BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the 2018 :
Long-Term Forecast Report : Case No. 18-501-EL-FOR of Ohio Power Company and :
Related Matters. :

In the Matter of the :
Application of Ohio Power :
Company for Approval to :
Enter Into Renewable : Case No. 18-1392-EL-RDR
Energy Purchase :
Agreements for Inclusion
in the Renewable :
Generation Rider. :
In the Matter of the :
Application of Ohio Power : Case No. 18-1393-EL-ATA Company for Approval to :
Amend its Tariffs. :

-     -         - 


## PROCEEDINGS

before Ms. Sarah Parrot and Ms. Greta See, Attorney Examiners, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-A, Columbus, Ohio, called at 2:00 p.m. on Wednesday, February 6, 2019.

VOLUME XI

ARMSTRONG \& OKEY, INC.
222 East Town Street, Second Floor
Columbus, Ohio 43215-5201
(614) 224-9481 - (800) 223-9481



Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481

## APPEARANCES: (Continued)

Ohio Environmental Council
By Ms. Miranda Leppla,
Mr. Trent A. Dougherty,
and Mr. Christopher D. Tavenor
1145 Chesapeake Avenue, Suite I
Columbus, Ohio 43212
On behalf of the Ohio Environmental Council.
Kegler, Brown, Hill \& Ritter, LPA
By Mr. Robert Dove
Capitol Square, Suite 1800
65 East State Street
Columbus, Ohio 43215-4294
On behalf of the Natural Resources Defense Council.

Whitt Sturtevant, LLP
By Mr. Mark A. Whitt
and Ms. Rebekah J. Glover
The KeyBank Building, Suite 1590
88 East Broad Street
Columbus, Ohio 43215
On behalf of Direct Energy, LP and Retail Energy Supply Association.

Benesch Friedlander Coplan \& Aronoff, LLP
By Mr. John F. Stock
and Mr. Orla E. Collier, III
41 South High Street, Suite 2600
Columbus, Ohio 43215
On behalf of the Ohio Coal Association.
Dickinson Wright, PLLC
By Ms. Christine M.T. Pirik,
Mr. Terrence O'Donnell,
Mr. William V. Vorys,
and Ms. Cristina N. Luse
150 East Gay Street, Suite 2400
Columbus, Ohio 43215
On behalf of Mid-Atlantic Renewable Energy Coalition.

Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481

## APPEARANCES: (Continued)

Boehm, Kurtz \& Lowry
By Mr. Michael L. Kurtz,
Ms. Jody Kyler Cohn,
and Mr. Kurt J. Boehm
36 East Seventh Street, Suite 1510
Cincinnati, Ohio 45202
On behalf of Ohio Energy Group.
Sierra Club
By Mr. Tony G. Mendoza
2101 Webster Street, 13th Floor
Oakland, California 94612
Richard Sahli Law Office, LLC
By Mr. Richard C. Sahli
981 Pinewood Lane
Columbus, Ohio 43230-3662
On behalf of the Sierra Club.

14



Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481

$$
2685
$$

Wednesday Afternoon Session, February 6, 2019.

-     -         - 

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

This is the continuation of the hearing
in Case No. 18-501-EL-FOR, et al.
Let's start with brief appearances, starting with the Company, and we'll work our way around.

MR. NOURSE: Thank you, your Honor. On behalf of Ohio Power Company, Steven T. Nourse, Christen M. Blend, and the law firm of Ice Miller, Christopher L. Miller; the law firm of Porter, Wright, L. Bradford Hughes and Eric B. Gallon.

MS. WILLIS: Thank you, your Honor. On behalf of the residential customers of the Ohio -residential customers of the Ohio Power Company, Bruce Weston, Consumers' Counsel, by Maureen Willis, Christopher Healey, and William Michael.

MR. McNAMEE: For the Staff of the PUCO, Tom McNamee.

MR. KURTZ: Good afternoon, your Honors. Mike Kurtz, OEG.

MR. OLIKER: Good afternoon, your Honors.

On behalf of Interstate Gas Supply, Inc. and IGS Solar, LLC, Joe Oliker and Mike Nugent.

MS. BOJKO: Good afternoon, your Honors.
On behalf of the Ohio Manufacturers' Association Energy Group, Kimberly W. Bojko and Brian W. Dressel.

MS. WHITFIELD: Good afternoon, your
Honors. On behalf of The Kroger Company, Angie Paul Whitfield and Stephen E. Dutton.

MR. DOVE: Good afternoon, your Honors. On behalf of Natural Resources Defense Council, Robert Dove.

MS. MOONEY: On behalf of Ohio Partners for Affordable Energy, Colleen Mooney.

MS. LEPPLA: Good afternoon, your Honors. On behalf of the Ohio Environmental Council, Miranda Leppla.

MR. DARR: For Industrial Energy Users-Ohio, Frank Darr.

MS. GLOVER: On behalf of the Retail Energy Supply Association and Direct Energy, Mark Whitt and Rebekah Glover.

EXAMINER PARROT: Thank you, everyone.
Ms. Willis.
MS. WILLIS: Thank you, your Honor. OCC would call to the witness stand, Professor Noah

Dormady.
EXAMINER PARROT: We will go ahead and just remind you that you have already been sworn in as a witness. Go ahead and have a seat.

Dr. Dormady, before we start, I would just note that you were not present with us on Friday. At that point, the Bench did issue a ruling with respect to the motion to exclude your testimony that was filed by NRDC and OPAE.

THE WITNESS: Great.
EXAMINER PARROT: I am not going to go through all that again, but $I$ would just note although the Commission -- well, I should say the Bench found it was appropriate to proceed with your testimony. On the issue of whether or not there is a conflict, we noted only that if you proceed with your testimony, you are doing so at your own election and that we are not issuing any sort of ruling on the alleged conflict.

