

1 BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

2 - - -

3 In the Matter of the :  
Application of Columbus :  
4 Southern Power Company for:  
Approval of its Electric :  
5 Security Plan; an : Case No. 08-917-EL-SSO  
Amendment to its Corporate:  
6 Separation Plan; and the :  
Sale or Transfer of :  
7 Certain Generating Assets.:

:  
8 In the Matter of the :  
Application of Ohio Power :  
9 Company for Approval of :  
its Electric Security : Case No. 08-918-EL-SSO  
10 Plan; and an Amendment to :  
its Corporate Separation :  
11 Plan. :

12 - - -

13 PROCEEDINGS

14 before Ms. Kimberly W. Bojko and Ms. Greta See,  
15 Hearing Examiners, at the Public Utilities Commission  
16 of Ohio, 180 East Broad Street, Room 11-C, Columbus,  
17 Ohio, called at 9:00 a.m. on Friday, November 21,  
18 2008.

19 - - -

20 VOLUME V

21 - - -

22 ARMSTRONG & OKEY, INC.

185 South Fifth Street, Suite 101

23 Columbus, Ohio 43215-5201

(614) 224-9481 - (800) 223-9481

24 Fax - (614) 224-5724

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 APPEARANCES:

2 American Electric Power  
By Mr. Marvin I. Resnik  
3 Mr. Steven T. Nourse  
One Riverside Plaza  
4 Columbus, Ohio 43215-2373

5 Porter, Wright, Morris & Arthur, LLP  
By Mr. Daniel R. Conway  
6 41 South High Street  
Columbus, Ohio 43215-6194

7  
On behalf of Columbus Southern Power  
8 and Ohio Power Company.

9 Janine L. Migden-Ostrander  
Ohio Consumers' Counsel  
10 By Ms. Maureen R. Grady  
Mr. Terry L. Etter  
11 Ms. Jacqueline Lake Roberts  
Mr. Michael E. Idzkowski  
12 Mr. Richard C. Reese  
Assistant Consumers' Counsel  
13 Ten West Broad Street, Suite 1800  
Columbus, Ohio 43215-3485

14  
On behalf of the Residential  
15 Ratepayers of Columbus Southern Power  
and Ohio Power Company.

16  
Sherry Maxfield, First Assistant  
17 Attorney General  
Duane W. Luckey  
18 Senior Deputy Attorney General  
Public Utilities Section  
19 By Mr. Werner L. Margard III  
Mr. John H. Jones

20       Mr. Thomas G. Lindgren  
Assistant Attorneys General  
21       180 East Broad Street, 9th Floor  
Columbus, Ohio 43215-3793  
22  
On behalf of the staff of the Public  
23       Utilities Commission of Ohio.

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

## 1 APPEARANCES (Continued):

2 Mr. Richard L. Sites  
General Counsel, Ohio Hospital Association  
3 155 East Broad Street, Floor 15  
Columbus, Ohio 43215-3620

4 Bricker & Eckler, LLP  
5 By Mr. Thomas J. O'Brien  
100 South Third Street  
6 Columbus, Ohio 43215-4291

7 On behalf of the Ohio Hospital  
Association.

8 Mr. Joseph V. Maskovyak  
9 Mr. Michael R. Smalz  
Ohio State Legal Services Association  
10 555 Buttles Avenue  
Columbus, Ohio 43215

11 On behalf of the Appalachian People's  
12 Action Coalition.

13 McNeese, Wallace & Nurick  
By Mr. Samuel C. Randazzo  
14 Ms. Lisa McAlister  
Mr. Joseph M. Clark  
15 Fifth Third Center, Suite 1700  
21 East State Street  
16 Columbus, Ohio 43215

17 On behalf of the Industrial Energy  
Users of Ohio.

18 McDermott, Will & Emery  
19 By Ms. Grace C. Wung  
600 Thirteenth Street, NW

20        Washington, DC 20005-3096

21            On behalf of Wal-Mart Stores East, LP,  
22            Macy's, Inc., Sam's East, Inc.

23

24

25

26

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 APPEARANCES (Continued):

2 Boehm, Kurtz & Lowry  
By Mr. David Boehm  
3 Mr. Michael Kurtz  
36 East Seventh Street  
4 Suite 1510  
Cincinnati, Ohio 45202-4454

5  
On behalf of the Ohio Energy Group.

6  
Chester, Willcox & Saxbe, LLP  
7 By Mr. John W. Bentine  
Mr. Matthew S. White  
8 Mr. Mark S. Yurick  
65 East State Street  
9 Columbus, Ohio 43215

10 On behalf of the Kroger Company.

11 Bell Royer, Co., LPA  
Mr. Langdon D. Bell  
12 33 South Grant Avenue  
Columbus, Ohio 43215-3927

13  
On behalf of the Ohio Manufacturers  
14 Association.

15 Bell Royer, Co., LPA  
Mr. Barth E. Royer  
16 33 South Grant Avenue  
Columbus, Ohio 43215-3927

17  
On behalf of the Ohio Environmental  
18 Council and Dominion Retail.

19 Schottenstein, Zox & Dunn  
By Mr. Andre Porter

20 Mr. Christopher Miller  
Mr. Gregory Dunn  
21 250 West Street  
Columbus, Ohio 43215-2538

22  
On behalf of the Association of  
23 Independent Colleges and Universities of  
Ohio.

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



## 1 APPEARANCES (Continued):

2 Vorys, Sater, Seymour and Pease, LLP  
By Mr. M. Howard Petricoff  
3 Mr. Michael J. Settineri  
Ms. Betsy L. Elder  
4 52 East Gay Street  
Columbus, Ohio 43216-1008

5  
Mr. Bobby Singh  
6 300 West Wilson Bridge Road  
Worthington, Ohio 43085

7  
On behalf of Integrys Energy.

8  
Vorys, Sater, Seymour and Pease, LLP  
9 By Mr. M. Howard Petricoff  
Mr. Michael J. Settineri  
10 Ms. Betsy L. Elder  
52 East Gay Street  
11 Columbus, Ohio 43216-1008

12 Ms. Cynthia Fonner  
500 West Washington Boulevard  
13 Chicago, Illinois 60661

14 On behalf of the Constellation NewEnergy  
and Constellation Commodity Energy Group.

15  
Vorys, Sater, Seymour and Pease, LLP  
16 By Mr. M. Howard Petricoff  
Mr. Michael J. Settineri  
17 Ms. Betsy L. Elder  
52 East Gay Street  
18 Columbus, Ohio 43216-1008

19 On behalf of EnerNoc, Inc. and  
Consumer Powerline.

20

Vorys, Sater, Seymour and Pease, LLP

21

By Mr. M. Howard Petricoff

Mr. Michael J. Settineri

22

Ms. Betsy L. Elder

52 East Gay Street

23

Columbus, Ohio 43216-1008

24

On behalf of the Ohio Association of  
School Business Officials.

