BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

- - -

In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates.	Case No. 17-32-EL-AIR
In the Matter of the Application of Duke Energy Ohio, Inc., for Tariff Approval.	Case No. 17-33-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.	Case No. 17-34-EL-AAM
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Modify Rider PSR.	Case No. 17-872-EL-RDR
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Amend Rider PSR.	Case No. 17-873-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval to Change Accounting Methods.	Case No. 17-874-EL-AAM
In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan, Accounting Modifications, and Tariffs for Generation Services.	Case No. 17-1263-EL-SSO

In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Amend its Certified Supplier Tariff, P.U.C.O. No. 20.	Case No. 17-1264-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc., for Authority to Defer Vegetation Management Costs.	Case No. 17-1265-EL-AAM
In the Matter of the Application of Duke Energy Ohio, Inc., to Establish Minimum Reliability Performance Standards Pursuant to Chapter 4901:1-10, Ohio Administrative Code.	Case No. 16-1602-EL-ESS

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PROCEEDINGS

before Mr. Nick Walstra and Ms. Stacie Cathcart, Attorney Examiners, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-A, Columbus, Ohio, called at 9:00 a.m. on Tuesday, July 10, 2018.

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VOLUME II

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Tuesday Morning Session,
July 10, 2018.

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EXAMINER WALSTRA: We'll go back on the record.

We are here for Day 2 of In Re: Duke Energy. I believe Mr. Rose is still on cross-examination and we're at OCC right now. Whenever you are ready.

Before we do that, Mr. Alexander, if the representative from FES would like to just give his name for the record.

MR. FAIRWEATHER: John Fairweather, Brouse McDowell.

EXAMINER WALSTRA: Thank you.

Whenever you are ready, Mr. Healey.

MR. HEALEY: Thank you, your Honor.

- - -

JUDAH L. ROSE

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

CROSS-EXAMINATION

By Mr. Healey:

Q. Good morning, Mr. Rose. Welcome back.

A. Good morning.

Q. You conclude in your testimony that the OVEC plants should continue to operate, correct?

A. Yes.

Q. You're not testifying that you believe that the OVEC plants will shut down if the PUCO rejects Duke's proposal to charge customers under Rider PSR, correct?

A. I simply analyzed economics in the plant and concluded that continued operations were economic and subsequent developments reinforce that, so I didn't -- I assume the plants will continue to operate.

Q. Okay. And if the PUCO rejects Duke's proposal to charge customers under Rider PSR, are you testifying that the plants will not continue to operate?

A. No.

Q. Are you suggesting that the PUCO has the authority to order the OVEC plants to stop operating?

A. I'm not -- I'm not a lawyer, but I don't believe that it does. At best it would be considered advisory, but I don't believe that it has that power.

Q. Your testimony is focused on issues related to the OVEC plants, not the stipulation in general?

A. Yes. I'm focused in on the Clifty and Kyger Creek.

Q. And you're not testifying whether the settlement, as a package, entirely benefits customers, correct?

A. My testimony is limited to the OVEC issue and associated issues, not the entire stipulation.

Q. You're familiar with the Inter-Company Power Agreement, correct?

A. Yes.

Q. And in your testimony you note that Duke is a sponsoring company under that agreement with a participation ratio of 9 percent; is that right?

A. Yes. It's an owner, as I understand it, and also a sponsoring company receiving entitlement of 9 percent.

Q. And the ICPA treats all of the sponsoring companies identically with the exception of their differing percentages and their entitlement; is that right?

A. Yes. That is all of the companies that are receiving an entitlement also receive pari passu obligations.

Q. Do you have a copy of your supplemental testimony in front of you?

A. I do.

Q. And just for the record, I don't plan to ask you any questions about your direct testimony so if I say "your testimony," I will be referring to your supplemental testimony.

A. Okay.

Q. Let's turn to page 20 of your testimony, please.

A. I'm there.

Q. And I direct your attention to Exhibit 2 which, as we discussed yesterday, was previously redacted but is now public with the exception of the footnotes and I would like to talk about the base case in Exhibit 2. Do you see that row in the table?

A. I can imagine it's redacted. One second. Okay.

Q. Do you have the version that's not redacted?

A. Yes.

Q. Now, under your base case with sunk costs included, you conclude that from January 1, 2018, through May 31, 2025, under the base case that Duke will lose $77 million under the ICPA, correct?

A. I estimate the expected net of costs and revenues to be a minus 77 million in that scenario

1 for that period of time.
2 Q. And that $77 million is based on Duke's
3 9 percent share under the ICPA, correct?
4 A. Yes, and the outcome of various different
5 uncertainties. It's an expected value. It's not a
6 necessary outcome, but it's my estimate, my expected
7 value estimate.
8 Q. Sure. And you would agree that all
9 projections of the future are not definite, correct?
10 A. For sure. There's no point in discussing
11 hedges if there is no uncertainty. So this is an
12 expected value forecast.
13 Q. And there's no such thing as a definite
14 value forecast, correct?
15 A. Not that I'm aware of. I mean,
16 there's -- there's no current prophetic activity.
17 Q. We just discussed that the $77 million
18 number is Duke's share based on its 9 percent
19 interest. If another sponsoring company had, for
20 example, an 18 percent interest, which is double
21 Duke's, then its net margins under that same analysis
22 would be double, 154 million, correct?
23 MR. D'ASCENZO: Objection. Assuming
24 facts not in evidence.
25 MR. HEALEY: It's a hypothetical, your

Honor.

EXAMINER WALSTRA: Overruled.

A. So in this analysis, if there was a change in the participation ratio, there would be a pro rata change in the expected value estimate.

Q. And with regard to the second row on that table, AEO 2018 reference case, the same would be true, correct?

A. Yes, if the only difference was the entitlement share or the sponsorship percentage, it would be a pro rata adjustment.

Q. You agree that if one sponsoring company under the ICPA has negative net margins over a given time period, then all sponsoring companies would have negative net margins over that same period; is that right?

A. If one's looking only at the revenues from selling in the PJM market and only looking at the costs of the plant, that was the only consideration, I would agree with that.

Q. And coming back to the base case, this $77 million number, that's a present value number, correct?

A. Yes.

Q. Which means that's not the actual nominal

1 charge that customers would pay under Rider PSR were
2 your projections to be dead on, correct?
3 A. Correct. And every year there's a number
4 and then I'm discounting that number using the
5 discount rate to get a present value.
6 Q. And now this $77 million number is an
7 aggregate number for the entire 2018 to 2025 period;
8 is that right?
9 MR. D'ASCENZO: Objection. Asked and
10 answered.
11 EXAMINER WALSTRA: Overruled.
12 A. It's close. It's not quite that. It's
13 through May 31, 2025.
14 Q. And in this table you are not providing
15 the year-by-year present value projected net margins,
16 correct?
17 A. Correct. That's something we should
18 discuss in the confidential section.
19 Q. Okay. So it's your -- your understanding
20 is that the year-by-year projections are
21 confidential, but the aggregate number is not
22 confidential?
23 A. Yes.
24 Q. And would you agree then that the $77
25 million present value number is not confidential,

that if we were to have the nominal aggregate number from January 1, 2018, through May 31, 2025, that would not be confidential either?

A. As I understand the agreement was Exhibits 1 and 2, except the footnotes, are public, and so I can't agree with what you just said.

Q. So you believe that if we had the aggregate number -- the aggregate nominal number of net margins from January 1, 2018, through May 31, 2025, that number would have to remain confidential?

A. Yes, that's my understanding of the agreement, and I would be glad to discuss them in confidential section.

MR. HEALEY: Your Honor, I would ask at this point if we could get some clarification from Duke's Counsel. Our understanding was that aggregate numbers, we referenced specifically Exhibit 1 and Exhibit 2, the aggregate net margin numbers for the entire period of the ESP would be in the public record. We have this $77 million present value number. I can't think of any reason that the corresponding nominal number should be redacted, so perhaps Mr. D'Ascenzo could weigh in on that.

EXAMINER WALSTRA: Let's go off the record for a second.

(Discussion off the record.)

EXAMINER WALSTRA: We'll go back on the record.

Q. (By Mr. Healey) Mr. Rose, can you please turn to page 75 of your supplemental testimony.

A. Yes.

Q. And I direct your attention to Exhibit 39. There's a column, second from the right, titled -- well, there's -- the right-most two columns are under the heading "Net Margins" and then the column second from the right is "With Total Demand Charges." Do you see that column?

A. I do.

Q. And that column shows net margins when you include sunk costs, correct?

A. Yes.

Q. And understanding that for the time being the individual numbers in that column are deemed confidential, can you please confirm that the sum of those numbers from January 1, 2018, through May 31, 2025, is $94 million?

A. The number is not in my testimony. It's derived from my testimony. I'm good at doing it in my head, but I -- it seems like it's in the relevant range. If I had a calculator, I guess I could do it.

I just want to make sure it's done right.

Q. Do you have a pen in front of you? I assume, given your many years of experience in financial information, you can do two-digit addition, correct?

MR. D'ASCENZO: Objection, your Honor. Argumentative.

EXAMINER WALSTRA: Can we agree, subject to check, that's 94 million?

MR. HEALEY: Sure.

A. What's the number again?

Q. 94 million.

A. Yes, that's correct.

Q. Thank you.

And you would agree, without revealing any of the individual numbers that your -- the expected value of the net margins under the "With Total Demand Charges" for each year under the ESP term, which is January 1, 2018, through May 31, 2025, would be a negative number, correct?

A. Yes. The expected value is negative in all years and this is something really we should discuss in the confidential section -- session, in my opinion, so that we could elaborate on the -- on this more.

Q. Let's turn to page 7 of your supplemental testimony, please.

A. Okay.

Q. On this page you reference potential power plant retirements, correct? Around lines -- starting at line 5?

A. Yes.

Q. And at line 9 you conclude that "Greater retirements increased wholesale power prices, thus in part mitigating the impact of lower gas prices on OVEC's economics," correct?

A. Yes.

Q. And so based on these projected retirements, you conclude that OVEC's revenues and margins are higher than they would be without the retirements, correct?

A. Yes. Everything else being equal, they would be higher. These are firm retirements that are input into the model based on information available at the time.

Q. And so if these retirements, in fact, do not occur, then you would agree that, all else equal, OVEC's revenues and margins would go down, correct?

A. Yes. That's true. I think the likelihood of that is limited by the fact that what I

1 am discussing here is firm retirements and those are
2 plants that have announced retirements. But to the
3 extent that a firm retirement is -- doesn't occur,
4 directionally it will -- if there is less
5 retirements, the prices would be a little bit lower.
6 I don't have the exact amount though.
7 Q. You believe that Duke's proposal for
8 Rider PSR provides some hedge value, correct?
9 A. Yes.
10 Q. OVEC itself does not derive any hedge
11 revenues though; is that right?
12 A. That's -- that's correct. I mean, its --
13 its revenues and costs are hedged by the fact that
14 relative to some other power plants that some of
15 their -- some of their input parameters are
16 relatively -- have relatively low volatility, but in
17 terms of the hedge value to the customers, that's at
18 best an indirect effect.
19 Q. And to the extent there is hedge value
20 for customers, that value would accrue to customers
21 beyond just Duke's customers, correct?
22 A. Yes, because there's multiple owners and
23 I believe similar arrangements have already been
24 approved as hedge contracts by the Commission.
25 Q. And you have not quantified the hedge

1 value to Duke Energy Ohio customers, correct?
2 A. It's positive, but I don't have a
3 specific number because I don't believe it's feasible
4 to get a specific number.
5 Q. Have you attempted to quantify hedge
6 value in other cases?
7 A. No, for the same reason. Usually it's a
8 decision made by their agents which is usually a
9 Commission. It's not feasible to determine that
10 number with any certainty.
11 Q. And you haven't quantified the impact on
12 wholesale market rates as a result of the OVEC plants
13 participating in the wholesale PJM markets, correct?
14 A. No. I don't have a specific estimate.
15 It does lower the prices, everything else being
16 equal, but I don't have an estimate of the effect,
17 and it's only one power -- only two power plants out
18 of many, so the effect would be limited but it's --
19 it's there.
20 Q. Can you turn to page 5 of your
21 supplemental testimony, please.
22 A. I'm there.
23 Q. And I direct you to line 15, the first
24 full sentence there that says, "I do not opine on
25 what if any trade-offs should be made between cost

1 and volatility to the extent the results indicate
2 there is a trade-off, though I do believe expected
3 costs and cost volatility are both appropriate
4 considerations." Do you see that sentence?
5 A. I do.
6 Q. When you use the word "trade-off," you
7 mean that reducing volatility could increase average
8 customer bills overall, correct?
9 A. Yes. I think that's a pretty common
10 phenomenon and it's extremely common for people to
11 decide to reduce the downside risk even if it's
12 slightly more costly or more costly.
13 Q. So the hedge value to some customers in
14 your opinion is that they might prefer a slightly
15 higher average monthly bill that fluctuates less,
16 correct?
17 A. Yes. Similar to what -- why people have
18 30-year mortgages with fixed interest rates versus
19 31-year ARMs. It's the same underlying issue.
20 Q. And you would agree then that some
21 customers would prefer to have lower average monthly
22 bills that are more volatile, correct?
23 A. I would, although I know no one that has
24 ever engaged in 30 continuous years of adjustable
25 rate mortgages, but the degree to which people would

1 be willing to accept volatility varies and there are
2 people who like volatility more than others.
3 Q. And you've not surveyed Duke's customers
4 to determine how many of them are averse to
5 volatility and how many are not, correct?
6 A. No. And it's not enough to know that
7 they're risk averse. You would have to know how risk
8 averse and that's why the decisions are made by
9 Commissions, their agents, and a lot of information
10 you have, and you would also have to make a decision
11 how you feel about poor people versus nonpoor people.
12 Poor people are generally more risk averse.
13 Q. Let's turn to page 14 of your testimony,
14 please.
15 A. Okay.
16 Q. And I direct you to line 8, and I realize
17 there is some confidential information here so I am
18 not asking -- I am not asking you to reveal any of
19 the confidential information but generally your --
20 your forecasts rely, in part, on the plant
21 utilization rates for Clifty Creek and Kyger Creek,
22 correct?
23 A. Yes. The plants are only utilized if
24 they are profitable or providing contribution to --
25 or what they call gross margin which is an input into

1 net margin and, yes, utilization is a co-determined
2 factor along with prices and other factors.
3 Q. And in this type of analysis is it -- is
4 it true that, all else equal, when plant utilization
5 rates go up, the net margins would also go up?
6 A. Yes.
7 Q. Let's turn back to page 5 of your
8 supplemental testimony, please.
9 A. Okay.
10 Q. And at line 2, the first full sentence
11 there you say, "I do not opine on the treatment of
12 sunk costs in terms of recoverability, though I
13 present perspectives on their treatment." Do you see
14 that?
15 A. I do see that.
16 Q. When you say "in terms of
17 recoverability," you are referring to Duke charging
18 customers for some OVEC costs under Rider PSR,
19 correct?
20 A. No. I'm referring to the issue of sunk
21 costs in general and I defer to the Commission on
22 their treatment of that.
23 Q. What are sunk costs?
24 A. Sunk costs in general, and without
25 getting into the confidential information that I used

1 to estimate it here, are costs that are already
2 committed and so as opposed to variable costs. So
3 incremental fuel is a -- is not a sunk cost. A
4 recovery of an already-incurred investment is an
5 example of a sunk cost. So it doesn't change
6 regardless of the decision-making within a reasonable
7 range of decision-making ability.
8 MR. HEALEY: Your Honor, can I have one
9 minute to confer?
10 EXAMINER WALSTRA: Sure.
11 Q. (By Mr. Healey) Mr. Rose, you testified
12 earlier that you did not and were not able to
13 quantify the hedge value of Rider PSR, correct?
14 A. Yes, and that no one is capable of doing
15 that in a, if you will, extremely highly-quantified
16 manner. It's something that can only be done -- it
17 is a judgment basis that's usually -- usually the
18 decision of the Commissions.
19 Q. And you would agree that for -- it would
20 be worth it to customers to charge them somewhere
21 between 77 and 94 million dollars under Rider PSR,
22 that hedge value should be greater than the charges
23 under the rider, correct?
24 A. No, I've not come to that specific
25 conclusion. That's a judgment for the Commission and

1 that's only part of the information. You need to
2 know how volatile the market conditions are or could
3 be and also the degree to which unexpected outcomes
4 in terms of even higher bills would impact customers,
5 so you need more information than just the expected
6 value. You need a sense of what the volatility is
7 and what the Commission believes is the reasonable
8 level of hedging that's required and particularly
9 over the period of time here.
10 Q. We discussed before that some customers
11 might prefer more volatile rates that are lower on
12 average, where some customers might prefer more
13 stable rates that are less -- that are higher,
14 correct?
15 A. Yes. There's a wide range of, in my
16 experience, of views on that. Typically it's
17 proportional to income is sort of the standard way to
18 view it. Since rich people can afford to have
19 unexpected high bills easier than poor people.
20 Q. And so isn't it true then that if a
21 substantial majority of Duke's customers prefer lower
22 but more volatile rates, that hedge value could
23 conceivably be negative?
24 A. So in that -- in that hypothetical, it's
25 possible, so then you have to not only know the

degree to which they feel that way, you also have to make a comparison across all the customers, how much are they consuming and what happens to them when their bills are unexpectedly high. So there is an intercustomer judgment that's required as well.

MR. HEALEY: That's all I have, your Honor. I will have some in the confidential -- or may have some in the confidential section. Thank you.

EXAMINER WALSTRA: Thank you.

Redirect?

MR. D'ASCENZO: Yes, your Honor.

Just a few questions.

- - -

REDIRECT EXAMINATION

By Mr. D'Ascenzo:

Q. Mr. Rose, Mr. Healey just asked you some questions about the volatility of OVEC costs. Without getting into confidential information, how does the cost of OVEC compare vis-a-vis the volatility in the market?

A. So in my analysis based on historical information, the volatility of the market is five times the volatility of the OVEC costs. So if the market is significantly more volatile on a historical

1 level, I expect it to continue to be volatile, and I
2 think the volatility is enhanced by changes in the
3 regulatory structure that affects the wholesale
4 market.
5 Q. Thank you. And Mr. Healey asked you some
6 questions about firm retirements in PJM. Do you know
7 the fuel source for the firm retirements referenced
8 in your supporting testimony?
9 MR. HEALEY: Objection, your Honor.
10 That's well outside the scope of the questions I
11 asked. They were about whether firm retirements
12 would affect his projections, all else equal. The
13 fuel source has nothing to do with the questions I
14 asked him on cross.
15 MR. D'ASCENZO: I would disagree, your
16 Honor. The fuel source of those retirements that are
17 included in his testimony are -- are very relevant.
18 The question that Mr. Healey asked was leading to
19 whether or not those retirements are -- are likely to
20 happen so it's relevant.
21 EXAMINER WALSTRA: I'll allow it.
22 MR. D'ASCENZO: Thank you.
23 A. So the fuels retired -- or likely to
24 retire are what's known sort of as fuel secured
25 baseload units who -- whose costs are relatively less

1 volatile than natural gas prices, so every additional
2 retirement adds to the volatility of the wholesale
3 power market.
4 Q. Could you further elaborate what the
5 significance of declining fuel diversity in a
6 wholesale market would do to price volatility?
7 A. Yes. It would increase. The reason for
8 that is is that in the absence of these units, the
9 power supply will come primarily from natural
10 gas-fired units. Natural gas is an extremely
11 volatile commodity compared to coal and nuclear fuel
12 and the costs of operating those plants. Natural gas
13 is typically the most volatile commodity in the
14 United States. It is heavily influenced by weather
15 conditions. So on a cold winter, prices can be very
16 high, particularly in delivered areas. And for
17 customer -- for customers it's a double whammy
18 because their heating bills and electricity bills are
19 going up together or vice versa. So the volatility
20 is enhanced when you rely more on natural gas.
21 Q. And with respect to the fuel diversity
22 that exists in PJM, are you familiar with what the
23 generation resource mix is that exists today in PJM?
24 MR. HEALEY: Objection, your Honor. This
25 has no connection whatsoever to anyone's

1 cross-examination of the witness.
2 MR. OLIKER: I support that objection,
3 your Honor.
4 MR. D'ASCENZO: Your Honor, we are just
5 following up on Mr. Rose's understanding of the
6 volatility that exists in the market. He testifies
7 in his testimony about OVEC being less volatile than
8 the market, and we're just further elaborating on
9 that.
10 MR. HEALEY: The time to do that was in
11 his direct testimony when he could have written
12 whatever he wanted.
13 MR. MENDOZA: Your Honor, if I may, the
14 question that this redirect purportedly relates was
15 about retirements; and, now, we have gone into
16 volatility of commodity prices which is unrelated to
17 that.
18 EXAMINER WALSTRA: Can I have the
19 question read back?
20 (Discussion off the record.)
21 EXAMINER WALSTRA: If you could ask the
22 question again.
23 MR. D'ASCENZO: Okay. Thank you.
24 Q. (By Mr. D'Ascenzo) Mr. Rose, are you
25 familiar with what the current resources, generating

1 resource mix is today in PJM?
2 A. Yes, I am.
3 MR. HEALEY: Your Honor, I believe the
4 purpose of asking was to address the objections, not
5 to get an answer.
6 EXAMINER WALSTRA: Right. And what is
7 this referencing from cross-examination?
8 MR. D'ASCENZO: It's in reference to the
9 volatility in the market. Mr. Rose, as part of his
10 response to questions regarding volatility, mentioned
11 retirements, and I'm just -- and that also OVEC
12 was -- the costs of OVEC were less volatile than the
13 the market and I am just trying to get into what is
14 the basis of his assumptions.
15 MR. HEALEY: Your Honor, I didn't ask
16 anything even remotely close to that. I asked him a
17 hypothetical involving the way retirements impact his
18 projections which has nothing to do at all with the
19 effect of volatility on the market or fuel mixes or
20 anything like that. It was a hypothetical based on a
21 single input into his economic projections. It was
22 not a question about the state of PJM markets and
23 volatility and things like that.
24 EXAMINER WALSTRA: I am going to sustain
25 the objection. I think you've explored volatility

1 already regarding retirements.
2 MR. D'ASCENZO: Thank you, your Honor.
3 Q. (By Mr. D'Ascenzo) Mr. Rose, I need to go
4 back to some of the cross-examination that occurred
5 yesterday.
6 A. Okay.
7 Q. Do you recall, Mr. Rose, when Mr. Mendoza
8 asked you to perform a calculation with a calculator
9 on the stand?
10 A. Yes.
11 Q. And do you recall what the purpose of
12 that calculation was to show?
13 A. I believe it was to imply that the --
14 under all circumstances -- you could calculate the
15 losses by simply -- by simply knowing the loss for
16 one ownership share, one analysis, and then compare
17 it using the ownership share of another entity in
18 another analysis.
19 And while that is a significant part of
20 that exercise, there's more to it than that and --
21 and the additional aspects of it are is that when
22 you -- when you compare cross analyses, first of all,
23 there was an approximation error, there was also
24 vintage differences between the two analyses. This
25 analysis is more up-to-date than the analysis that

1 was done in the FES case; that, together with the
2 approximation error accounts, for roughly a third of
3 the difference. The remaining two-thirds are related
4 to different input parameters related to the plant.
5 And what happens is is that relatively
6 minor changes in the input parameters result in
7 relatively limited changes in the cost to revenue,
8 but the impact on the margin is amplified. So if
9 your revenues are 100 and your costs are 99 and they
10 go to 99.5, it's a .5 percent increase in your costs,
11 but that results in the margin -- the difference
12 between the 100 and 99 going to 100 to 99.5, that's a
13 50-percent decrease in margin, so there is an
14 amplification effect, so that's the additional
15 granularity that's required in order to compare
16 across different studies.
17 Q. Thank you, Mr. Rose.
18 And so, is it fair just to say that the
19 analysis that you performed for Duke is not directly
20 proportionate to other analyses that you may have
21 performed?
22 A. Yes, that's correct. While they may be
23 similar in the aggregate, there might be differences
24 for the reasons which I just mentioned.
25 Q. And, Mr. Rose, do you recall a line of

1 questions yesterday from Mr. Oliker regarding
2 transition costs?
3 A. Yes.
4 Q. And do you recall that Mr. Oliker had
5 asked you about your testimony regarding stranded
6 costs for FirstEnergy utilities in the early 2000s as
7 part of its transition plan?
8 A. Yes.
9 Q. And just by way of background, have
10 you -- and I believe you mentioned this yesterday,
11 you have testified in other jurisdictions regarding
12 stranded costs for regulated markets moving towards
13 deregulation?
14 A. Yes. I've testified in those type of
15 hearings.
16 Q. And in your experience, how have
17 jurisdictions generally treated purchase power
18 arrangements with respect to stranded costs
19 determinations?
20 A. Usually they are treated separately from
21 balance sheet assets. Balance sheet assets are --
22 there is a direct effort to either compensate the
23 company for the difference between what it could earn
24 in a deregulated market and its net book position or
25 its net implied -- or discounted revenues, but

usually contracts are just allowed to continue and expire based on their own term.