THE WITNESS: Okay.
EXAMINER PARROT: Is that your
understanding and you are prepared to proceed today?
THE WITNESS: Yes. Thank you.
EXAMINER PARROT: Ms. Willis, did you have anything before we proceed with cross?

MS. WILLIS: No, your Honor. I believe we have marked already, Professor Dormady's testimony as OCC Exhibit No. 24. I believe we also gave Dr. -or, Professor Dormady an opportunity to -- for corrections, additions, and deletions, so we would, at this point, reoffer Dr. Dormady for cross-examination and move for admission of OCC Exhibit No. 24.

EXAMINER PARROT: Thank you, Ms. Willis.
Ms. Glover?
MS. GLOVER: No questions, your Honor.
EXAMINER PARROT: Mr. Darr?
MR. DARR: No questions.
EXAMINER PARROT: Ms. Whitfield?
MS. WHITFIELD: No questions, your Honor.
EXAMINER PARROT: Ms. Bojko?
MS. BOJKO: I do have some, your Honor. - - -

NOAH DORMADY, PH.D.
being first duly sworn, as prescribed by law, was examined and testified as follows:

CROSS-EXAMINATION
By Ms. Bojko:
Q. Good afternoon, Mr. Dormady or Professor, excuse me. I have a couple of questions about your
testimony beginning on page 9. Starting on line 10, you discuss the concept of the coding that was done with regard to the survey performed by Navigant; is that correct?
A. That's correct.
Q. And on lines 10 and 12, you talk about reliability checks in place and that there's no way to effectively rely upon the coded responses without that reliability check; is that correct?
A. That's correct, yeah.
Q. So then if we turn to page 10 of your testimony, you talk about qualitative coding on lines 9 through 12. And here you conclude that Navigant's qualitative coding for open-ended responses did not include the coding reliability checks; is that correct?
A. That's correct.
Q. And in that conclusion you are relying on a discovery response attached to your testimony as Exhibit ND-5 which explains that one human coder reviewed, analyzed, and coded the various responses subjectively; is that accurate?
A. Just a moment.

That's incorrect. I believe it's
Footnote 6 which I believe is the next item there.

Give me just a moment. Yeah, it's Interrogatory 8-086 which is my sixth footnote.
Q. Oh, I'm sorry, sixth footnote, but it's ND-05, is that the attachment name?
A. That's correct.
Q. Okay.
A. Yeah.
Q. And what are coding reliability checks that you refer to in this section?
A. Coding reliability checks, there are two measures, Inter- and Intra-Coder Reliability. Coder reliability checks are typically used to assess the internal consistency with which qualitative responses are coded into a numeric entry. In this case it's done, in the exhibit that was offered in this case, a simple binary coding was used, 1 or 0, indicating whether or not a qualitative response was supportive or not supportive of the initiative. And that's the quantitative coding that's typically used. So the two measures that are typically used in response to your question are Inter-Coder Reliability checks and Intra-Coder Reliability checks which I describe later in the testimony.
Q. Okay. So if you could turn to page 27. I am trying to connect different pieces of your
testimony so I understand. On page 27 is where you discuss specifically, I believe, on lines, I guess it starts on line 1, but you're talking about the single researcher coding and that coding is the Inter-Coder Reliability that you discuss?
A. Yes. And I mention these explicitly on the next page, on page 28, beginning on line 2 , where I discuss the difference between Inter- and Intra-Coder Reliability.
Q. Okay. Talking about the -- focusing on the Inter-Coder Reliability, you state that if there's only one single reviewer, there's no confidence that another person wouldn't come to a different conclusion if they read the same comments and also did their own coding, correct?
A. That's correct.
Q. Okay. So the coding that you are talking about in these sections is the coding from the Navigant survey where Navigant used the coding terminology of mixed, supportive, neutral/unclear, and negative?
A. I don't remember.

MR. MILLER: Your Honor, we're going down a path here that I am not really sure what we are doing. This is sort of friendly cross and we're
putting a bunch of additional items into the record. I think the witness has indicated he explained this in his testimony and now we are having him elaborate significantly on the additional detail. And I believe that counsel had hostile cross for the AEP witness that talked about the survey and now we're simply embellishing effectively the testimony that's in the record.

MS. BOJKO: Your Honor, I sole -- I disagree with that. I do not know what Professor Dormady's responses are. He is the witness that brought up Inter-Coder Reliability and Intra-Coder Reliability, and I'm trying to ascertain if that is connected to the survey coding and labeling that -the terms that were used by Navigant. I'm trying to understand his testimony. I think this is very akin to what Mr. Kurtz did when he stated he was trying to understand testimony earlier and connect some dots and that's exactly what $I$ am trying to do. No other witness has talked about inter-coded or inter-coder reliability and related to the Navigant survey. MR. MILLER: Your Honor, if I may? MS. BOJKO: So I wouldn't have been able to ask the other survey witness about that. MR. MILLER: If I may, the AEP witness,

Witness Horner, I believe was asked these specific questions about coding and I think she even went so far as to name the individual in the Navigant organization who was responsible for the coding process. There was a fair amount of questions of that witness about how that worked and what the detail happened to be. And I think we have asked other witnesses in this case. This is not in response to that. This is additional detail in regards to embellishment of an extension of his testimony that is essentially, I would argue, friendly.

MS. BOJKO: Your Honor, she did not talk
about the methodology. He is challenging the methodology used and I'm trying to connect the methodology to the survey and understand where his position is and what recommendations he's made based upon on his testimony. No other witness has testified to this.

MR. MILLER: We had the opportunity to ask the AEP witness these questions. We did that. We went through that process. We are now taking that and extending it illogically and asking this gentleman to provide additional detail that he did not choose to put into his prefiled direct testimony.

MS. BOJKO: Your Honor, I couldn't have asked the other witness about Mr. Dormady's testimony.