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 APPEARANCES (Continued):

2 Mr. David C. Rinebolt  
Ms. Colleen Mooney

3 231 East Lima Street

P.O. Box 1793

4 Findlay, Ohio 45839-1793

5 On behalf of Ohio Partners for  
Affordable Energy.

6

- - -

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1	INDEX	
2	- - -	
3	WITNESSES	PAGE
4	Philip J. Nelson	
	Cross-examination by Ms. Grady	10
5	Redirect examination by Mr. Conway	100
	Recross-examination by Ms. Grady	103
6	William K. Castle	
7	Direct examination by Mr. Nourse	110
	Cross-examination by Mr. White	111
8	Cross-examination by Mr. Randazzo	112
	Cross-examination by Mr. Etter	113
9	Jay F. Godfrey	
10	Direct examination by Mr. Nourse	122
	Cross-examination by Mr. Etter	123
11	Gregory A. Earl	
12	Direct examination by Mr. Resnik	134
	Cross-examination by Mr. Randazzo	135
13	Cross-examination by Mr. O'Brien	136
	Cross-examination by Mr. Idzkowski	140
14	Examination by Mr. Bojko	157
	Redirect examination by Mr. Resnik	159
15	Karl G. Boyd	
16	Direct examination by Mr. Nourse	161
	Cross-examination by Mr. Reese	162
17	Cross-examination by Mr. Maskovyak	231
	Cross-examination by Mr. O'Brien	237
18	Cross-examination by Mr. Jones	256
	Redirect examination by Mr. Nourse	264
19	- - -	

20

21

22

23

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1	INDEX		
2	- - -		
3	COMPANY EXHIBITS	ID'D	REC'D
4	7 - Direct Testimony of		
	Philip J. Nelson	V.IV	107
5			
	7A - Revised PJN-1, PJN-4, PJN-13	V.IV	107
6			
	8 - Direct Testimony of		
7	William K. Castle	109	121
8			
	9 - Direct Testimony of		
	Jay F. Godfrey	121	131
9			
	10 - Direct Testimony of		
10	Gregory A. Earl	134	160
11			
	11 - Direct Testimony of		
	Karl G. Boyd	161	268
12			
	OCC EXHIBITS	ID'D	REC'D
13			
	6 - Company Response to OCC Request		
14	for Production No. RPD-125	V.IV	106
15			
	7 - Company Response to OCC		
	Interrogatory Request No. 9-270	89	106
16			
	8 - OCC RPD-7-93 Attachment 1	117	121
17			
	9 - Company Response to OCC		
18	Interrogatory Request No. 3-50	178	268
19	IEU EXHIBITS	ID'D	REC'D

20 2 - AEP 3Q08 Earnings Release V.IV 108

21 OHA EXHIBITS ID'D REC'D

22 1 - Company Response to OHA  
Interrogatory Request No. 2-3 244 269

23

- - -

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Friday Morning Session,

2 November 21, 2008.

3 - - -

4 EXAMINER BOJKO: Let's go back on the  
5 record.

6 This is a continuation of case number  
7 08-917, 08-918-EL-SSO In the Matter of AEP's  
8 Applications for Electric Security Plans, et al.

9 Let's go around the room and just do a  
10 brief, brief appearances to make sure who is in the  
11 room at this time.

12 Mr. Resnik.

13 MR. RESNIK: Marvin Resnik, Dan Conway,  
14 and Steve Nourse for the companies.

15 MR. MASKOVYAK: Joe Maskovyak and Mike  
16 Smalz for APAC.

17 MR. O'BRIEN: Tom O'Brien, Rick Sites for  
18 the Ohio Hospital Association.

19 MR. JONES: Good morning, your Honor. On

20 behalf of the staff of the Public Utilities

21 Commission of Ohio, Werner Margard, Tom Lindgren, and

22 John Jones.

23 MS. ELDER: Betsy Elder and Howard

24 Petricoff for Integrys Energy and Constellation New

25 Energy.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           MS. GRADY: On behalf of the residential  
2 ratepayers of the company, Janine L.  
3 Migden-Ostrander, Consumers' Counsel, Maureen Grady  
4 and Terry Etter.

5           MR. RANDAZZO: Lisa McAlister, Joseph  
6 Clark, Sam Randazzo for the Industrial Energy Users  
7 of Ohio.

8           MR. BOEHM: On behalf of the Ohio Energy  
9 Group David Boehm and Michael Kurtz.

10          MR. WHITE: For the Kroger Company, Matt  
11 White, John Bentine, and Mark Yurick.

12          EXAMINER BOJKO: Thank you.

13          Mr. Nelson, you recall you're still under  
14 oath.

15          THE WITNESS: Yes.

16          EXAMINER BOJKO: I believe we left off  
17 with Ms. Grady.

18          MS. GRADY: That's correct, your Honor.

19                   - - -

20                   PHILIP J. NELSON

21   having been previously sworn, as prescribed by law,

22   was examined and testified as follows:

23                   CROSS-EXAMINATION

24   By Ms. Grady:

25         Q.   Good morning, Mr. Nelson.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Good morning.

2       Q. Let's go to your testimony, page 4, and  
3 I'm going to direct your attention to lines 13 and  
4 14, and you indicate there that SB 221 provides for a  
5 broader cost-based adjustment than the EFC  
6 methodology in that it includes all prudently  
7 incurred fuel, purchased power, and environmental  
8 components in the ESP. Do you see that reference?

9       A. Yes.

10      Q. When you use the term "prudently  
11 incurred," that term applies to all the components  
12 you mentioned on line 14, that is, SB 221 provides  
13 that the SSO may include prudently incurred fuel,  
14 prudently incurred purchased power, and prudently  
15 incurred environmental components?

16      A. Yes. But the only qualifier is that it  
17 does say "incurred," so to me the prudence test is  
18 after we got the fuel in place and we would have a, I  
19 think, an annual audit under Commission's rules so

20 that's when the prudence test, I believe, would have

21 to come in.

22 Q. Now, when you refer to the environmental

23 components, are those the costs that are prudently

24 incurred to comply with environmental laws and

25 regulations as you understand SB 221?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes, I believe that's the case.