Q. And, Mr. Rose, do you know whether the Ohio Commission has previously addressed whether a PSR-like mechanism for OVEC is a transition cost?

A. Yes.

MS. FLEISHER: Objection, your Honors. If he is asking him to testify about Commission decisions, that's really asking for a legal argument that they can make in brief.

MR. OLIKER: Your Honor, I don't think anybody asked him what the Commission has done with prior PSR rulings or mechanisms of that nature.

EXAMINER WALSTRA: We are getting there but I am going to overrule for now. See where this is going.

A. Yes, I did review the AEP decision which indicated that the mechanism that was similar was not a transition charge, it was a hedge, and that the OVEC situation generally, in the view of one person, could not be emphasized enough that it was -- how different it was.

MR. MENDOZA: Your Honor, I would move to strike that whole answer. He is interpreting a legal opinion. They can brief this issue. This witness's

1 lay opinion about what a Commission or a Court said
2 in a legal opinion is not relevant and shouldn't be,
3 in fact, testimony.
4 EXAMINER WALSTRA: Denied, but you are
5 getting to that edge.
6 MR. D'ASCENZO: I'll move on, your Honor.
7 Thank you.
8 Q. (By Mr. D'Ascenzo) Mr. Rose, do you
9 remember cross-examination yesterday by Mr. Mendoza
10 and Mr. Oliker regarding your supplemental base case
11 analysis of the profitability of OVEC versus the
12 market?
13 A. Yes.
14 Q. And I believe there was some questions
15 about the costs of OVEC versus impacting the
16 profitability of -- of the -- of OVEC in the market.
17 A. Yes.
18 Q. And in your supplemental testimony did
19 you discuss any factors that could also impact the
20 profitability of OVEC --
21 MR. MENDOZA: Objection, your Honor.
22 Q. -- versus the market in a positive way?
23 MR. MENDOZA: Objection. We're --
24 there's no reference to any specific question we
25 asked. If that principle stands that they can ask

1 anything that relates to his base case projection,
2 then they can just revise their entire testimony on
3 redirect. If they wanted to bring in new information
4 into this case, they should have asked for a motion
5 for leave to file supplemental direct -- or second
6 supplemental direct testimony. Instead, they are
7 trying to jump -- throw new evidence in here on
8 redirect.
9 MR. D'ASCENZO: I asked for a specific
10 reference to what was in his testimony, your Honor.
11 There were questions about costs of OVEC versus its
12 profitability yesterday. You know, having Mr. Rose's
13 cross-examination spanning over two days makes it a
14 little difficult to refer directly to a question,
15 but, nonetheless, he was asked about that and I
16 didn't ask for any additional information. My
17 question was simply did you mention any factors in
18 your supplemental testimony that could positively
19 impact OVEC profitability.
20 MR. OLIKER: Your Honor, if I may be
21 heard. If he wants to ask him questions about OVEC's
22 costs, which Mr. Mendoza and I think I briefly spoke
23 about, that's fine, but he is not talking about
24 costs. He is talking about other external parts of
25 his testimony which are completely unrelated to those

1 questions.
2 MR. D'ASCENZO: The costs were in
3 relation to the profitability of OVEC. I'm also
4 inquiring into the profitability of OVEC.
5 EXAMINER WALSTRA: Overruled.
6 MR. D'ASCENZO: Thank you.
7 A. Yes, so in addition to the uncertainty,
8 or costs which have declined over the course of the
9 case, but the degree to which can only be discussed
10 in confidential session, I did identify on page 12,
11 for example, at least three areas where I thought, as
12 of June 5 or 6 when I filed the testimony, that could
13 qualitatively increase the revenues available to the
14 OVEC plant based on developments that would affect
15 the capacity markets in particular.
16 And they were changes in the capacity
17 markets themselves directly associated with a docket,
18 which I will refer to as the Minimum Offer Price Rule
19 docket at FERC, and they were also related to
20 resiliency and penalties. So -- and in the course of
21 my deposition I discovered, or that day, that FERC
22 had made a ruling on that -- in one of those issues,
23 which is an extremely important ruling which was
24 designed to increase capacity prices in the PJM
25 marketplace.

1 At the time, when I was being asked
2 during the deposition, I hadn't had a chance to read
3 it. I have had a chance to read it, and what it says
4 is FERC rejected their proposal of PJM because it
5 wasn't comprehensive enough. It exempted certain
6 renewables from the Minimum Price Rule. The Minimum
7 Price -- Offer Price Rule, that the offer should have
8 to be higher, exempted certain market -- under
9 certain market conditions, and FERC went beyond that.
10 And while the details have yet to be worked out, they
11 have also rejected another of the PJM proposals. The
12 net of it was a surprisingly strong decision on
13 behalf of higher prices in the capacity market.
14 I also believe it is related to the
15 second one -- in the course of my testimony being
16 filed, I didn't -- I did also receive a copy of the
17 DOE addendum related to resiliency and change in
18 resiliency policies under active consideration. I
19 believe it's facilitated by the FERC decision.
20 One of the arguments against the
21 additional support for fuel-secured units like OVEC
22 that have fuel on-site was somehow that it would
23 adversely affect the power market. But the FERC
24 decision facilitates that in combination with the DOE
25 addendum. There is ongoing consideration of

1 additional revenues on top of higher capacity prices
2 for plants like OVEC. So there are considerable
3 upsides which were qualitatively incorporated into my
4 thinking, but not quantitatively.
5 There's still uncertainty about both of
6 those elements, but it is part of a significant set
7 of regulatory developments that are positive for the
8 net margins of the power plant, including a very
9 active effort to decrease the stringency of
10 environmental regulations that pertain to the power
11 plant.
12 MR. MENDOZA: Your Honor, I move to
13 strike that entire answer. Terms that did not appear
14 at all in any questions yesterday are: Capacity
15 markets, MOPR, FERC, resiliency, penalties, things
16 that he discovered at his deposition, FERC ruling,
17 DOD addendum, regulatory developments, environment,
18 and changes in environmental law. All of these
19 topics were untouched by any counsel for the
20 intervenors at any point.
21 And you will note yesterday that a few
22 times this witness brought up FERC developments on
23 his own and, of course, we moved to strike that
24 because it was a gratuitous effort to revise his
25 direct testimony, and now we've had what was -- what

1 the obvious purpose of his attempt to do that is this
2 long soliloquy about these things he's learned since
3 he filed his testimony.
4 And if the company wishes to file revised
5 direct testimony, that's fine, they can do that. But
6 instead they're attempting to surprise intervenors
7 with new evidence that we have no -- you know, we're
8 completely prejudiced by allowing that information
9 in. We have no opportunity to cross him, and it's
10 completely inappropriate.
11 MS. FLEISHER: Your Honor, if I may, I
12 can't quite see the court reporter's screen from
13 there but that answer was like a 5-minute soliloquy,
14 as Mr. Mendoza describes about, you know, several new
15 events that have occurred and which Mr. Rose is
16 trying to get in supplementally. To expect us to
17 respond to that on recross in the next 10 minutes is
18 not going to produce a good record. If they want to
19 put something new in the record that we have a chance
20 to review, talk to our own experts about, have a
21 chance to actually develop effective cross about,
22 fine. Then let them do that but this is not how you
23 get a full record before the Commission.
24 MR. DOVE: Additionally, your Honor, he
25 opened that answer describing a FERC decision. It's

a decision we don't have, and he is not an attorney, so we're getting a legal opinion on an opinion we don't have in front of us. And that seems improper.

MR. OLIKER: Your Honor, it also interprets the FERC decision and tries to speak on behalf of FERC taking a lot of poetic license that FERC did not necessarily say and he has no capacity to opine about.

MR. HEALEY: On behalf of Duke's residential customers, I join all those objections.

MR. MENDOZA: And, your Honor, if I may once more, I would just ask them to identify a question that anyone asked about FERC reforms yesterday. It did not occur.

EXAMINER WALSTRA: To be honest, I'm a little frustrated when you said on the initial question, before you even asked a question, you said you are just asking for a reference in his testimony. And then he's expounding beyond any reference in his initial testimony to all these external factors. Do you want to respond?

MR. D'ASCENZO: Your Honor, if I may respond, please. Mr. Rose's testimony -- he did point out the reference in his testimony on page 12, the third bullet which talks about the PJM capacity

1 market corrections. There's a footnote in his
2 testimony there that refers to specific proposals.
3 He does talk about resiliency initiatives again.
4 There is a footnote there that references that the
5 fact that FERC did issue an order is a matter of
6 public record. It speaks to the -- it directly is on
7 point to the discussion that Mr. Rose has in his
8 testimony.
9 As far as what this is in reference to,
10 again, there were questions yesterday about the
11 profitability of OVEC versus its costs. Another
12 component of that is what it can -- of how -- its
13 cost measure against the market. These are all
14 factors that will impact the market. That's all
15 we're trying to show, your Honor.
16 MS. FLEISHER: Your Honor, if I may have
17 one last word since it is our motion to strike, you
18 know, just because -- they're trying to shoehorn in
19 new stuff here. And, again, I come back to if our
20 mutual goal here is to develop a record for the
21 Commission to be able to appropriately weigh all the
22 evidence, this is not the way to do it. You know,
23 unless we would have some fulsome chance to respond
24 to Mr. Rose's testimony other than whatever we can
25 come up with for recross within the next little bit,

then the result is not going to produce a good decision and that's why we have rules limiting the scope of redirect.

EXAMINER WALSTRA: Okay. Two things, I know the court reporters need to fix some stuff. So we'll go off the record and take a 10-minute recess, and then we'll come back.

(Recess taken.)

EXAMINER WALSTRA: All right. We'll go back on the record.

In the recess I did have time to review the answer and consider the motions to strike. I'm going to grant the motion to strike for most of the answer. I will allow the first eight lines of the answer which referred back to his initial testimony.

The testimony he gave after that, that directly affected his analysis and was as big a factor as he was discussing, that sounds like something that should have been brought up either through supplemental testimony or in his initial direct testimony to give the parties sufficient time to prepare and I don't think it directly necessarily addressed a question that was on cross-examination in that -- toward -- that much towards his analysis. So the first eight lines, if we want those read back, we

1 can do that. Otherwise, everything after that are
2 stricken.
3 MR. MENDOZA: Thank you, your Honor.
4 MR. OLIKER: Thank you, your Honor.
5 MS. FLEISHER: If we could have it
6 quickly read back.
7 EXAMINER WALSTRA: Yeah. If you could,
8 Karen.
9 (Record read.)
10 MR. D'ASCENZO: Thank you, your Honor.
11 Q. (By Mr. D'Ascenzo) Okay. I think I just
12 have a couple more questions, Mr. Rose.
13 Do you recall yesterday, Mr. Rose, a
14 conversation with Mr. Whitt from RESA discussing the
15 hedging of stock prices through a hypothetical?
16 A. Yes.
17 Q. To what extent is the hedging of stock
18 prices comparable to what the company is proposing
19 with respect to using OVEC as a hedge to market
20 volatility through the PSR?
21 A. So there are some similarities and there
22 are some differences. One of the differences is that
23 this is a seven-year hedge, and as the hedge period
24 goes out over time, it's common -- first of all, it's
25 difficult to find counterparties and the

1 counterparties often require market-to-market
2 collateral. So as market conditions change, you
3 could end up having to post more collateral, and this
4 particular PPA does not have collateral requirements
5 as -- in terms of having to post, say, letters of
6 credit or actual cash.
7 In addition, it is a physical hedge and
8 the physicality of it as opposed to a financial hedge
9 is differentiable in a sense of were there to be
10 changes in the revenues available by virtue of the
11 particular physicality of the plant, that is the fuel
12 secure resources, the plant would receive those
13 revenues and that would affect the calculus of the
14 hedge in a way in which a financial transaction which
15 is denominated purely in a dollar basis wouldn't. So
16 this contract creates the ability to access, for
17 example, resilience initiatives which are currently
18 under consideration in -- on the part of DOE and
19 FERC.
20 MR. MENDOZA: Your Honor, I would move to
21 strike those statements about the resilience. It
22 doesn't have anything to do with the hypothetical
23 about stock prices and it's the same information you
24 just struck. They are trying to get in this new
25 information about ongoing regulatory development.

1 Again, if they want to file direct
2 testimony and not surprise us at the hearing, they
3 can do that, or they can brief these legal issues.
4 Most of these things are just legal issues. The FERC
5 ruling, they could just brief it if they want to.
6 But again, they are trying to get in new evidence and
7 it goes contrary to your ruling you just made.
8 MR. D'ASCENZO: Your Honor, if I may,
9 there's no new evidence in Mr. Rose's example. He
10 does discuss, not only on page 12 but also on 79 of
11 his testimony, resiliency initiatives at FERC. So
12 it's not new evidence. It's all evidence that was in
13 his testimony. He was just making the distinction
14 between the hypothetical that was given to him
15 yesterday and how that translates to what the company
16 is proposing. That's all he was doing.
17 MR. MENDOZA: Your Honor, I am sorry to
18 belabor the point, but nobody asked a single question
19 about resiliency initiatives at DOE or FERC. It's
20 true it was in his testimony and if they want to cite
21 his testimony, they are free to do that, but to ask
22 questions on redirect to bring in new developments
23 that have happened since the time he filed his
24 testimony is improper and contrary to the ruling you
25 have already made.

EXAMINER WALSTRA: I'll strike the last sentence of his answer. The rest will stay.

MR. D'ASCENZO: If I could have a moment, your Honor.

EXAMINER WALSTRA: Take your time.

MR. D'ASCENZO: No further questions, your Honor.

EXAMINER WALSTRA: Thank you.

Recross?

MR. MENDOZA: Just two.

- - -

RECROSS-EXAMINATION

By Mr. Mendoza:

Q. Mr. Rose, do you recall yesterday when we did that math problem, that math exercise with your testimony from the FES case?

A. I assume you are referring to the calculator --

Q. Yes.

A. -- incident?

Q. Then you recall the calculator incident and do you recall when Duke's counsel asked you some questions on that on redirect?

A. Yes, sir.

Q. Okay. And I think you said there was --

1 you explained some of the differences between the two
2 forecasts, I think. And I think you said one of
3 the -- one of the forecasts has a more up-to-date
4 vintage. Do you recall that answer?
5 A. Yes.
6 Q. And can you explain what -- you know,
7 which one is more up-to-date? What's the timing?
8 A. So my testimony in one case was from --
9 my declaration was filed March 31, April 1, of this
10 year. And in this case it was filed June 6, June 7.
11 And while that is not a huge amount of time, it turns
12 out that the PJM, they call it base residual auction,
13 the main capacity market auction results occurred and
14 there was a dramatic increase in the capacity price.
15 It increased 83 percent and that was something that
16 had to be addressed. So I did -- I have received
17 information updates and that affects a comparison
18 between the two.
19 There are other issues, as we discussed,
20 an approximation error and differences in plant input
21 parameters, so they were all part of the explanation.
22 Q. And for the auction you just referenced,
23 what was the delivery year for that auction?
24 A. The delivery year was June 1, 2021
25 through May 31, 2022.

1 MR. MENDOZA: Thank you, Mr. Rose. I
2 have no further questions.
3 EXAMINER WALSTRA: Thank you.
4 Ms. Fleisher?
5 MS. FLEISHER: No questions, your Honor.
6 MR. OLIKER: Thank you, your Honor.
7 - - -
8 RECROSS-EXAMINATION
9 By Mr. Oliker:
10 Q. Mr. Rose, just a few follow-up questions.
11 You discussed the treatment of PPAs during
12 restructuring, correct, with Mr. D'Ascenzo?
13 A. Yes.
14 Q. And you indicated that during
15 restructuring, PPAs that were entered into prior to
16 restructuring and carried over into the restructuring
17 process were allowed to continue, correct?
18 A. Yes. It's -- it wasn't a focal point of
19 my testimony, but it was based on my knowledge
20 generally.
21 Q. And am I correct those PPAs were often
22 for generation resources that served load when the
23 utility was short?
24 A. In general those contracts were either
25 cogeneration contracts or related to the cogeneration

1 supply and to a degree renewables. It depended on
2 the period of time we're discussing.
3 Q. And those contracts were allowed to
4 continue because they were entered into prior to
5 restructuring, correct?
6 A. Yes. And my nonlawyer understanding is
7 that there is some issues about the State acting to
8 have the contract be breached, Article I, Section 10,
9 of the Constitution.
10 Q. And, for example, if the contract expired
11 in 2002 and restructuring occurred in 2000, would you
12 agree that anything after 2002 was up to the market?
13 A. In general, the contracts were just
14 allowed to continue and so whatever the consequences
15 were -- were -- I would have to delve back into.
16 This was just a general comment based on my
17 experience in restructuring and so they just were
18 allowed to continue.
19 Q. And do you know how any of those
20 contracts were treated after they expired or how
21 those resources were treated after they expired,
22 their contract?
23 MR. D'ASCENZO: Objection, compound
24 question.
25 MR. OLIKER: I can restate, your Honor.

1 EXAMINER WALSTRA: Thank you.
2 Q. (By Mr. Oliker) Mr. Rose, would you agree
3 that the resources that were subject to the PPAs you
4 referenced did not receive -- let me rephrase that.
5 Are you aware of any PPAs that were
6 allowed to continue during the restructuring process
7 that were automatically renewed under the same terms?
8 After the restructuring process?
9 A. I have not studied this issue in
10 sufficient detail to answer that question.
11 Q. And you referred to the OVEC resources
12 being a physical hedge. You would agree that the
13 OVEC resources and the PSR do not actually provide
14 retail electric service to customers in Ohio.
15 A. I'm not sure what you mean any wholesale
16 asset cannot -- is providing in the wholesale market
17 a product. And so it cannot directly be used for
18 retail. And it is my understanding that it's more of
19 a financial hedge with the additional element,
20 because of the physicality of the asset, it may
21 qualify for revenues that would be different for
22 other assets related to the resilience in the fuel
23 security issue discussed in my testimony.
24 MR. OLIKER: Your Honor, I would move to
25 strike the last two references to fuel security and

1 resiliency. They were completely unrelated to my
2 question of whether it was providing retail electric
3 service.
4 MR. D'ASCENZO: Your Honor, again, he was
5 referring directly to what he said in his testimony
6 in response to Mr. Oliker's question. There was no
7 new information there.
8 MR. OLIKER: Whether or not it is new or
9 not, it is irrelevant. It was not responsive to my
10 question which is why it should be stricken.
11 EXAMINER WALSTRA: Deny the motion.
12 MR. OLIKER: Thank you. Those are all
13 the questions I have, your Honor.
14 EXAMINER WALSTRA: Thank you.
15 Mr. Healey?
16 MR. HEALEY: Nothing further, your Honor.
17 EXAMINER WALSTRA: Thank you.
18 We will now move on to the confidential
19 portion. I will leave it to Duke to identify anyone
20 who has not signed an agreement.
21 MR. D'ASCENZO: So I believe, your Honor,
22 the only parties to the proceedings that do not have
23 a nondisclosure agreement are Constellation
24 NewEnergy, Exelon, University of Cincinnati, and
25 Miami, and I don't see counsel for them. And the

gentleman from FirstEnergy Solutions just left, so I think we are okay.

