companies had evaluated the reliability impacts 22 or needed upgrades to allow for the retirement of the 23 Sammis plant alone, individual units of the Sammis

plant and/or the Davis-Besse plant alone; is that

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right?

- A. Yes, that's what the question says.
- Q. Okay. And the response after the objections says, "Retirement of only the Sammis plant would require \$213 million of transmission system upgrades while retirement of only the Davis-Besse plant requires \$65 million"; is that right?
 - A. Yes.

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- Q. Okay. And to your knowledge is that -- are those figures accurate?
- A. I don't know. I did not do any reviews or studies of only Sammis or Davis-Besse retiring. I only did the review of Sammis -- Sammis and Davis-Besse both retiring.
- Q. Okay. So you are not offering any opinions regarding what transmission system upgrades might be needed if only the Sammis plant were to retire?
 - A. That is correct.
 - Q. Okay. And the same for Davis-Besse.
 - A. That is correct.
- Q. Okay. And to your knowledge, did the companies ever evaluate what transmission upgrades that might be needed if only a subset of the Sammis units were retired?
- 25 A. I am not aware of everything. I just

know about this from the discovery request as far as looking at Sammis or looking at Davis-Besse. I know of nothing else.

- Q. Okay. And I believe yesterday there was a discussion about how the costs of transmission upgrades may be allocated; do you recall that?
 - A. Yeah, I remember some discussion on that.
- Q. Okay. And I believe your supplemental testimony on page 10 discusses how the costs of transmission upgrades related to coal plant retirements from 2012 to 2015, 82 percent of those costs were allocated to the companies' customers; is that right?
 - A. Yes.

Q. Okay. And to your knowledge that

82 percent allocation has just been assumed for
evaluating how much of the cost of transmission
upgrades from Sammis and Davis-Besse might be charged
to the companies' customers; is that right?

THE WITNESS: Could I have that read back.

22 EXAMINER PRICE: You may.

23 (Record read.)

A. Since I was not able to identify exactly what facilities would end up being needed as Sammis

and Davis-Besse retired, the 82 percent that I referred to for the Lake plants, I indicated that in lieu of knowing exactly what facilities, that was a good reasonable value to use, something that's recently happening for similar plants that retired in ATSI.

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- Q. Okay. And in actual practice, PJM would determine how those costs are allocated; is that correct?
- A. Yes. When PJM has actual upgrades that are needed, they will do a study to determine exactly how the facilities will be allocated.
- Q. Okay. And a significant portion of the costs for transmission upgrades over \$5 million would be allocated using the DFAX method; is that right?
- A. There's two parts. If it's \$5 million or more, part of it is by the DFAX methodology, and also depending on the voltage level, it's also by spread by load ratio share.
- Q. Okay. And the DFAX method is a study that PJM does to determine which load zones will benefit from an upgrade; is that right?
- A. Yes. they do a study to determine who will benefit, essentially what load -- because you are putting an upgrade in, what load is benefiting

from that upgrade going in.

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- Q. Okay. And then the load zone that benefits from the upgrade will pay at least a portion of the costs of those upgrades; is that right?
- A. Yes. For the DFAX piece, whatever that's representing, is the overall percentage that they are doing. Then that will be spread across however they determine for what zones would be applicable for that.
- Q. And do you know what the voltage threshold is for not using DFAX?
- A. If it is a project that's \$5 million or more and it's 500 kV or double circuit 345, then 50 percent of it goes to DFAX and 50 percent goes to load ratio share.
- Q. So if it's single line under 345, then all of it is allocated on DFAX; is that right?
 - A. If it was a project that was over \$5 million and it was single 345 kV or lower, then it would be 100 percent DFAX.
 - Q. Okay. And the companies would not be able to replicate a DFAX analysis, correct?
 - A. No. We currently do not do that.
 - Q. Okay. So PJM would have to carry out a new DFAX analysis of the allocation of the costs of

any transmission upgrades if Sammis and Davis-Besse were to retire; is that right?

- A. PJM would do the actual cost allocation.
- Q. Okay. And the companies have not asked PJM to do any sort of DFAX analysis regarding the transmission upgrades that you have identified; is that correct?
 - A. That is correct.
- Q. Okay. If you could turn to your supplemental testimony, page 7, lines 9 through 11; you have a discussion there about whether projects in the PJM queue will end up going into service; is that correct?
 - A. Yes.

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- Q. Okay. And you state that there's only a 14.6 percent historical probability that a project that enters the feasibility study phase will go into service; is that right?
- A. Yes. PJM has several phases to their studies when generators go through the interconnection process, and when they begin the process, only 14.6 percent of them, they have shown from history, actually go in service. In terms of megawatts, they also do that, it's only 7 percent of the megawatts that go into the interconnection

process actually go in service.

- Q. Okay. And the sentence from lines 9 through 11 on page 7, there's a footnote 5, and then there is a link to a PJM document; is that correct?
 - A. Yes.

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Q. Okay.

MR. FISK: May we approach, your Honor?

EXAMINER PRICE: You may.

MR. FISK: I ask that this be marked as Sierra Club Exhibit 58.

11 EXAMINER PRICE: So marked.

MR. FISK: Thank you.

(EXHIBIT MARKED FOR IDENTIFICATION.)

- Q. Okay. Mr. Phillips, you have been handed a document that's been marked as Sierra Club 58, and it is titled "2014 PJM Interconnection Queue Statistics Update." Do you see that?
 - A. Yes.
 - Q. And have you seen this document before?
- 20 A. Yes.
- Q. Okay. And is this the document that is linked to footnote 5 on page 7 of your supplemental testimony?
- 24 A. Yes.
- Q. And the 14.6 percent figure that you

reference in your supplemental testimony, where does that figure come from in this document?

- A. If you turn to page 3, page 3 talks about new projects that enter the generation connection process.
- Q. Okay. And so the 14.6 percent is the -- are you referring there to the 15 percent figure at the bottom of the triangle?
 - A. Yes.

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- Q. Okay. And so that figure, am I correct, represents the number of -- the percentage of plants that have gone into service compared to the number that have been applied to PJM; is that right?
- A. Yes. That number we would refer to the top number, which is how many generation projects started the process and then how many actually went in service.
- Q. Okay. Okay. And if you compare the number of plants that have a facilities studies issued compared to the number that go into service, the percent is significantly higher than 14.6 percent, correct?
- A. Well, yes. The 14 percent is talking about when you start with the number of generators starting, if you look at the 908 and then look at the

282, so as you step down through the process, they do the feasibility study, the impact study, the facility study, and then they sign their interconnection agreement.

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So if you look at the 908, the 282, basically after they have all progressed to where they completed all of the studies, which a facilities study is there, what that is showing is it about 30 percent of those projects go in service.

- Q. Okay. So as a project progresses through the PJM process, the odds of it actually going into service actually increase, is that right?
- A. Yeah. That's kind of -- as you look as you go along, because some of the numbers drop out of the top, but as you go down through all the steps, projects dropping out all along, so the last one is a facility study, which means when they complete that, 30 -- 70 percent of them drop out, and then the next phase is, as it shows there, is, like, when they sign their -- all their interconnection agreements, and even from that point, it's almost 50 percent that drops out.
- Q. Okay. So for that 50 percent you're comparing the 505 for the executed agreements and the 282 for in service?

A. Correct.

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- Q. Okay. So for plants with executed agreements or proposed plans with executed agreements, over half of them end up going into service, correct?
- A. Yeah, approximately half drop out and half go into service.
- Q. Okay. And at the top of the triangle, it says "Excludes Active Projects." Do you know what that means?
- A. That would mean projects that are currently in the queue process going -- you know, gone through the generation interconnection process.
- Q. So those projects are excluded from this analysis?
- A. Yes, because they wouldn't have went in service yet or they haven't withdrawn yet.
- Q. Okay. So these statistics do not reflect projects that have been proposed and are still going through the process of becoming in service at some point, correct?
 - A. That's correct.
- Q. And if you included those projects, do you have any idea how it would affect the estimate of the percentage of projects that had been proposed

that could still go into service?

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- A. You wouldn't be able to include those because they have not completed the process, so they haven't -- what this chart is showing is what went into service, so you couldn't include them because they haven't went into service, and they are still going through the interconnection process, so they haven't dropped out. So if you try to put projects in there like that, actually, if you put those projects in there, the numbers would look worse because none of those projects would be in service.
- Q. Okay. Do you know what percent of -- do you know how many projects that haven't yet gone into service are still going through the process?
- A. No. Across PJM I don't know the enrolled count.
 - Q. Do you know how many in Ohio?
- A. I know the plants we have mentioned here over the last two days.
- Q. Okay. Do you know if there's any others that are in -- that are active projects besides the ones we mentioned in the past days?
- A. No. I am familiar with the ones we have discussed here.
 - Q. Okay. And the projects that are

reflected in page 3 of Exhibit 58, do you know over what timeframe these projects were proposed?

- A. Yes. This PJM went back to 1997.
- Q. Okay. Okay. And do you know whether the rate of projects that are actually going into service has increased or decreased over that time period?

THE WITNESS: Can I have that read back, please.

10 (Record read.)