2       Q. Do you know the source in 221 of the  
3 environmental component portion?

4       A. I'm not sure how to answer that question.  
5 Are you asking me the source in the statute itself  
6 for environmental or --

7       Q. Yes. Can you point to a specific  
8 provision within SB 221 that permits the recovery of  
9 the environmental component or the environmental  
10 cost? Do you know the specific statute for a  
11 reference? And if you don't, that's fine as well.

12      A. 143(B)(2)(a) has the environmental  
13 allowances in that section specifically. They're  
14 also -- in Senate Bill 221 there's some language  
15 "without limitation" and so forth, so not all  
16 environmental perhaps is specifically detailed in a  
17 particular section. It may come under a broader  
18 category.

19           However, it seems apparent to me that

20 when you read Senate Bill 221, the intention was for  
21 us to get our environmental costs. Environmental is  
22 prevalent in that it is -- it's also handled under  
23 the MRO section of the bill. It specifically  
24 mentions environmental in that section, I believe.

25 Q. Yes. I guess that was my point. When I

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 looked at the -- when I look at 221, I see a  
2 reference to the environmental components under  
3 4928.142(D)(4), and that's the MRO section.

4 A. Yes.

5 Q. And I was searching for similar language  
6 on the SSO section and wasn't finding that.

7 A. Yeah. The ESP section I don't think has  
8 the same language around environmental, though it  
9 has, as we talked about, a broader "without  
10 limitation" and I've kind of looked at, you know,  
11 that it is in the MRO, it seemed that, you know, that  
12 they envision that we should get environmental  
13 recovery specifically, so even though it wasn't --  
14 that same language wasn't taken over to the ESP side  
15 of the bill, other than, you know, specific mentions  
16 for like allowances, I felt that it was the intention  
17 of the bill to allow us to recover environmental  
18 costs.

19 Q. Now, going to page 4 of your testimony,

20 lines 18 through 21, you indicate that the company  
21 did not propose to include capital carrying costs on  
22 the environmental capital in the fuel adjustment  
23 clause. Do you see that?

24 A. Yes.

25 Q. But, Mr. Nelson, recovery for the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 carrying costs on the environmental capital is being  
2 sought in some other form, correct?

3 A. That's correct.

4 Q. And you merely testified as to the amount  
5 of the costs or the quantification; is that correct?

6 A. I provide a quantification of it, though  
7 I am supporting the concept that we should get that  
8 as well.

9 Q. The environmental carrying costs would be  
10 included in the SSO rate as you understand it, and  
11 Mr. Roush would testify to that?

12 A. Yes. He would have taken the number I  
13 provided him and designed a rate to recover it.

14 Q. And due to the fact that the capital  
15 carrying cost on the environmental capital is not  
16 being recovered through the fuel adjustment clause,  
17 the company is not proposing, is it, in the ESP any  
18 trueup or a tracker associated with the carrying cost  
19 associated on the environmental investment; is that

20 correct?

21 A. That's correct, we did not propose a

22 tracker for that item.

23 Q. And there's no trueup either.

24 A. That's correct.

25 Q. So whatever carrying costs are currently

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 built into the ESP remain there forever.

2 A. Well, the ESP is a three-year plan.

3 Q. I'm sorry, remain there for three years

4 then at least, at a minimum.

5 A. Yes. That's correct.

6 Q. Let's go back for a moment, Mr. Nelson,

7 to your first exhibit. That would be PJN-1, and it

8 really doesn't -- for purposes of my questions it

9 really doesn't matter whether we're on PJN-1 Exhibit

10 7 or Exhibit 7A, so that does not make a difference.

11 In terms of the PJN-1, this exhibit would

12 show the fuel component of the current SSO for CSP;

13 isn't that correct?

14 A. Yes, that's correct.

15 Q. And the corresponding exhibit for Ohio

16 Power would be PJN-4.

17 A. Yes.

18 Q. Now, if I look at PJN-1, we see the

19 allocation factor allocating, for instance, the

20 SB 221 FAC accounts at the 1999 level.

21 A. Yes.

22 Q. And what you're trying to do there is

23 allocate those accounts to internal load; is that

24 correct?

25 A. Yes. Some of the costs should be

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 assigned to the off-system sales, and in the case of  
2 Ohio Power, there would also be assignment to other  
3 members of the AEP companies or AEP.

4 Q. And when you allocate or assign some of  
5 that to off-system sales, the reverse of that is  
6 true, that you are allocating costs to the internal  
7 load, correct?

8 A. Yes, that's correct.

9 Q. Now, the allocation factor that you've  
10 shown here, that has never been approved by the Ohio  
11 Commission, has it?

12 A. No, and I wouldn't think it would be.

13 Q. And why do you think it wouldn't be?

14 A. It's a dynamic allocator. The  
15 methodology would be approved but not a particular  
16 percentage.

17 Q. Has the methodology been approved by the  
18 Ohio Commission, to your knowledge?

19 A. In a sense I believe so because in the

20 old EFC provisions there would always have been  
21 allocations of fuel costs to off-system sales and  
22 away from the internal customer, and I'm continuing  
23 that methodology for these additional items.

24 Now, we don't have the ability back in  
25 '99 to be as precise at looking at which units were

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 actually running and assigning these costs based on  
2 which units were assigned to off-system sales. So  
3 what I did is I had to use a proxy for that, so I  
4 went back and analyzed the kWhs assigned to internal  
5 load versus off-system and assigned on that basis.

6 Now, the fuel cost itself, the old EFC or  
7 the NEC would have been done in the manner I  
8 described. It would have been the algorithm where at  
9 each hour you determine which plant is running for  
10 off-system sales and assign that amount.

11 Q. So in the company's most recent EFC  
12 proceeding, this allocation methodology which you  
13 present here today would have been used by the  
14 company and approved by the Commission. Is that your  
15 testimony today?

16 A. And I'm assuming when you say "the most  
17 recent EFC," that would have been the vintage  
18 '99 cases?

19 Q. Yes.

20       A. Yes. That would underlie the number  
21 shown on line 10. You see that 1.373, that would  
22 have reflected that methodology.

23       Q. I guess I was looking at the allocation  
24 that occurs in the following lines from line 18  
25 through 31.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. There we'd have to do, as I said, a proxy  
2 for determining that. The method I used was to  
3 review that period 1999 and assign these costs  
4 according to the megawatt-hours assigned internal  
5 versus off-system because that wasn't a part of the  
6 old EFC, so those costs wouldn't have been available  
7 in the algorithm.

8       Q. Now, when we use the phrase "internal  
9 load," are we talking about retail jurisdictional  
10 customers?

11      A. We're talking about retail and firm  
12 wholesale.

13      Q. Now, on line 36 of PJN-1 you have a --  
14 you have the RSP rate adjustment. Do you see that?

15      A. Yes.

16      Q. And you have 3 percent per year for three  
17 years. Do you see that?

18      A. Yes.

19      Q. That represents a compound rate, does it

20 not, Mr. Nelson? In fact, in the RSP you get  
21 3 percent increase for '06, an additional increase  
22 for '07, and an additional 3 percent for '08.