EXAMINER WALSTRA: Okay. Close the door.

(CONFIDENTIAL SESSION EXCERPTED.)

(OPEN RECORD.)

EXAMINER WALSTRA: We'll go back on the record.

Duke, whenever you're ready.

MR. D'ASCENZO: Your Honor, we have no

1 questions.
2 EXAMINER WALSTRA: All right. Thank you,
3 Mr. Rose.
4 If you would like to move your motions --
5 or, your exhibits.
6 MR. D'ASCENZO: Yes. One housekeeping
7 item from yesterday, as well, with regard to the
8 admission of evidence. So we would move at this
9 point for Duke Energy Ohio Exhibits 8, 8A, 9, 9A
10 which are the supplemental public and confidential
11 versions of Mr. Rose's testimony, and the public and
12 confidential versions of Mr. Rose's direct testimony,
13 as well as Joint Exhibit 1 which was the stipulation
14 that was marked yesterday.
15 EXAMINER WALSTRA: Subject to previous
16 Duke motions, 8, 8A, 9, 9A, as well as the Joint
17 Exhibit 1, subject to previous motions to strike, are
18 there any objections?
19 MR. HEALEY: Nothing further.
20 EXAMINER WALSTRA: Those will all be
21 admitted.
22 MR. D'ASCENZO: Thank you, your Honor.
23 (EXHIBITS ADMITTED INTO EVIDENCE.)
24 EXAMINER WALSTRA: Mr. Oliker.
25 MR. OLIKER: Thank you, your Honor. At

this point in time, IGS would move into the record IGS Exhibits 2, 3A, and 4A.

EXAMINER WALSTRA: Any objection?

MR. D'ASCENZO: No, your Honor.

EXAMINER WALSTRA: All three will be admitted.

MR. OLIKER: Thank you.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER WALSTRA: Mr. Mendoza.

MR. MENDOZA: Thank you, your Honor. At this time, Sierra Club would move to admit Sierra Club Exhibit 1, Exhibit 2, and Confidential Exhibit 3A.

EXAMINER WALSTRA: Any objections?

MR. D'ASCENZO: No, your Honor.

EXAMINER WALSTRA: They will be admitted.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER WALSTRA: And is that all?

5 minutes to an hour?

MR. MICHAEL: I can get it done by 12.

EXAMINER WALSTRA: Go ahead and call your next witness.

MR. D'ASCENZO: Okay. Your Honor, for its next witness, Duke Energy Ohio would call James Riddle.

(Witness sworn.)

EXAMINER CATHCART: You may be seated.

MR. D'ASCENZO: Your Honor, may we approach?

EXAMINER WALSTRA: You may.

MR. D'ASCENZO: Your Honor, for purposes of the record, we would like to mark as Duke Energy Ohio Exhibit 10, the direct public version of the direct testimony of James A. Riddle in Case No. 17-32-EL-AIR.

EXAMINER CATHCART: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MR. D'ASCENZO: And as Duke Ohio Exhibit 10A, the confidential version of the direct testimony of James A. Riddle filed in Case No. 17-32-EL-AIR.

EXAMINER CATHCART: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MR. D'ASCENZO: Thank you.

EXAMINER CATHCART: You may proceed.

MR. D'ASCENZO: Thank you.

- - -

JAMES A. RIDDLE

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

DIRECT EXAMINATION

By Mr. D'Ascenzo:

Q. Mr. Riddle, would you please state your name, position with the company, and business address for the record.

A. My name is James A. Riddle. My title is Rates and Regulatory Strategy Manager, Pricing and Rate Options. 139 East Fourth Street, Cincinnati, Ohio 45202.

Q. And Mr. Riddle, did you cause to file direct testimony in Duke Energy Ohio's electric distribution rate case?

A. Yes.

Q. And do you have any changes or corrections to that testimony?

A. No.

Q. And do you have in front of you what has been just marked as Duke Energy Ohio Exhibits 10 and 10A?

A. I do.

Q. And are those the public and confidential versions of your testimony?

A. They are.

Q. Now, Mr. Riddle, are you aware there is a stipulation that was filed in this consolidated proceeding?

A. I am.

Q. And to the extent that you know, has that stipulation incorporated your testimony and the exhibits that you've supported as part of the company's application?

A. Yes.

Q. Thank you.

And are you aware if the stipulation includes changes to those exhibits to your direct testimony?

A. They do.

Q. And can you please explain what those are?

A. As part of the settlement, the company -- or -- the parties, they have agreed to changes in the revenue requirement as compared to the original proposal as well as the customer charges related to each of the rate classes in the proposal.

Q. And is there any other tariff language that you are aware of that has been changed as a result of the stipulation?

A. I believe -- we proposed language changes in a few areas and the stipulation speaks to those.

MR. D'ASCENZO: Thank you, Mr. Riddle.

Your Honor, no further questions.

EXAMINER CATHCART: Thank you. We'll start down the line.

MR. MICHAEL: Your Honor, would the Bench entertain motions to strike now?

EXAMINER CATHCART: Yes.

MR. MICHAEL: Were you going to start over there with them?

EXAMINER CATHCART: I was going to, if that's okay.

MR. MICHAEL: Okay. That's fine with me.

MR. DOVE: Yes, your Honor. I would like to make a motion to strike and it's got several grounds so bear with me, if you will. First, I'll identify where.

Starting on page 6, line -- sorry, I just switched the page. Line 12, starting at "The proposed." And then I would like to go all the way through page 7, line 22, ending after the word "charges."

This testimony deals with rate design issues including the customer charge which the witness has just said were changed by the stipulation. Pursuant to the AE's original order, these are no longer compatible and therefore should not be allowed.

1 Additionally, this would be directly
2 prejudicial to my client. My client chose not to put
3 on an opposition witness to rate design testimony
4 because it was resolved by the stipulation, as both
5 the stipulation states on the first full paragraph of
6 page 9, and Witness Spiller states as well on page 8
7 as Mr. Oliker pointed out yesterday.
8 So allowing this testimony in is
9 essentially allowing the company to both litigate the
10 stipulation as well as the underlying application as
11 this testimony is no longer relevant. It's been
12 resolved by the stipulation pursuant to the company's
13 own admission.
14 MR. MICHAEL: OCC's joins in Mr. Dove's
15 motion to strike.
16 MR. D'ASCENZO: Your Honor, if I may, for
17 the same reasons that the company articulated
18 yesterday with respect to Ms. Spiller's testimony,
19 the -- the purpose of this hearing is to determine
20 the reasonableness of the stipulation, one of the
21 prongs to that analysis is whether there was -- the
22 stipulation is the product of serious bargaining. A
23 key to that is the understanding of what the company
24 originally proposed in its application and it will be
25 important for the Commission to evaluate in terms of

1 reasonableness.
2 Mr. Riddle has just explained that the
3 stipulation does indeed result in a -- an agreed-upon
4 different outcome. His testimony would merely be
5 offered, your Honor, to show where we started so that
6 the comparison could be made to where we ended up.
7 The company, as Mr. Riddle has indicated,
8 has agreed, as part of the stipulation, to a number
9 of changes with respect to rate design as well as
10 other language changes in the stipulation that are
11 readily apparent. The Commission is able to afford
12 the appropriate weight to Mr. Riddle's testimony
13 that's written here in light of the fact there is a
14 stipulation and, again, the parties are free to
15 cross-examine Mr. Riddle on that information if they
16 so choose.
17 But as he has indicated, that the
18 stipulation does indeed -- the company has agreed to
19 different -- different rate design issues that were
20 raised as part of the serious bargaining, again, his
21 testimony, original testimony supports that.
22 Therefore, it is compatible with the stipulation and
23 relevant to the Commission's determination of
24 reasonableness of the stipulation.
25 MR. DOVE: Your Honor, if I may respond?

1 You allowed some testimony in yesterday
2 as far as reasonableness goes. This information is
3 already in the record to the extent it needs to be.
4 This goes beyond just a mere summary to
5 help gauge reasonableness. And as far as the
6 appropriate weight, a stipulation has been filed
7 which replaces the application, so the appropriate
8 weight is zero. So presumably that response is
9 always true. The Commission will always know, all
10 else being equal, what amount of weight to give
11 something. But all else is not equal and a
12 stipulation was filed, therefore, this does not
13 belong in the record. So we don't need to add to
14 what the Commission needs to review with irrelevant,
15 at this point, useless information.
16 And I would just like to highlight that
17 again we would have put on opposition testimony. We
18 were told this was resolved. If this is allowed to
19 be in the record, my client is directly prejudiced as
20 a result.
21 MR. MICHAEL: And I will just add real
22 quickly, your Honor, the company has relied on
23 numerous occasions about well, it enables the PUCO to
24 make the comparison about where we were and where we
25 are now. Well, that's not really all that helpful of

1 a comparison. What the company would have to show
2 would be that there would be some likelihood that
3 what they initially asked for had some possibility or
4 potential of actually getting adopted by the PUCO.
5 A perfect example is, for example, the
6 regulatory mandates rider which the Commission has
7 rejected repeatedly but yet the company claims that
8 because they withdrew it, that's a benefit to the
9 settlement.
10 So simply making a comparison isn't all
11 that helpful or useful or relevant because in
12 addition to the comparison, the company would have
13 some burden to show that without -- had they not
14 withdrawn it there may have been some likelihood of
15 them actually obtaining or hitting the star they are
16 shooting for, so to speak.
17 So in addition to what Mr. Dove so ably
18 described, I don't think any comparison, by just
19 enabling a comparison, is all that helpful or
20 survives the motion to strike.
21 MR. D'ASCENZO: Your Honor, if I may just
22 respond to that quickly. The issue here is the
23 straight-fixed, variable, rate design that was
24 originally proposed among other rate design issues.
25 The company, as Mr. Riddle explained in his

1 testimony, included the straight-fixed, variable,
2 rate design in direct response to a Commission Order.
3 So to the extent that Counsel for OCC is
4 arguing there's -- there's no possibility that the
5 Commission would have approved that, I would beg to
6 differ given that the Commission itself had directed
7 all utilities to include such a filing. That would
8 go to, your Honor, the -- whether or not the
9 company's application itself would have been
10 compliant with not only the Commission's rules but
11 the Commission's previous Orders as well.
12 MR. DOVE: In the interim, your Honor,
13 the Commission has removed that direction toward when
14 it comes to other utilities. In the AEP decision in
15 their most recent case, the Commission said do not do
16 that, we will handle rate design in PowerForward.
17 So to the extent there could be some
18 value out there by allowing this information in, even
19 though the stipulation eliminates it, I think that's
20 moot at this point. The Commission has made their
21 position clear.
22 EXAMINER CATHCART: I am going to deny
23 the motion to strike and the Commission can give it
24 the appropriate weight. The stipulation, you know,
25 speaks for the changes.

1 MR. DOVE: I understand your decision. I
2 would like the record to note that I strenuously
3 object. We are now allowing the company to both
4 litigate a stipulation and the underlying application
5 and this is directly prejudiced to my client's
6 interests contrary to what we were told throughout
7 this process and is going to have a chilling effect
8 for us on further negotiations.
9 EXAMINER CATHCART: Thank you.
10 Any further motions to strike?
11 MR. MICHAEL: We have some, your Honor,
12 OCC.
13 Our first motion to strike, your Honor,
14 is on page 4, lines 5 through 20, and in that
15 testimony Mr. Riddle offers some analysis and
16 description of the rate schedule for the application
17 as filed and the rates that were requested therein,
18 and I don't need to remind, your Honor, that in that
19 application the company asked for a rate increase
20 and, in fact, the stipulation provides for a rate
21 reduction. The testimony on page 4, lines 5 through
22 20 is incompatible with the settlement --
23 incompatible with the settlement and should be
24 stricken.
25 MR. D'ASCENZO: May I respond, your

Honor?

EXAMINER CATHCART: You may.

MR. D'ASCENZO: Thank you.

The testimony here is simply describing and summarizing what was included in the company's various schedules. The schedules themselves are required under filing requirements. So, you know, his testimony is simply explaining. It's -- it's a roadmap, your Honor, of what was included in the company's application and where the Commission can find information. That's -- that's all that this language is discussing.

MR. MICHAEL: It just reflects rates that are no longer in play.

MS. BOJKO: Your Honor, may I have the page -- the reference?

MR. MICHAEL: Page 4, lines 5 through 20.

MS. BOJKO: Thank you.

Your Honor, at this time I am going to have to raise a concern as well, and I support the motion of OCC.

Many parties either agreed to not sign or not oppose the stipulation or become a signatory for the stipulation, and the reason for doing that was so that items would not get into the record that were

about the application because the stipulation changes the application. The stipulation changed the rate design in many instances that affect our customers. The testimony about rate design and these rate issues, if it's allowed to be in the record, is going to confuse the record, but it is also contradictory and counter to the positions that other parties would have taken had the case been litigated.

We are not litigating the case because the application no longer exists as it is presented. If we start doing this, then we're going to have to cross-examine the witnesses on every component of their testimony that deals with the application that we don't agree with.

The purpose of settling is so that you don't have to do that and that I don't have to go through the application of bringing your witnesses to challenge. If the application is going to be in and all the testimony is going to be in, then we're going to have to put on counter testimony or do it through cross-examination of the witnesses to show how the application proposal was unreasonable and that is why a settlement of the case was reached. The application is not being litigated here and as a nonopposing party, this is very problematic because

1 the issues that you are now allowing to be in the
2 record directly affect our clients and the whole
3 point of resolving the case these issues were
4 modified by the stipulation.
5 MR. D'ASCENZO: Your Honor, if I just may
6 respond to Ms. Bojko. The stipulation itself states
7 that Duke Energy Ohio offers its testimony in
8 exhibits filed in these proceedings as further
9 evidentiary support for the stipulation. That's what
10 we're doing.
11 This testimony of -- the testimony of
12 Mr. Riddle and the other witnesses, you know, that we
13 are offering is simply to put in context and to
14 support the filing requirements under Ohio's rules
15 and regulations for the electric security plan, for
16 the distribution rate case. In this particular
17 instance it includes the schedules that are required
18 under filing requirements for a distribution rate
19 case. That's the only purpose that we are offering
20 this testimony in this -- in this instance.
21 The stipulation itself does indeed
22 incorporate many other aspects of Mr. Riddle's
23 testimony directly, including specific tariff changes
24 and the billing determinants that Mr. Riddle
25 supported.

1 So, you know, in terms of what the
2 company is trying to do here, we are not trying to
3 litigate the underlying application. We are
4 absolutely supporting the stipulation. The
5 stipulation, again, the Commission must consider the
6 serious bargaining that occurred. That's all we're
7 trying to demonstrate here is to say this is where we
8 started and the stipulation is where we ended up.
9 MS. BOJKO: Your Honor, if I may just
10 respond, the language in the stipulation said in
11 support of the stipulation. This testimony directly
12 contradicts the stipulation. I did not speak up
13 yesterday when it was about summary and Ms. Spiller
14 explaining because that, I think, justified the point
15 just raised by Counsel that, you know, it shows where
16 we've been and where we go.
17 But to allow testimony in that directly
18 contradicts, that is inconsistent with the
19 stipulation itself and, your Honor, frankly, is
20 inconsistent with your ruling that you made back when
21 we had this discussion of what witnesses would be
22 presented and what testimony would be presented.
23 We talked about anything being allowed in
24 the record that was consistent with the stipulation
25 and that supported the stipulation. This does not

support and is not consistent with the stipulation and that's where my concern lies.

MR. DOVE: I have to second it. As parties to negotiation, we cannot be expected to agree to a settlement and then face, down the line, additional testimony that's contrary to the settlement. That was the whole point of my initial motion to strike.

MS. FLEISHER: And, your Honor, can I just say, you know, again, I think your Honors have done a good job trying to keep this a streamlined proceeding and allowing in some of that summary information doesn't get away -- in the way of that. But I am now facing the prospect of do I need to now cross him on the reasonableness of his testimony; whereas, before I was planning to do no cross at all.

So we have to respond in whatever form we are able here to be sure that none of this gets in the record and then, you know, next time we're litigating these rate design issues which is going to happen. You can't face the risk that this is evidence in a Commission proceeding.

MR. DOVE: Especially when you have -- I have a client who practices in multiple states and it is very likely this could be brought up and used

against them in another state, the fact that this wasn't opposed in this case with direct testimony, which we would have done if we knew this was coming in.

EXAMINER WALSTRA: We will take this under consideration and break for lunch.

MR. MICHAEL: My intent was not to start that storm, your Honor, but I'm glad I did.

EXAMINER WALSTRA: I had a feeling the storm was coming anyway. So we will break for lunch until 1:25.

(Thereupon, at 12:10 p.m., a lunch recess was taken.)

- - -

1 Tuesday Afternoon Session,
2 July 10, 2018.
3 - - -
4 EXAMINER CATHCART: Okay. Let's go back
5 on the record. So where we left off is we had a
6 motion to strike. We are going to grant that motion
7 to strike. Consistent with our prior ruling, we will
8 allow testimony from the application that is
9 consistent with the stipulation.
10 We allowed Ms. Spiller's testimony as a
11 summary to provide context. Other testimony is to be
12 consistent with the stipulation.
13 MR. MICHAEL: Thank you, your Honor.
14 MR. D'ASCENZO: Your Honor, for clarity,
15 could we please -- or Mr. Michael, if you would,
16 please, identify which sections you were just --
17 MR. MICHAEL: May I rely on what the
18 record reflects, Mr. D'Ascenzo, and perhaps the court
19 reporter would read it back for us.
20 MR. DOVE: Your Honor, may I also ask,
21 under that rationale, is my motion to strike also
22 granted?
23 EXAMINER CATHCART: Yes.
24 MR. DOVE: Thank you.
25 MR. D'ASCENZO: Again, do we have

clarification what exactly that is?

EXAMINER WALSTRA: Mr. Michael, can you confirm it's page 4, lines 5 through 20?

MR. MICHAEL: I believe that's right. That's it.

MS. BOJKO: It's hard to hear with the fan back here.

EXAMINER WALSTRA: Was it lines 5 through to 20 on page 4?

MR. MICHAEL: Yes, your Honor, it was.

EXAMINER WALSTRA: And Mr. Dove?

MR. DOVE: It was -- I'm sorry -- a little more specific. Line 6 -- page 6, line 12 starting at "the proposed" and then ending on page 7, line 22, after the word "charges."

MR. MICHAEL: Your Honor, if I may, for OCC's second motion to strike, we would move to strike on page 5, lines 11 through 14. That is a typical bill comparison that presents the effect of the proposed rates. As I have described earlier and as the Bench is well aware, what is the proposed rates has changed since Mr. Riddle did his comparison. The rates that would now be applicable are governed by the settlement. Therefore, this part of Mr. Riddle's testimony is not compatible with the

1 settlement. It is irrelevant and should be stricken.
2 MR. D'ASCENZO: Your Honor, just for
3 clarification, we -- what we are talking about here
4 is only the testimony and not the underlying
5 schedules which have already been admitted. The
6 company has a concern that if we are starting to get
7 into striking the underlying pieces of the
8 application, that there's an issue of whether or not
9 the company's entire application would be considered
10 complete in meeting the filing requirements.
11 So I would just like to have it clarified
12 for the record that what we are discussing here is
13 just the testimony, but that because the application
14 itself has already been admitted, that those various
15 schedules, for purposes of completeness of the filing
16 requirements, are still in the record.
17 MR. MICHAEL: And if I could be heard on
18 that, your Honor, at the very least I would disagree
19 with the company because, for example, on page 4,
20 lines 19 through 20, excuse me, Mr. Riddle discusses
21 Attachment JAR-1. That is not a schedule. That is
22 something that Mr. Riddle put together and it
23 reflects information that your Honor has already
24 described would not be admitted into evidence. So at
25 the very least, as it relates to Attachment JAR-1,

1 that attachment should, in fact, be stricken.
2 EXAMINER WALSTRA: But regarding your
3 pending motion?
4 MR. MICHAEL: No, I'm sorry, your Honor,
5 that was the one that your Honors had already ruled
6 on, so that was page 4, lines 5 through 20. That was
7 my first motion to strike.
8 And on line 19, your Honor, Mr. Riddle
9 refers to Attachment JAR-1. And my point is simply
10 that that is not a schedule to the application. That
11 is something that Mr. Riddle put together and
12 reflects information that your Honors had stricken,
13 so I don't think the company's comment is applicable
14 to Attachment JAR-1.
15 MR. D'ASCENZO: For a point of
16 clarification with respect to JAR-1, the stipulation
17 itself refers to the billing determinants that were
18 in the direct testimony of Mr. Riddle, as updated
19 by -- as adjusted by the staff, are incorporated into
20 the stipulation.
21 MR. MICHAEL: That's not what JAR-1 is
22 though. And I apologize, your Honor, just to the
23 degree I am unclear, I take Mr. D'Ascenzo's point
24 regarding schedule to the application, I am simply
25 pointing out that that concern does not extend to

1 JAR-1 which was not a schedule to the application and
2 is something that Mr. Riddle created on his own.
3 EXAMINER WALSTRA: Doesn't it say it's a
4 replication of the schedule?
5 MR. MICHAEL: It does, your Honor, but it
6 goes on to say including all -- excuse me --
7 including applicable riders. So it's simply not
8 Schedule E-4 all over again. It's modifications to
9 Schedule E-4 that Mr. Riddle did.
10 EXAMINER WALSTRA: Okay. Thank you.
11 EXAMINER CATHCART: I am going to grant
12 OCC's motion for lines 11 through 14.
13 MR. MICHAEL: Thank you, your Honor.
14 And if I might ask the Bench, has the
15 Bench determined -- has the Bench confirmed JAR-1 is
16 also going to come out or is that still under
17 consideration?
18 EXAMINER WALSTRA: Is it referenced by
19 the stipulation or just the schedule?
20 MR. D'ASCENZO: The stipulation refers to
21 billing determinants. To the extent that the billing
22 determinants are articulated in this stipulation
23 which includes all of the riders, it would, but, you
24 know, the underlying schedule, as Mr. Michael pointed
25 out, does not include the -- does not -- has

1 different information.
2 EXAMINER WALSTRA: Okay.
3 MR. MICHAEL: And one of the schedules
4 that includes the billing determinants that were
5 adopted as part of the settlement is one of the
6 schedules. So to the degree the Bench excludes
7 JAR-1, that is not going to impact that schedule.
8 EXAMINER WALSTRA: Then that will be out
9 as well.
10 MR. MICHAEL: Thank you, your Honor.
11 Your Honor, the next motion to strike
12 that OCC would make is page 6, lines 6 through 9, and
13 in that portion of Mr. Riddle's testimony, Mr. Riddle
14 talks about the rate design and no structural changes
15 in the design of the rates are being proposed in
16 these proceedings. That's a reference to the
17 "straight-fixed variable." That is no longer part of
18 the settlement. It's not relevant and it's not
19 compatible with the settlement.
20 EXAMINER CATHCART: I will grant that.
21 MR. MICHAEL: Thank you, your Honor.
22 MR. D'ASCENZO: Your Honor, if I could
23 quickly respond. The "current rate design," not what
24 was proposed, in that first sentence.
25 MR. MICHAEL: But, your Honor, if I may

weigh in. He goes on to say, "Therefore, with the exception of the residential rates, no structural changes in the design of the rates are being proposed...." So he's going further than simply talking about current rate designs and talking about an additional rate design change and that rate design change would have been the proposed increase in the straight fixed variable.