- 11 A. No, I don't -- I have not seen anything
 12 from PJM on that.
- Q. Okay. And the data reflected on page 3 of 58 is PJM-wide, correct?
- 15 A. Yes.

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- Q. Okay. Do you know what the Ohio-specific results would be?
- 18 A. No.
 - Q. Okay. And if you look at the direct testimony on page 6, lines 10 through 12, it says,

 "It is important to appreciate that the necessary transmission upgrades that I describe are not the most optimal solution to reliability criteria violations." Do you see that?
- 25 A. Yes.

Q. Okay. And do you agree with that statement?

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- A. Yes. I agree if you were able to plan, like we had in the past, the best planning would be a culmination of being able to plan where to put generation and where to put transmission as one combined study.
- Q. Okay. So a study attempting to identify an optimal solution to reliability criteria violations would evaluate both transmission and generation solutions; is that right?
- A. Yes. That way when you came up with solutions, you could determine the culmination of generation or transmission.
- Q. And the companies' reliability analyses in this proceeding did not evaluate both generation and transmission solutions concurrently, right?
- A. The studies we ran, of course, had -includes generation and transmission in it. But
 within the PJM market, PJM does not have the
 authority to make generators or make generation be
 built in any location, so the only thing we have the
 ability to do is to indicate where there is overloads
 and what transmission can be done to fix that
 reliability issue.

1 MR. FISK. Move to strike that response 2 as not responsive. I was simply asking whether 3 they've evaluated both transmission and generation. 4 EXAMINER PRICE: Can I have the question 5 back, please. (Record read.) 6 7 EXAMINER PRICE: Mr. Lang, response. 8 MR. LANG: Your Honor, he answered the 9 question by explaining that under what PJM does, 10 which is what they were doing, PJM only does transmission. And so the answer is they only do 11 12 transmission, not generation and transmission. 13 EXAMINER PRICE: We will give the witness 14 a little leeway on this one. 15 MR. FISK: Okay. Thank you, your Honor. 16 Ο. (By Mr. Fisk) And do you recall, 17 Mr. Phillips, a discussion yesterday about the PJM 18 generation queue? I remember there was discussions on that 19 Α. 2.0 yesterday. Okay. And am I correct it was your 2.1 Ο. 22 testimony that PJM would include a proposed

generation station in its RTEP and RPM modeling if

the plant had an interconnection service agreement

with an earned service date by the date of the

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modeling?

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- A. Yes. So, for example, if you were looking at your 2019 RTEP, if a generator had signed an interconnection service agreement and would be in service by June, 2019, it would be included.
- Q. Okay. And PJM publicly reports on its website what proposed generating units are in the queue, correct?
 - A. Yes.
- Q. And that website reports the status of each unit in the queue; is that right?
 - A. Yes.
- Q. Okay. And that website includes interconnection service agreements if the proposed generating unit has entered one; is that right?
- A. Yeah. They have a matrix that kind of shows what the status is of the generator, and then a lot of times off that, you can get links to the agreements if they've been signed.
- Q. Okay. And so do you consult that website, at least occasionally, to determine whether something has an interconnection service agreement?
 - A. Yes, that's where I would look.
- Q. Okay. And do you recall having a discussion yesterday about the Carroll County

3332 1 generating station that's been proposed? 2 Α. Yes. 3 Okay. And do you know if the entity Ο. proposing the Carroll County generating station has 4 signed an interconnection service agreement? 5 6 I believe they have. As we speak today, 7 I believe that's what it shows on the PJM website. 8 Okay. And do you know, was that Q. 9 agreement entered around March of 2015? 10 Α. I do not know the date. I looked at the 11 summary page. 12 Q. Okay. 13 MR. FISK: Your Honor, may we approach? 14 EXAMINER PRICE: You mav. 15 MR. FISK: If we could have this marked 16 as Sierra Exhibit 59. 17 EXAMINER PRICE: So marked. 18 MR. FISK: Thank you. 19 (EXHIBIT MARKED FOR IDENTIFICATION.) 2.0 Mr. Phillips, you have been handed a 0. 2.1 document marked Sierra Exhibit 59 and it is entitled 22 "Interconnection Service Agreement Among PJM 23 Interconnection, LLC And Carroll County Energy, LLC 24 And AEP Ohio, Inc"; is that correct?

I see that, but I have not seen this

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Α.

document before, but that's what it says on the first page.

- Q. Okay. You referred earlier, a minute ago, I believe, to knowing that Carroll County had entered an interconnection service agreement, correct?
 - A. Yes.

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- Q. Okay. Do you have any reason to believe that this document would not be that interconnection service agreement?
- A. It doesn't have any information -- it says "Carroll County," but I don't see any references to either megawatts or the line it's interconnecting to. So it definitely says "Carroll County Energy", so it doesn't give me any indication where it is interconnecting, so I can't guarantee this is the exact one I was referring to.
- Q. Okay. Do you know what the expected in-service date for the Carroll County facility is?
- A. I believe I recall the proposed date that they had estimated, in-service date, was 2017.
- Q. Okay. And the document marked Sierra Club Exhibit 59, it says effective date March 26, 2015; is that right?
 - A. Yes, that's what it says at the top.

Q. Okay. And that was before you submitted your supplemental testimony in this proceeding; is that right?

A. Yes.

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- Q. Okay. And would a plant -- a proposed plant that has an interconnection service agreement and a projected in-service date of in 2017, would that today be included in an RTEP analysis for 2019?
- A. When PJM would be putting together a model today, when they were going through their process, which would have been in the first portion of this year, when they were putting their latest model together, if a generator was going to be in service by the date of the model they were developing and the generators had an ISA, at that time they would include it.
- Q. Okay. So if PJM in May of 2015 were putting together its model, it would have included a plant that had an interconnection service agreement and that had an in-service date in the fall of 2017, correct?
- A. Yes. PJM in the beginning of this year would have been putting their model together to study that -- in this case they're studying the year 2020. But if that generator had an in-service agreement and

had an in-service date before that study, it would be included.

- Q. Okay. And just to confirm, Carroll
 County was not included in your RTEP, the RTEP base
 case that you used in your modeling, correct?
- A. No. The study that we used, at that time PJM had not included it in there, which means they would not have met those requirements.
- Q. All right. Yesterday there was some discussion, I believe, about 38 transmission system upgrades that you've identified as necessitated by retirement of the 2,400 megawatts of coal plants in Ohio by FES and GenOn; do you recall that?
 - A. Yes.

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- Q. Okay. And those 38 transmission system upgrades are listed on the fourth and fifth pages of your public workpapers; is that right?
- A. No. Wait a minute. Let me check the right page. Sorry, I am looking at the wrong thing. I don't have numbered pages in front of me so I'm not sure. The public, is that what you said?
- Q. Yes, it's been marked as Company Exhibit 40, I believe.
- MR. LANG: Yes, counsel. Company Exhibit 40.

- A. Yes, that would be correct.
- 2 Q. So page 4 and 5, this is a list of
- 3 projects. These are the 38 transmission system
- 4 upgrades?

- 5 A. Yes.
- Q. Okay. And the 2,400 megawatts of coal
- 7 plants, am I correct, they have been referred to as
- 8 | the Lake plants; is that right?
- 9 A. Yes.
- Q. Okay. Can we agree to refer to them
- 11 today as the Lake plants?
- 12 A. Yes.
- MR. FISK: May we approach?
- 14 EXAMINER PRICE: You may.
- 15 MR. FISK: And if we can have this
- 16 document marked as Sierra Club Exhibit 60.
- 17 EXAMINER PRICE: So marked.
- 18 (EXHIBIT MARKED FOR IDENTIFICATION.)
- 19 O. All right. And, Mr. Phillips, you have
- 20 been handed a document marked as Sierra Club Exhibit
- 21 | 60, and it's "Transmission Expansion Advisory
- 22 | Committee (TEAC) Recommendations to the PJM Board";
- 23 is that correct?
- 24 A. Yes.
- 25 Q. Okay. And if I refer to this as the TEAC

report, can we agree that's Sierra Club Exhibit 60?

A. Yes.

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- Q. Okay. And have you seen this document before?
 - A. Yes.
- Q. Okay. And is this document where the 38 transmission upgrades were identified?
 - A. This document references those 38 transmission upgrades, yes.
- Q. Okay. And if you look on pages 2 to 3 starting about halfway down the page of page 2, there is a list of power plants; is that right?
 - A. Yes.
 - Q. And those are the plants proposed for retirement that were being evaluated in this TEAC report; is that right?
- A. Yes.
- Q. Okay. All right. And there are more plants on there than just the Lake plants, correct?
 - A. That is correct.
- 21 Q. Okay. And on pages 4 to 5 of the TEAC

 22 report, there's a discussion about -- or list

 23 starting about halfway down page 4 that says "Western

 24 Region System Upgrades," and that goes over into page

 25 5; is that right?

A. Yes.

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Q. Okay. And that Western Region would include the ATSI zone; is that right?