EXAMINER PARROT: The objection is overruled with respect to the question that's pending.

Go ahead, Ms. Bojko. You are going to need to rephrase it or we will have it read back. MS. BOJKO: I am happy to rephrase, your Honor.
Q. (By Ms. Bojko) The coding that you referred to is a labeling of the comments that were taken from customers and labeled by Navigant into -there were four categories, the mixed, supportive, neutral/unclear and negative; is that correct?
A. I don't recall the exact categories. I seem to recall only them being coded as supportive or not supportive. But in response to your question, I am referring to the qualitative coding where qualitative responses were coded into a numeric or categorical entry as described. So that's, regardless of what the categories are, the bins are, yes, that's what $I$ am referring to.

MS. BOJKO: Okay. Your Honor, that's all
the questions I have. Thank you.

Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481


Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481

correct?
A. That's correct.
Q. And you are an Assistant Professor of Public Policy?
A. That's correct.
Q. So you -- I believe your teaching and research focuses on energy and environmental economics and policy, and the economics of resilience to terrorism and natural hazards. Did I get that right?
A. That's correct.
Q. So just to be clear, the testimony we're discussing here today doesn't include any analysis regarding the economics of resilience to terrorism or natural hazards, does it?
A. It does not.
Q. Your educational background, can you run me through that real quick?
A. Say that one more time.
Q. Your educational background, can you -- I know it's in your testimony, but can you kind of give me an idea of your studies, your focus of studies in each of your degrees, so $I$ understand what they are?
A. Sure. I have a Ph.D. in Public Policy, Planning and Development, which is -- you can refer
to simply as like an applied economics degree, from USC, from the Price School of Public Policy; ranked 2 in our field. I have Master's degrees -- a Master's degree and Bachelor's degree from the University of California in Political Science. Specifically with application in public policy.
Q. And do you have a degree in statistics or marketing?
A. My -- when you do a Ph.D., when you do a doctorate, one can complete minor programs or complete a minor course of study. My minor course of study was in methodology with respect to statistical analysis and econometric analysis.
Q. And so I understand, what types of course work would that involve?
A. That would include things like statistical analysis, econometric analysis, forecasting analysis, analysis of market data, survey data, et cetera.
Q. So is it fair to say you consider yourself a statistician?
A. No, not at all.
Q. So you consider yourself a public policy expert; is that --
A. Public policy professor, that's correct.
Q. In the courses you described, have you taken any courses in survey design?
A. Have I taken any courses in survey design?
Q. Or coursework.
A. Good question. I can't recall all the courses I've taken. I know I covered survey design in courses that I've taken at the graduate level for sure. But I don't recall the titles of the courses.
Q. So subsequent to your --
A. That was some time ago.
Q. Thank you; some time ago.

Subsequent to obtaining your degrees and in your current teaching career, do you administer surveys on a regular basis?
A. I do.
Q. What types?
A. I administer surveys. My surveys have been sponsored by the National Science Foundation and the U.S. Department of Homeland Security, specifically to evaluate resilience to critical infrastructure disruptions, predominantly surveys of utility customers, to focus on their ability to recover and respond to large-area natural and human-caused hazards.
Q. How are those --
A. These are economic surveys. Economic analyses.
Q. Economic. How --
A. Let me clarify. To evaluate economic resilience.
Q. How were those surveys conducted? What methodologies do you use to get that information?
A. Well, typically, I mean, I could run through specific examples if that would be helpful.
Q. Let me -- instead of having you do that, I know we want to get out of here at a reasonable time today.
A. Sure.
Q. I'm just curious, what's the outreach, I guess, is the way to say it. How do you obtain the connection with these individuals or these organizations you are surveying?
A. Typically we'll develop a -- I know where you are going -- we will develop a sampling frame which is consistent with good practice. Let me give you an example. When I conducted a survey funded by the National Science Foundation, I worked with the Natural Hazards Center at the University of Colorado Boulder with a survey research team. I took the lead
in developing the survey instrument itself. But we worked very hard with organizations like Dun \& Bradstreet and other organizations to develop a rigorous sampling frame of the firms that we would sample for our survey, to develop that sampling approach.
Q. And in that example, just so I understand, you're sampling you said firms? You are sampling entities?
A. Exactly. We're -- this, in this particular survey, we were focused specifically on firms, small businesses, mid-size businesses, to evaluate how they recovered and what they did right or wrong to recover effectively from a natural disaster.
Q. Have you had the occasion to sample individuals as opposed to organizations?
A. My survey research has been predominantly focused on mid-size businesses.
Q. Okay. And how do you -- when I asked earlier about the outreach, what's the contact methodology? Do you mail them a survey or do you call them on the phone? How does that work?
A. Oh, great question. So typically we will -- I will solicit and hire a professional survey
firm to conduct the outreach and engagement with the survey respondents. I don't always do that but typically that's the case.
Q. So typically you hire a firm to do that, like, $I$ guess kind of like Navigant was for AEP? You hire another firm to do that?
A. That's correct.
Q. And get those results? Do you ever administer those surveys?
A. I have administered a survey -- well, let me clarify. Our research team has administered the survey. My role has always been to design the survey instrument or to conduct the analysis or lead the team that conducts the analysis of the survey data. So as a -- in my particular role, I've never been the person to actually do the actual administration of the survey. I design and analyze the survey.
Q. Have you had the occasion to hire Navigant ever?
A. I have never hired Navigant.
Q. Some of their peers perhaps?
A. Not to the best of my knowledge, no.
Q. Okay. And how did you go about selecting who you hire for that kind of work just so I understand?

Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481
A. In my case, I always hire the same firm which has a contract with our university.
Q. For the national surveys you do --
A. Yes, that's correct.
Q. -- including -- okay. I believe -- I asked you the question, I guess, have you read the Company's Application in this case, the long-term forecast?
A. The Application itself?
Q. Yes.
A. I have not.
Q. Have you -- there is an Amendment to that also. Have you read that?
A. I don't know what you are referring to. Probably not, but.
Q. So -- so the Company, on April 16, in last year, filed a -- what was called a long-term forecast and that's what $I$ am referring to, I guess, as the Application.
A. Right.
Q. And then subsequently they amended that, updated it a little bit, September, I think the 19th. And you haven't read either one of those two documents?
A. That's correct.
Q. Any parts of those documents?
A. I may have, but I doubt that I have.
Q. So just a question, when you -- when you were hired -- you were hired by the OCC to put your testimony together, correct?
A. To conduct an independent evaluation of the Navigant survey.
Q. And so, I think in all the machinations that went into a week or so ago, when we had objections to you testifying, and I think that you had, on behalf of your lawyer, on behalf of you, had filed some paperwork in the docket regarding your relationship and agreement with OCC and what you were to review and testify on here today?
A. I believe my contract with Consumers' Counsel was provided as a -- as an appendix to that -- to that filing.
Q. Okay. And do you remember, did that contract ask you to review the Application and the Amendment?

MS. WILLIS: Objection. Relevance.
MR. MILLER: I'm trying to determine whether he read it. He put documentation into this docket that indicates what his task was, and I am trying to get to an understanding of what he did to
prepare to submit his testimony we're talking about here today. And I think it's an important part of grasping the breadth of his understanding of the process in this case, the specific items and issues in the case he testified on. I think it's completely relevant.

MS. WILLIS: Dr. Dormady was hired to evaluate a survey, not to evaluate a long-term forecast filing.

MR. MILLER: I think the survey is part and parcel of this case and is based on the issues being requested in the long-term forecast, and to say that he was hired to review something that wasn't essentially part of this case is ludicrous at best.

EXAMINER PARROT: The objection is overruled.
Q. Do you want that read back?
A. Yes, please.

MR. MILLER: Karen, can you read that
back, please?
(Record read.)
A. It's my understanding, my recollection, I don't remember the exact language in the contract. It was a lengthy document. But it was my understanding that review of the survey and items
pertinent to it was specifically what $I$ was asked to do in that contract.
Q. And so, if I ask you if reviewing the Application was pertinent to the survey, would you have a response to that?
A. It would be my understanding it would not be.
Q. Did you review any of the Company's witnesses testimony in this case?
A. I did.
Q. And what did you review?
A. I reviewed Horner's testimony and Fry's testimony.
Q. Okay. Any of the other witnesses?
A. I reviewed a portion, I believe, of Mr. Allen's testimony.
Q. And you said a portion. So you reviewed all of Fry's and all of Horner's?
A. That's correct.
Q. And then a portion of Allen's; is that correct?

We talked about your survey experience a minute ago. And I wanted to ask you a quick couple of questions about that. I think you indicated that you had done some surveys and you had done those
surveys with predominantly entities or organizations where you reached out to them and took survey information. Can you give me an idea, based on your experience with doing those things, what -- what number, you know, in any given survey you may have performed, what are we talking about in terms of the number of respondents?
A. Number of respondents?
Q. Sure.
A. Smaller than in this Application.

Typically, between 1 and 300 response -- respondents.
Q. And so what --
A. Actually, let me clarify that. Typically the largest survey, if I recall correctly, had only about 220 responses.
Q. And what about the population of the pool of requests? So you got 200 -and-some responses and that went out to how many? Do you remember?
A. I don't recall. I don't recall, but I can tell you -- I can tell you we typically have a response rate of 20 percent or less. That's my best guess of the response rate. So if you are trying to get a sense of the larger pool and our response rate on these surveys, it's typically approximately 20 percent to the best of my recollection.
Q. So in this case, when we are talking about this example and you indicated it was sort of the normal response rate. If you got 200 responses, for example, you would have, what, a thousand solicitations that would go out and --
A. In some cases more. But approximately, yeah.
Q. Some cases less?
A. Less than a thousand?
Q. No, no, no. Less than the response. Let me reask the question because $I$ think we are talking past each other perhaps.
A. Sure.
Q. So you normally, if you had a thousand requests -- survey selections that went out to --
A. Let's call those "invites."
Q. Invites, sure. So you had a thousand invites. You normally, in your experience, get approximately, I think you said, a 20-percent response rate?
A. That's correct, yeah.
Q. And --
A. Or less.
Q. Or less. 20 percent or less, I'm sorry. And --
A. Let me just clarify though. My surveys are post-disaster surveys, right? I surveyed firms in Texas, recently a survey firm that we hired, we surveyed firms in the entirety of the State of Texas after Hurricane Harvey. Firms are difficult to get ahold of in the aftermath of a major disaster so. We -- it's -- for these types of surveys, although our response rate is appropriate.
Q. And so, you said these are post-disaster. And is -- is there a minimum type of disaster? Are we talking, you know, act of God? Earthquakes? Hurricanes? Or is --
A. We are talking hurricanes or major disasters, yeah.
Q. And so all of the people you were getting responses from have lived through that disaster experience?
A. That's correct.
Q. And so they've had that -- they've experienced that disaster and you were asking them those questions to try to understand.
A. I would not -- great question. I would not survey a business to evaluate how they responded to or to measure their resilience or recovery from a natural disaster if they did not live through that
natural disaster. So all -- in all cases, all of my survey research would screen out firms that did not, in fact, live through that disaster.
Q. So your -- I think your testimony
indicates that you provided -- you provided direct testimony in other PUCO proceedings; is that correct?
A. That's correct.
Q. What were those -- what were those cases? Do you remember?
A. I don't remember the case numbers. But you cross-examined me.
Q. I did.
A. The case -- the case with your company was the PPA Rider case.
Q. I think you laid out the cases that you provided testimony in in your CV?
A. That's correct.
Q. And I have a question for you because I'm not clear and $I$ want to understand this, I think one of the cases you indicated that you provided testimony in was a case that was for Dayton Power \& Light.
A. That's correct.
Q. And so, you provided written testimony for a Dayton Power \& Light case?
A. Say that one more time, please.
Q. So you provided written testimony for a Dayton Power \& Light case in front of the Commission?
A. I did. That's correct. It was my understanding that the Consumers' Counsel, due to some external -- external event, decided to not file my testimony and a few others. I provided the testimony, provided the work to the Consumers' Counsel. It was ultimately up to them to file it.
Q. So let me understand, so you -- they hired you to prepare it.
A. That's correct.
Q. And you did. And for whatever reason, they chose not to submit it in the docket and have it be testimony in the case.
A. That's correct.
Q. What was that case about?
A. The Dayton Power \& Light case?
Q. Yes, sir.
A. It was very similar to the power purchase agreement case.
Q. And just generally, and I don't want to get into the details, just generally what was your testimony to be about? What was it to focus on?
A. In that case, I believe my testimony was
focused on the economic impacts of -- to evaluate the macroeconomic impacts as provided by your company.
Q. By AEP?
A. By AEP.
Q. Or --
A. Excuse me. Not by your company. Forgive me. By DP\&L.
Q. And so that testimony, although it was never entered into the record, was -- it opposed the Company's position or request in some way?