EXAMINER CATHCART: Okay. We will allow the first sentence ending in "principles" and strike the second sentence beginning with "Therefore" and ending in "proceedings."

MR. MICHAEL: Thank you, your Honor.

Your Honor, our next motion to strike would be on page 7, lines 20 -- oh, I'm sorry. Back to Mr. Dove's motion covered that, I apologize.

Our next motion to strike, your Honor, would be on page 8, lines 4 through 10. And in that section of Mr. Riddle's testimony he discusses Rider DDR and he goes on to say "When new rates are approved by the Commission in this case, the Rider DDR base amount will be updated to reflect the newly approved level of distribution revenue."

Because the effect on Duke's distribution revenue is a function of the settlement and the

1 settlement results in a rate reduction, that
2 testimony applicable to the application wherein the
3 company asked for an increase in rates is
4 incompatible with the settlement. It's no longer
5 relevant and it should be stricken.
6 MR. D'ASCENZO: Your Honor, I would
7 disagree. What he is saying here is that when new
8 rates are approved by the Commission, the Rider DDR
9 base amount will be updated to reflect the newly
10 approved level of distribution revenue.
11 It's not saying whether or not that would
12 be an increase or a decrease. It's simply saying
13 that the base amount will be updated and that is a
14 fact that will occur.
15 EXAMINER CATHCART: Yes. I am going to
16 deny that motion to strike.
17 MR. MICHAEL: Thank you, your Honor. On
18 page -- I believe this is the final motion to strike,
19 your Honor. On page 11, beginning with line 17,
20 turning over to page 12, line 2, and in that part of
21 Mr. Riddle's testimony, your Honor, Mr. Riddle
22 discusses withdrawing Rate TD. The Staff Report that
23 was issued in the rate case rejected that proposal
24 and the settlement is silent on that subject matter.
25 Therefore, that testimony from

1 Mr. Riddle, to the degree the rate case is resolved
2 by the stipulation, is no longer relevant and it
3 would be inconsistent to allow Mr. Riddle to testify
4 on that because it was resolved as a result of the
5 stipulation.
6 MR. D'ASCENZO: The stipulation is silent
7 on this, your Honor, so to the extent that it -- you
8 know, the stipulation is silent, I don't know that
9 it's being withdrawn.
10 MR. MICHAEL: Just as a factual matter,
11 the testimony is replete with references to the fact
12 that the settlement resolves all of the issues and
13 all of the cases. The settlement itself states that
14 and, therefore, to the degree the settlement is
15 silent on that subject matter, and the staff rejected
16 that proposal in the Staff Report, I think it's
17 pretty clear that that proposed withdrawal of Rate TD
18 is no longer a part of this case.
19 EXAMINER CATHCART: I am going to deny it
20 and we can explore that on cross-examination.
21 MR. MICHAEL: Thank you, your Honor. I
22 have no further motions to strike.
23 EXAMINER CATHCART: Thank you.
24 MS. WHITFIELD: Your Honor, on behalf of
25 Kroger, we have a motion to strike that is on page 9,

lines 1 through 4, ending at the "$229.92" as that customer charge is different in the stipulation. It's $100 instead of $229.92.

MR. D'ASCENZO: I'm sorry. Could you repeat that?

MS. WHITFIELD: It's lines 1 through 4 through the amount the $229.92. Because if you recall, in the stipulation, the DP customer charge decreased to $100.

MR. D'ASCENZO: Consistent with the Commission's recent order, we would not oppose that.

EXAMINER CATHCART: I'll grant that motion.

MS. WHITFIELD: I guess to clarify, I guess we need to leave the sentence, so it would be lines -- or, the question would be lines 2 through 4 through the dollar figure. That's all we have.

EXAMINER CATHCART: Thank you.

Okay. We'll start with cross-examination going this way around the room.

MR. DOVE: At this point, your Honor, I don't have any. Thank you.

MS. LEPPLA: No.

MS. FLEISHER: No cross.

MR. WHITT: Your Honor, I am going to

concede to Mr. Oliker and I may have follow-up.

EXAMINER CATHCART: Thank you.

MR. OLIKER: Thank you, your Honor.

- - -

JAMES A. RIDDLE

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

CROSS-EXAMINATION

By Mr. Oliker:

Q. Good afternoon, Mr. Riddle.

A. Good afternoon.

Q. Just a few questions for you today. As I understand it, your testimony describes rates that were derived from the cost-of-service study?

A. My -- my testimony describes the process of taking the revenue requirement from the cost-of-service study and converting those to the charges contained within the tariffs.

Q. And you -- did you personally prepare the cost-of-service study?

A. I did not.

Q. And is that Jim Ziolkowski?

A. Yes.

Q. I'll come back to that. Also your testimony describes certain tariff offerings,

correct?

A. Yes.

Q. And one of those new rate schedules relates to LED lighting, correct?

A. Yes.

Q. And that lighting would be owned and maintained by Duke, correct?

A. Yes.

Q. Could you give examples of what type of LED lighting Duke would own and operate?

A. The proposed LED tariffs lists several different types of lighting and pole, and under the proposal, we would own any and all of those that get, you know, installed, or at the request of our customers.

Q. And would these be in front of the meter or behind the meter or both?

A. Typically lighting is an unmetered service.

Q. Could you explain what that means?

A. Rather than having a meter on each pole or streetlight, you determine the amount of daylight hours, times the usage of the fixture and, you know, determine a rate --

Q. And --

A. -- or a cost on the bill.

Q. Sorry. I didn't mean to interrupt you.

Would any of these LED lighting offerings be behind the meter of a customer?

A. I'm not expertise -- you know, I don't have the expertise to answer that. I assume if the lighting is privately -- well, if it's company-owned, probably not.

Q. Would you agree that there are other companies in the market that could provide the service described by the LED lighting tariff?

A. I would have to assume so.

Q. And switching gears to the -- would you agree there are demand charges for small commercial and large commercial customers in the distribution rate?

A. Yes.

Q. Are you familiar with the way those charges are calculated?

A. The -- using a billing determinant where we measure demand and the revenue requirement. A portion of that revenue requirement is recovered through the demand charge.

Q. And going back to the billing determinant, would you agree that Duke Energy uses

the customer's peak demand within a month? If you know?

A. As measured by the meter, yes.

Q. And would you agree that that demand could occur at a time when the distribution circuit is not peaking?

A. I'm not sure I understand what you mean by "distribution circuit." Or -- go ahead, I'm sorry.

Q. No, if you know, would you agree that the most important time, for purposes of distribution demand, is when the distribution circuit is peaking?

A. Not being an engineer, I don't think I can answer that question.

Q. Would those questions be better directed to Mr. Ziolkowski?

A. Probably.

MR. OLIKER: Okay. I believe those are all the questions I have, Mr. Riddle. Thank you very much.

EXAMINER CATHCART: Thank you.

- - -

CROSS-EXAMINATION

By Mr. Michael:

Q. Hello, Mr. Riddle.

A. Good afternoon.

Q. I want to draw your attention to page 11 of your testimony, starting on line 17 and carrying over to page 12, line 2. Rate TD is a time-of-use rate, correct?

A. Yes.

Q. And did you read the Staff Report filed in the rate case?

A. Yes.

Q. And in the Staff Report, staff suggested that Duke retain Rate TD, correct?

A. Yes.

MR. MICHAEL: I don't have any further questions, your Honor. Thank you.

EXAMINER CATHCART: Thank you.

Any redirect?

MR. WHITT: I'm sorry, your Honor. I do have a few questions.

EXAMINER CATHCART: Please go ahead.

MR. WHITT: Just to follow-up to Mr. Oliker.

- - -

CROSS-EXAMINATION

By Mr. Whitt:

Q. Good afternoon, Mr. Riddle. My name is

Mark Whitt. I represent RESA. I just wanted to follow-up on an area that Mr. Oliker touched on and I want to make sure I understand, when we talk about outdoor -- the proposed LED outdoor lighting service, what exactly we're talking about. Would that be things like streets or parking lots, generally public areas? Are those the types of facilities that would be lighted?

A. I believe so, yes.

Q. Okay. And is outdoor lighting a service that Duke provides today?

A. It is.

Q. Would Duke need to install different types of poles or wires to provide LED lighting service?

A. I don't know.

Q. Do you happen to have LED lights in your home?

A. Yes, I do.

Q. And were you able to go and buy those at Lowe's or Home Depot or somewhere and -- and replace them without having to replace any wiring in your house?

A. Well, I actually got them from Duke Energy. But yes, I did not have to replace any

wiring.

Q. Okay. If a Duke customer today decided they wanted to have LED lights in an area that currently receives outdoor lighting service, could the customer install those LED light bulbs itself?

A. I don't believe so, no.

Q. Is that something that would be prohibited under the tariff to your knowledge?

A. I believe either under the tariff or service regulation.

MR. WHITT: That's all I have.

EXAMINER CATHCART: Thank you.

Any redirect?

MR. D'ASCENZO: No, your Honor.

EXAMINER CATHCART: Thank you.

Thank you. You may be excused.

THE WITNESS: Thank you.

EXAMINER CATHCART: Would you like to move your exhibits?

MR. D'ASCENZO: Yes, your Honor. Thank you. At this time Duke Energy Ohio would like to move into evidence its Duke Energy Ohio Exhibit No. 10 and 10A.

EXAMINER CATHCART: Any objection subject to the motions to strike? Those will be admitted.

(EXHIBITS ADMITTED INTO EVIDENCE.)

EXAMINER WALSTRA: Would you like to call your next witness?

MS. WATTS: Yes. Duke Energy calls Donald L. Schneider, Jr. And, your Honor, may we have Mr. Schneider's direct testimony in the rate case, Case No. 17-32-EL-AIR, marked as Duke Energy Ohio Exhibit 11.

EXAMINER WALSTRA: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MS. WATTS: And may we approach?

EXAMINER WALSTRA: You may.

(Witness sworn.)

MR. HEALEY: Your Honor, before we start, when Duke sent around its list of witness testimony, they identified his ESP testimony, not his rate case testimony, as the relevant one for this case. I have a copy of their submission to the Attorney Examiner if you would like to --

MS. WATTS: That being the case, we can go with -- I think they are identical so.

MR. HEALEY: All my page references are for the ESP one if that's okay with you.

EXAMINER CATHCART: Thank you.

MS. WATTS: Yeah.

MR. HEALEY: Thank you.

MS. WATTS: So just give me a second because I need the ESP copy.

EXAMINER WALSTRA: I believe the one he just passed out is the ESP.

MS. WATTS: Is it? Okay. Well, thanks. The one that's in my book is the rate case. We can get started because I don't even need to refer to page numbers so.

EXAMINER WALSTRA: Okay. Whenever you're ready.

- - -

DONALD L. SCHNEIDER, JR.

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

DIRECT EXAMINATION

By Ms. Watts:

Q. Okay. Sir, would you state your name, please.

A. Yes. Donald L. Schneider, Jr.

Q. And, Mr. Schneider, do you have before you what's just been marked as Duke Energy Ohio Exhibit 11?

A. Yes, I do.

Q. And is that your testimony in this

proceeding?

A. Yes.

Q. Well, let me clarify that. Apparently that's your testimony in Case No. 17-1263?

A. That's correct.

Q. Okay. And you are testifying in the combined proceeding today, correct?

A. Yes, I am.

Q. And if I were to ask you the questions contained therein, again would your responses be the same?

A. Yes, they would.

Q. And are they true and accurate to the best of your knowledge?

A. Yes, they are.

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

EXAMINER WALSTRA: Thank you.

Mr. Dove.

MR. DOVE: No, your Honor.

EXAMINER WALSTRA: Anything?

MS. LEPPLA: Your Honor, Mr. Healey and I talked, he will go first and I will follow-up afterwards.

EXAMINER WALSTRA: No problem.

Mr. Healey, are you going first?

MR. HEALEY: It's up to -- I don't want to cut the line.

MR. WHITT: No, why don't we have --

MR. HEALEY: I imagine mine is the most substantial, so it may reduce the time for everybody.

MR. WHITT: It might make sense for OCC to go first.

EXAMINER WALSTRA: Go ahead, Mr. Healey.

- - -

CROSS-EXAMINATION

By Mr. Healey:

Q. Hello, Mr. Schneider. Good afternoon.

A. Good afternoon.

Q. Good to see you again.

You filed direct testimony in Duke's ESP case in June of 2017, correct?

A. Yes.

Q. And that testimony is before you as what was just marked as Duke Exhibit 11?

A. That's correct, yes.

Q. And in that testimony you described Duke's plan to transition its residential customers to what you refer to as a mesh environment, correct?

A. Yes. So I speak to both our existing

node environment and our mesh environment, and the need to address some concerns with the node environment, which includes a proposal to transition to the mesh environment.

Q. And that proposal to transition to the mesh environment you refer as to the AMI transition plan, correct?

A. That is correct yes.

Q. And, in fact, some Duke customers are already connected to the mesh system, correct?

A. Duke Energy Ohio customers are, yes, some are.

Q. But most of Duke's residential customers are, as you mentioned, connected currently to what you refer to as the node system; is that right?

A. Yes. I am assuming you are referencing Duke Energy Ohio?

Q. Yes. Just -- I am always refencing Duke Energy Ohio unless I say otherwise. We'll assume we are talking about Ohio. I may ask you some questions about other jurisdictions but it will be clear.

A. Okay.

Q. And the meters that residential customers have connected to the node system are made by a company called Echelon, correct?

A. That is the company that made the meters, correct.

Q. And the node system also includes communication nodes which were originally made by Ambient which was later acquired by Ericsson, correct?

A. That's correct.

Q. And so, if I refer to your node system as either "the Echelon system" or "Echelon metering system" you will understand we are talking about the same thing when you say "the node environment," correct?

A. Yes. That makes sense.

Q. Duke has not used the node system in jurisdictions other than Ohio, correct?

A. Duke started initial deployment in the Carolinas as it was proving out the technology, but as far as a full-scale deployment, no.

Q. And would the -- that work in the Carolinas be the only other jurisdiction where Duke used the node system?

A. Yes.

Q. Duke's nonresidential customers in Ohio are generally connected to the mesh system already; isn't that right?

A. Yes. So as we were deploying the Echelon Ambient solution, it became evident that Echelon was not going to manufacture the other forms of meters or for the commercial/industrial customers and so we had to switch vendors or solutions, and so we went with the Itron solution for those customers.

Q. The two systems, one being the node system and the other being the mesh system, use different meter data management systems for Duke Energy Ohio, correct?

A. Yes. So the information from those two systems feed into different meter data management systems, correct.

Q. And the node system uses what you generally refer to as EDMS, correct?

A. That's correct.

Q. And the mesh system feeds into what you generally refer to as MDM, correct?

A. That's correct.

Q. And based on your testimony, when the AMI transition plan is complete, should it be completed, the node system will not be used at all in Ohio, correct?

A. Correct.

Q. And so, every residential customer that

1 currently has an Echelon meter will eventually have
2 an Itron meter should the AMI transition plan be
3 completed?
4 A. That is correct.
5 Q. And all nodes that are currently on the
6 system will be removed?
7 A. Correct.
8 Q. If you were designing a distribution
9 system from scratch, you would not design it to use
10 two different meter data management systems, correct?
11 A. You said a distribution system, but I'm
12 assuming you mean an AMI system?
13 Q. Yes.
14 A. Yes. No, we would not.
15 Q. You're aware that Duke signed a
16 stipulation in this case, correct?
17 A. Yes.
18 Q. Do you have a copy of the stipulation in
19 front of you?
20 A. Do I? I don't know. What's the Exhibit
21 number?
22 MR. D'ASCENZO: It would be Joint 1,
23 Joint Exhibit 1.
24 MS. WATTS: It has "Joint 1" on it.
25 A. Yes, I do have it.

Q. And have you seen the stipulation before today?

A. Yes, I have.

Q. Are you familiar with the three-part test that the Commission uses to evaluate stipulations?

A. Vaguely, yes.

Q. And you did not file any testimony -- testimony in this case after the stipulation was filed; is that right?

A. That's correct.

Q. So you agree then that your ESP testimony, which is being offered today, does not address whether the stipulation meets the Commission's three-part test, correct?

A. That would be correct.

Q. I assume you're familiar with the sections of the stipulation that refer to the PowerForward Rider also known as Rider PF?

A. Yes, I am.

Q. Can you turn to page 16 of the stipulation, please.

A. I'm there.

Q. Starting about two-thirds of the way down the page, the stipulation refers to what is called "Component one - Commission directives" as part of

Rider PF. Do you see that?

A. Yes, I do.

Q. And your proposed AMI transition plan from your ESP testimony is not part of "Component one" of Rider PF; is that right?

A. That's correct.

Q. Let's turn to page 17, please, of the stipulation. On the third line of page 17 of the stipulation it says that Rider PF will include "the communication infrastructure needed to support the AMI transition, but excluding the costs of the smart meters themselves." Do you see that line?

A. Yes, I do.

Q. Now, this communication infrastructure upgrade, that was part of your AMI transition plan, correct?

A. Correct.

Q. Can you turn to Exhibit F to the stipulation, please.

A. I'm there.

Q. And this Exhibit F includes what I think are generally referred to as data access updates for energy suppliers. Is that an accurate description of the -- of what's described on Exhibit F or Attachment F, rather?

A. Yes. I'm not that familiar with these, but reading through it, I think that's a good description.

Q. And all of these upgrades described on Attachment F, would those have been part of your AMI transition plan as well?

A. No, they are not.

Q. So had the company proceeded with its application and pursued the AMI transition plan as originally proposed by you, these upgrades would not have been made?

A. I can't say that. I don't -- this isn't my area of expertise so I cannot say whether they would have or not.

Q. Can you see on Attachment F there are various costs associated with these upgrades in the right column?

A. Yes.

Q. Is it your testimony that these costs were not included in the costs that you've projected for the AMI transition plan?

A. That's correct, they are not included.

MR. HEALEY: Your Honor, may I approach the witness, please?

EXAMINER WALSTRA: You may.

1 MR. HEALEY: Wrong one. Sorry. We'll
2 get to that.
3 MS. WATTS: Okay.
4 MR. HEALEY: Your Honor, I would like to
5 mark as OCC Exhibit 2 the document that I just handed
6 the witness. This is Duke's response to Staff Data
7 Request 14-002 from June 8, 2018.
8 EXAMINER WALSTRA: So marked.
9 (EXHIBIT MARKED FOR IDENTIFICATION.)
10 Q. (By Mr. Healey) Mr. Schneider, I have
11 just handed you what's been marked OCC Exhibit 2.
12 You will see at the bottom you were identified as the
13 responsible witness for this discovery response,
14 correct?
15 A. Yes, I am.
16 Q. And you, in fact, provided this response.
17 A. I did.
18 Q. Let's turn -- keep that in front of you
19 but let's turn back to page 16 of the stipulation --
20 or rather page 17. One more try, page 18.
21 A. I'm there.
22 Q. And in that first full paragraph you'll
23 see about four lines down there is reference to "Cost
24 recovery of the communications system shall not
25 exceed $28,625,000." Do you see that reference?

A. Yes, I do.

Q. And you would agree that the OCC Exhibit 2 that I just handed you, your response to this Staff Data Request pertains to that same $28,625,000 number, correct?

A. Yes, it is.

Q. And according to this exhibit -- or rather this exhibit and your response to the Staff Data Request gives a little bit more detail about how that 28 -- I will just refer to it as the 28.6 million, how that $28.6 million will be spent, correct?

A. Yes, it does.

Q. And most of that money, the 16.6 million, is for removal of nodes, correct?

A. Yes.

Q. And this 16.6 million spent on removing nodes, is that the amount to remove every node on the Duke Energy Ohio system?

A. Yes, it is.

Q. And there's also reference in this exhibit to $4.5 million for CGRs. First, can you tell me what a CGR is?

A. CGR is a connected grid router. It basically serves the same function as the ambient

node. It's the collection point for all the data for the Itron meters.

Q. And the $4.5 million cost for CGRs identified in OCC Exhibit 2, is that the cost to install all necessary CGRs for residential customers in the Duke Energy Ohio system?

A. Yes, for the additional CGRs that we would need to install, yes.

Q. And also with regard to range extenders, 1.1 million, is that all the range extenders that would be needed to complete the AMI transition?

A. Again, all the additional ones, yes, to complete.

Q. You understand that the cost of the new Itron meters for residential customers that do not currently have one will not be recovered through Rider PF, correct?

A. That's correct. From the meters, that's correct.

Q. And in addition to the cost of new meters and this $28.6 million, are there other costs associated with the AMI transition plan?