A. Yes.

- Q. Okay. And on page 6 towards the top of the page, there is then a discussion of Western Region system upgrades; is that right?
- A. Yes. That section describes the generators and the impacts that they have, mainly focusing on ones around Lake Erie.
- Q. Okay. There is a map on page 6 that identifies pending retirements; is that right?
 - A. Yes.
- Q. Okay. And the Lake plants are -- are identified on this map; is that right?
 - A. Yes.
- Q. Okay. And that's -- those are Ashtabula,

 Eastlake, Lake Shore, Bay Shore, and Niles; is that

 right?
 - A. Yes.
 - Q. And then this map also identifies other power plant retirements in Ohio, West Virginia, Pennsylvania, and other states; is that right?
 - A. Yes.
- Q. Okay. So this analysis of the Western

Region system upgrades doesn't look only at retirements of the Lake plants, correct?

- A. No. PJM had a large number of generators that were requesting -- not requesting, but put in retirement dates near the same time, so as those came in, PJM had to study them all -- study them all together as a portfolio.
- Q. Okay. And if you could look at page 5 of your workpaper, your public workpapers, if you look at the second-to-last upgrade project that's identified, and it's identified as b1983, do you see that?
 - A. Yes.

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- Q. Okay. And the project is 150 MVAR SVC & 100 MVAR cap at New Castle 138 kV; is that right?
 - A. Yes.
- Q. Okay. And if you go to the TEAC report, starting at the last line on page 7 to the first two lines on page 8, that exact same transmission upgrade project is discussed there; is that right?
- A. Yes. PJM -- the first part of this report they are talking about the impacts of voltage and thermal overloads due to the plants around the Lake, and the last line, what they're discussing here is that for voltage there was one other item that

also contributed to those upgrades, and that was the retirement of New Castle also would have -- those upgrades would have been driven by that also, would have had an impact.

- Q. Okay. And the TEAC report states that a 150 MVAR SVC and 100 MVAR capacitor was recommended at New Castle station to "address voltage problems primarily related to the deactivation the New Castle generation"; is that correct?
 - A. Yes.

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- Q. Okay. And New Castle is not one of the Lake plants; is that correct?
- A. New Castle, as I -- yeah. The project studied together as a portfolio, so the Lake plants had an impact. They were the largest because they had the 24 megawatts. And then as you look at the different overloads that occur, you can raise them up to a value, and then this one what they said is, hey, the Lake plants -- we know that from doing our studies, the Lake plants had an effect, but when New Castle retired it also impacted that that required to upgrade.
- MR. FISK: Your Honor, I would move to strike everything after "yes." I simply asked whether New Castle was one of the Lake plants.

EXAMINER PRICE: Mr. Lang.

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MR. LANG: Your Honor, he was simply explaining in the context of this reference to the TEAC report with regard to New Castle, what the New Castle plant is versus what the Lake plant is.

EXAMINER PRICE: We will strike everything after that, after "yes."

MR. FISK: Thank you, your Honor.

- Q. (By Mr. Fisk) So the TEAC report specifically identifies voltage problems related to the deactivation of the New Castle generation as the primary reason for the 150 MVAR SVC and 100 MVAR capacitor project, correct?
- A. It does say "primarily," but not the total reason, correct.
- Q. And there is no specific text in this -in these sentences that I just referred you to that
 identify any of the Lake plant retirements as a cause
 for needing that upgrade, correct?
- A. Well, to get the total right context of the discussion, I think you have to start back at the beginning where they are starting to describe the upgrades in the Western Region. And what they do is they are talking about the "Deactivation of the generation along Lake Erie will require significant

transmission upgrades to resolve thermal and voltage violations," and then it goes on to talk about what those voltage violations are and what the thermal are, and the last sentence when they are discussing the voltage, that's where they mention that.

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MR. FISK: I would move to strike that answer. I asked him whether the sentences I referred to specifically identified the Lake plants, not an explanation that if his counsel wants to try to do on redirect, he is free to do, but that was not my question.

MR. LANG: Your Honor, if we could have the question read back because I don't believe it is what Mr. Fisk just described.

EXAMINER PRICE: Let's have the question back, please.

(Record read.)

MR. LANG: So, your Honor, Mr. Phillips was describing where the language was in this, which is this report.

EXAMINER PRICE: I have to agree. Motion to strike is denied.

Q. (By Mr. Fisk) Is there any language in this report that specifically ties the 150 MVAR South SVC and 100 MVAR capacitor project to the retirement

of the Lake plants as opposed to the New Castle station?

MR. LANG: And, your Honor, for that I object, asked and answered.

EXAMINER PRICE: You can answer.

- A. You know, once again, I would refer back to what I said. I think you have to start at the beginning to get the right context where it starts talking about it. And it talks about the "Deactivation of the generation along Lake Erie will require significant transmission upgrades to resolve thermal and voltage violations," and what it goes on to do is talk about what thermal upgrades were needed there, and the only place it mentions New Castle was on the one item there where it says, also for this upgrade, then it's also primarily related to the deactivation of New Castle.
- Q. Okay. And if you could look back at your workpaper, page 4, fifth line from the bottom, you say project b1936, do you see that?
 - A. Yes.
- Q. Okay. And that is identified in your workpaper as "Allen Junction-Midway-Lemoyne 345 kV"; is that right?
- A. Yes.

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Q. Okay. That's identified as an \$86.3 million project?

A. Correct.

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- Q. Okay. And if you go to the TEAC report page 8, in the second full paragraph, that Allen Junction to Midway-Lemoyne 345 kV project is also discussed in the TEAC report; is that right?
 - A. Yes.
- Q. Okay. And the TEAC report states in the second sentence -- well, the first two sentences of the second paragraph on page 8 that this project is to address a thermal violation and that such violation is "being driven by the loss of the Allen Junction to Lulu 345 kV tie line to Michigan and the Lemoyne to Five Points 345 kV line"; is that correct?
- A. What that is describing is, as it indicates above, that line needed to be upgraded due to the N-1-1 condition that was studied, and that N-1-1 describes what the two lines were.
- Q. And that paragraph, the second full paragraph on page 8 of the TEAC report does not identify the Lemoyne -- the Allen

 Junction-Midway-Lemoyne 345 kV line as being necessitated by the retirement of the Lake plants, correct?

1 Α. It does not list anything there. You have to go back for the full context back to the 2 3 beginning where PJM says we are going to talk about 4 the thermal and voltage problems due to the Lake 5 plants. MR. FISK: Can I have 2 minutes, your 6 7 Honor? 8 EXAMINER PRICE: You may. 9 MR. FISK: Thank you. 10 (Off the record.) MR. FISK: I have nothing further on the 11 12 public record. 13 EXAMINER PRICE: Thank you. 14 Ms. Fleisher, wait. Let's go back to Mr. Oliker. 15 MR. OLIKER: I may have just two or three 16 questions. 17 EXAMINER PRICE: Okay. Sorry, 18 Ms. Fleisher. You still have to wait. 19 2.0 CROSS-EXAMINATION 2.1 By Mr. Oliker: 22 Good afternoon, Mr. Phillips, by about a 23 minute. My name is Joe Oliker, and I represent IGS 24 Energy. Do you participate in earnings calls for any 25 of the FirstEnergy operating companies?

A. No, I do not.

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- Q. Are you familiar with any representations that FirstEnergy has made to the investment community regarding its intentions to invest in transmission assets? And when I refer to FirstEnergy, I am referring to the holding company.
- A. I am aware of the investments we do for -- across our transmission system. That part I am aware of.
- Q. Would you agree that the FirstEnergy holding company has indicated to its investors that it plans to invest approximately \$1 billion in the transmission assets held by all of its operating companies per year?
 - A. Yes, I believe that's what -- how much.
- Q. And a portion of that investment will be in Ohio?
- A. Yeah. That would be across

 FirstEnergy's -- across the whole territory where we have transmission which would include Ohio.
- 21 MR. OLIKER: Okay. Thank you. That's 22 all the questions I have, your Honor.
- Thank you, Mr. Phillips.
- 24 EXAMINER PRICE: At this time, as
- 25 Mr. Oliker has reminded us, the noon hour has

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      approached, and I think Ms. Fleisher had about an
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      hour; is that right?
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                  MS. FLEISHER: Roughly. Don't hold me to
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      it, but yeah.
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                  EXAMINER PRICE: Why don't we go ahead
      and stop for lunch and we'll reconvene at 1:15.
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                  Let's go off the record.
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                   (Thereupon, at 11:59 a.m., a lunch recess
 9
      was taken until 1:15 p.m.)
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Tuesday Afternoon Session,

September 22, 2015.

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EXAMINER PRICE: Let's go back on the

EXAMINER PRICE: Let's go back on the record. Ms. Fleisher.

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CROSS-EXAMINATION

By Ms. Fleisher:

Q. Mr. Phillips. Thank for being here. My name is Madeline Fleisher. I represent the Environmental Law & Policy Center.

So you are aware that PJM produces a load forecast every year, correct?

- A. Yes.
- Q. And are you aware that includes a range of forecasts involving different scenarios?
- A. I'm not aware of the range. What I have looked at in the report is what they gave as a value through the various different years of what the projected load will be.
- Q. Okay. Can we go to Mr. Cunningham's testimony at 4, page 4, and on line 19 it says that "Generation deliverability studies are conducted using a '50/50' load forecast, which represents a 50% chance of actual load being higher or lower,"

correct?