MS. WILLIS: Objection. Relevance.
MR. MILLER: We've got a listing here of expert testimony he's given. It appears that it wasn't actually ever filed, and certainly in my review of the docket it didn't indicate it was there, and I am trying to discern exactly what this was and in what case.

MS. WILLIS: I would also object on the basis of, you know, attorney work product and privilege. He was not offered as a witness in that case. He was merely -- his role was a consultant. He did not file testimony. So I think this is -this cross-examination is -- is inappropriate and not relevant.

MR. MILLER: If I may, it's in his CV. I
would assume, I don't know, but I would assume his counsel reviewed this before it was introduced as testimony in this case. I think it's fair game because it's part of his credentials. And again, I don't want to get into the specific details of what he did or didn't draft, or may have or may not have drafted. I am trying to get a general understanding of what -- what he was generally taking a position on in that proceeding.

EXAMINER PARROT: With respect to the question that's pending, the objection is overruled. Go ahead, Dr. Dormady.

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

EXAMINER PARROT: We can do that.
(Record read.)
A. No, it did not.
Q. It did not -- it wasn't testimony that was in opposition to the Company's position, I think is what Karen --
A. I conduct independent analyses. I don't oppose or support any particular intervenor in any case.
Q. Normally, testimony takes a position on something. Did you take a position on that testimony
or was it --
A. The position taken in my testimony, if I recall, was very similar to my testimony in this case, where I was simply identifying as to whether or not a particular piece of analysis should be evaluated and trusted. Just as in this case, my testimony takes the position that the Navigant survey is unreliable and should not be trusted.
Q. So when you are retained to put those kind of pieces of testimony together, those positions, are you -- are you directing your testimony. In other words -- let me ask you the question this way: When you are hired, you are hired to do certain things by OCC in this case, correct? Perform certain work.
A. I don't understand the question, I'm sorry. What do you mean by "certain things"?
Q. There's a task they want you to perform.
A. That's correct.
Q. And you indicated that you provide an independent analysis.
A. That's correct.
Q. Are you ever asked to perform a task that directs your -- directs the result, perhaps on the outcome, and they ask you to fill in the blanks in
how to get there? In other words, have you ever been asked to provide testimony where somebody says "I would like you to prove I'm wrong, tell me how"?

MS. WILLIS: Objection. Relevance, your
Honor. I think we've been pretty patient here. I don't know where this is going. You know, it's going to testimony that was not even filed, not even presented. And I don't see the relevance at all of this line of questioning and we've been very patient so far.

MR. MILLER: Your Honor, the witness said he took independent views. I am trying to understand what that means to him. I am trying to understand how his retention process works. He has been retained several times. I don't know that this is necessarily directed at the Dayton Power \& Light case. He has been hired in at least three cases by the OCC, for example.

MS. WILLIS: What does OCC's retention process have to do with the issues presented before this Commission?

MR. MILLER: I think, among other things, this witness has provided testimony that talks about AEP's retention process of their surveying analytics firm, and he's provided essentially a rebuttal, and I
want to know how they retained their analysis and how they retained their analysts.

MS. WILLIS: Your Honor, with all due respect, we are talking apples and oranges. OCC does not have the burden of proof and is not asking for hundreds of millions of dollars to be spent on a -- a project. We are talking about, you know, OCC presenting a case. It has nothing to do with what -our retention process and what we do with our consultants is not relevant to the issues presented before the Commission.

MR. MILLER: Your Honor, the witness has testified he was retained by the OCC to provide testimony in the Dayton Power \& Light case. He listed it in his CV. I would assume his lawyers or the lawyers for OCC, reviewed that before it was admitted into evidence in this case. Or going to be admitted into evidence in this case. And it's a little bit troubling to think he provided some kind of analysis in the Dayton Power \& Light case that the OCC made the determination not to submit. And I am not asking him why they didn't submit it.

MS. WILLIS: Your Honor --
MR. MILLER: I am trying to determine what this gentleman believes his level of independent
analysis happens to be.
MS. WILLIS: Your Honor --
MS. BOJKO: Your Honor, I am going to object.

EXAMINER PARROT: To the question that is pending, the objection is overruled.