A. Yes. So in my testimony, Exhibit DSL-1 -- excuse me -- DLS-1, it details the additional costs which are monthly cellular costs and

1 communication device failures and vendor maintenance
2 when you are comparing it to the option of continuing
3 the node environment.
4 Q. And so those vendor maintenance costs,
5 are you proposing that they be recovered through
6 Rider PF?
7 A. I'm not real sure if we -- those are not
8 included in the 28 million, no, so they would not be.
9 Q. And what about the monthly cellular costs
10 under the AMI transition, would they be included in
11 Rider PF?
12 A. They would not be.
13 Q. And what about costs for communication
14 device failures?
15 A. They would not be.
16 Q. If the stipulation in this case is
17 approved as filed, Duke plan -- plans to proceed with
18 the entire AMI transition plan; is that right?
19 A. That's correct.
20 Q. Will Duke proceed with the AMI transition
21 plan if the stipulation is not approved?
22 A. Yes, we will. We have to address some of
23 the issues with the existing node environment and our
24 analysis shows that it would be a more prudent spend
25 to transition to the Itron mesh environment as

1 opposed to upgrading it and what we would have to do
2 to continue to operate and maintain the node
3 environment.
4 Q. What does Duke plan to do with the
5 Echelon meters that are taken off the system as a
6 result of the AMI transition plans?
7 A. Scrap them.
8 Q. When Duke takes an Echelon meter out of
9 the system and scraps them, will the remaining book
10 value of the -- of that Echelon meter offset the
11 revenue requirement under Rider BCI?
12 A. I can't answer that question. It would
13 probably be better for Don Wathen.
14 Q. Do you believe that customers should
15 continue to pay for meters that have been scrapped?
16 A. Well, you know, we have -- I personally
17 think we need to continue to get return on that
18 depreciation, but again, I am not an expert in that
19 area so.
20 Q. Your AMI transition plan from your
21 testimony also includes installing Itron gas
22 communication modules, correct?
23 A. Yes, it does.
24 Q. And the cost for those will not be
25 charged to customers through Rider PF or Rider BCI,

1 right?
2 A. No, they would not.
3 Q. Let's turn back to page 17 of the
4 stipulation, please. And I'd like to talk about
5 "Component three - Infrastructure modernization"
6 which is Subsection c. near the top. Do you see
7 that?
8 A. Yes, I do.
9 Q. The last sentence under that section says
10 that the plan will include a proposal to upgrade the
11 Company's Customer Information System or CIS. Do you
12 see that?
13 A. Yes, I do.
14 Q. Your AMI transition plan did not include
15 any proposal to upgrade the company's Customer
16 Information System, did it?
17 A. No, it did not.
18 Q. And you have not projected how much it
19 will cost to upgrade the CIS in your testimony,
20 correct?
21 A. I did not.
22 Q. But Component three, while mentioning
23 this upgrade to the CIS, is not limited to only
24 upgrading the Customer Information System, right?
25 A. Could you repeat the question?

Q. Sure.

Component three of Rider PF includes a proposal to upgrade the CIS, but that is not the only thing that will be included under Component three, correct?

A. As I read Component three, you are correct. It also includes recovery of costs related to an infrastructure modernization plan which will be filed in a separate proceeding and subject to a hearing. So I don't know if that includes only the customer -- company's Customer Information System or if that includes other.

Q. Has Duke prepared an infrastructure modernization plan that it intends to seek approval of under Component three?

A. I am not aware of one.

Q. Do you know how much any such infrastructure modernization plan will cost?

A. I do not as I am not aware of one.

Q. Is it possible that the cost of Component three, infrastructure modernization, will be more than $100 million?

MS. WATTS: Asked and answered. The witness has testified twice that he is not aware of any such plan.

1 EXAMINER WALSTRA: Sustained.
2 Q. But Duke is not committing, through the
3 stipulation, to any particular limit on the amount
4 that it might seek under Component three, correct?
5 A. I am not aware of any, no.
6 Q. Duke selected Echelon as the supplier of
7 its smart meters sometime in 2007, correct?
8 A. I don't recall the exact date, but I do
9 believe, yes, we were working with Echelon on a
10 solution in that 2006, 2007 time frame.
11 MR. HEALEY: Your Honor, may I approach
12 the witness, please?
13 EXAMINER WALSTRA: You may.
14 Q. Mr. Schneider, I just handed you a copy
15 of the transcript from your deposition that was taken
16 December 6, 2017. Do you recall being deposed by me
17 on that date in North Carolina?
18 A. Yes, I do.
19 Q. And you understood at the time of that
20 deposition that you were answering questions under
21 oath, correct?
22 A. Correct.
23 Q. Could you please turn to page 29 of
24 your -- of the deposition transcript.
25 A. I'm there.

1 Q. And I would direct you to page 29
2 beginning at line 8.
3 "Question: When did Duke select Echelon
4 as the meter supplier?
5 "Answer: That would have been sometime
6 in 2017 -- 2007. I'm sorry. I'll be stuck on that
7 now."
8 Did I read that correctly?
9 A. Yes, you did.
10 Q. Now, the model of the Echelon residential
11 meters in Duke Ohio's territory is the Form 2s Class
12 200 meter, correct?
13 A. Correct.
14 Q. And that's the only Echelon meter that
15 Duke has installed in its Ohio service territory,
16 right?
17 A. Yes.
18 Q. Nonresidential customers of Duke Energy
19 Ohio were never part of the node system, correct?
20 A. Correct.
21 Q. And Duke began installing residential
22 Echelon meters around March of 2008, correct?
23 A. On a full scale, correct. We had an
24 initial deployment -- excuse me -- yeah, initial
25 deployment started in early 2008.

MS. WATTS: Your Honor, could I interpose an objection? The witness was just asked to read from a deposition and I didn't hear any -- I don't know what the purpose of that was, so I don't know where we are with this.

MR. HEALEY: That was an impeachment. I asked him if I read it correctly and that's the end of it.

MS. WATTS: And his statement in the deposition was identical to his statement on the stand.

MR. HEALEY: I am not sure what the objection is, your Honor. I asked a question; it was answered. If they take issue with my impeachment, they can address that to the extent that I use it on brief.

MS. WATTS: I am objecting to the improper use of a deposition for no purpose.

EXAMINER WALSTRA: Overruled.

Q. (By Mr. Healey) Mr. Schneider, the Form 2s electric meter that Echelon produces did not exist before Duke signed the contract with Echelon to provide meters for Duke in Ohio; is that right?

A. I'm sorry. Could you repeat the question?

1 Q. Sure.
2 You're aware, as we just discussed, that
3 the residential Echelon meter is called a Form 2s
4 Class 200 meter, correct?
5 A. Correct.
6 Q. And that meter did not exist before you
7 signed a contract with Echelon to provide meters for
8 Duke in Ohio, correct?
9 A. I don't know for sure if it was
10 manufactured prior to the signing of the contract or
11 not.
12 Q. Duke was aware at the time it selected
13 Echelon that it did not at the time manufacture the
14 type of meter necessary for most nonresidential
15 customers, correct?
16 A. I don't know if it was at the time we
17 selected Echelon. I know at the time we started
18 talking with Echelon they did not manufacture the
19 Form 2s meter.
20 Q. Mr. Schneider, can you turn back to your
21 deposition transcript, please, on page 34.
22 A. Yes. I'm there.
23 Q. Starting at line 15.
24 The Question is: "And Duke was aware at
25 the time it selected Echelon that it did not at that

1 time manufacture the type of meter necessary for most
2 nonresidential customers, correct?"
3 "Answer: Correct. I mean, they actually
4 started manufacturing the Form 2s that's mentioned in
5 my testimony for residential customers. They
6 manufactured that specifically for our deployment
7 with plans to manufacture all the other meter forms
8 for all the other customer classes, as well. They
9 just never went as far as developing any meter past
10 that residential meter."
11 Did I read that correctly?
12 A. Yes, you did.
13 MS. WATTS: And again, your Honor, I
14 would object because the witness's testimony in the
15 deposition is identical to what he just testified to
16 on the stand.
17 MR. HEALEY: Your Honor, that's not
18 accurate. I asked him if the Echelon meters for
19 nonresidential customers were available at the time
20 they selected Echelon, and he responded that they
21 were not available at the time they were discussing
22 it with Echelon which was an earlier time period, so
23 his response was not consistent with the impeachment.
24 MS. WATTS: I don't think the record is
25 clear with respect to what time period was being

1 discussed.
2 EXAMINER WALSTRA: I don't necessarily
3 see the difference, but I'll overrule the objection.
4 The Commission will give it the weight it deserves.
5 Q. (By Mr. Healey) Mr. Schneider, it was
6 Duke's expectation that Echelon would eventually
7 develop smart meters that could be used by
8 nonresidential customers, correct?
9 A. Yes, it was.
10 Q. And it was Duke's intent, when it began
11 deployment of the node system, for both residential
12 and nonresidential customers to be part of that
13 system, correct?
14 A. Correct.
15 Q. But around 2011, Duke realized that
16 Echelon was not going to manufacture any meter forms
17 beyond the Form 2s residential meter; isn't that
18 right?
19 A. Somewhere around the 2011 time frame,
20 yes.
21 Q. So essentially, at that point, Duke had
22 to abandon its plan to add nonresidential customers
23 to the node system and, instead, find a different
24 solution for them, correct?
25 A. Correct.

Q. And then in late 2012 or early 2013, you decided to use the Itron mesh system for nonresidential customers, right?

A. Correct.

Q. And those Itron meters for nonresidential customers were on what we previously discussed is the second-generation meter data management system referred to as MDM, correct?

A. Correct.

Q. And, in fact, Duke was aware of the existence of the second-generation MDM as early as 2011 or early 2012, correct?

A. As I recall, subject to check, yes.

Q. And you would agree that the PUCO staff determined that Duke's SmartGrid deployment was complete in October 2015, correct?

A. Again, subject to check, that does sound correct.

Q. Did Duke know what a smart meter was when it began installing Echelon meters in 2008?

A. When it began installing them in 2008, yes.

Q. Did Duke not know what a smart meter was before that?

A. Prior to that, in the 2006, 2007 time

1 frame, when we were working with Echelon, that was
2 kind of the entrance of smart meters to the utility
3 industry and there were several definitions of a
4 smart meter floating around at that time.
5 Q. Let's move on to page 14 of your
6 testimony, please.
7 A. I'm there.
8 Q. At page 14, line 14, you state that --
9 beginning at line 14, that "If Duke Energy Ohio does
10 not receive necessary regulatory approval and has to
11 continue with the node environment instead of
12 undertaking the Ohio AMI Meter Transition, the
13 Company estimates it would spend $1 million in 2019
14 just to develop a long-term solution to address the
15 node failure issue." Do you see that?
16 A. Yes, I do. Correct.
17 Q. Now, you would agree based on your
18 previous testimony that the company is proceeding
19 with the AMI transition regardless of whether the
20 stipulation gets approved that this is no longer
21 applicable, correct?
22 A. That's correct. We will not have to
23 spend the million dollars if we continue with the
24 transition plan.
25 Q. You've not, in fact, at this point

performed the analysis that you are describing in this sentence that would purportedly cost $1 million, correct?

A. There was not a detailed analysis performed. This was money that was assumed would need to be spent to work with a new vendor. Since Ambient went out of business, we knew we would have to work with a new vendor to supply the next, if you will, the next generation node and that there would be costs in the design and the development of that and that's what this million dollars estimate is.

Q. So you would agree then that if Duke were to continue the node system, you would not currently have a long-term plan for that process, correct?

A. We would have to develop a plan, yes.

Q. And I realize this might seem obvious, but if you have not developed that plan, then you wouldn't know what that plan would cost, correct?

A. As I stated, this is an estimate as to what that would cost to develop.

Q. I'm sorry, maybe I can clarify. You would not know what it would cost to implement such a plan given that you don't have such a plan, correct?

A. You're talking about the plan just in relation to the $1 million?

Q. Yes. So -- so maybe I'll take a step back.

You discuss spending $1 million to develop a long-term solution to address the node failure issue, correct?

A. Correct.

Q. And whatever that solution might be that comes out of that process, you don't know what it would cost to implement that solution, correct?

A. We would not know that cost until we did implement it.

Q. Let's go to page 9 of your testimony, please.

EXAMINER WALSTRA: Did you say 9?

MR. HEALEY: 9, yes.

A. Okay.

Q. On page 9 of your testimony, line 12, you state that communication nodes have been failing at a higher rate than expected, correct?

A. Correct.

Q. And in 2016, the nodes were failing at a rate of about 4.5 percent; is that right?

A. Correct.

Q. But the expected failure rate was just 2 percent, correct?

A. Correct.

Q. Duke's residential customers are not causing the nodes to fail, are they?

A. They are not.

Q. Ericsson provides repair services to Duke for nodes that fail, correct?

A. I'm not sure if they do still today, but they have, yes.

Q. Is anyone other than Ericsson providing repair services for your nodes currently?

A. No.

Q. So is it your testimony that no one is repairing the nodes?

A. I don't believe so. That's not my department, but last I had conversation the cost was becoming prohibitive. Ericsson doubled the cost to repair nodes, and so I believe we were going the direction of no longer sending any nodes back for repair because of the exorbitant costs.

Q. Duke had not supported the option of finding other vendors to repair the nodes, correct?

A. No, Duke has not.

Q. So you wouldn't know what it might cost to find someone else to repair the nodes?

A. No. We can only assume that it would be

similar to Ericsson's costs.

MR. HEALEY: Your Honor, I would move to strike the last part of that response about assuming what it might cost given that he says he doesn't know and that would be speculation and, therefore, outside the witness's knowledge.

MS. WATTS: Your Honor, the witness answered the question with the reason for why he has not explored such costs, and Mr. Healey asked a reasonable question and the witness gave a reasonable response.

EXAMINER WALSTRA: Overruled.

Q. (By Mr. Healey) Let's look at page 8 of your testimony. The Figure 2 at the bottom.

A. Yes.

Q. You would agree, based on this figure, which is as of January 31, 2017, there were approximately 140,000 nodes on Duke's system?

A. Correct.

Q. And about 626,000 Echelon meters?

A. Correct.

Q. And so, roughly each node is connected to four to five meters?

A. Correct.

Q. When a node fails, the meter continues to

1 count the customer's kilowatt-hour usage, correct?
2 A. Yes, it does.
3 Q. And Duke can use the information from the
4 meter to accurately bill the customer?
5 A. You would have to manually go out and
6 retrieve that information if the node has failed.
7 Q. And given that the nodes have been
8 failing at a relatively high rate and, as you stated,
9 they are no longer being repaired, do you have
10 customers currently that when the node fails you are
11 sending someone out to read their meter?
12 A. No, we do not.
13 Q. And so how are you billing those
14 customers currently?
15 A. We have a Business Continuity Plan that's
16 currently in place where we are taking down some
17 nodes and replacing them with the Itron solution, so
18 that we can have nodes in stock to be able to
19 continue to manage the node environment.
20 Q. And so each time a node fails, you are
21 able to replace the node and transition that customer
22 to the Itron solution before the end of the billing
23 cycle?
24 A. No. We don't necessarily -- if a node
25 fails, we try to replace it with a node. The

1 Business Continuity Plan was to get more nodes in
2 stock so we would have them to replace them upon
3 failure.
4 Q. So when a node fails, you replace it, and
5 is that always done before the end of the billing
6 cycle?
7 A. I can't answer that question. I don't
8 know.
9 Q. So you wouldn't know, for example, if a
10 customer had a -- was connected to a failed node on
11 the day that the billing cycle ended, you don't know
12 how that customer is getting a bill that month?
13 A. If we were not able to gather the
14 information, the customer would receive an estimated
15 bill.
16 Q. And Echelon is still manufacturing the
17 meters that Duke uses, correct?
18 A. I believe so.
19 Q. You do not expect the mesh system to
20 improve the reliability of Duke's system as compared
21 to the node system, correct?
22 A. There could be some improvements.
23 Q. Mr. Schneider, can you please turn to
24 page 121 of your testimony.
25 A. Page what?

Q. I'm sorry. Page 121 of your deposition transcript.

A. Okay. I'm there.

Q. Starting at line 14.

The Question is: "Will the mesh system further improve the reliability of Duke's system as compared to the node system?

"Answer: It will basically have the same.

"Question: So you would expect the reliability to be comparable with the mesh system as compared to the node system?

"Answer: Yes."

Did I read that correctly?

A. Yes, you did.

MS. WATTS: Again, your Honor, an objection as to the testimony in the deposition is again what the witness's testimony on the stand is.

EXAMINER WALSTRA: Overruled.

Q. Mr. Schneider, let's look at Exhibit DLS-1 to your testimony, please.

A. Okay.

Q. This document compares the cost of continuing the node environment to the cost of the transition to the mesh environment, correct?

A. Correct.

Q. And it does not purport to compare the benefits of the two, correct?

A. It does not.

Q. And you did not do any analysis of the monetary benefits to customers under continuing the node environment as compared to the transition to the mesh environment, correct?

A. Correct. There was no need to. This is strictly an analysis to determine what was the least-cost method to continue to serve our customers with an AMI solution.

Q. I notice that you use a 7.73 percent discount rate on each of the tables on Attachment DLS-1. Do you see that?

A. Yes.

Q. Did you perform the analysis in DLS-1 using any other discount rates?

A. No, I did not.

Q. So you don't know how these numbers would turn out if you used a higher or lower discount rate, correct?

A. Correct.

Q. And you do not know what the basis for that 7.73 percent discount rate is, correct?

A. I believe it was our weighted cost of capital at the time.

Q. I see on the right-most column on Attachment DLS-1 you identify the years 2019 to 2038, correct?

A. That's correct.

Q. So it would be true that any costs that Duke has incurred to date with the Business Continuity Plan in 2017 or 2018 would not be included in DLS-1, correct?

A. That's correct. They are not included in either one of these options.

Q. And other than the two options you describe on DLS-1, which are "Continue Node Environment" and "Transition to Mesh Environment," you did not calculate the net present value of any other options, correct?

A. We did not perform any detailed analysis on the other options.

Q. You would agree that under the stipulation in this case, Duke -- Duke is not proposing to charge customers for natural gas costs, correct?

A. Correct.

Q. So I direct your attention to the second

1 table which is "Electric Costs Only" and I would also
2 direct you therein to the "Continue Node Environment"
3 heading. Do you see that?
4 A. Yes, I do.
5 Q. And so, under this heading, you are
6 purporting to calculate what it would cost to
7 continue using the Echelon system for Duke's
8 residential customers, correct?
9 A. Yes. So -- so these numbers were simply
10 arrived at by taking the total costs with gas and
11 electric and utilizing our split of gas versus
12 electric customers, so that's how those numbers were
13 arrived at.
14 Q. Now, Mr. Schneider, a couple of minutes
15 ago we discussed your testimony that you would need
16 to spend a million dollars to develop a proposal to
17 continue the node environment, correct?
18 A. Correct.
19 Q. So if you haven't done that analysis as
20 we've discussed and you haven't spent that million
21 dollars, then how could you possibly project what it
22 might cost to continue the node system in this table?
23 A. Again, without going into the details of
24 an RFP and everything else to find a vendor that
25 would be willing to provide a node solution, we

simply estimated that cost at $1,000 to include in our total costs to continue the node environment.

Q. I'm sorry. You estimated what costs at $1,000?

A. At a million dollars, I'm sorry.

Q. Okay. Maybe I -- sorry, go ahead.

A. The cost for a long-term communication node-system solution.

Q. Maybe let's take a step back.

You testified earlier that you have not, in fact, spent that million dollars to develop a long-term plan for the node system, correct?

A. Correct.

Q. And so, therefore, you've not developed any such plan to continue the node system, correct?

A. The entire dollars under "Continue Node Environment" is the plan to continue the node environment system which includes an estimated $1 million for a long-term communication node solution for the communication itself.

Q. When you say "long-term," are you talking about a time period beyond 2019 to 2038?

A. No. It would be inclusive of that time period.

Q. So that is the long-term period you're

1 referring to?
2 A. Yes.
3 Q. And so you, on this DLS-1, are purporting
4 to project what it will cost to continue the node
5 system through 2038, correct?
6 A. Correct.
7 Q. But since you've not spent the million
8 dollars to prepare that long-term plan, you don't
9 actually know what that plan will look like.
10 MS. WATTS: Objection. Mischaracterizes
11 his testimony.
12 EXAMINER WALSTRA: The witness can
13 clarify.
14 THE WITNESS: Could you repeat the
15 question, please.
16 MR. HEALEY: Can I have the question
17 reread, please.
18 (Record read.)
19 A. In general, the plan would call to
20 replace all the communication nodes. It would call
21 to convert the Echelon meters from EMS to MDM. It
22 would call for working with a new communications node
23 manufacturer. It would call -- it would require
24 headend upgrades, it would require monthly cellular
25 costs, it would include communication device

1 failures, and vendor maintenance for us to continue
2 the node environment.
3 Q. And so, if you've already determined all
4 those steps were necessary, what would be the purpose
5 of your spending an additional $1 million in 2019 to
6 develop a plan that you just described to me right
7 now?
8 A. The $1 million is not for developing an
9 all-inclusive plan to continue the node environment.
10 The $1 million is to come up with a long-term
11 solution for the node itself since Ambient no longer
12 manufactures those nodes.
13 Q. And there's a line on DLS-1 in each of
14 the tables called "4G Communication Node Upgrade."
15 Do you see that?
16 A. Yes, I do.
17 Q. And is that different than what you just
18 referred to as a long-term solution for the nodes?
19 A. You develop the long-term solutions,
20 spend a million dollars, an estimated million
21 dollars, and you develop a long-term solution for
22 what that node will be, who the manufacturer will be,
23 and then you spend the $91 million to replace the
24 nodes.
25 Q. And so, although you don't know the

1 manufacturer, you don't know how this will be done,
2 you know how much it will cost?
3 A. That's our rough estimate based on the
4 costs that we were paying for nodes at the time we
5 were purchasing nodes.
6 Q. Mr. Schneider, do you believe SmartGrid
7 reduces a utility's operations and maintenance or O&M
8 costs?
9 A. Absolutely.
10 Q. By how much did Duke's investment in
11 SmartGrid reduce Duke's O&M costs during the test
12 year in this case?
13 A. I believe Don Wathen has the exact
14 numbers, but if I recall the differences in our 2012
15 base rate case to this one is around a $16 million
16 reduction.
17 Q. And it's your testimony that all of those
18 dollars are identifiable as being attributable to
19 SmartGrid?
20 A. I can't answer that. That would be Don
21 Wathen's answer.
22 Q. Does Duke currently have the ability to
23 disconnect residential customers remotely?
24 A. Yes, we do.
25 Q. And if Duke completes its AMI transition

1 plan, it will continue to have that capability,
2 correct?
3 A. Correct.
4 Q. So it would be fair to say that the
5 ability to connect and disconnect customers remotely
6 is not an added benefit of the AMI transition plan,
7 correct?
8 A. It's a continued benefit, correct.
9 Q. Can you turn to page 13 of your
10 testimony, please.
11 A. You say 13?
12 Q. Yes, page 13. And the first full
13 sentence on line 11 says, "Having all meters in the
14 Itron AMI mesh environment would mean that the
15 Company would have billing-quality interval AMI CEUD
16 for all its electric customers with AMI meters
17 because Itron meters necessarily feed data into MDM
18 rather than EDMS. Do you see that sentence?
19 A. Yes, I do.
20 Q. Can you tell me what CEUD is?
21 A. Customer energy usage data.
22 Q. And when you use the word "interval," can
23 you tell me what that means in this context?
24 A. Yes. Depending on how we collect that
25 interval in the AMI meter itself, it could be

15-minute intervals, it could be 30-minute intervals.