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- A. Yes.
- Q. So the load assumptions in the generation deliverability analysis could under- or overestimate load, correct?
- A. In the gen to live they use the 50/50 forecast, which it describes there it represents a 50 percent chance of actual load being higher or lower.
- Q. And let me know if this is confidential, but is it correct that the generation deliverability analysis that the companies performed is the analysis that resulted in all of the reliability violations encompassed in your estimate of transmission upgrades?
- A. The violations we saw were all from the 2019 RTEP, which would include the 50/50, and that would have been the gen deliverability and N-1-1 would be ran against that case.
- Q. Okay. And changing the load that goes into the generation deliverability analysis could change the results of that analysis, correct?
- A. Well, PJM has a very standard format that directs how the inputs are in there so load is one input that they put in there. they put in the

existing generation. they put that into the load model, and then they also will make adjustments for generation that's withdrawn or deactivated, and they also put in the model, you know, proposed generation that hasn't -- still in a generation queue process so it's one of several inputs they put into the model.

MS. FLEISHER: Move to strike as nonresponsive. I was asking whether -- it was not an answer to my question, which was whether changing the load that is used as an input could change the results of the analysis.

EXAMINER PRICE: Could I have the answer again, please.

(Record read.)

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EXAMINER PRICE: I am not going to strike your answer, but I would like you to give her a "yes" or "no" answer to her question.

THE WITNESS: It's hard to give a yes or no because if you are changing the input they had in the particular model they did, to say what impact that will have, you have to factor in all the other changes, and that's the reason why they're very strict on keeping all those changes at one time and get them done because if you are just trying to guess on one, there's other changes that impact other

changes that are being made.

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12346789: I understand that, but controlling for all the other variables if you increase the generation, that's going to change the outputs, isn't it?

What was your question again?

MS. FLEISHER: Yeah. I guess I'm just looking for an answer as to whether it could change the results if you changed the load assumption.

THE WITNESS: That would depend on what order of magnitude change compared to other changes that occurred.

- Q. (By Ms. Fleisher) Holding all else equal.
- A. Yeah, I guess that's a big assumption.

 But holding all else equal, if you change the load as an input, depending on how big of a change that was, then when you ran the study, you might have different results, could change something.
- Q. Okay. And do you know what changes would result without actually running the study?
- A. No. PJM is so large you would need a study to understand if it had any impact or not.
- Q. And no one with the companies ran the generation deliverability analysis with different assumptions regarding load, correct?

- A. No, we did not change any of the inputs
 to the model that PJM provided.

 Q. Are you generally familiar with the PJM
 load forecasting process?

 A. Not really. I know when the forecast
 - A. Not really. I know when the forecast report comes out, and that's what feeds the RTEP studies that they do, but beyond that, not too much familiar with it, no.
 - Q. Do you review the load forecast reports each year?
- 11 A. I look -- I look at the report. It just
 12 shows what the forecast numbers are compared to, you
 13 know, what we are seeing in our studies.
- MS. FLEISHER: Your Honor, may I approach?
- 16 EXAMINER PRICE: You may.

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- MS. FLEISHER: And if we can get this marked as ELPC Exhibit 17.
- 19 EXAMINER PRICE: So marked.
- 20 (EXHIBIT MARKED FOR IDENTIFICATION.)
- Q. MR. Phillips, do you recognize this document?
- A. Let me look through it here.
- Q. Sure. Take your time.
- 25 A. Yes, I believe I have seen this document.

MS. FLEISHER: And for the record, on the title page it says "2015 RTEP Process Scope and Input Assumptions, White Paper."

- Q. Mr. Phillips, are you familiar with this as a document prepared by PJM as part of preparing the 2015 RTEP?
 - A. Yes, that's my understanding.
- Q. Okay. Can you turn to page 14. And do you see it says -- there's a little title -- "Model Improvements," and then it says "PJM continues to improve its load forecast model and is in the process of incorporating new trends of the equipment saturation and equipment efficiency into its load forecast model framework. This better aligns the model with recent history (i.e. the changes in equipment efficiency that have already occurred) and also with the expected impact of future incremental improvements." Did I read that correctly?
 - A. Yes.

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- Q. And are you aware of these changes in PJM's load forecast model?
- A. I am not aware other than what was read here.
 - Q. And are you aware generally how the PJM load forecasting process accounts for energy

efficiency?

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- A. No, I am not aware of the whole process they go through for doing that, no.
- Q. Okay. Are you aware generally how the PJM load forecasting model accounts for behind-the-meter generation, such as distributed solar or combined heat and power?
 - A. No.
- Q. Would you agree that energy efficiency programs reduce customer demand?
- A. I'm not sure specifically when you say "energy efficiency programs," I am not sure what you are meaning by that.
- Q. Okay. Are you aware that the companies have energy efficiency programs in their service territory?
- 17 A. No.
- Q. Are you aware of the existence of utility energy efficiency programs?
- A. No, no details. I have heard the term before but no involvement with it, no.
- Q. Okay. Have you ever bought a CFL light bulb, Mr. Phillips?
- 24 A. Yes.
- Q. So would you agree that if a utility

provided a discount on that CFL light bulb, that could produce energy savings?

MR. LANG: Objection, your Honor, far beyond the scope of his testimony. Didn't identify anything in that question related to transmission.

EXAMINER PRICE: She's getting there.

Overruled.

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THE WITNESS: Would you read the question back again?

10 EXAMINER PRICE: Yes, please.

11 (Record read.)

- A. I don't know. I guess it would end up to determine if that caused a customer to buy a different bulb.
- Q. And are you aware that the companies
 until the end of 2014 -- the companies at the end of
 2014 eliminated or suspended a significant number of
 their energy efficiency programs?

MR. LANG: Objection, again, your Honor, relevance.

MS. FLEISHER: Happy to respond.

22 EXAMINER PRICE: Please.

MS. FLEISHER: I think he has clearly
testified load is an input into his analysis. To the
extent energy efficiency programs can affect load, I

1 think it is directly relevant.

2 MR. LANG: It's not relevant to his

3 testimony, your Honor. His testimony is total load.

4 It doesn't have anything to do with energy

5 efficiency. It doesn't have anything to do with the

6 questions she is asking about. He is not here as an

energy efficiency expert.

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8 EXAMINER PRICE: I think we have 9 established that.

MR. LANG: I think we have established
that, which is why with regard to this witness it is
not a relevant question.

EXAMINER PRICE: We are going to give her a little bit of leeway.

MS. FLEISHER: Your Honor --

EXAMINER PRICE: See where this gets.

MS. FLEISHER: -- that about runs out my questions on this front.

EXAMINER PRICE: Very little leeway.

Go ahead and answer the question.

THE WITNESS: Could you repeat that again, please?

Q. (By Ms. Fleisher) Sure. I'll go ahead and rephrase it because I think it is not very well done. So are you aware that as of the end of 2014, a

significant number of energy efficiency programs in the FirstEnergy Service territory were suspended?

- A. I do not know what type of programs FirstEnergy has on that.
 - Q. Okay.

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EXAMINER PRICE: Are you aware of investments the company makes to reduce line losses in transmission and distribution systems?

THE WITNESS: The programs that I can think of is -- is when we had line upgrades we do. We put a larger conductor in. That helps to reduce losses on the system.

EXAMINER PRICE: Okay. So you do have programs to reduce line losses on your transmission and distribution systems.

THE WITNESS: Yes, transmission line, there will be losses on the line, power flowing through it.

EXAMINER PRICE: Are you aware that the companies request the Commission annually to count those energy savings resulting from the reduction of line losses as part of their energy efficiency and peak demand reduction portfolios?

THE WITNESS: No, I am not.

EXAMINER PRICE: You have never been

1 involved in supporting any filing to that extent?

THE WITNESS: I have never been involved,

3 no.

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MS. FLEISHER: Sorry, your Honor.

5 EXAMINER PRICE: You have two assumptions

in your testimony that you've adopted in the

7 testimony you prepared. One is the more conservative

8 option, the reconductoring. Another is a less

9 conservative option in case all the circuits need to

10 be rebuilt. Is that a fair summary?

11 THE WITNESS: Yes. There is two

12 estimates based on reconductored or if you rebuild.

13 EXAMINER PRICE: Okay. If you

14 reconductor, will it reduce line losses?

15 THE WITNESS: Yes. If you are

16 reconductoring, you don't have an overload which

would be putting in larger conductors, yes.

18 EXAMINER PRICE: And if you rebuild, will

19 it reduce line losses?

20 THE WITNESS: Yes. Rebuild you would be

21 doing it based on the larger conductor you are

22 putting in. That's what drives the rebuild, yes.

23 EXAMINER PRICE: Can you quantify the

24 energy savings that would result from reconductoring

25 and reducing line losses?