THE WITNESS: Can I have the question again, please?
(Record read.)
A. In all cases, I direct the means of the analysis. I would never enter into an agreement where the outcome was predetermined.
Q. So we talked a little bit about your agreement with the OCC in this case. I think you said that was -- your lawyer had attached it as a document, I believe, to some of the filings that were made, I think, last week. Do you remember, we talked about some of your recollections of what that agreement said in regards to reviewing testimony which you were hired to do. Do you remember language in that agreement that reflected on the fact you were specifically hired to point out bias?

MS. BOJKO: Objection, your Honor. I think that if counsel is asking about a contract in this case, then we can ask that question. But I'm
going to object to the continuing referral to the docket as being evidence. The docket -- a filing in the docket is not evidence. And secondly, inappropriate -- what I believe was an inappropriate motion to exclude testimony and the proceedings that occurred around that have no bearing or relevance now. You've already made a ruling on that, and counsel keeps going back to those pleadings which have nothing to do with the case at hand. You made a ruling, and I think that he needs to talk about this case and contracts in this case.

MR. MILLER: Your Honor, I would perhaps choose "record" as opposed to "evidence," but this information is in the record. This gentleman filed or had his lawyer file an entire set of information a week ago, on the record, which he signed an affidavit that said it was true and factual and accurate. And I am trying to get an understanding, like we talked about earlier, what his relationship happens to be in providing independent analysis. I don't think it's unfair to ask him about things that he swore to previously and submitted in the record of this case. EXAMINER PARROT: The objection is overruled.

THE WITNESS: One more time, please.

| (Record read.) <br> A. There are several questions in that. Can we clarify? <br> Q. Yeah. Let me sort of break it down for you, and if goes like it has been going, we will have to have her go back and reread it. Let me try to break this down. So would it be fair to say that you were hired by the OCC in this case to evaluate potential bias and shortcomings in the Navigant survey? <br> A. To evaluate the credibility of the survey which would include bias, yes. <br> Q. And the shortcomings. <br> A. Shortcomings, yes. <br> Q. Okay. Have you ever provided testimony on behalf of a regulated utility? <br> A. No, I have not. <br> Q. Have you ever testified in favor of any requests made by a regulated utility? <br> A. No, I have not. <br> Q. You've only testified in opposition to requests made by public utilities; is that correct? <br> A. That's correct. Well, let me clarify. You asked this question a few minutes ago. I never take a position for or against any intervenor in a |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

case. I would never conduct an analysis where I am not in control of the means of the analysis, whether or not it supports a particular side or not. So I guess to the degree that, as a witness, I can object to the characterization of your question, I would ask you to rephrase the question. In every case, I control the means of the analysis.
Q. And were you asking me to ask the question again? I think we're fine, so.
A. I think we're fine.
Q. Okay. So your testimony in this case challenges the Voice of the Customer survey designed and administered by Navigant. We talked about you reviewing the testimony, in this case, of witness Horner and witness Fry.
A. That's correct.
Q. And you did that. You did that, I think, in its entirety, reviewed all the documentation they provided and put into the record, correct?
A. That's correct.
Q. And you reviewed the actual survey and the survey results?
A. I did -- I did evaluate the survey and review the survey results, that's correct.
Q. So what else did you do in preparing your
testimony? I know you reviewed their testimony, you reviewed the survey. Anything else?
A. I sub -- supplied questions for discovery. And reviewed those questions -- those responses, those interrogatories.
Q. Do you have a sense of how much time you spent preparing all of that?
A. I keep a record of my time, yes. I don't have the exact number now. I make every effort to keep -- I make every effort to keep my time as short as possible, in the public interest, given this is a public agency. But $I$ do have a record of that, not on me.
Q. And so, you keep a record of that time and what do you do with that information?
A. With that record?
Q. Right.
A. I don't understand. I'm sorry.
Q. Is there a purpose? Is there a reason you keep a record of that time?
A. For purposes of invoicing.
Q. That's what I assumed. I just wanted to check.
A. Correct.
Q. On -- do you have your testimony in front
of you?
A. I do.
Q. On page 4, line 4, if you can turn to that for me. Let me know when you're there.
A. I'm here.
Q. So I believe on page 4, line 4, you state the AEP results, as performed by Navigant, are not reliable. Is that a fair and accurate representation of your statement?
A. Yes.

THE WITNESS: If I can interrupt just briefly? Can I get some water?

Thank you, Maureen.
MS. WILLIS: If you give me that, I'll
fill it up. I don't have any Perrier left.
THE WITNESS: Thank you so much.
Q. (By Mr. Miller) Dr. Dormady, are you ready?
A. Yeah.
Q. I am just checking. I wanted to make sure. We asked -- we talked a minute ago, before we took a break, about the results not being reliable and that was your conclusion in the regards to the Voice of the Customer survey?
A. That's correct.
Q. Are the results accurate?
A. I don't believe so.
Q. Could they be accurate?
A. It's possible.
Q. Did you or anyone at the OCC, I think we asked a similar question before but $I$ will try not to reask the same one, you were asked -- let me say it this way: You were asked if you performed a survey, correct?
A. I believe, a few minutes ago, I was, yes.
Q. And your answer was, of course, no. I believe that's what it was.
A. That's correct.
Q. Did anyone at the OCC perform a survey, as far as you know, regarding the opinion of AEP's customers, concerning renewable energy and what they may be willing to pay?
A. As far as $I$ know, they did not.
Q. Did you or anyone at the OCC perform research or conduct any due diligence regarding whether any similar studies had been performed? In Ohio?
A. Other similar willingness-to-pay estimates work performed or preference assessments for renewables?
Q. Well, let's break it down a little bit. Did you review any other studies or surveys regarding renewables before you -- before you put together your testimony in this case?
A. I did not. I was aware of them in the literature, but I did not need to use billable hours to do that. If that makes sense.
Q. What literature are you referring to?
A. The peer-reviewed published literature on the subject.
Q. Are you aware of any similar studies in Ohio that you might have taken a look at in regards to renewables and customers' willingness to pay?
A. I am not.
Q. When you were retained by the OCC, was it in your scope of work to review other available studies?
A. I don't believe that it was in my scope, no. I was asked simply to conduct an evaluation of the quality of this particular survey, the Navigant survey.
Q. Do you know, in talking a little about the OCC and you have worked for them several times now, they represent the residential ratepayers of Ohio, correct?
A. That's my understanding, yes.
Q. In your course of working for OCC, have you talked to them about what other types of surveys they may have done in regards to their constituency?
A. I have not.
Q. Do you have any idea how the OCC may discern what its constituency is thinking if they don't do surveys?