23 A. Yes, that's correct. And I believe I  
24 give you the compound percentage in my testimony.

25 Q. And that compound rate is then applied to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 line 35, the 2.166 cents?

2 MR. CONWAY: Just for the record, you're  
3 keying your discussion off of the original PJ --

4 MS. GRADY: I'm sorry.

5 MR. CONWAY: That's okay, you explained  
6 at the outset. I just want to make sure everyone  
7 understood you were looking at the original figures.

8 MS. GRADY: Yes.

9 Q. And that compound rate, let's use the  
10 more revised because that probably is more  
11 appropriate. You applied that compound rate that you  
12 indicate in your testimony to line 35, and in 7A that  
13 line 35 is 2.175.

14 A. Yes, that's correct, and results in a  
15 rate adjustment of 0.202.

16 Q. And the 2.175 reflects the addition of  
17 the frozen EFC rate in 1999 plus the additional  
18 SB 221 FAC accounts; is that correct?

19 A. Yes.

20 Q. And again, we're talking about for

21 Columbus Southern Power.

22 A. We are.

23 Q. Now, if we talked about Ohio Power, you

24 would have done the same calculation and that would

25 be shown on PJN-4.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. That's correct.

2       Q. And in that instance you would have  
3 applied the RSP rate adjustment, the 7 percent per  
4 year for three years.

5       A. That's correct. I think it's a compound  
6 of 22.5 percent.

7       Q. Thank you.

8           Now let's go to PJN-2, Mr. Nelson. In  
9 PJN-2 you present the company's calculation of the  
10 fuel adjustment clause for the base period; is that  
11 right?

12       A. PJN-2 is the forecast for 2009.

13       Q. I'm sorry. And PJN-2 reflects Columbus  
14 Southern Power while PJN-5 would be Ohio Power.

15       A. That's correct.

16       Q. Now, this exhibit, Mr. Nelson, is based  
17 on the projected or forecasted amounts for 2009?

18       A. Yes, it is.

19       Q. Okay. And at the time that this exhibit

20 was developed what was the -- let me strike that.

21 As we sit here today what are the actual

22 latest known data for the SB 221 FAC accounts? What

23 period would that cover up to?

24 A. The latest known. I haven't done any

25 sort of calculation on the latest known.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Q. Would you imagine that you have the  
2 SB 221 FAC account information at least through 2008,  
3 of September?

4 A. Yeah, we'd have actual data through  
5 September '08.

6 Q. Would you have actual data beyond  
7 September 2008?

8 A. Yes, we should have probably through  
9 October now.

10 Q. Now, on PJN-2 the 2009 forecast, do you  
11 know what months that would consist of actual and  
12 what months would be forecasted for purposes of your  
13 exhibit?

14 THE WITNESS: Could you repeat that,  
15 please?

16 (Record read.)

17 A. For 2009 it's all forecasted information.

18 Q. Entirely forecasted.

19 A. Yes.

20       Q. Have you looked at the actual SB 221 FAC  
21 accounts for 2009 to see how they match up with the  
22 forecasted 2009 amounts shown on PJN-2.

23       MR. CONWAY: Could I have that question  
24 reread, please?

25       (Record read.)

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           MR. CONWAY: I'm going to object because  
2 as the witness just explained, that the forecast is a  
3 forecast, it's not actuals.

4           EXAMINER BOJKO: Could you rephrase your  
5 question, please, Ms. Grady?

6           MS. GRADY: Sure.

7           Q. For purposes of the ESP plan presented  
8 and for purposes -- let's focus on the FAC component  
9 which you're testifying to. You are, and "you" being  
10 the company, you are proposing to use the FAC for  
11 2009 based on total forecast. You are not proposing  
12 FAC based upon any actual fuel cost; is that correct?

13          A. No, that's not correct. In a normal fuel  
14 proceeding you'd normally -- you'd do a projection of  
15 what you anticipate fuel to be and you would then  
16 true up the actual fuel for the same period. In this  
17 instance it's no different other than when I had the  
18 caveat that we've got the cap of 15 percent, so my  
19 numbers aren't taken right to revenue. Normally you

20 just start charging what's shown on PJN-2, which is a  
21 3.649 in rates effective January 1st, and then you  
22 would true up the actual to that rate, so you'd  
23 compare your actual cost to your actual revenues.  
24 Your difference would be deferred.  
25 In this instance we're not putting in the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 full amount because we have a phase-in plan. We'll  
2 have a lower revenue in 2009 so we expect to build a  
3 big deferral right off the bat, but we're always  
4 going to be comparing a forecast to an actual, and  
5 the customer will always get billed in the final  
6 state, the actual fuel cost.

7 Q. And why not, Mr. Nelson, why not use  
8 actual information as opposed to forecast information  
9 for this purpose?

10 A. Well, we have to put in a rate January  
11 1st, 2009, and we don't have any actual. We're  
12 still in '08.

13 Q. But you do have actuals. We just  
14 established that you have actuals at least up through  
15 September 2008 for the FAC components.

16 A. Well --

17 Q. And those would be the latest known  
18 actuals, correct?

19 A. Yes. But to be frank, it just wouldn't

20 make sense. When you do a fuel clause, you're  
21 putting in the anticipated expense that you expect to  
22 experience in that period and then you true up to  
23 that. It's a matching principle. You want to match  
24 revenues received to the costs in the same period.  
25 If not, then you're going to get distortions in your

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 income statement, you can't really true up one period  
2 to a past period. That doesn't make sense to me.  
3 You have to true up to the same period.

4 So if you're comparing January '09 costs  
5 to something, you should be comparing it to January  
6 '09 revenues for that item.

7 Q. I'm not sure that I followed that, but I  
8 will move on.

9 A. Okay.

10 Q. Would the forecast for 2009 have been  
11 developed by you or someone under your supervision?  
12 And I'm talking about specifically about the 221 FAC  
13 accounts forecast for 2009 as shown on PJN-2.

14 A. They would have been prepared -- the  
15 underlying data would have been prepared by numerous  
16 groups within AEP. Everybody has budgets and are  
17 required to submit budget forecasts and so I can't  
18 say it's any one particular group. Obviously, our  
19 fuel supply group would have a big role in it because

20 they forecast the underlying fuel costs that feed the

21 forecast, but a number of parties are involved.