Q. And you mentioned 15- to 30-minute intervals. Does "interval" necessarily mean less than an hour?

A. No, not necessarily.

Q. And if you had data that was only done by the day, 24 hours, you would not consider that to be interval data, would you?

A. Yes, it would be.

Q. You use the phrase "billing-quality." For data to be billing-quality, it must go through Validating, Editing, and Estimation, also known as VEE, correct?

A. Correct.

Q. And so, by extension, if data has not gone through the VEE routine, then it is necessarily not billing-quality data, correct?

A. That's correct.

Q. You testify in this sentence here that once all meters are in the Itron solution, the company would have billing-quality interval AMI CEUD for all its electric customers. Does Duke's residential customers currently not have billing-quality interval AMI CEUD?

A. Not provided by the EDMS, no.

Q. When Duke designed its initial SmartGrid deployment did it intend that the Echelon system would be able to provide billing-quality interval AMI CEUD for all residential customers?

A. Yes. When we designed the EDMS system, the requirements were for it to have scalable VEE.

Q. In your testimony you state that one reason the AMI transition is necessary is that Verizon is discontinuing its 2G and 3G networks after 2022, correct?

A. Correct.

Q. And has Duke asked Verizon for an extension between 2022?

A. We have talked to Verizon, my understanding, and that was the absolute longest extension that they would provide us.

Q. Has Duke had conversations with any other cellular providers other than Verizon?

A. Not that I'm aware of. That's in our telecom area; not my expertise.

Q. If you wanted to switch to another provider, you would have to replace the cellular modems in the nodes, correct?

A. Correct.

Q. And Duke did not analyze the cost of

1 replacing the cellular modems to use a different
2 network, correct?
3 A. Well, again, when we pull them down to
4 have to change out the communications module, whether
5 it would be a Verizon or AT&T or any other carrier,
6 those costs would be very similar.
7 Q. My question was did you -- you did not
8 analyze the cost of replacing the cellular modems to
9 use a different network, correct?
10 A. Correct. There was no need to.
11 Q. If Verizon's 2G and 3G networks will
12 continue to operate until 2022, Duke still has
13 several years to figure out the best way to address
14 the issue with the networks being sunset; isn't that
15 right?
16 A. We have less than four years, correct.
17 Q. Do you expect your AMI transition plan to
18 be complete by 2022?
19 A. I believe it goes into the first quarter
20 of 2022 if I recall.
21 Q. And your proposed mesh system, under the
22 AMI transition plan, would work on Verizon's 4G
23 network, correct?
24 A. Correct.
25 Q. Will it work under Verizon's 5G network

should that network go live?

A. That would be speculative on my part.

Q. So if Verizon were to sunset the 4G network and transition exclusively to 5G, you don't know whether or not the AMI transition plan would continue to function, correct?

A. I do not. They could make it downward compatible. I just don't know if they would do that or not.

MR. HEALEY: Your Honor, could I take 1 minute, please?

EXAMINER WALSTRA: Sure. We can go off the record.

(Discussion off the record.)

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

MR. HEALEY: I have nothing further, your Honor. Thank you.

EXAMINER WALSTRA: Thank you.

Are you all right, Mr. Schneider?

THE WITNESS: Yes.

EXAMINER WALSTRA: Keep going.

- - -

CROSS-EXAMINATION

By Ms. Leppla:

Q. Hello, Mr. Schneider. I'm Miranda Leppla and I'm representing the Ohio Environmental Council and the Environmental Defense Fund.

A. Hello.

Q. So just to -- I know you talked a little bit with Mr. Healey, but in your testimony you discuss why --

EXAMINER WALSTRA: Could you turn on the mic?

Q. Better?

A. Yes.

Q. It's working? Good.

So in your testimony you discuss why Duke is replacing the AMI -- I'm sorry -- the Echelon AMI node environment in its entirety with the Itron AMI mesh system, correct?

A. Correct.

Q. And when Duke initially installed those Echelon meters, Duke received cost recovery, correct?

A. In what form?

Q. As far as cost recovery from ratepayers for those.

A. Yes.

Q. Okay. And Duke's requesting cost recovery here for replacement of those with Itron meters, correct?

A. Correct.

Q. And you've testified in other states on this topic?

A. Yes, I have.

MS. LEPPLA: I'm going to go ahead and mark a couple of exhibits now and just pass them out. Make this easier. May I approach, your Honor?

EXAMINER WALSTRA: You may.

MS. LEPPLA: The first one is testimony from Mr. Schneider from Indiana. And the second one I'll hand you, just so you've got both, is testimony from a Kentucky case.

MS. WATTS: And, your Honor, I'll start now with an objection to these testimonies which were provided in other states which are not relevant in Ohio.

MS. LEPPLA: I would like to be permitted to ask some questions about them because I think they are relevant and they are also public records.

EXAMINER WALSTRA: I'll let her question the witness before I rule.

MS. LEPPLA: Thank you, your Honor.

(EXHIBITS MARKED FOR IDENTIFICATION.)

Q. (By Ms. Leppla) Mr. Schneider, I've handed you two exhibits. One is, and I will mark it OEC/EDF Exhibit 1, and it is testimony from a case before the Indiana Utility Regulatory Commission, Cause No. 44720. Does that look familiar to you?

A. Yes, it does.

Q. And is that your testimony submitted in that case?

A. Yes, it is.

Q. Okay. And I will ask you the same questions for the second document I handed you which I'll mark OEC/EDF Exhibit 2 which is testimony submitted to the Kentucky Public Service Commission in Case No. 2016-00152. Does that look familiar to you?

A. Yes, it does.

Q. And is that your testimony submitted before the Kentucky Public Service commission?

A. Yes, it is.

MS. LEPPLA: And, your Honors, I have this e-mailed out, but I'll send it to everybody else so everybody has copies of this.

EXAMINER WALSTRA: Okay.

Q. Mr. Schneider, did you do cost/benefit

1 studies in each of those states for your Indiana
2 testimony and your Kentucky testimony?
3 MS. WATTS: And again, objection, your
4 Honor. I don't think any cost/benefit study relevant
5 to a case proceeding in another state is relevant to
6 this proceeding.
7 EXAMINER WALSTRA: I'll continue to see
8 where this is going.
9 MS. LEPPLA: Thank you, your Honor.
10 A. Yes.
11 Q. Yes? And Duke did not do a full
12 cost/benefit study on their replacement of meters for
13 Ohio in this case, correct?
14 A. Duke did a full cost analysis -- benefit
15 analysis for the original Echelon solution, but in
16 this case, again, it was simply a cost analysis to
17 determine what was the best, most-prudent spend going
18 forward to address the issues with the node system.
19 Q. So there was no updated cost/benefit
20 study done for the replacement with Itron?
21 A. Not what I would call a cost/benefit
22 study, no. Just a cost analysis.
23 Q. Okay. And one of the major benefits you
24 reference in the studies done for Indiana and
25 Kentucky is related to that customer access to

interval data. And I believe the language you use is you can empower customers to better understand their usage and save energy.

A. Correct.

Q. I can give you the cites if that's necessary.

A. Correct.

Q. Correct?

And would you agree that Ohioans would similarly benefit from access to that type of data?

MS. WATTS: Objection, your Honor. The foundation for this questioning is completely out of order because these proceedings in other states are not even remotely similar to the one that's before -- before the Commission in Ohio right now. So drawing parallels between his testimony in those proceedings with this proceeding is completely off base.

MS. LEPPLA: Your Honor, it's not irrelevant, especially when he is generalizing as much as it empowers customers to better understand their energy usage and save energy. I am merely asking whether or not Mr. Schneider believes that Ohioans would similarly benefit from interval data access.

EXAMINER WALSTRA: I'll continue to allow

it.

MS. LEPPLA: Thank you.

A. So, I'm sorry, could you repeat the question?

Q. Sure.

Would you agree that Ohioans would similarly benefit from access to that interval data in real time?

A. Yes, and they have been since -- since the deployment of the Echelon solution.

Q. And consumers are only able to benefit from the types of items that you've referenced in prior testimony and probably in the Ohio testimony on the cost/benefit analysis done and customer -- I'm sorry, let me rephrase that. I was getting a little complicated.

Consumers are only able to benefit from those cost benefits that are identified by Duke if Duke actually delivers those benefits, correct?

A. Correct.

MS. WATTS: Objection as to the form of the question. Counsel is referring to cost benefits. I have no idea which cost benefits she's referring to.

EXAMINER WALSTRA: I agree. Can you be

more specific?

MS. LEPPLA: Sure, your Honor.

Q. So I'm giving you copies of your testimony in prior cases where you did cost/benefit analyses, correct?

A. Correct.

Q. Okay. And those benefits that you've identified through those studies that Duke has done, a consumer, a ratepayer, is only able to access those benefits if Duke actually delivers the benefits, correct?

MS. WATTS: Objection. Counsel, could you point specifically to a place in his testimonies where he identified specific benefits so we all know what benefits we're addressing?

MS. LEPPLA: Well, right now I am just asking generally, and I'm going to keep going and I will get to more specific benefits if that's okay.

MS. WATTS: Well, to the extent you asked generally, the question is unclear.

MS. LEPPLA: I would disagree. There is a host of benefits. If a benefit is going to be identified and a consumer is going to receive benefits from that, it would make sense that Duke actually delivers the benefits that they are

1 identifying in those cost/benefit studies; otherwise,
2 there is no benefit at all.
3 EXAMINER WALSTRA: Are you referencing
4 specific benefits in these other states?
5 MS. LEPPLA: I am just referencing the
6 cost benefits right now. I am happy to move on and
7 come back to it if you like, but I am just asking
8 generally. If you are going to do a cost/benefit
9 study, the benefits actually have to be delivered to
10 be beneficial.
11 EXAMINER WALSTRA: You can proceed.
12 THE WITNESS: Correct.
13 MS. LEPPLA: Thank you.
14 Q. (By Ms. Leppla) If Duke is planning, as
15 it is here, to get cost recovery for these meters,
16 should it be required to deliver those benefits to
17 Ohio consumers?
18 A. Yes. And we will.
19 Q. And so Duke will commit to providing
20 those benefits to Ohio consumers?
21 A. We have been providing those benefits and
22 will continue to.
23 Q. And Mr. Schneider, I think I know the
24 answer to this, but have you heard of the "Prius
25 Effect"?

A. Yes, I have.

Q. Okay. And that's the effect that occurred after people started driving Prius cars and referring to the fact that when people saw in real time how much gas they were saving, they actually went out of their way to save even more gas, correct?

A. Correct.

Q. Is there something similar to the Prius Effect that occurs with AMI meters and home energy monitors such that when a customer sees how much electricity that they are saving in real time or near real time, they strive to save more?

A. Yes. There's studies that show even just with having the usage data readily available in a near real time, just having that information, not even tied to the home network, that customers still use that information to change their habits to reduce their usage.

Q. In any of the cost/benefit studies that Duke Energy Ohio has filed with the Commission for AMI deployment, and you referenced one they had done previously for the Echelon meter installation, has Duke tried to estimate the savings that would occur by providing customers access to their data near real time due to the Prius Effect?

A. Yes. So I wasn't involved in the business case for the original node environment Echelon solution, but if my memory serves me correct, there was a benefit in there titled "Prius Effect" which was all around the amount of energy customers could save based on having your real time usage data and based on a study that showed that by having that data, and I can't remember the exact percentage but somewhere in the range of I thought it was 5 to 10 percent reduction just by having that data available to them and beginning to change their energy usage habits.

Q. So it can be measured as part of a cost/benefit test for AMI, the Prius Effect?

A. It can be estimated. No way it can be measured.

Q. If you could refer to Exhibit 1 which is the Indiana testimony. If you go to, it's actually the last page of the document, it's Exhibit 5-J and it entitled "AMI Metric Reporting."

A. Yes, I see that.

Q. And you propose in this measuring the Prius Effect related to AMI deployment as a means of demonstrating the prudency of that program, correct?

A. Yes. So we measured the number of

1 customers who can view interval usage data on the
2 customer portal, and the number of different
3 customers viewing interval usage data from the AMI
4 meter on the customer portal.
5 Q. And if you flip back in that same
6 document a few pages. It's Exhibit 5-H entitled
7 "Detailed AMI Costs and Benefits." And this shows
8 that the Prius Effect over a 10-year period was
9 valued at 125.38 million; is that correct?
10 A. Hold on. I am not quite there yet.
11 Q. Sure.
12 A. 5-H?
13 Q. Yes.
14 MS. WATTS: And, your Honor, again I
15 would like to object to this line of questioning.
16 And it should be -- both of these states are fully
17 regulated states, so some of these issues are
18 completely different in these states than they are in
19 Ohio. And without making that clear and laying a
20 foundation, there's -- it's really not clarifying the
21 record in any respect or helping us make decisions in
22 this particular case.
23 EXAMINER WALSTRA: Your objection is
24 noted. I am going to continue to see where this is
25 going.

1 MS. LEPPLA: Thank you, your Honor.
2 Q. Mr. Schneider, I'll just remind you of my
3 question. If you look down toward the bottom of that
4 chart where it says "Customer Feedback" and in
5 parentheses it says "Prius Effect"?
6 A. Yes.
7 Q. And there's a total column.
8 A. Yes.
9 Q. And it shows that the Prius Effect over
10 that period was valued at 125.38 million, correct?
11 A. Correct.
12 Q. Okay. And the line below that shows that
13 the total customer benefits are 336 million?
14 A. Correct.
15 Q. So the Prius Effect accounts for about a
16 third of the total customer benefits from AMI in the
17 Indiana plan, correct?
18 A. Let me clarify that. So the total
19 benefits is the 642; the very bottom number.
20 Q. I'm sorry. The total customer savings.
21 A. The total customer savings is 336.
22 Q. Right. So about a third of that customer
23 savings was from the Prius Effect.
24 A. That's correct.
25 Q. Okay. If you could turn to Exhibit 2

which is the Kentucky testimony.

A. Kentucky testimony?

Q. Yeah. And if you could flip to about, it's about six pages from the end. I apologize.

A. Could you give me some idea where that exhibit is?

Q. Yes. DLS-4 which is the Exhibit number and it's page 8 of that exhibit.

A. Page 8? Okay. Maybe I should have got some stronger glasses.

Q. I'm sorry. I know they are tiny. My apologies. That's how they printed out.

And so if you look at the bottom of that page, you also measured the Prius Effect in the cost/benefit study for Kentucky, correct?

A. Correct.

Q. Okay. So that entire component of the benefit category here was called "Customer Savings"?

A. That's correct.

Q. And if you flip to the first page of that same Exhibit DLS-4.

A. Page 1?

Q. Yes, correct.

A. Okay.

Q. It's not as small, so hopefully you can

read it better.

A. Yes.

Q. It shows here that this "Customer Savings" category, which you noted was the Prius Effect in its entirety, is about 20 million of the total AMI benefits of that 114 million?

A. In nominal values, correct.

Q. So it's a little bit under 20 percent of the total benefits, correct?

A. Correct.

Q. Okay. Would you expect the Prius Effect to be similar in magnitude to the projections made in Indiana and Kentucky for Duke Energy Ohio customers if they had access to interval data near real time?

A. I see no reason why they would be.

EXAMINER WALSTRA: Anyone else?

Any redirect?

MS. WATTS: Yes, your Honor. May we have 5 minutes?

EXAMINER WALSTRA: Sure. We'll recess for 10.

(Recess taken.)

EXAMINER WALSTRA: We'll go back on the record. Whenever you're ready.

MS. WATTS: Okay. Thank you.

REDIRECT EXAMINATION

By Ms. Watts:

Q. Mr. Schneider, are you ready?

A. Yes, I'm ready.

Q. Do you recall, sir, responding to some questions, questions from Ms. Leppla, with respect to the Prius Effect?

A. Yes, I do.

Q. In particular she called your attention to a -- your testimony in Kentucky before the Commonwealth of Kentucky Public Service Commission. Do you recall that?

A. Yes, I do.

Q. Did you discuss the Prius Effect in that testimony?

A. Yes, I believe I did.

Q. And did you discuss the benefits of the Prius Effect in that testimony?

A. Yes, I did.

Q. And would you turn to page 28 of your testimony, please, in the Kentucky proceeding.

A. Yes, I'm there.

Q. Can you look at lines 1 through 4 on that -- on that page, please.

A. Yes.

Q. Isn't it true that the estimated savings for the Prius Effect in the Kentucky proceeding were modeled after the savings that had been derived in Ohio for the same benefit?

A. Yes, that's correct.

Q. And isn't it also true that the Prius Effect was one of the original benefits that was identified in the cost/benefit analysis that was filed with the Commission at the beginning of the SmartGrid deployment for Duke?

A. Yes, it was.

EXAMINER WALSTRA: What line is that in reference to?

MS. WATTS: Your Honor, page 28, lines 1 through 4, of the Kentucky testimony.

EXAMINER WALSTRA: Thank you.

Q. (By Ms. Watts) Mr. Schneider, one last question about that, in Kentucky what type of physical deployment was carried out?

A. In terms of the technology type?

Q. Yes. Which type of technology?

A. The Itron solution, mesh environment.

Q. Thank you. Turning your attention to your -- the attachment to your Ohio testimony, Attachment DLS-1, do you see that?

A. Yes, I have it.

Q. And do you recall that Mr. Healey asked you to clarify that there were no benefits analyzed in this table but that it was merely a cost analysis?

A. Yes, I recall that.

Q. And why are there not benefits factored into this analysis?

A. Well, there could be benefits factored in and the benefits would be the same for both scenarios because with the node environment we've already -- we already received those benefits from the node environment, and whether we continue with that node environment we would continue those benefits, or whether we transition to the mesh environment we would continue with those benefits.

Q. Okay. Thank you. And I believe you also testified in response to a question from Mr. Healey that the company would likely proceed with an AMI transition plan regardless of the Commission's actions in this case. Can you clarify that response, please?

A. Yes. I mean, if we want to continue to provide those benefits that we talked about, then we have to do something. And as this analysis shows, the least cost method of doing that would be to

1 transition to the mesh environment. I mean,
2 obviously there's the option to do nothing which
3 would be go back to a walk by solution, but in that
4 case we would receive none of those benefits and, you
5 know, I hear the Commission talk about PowerForward.
6 I don't hear them talk about PowerBackward.
7 MS. WATTS: Thank you. Nothing further,
8 your Honor.
9 MR. HEALEY: I do have quick recross,
10 your Honor.
11 RECROSS-EXAMINATION
12 By Mr. Healey:
13 Q. Mr. Schneider, you just testified in
14 response to questions from your counsel that benefits
15 are not included in DLS-1 because they would be the
16 same under the node and mesh system; is that right?
17 A. That's correct.
18 Q. So it's your testimony that the AMI
19 transition will provide no new benefits to customers?
20 MS. WATTS: Your Honor, I object. That
21 was asked and answered on original cross.
22 EXAMINER WALSTRA: Overruled.
23 A. Yeah. It would provide the same
24 benefits.
25 Q. So there are no new benefits to customers

from continuing -- from completing the AMI transition plan, correct?

A. That's correct.

MR. HEALEY: Nothing further, your Honor.

EXAMINER WALSTRA: Ms. Leppla.

MS. LEPPLA: Just a couple of questions.

- - -

RECROSS-EXAMINATION

By Ms. Leppla:

Q. Mr. Schneider, the first -- the beginning of the SmartGrid deployment for Duke Ohio was in 2007-2008; is that correct?

A. Correct.

Q. And any analysis done in Ohio would have been done for the rollout of Echelon meters, not Itron meters, correct?

A. Correct.

Q. And no updated cost/benefit study was done in Ohio for the replacement of the Echelon meters with Itron meters, correct?

A. Again, there was no need to but, yes, you're right.

Q. Okay. And that's about 10 years ago, correct, the original study was done?

A. I thought you said with the transition.

1 Could you repeat your question? I'm sorry.
2 Q. I just was checking there's no updated
3 cost/benefit study that's been done here in Ohio for
4 the replacement of Echelon meters with the Itron
5 meters, correct?
6 A. Again, this was a cost analysis. There
7 is no need to include the benefits because both of
8 these scenarios continue the benefits.
9 Q. And that original cost/benefit study was
10 done though for the original rollout of this
11 SmartGrid for Duke?
12 A. For the node environment, yes.
13 MS. LEPPLA: Okay. Nothing further, your
14 Honor.
15 EXAMINER WALSTRA: Thank you,
16 Mr. Schneider.
17 THE WITNESS: Thank you.
18 MS. WATTS: Your Honor, we would move for
19 admission of Exhibit I think it's 11.
20 EXAMINER WALSTRA: Yeah. Any objections?
21 Hearing none, it will be admitted.
22 (EXHIBIT ADMITTED INTO EVIDENCE.)
23 MS. LEPPLA: Yes. We would move for --
24 I'm sorry -- admission of OEC/EDF Exhibits 1 and 2.
25 EXAMINER WALSTRA: Any objections?