MS. BOJKO: Objection, your Honor.
Assumes facts not in evidence and mischaracterizes what the witness just stated.

MS. WILLIS: I'll join.
MR. MILLER: I am not sure I
mischaracterized what he stated. I asked a question.
EXAMINER PARROT: Overruled.
MR. MILLER: It was an open-ended
question.
EXAMINER PARROT: Overruled.
A. When you say what their customers are thinking, what are you referring to?
Q. I will ask you the question about surveys.
A. I assume you don't mean Ohio State football.
Q. No. I think everybody south of Toledo,
we know what they're thinking. No, I think what I am getting at is you worked for them several times. We talked about that. Do you have any sense of how they determine what their customers want in regards to the services they may provide to their customers?
A. I'm sorry. I don't understand the question.
Q. The OCC doesn't do surveys as far as you know or have been informed, correct?
A. I am not informed of all of the dealings of the Ohio Consumers' Counsel.
Q. And you've never been involved in a survey for the OCC?
A. That's correct.
Q. Are you personally in favor of renewable energy?

MS. WILLIS: Objection, relevance.
MR. MILLER: I think we've seen similar questions like this of other witnesses. I think this case is covering renewables. I think he is an expert. I think he is -- has a long curriculum vitae and he indicates he's an independent and, again, I am trying just to understand what his view of independence is and what his perspectives are, and I think that's an important part of us being able to
prove our case.
EXAMINER PARROT: Overruled.
THE WITNESS: Can I have the question again, please?
(Record read.)
A. What do you mean by "in favor of"?
Q. Supportive.
A. I think that's a synonym. Do you mean willing to pay as in the Navigant survey's approach or do you mean generally in favor as, you know, I support it like I support the color purple?
Q. I am not sure about purple, but let's ask both those questions. So would you be willing to pay more for renewable energy?
A. I am one of the few customers in the State of Ohio who agrees, through his CRES provider, to pay a slightly higher rate for renewables, yes.
Q. And so, the other question, like you broke that down, are you generally in favor of it as you may support the color purple, I think was the way you put it?
A. I am willing to pay, I am a customer who is willing to pay a slightly higher premium on his electric bill for renewables; and if that means that I support renewables, yes.

Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481
Q. You didn't participate in the AEP survey, did you?
A. I did not.
Q. Do you believe base -- because you're a professor, you deal with energy policy all the time. I think you have been very involved with the personalities at the Commission, for example, and the industry in town and in the state. And knowing all that, I kind of wanted to ask you the question, do you believe that the people in Ohio are generally in favor of renewables?

MS. WILLIS: I am going to object and move to strike the colloquy or whatever it was about the personalities and I don't understand what that means. I don't want it being part of the record. It doesn't help the record. It's a statement and I don't know what it's good for.

EXAMINER PARROT: Let's rephrase.
Q. (By Mr. Miller) You're -- you are an expert in energy policy in the State of Ohio, correct?
A. I believe that's correct, yes.
Q. Do you believe people in Ohio are generally in favor of renewable energy?
A. I do not.
Q. What about the rest of the United States?
A. Let me clarify my response. When I say
"in favor of" or "supportive of" in response to consistent with -- consistent with your prior question, I mean willingness to pay.
Q. Is there a different answer if you separate those two things out into sort of independent categories?
A. Absolutely.
Q. And again, you haven't done any surveys or studies in regards to whether people are supportive of renewable energy or whether people are supportive of renewable energy and willing to pay more, either of those?
A. Can I ask you to be a little bit clearer in your question when you say "supportive"? Can you either phrase it in terms of willingness to pay or some other construct, so I can be precise in my response?
Q. When I say "supportive," would like to see or have the marketplace construct, build, deploy.
A. Regardless of their costs?
Q. Correct.
A. Okay. Say the question one more time then.
Q. So I think you qualified your support for renewable energy, and I asked you the question about whether or not people in Ohio support renewable energy. And I think, again, you sort of qualified it with a willingness to pay or not. And I think the question I'm asking you is, do you think the people in Ohio support renewable energy, economics aside?

MS. BOJKO: Objection, your Honor. I
would ask for further clarification if we're talking about AEP Ohio developing or are we talking about market based. He asked the question twice and he included one time the marketplace and the other time he did not. So is the question do people support AEP Ohio developing or the marketplace developing? Because those are different questions.

MR. MILLER: I don't think I asked the question, $I$ didn't intend to ask the question about AEP Ohio in a reference. I think what we were talking about was people in Ohio, not just AEP Ohio. And I think he asked for additional explanation. I was trying to kind of put some parameters on that so he could answer the question.