3359 1 THE WITNESS: No, I did not work on that. 2 EXAMINER PRICE: Can you quantify the 3 energy savings as a result of rebuilding the system and reduction of line losses? 4 5 THE WITNESS: No, I cannot. 6 EXAMINER PRICE: Thank you. 7 Thank you, Ms. Fleisher. 8 MS. FLEISHER: Thank you, your Honor. 9 Ο. (By Ms. Fleisher) Mr. Phillips, are you 10 aware of voltage optimization or also called Volt/VAR 11 improvements that the companies might be planning to 12 make to the distribution technology in their service 13 territory? 14 Α. I work in transmission, and no, I am not involved in the distribution side. 15 16 And do you know whether any voltage 17 optimization improvements would be incorporated in PJM's 2014 load forecast? 18 19 Α. I do not know. 2.0 Q. Mr. Phillips, are you aware of the clean 2.1 power plant? 22 Α. Can you repeat that again? (Record read.) 23 24 I am not sure what you mean by "clean power plant." 25

Q. Are you aware EPA presently finalized a rule to regulate carbon dioxide emissions from existing power plants?

A. No.

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- Q. So I believe that for purposes of your testimony it assumes Sammis and Davis-Besse would retire as of June, 2017; is that correct?
 - A. Yes.
- Q. So let's assume that FirstEnergy
 Solutions announces it's going to retire Sammis and
 Davis-Besse. they make the announcement at the end
 of 2016. PJM would then conduct a reliability
 analysis for those two plants, correct?
 - A. Yes.
 - Q. And do you know what year RTEP would use?
- A. They'd look at a year as close to when the plant is retiring, and then depending what else is going on on the system, they might look out a few extra years.
- Q. And do you know what year load forecasts they would use?
- A. they would use whatever the latest load forecast was that went into the model, so they do -- they change the models usually once a year. For instance, when they did the model for 2015, they

would have used the load forecast that would come out at the beginning of the year for 2015.

- Q. And in Exhibit 17, can you turn to page 4.
 - A. Okay.

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- Q. And looking at Figure 1.3, it's a flow chart. After you take a minute to look at that, can you tell me whether you are familiar with that as the process for submission of transmission project proposals to PJM?
- A. Yes, I believe this is the process they use in their RTEP process for when they do their annual RTEP process. It's in the -- not the same process they would use for, like, when generators retire, that type of thing. This is when they do their annual RTEP process.
- Q. Okay. And could this process result in new transmission upgrades or new transmission projects being identified and incorporated in the RTEP?
- A. Well, this would be the process they were using now in the current process of going through for 2015. That would be looking out for the year 2020. So as they are studying the year 2020, they would be identifying if there is any transmission overloads or

voltage issues that would need to be addressed, and then based on that, they would decide if there needed to be transmission upgrades.

- Q. And I believe when you were -- in response to Mr. Oliker, you testified that you are familiar that FirstEnergy has indicated that it plans to expend significant amounts over the next several years on new transmission projects; is that correct?
- A. I'm familiar with the transmission programs that we have at FirstEnergy, yes.
- Q. Okay. And are you familiar with the name "Energizing the Future" transmission plan?
 - A. Yes.

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- Q. And that is referred to as FirstEnergy's plan to spend sums, including about a billion dollars, in Ohio on transmission improvements?
- A. No, I don't think that's quite right.

 The transmission program that -- or FirstEnergy has of a billion dollars includes a transmission spend across its entire footprint and also includes -- includes the projects that are identified through the PJM RTEP process.
- Q. Okay. And do you know how much the Energize the Future program would involve spending in Ohio?

A. I do not know the breakdown by state for that, no.

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- Q. And do you know whether the appropriate FirstEnergy company has submitted any projects for incorporation in the RTEP for the 2015 RTEP?
- A. The programs identified in the RTEP process would be lines identified as overloaded by PJM, so our planning group would be working with PJM based on what overloads they look at to identify potential solutions, so based on what overloads we are seeing, we would be offering solutions to PJM.
- Q. Okay. And do you know whether FirstEnergy has offered any such solutions to PJM for the 2015 RTEP process?
- A. I'm not sure in the 2015 process how far they are along on that. That's usually going on over the summer months into the early fall so I am not exactly sure what the status is right now.
- Q. Okay. Do you know whether FirstEnergy might do so or in the future?
- A. FirstEnergy will work with PJM in offering solutions for the overloads that occur in their footprint, yes.
- Q. Generally as part of the Energizing the Future effort, is there any transmission improvements

planned in the ATSI zone?

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- A. Yes. The Energizing the Future piece would have work being done in the ATSI zone.
- Q. And do you know whether all of that work is included in the 2014 RTEP?
- A. If we had identified any upgrades with ETF that involved new facilities or new -- you know, doing something to align or something that would change the topology, that would be given to PJM to be included in their models.
- Q. Okay. And are you testifying that all of those were identified as of the 2014 RTEP process?
- A. What I am saying, if there was any projects identified for sure when PJM would have been putting together the 2014 RTEP that was finalized, that was going to be done, then the -- we could have given those to PJM so they would note what type of projects, if we were doing something that was different outside of an RTEP project.
- Q. Are there any projects that are "for sure," as you put it, that could be incorporated in the 2015 RTEP?
- A. I don't know specifics, but it's each year there will be -- just as we study for overloads, we will also study to identify is there any

additional type of upgrades that would be necessary to do for reliability.

- Q. Do you know whether any new transmission upgrades have been proposed for the ATSI zone that were not incorporated in the 2014 RTEP?
- A. I don't know specifically what could be the latest list as compared to what might have changed since the 2014 RTEP. I do not know.
- Q. PJM keeps a list of pending transmission projects, correct?
 - A. Yes.

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- Q. Can you turn to page 13 of Exhibit 17.

 And in that first paragraph where it says,

 "Up-to-date comprehensively determined zonal load forecasts the basis for modeling power flow case bus loads are essential if transmission expansion studies are to yield plans that will continue to ensure reliable and economically efficient system operations." Do you agree with that?
- A. Yes. That's one of the inputs in PJM. Every year when they put the model together, they will use the latest updated forecast.
- Q. Can you turn to page 5 of the same document?
- MR. LANG: What was the page reference

again?

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MS. FLEISHER: I'm sorry, page 5.

- Q. And here it refers to the PJM market efficiency analysis. Are you familiar with that process?
- A. I am aware they have -- that that's one of those type of studies they do.
- Q. And would you agree that's a process to identify transmission projects that might have economic benefit?
 - A. Yes.
- Q. And could transmission projects have economic benefits, for example, by reducing congestion?
- A. Yes. I believe that's the driver for what they are looking at.
- Q. Okay. And did you conduct any analysis as to whether the transmission upgrades you discuss in your testimony could have any economic benefit?
 - A. No.
- Q. And the transmission upgrades you identify would facilitate importing electricity from generators other than Sammis and Davis-Besse -- actually, strike that.

The transmission upgrades you identify

would facilitate the transmission of electricity from generation sources other than Sammis and Davis-Besse; is that correct?

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- A. Yes. The study that we did identified overloads that when you upgraded them, then you would not have any reliability issues after that, so that if Davis-Besse retired that the generation, it could come from other sources.
- Q. And could the electricity from those sources be cheaper than the electricity from Sammis and Davis-Besse?
- A. I do not know. PJM dispatches their generation on a normal day based on, I know, economic merit, but I am not involved with that side, but I have no idea how Sammis and Davis-Besse would compare in terms of prices or where the generation might be coming from.
- Q. And you didn't do any analysis as to whether the retirement of Sammis and Davis-Besse could have any impacts on the locational marginal price of energy in the ATSI zone, correct?
 - A. I did not do any studies like that.
- Q. And you did not analyze the effect of the closure of Sammis and Davis-Besse on retail electricity prices, correct?

What I identified was the cost that would 1 Α. 2 be required for upgrades, and then those upgrades 3 then would be recovered back through the customers 4 that would have an impact on price. 5 MS. FLEISHER: Your Honor, move to strike 6 as nonresponsive. 7 EXAMINER PRICE: Mr. Lang. 8 MR. LANG: Your Honor, I think he was simply responding to what he did. He was asking 9 10 about prices, and so what he did has an impact on 11 prices. 12 EXAMINER PRICE: The motion to strike 13 will be granted. 14 Please answer the question more 15 responsively, please. 16 MR. LANG: Could we have it read back 17 then, please. 18 EXAMINER PRICE: Yes. 19 (Record read.) 2.0 I did not analyze final electricity Α. 2.1 prices, no. 22 Can you turn to your direct testimony at Q. 23 page 5, line 21. 24 EXAMINER PRICE: When you say his direct,

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do you mean --

MS. FLEISHER: The Phillips' direct testimony -- or supplemental testimony, I'm sorry.

THE WITNESS: What was the page number again, please.

- Q. (By Ms. Fleisher) Page 5, line 21. And here you testify, "For plants like Sammis, generation re-dispatch is used extensively to manage the transmission constraints that occur on the system in real-time. When generators are removed from the system, a key tool for operators is no longer available for them to utilize"; is that correct?
 - A. Yes.