1 MS. WATTS: Your Honor, I object because
2 I still would maintain that they are irrelevant since
3 they are testimony out of Ohio and irrelevant to
4 what's before the Commission in this case.
5 MS. LEPPLA: If I may respond, your
6 Honor, these are both public documents. The witness
7 identified them as his own testimony in two other
8 states. He testified about the Prius connection or
9 the Prius Effect connection. And any issues that
10 Duke takes with these -- the admission of these can
11 be done on brief.
12 MS. FLEISHER: And, your Honor, I will
13 just chime in Mr. Schneider is testifying here about
14 potential benefits of smart meters and cost
15 appropriating for those and the testimony is about
16 benefits of smart meters and so I think it's directly
17 relevant.
18 MS. WATTS: Your Honor, if they are to be
19 admitted, I would ask they be used only for the
20 purpose they were used in testimony here today with
21 respect to that one item, the Prius Effect.
22 Otherwise all of the testimony would be part of the
23 record and that seems inappropriate.
24 EXAMINER WALSTRA: All right. The Bench
25 will take admit it but limit to the reference to the

1 Prius Effect and what was discussed in the hearing
2 room which I think was the last page of OEC/EDF 1.
3 MS. WATTS: And page 28.
4 EXAMINER WALSTRA: Page 28, lines 1
5 through 4 of OEC/EDF Exhibit 2.
6 MS. LEPPLA: Your Honor, if I could just
7 suggest the testimony itself come in because I'm not
8 100 percent sure as we sit here if there are other
9 references to the Prius Effect in the actual
10 testimony, and if we could just reference those pages
11 as well admitted, I would be okay with that.
12 EXAMINER WALSTRA: Can you say that
13 again?
14 MS. LEPPLA: Sure. If we could admit
15 those exhibits, admit his testimony in both of those
16 exhibits but just admit the documents that I
17 referenced, I would be okay with that, those exhibits
18 that I referenced.
19 EXAMINER WALSTRA: Okay. Wait. Did you
20 say the whole testimony?
21 MS. WATTS: I'm not sure I --
22 MS. LEPPLA: His testimony and I
23 referenced two exhibits in each and if we could have
24 that testimony and those exhibits.
25 EXAMINER WALSTRA: Yeah, that's what I

1 was trying to --
2 MS. LEPPLA: I was trying to save time
3 trying to find page numbers.
4 EXAMINER WALSTRA: I think for a clearer
5 record we should put them on the record which I
6 believe was DLS-4 attachment, page 1 and page 8 of
7 the same attachment.
8 MS. WATTS: No objection.
9 (EXHIBITS ADMITTED INTO EVIDENCE.)
10 MR. HEALEY: Your Honor, I would just
11 note that Ms. Watts did ask questions on his
12 testimony that was unrelated to the Prius Effect on
13 their redirect including questions about what type of
14 meters were installed. So to the extent we are
15 limiting the use of these documents to issues related
16 to the Prius Effect, then those portions of the
17 transcript should either be struck or Duke should
18 agree not to reference those either.
19 EXAMINER WALSTRA: I am going to deny
20 that. I think those were clarifying questions in
21 regards to the initial questions.
22 MS. LEPPLA: Your Honor, if I may, that's
23 part of the problem of striking parts of this. If we
24 are going to have other testimony clarifying it, I
25 don't want the record to be unclear as to what I was

1 referencing. And, again, these are public documents.
2 This is something you can go and pull up.
3 EXAMINER WALSTRA: I think his testimony
4 on the stand still stands for what he said. I think
5 that was just clarifying the differences between the
6 states.
7 MS. LEPPLA: Sure. I just want to make
8 sure I understand your ruling is the testimony itself
9 comes in, each of the exhibits, and then the exhibits
10 that I referenced that were attached to that
11 testimony are in as well?
12 EXAMINER WALSTRA: No, just the specific
13 testimony on page 28, line 1 through 4, and the
14 attachments that were referenced in his testimony in
15 his cross-examination.
16 MR. HEALEY: Your Honor, if we're now
17 done with that, I would now move for the admission of
18 OCC Exhibit 2.
19 MS. LEPPLA: Before we move on, I am not
20 sure which pieces you are admitting because there
21 were other parts of this testimony that do reference
22 the Prius Effect. I didn't specifically call them
23 out and there are pieces of this that reference that
24 cost/benefit that I am pointing out which is why I
25 was hoping that we could admit the entirety of his

1 testimony from both of these and then the exhibit
2 pages that I referenced specifically.
3 MS. WATTS: Your Honor, with respect to
4 the balance of the testimony it's not relevant to
5 this proceeding. The only thing that was apparently
6 relevant was what was asked of the witness while he
7 was on the stand in this case by opposing counsel.
8 They've already selected from that testimony what
9 they deemed to be important and you've admitted that
10 into the record and that should be sufficient.
11 EXAMINER WALSTRA: Right. I mean,
12 nothing was pointed out other than the exhibits and
13 the testimony regarding the Prius Effect. Other than
14 that he answered your questions regarding the Prius
15 Effect. And regarding the rest of this testimony, I
16 don't think anything was brought up to be relevant in
17 this proceeding.
18 MS. LEPPLA: Can you tell me one more
19 time which pages you are admitting? I am not sure.
20 I was trying to find page 20, and I think it might
21 have been the wrong exhibit.
22 EXAMINER WALSTRA: OEC/EDF Exhibit 2,
23 page 28, lines 1 through 4. And then also in OEC/EDF
24 Exhibit 2 Attachment DLS-4, page 1 and 8.
25 MS. LEPPLA: And for Exhibit 1? I

1 believe it was the last page of the document I
2 referenced and then -- which was Exhibit 5J.
3 EXAMINER WALSTRA: 5J and I believe also
4 as well as 5H.
5 MS. LEPPLA: Thank you, your Honor.
6 EXAMINER WALSTRA: I believe Mr. Healey
7 started to move his exhibit.
8 MR. HEALEY: Yes, your Honor. I would
9 move for admission of OCC Exhibit 2 at this time.
10 Thank you.
11 EXAMINER WALSTRA: Any objection?
12 MS. WATTS: No objection.
13 EXAMINER WALSTRA: It will be admitted.
14 (EXHIBIT ADMITTED INTO EVIDENCE.)
15 EXAMINER CATHCART: Would you like to
16 call your next witness, please.
17 MS. WATTS: Yes, thank you. Duke Energy
18 Ohio calls Richard Brown.
19 (Witness sworn.)
20 EXAMINER CATHCART: You may be seated.
21 - - -
22
23
24
25

1 RICHARD E. BROWN
2 being first duly sworn, as prescribed by law, was
3 examined and testified as follows:
4 DIRECT EXAMINATION
5 By Ms. Watts:
6 Q. Sir, good afternoon.
7 A. Good afternoon.
8 Q. Would you state your name, please.
9 A. Richard Brown.
10 Q. And, sir, with whom are you employed?
11 A. Exponent.
12 Q. And do you --
13 MS. WATTS: Your Honor, may we have
14 Mr. Brown's testimony marked as Duke Energy Ohio
15 Exhibit 12?
16 EXAMINER CATHCART: So marked.
17 (EXHIBIT MARKED FOR IDENTIFICATION.)
18 MS. WATTS: May we approach?
19 EXAMINER CATHCART: You may.
20 Q. (By Ms. Watts) Sir, do you have what has
21 been marked as Duke Energy Ohio Exhibit 12?
22 A. Yes.
23 Q. Is that the testimony you caused to be
24 filed in this case?
25 A. Yes.

Q. And do you have any additions or corrections to that testimony?

A. Yes. I have a few.

Q. Would you tell us what those are, please.

A. Yes. On page 3, line 14, there is the acronym "SAIDI," S-A-I-D-I, that should be "SAIFI," S-A-I-F-I.

Q. Thank you.

A. Yes. And there is a few editorial changes as well. Page 6, line 7, the word "increased" should be "increases."

Page 14, line 19, the words "planned interruptions" should being changed to "changes in hotline tag requirements."

Page 19, line 7, the first word is misspelled. That should say "expected" spelled correctly.

Q. I'm sorry. Could you provide a reference point to that last one?

A. Yes. It is page 19, line 7, the first word. It's --

Q. Mr. Brown, my copy of your testimony on page 19, line 7, starts with the word "feeder breaker."

A. Okay. I'm using a copy that I have that

may not be.... I apologize here.

Q. The word "expected" appears in the second paragraph on that same page. I don't know if that's the one we're looking for.

A. Yes. It looks like the new copy has that spelling change corrected. I must have an old copy. And then there is just one more.

Q. Okay.

A. And then that's in a footnote. On page 22 in the footnote, the second to last line of the footnote, it says "typically be is" and "is" should be struck. That should just be deleted. And those are all of the changes.

Q. Thank you. And, sir, with those corrections if I were to ask you the questions contained in your testimony again today, would your responses be the same?

A. Yes.

Q. And are they true and accurate to the best of your knowledge?

A. Yes.

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

EXAMINER CATHCART: Thank you.

MS. FLEISHER: No questions.

1 MS. GLOVER: No questions.
2 - - -
3 CROSS-EXAMINATION
4 By Mr. Woltz:
5 Q. Just to clarify do you have two copies of
6 your testimony before you?
7 A. Yes. I have a copy that I brought that I
8 had marked up, but I have now discarded that, and I
9 am using the copy that everybody else has.
10 Q. I appreciate that. If we can stick to
11 that copy, it would be much easier, I believe. First
12 question for you, if we could look at page 2 of your
13 testimony, line 1 through to 2.
14 A. Yes.
15 Q. You state "I have also" -- "I have also
16 helped numerous utilities develop cost justified
17 reliability improvement plans"; is that correct?
18 A. Correct.
19 Q. Can you describe for me what "helped"
20 means in that sentence?
21 A. Yes. And so utilities for a variety of
22 reasons are interested in proving -- improving
23 reliability, and so I would be retained as a
24 consultant working with typically their reliability
25 engineers or their planning departments to help come

1 up with capital and maintenance programs or
2 combinations to try to improve reliability and try to
3 come up the most cost effective way typically to
4 achieve reliability targets or come up with like a
5 benefit-to-cost curve for different levels of
6 reliability.
7 Q. Thank you. And when you say "cost
8 justified reliability improvement plan," does that
9 require the same analysis as a cost/benefit analysis?
10 A. Typically, no.
11 Q. And can you explain the differences for
12 me?
13 A. Yes. And so when utilities are trying to
14 improve reliability, you would set reliability
15 targets typically for reliability indices or other
16 measures. So to the extent that better reliability
17 indices are a benefit, that would be the benefit but
18 you are not monetizing that benefit. So, for
19 example, you would say we want to reduce our
20 reliability indices by 15 percent. That would be the
21 goal and then you are trying to achieve that goal in
22 the least cost manner which is a little bit different
23 than trading off monetized costs versus a monetized
24 benefit.
25 Q. Thank you for that. And can you describe

1 maybe a few utilities that you helped with this that
2 are similar in size to Duke Energy Ohio.
3 A. Yes. So -- well, these would be larger.
4 Is larger okay?
5 Q. Larger will do.
6 A. Okay. Like Florida Power & Light,
7 Carolina Power & Light prior to the acquisition by
8 Duke. Also I've done this for Cinergy, I believe,
9 before they were acquired by Duke, Snohomish County
10 Public Utility District would be smaller than Duke
11 Energy Ohio, Commonwealth Edison in Chicago, a few
12 European utilities, a few Australian utilities, a
13 lot.
14 Q. Okay. And have you provided any help to
15 smaller companies then?
16 A. Again, yes, like Snohomish County Public
17 Utility District would be a smaller utility that I've
18 been engaged by for this, and I guess narrower
19 contexts like Seattle City Light for looking at the
20 cost effectiveness of just more targeted programs,
21 less broad though, but primarily for I would call
22 them midsized to larger utilities, about 500,000
23 meters and up, would be typically who I get engaged
24 by.
25 Q. Looking at your testimony again, can we

1 look at page 2 of your testimony, line 18 through 19.
2 A. Yes.
3 Q. Here you discuss the purpose of your
4 testimony is to issue an opinion on the proposed
5 reliability indexes associated with Rider DCR -- DCI;
6 is that correct?
7 A. Correct.
8 Q. And is your testimony rendering opinion
9 on both reliability index targets then or only the
10 reliability as associated with Rider DCI?
11 A. Could you restate the question? I am not
12 sure I understood.
13 Q. Yes. So is the purpose of your testimony
14 to render an opinion on both the reliability index
15 targets and the distribution capital investment rider
16 otherwise known as Rider DCI?
17 A. It is just the reliability index targets
18 that I'm rendering an opinion on.
19 Q. So we're clear you are not rendering an
20 opinion on Rider DCI at this time?
21 A. That's correct, yes.
22 Q. In advising Duke Energy Ohio have you
23 reviewed the Ohio Administrative Code as it relates
24 to reliability standards?
25 A. Yes.

Q. So is it safe to say that reliable -- review included Ohio Administrative Code 4901:1-10-10?

A. Subject to check, yes, 4901:1-10-10 was the section that I reviewed.

Q. Okay. Thank you. And then is it also safe to say you reviewed Ohio Administrative Code 4901:1-10-11?

A. I don't see that in my testimony, but I believe that I did. I reviewed the Code and what I cited I think was dash 10, but I think what I reviewed went beyond that.

Q. All right. Thank you. In advising Duke Energy Ohio have you reviewed the most recent rulemaking procedure in which the PUCO set guidelines on how it reviews reliability in Ohio? And the Case No. for you is 12-2050-EL-ORD if that helps you.

MS. WATTS: Object as to form.

MR. WOLTZ: I can rephrase.

EXAMINER CATHCART: Could you? Thank you.

Q. (By Mr. Woltz) Have you reviewed the most recent ruling procedure in which the PUCO set guidelines on how it reviews reliability in Ohio?

A. So since my direct testimony, I've

1 reviewed a few other intervenor direct testimonies
2 that may have touched upon that. To the extent that
3 they did, I have reviewed it. I haven't reviewed
4 that -- the original cases though for that, so I'm
5 not sure if I had. I may have read something about
6 it though.
7 MS. WATTS: And, your Honor, I object to
8 the question because that docket has not been
9 concluded yet, so Mr. Woltz's characterization of the
10 Commission's having set guidelines is his own
11 characterization, not necessarily a fact.
12 MR. WOLTZ: As to the question, I am just
13 trying to figure out Mr. Brown's testimony. He
14 discusses how he is well aware of Duke Energy Ohio's
15 reliability standards as they are. I'm just trying
16 to determine his knowledge of both Duke Energy Ohio's
17 reliability standards and how reliability standards
18 in the State of Ohio operate as he has not testified
19 before the PUCO before.
20 EXAMINER CATHCART: Overruled. I'll
21 allow the question.
22 MR. WOLTZ: Thank you, your Honor.
23 Q. So is it safe to say that in that docket,
24 you have not reviewed any comments filed by Duke
25 Energy Ohio?

A. Correct.

Q. Is it also safe to say that you have not reviewed comments in that docket filed by any other party?

A. Correct.

Q. Thank you. And if we could turn now to page 3, line 11, of your testimony.

A. Okay.

Q. Here you state "I am very familiar with Duke Energy Ohio's existing electric distribution system as it relates to historic reliability performance, historical reliability programs proposed, continuations of reliability programs and new proposed reliability programs in the setting of SAIFI and CAIDI targets"; is that correct?

A. Correct, yes.

Q. Thank you. And may I ask what are Duke Energy Ohio's historic reliability programs you are referencing here?

A. On page 10 of my testimony, these are the reliability programs that I have reviewed. These are the reliability programs that were under the -- I guess the current rider program, and so I'm familiar with these. And then when engaging with Duke's reliability engineers, I also interviewed them on

other things that might be relevant in terms of reliability programs such as fusing programs and things like this. And so I'm familiar just with verbal exchanges with Duke engineers for what I call sort of the low-hanging fruit programs and their history with regard to those, so this table but beyond this table.

Q. So in part of those conversations have you become familiar with Duke Energy Ohio's inspection maintenance repair and replacement plan?

A. Not deep dive but, yes, generally.

Q. And can you clarify what the proposed reliability program that Duke Energy Ohio is continuing to seek -- or seeking to continue? I apologize.

A. Yes. So, again, Table 2, my understanding is that they continue -- they propose to continue those programs that are under the DCI rider which is listed in Table 2, and then they are proposing to add two additional programs to Table 2. One would be the, what do they call it, their automation program, their SOG, S-O-G, self -- their self-healing grid system, and then I don't think I mentioned this in my direct testimony, but I believe they also are proposing a targeted undergrounding

1 program as well in addition to Table 2.
2 Q. Thank you. If we could turn now to page
3 3 of your testimony, line 11 through 17.
4 A. Yes.
5 Q. As you sit here, you -- as we previously
6 discussed, you say you are familiar with Duke Energy
7 Ohio's existing system, and you have consulted for
8 Duke Energy Ohio regarding its reliability
9 performance initiatives and have assisted the company
10 in other ways; is that correct?
11 A. Yes.
12 Q. And have you advised Duke Energy Ohio
13 regarding its reliability performance initiatives in
14 any other case or proceeding?
15 A. Duke Energy Ohio specifically?
16 Q. Correct.
17 A. No.
18 Q. And in Case No. 16-1602-EL-ESS which is a
19 consolidated -- consolidated case in this proceeding,
20 did you advise Duke Energy Ohio in its preparation of
21 its application to establish reliability standards?
22 A. The initial application?
23 Q. Correct.
24 A. I'm trying to get my timeline. I believe
25 they had done that application prior to my retention,

so I would say no.

Q. But in preparation for assisting Duke Energy Ohio in this case, is it safe to say you reviewed comments provided by PUCO staff and other intervening parties in that case?

A. Yes.

Q. And is it safe to say you did not assist in calculating the CAIDI standard in this case then?

A. So I am not certain. I have given them feedback on my thoughts as to SAIFI and CAIDI targets and had presented my thoughts in a meeting with staff and then subsequent to that, their -- you know, the stipulation came around, and I was not part of the numbers that existed in that.

So to the extent that my input was used to come up with -- I don't know if they -- if it had no bearing, if it had a strong bearing, or what. I don't know the answer, but they had input from me before that stipulation occurred but not before the application.

Q. Thank you. And would your answer be the same in the proposing of SAIFI standards in this proceeding?

A. Yes. SAIFI and CAIDI were always done simultaneously, so it would be the same answer for

1 both.
2 Q. And in your review of Duke Energy Ohio's
3 reliabilities, are you aware that the CAIDI standard
4 was missed for 2016?
5 A. I do not recall the -- the approved CAIDI
6 standards, if they did go through 2016, or if they
7 went through 2015. I don't recall when the actual
8 approved standards went through, so I can't answer
9 that without knowing that.
10 Q. If we can look at your testimony on page
11 6.
12 A. Yes.
13 Q. And I'm at lines 10 through 13.
14 A. Yes.
15 Q. And it says "Question: How does the
16 stipulation address reliability performance in 2016
17 and 2017?"
18 A. Yes.
19 Q. "Answer: The stipulation states that
20 neither CAIDI nor SAIFI performance in 2016 and/or
21 2017 shall be used to determine any penalty for
22 noncompliance"; is that correct?
23 A. That's correct, yes.
24 Q. If you were unaware that Duke failed to
25 meet its standards in 2016, what was your purpose of

1 this question?
2 A. I am doing analysis -- analysis here of
3 2018 and before. I am just simply here describing
4 what the stipulation states here. My understanding
5 is that there may be some different points of view as
6 to whether there was or was not applicable standards
7 for these years in question. This is just why I'm
8 not addressing these years when I am looking at
9 performance targets.
10 Q. And if we were to look back at page 3 of
11 your testimony, you described that you were very
12 familiar with Duke's assisting system, historical
13 reliability performance, reliability programs, new
14 programs, that you consulted based on their
15 reliability and that you have consulted Duke Energy
16 regarding the CAIDI and SAIFI standards; is that
17 correct?
18 A. That's right, yes.
19 Q. But you are unaware if they met their
20 standards in previous years?
21 A. That's not what I said at all. What I
22 said was I think it's unclear whether there were, in
23 fact, standards for 2016 and 2017. That's what I
24 said.
25 Q. And you had previously said you have

1 reviewed Ohio Administrative Code 4901:1-10-10; is
2 that correct?
3 A. Yes.
4 Q. And are you aware that under the Ohio
5 Administrative Code that a public utility is required
6 to have reliability standards?
7 MS. WATTS: Your Honor, I am going to
8 object. I think we are getting into territory that
9 calls for legal conclusions, and so I think this line
10 of questioning is improper for Mr. Brown.
11 A. So in like 4901:1-10-10(B)(2) it says
12 each electric utility in this state shall file with
13 the Commission an application to establish
14 company-specific minimum reliability performance
15 standards. My understanding is that happened, but
16 the process needs to continue further before those
17 are actually agreed to and approved, and my
18 understanding is that there was never really a
19 resolution to that process so, no, that is not my
20 understanding of what the Code says.
21 Q. As to avoid any legal conclusion issues,
22 how about we approach it this way, if under Ohio
23 rules the reliability standard from the 2015 stayed
24 in place, would you agree that Duke Energy Ohio
25 failed to meet it in 2016 for CAIDI?

A. Yes. CAIDI would have been higher than the standard. I can make other quibbles, but I won't.

Q. I would appreciate that. And given under the same situation would you be willing to admit that Duke Energy Ohio failed to meet its CAIDI standard in 2017?

A. If 2015 standard was applicable to 2017 --

Q. Correct.

A. -- would the 2017 CAIDI have been higher than that 2015 standard?

Q. Correct.

A. Correct, yes.

Q. And under those same situations where if the 2015 standard was still applicable to 2017, would you be willing to admit that Duke Energy Ohio failed to meet its SAIFI standard?