22 But were you actually -- I'm sorry, were

23 you specifically referring to the SB 221 accounts?

24 Q. Yes, I was.

25 A. Okay. Well, they would have probably a

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 little bit lesser role in that, the fuel supply  
2 group. They would have a very prominent role in the  
3 pieces above that line.

4 Q. Now, the company's filing, Mr. Nelson, to  
5 your knowledge did not present any data on the  
6 forecast or prices of fuel for the SB 221 FAC  
7 accounts for any other period than 2009; is that your  
8 recollection?

9 A. When we filed the information, yes, we  
10 filed 2009 only.

11 Q. Now, the allocation factor for the  
12 environmental accounts that's shown on lines 20  
13 through 22 of PJN-2, is that based on 1999 or 2009  
14 data?

15 A. No; that's based on 2009 data.

16 Q. Let's go to page 6 of your testimony,  
17 Mr. Nelson. Specifically I want to direct your  
18 attention to lines 2 through 3, and there you  
19 indicate that: "The Companies will include in the

20 FAC any new environmental related chemicals that may  
21 be required in the future." Do you see that  
22 reference?

23 A. Yes.

24 Q. The only chemical that you expect at this  
25 time that will be required into the future is the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 activated carbon; is that correct?

2 A. That's one that I'm aware of that could  
3 occur in this period, the three years we're talking  
4 about for the ESP.

5 Q. You're not anticipating, are you,  
6 Mr. Nelson, any new chemicals to recover costs  
7 related to CAMR, C-A-M-R?

8 A. No, I wouldn't think so. I think if we  
9 anticipate something, normally we put it in the  
10 forecast, and I'm not aware of anything in the  
11 forecast at this point.

12 Q. Is it your understanding that CAMR's been  
13 vacated by the courts?

14 A. No. My understanding -- well, I may not  
15 be up to speed on it. I don't know where it stands,  
16 to be frank. I know CAMR -- I'm sorry, the mercury  
17 rule I think has been vacated. I'm a little confused  
18 on where CAIR stands.

19 Q. So CAMR is the mercury rule.

20       A.  Yes.

21       Q.  What does CAMR, what do the acronyms  
22 stand for?

23       A.  I think it's Clean Air Mercury Rule, but  
24 that's a guess.

25       Q.  And the other standard you mentioned is

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 CAIR.

2 A. Yes.

3 Q. Can you tell me what those acronyms stand  
4 for?

5 A. I think it's Clean Air Interstate Rule.

6 Q. So it's your understanding that CAMR has  
7 been vacated but not necessarily CAIR.

8 A. I just don't know the status of CAIR.

9 Q. Now, on page 8 of your testimony you  
10 speak of a three-step process to identify the FAC  
11 component of your most recent SSO. Do you see that  
12 testimony?

13 A. Yes.

14 Q. And on lines 19 through 21, I'm going to  
15 focus on the third step, and that's where you make  
16 "an adjustment for subsequent rate changes" -- and  
17 I'm going to focus on that word, "subsequent" rate  
18 changes -- "to arrive at a base FAC component that is  
19 equal to the fuel cost presently in the most recent

20 SSO." The subsequent rate changes that you are  
21 referring to there are then described on page 9,  
22 lines 22 through 23; is that correct?

23 A. Yes, that's where I start the discussion.

24 Q. And the first of those subsequent rate  
25 changes are the 3 and 7 percent generation increase

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 granted in the RSP cases. Do you see that?

2 A. Yes.

3 Q. And that is 04-169; is that correct?

4 A. That's correct.

5 Q. And those were yearly increases each year

6 from 2006 through 2008.

7 A. Yes, that's correct.

8 Q. And the company has done a calculation,

9 has it not, to identify how much revenue was produced

10 on an annual basis for 2008 with respect to the

11 increases produced under 04-169?

12 A. Yes.

13 Q. Has the company done a calculation

14 identifying how much revenue in total was produced

15 for the periods of 2006 and 2007 associated with

16 04-169?

17 A. No. It doesn't seem relevant. You want

18 to take -- identify what's in your current rates, the

19 last step, the highest step, so you'd want to have

20 escalating rates by the 22.5 percent and then

21 calculate the annual effect of -- the last year would

22 be the highest year.

23 Q. Because of the compounding?

24 A. Yes.

25 Q. Now, the 2008 annual revenue would be

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 shown on PJN-13?

2 A. Yes.

3 Q. And that was supplied to you by

4 Mr. Roush?

5 A. Yes, it was.

6 Q. So that would show that there was

7 \$270 million associated with the 3 and 7 percent

8 increase for 2008; is that right?

9 A. Yes, on an annualized basis, though I'm

10 not sure if that -- yes, I think that's using 2008

11 kWh.

12 Q. Now, the RSP 3 and 7 generation case that

13 we've been discussing had more than a 3 and a

14 7 percent increase in it, didn't it?

15 A. The RSP I believe had other components.

16 I don't recall specifically, I don't remember what

17 they were.

18 Q. For purposes of PJN-13 how did you

19 separate the 3 and 7 revenue from the RSP general

20 revenue in that case?

21 A. The reason I used the 3 and 7 is that we

22 have a rate component that I've identified, I've

23 unbundled the fuel component at the start, and I know

24 that the total generation rate, say it was -- I'm

25 going to just use an example -- we started the period

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 at, say, \$40 per megawatt-hour. I know there was a  
2 component of that \$40 that had already been  
3 identified in the unbundling case for fuel.

4 So I know if you apply 7 or 3 percent to  
5 that total, I'm making the assumption, though it  
6 wasn't specific in the RSP case if 3 or 7 was for  
7 fuel or anything else, but the SSO rate was increased  
8 by 3 percent and 7 percent each year. So I now know  
9 at the start, you know, what my SSO rate is total. I  
10 know what the fuel component is of that SSO rate, so  
11 I made the assumption that -- I think a fairly  
12 logical assumption -- that the fuel component of that  
13 rate also escalated by 3 and 7 percent.

14 Now, other components of the RSP were  
15 probably not relevant to the fuel component.

16 Q. That would be your determination,  
17 correct?

18 A. Yes.

19 Q. Does Mr. Roush, if you know, present

20 testimony on how he separated the 3 and 7 revenue

21 from the RSP general revenue in that case?

22 A. In which case?

23 Q. In the 04-169 for purposes of your

24 PJN-13.

25 MR. CONWAY: Could I have that question

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 reread?

2 (Record read.)