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- Q. Can demand response also be a tool to address transmission constraints?
- A. On a normal day-in, day-out basis, generation dispatch is used. The DR response is used when you would have an extreme emergency, which is usually something systemwide, so on a normal day-to-day basis with the -- with the overloads we see, it's generation dispatch.
- MS. FLEISHER: And, actually, your Honor, may I approach?
- 23 EXAMINER PRICE: You may.
- MS. FLEISHER: If you want to take a minute to look it over. Just let know when you are

FirstEnergy Volume XVI 3370 1 done. 2 And, meanwhile, can we mark this as ELPC 3 Exhibit 18? 4 EXAMINER PRICE: It will be so marked. 5 (EXHIBIT MARKED FOR IDENTIFICATION.) EXAMINER PRICE: Care to describe it for 6 the record? 7 8 MS. FLEISHER: Certainly. 9 So, Mr. Phillips, I hope you will confirm this is an Excerpted Section from the Book 5 of the 10 11 2014 PJM RTEP. 12 Α. It says -- I have not -- I have not seen this document before. 13 Do you have any reason to believe it's 14 not an accurate copy of a section of the 2014 RTEP? 15 16 MR. LANG: Objection, your Honor. 17 EXAMINER PRICE: Grounds? 18 MR. LANG: He says he hasn't seen it 19 before. I don't know how he is going to decide 2.0 whether it's an accurate copy if he has never seen it 2.1 before. 22 MS. FLEISHER: I can ask some questions,

23 if you would like, to try to lay a foundation. 24 EXAMINER PRICE: You can try.

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Q. Mr. Phillips, have you ever reviewed the

state RTEP summaries within PJM RTEP.

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- A. Can you say that again? I'm sorry, I didn't catch that.
 - Q. Certainly. I guess, are you aware that the PJM RTEP includes state-by-state summary sections?
 - A. they produce a variety of reports, and I guess that's one in this one. I am not sure that I have seen this exact report before, so at least not in the details of this report.
- 11 Q. Okay. Have you ever seen any section of an RTEP, even if not this particular one?
 - A. I have seen documents that summarize, you know, talking about the RTEP process.
 - Q. I was going to ask if you have seen one relating to particular states.
 - A. I don't recall one that I have reviewed that was particular by state, no.
 - Q. Okay. So for the 2014 RTEP, did you refer to -- or did you ever review a section regarding Ohio?
- MR. LANG: Objection, your Honor. Just
 for point of clarification, you keep referring to the
 24 2014 RTEP. Can we have a clarification as to what
 that's in reference to? Because we -- what he used

was a 2019 RTEP base case model, and I don't know if you are asking about the same thing.

MS. FLEISHER: Okay. Certainly.

- Q. (By Ms. Fleisher) Mr. Phillips, are you aware that this is a document that's the PJM 2014 Regional Transmission Expansion Plan?
- A. I have not seen this particular document, no. I know they do reports on the RTEP every year, but this report I have not seen.
- Q. Okay. You can put the document aside. I am just asking whether you are familiar that in 2014 PJM came out with a Regional Transmission Expansion Plan document.
- A. I know they did in 2014 an RTEP expansion plan, and usually they have some type of documentation they put out on it, yes.
- Q. Okay. Have you ever reviewed any of that documentation for the 2014 RTEP?
 - A. I have seen reports on the 2014 RTEP, just not this one.
- Q. Okay. Do you know if -- strike that.

 Can you turn to page -- sorry, one second -- page

 Have you seen this map before?
- 24 A. No.

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Q. All right. We'll just put that aside.

Are you aware that PJM runs light load analyses as part of the RTEP process?

- A. Yes. That's one of the studies they will run.
- Q. Okay. And does that look at reliability issues that might arise from lighter-than-normal load?
 - A. Yes.

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- Q. And can light loads pose different reliability problems than above-average loads or peak loads?
- A. You can have issues with light loads.

 It's not usually an issue with overloads. It's an issue when light loads, whether you have higher voltages, which is not at the same consequence of the overloads or low voltages you have, so the consequences from that are not near as great as that you get from the other studies they run.
- Q. And the companies didn't run a light load analysis regarding the closure of Sammis and Davis-Besse, correct?
 - A. No.
- Q. And when you have reliability problems
 caused by light loads, can those be resolved by
 ramping down generation?

A. No. Usually the problem when you see that, the voltage is high. It's because you have got the generation ramped down as much as you can, and then you have to do something else.

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- Q. And do you know whether coal plants have to run at certain minimum levels?
- A. I do not know the specifics of any coal plants on what their mins or maxes are as far as that.
- Q. Generally are you familiar that coal plants have minimum running levels?
- A. I am not sure what you mean by "minimum level."
 - Q. I guess they have to be burning coal at a certain rate at all times.
 - A. Are you meaning at a minimum level as far as based on how they are constructed or versus how PJM requires something?
 - Q. As to how they are constructed.
 - A. No. I don't do anything with the generation section so I am not familiar with how that piece works.
 - Q. Okay. You said that you might have plants ramp down as far as you can go. Are you familiar that there can be constraints on how far

plants get ramped down?

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- A. I don't know the specifics, but I am sure there's -- there could be limits on how far a generator can ramp down.
- Q. And you discussed with Mr. Fisk PJM's interconnection queue statistics, and you mentioned that those go back to 1997; is that correct?
 - A. Yes.
- Q. And do you know what comparable statistics would be considering only projects in the vicinity of retiring generation?
- A. I don't quite understand what -- what you're asking there.
- Q. Okay. Do the statistics that you refer to include all proposed generation within PJM for the time period in question, with a caveat that you discussed with Mr. Fisk of excluding plants that have not yet gone through the whole process?
- A. Yes. From 1997 to 20 -- end of 2014 when they prepared the data, that would have included any of the generators who had went through the generation interconnection process and either went in service or had been withdrawn, meaning that they dropped out and it was no longer looking to be built.
 - Q. So it could include projects in close

proximity to existing generation, correct?

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- A. If you're asking if some of the generators identified in that report could have been located near other generators, I guess it could. It would include all generators no matter where they were located within PJM. I don't know -- I don't specifically know where all those generators are located.
- Q. Certainly. And you're aware that we had a significant economic recession starting around 2007?
 - A. Yes, I am aware of the recession.
- Q. And would you agree that economic conditions can affect the development of power plants?
- A. I'm not familiar with exactly what might be the business reasons for generators to go in service. It seems like their business reasons would be driven by advice on what the PJM market is.
- MS. FLEISHER: One minute. I will just make sure I'm done.
- Q. Mr. Phillips, are you aware that there are two combined heat and power projects currently pending approval in Ohio, currently pending

 Commission approval in Ohio?

3377 1 THE WITNESS: Could I have that read 2 back. 3 EXAMINER PRICE: You may. 4 (Record read.) 5 Α. I am not sure what you mean by combined heat and power projects. 6 7 Q. Take a step back. Are you aware that 8 industrial facilities may install natural gas 9 generation to supply their own facilities? 10 Α. Yes. And are you aware of any such proposed 11 Ο. 12 projects in Ohio? 13 Α. No. 14 And do you know whether such projects would be accounted for in PJM's load forecast? 15 16 I'm not sure how they would address that. 17 Okay. To the extent generation on-site Q. would reduce the amount of electricity that a 18 19 facility would draw from the grid, do you know 2.0 whether PJM's load forecast would take account of 2.1 proposed projects to do that? 22 Α. I don't know if their forecast process

MS. FLEISHER: May I approach, your

looks at that or not.

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Honor?

3378 1 EXAMINER PRICE: You may. 2 MS. FLEISHER: And we have these -- it's 3 two documents but they go together, so if we can have 4 them marked as ELPC 19 and 20. 5 EXAMINER PRICE: You may. Can you identify ELPC 19 for the record? 6 7 MS. FLEISHER: Actually, Shannon, I 8 didn't save myself a copy. 9 So, for the record, there are two filings 10 from PUCO dockets, ELPC 19 is Case No. 11 14-2304-EL-EEC, and it's titled "Joint Application 12 for Approval of a Special Arrangement Agreement 13 between Ohio Power Company and Kraton Polymers U.S, LLC." 14 15 EXAMINER PRICE: It will be so marked. 16 (EXHIBIT MARKED FOR IDENTIFICATION.) 17 MS. FLEISHER: And the second is Case No. 18 14-226-EL-EEC, so it would be the "Joint Application" 19 for Approval of a Special Arrangement Agreement 2.0 between Ohio Power Company and Solvay Speciality 2.1 Polymers." 22 EXAMINER PRICE: It will also be so 23 marked. 24 (EXHIBIT MARKED FOR IDENTIFICATION.) 25 Q. So just to confirm, Mr. Phillips, you are

not aware of any combined heat and power projects proposed by Kraton Polymers or Solvay Specialty Polymers, correct?

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- A. I have never seen these two documents and I am not aware of them.
- Q. And are you aware of any solar installations proposed in the Cleveland area?
- A. I do not know if there are solar projects in the generation queue currently or not.
- Q. And would a -- how big does a -- okay.

 Strike that. Would a solar project designed simply to supply electricity to a single facility or user be on the interconnection queue?

THE WITNESS: Could I have that read back again, please?

16 EXAMINER PRICE: Please.

(Record read.)

- A. PJM would include in its queue generators who were going to connect to the transmission system and sell power into the grid, so that depends on if that was what the project was going to do.
- Q. Okay. But you would agree if they weren't going to sell power into the grid, the solar project would not be on the interconnect queue?
 - A. I do not believe it would.