A. Yes.

Q. Thank you. And if we turn now in your testimony to page 5.

A. Okay.

Q. And generally line 2, I believe this is where you were talking about the Ohio Administrative Code. And you point out that Duke must do a customer

1 perception survey; is that correct?
2 A. Yes.
3 Q. Have you reviewed Duke's residential
4 reliability study?
5 A. The residential -- the customer survey?
6 Q. Correct.
7 A. No.
8 Q. In advising Duke on its reliability
9 standards, did you -- did you view its business
10 reliability customer survey, not just it its
11 residential? Did you review either of them?
12 A. I reviewed no surveys.
13 Q. On page 5, again, if we could look at
14 line 18 to 22.
15 A. Yes.
16 Q. Here you are describing Rider DCI as it
17 exists; is that fair to say?
18 A. Yes.
19 Q. And in your opinion would Duke Energy
20 Ohio have a responsibility to maintain the safety and
21 reliability of its distribution system regardless as
22 to if the PUCO authorized the continuation of the
23 DCI?
24 A. Yes.
25 Q. And if we can turn now to I believe it is

page 9 of your testimony. I apologize. That's the wrong -- I was in the wrong place. And if we could look at lines 11 to 12.

A. On page 9?

Q. Correct.

A. Okay.

Q. You state that some but not all of the current Duke capital reliability programs are listed in Table 2 --

A. Yes.

Q. -- is that correct?

A. Yes.

Q. Can you identify additional capital reliability programs that are not listed in the table?

A. No. This was a comment back from Duke in reviewing my testimony that the list that I had in Table 2 that they had provided me initially had -- wasn't -- didn't include everything.

Q. And are you aware that the 19 programs listed in the -- there are the 19 programs approved under the current DCI rider?

A. That's my understanding, yes.

Q. And have you reviewed any of the programs listed there to determine if they are cost justified?

A. That I have listed in Table 2?

Q. Correct.

A. I looked through all of these programs and there was filings on budgets and -- and actual spends for these different programs, so I did look at all of the spends on them. And they all looked -- nothing stood out to me as being funny. But I didn't do a detailed cost/benefit for any of these. It would have been just sort of looking at the amount of work they were doing, the amount that was budgeted, the amount that they were spending on it, and all of that looked -- there were a few questions, but for the most part no red flags showed up in my mind.

Q. And just to clarify in your response just now, you said you didn't no cost/benefit analysis. Did you do any cost justification analysis?

A. Again, no. These programs are generally programs that I would see utilities approaching so the program itself doesn't seem odd to me. It's a good thing to do as long as you are not spending too much money on them, and then I look at the budgets to see how much they are spending on and those budgets seem to be okay so in terms of typical or good utility practice that's the test really that I looked at. Again, not a deep detail analysis.

Q. So is it fair to say you did no analysis comparing other programs that might lead to reliability that are more cost justified?

A. So I think in my -- I did look at -- again, there is low-hanging fruit programs that utilities can do when you're initially starting to try to cost effectively improve reliability and those do not show up in Table 2 and so I did ask Duke about the state of these programs and they had already done all of these types of programs and so this would be sort of ones you pick all the low-hanging fruit, these would be the next things that you would do and some of these are focused on reliability mix indices and those ones are also highlighted in Table 2.

Q. Thank you. And while you are discussing picking all the low-hanging fruit, can we look at your testimony at page 11.

A. Yes.

Q. And we will look at lines 1 through 5.

A. Okay.

Q. And this testimony here on lines 1 through 5 pretty much discuss what you just said about having discussed with Duke already picking all the low-hanging fruit; is that correct?

A. Yes.

Q. Would you believe that proper vegetation management would be considered low-hanging fruit?

A. If you're not doing, you know, vegetation management and you are in a vegetated area, this is going to be a critical part of your -- of your reliability spend. And so it's a little bit of a different category since it's very core -- it's a very important one though, vegetation management, for sure.

Q. So just to clarify it is low-hanging fruit or is not low-hanging fruit?

A. So you have to -- you have to pick it every year. This is not something that you can do a one program, deploy it, and walk away. That's sort of my low-hanging fruit program like, you know, have you looked at lateral fusing and if you have and you've done it, then you don't need to revisit it. Vegetation management is an ongoing program, and so it's a little bit different category important for reliability and important for costs though.

Q. In advising Duke Energy Ohio, were there any additional programs you found that could lower CAIDI specifically?

A. So the rider is focused more on capital programs, and when you're looking at CAIDI, I

1 explained the complications with CAIDI in my
2 testimony, but if you're trying to take a given
3 interruption and you are going to try to reduce the
4 time of that specific interruption to customers, what
5 are the things that you can do to try to improve
6 CAIDI using sort of faster operational response?
7 And, yeah, I did talk about certain things. Usually
8 these are expense budget issues though. You can have
9 higher staffing. You can have more dispatch
10 locations so that you're closer to the -- to the
11 events. It's not always easy to address those
12 aspects of -- of CAIDI though because basically you
13 need to identify the fault quicker. You need to be
14 able to locate that fault quicker. You need to be
15 able to get to that location quicker. You need to be
16 able to switch quicker. All of these things can be a
17 challenge -- a challenge to do.
18 Q. Understanding and appreciating the fact
19 it might be a challenge, are there programs that
20 could specifically help Duke Energy meet its CAIDI
21 standard?
22 A. Yeah. So I -- I do look at -- I do
23 recommend that they reduce CAIDI by about -- the
24 inherent CAIDI associated with operational response
25 by about 10 percent in my testimony, and I don't tell

1 them how to do it which may be a little bit unfair.
2 But so there are ways that you can improve CAIDI that
3 you do not want to do so you can meet your CAIDI
4 target, for example, by reducing your safety
5 requirements before you work on a job. So if you
6 instead of spending 15 minutes on a safety brief, you
7 go 5 minutes on a safety briefing, you are going to
8 improve your CAIDI by that much. That's not
9 something that I would recommend.
10 You can also, if you have automated
11 switching capabilities and you can switch a customer
12 on in 2 or 3 minutes and you just wait and switch
13 them on in 6 minutes, then you are going to improve
14 CAIDI because that 6 minutes now qualifies as a
15 sustained interruption even though the customers are
16 worse off.
17 So there is a whole host of ways you can
18 improve CAIDI but that aren't necessarily good from a
19 safety perspective or from a customer perspective,
20 and so I don't know specifically what they can do.
21 It's not obvious to me what they can do to improve --
22 improve CAIDI.
23 Q. I appreciate that. No one wants to risk
24 the safety of any workers, that's for sure. Do you
25 believe that the company has control over planned

1 outages?
2 A. Yes.
3 Q. Is it your understanding if the company
4 reduces the number of planned outages, it might
5 reduce CAIDI?
6 A. It's the opposite. So, in fact, in my
7 testimony I show that planned outages actually have
8 a -- it makes CAIDI lower because you're just
9 doing -- you are switching over, and so when
10 customers are out for planned interruptions, from a
11 SAIFI perspective, it makes SAIFI worse, but from a
12 CAIDI perspective, it actually makes CAIDI better, so
13 it's the opposite of what you are saying.
14 Q. Okay. Thank you for that clarification.
15 If the PUCO were to reject the settlement and instead
16 continue -- sorry, continue the current reliability
17 standards of 1.05 for SAIFI and 122.81 minutes for
18 CAIDI, would there be any reason to continue the DCI
19 rider?
20 A. Yes.
21 Q. And what would those reasons be?
22 A. So if you look at Table 2 in my
23 testimony, a lot of this discussion is about
24 reliability targets and such. But when I have looked
25 at separate cost recovery mechanisms for utilities,

it's often related to the issue of aging infrastructure because it can be a challenge for utilities that have historical test years to ramp up spend on the area of aging infrastructure because of just the way that rate cases work and such. And if you look at Table 2, a majority of these programs are really addressing aging infrastructure issues rather than these reliability issues. So a very real scenario if the rider doesn't happen is that, yes, okay, so Duke is still going to do programs to look for SAIFI and CAIDI targets but now all of your proactive treatment of aging infrastructure is really at risk. And this is not just Duke. This is every utility that has a historical test year rate case mechanism.

Q. But if the DCI was not continued by the PUCO, is there any reason Duke cannot continue to make the needed investments in its distribution system and seek recovery in a future base rate proceeding?

A. There's lots of reasons, absolutely. In fact, it's the most common outcome for utilities with regards to aging infrastructure is that it's easier just to do a replace and repair rather than to try to get ahold of the problem and start proactively

1 replacing it in hopes that you may or may not get
2 cost recovery for, you know, replacing equipment
3 that's in service but old in a rate case and so
4 absolutely utilities struggling with this question
5 all the time. And usually the answer is to not
6 aggressively go after aging infrastructure unless
7 there is some sort of a rider mechanism.
8 Q. And Duke has currently had this DCI rider
9 mechanism in place; is that right?
10 A. Yes.
11 Q. If we could turn now to page 7 of your
12 testimony.
13 A. Okay.
14 Q. And here on line 6 to 7, you say
15 "Consequently an increase in CAIDI does not
16 necessarily mean reliability is getting worse"; is
17 that correct?
18 A. That's correct, yes.
19 Q. Is it possible that an increase in CAIDI
20 does mean that reliability is getting worse?
21 A. Yes, it can.
22 Q. And if customers' interruptions are also
23 going up as CAIDI is increasing, is that an
24 indication that reliability is getting worse?
25 A. If customer interrupted -- these are

1 decoupled. If customer interruptions are going up,
2 then this is an indication that that aspect of
3 customer reliability is getting worse.
4 Q. Thank you. And you said you have
5 reviewed Duke's standards as they are moving 2018
6 forward; is that correct? Earlier when we were
7 discussing if Duke met its standards in 2017 and
8 2016, you had explained that you had not reviewed but
9 you had looked at that moving forward to 2018; is
10 that correct?
11 A. Yes. I did not look at standards for
12 2017 and, 2018. And I did look at performance in
13 2017 and 2018 when I was doing my analysis.
14 Q. If under the 2015 standards are
15 applicable at the end of 2018, is it your opinion
16 that Duke will meet its CAIDI standard?
17 A. So my target -- so we're looking at 2018
18 is your question?
19 Q. I'm looking at 2018 as it would be under
20 the 2015 standards.
21 A. Yes. And so my 2018 projection for
22 reported SAIFI for Duke 1.036 and I believe the 2015
23 standard, correct me if I'm wrong, is 1.05. And so,
24 no, my projection is that 2018 they would meet that
25 2015 standard based on my calculation as shown in

1 Table 4.
2 Q. I appreciate that. Maybe I misspoke. I
3 think my question was regarding CAIDI though. And if
4 not, then I meant to say CAIDI.
5 A. So my CAIDI projection for 2018, and this
6 includes an additional 2 minute improvements that I
7 just sort of expected they could find a way to find
8 was 136.4, and I believe that is higher than the 2015
9 CAIDI number.
10 Q. So is your interpretation then it would
11 meet or would not meet the standard?
12 A. Yeah. The actual Code doesn't say higher
13 or lower, but I'm not going to get into that
14 argument. So it would be higher than the standard
15 and the interpretation that everybody is making is
16 that higher means you don't make it, you don't meet
17 it.
18 Q. And if we can look at page 22 of your
19 testimony, footnote 5.
20 A. Yes.
21 Q. You point out that it would be very
22 difficult for Duke to meet this standard half of the
23 years due to random variation; is that correct?
24 A. Yes, that's correct. And so every year,
25 you know, you're not -- just random things happen to

1 make your numbers high or low, sort of oscillate
2 around an expected value. These numbers are pretty
3 close to the expected value. Random variation is
4 going to mean that, you know, about half the years,
5 according to my calculations, they probably just
6 won't make it. About half the years they probably
7 will make it if these -- if these standards are
8 adopted.
9 Q. And is it possible in half of those years
10 that it might meet two or more years in a row that
11 Duke does not meet their CAIDI standards?
12 A. That's right. And so if you -- if they
13 are not actively trying to manage the SAIFI versus
14 CAIDI tradeoff like I talk about, if you have one
15 year that is 50 percent chance that you don't make
16 it, and the next year is 50 percent chance that you
17 don't make it, that would be about a 25 percent
18 chance that you don't make it two years in a row.
19 Q. Do you believe it is possible that Duke
20 Energy Ohio can miss their standard in all the years
21 proposed?
22 A. Yes.
23 Q. For CAIDI?
24 A. So, yeah, absolutely, yeah. It's like
25 flipping a coin. There's five years here. It would

be like flipping a coin and getting heads five years in a row.

Q. And do you believe there is a benefit to customers of Duke Energy Ohio meeting its CAIDI standard?

A. It depends how they meet their CAIDI standard. As I mentioned before, you can meet a CAIDI standard. You can lower CAIDI in ways that are not beneficial to customers so not necessarily. I'm assuming that Duke would not do that, but it's certainly possible to meet your CAIDI standards in a way that's not good for customer reliability.

Q. Assuming that Duke would not do anything that is not good for customer reliability because Duke Energy Ohio would not want to operate that way, do you believe that there would be a benefit to customers for Duke Energy Ohio meeting its CAIDI standard?

A. Again, not necessarily because you have automation deployment which makes CAIDI go up. Automation is unequivocally good for customer reliability but makes CAIDI go up, so one way that they miss their CAIDI standards is that they more successfully deploy their automation strategy faster. That's good for customers, but it may make them miss

1 their CAIDI targets.
2 Q. And when you say it's good for customers,
3 are you talking all customers in general or a
4 specific customer class such as residential,
5 commercial, or so forth?
6 A. When you have automation, it is going to
7 be primarily beneficial for customers that are on the
8 circuits that have the automation deployed but that's
9 not -- it is possible that you also benefit other
10 customers on nonautomated circuits. For example, in
11 a storm situation you may be able to switch around
12 automatically faults on the automated feeders and
13 then focus more resources on those feeders that don't
14 have automation so there may be benefits. There's
15 benefits to all customers. The majority of benefits
16 are going to be on those circuits that have the
17 automation equipment.
18 Q. And have you reviewed Duke Energy Ohio's
19 circuits to determine which -- which customers do and
20 do not have -- are not on automated circuits?
21 A. I have not reviewed the -- yeah, no, the
22 deployment distribution of their automation equipment
23 or proposed automation equipment.
24 Q. Thank you. If we could turn to page 19
25 of your testimony looking at lines 20 to 21.

A. Okay.

Q. Do you see there that you indicated you subtracted the impact of increasing ash tree outages?

A. For calculating what I call baseline CAIDI in terms of getting a trend, that's what I have done.

Q. And how did you calculate which outages were due to ash tree?

A. So Duke whenever they get an outage, they have an outage management system, and this outage management system has a cause code. One of those cause codes is related to vegetation-related failures. They have done an audit of a sample of those that were related to ash trees and then have done an assessment of how long it takes to repair those types of events compared to other types of events and the impact that that has to CAIDI. Trend has been increasing, you are getting more ash trees dying, but I do not assume escalation in mine, and so my ash tree assumptions are from, I think, 2016 and I carry that same effect through my analysis. It could actually be it's probably going to be worse than that though.

Q. Thank you. I apologize. Just to clarify you said you base it on an estimate or an exact

number?

A. So this is based on a sample and so they did not exhaustively look at the impact of all of their ash tree events. They took a sampling of those and based -- just assuming that sample is representative of all ash tree events, what would be the impact to CAIDI. It's expensive to do those individual event audits so that's an approach I didn't recommend they do that but that's what I would have recommended had they asked.

MR. WOLTZ: Thank you. If I could have just a moment, your Honor, I might be finished.

EXAMINER WALSTRA: Sure.

Q. (By Mr. Woltz) Thank you for that. I think I have just a couple more questions. If we could turn back to your Table 2. I believe it was on page 10.

A. Okay.

Q. And in our discussion with this previously, you mentioned that you had reviewed budgets for that. Do you recall that?

A. Yes.

Q. And can you tell me whether those are budgets past, budgets spent, or future budgets projected?

A. These were budget versus actual spend. This was a Commission filing. I believe these are required to be annually submitted to the Commission and so those were the documents I reviewed. They showed the budgets and then actual spend, not projected, I believe.

Q. And in those filings you reviewed, do you remember any case numbers those were or would that be under the annual review of Duke Energy Ohio's regular DCI?

A. That's right, it was the annual review.

Q. And then I have one more question hopefully. Do you recall earlier we were discussing whether if the DCI continued or not if Duke Energy Ohio would be able to still collect in the base rates?

A. You did not ask me about that question. You asked me whether they could continue reliability programs if the DCI was not continued.

Q. Okay. Maybe I just am off on my question a little. I believe the question I had previously was is there any reason that Duke Energy Ohio could not make the needed investments in its distribution system and seek to recover them in future base rate proceedings.

A. Yes. You did not ask me that question before. Is that your question now?

Q. Sure.

A. So, yeah, of course, there's no reason why that can't happen but I will reiterate that from my perspective the big risk of that is what the impact will be on investments related to aging infrastructure. That's what I've seen across the country is the big issue with doing that.

Q. Would you say that it is also possible that these investments could be made under Rider DCI and there be no improvement to reliability because of aging infrastructure?

A. What I would say that the typical reliability -- capital reliability improvements like automation programs, it's possible that those will move forward. That's kind of the typical utility rate case model, you spend money to improve your system and you recover. But it is -- I haven't discussed this with Duke, but based on what I have seen through the country, it is likely that aging infrastructure spend will be significantly less if there is not rider treatment for it. That's what I have seen across the country. There's no reason that it can't happen in theory but it's a huge risk for

1 utilities to spend on aging infrastructure and hope
2 for future cost recovery in rate cases.
3 Q. Would it be possible even with rider
4 treatment that these programs do not have a positive
5 impact on reliability?
6 A. So the -- if we're talking about the
7 reliability index programs which is you have your --
8 primarily it's your automation. Your automation, if
9 you deploy it, will improve customer reliability, and
10 by that I mean SAIFI and SAIDI. I am not a fan of
11 CAIDI because CAIDI up or down doesn't mean customer
12 reliability is up or down. So, yes, reliability will
13 get better with automation spend.
14 There's also the program to do targeted
15 undergrounding. Reliability will get better with
16 targeted undergrounding also. A lot of these
17 programs are going to address aging infrastructure
18 but may not result in reliability indices getting
19 better, and so it depends on the program that you're
20 talking about.
21 Q. Thank you. I appreciate you pointing out
22 that you are not a fan of CAIDI. I would like to ask
23 you are you aware that CAIDI is the standard in Ohio?
24 A. That's why I try to treat it with kid
25 gloves in my testimony. Yes, I think it is a very

poor metric to use because it isn't related directionally to reliability improvement. I am aware that that is what the standard is which is why I have to do a pretty convoluted analysis to address CAIDI in my testimony. Yes, the answer is yes, I'm aware that's the standard.

Q. And as you are aware that's the standard, you are aware that Duke Energy Ohio is required to meet CAIDI standard in Ohio?

A. Yes. It does not say whether meeting the standard means it's higher or lower though. This isn't in our argument that's been made but, yes, I am aware of that.

MR. WOLTZ: Nothing further, your Honors.

EXAMINER CATHCART: Thank you.

Any additional cross?

Any redirect?

MS. WATTS: One moment, your Honor.

EXAMINER CATHCART: That would be great. Thank you.

EXAMINER WALSTRA: We are off the record.

(Discussion off the record.)

MS. WATTS: Your Honor, we have no redirect.

EXAMINER CATHCART: Thank you. Would you

like to move your exhibits?

MS. WATTS: We would move for admission of Duke Energy Ohio Exhibit 12.

EXAMINER CATHCART: Any objections?

Hearing none, it should be admitted

(EXHIBIT ADMITTED INTO EVIDENCE.)

MS. WATTS: Thank you, your Honor.

EXAMINER CATHCART: Thank you.

EXAMINER WALSTRA: I think everyone is sufficiently done for the day.

MS. WATTS: Your choice.

EXAMINER WALSTRA: Yeah. I think we'll call it a day. We can go off the record now.

MS. LEPPLA: Your Honor, quickly before you go off the record, I just wanted to ask you to reconsider on Exhibits 1 and 2 for OEC/EDF, just ask you to include additional text to give context. And it's the paragraph that is included along with what Elizabeth had already previously moved to admit just to give context what that exhibit is secondly to the direct text.

EXAMINER WALSTRA: This is OEC/EDF 2?

MS. LEPPLA: Exhibits 1 and 2.

EXAMINER WALSTRA: Could you point out.

MS. LEPPLA: Sure. On page 20 starting

at line 18 and over to page 21 at line 2. It's the identical text to Exhibit 2 which was on pages 27, line 20 through page 28, line 4.

EXAMINER WALSTRA: Give Duke a second to.

MS. LEPPLA: Yeah, sure. I am happy to point it out too.

MS. WATTS: I have 2 in front of me. And here's 1, okay. Thank you.

EXAMINER WALSTRA: I believe you said page 20?

MS. LEPPLA: On Exhibit 1 or Exhibit 2?

EXAMINER WALSTRA: Exhibit 1.

MS. LEPPLA: Exhibit 1, page 20, lines 18 through page 21, lines 2. All it's doing is discussing the Prius Effect and that is what we were crossing the witness on in that second -- third sentence in that same sentence -- this is the same testimony in both of these exhibits, 1 and 2, that I am moving.

MS. WATTS: I'm sorry, so page 20, lines 18 --

MS. LEPPLA: Uh-huh.

MS. WATTS: To where?

MS. LEPPLA: 21, line 2.

MS. WATTS: I have no objection to that

one.

EXAMINER WALSTRA: Okay. And then --

MS. LEPPLA: Then Exhibit 2 would be page 27, line 20 through page 28, line 4, and I believe your Honors already let in page 28, lines 1 through 4.

MS. WATTS: No objection.

EXAMINER WALSTRA: Thank you. So we'll amend the previous decision to allow, as discussed here, allow those into evidence.

MS. LEPPLA: Thank you, your Honors.

EXAMINER WALSTRA: Now, we'll go off the record.

(Discussion off the record.)

(Thereupon, at 4:40 p.m., the hearing was adjourned.)

- - -

CERTIFICATE

I do hereby certify that the foregoing is a true and correct transcript of the proceedings taken by us in this matter on Tuesday, July 10, 2018, and carefully compared with our original stenographic notes.

_____
Karen Sue Gibson, Registered Merit Reporter.

_____
Carolyn M. Burke, Registered Professional Reporter.

(KSG-6577)

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Summary: Transcript in the matter of the Duke Energy Ohio, Inc. hearing held on 07/10/18 - Volume II electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.