3 MR. CONWAY: Could I have a  
4 clarification? I'm not following personally the  
5 difference between the 3 and 7 revenue and the  
6 general revenue. Maybe you've explained what the  
7 distinction is in your question, but --

8 MS. GRADY: I think it goes back a couple  
9 questions to the cross.

10 EXAMINER BOJKO: I think the witness has  
11 been following this.

12 Can you answer her question?

13 A. I believe so. The way I interpret her  
14 question is she's asking whether Mr. Roush did  
15 anything in -- was it the 469 case? -- to identify  
16 and separate fuel from total generation rates, and,  
17 of course, in 469 we wouldn't have been doing that.  
18 There was no need to. There was no fuel clause at  
19 that time.

20           However, since we had no changes from  
21 2001 through 2005, what you could do is go back to  
22 the unbundling case to determine the fuel component.  
23           EXAMINER BOJKO: You mean no changes to  
24 the fuel components?  
25           THE WITNESS: Or any generation.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Generation didn't change at all between that period.

2 The total rate didn't change. The fuel rate didn't  
3 change.

4 EXAMINER BOJKO: From 2001 to 2005?

5 THE WITNESS: Yes.

6 So we didn't do anything specific in that  
7 case. There wouldn't have been any purpose. But now  
8 you can look back at those cases and carve out the  
9 appropriate FAC in our current SSO rate.

10 Q. (By Ms. Grady) And I guess that was my  
11 question, is if Mr. Roush presents testimony on how  
12 he did it, because I think your testimony today was  
13 that you got the information from Mr. Roush. He  
14 separated that out.

15 A. Well, I don't think that was my  
16 testimony. You asked about one item that was on  
17 PJN-13.

18 Q. Okay.

19 A. And who supplied me the annual revenue

20 associated with the 3 and 7 for 2008.

21 Q. Yes.

22 A. And Mr. Roush did do that calculation for

23 me, but I don't think that relates at all to the

24 discussion we've just had.

25 Q. I'm sorry, I didn't mean to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 mischaracterize your testimony, Mr. Nelson.

2 A. No problem. Just trying to clarify.

3 EXAMINER BOJKO: Mr. Conway.

4 MR. CONWAY: Excuse me, counsel, for

5 interrupting you. I think there was a reference to

6 469 in the testimony, and I think it was --

7 EXAMINER BOJKO: 04-169.

8 MR. CONWAY: -- 04-169 to clear it up and

9 not have to do it later.

10 EXAMINER BOJKO: The RSP proceeding is

11 what you were referencing, 04-169, Mr. Nelson?

12 THE WITNESS: Yes.

13 MS. GRADY: Thank you for that

14 clarification.

15 Q. (By Ms. Grady) Now, on PJN-13 under the

16 2008 revenue increase for 3 and 7 in the RSP

17 4 percent case, you reflect the revenue associated

18 with the compounded rate increase; is that correct?

19 A. Yes, because in 2008 you have had the

20 full compounding at that point.

21 Q. But it is an annual revenue increase and

22 not -- a revenue increase that goes back to 2006 and

23 2007, correct?

24 A. Yes. Every number on this schedule is on

25 an annual basis, so it's consistent. That's usually

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 the way we present numbers in rate proceedings is on  
2 an annualized -- annual basis.

3 Q. And that annual revenue produced by the 3  
4 and 7 in the 4 percent case is then used to offset  
5 the fuel and environmental costs requested be  
6 increased under the ESP; is that correct?

7 A. No. This schedule is just informational.  
8 What I've done, and I describe this schedule towards  
9 the end of my testimony, I think we want to go to the  
10 text to put this in the proper context.

11 And the question and answer begins on  
12 page 20 of my testimony. So after I've done what I  
13 think is the appropriate method to identify what the  
14 FAC is in the 2008 standard service offer --

15 Q. Yes.

16 A. -- and I've also provided, we haven't  
17 talked about it yet, but an offset for my  
18 environmental capital carrying costs. I then just  
19 thought it would be useful to this Commission to see

20 how that compared to the revenues received under the  
21 3 and 7 case and the various other proceedings that  
22 we have been before the Commission for.

23 But you'll recall that the 3 and 7 wasn't  
24 specifically for environmental or fuel; it was meant  
25 to -- it was a general increase to our total

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 generation rate. And I just wanted to show that just  
2 in my case where I'm dealing with just two components  
3 of the companies' cost. I provided credits in a  
4 sense to the customer accounting for all that revenue  
5 received under those proceedings.

6           So it's just a, more of an informational  
7 text to show that my, you know, I've accounted for  
8 the revenue provided, but the actual methodology to  
9 calculate each component would stand on its own, that  
10 is, I've done a methodology to identify the FAC in  
11 the current SSO. I've done a calculation to request  
12 environmental carrying costs, and I've provided, you  
13 know -- and I've increased the fuel rate in the  
14 current SSO by the 3 and 7, and on the side of the  
15 environmental calculation I've offset it with capital  
16 identified in the RSP 04-169 case as well as  
17 subsequent cases.

18       Q. So if I asked you that -- if we go back  
19 to PJN-13, is that the offset just to show a

20 reduction in environmental costs? Would that be a  
21 way to characterize it? As opposed to an offset for  
22 FAC?

23 A. No, I don't think that's the right  
24 characterization of the schedule. We jumped into one  
25 line on the schedule towards the bottom --

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. Yes.

2 A. -- and if it would be helpful I'd walk

3 you through the rest of the lines to show --

4 Q. Could you?

5 A. Yeah.

6 Q. Could you do that for me?

7 A. Why don't we stick with just the first

8 column, just do one company and make it easiest.

9 Let's do Ohio Power Company.

10 Q. Okay.

11 A. I've taken the load of Ohio Power and

12 multiplied it by the fuel component of 3 and 7.

13 That's the 0.323.

14 Q. Yes.

15 A. Maybe it would be helpful just to flip

16 back and tie that to the schedule. It should be on

17 PJN-4, and you'd have to look at the original. I

18 didn't update for the minor changes that would have

19 flowed through from the corrected sheet since this

20 particular schedule is just informational, not that  
21 important, and the number would be very similar.

22       So you get 94 million associated with  
23 fuel related to 3 and 7, okay? Then the next step is  
24 I provided an offset to my environmental capital that  
25 we're requesting because we only want the incremental

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 that we didn't recover in other proceedings before  
2 the Commission, and if we turn to PJN-8, now look at  
3 that and also PJN-13, on the environmental side  
4 you'll see for Ohio Power 84 million as the carrying  
5 cost.