- Q. And do you know whether the generation supplied by such a project would be accounted for in the PJM load forecast?
- A. I don't know if their process looks at that or not.
- MS. FLEISHER: And the last one, could we have this marked as ELPC 21?

EXAMINER PRICE: It will be so marked.

9 (EXHIBIT MARKED FOR IDENTIFICATION.)

- MS. FLEISHER: For the record, this is a article from cleveland.com, which is the website of the Cleveland Plain Dealer, and its headline is "Motorcars dealerships steer towards solar energy, sustainable future."
 - A. No, I have not seen this document.
- Q. Okay. Have you had a chance to just look it over briefly?
 - A. No. I will look it over.
- 20 Q. Please do. And are you familiar with a solar installation at the -- at Motorcars Cleveland as described in this article?
- 22 A. No.

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- MS. FLEISHER: That's all for me. Thank you.
- 25 EXAMINER PRICE: Thank you. Let's go off

3381 the record. 1 2 (Discussion off the record.) 3 EXAMINER PRICE: Go back on the record. 4 Please proceed, Ms. Hussey. 5 6 CROSS-EXAMINATION 7 By Ms. Hussey: 8 Good afternoon, Mr. Phillips. Ο. 9 Good afternoon. Α. 10 Ο. I have just a few questions for you. 11 believe you testified earlier that you are aware of 12 the proposed location of the Carroll County Energy 13 generation facility, correct? 14 Yes, I know of the Carroll County where 15 it's connecting to AEP's transmission grid, yes. 16 MS. HUSSEY: Your Honor, I am going to 17 move to strike his answer as nonresponsive after "ves." 18 19 EXAMINER PRICE: Could I have the answer 2.0 back, please. 2.1 (Record read.) EXAMINER PRICE: Motion -- we will grant 22 the motion to strike. 23 24 Would you agree that the Carroll County Energy generation facility is located approximately 25

1 23 miles from the location of the Sammis plant?

2 MR. LANG: Objection. Asked and

4 EXAMINER PRICE: I don't think we had had

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answered.

the 23 miles before, have we?

MR. LANG: I believe Ms. Petrucci gave mileage between Carroll County and Sammis.

MS. HUSSEY: If you would forgive me, I wasn't present for Ms. Petrucci, but I don't believe that number has been introduced.

EXAMINER PRICE: Looking for a little bit of leeway. You can answer the question if you know.

- A. I do not know the mileage difference between them.
- Q. And you are aware of the proposed

 location for the Oregon Clean Energy Center; is that

 correct?

MR. LANG: Objection, asked and answered.

EXAMINER PRICE: Sustained.

- Q. Would you agree that the Oregon Clean Energy Center is approximately 18 miles from the Davis-Besse facility?
- A. I know it's located west of Davis-Besse.

 I do not know the miles.
- Q. Thank you. And you testified earlier

that you are aware of the proposed location for the Lordstown energy center; is that correct?

A. I know the general location.

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- Q. Okay. Would you agree that it's roughly 46 miles from the Sammis plant?
- A. I know where it connects to the transmission system. I don't know if that's the right mileage or not.
- Q. Okay. Could you turn to page 6, line, 9 of your supplemental testimony. Would you please define "electrical proximity" as you've used it in that line.
- A. Yes. We are talking about electrical proximity referring to electrically is a generation resource located to where the various load centers are and that can be -- it's measured by electrically you look at how many lines come out of it because one line could be connected to somewhere and you could have another generator that has multiple lines, and because you have multiple lines, it is electrically closer the way the transmission system works.
- MS. HUSSEY: Okay. Thank you. No further questions.
- EXAMINER PRICE: Mr. Lindgren, any questions?

3384 1 MR. LINDGREN: No questions, your Honor. 2 EXAMINER PRICE: You testified earlier, 3 if I recall correctly, that you were not involved in 4 this application until about April 1, 2014; is that 5 right? THE WITNESS: Yes. 6 7 EXAMINER PRICE: Did you study whether 8 there would be transmission upgrades and what the costs would be if any other FES plant closed? 9 10 THE WITNESS: No. EXAMINER PRICE: So it's fair to say you 11 12 would have no basis for determining whether 13 transmission cost upgrades might be more expensive in the event of the closure of Bruce Mansfield? 14 THE WITNESS: Correct, I have not studied 15 16 that. 17 EXAMINER PRICE: And it's fair to say you 18 would not be able to testify that the transmission 19 upgrades might not be more expensive if Perry nuclear 2.0 power plant were to close; is that correct? 2.1 THE WITNESS: That's correct. 22 EXAMINER PRICE: Thank you. At this time 23 we will go to our confidential portion of our 24 transcript, I think. Do we still have confidential 25 cross?

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                  MR. FISK: I have a bit.
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                  MR. BURK: There are new faces today,
 3
      your Honor.
                  EXAMINER PRICE: I know that.
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                  MR. FISK: Your Honor, could we take a
      three-minute break?
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                  EXAMINER PRICE: Let's take a break
     until 2:30. We will go off the record.
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                  (Recess taken.)
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                  EXAMINER PRICE: Let's go back on the
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      record.
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                  Once again, we are now on the
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      confidential portion of our transcript.
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                  (CONFIDENTIAL PORTION EXCERPTED.)
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                    (OPEN RECORD.)
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                   EXAMINER PRICE: Redirect?
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MR. LANG: Thank you, your Honor. We have one or two questions, your Honor.

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REDIRECT EXAMINATION

By Mr. Lang:

Q. Mr. Phillips, you were asked several questions starting yesterday into today about other potential generating facilities that could be included in the base case model. Does the discussion and understanding you have of those other facilities, generating facilities, does that change your opinion with regard to the study that you had performed using the 2019 RTEP base case?

A. No. The model that we used for the PJM looked at the whole PJM system, so it's a good view of the year 2019. It has the transmission facilities that will be in there. It has all the existing generation that's in there. And then it also does include proposed generation that's far enough in the generation process, and PJM includes that even though, as we talked about when they put them in there, between 15 and 17 percent drop out.

So they gave us a model, what it looks like in 2019. That is a good view of 2019. If you start to try to add individual changes, then you have

to look at the big picture because if you start to try to add some additional generation, you need to go back and adjust the model to reflect other generation that's already withdrawn, other generation that's retired.

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PJM is a big system. It's dynamic. But the two consistent things that are there are the existing generation and the transmission system that they outline. So that's what makes the model good for looking at it 2019, especially when you are talking about the magnitude of the megawatts that are being removed, you know, 3,200 or 3,300 megawatts with Sammis and Davis-Besse. Those are — those are — those are huge. There is no proposed generation that's going back in their same places. The model gives a good representation and order of what the magnitude is if PJM would do the similar study.

- Q. And you were also asked, I believe this afternoon by Ms. Fleisher, about other studies that you did not perform, light load study, the market analysis study. Is there any reason why you did not perform those studies?
- A. What we did is when we did this process is two key things to make sure you get it correct.

One, you get the models from PJM, and, two, is they have a -- what they call their manual 14B that lays out the process you follow when you run their -- the different studies and things you did.

So, A, we used their model and we followed those procedures to make sure we kept standard with that. So when you look at those procedures, when you do a generation deactivation, you study gen-to-live, you study N-1-1, and you study load deliverability. Market efficiency is a different type of thing so that's not something you would study for a gen deactivation.

MR. LANG: Thank you, Mr. Phillips.

That's all the redirect.

15 EXAMINER PRICE: Thank you.

Mr. Moore, recross?

MR. MOORE: No, no, thank you, your

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MR. FISK: Mr. Borchers?

MR. BORCHERS: No, your Honor.

21 EXAMINER PRICE: OEG?

MS. COHN: No, thank you.

23 EXAMINER PRICE: Mr. Oliker?

MR. OLIKER: No, thank you, your Honor.

25 EXAMINER PRICE: Mr. Fisk?

MR. FISK: Just a couple.

EXAMINER PRICE: I remind you, we are on the public section though.

MR. FISK: Yes, yes, thank you, your Honor.

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By Mr. Fisk:

Q. Your counsel just asked you as to whether any of the proposed new units, whether including that would have changed your results in any way, correct?

RECROSS-EXAMINATION

- A. He asked me if I thought that would substantially change, if I thought our viewpoint of what we ran was indicated or what I would expect of PJM and then retired, and I believe it does give that.
- Q. Okay. And you stated that you -- you couldn't simply add new units to the modeling because you would also have to figure out whether other retirements that needed to be included or other proposed units had been withdrawn from the queue; is that right?
 - A. That's correct.
- Q. Okay. And you have not identified any unit retirements that are now -- strike that.

You have not identified any proposed unit retirements that weren't included in your modeling, correct?