MS. WILLIS: And I would object on
relevance. I think we are talking about AEP
customers in this case. We are not talking generally
about the State of Ohio.
EXAMINER PARROT: Overruled.
THE WITNESS: One more time with that question, please.
(Record read.)
A. How can you separate economics from such an important question?
Q. I am going to ask you to try real hard.
A. Try really hard. I really don't know how to answer that question. Sorry.
Q. So as an expert, you don't think the two things can be separated.
A. If you are asking me if I believe that Ohio customers, regardless of service territory, in the aggregate in general support renewables, and there's no change in their costs whatsoever, I would have no -- no evidence to support a claim either way.
Q. What if it were lower cost? Reduced, cost was reduced, in other words, your bill went down?
A. Typically the law of demand would dictate their demand would increase.
Q. So let me understand, I think --
A. Let me say this: "Demand" I use synonymously with "willingness to pay" as I do in my
testimony.
Q. So to be clear, I think what you are saying is costs were -- if it was a benefit to the customer, not an outflow of cash but it was cheaper for them, you think that they would be more supportive -- or supportive, I guess I should say, supportive of renewable energy projects?
A. Correct.
Q. Are you -- are you aware that the Sierra Club is supportive of renewables?
A. I don't know the particular background or degree of support of any Intervenor in this case. Again, I am an independent objective analyst.
Q. Are you aware that there are Intervenors in this case that are supporting the Company's request for construction of utility-scale --
A. Of course.
Q. -- renewables? Do those entities
represent residential ratepayers in Ohio?
MS. WILLIS: Objection, relevance. We'll
stipulate they do not represent other -- the
residential customer classes, if that's what counsel would like.

MR. MILLER: I think counsel --
MS. MOONEY: We wouldn't like that.

MS. WILLIS: Directly, we directly
represent residential customers.
MS. MOONEY: OPAE also represents
residential customers.
EXAMINER PARROT: Overruled.
THE WITNESS: One more time, please.
(Record read.)
A. I don't know that $I$ would characterize any entities or Intervenor in this case representing residential consumers as having a position for or against renewable energy in the broad sense that you've described the term a few minutes ago.
Q. Do you know who OPAE represents?
A. I do not.
Q. Do you know what OPAE is?
A. Yes, I do.
Q. Can you tell me what you think OPAE is?
A. Ohio Partners for Affordable Energy.
Q. And do you know who they serve, who they say they serve?
A. Generally speaking, I don't have any specifics but, yes.
Q. So generally speaking who would that be?
A. I believe they represent, in the aggregate, customers very similar to the Consumers'

Counsel. Customers in addition to small and mid-size business, business customers.
Q. So is -- is your testimony here today made to suggest AEP's customers do not want renewables?
A. Not at all. My testimony is entirely about flaws or biases in the -- in the instrument used to measure demand or willingness to pay of those customers.
Q. And along those lines, can you turn to page 7.
A. Sure.
Q. Lines approximately 1 through 12 , sort of the majority of the top part of that page, first half.
A. Which line?
Q. Just 1 through 12, all of it. And I kind of want to get an understanding of this, and I am going to -- I guess the best way to say it, I am going to explain to you what my understanding is, and perhaps we can talk a little bit about what your representation is here in this part of your testimony.
A. Sure. Go ahead.
Q. So I think here you are talking about a
restaurant chain considering higher tiers on its wine menu to illustrate what you believe the differences between the stated preference and a revealed preference; so you are using this restaurant analogy or --
A. A hypothetical, yeah.
Q. Hypothetical. And I think your suggestion is for the purposes of survey reliability, it would be more appropriate in this hypothetical for them -- the restaurant chain to rely upon another similar chain's actual data and the results of perhaps the experiences that similar chain had had, and that would be a revealed preference analogy, right, that you are analogizing to reveal preference?
A. That's correct. The revealed preference study is where you are actually observing, non-hypothetical responses, customers' actual behavior in the marketplace.
Q. And I think you contrast this with a stated preference which is that same restaurant trying to figure out what to do with the high-tier wine menu, they would just ask local households what to do and that wouldn't be the same. It would be different, right? It's a stated preference, and it wouldn't be actual in the sense of there's no
experience there to reflect upon.
A. That's correct.
Q. And so in your hypothetical data, that analysis requires there be a similar restaurant chain that has that actual data to arrive at that result which, in your mind, is more accurate.
A. That's correct.
Q. Do you know, is a nonbypassable charge or tariff rider for renewables in any other electric utility Standard Service Offer currently in place in Ohio?
A. I don't understand your question. Say that one more time, please.
Q. Do you know if any other electric utility in Ohio has a nonbypassable charge in place in regards to their standard offer, Standard Service Offer, that has to do with renewable costs?
A. I'm not familiar with all of the -- there is a multitude of riders in each of -- for each of the utilities. I'm not familiar with the details of any -- of any of them.
Q. So you wouldn't know.
A. That's correct.
Q. Would you know if any electric utility had ever had a nonbypassable renewable charge in
place?
A. Say that one more time, please.
Q. Would you know if any electric utility ever had a nonbypassable charge in place regarding renewables?
A. I would not.
Q. So you're not aware of any -- you are not aware there would be any data out there perhaps to compare to what the Company's asked in this case?
A. That's incorrect. There is data out there.

MR. MILLER: I don't think I have anything further. Thank you.

THE WITNESS: Thank you.
EXAMINER PARROT: Ms. Willis, redirect?
MS. WILLIS: If I may have a moment, your Honor? Thank you.
(Pause in proceedings.)
MS. WILLIS: Thank you, your Honor. We have no redirect. At this time, we move for the admission of OCC Exhibit No. 24.

EXAMINER PARROT: Are there any objections to the admission of OCC Exhibit 24?

Hearing none, it is admitted into the record.


Armstrong \& Okey, Inc., Columbus, Ohio (614) 224-9481


This foregoing document was electronically filed with the Public Utilities

## Commission of Ohio Docketing Information System on

## 2/11/2019 8:55:25 AM

in

## Case No(s). 18-0501-EL-FOR, 18-1392-EL-RDR, 18-1393-EL-ATA

Summary: Transcript in the matter of the Long-Term Forecast Report of the Ohio Power Company hearing held on 02/06/19 - Volume XI electronically filed by Mr. Ken Spencer on behalf of Armstrong \& Okey, Inc. and Gibson, Karen Sue Mrs.