6 Q. You're talking about PJN-8, the line  
7 entitled Jurisdictional Revenue Requirement?

8 A. That's correct. And you'll also see that  
9 on PJN-13.

10 Q. Yes.

11 A. And it says "Environmental Carrying Cost  
12 would offset for RSP Estimates and 4 percent Case."

13 Okay. Now, up above that line is -- or,  
14 up above that item we just talked about on PJN-13 is  
15 another number, and that's 224 million. How did I  
16 get that? Well, that would have been the  
17 jurisdictional revenue requirement if I hadn't  
18 provided any offset on the environmental, that is,  
19 going back to PJN-8 -- I'll let people catch up.

20 I start with total environmental  
21 investment of about \$2.4 billion for Ohio Power  
22 Company. You can see that I've offset about  
23 \$1.5 billion of that saying that was in some manner a  
24 subject of prior cases.  
25 Q. Yes.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. So I come up with a net incremental of  
2 900 million. So where does the 224 come from on  
3 schedule 13? That is if I didn't provide that credit  
4 of 1.5 billion, the carrying costs would have been  
5 \$224 million, so the quantification of that credit is  
6 140 million, okay?

7       The next step is to add the two pieces.  
8 We've said that the value of the 3 and 7 on the fuel  
9 side was 94 million for Ohio Power Company. The  
10 value of the credit or offset on the environmental  
11 side is 140 million, so I've provided value just in  
12 my two components of \$234 million.

13       Then what I do next is just say, well,  
14 how did that compare -- and this is just as I said,  
15 more for informational -- to the total revenue  
16 received in -- from the 3 percent component of the  
17 RSP and the --

18       MR. CONWAY: Excuse me, Mr. Nelson. I'm  
19 sorry to interrupt again, but just to make sure it's

20 clear, you said the 3 percent. Did you mean the

21 7 percent?

22 THE WITNESS: Yes.

23 MR. CONWAY: Okay.

24 THE WITNESS: Yes. In Ohio Power's case

25 it would be 7 percent and 3 percent for CSP.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           So what I've identified next is, and as I  
2   said, Mr. Roush provided me the value of the  
3   7 percent as \$190 million, that's what the value is  
4   in 2008 because it's been compounded. It's up to  
5   22-1/2 percent at that point.

6           Now, the environmental cases that we had  
7   since that time resulted in very little incremental  
8   revenue for Ohio Power Company because of the method  
9   we used when we made those filings. We were only  
10   asking for incremental CAIR and CAMR that we hadn't  
11   previously anticipated.

12       Q.   Okay.

13       A.   And we had anticipated most of the CAIR  
14   and CAMR expenses for Ohio Power Company in our  
15   original estimate so it results in very little  
16   revenue requirement, and if you review the case file,  
17   I think we ended up with a 5 million annual increase  
18   there.

19           So the sum of those two components is

20 195 million related to the 7 percent piece, the RSP,  
21 and subsequent 4 percent cases which recovered  
22 environmental, incremental environmental carrying  
23 costs.

24 So then I just compare the two. I

25 provide credit of 234 million, and from these cases

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 for these components I've only actually received

2 195 million.

3 Now, what I could have done is maybe  
4 limited my credits to provide no more than these, but  
5 I didn't do that. I just said that we're comfortable  
6 with the numbers. What I'm getting at is we were a  
7 little conservative perhaps on Ohio Power.

8 And again, remember that the 3 and  
9 7 percent increases granted were not to recover just  
10 fuel, there were other things. They were not  
11 designed to recover just environmental, there would  
12 have been other things. So that's really the purpose  
13 of this exhibit, is just to put it in perspective.

14 Q. So are you saying, and I'm trying to  
15 follow you, Mr. Nelson, I really am, that the total  
16 value of the RSP in the RSP 4 percent case  
17 adjustment, that line that shows 234 for OPCO and 104  
18 for CSP, that adjustment has been made as opposed to  
19 the adjust -- or, as opposed to anything else on this

20 schedule?

21 A. Yes, those adjustments have been made.

22 Q. And that where you show below the 2008

23 revenue increase for 3 and 7 in the 4 percent case,

24 that's just informational in a sense.

25 A. Well, it's informational. It provides a

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 comparison basis.

2 Q. But it's not reflected in the FAC or the  
3 environmental piece of your case.

4 A. No; that's correct. The 234 million is  
5 the value for environmental and FAC.

6 Q. I think I understand.

7 A. Okay.

8 Q. Under your methodology, Mr. Nelson, would  
9 you agree with me that the larger the annual revenue  
10 that you calculate is produced for 2008 by the 3 and  
11 7 and in the 4 percent cases, the greater the offset  
12 to fuel and environmental costs under the ESP filed  
13 by the company?

14 THE WITNESS: Could I have that question  
15 read back?

16 (Record read.)

17 A. No, I don't think I can agree with that  
18 statement. Recall that the -- again, we're going to  
19 take you back to the total G rate, we'll just use an

20 example, and the FAC component of that rate. I'll  
21 use simplifying examples just to throw out your  
22 numbers, which are ballpark, but don't hold me to  
23 them.

24 Q. Okay.

25 A. Let's use the assumption that the total G

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 rate was 40 mils. We would have applied this 3 and  
2 7 percent, let's say it's Ohio Power, 40 mils. We  
3 would apply 7 percent to that 40 mils. That was our  
4 request in the RSP case, so that would have generated  
5 a revenue and we think, based on what Mr. Roush has  
6 provided, that would provide about \$190 million by  
7 the final year annually.

8       What I'm doing in the fuel is you would  
9 apply the 7 percent not to the total 40 mils, but by  
10 the fuel components of that, it's 20 mils. And  
11 that's the methodology I've used. So it would be the  
12 22.5 percent times the 20 mils. That would give you  
13 how much fuel revenue has grown and that's the  
14 relevant number.

15       Again, the 190 is just informational that  
16 I've got it accounted for everything, including fuel  
17 and environmental plus other stuff, and I'm just  
18 comparing the two, but it doesn't drive how I've  
19 arrived at my --

20 Q. I understand. Maybe I misspoke or maybe  
21 you misunderstood. We were speaking of the total  
22 value of the RSP in the RSP 4 percent case  
23 adjustment. I was looking at the line on PJN-13 with  
24 the 234 and the 104 for CSP, and I guess my question  
25 is, is if we concluded that the annual revenue

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 produced by the RSP in the RSP 4 percent case should  
2 be increased, wouldn't that mean that we would have a  
3 greater offset to the fuel and environmental costs  
4 that are requested to be recovered by the company?

5 A. Well, I'm hesitating. I wouldn't want to  
6 apply that logic necessarily to schedule 13. I think  
7 what you'd need to do is apply it to the individual  
8 calculations that --

9 Q. Yes.

10 A. -- is the FAC and the environmental, and  
11 I have some sound logic for varying what I did on my  
12 individual schedules. I don't want to lump it all  
13 into one general statement.