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- A. If I was going to do a study and try to change inputs, like -- which I wouldn't because you are going outside the PJM process, but when you do that, you would go to the latest PJM list, which they would provide a list that shows these are the deactivations, retirement dates we have across the whole PJM footprint, and they would also provide an update of what generators withdrew because a large percentage of them do so. You always have that change from year to year, and you look at that. I was working on the 2014. I have not looked at that, you know, to do a different year's study.
- Q. Okay. So the answer to my question is yes, you have not identified any proposed unit retirements that were not included in the modeling you did, correct?
- A. No. What I said was I haven't reviewed the PJM queues to see if there is anything different, so it's not a matter of me identifying. I never looked to see if there has been changes.
- Q. Okay. Can you identify any generating unit that has proposed to retire whose retirement is

not already reflected in the modeling that you have done?

- A. I would have to go to the PJM list and look at those. I don't -- I don't know those off the top of my head. PJM is a huge footprint.
- Q. Okay. And you have not identified any proposed units that were included in your modeling that have since been withdrawn, correct?
- A. Once again, I have not looked in the PJM queue to see.
- MR. FISK: Okay. Nothing further.
- EXAMINER PRICE: So just so the record is

 clear with respect to which plants were in your

 modeling, you relied solely upon what PJM gave you.
- THE WITNESS: Yes. I relied on what they gave us in their model, yes.
- 17 EXAMINER PRICE: Okay. Thank you.
- 18 Ms. Fleisher?

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- MS. FLEISHER: No questions.
- 20 EXAMINER PRICE: Ms. Hussey?
- MS. HUSSEY: No questions.
- 22 EXAMINER PRICE: Mr. Hays?
- MR. HAYS: No questions, your Honor.
- 24 EXAMINER PRICE: Ms. Addison?
- EXAMINER ADDISON: No.

3408 EXAMINER PRICE: Ms. Chiles? 1 2 EXAMINER CHILES: No. 3 EXAMINER PRICE: Thank you. You are 4 excused. 5 Mr. Lang? MR. LANG: Your Honor, the companies 6 7 would move Companies' Exhibits 37, 38C Confidential, 8 39, 40, and 41C Confidential. 9 EXAMINER PRICE: Any opposition to the 10 admission of Companies Exhibits 37, 38C confidential 39, 40, and 41C Confidential? 11 12 Seeing none, they will be admitted. 13 (EXHIBITS ADMITTED INTO EVIDENCE.) 14 EXAMINER PRICE: Mr. Moore. MR. MOORE: OCC would like to admit 15 16 Exhibit 14. 17 EXAMINER PRICE: Any opposition? 18 MR. LANG: None, your Honor. EXAMINER PRICE: It will be admitted. 19 2.0 (EXHIBIT ADMITTED INTO EVIDENCE.) 2.1 EXAMINER PRICE: Mr. Fisk. 22 MR. FISK: Thank you, your Honor. Sierra Club would move for the admission of Exhibits 57, 58, 23 24 59, 60, 61C, 62C, and 63C. 25 EXAMINER PRICE: Opposed?

1 MR. LANG: Your Honor, the companies 2 would object to Sierra Club Exhibit No. 59, which was 3 represented by Sierra Club to be a Carroll County 4 Interconnection Services Agreement, although the 5 witness is not familiar with it and it was not 6 discussed. Only that Sierra Club exhibit. 7 EXAMINER PRICE: Okay. At this time we 8 will go ahead and admit 57, 58, 60, 61 Confidential 9 62 Confidential and 63 Confidential. 10 (EXHIBITS ADMITTED INTO EVIDENCE.) 11 Mr. Fisk, do you care to respond as to 12 59. 13 MR. FISK: Certainly, thank you, your 14 Honor. Exhibit 59 was the Interconnection Agreement 15 for the Carroll County plant. Mr. Phillips did 16 testify that he knew that such an agreement had been 17 The document was from the PJM -- PJM entered. 18 website, which Mr. Phillips acknowledged PJM publicly 19 posts any such interconnection agreements. 2.0 I believe, therefore, it should be 2.1 admitted, and in the alternative, I would argue that 22 it should be -- that the Commission could take administrative notice that the interconnection 23 24 agreement is on the PJM website.

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EXAMINER PRICE: Mr. Lang, do you have

any objection to taking administrative notice of the exhibits?

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MR. LANG: Yeah. You know, it's a -it's a private agreement between those parties, so I
don't think it's something you can take
administrative notice of. It is what it is. That's
the same issue here that Mr. Phillips couldn't
identify that is what it is. I think for purposes of
the record, Mr. Phillips has identified that there
is -- is an agreement which I think --

EXAMINER PRICE: Why shouldn't we take administrative notice of the fact that that's it? If he's going to verify it's on the website, we all acknowledge it exists. Why shouldn't the Bench go ahead and take administrative notice that is the actual -- he barely asked him any questions about it. Why shouldn't we take administrative notice of that is it?

MR. LANG: And, again, taking administrative notice of a long document that we don't know what the terms are and doesn't have any relevance to this proceeding, there isn't a basis for your Honors to take administrative notice. There was hardly any -- there was hardly any discussion of the document, so to the extent that Sierra Club wanted to

establish there is an agreement, they have done that in the record. There is no basis for putting this document in the record.

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EXAMINER PRICE: Quit while you're ahead. We are going to go ahead and take administrative notice of the document. It is on the website and easily verifiable.

MR. FISK: Thank you, your Honor.

EXAMINER PRICE: Ms. Fleisher.

MS. FLEISHER: Your Honor I would move for admission of ELPC Exhibit 17, and request that your Honors take administrative notice of ELPC 19, 20, and 21.

14 EXAMINER PRICE: Any objection to ELPC 17?

16 MR. LANG: Your Honor, no objection to 17 17.

18 (EXHIBIT ADMITTED INTO EVIDENCE.)

> EXAMINER PRICE: Any objection to or taking administrative notice of 19 and 20?

MR. LANG: We would object to taking administrative notice of 19 and 20 because there's been absolutely no basis established for why the Commission should take administrative notice of ELPC 19 and 20. There is no connection to this witness

and no connection to this case.

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Ohio.

EXAMINER PRICE: Ms. Fleisher?

MS. FLEISHER: Certainly, your Honor. I mean, I think we did manage to agree that combined heat and power projects are generation projects.

These two are applications for generation projects in

To the extent that Mr. Phillips' analysis, it matters what generation projects in Ohio he accounted for or whether he knows he accounted for them. I think it's reasonable for those applications to be within the Commission's purview.

EXAMINER PRICE: I think the difficulty is the Commission hasn't approved the applications as of today. If we had approved them, you could use the Commission order approving them to your heart's content in your brief, but until we approve them --

MS. FLEISHER: Your Honor --

EXAMINER PRICE: -- their status is uncertain.

MS. FLEISHER: I didn't want to go
through this with Mr. Phillips, given that he is
unfamiliar with the documents. I believe the
documents show the projects are being built. The
applications are for how those are treated for

purposes of the energy efficiency programs ran by AEP, so it's the -- it's evidence of the existence of the projects, but not necessarily as determinative as to whether they are being built.

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MR. LANG: Your Honor, as you said, they have not been approved. There's no evidence that they actually do exist. The applications are, I believe, with regard to prospective work being done, so it would have no impact on what's been presented in this case.

EXAMINER PRICE: Yes. The problem is any statements they make in the applications, "yeah, they're built" is just hearsay. And they can't cross-examine whether they were or were not. If they are approved, I would feel better -- I think we are going to deny your motion to take administrative notice on those ELPC 19 and 20.

Mr. Lang, any objection to administrative notice of ELPC 21?

MR. LANG: Yes, your Honor.

EXAMINER PRICE: Grounds?

MR. LANG: That Plain Dealer article is not something that the Commission could take administrative notice of, have never taken administrative notice of, and I certainly hope that

the Commission never in the future takes
administrative notice of newspaper articles. So
it's, you know, hearsay and it's irrelevant. There
is no use of it in this hearing, so there's no basis
for taking administrative notice, and I would
certainly suggest that you should not.

EXAMINER PRICE: Ms. Fleisher, why is

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EXAMINER PRICE: Ms. Fleisher, why is this any different from the previous instance where we denied the admission of newspaper articles based on double hearsay?

MS. FLEISHER: Your Honor, it's -- I will go ahead and cite Rule of Evidence 902, newspaper articles are self-authenticating. It's not reporting what anyone said. It's reporting on a thing that has happened. So I think, you know, I am not relying on it like "Here is a statement that someone uttered." So I would argue that it's a different application of Rule 902 and reasonable for the Commission to take administrative notice.

EXAMINER PRICE: Good try. Motion is denied.

MS. FLEISHER: I appreciate the credit for trying.

EXAMINER PRICE: Is that everything?

We are adjourned until Thursday,

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      September 24. We will commence at 9 o'clock. Let's
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      go off the record.
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                   (Discussion off the record.)
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                   (Thereupon, at 3:12 p.m., the hearing was
      adjourned.)
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1	CERTIFICATE
2	I do hereby certify that the foregoing is
3	a true and correct transcript of the proceedings
4	taken by me in this matter on Tuesday, September 22,
5	2015, and carefully compared with my original
6	stenographic notes.
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10	Karen Sue Gibson, Registered
11	Merit Reporter.
12	(KSG-6094)
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Case No(s). 14-1297-EL-SSO

Summary: Transcript In the Matter of the application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company hearing held on 09/22/15 - Volume XVI electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.