14 Q. I understand.

15 A. But if you determine that the fuel  
16 component of the current SSO is higher, I think, you  
17 know, that would have an impact. If you determined  
18 it was lower, that would have an impact, vice versa,  
19 or, the same thing with environmental.

20 Q. Mr. Nelson, I'm going to move now to  
21 another area. I'm going to go to page 12 of your  
22 testimony where you begin talking about allocation  
23 factors developed to assign costs to internal load.  
24 And there specifically on lines 13 through 14 -- let  
25 me strike that.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           Yesterday you spoke briefly with  
2 Mr. Yurick about your testimony here about the  
3 stacking of the companies' generation resources and  
4 an assignment of the highest cost resources to  
5 off-system sales. Do you recall those questions?

6       A. Yes.

7       Q. Can you explain to me, Mr. Nelson, how  
8 purchased power fits into the stacking of generation  
9 resources and assignment of highest cost resources to  
10 off-system sales?

11      A. Yes. That would be part of the --  
12 considered part of the resources and would be lined  
13 up with our own generation in determining which is  
14 assigned to off-system sales, unless a purchase is  
15 made for a specific jurisdiction. For example, wind  
16 in some areas would be assigned to internal  
17 customers.

18      Q. So are you saying that purchased power  
19 then is added to your generation resources stack, and

20 then it goes -- it is -- it along with all the other  
21 generation resources are assigned on the basis of  
22 highest cost resources going to off-system sales?

23 A. Yes. That's a general statement.

24 Q. So under the approach that the company  
25 takes in the stacking of generation resources, if you

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 go out and purchase, and it's an expensive purchase,  
2 that purchase would then, generally speaking, go to  
3 off-system sales if off-system sales are made?

4 A. Yes. If that purchase isn't dedicated to  
5 internal load, it would go -- be assigned -- if it's  
6 very high cost, most likely it's going to get  
7 assigned to off-system sales.

8 Q. And in turn if the purchase is a normal  
9 purchase and it is a real cheap purchase, under the  
10 way your generation resources are stacked that would  
11 go to internal load if it was not dedicated.

12 A. Yes. If it was such that it fit in the  
13 stack and was less expensive than our own resource,  
14 an economic purchase, then it would be assigned to  
15 internal load.

16 Q. Now, for 2009 if we look at PJN-3, line  
17 67, it would show that 5,698,470 megawatt-hours are  
18 going to off-system sales as compared to a total of  
19 approximately 29 million 530 on line 71.

20 THE WITNESS: I'm sorry, could you repeat

21 those figures? I might have been this the wrong

22 column.

23 Q. And it could be possible that I'm in the

24 wrong column, which is probably more likely than you

25 being in the wrong column.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Well, you can be in any column you want.

2 I just want to make sure I'm in the same column.

3       Q. And you're not going to tell me if I'm

4 wrong when I'm in the column. I was looking at

5 the -- I was looking at the Column B I believe where

6 you show that under the total off-system allocation

7 of sources you show 5,698,470, I assume that's

8 megawatt-hours as going to off-system sales, and then

9 I compare that to the total sales I believe shown on

10 line 71 of 29 million 530.

11       MR. CONWAY: You're asking him to compare

12 line 67 to line 71?

13       MS. GRADY: Yes.

14       Q. And is that a comparison, if I look at

15 those two lines, the 69 and 71, am I comparing how

16 much off-system sales were made compared to total

17 sales?

18       MR. CONWAY: Now I'm going to ask again

19 for another clarification. You said line 69. Then

20 is it line 67?

21 MS. GRADY: I'm sorry, it is 67. Thank

22 you, Mr. Conway. You're the record-keeper. I like

23 it.

24 A. He keeps me straight as well sometimes.

25 Yes, I think that's a valid comparison,

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 that if you -- you start with total sources. That's  
2 identified on line 59, and then the number you cite  
3 for off-system sales which appears on line 67, that's  
4 the number that's been assigned to off-system sales  
5 in this instance.

6 EXAMINER BOJKO: What's NER?

7 THE WITNESS: Net energy requirement.

8 EXAMINER BOJKO: Oh, requirement, okay.

9 Thank you.

10 THE WITNESS: And there's also a term net  
11 energy cost.

12 EXAMINER BOJKO: Right, that's why I  
13 didn't know.

14 THE WITNESS: Net energy requirement is  
15 the megawatt side, and then NEC is net energy cost  
16 which is the dollar side.

17 Q. So given that the analysis we just went  
18 through, the data would show that, at least for the  
19 period reflected here -- and I assume this is your

20 forecasted 2009 period; is that right?

21 A. That's correct.

22 Q. -- that 1/5 or about 20 percent of the

23 sales went to off-system sales.

24 A. In the forecast. You said "went to."

25 We're anticipating will go to.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. Would go to, thank you.

2 And who are your off-system sales made  
3 to, Mr. Nelson?

4 A. The primary market is the PJM market.

5 Q. Do you make off-system sales pursuant to  
6 contracts with third parties?

7 A. Well, off-system sales are generally  
8 defined as opportunity sales. If you have a contract  
9 and it's a longer term contract, it may be treated as  
10 a firm load requirement.

11 Q. And when you mean opportunity, are you  
12 talking about economic sales? Is that synonymous  
13 with opportunity sales?

14 A. You're getting a bit beyond my expertise,  
15 but I think that's probably a fair characterization.  
16 If we bid our generation into PJM at a certain price  
17 and then if it is accepted, then we make that sale.  
18 That's for the excess generation.

19 Q. And off-system sales could be made on

20 peak time or off-peak time as well?

21 A. Sure.

22 Q. Do you know, Mr. Nelson, in round numbers

23 what AEP's total annual system peak is for the

24 internal or retail customers?

25 A. AEP's total peak?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Q. Yes.

2 A. In round numbers, it used to run about --

3 I have to think whether I'm dealing with east or west

4 or both, but I would say it was in the 20,000 range.

5 Q. And that's MWh?

6 A. We're talking peak?

7 Q. Yes.

8 A. MW.

9 Q. MW, I'm sorry.

10 And what months are considered peak for

11 AEP?

12 A. If you're considering all AEP --

13 Q. Yes.

14 A. -- then we would be a summer peaking

15 utility in total.

16 MR. CONWAY: Could I have that answer

17 reread, please?

18 (Record read.)

19 MR. CONWAY: Thank you.

20 Q. And by summer would you mean -- what

21 months would you mean?

22 A. Most likely it's going to be June to

23 August, but the definition I think might be made

24 through September. I'm not positive. But generally

25 we would peak in the period I described, the shorter

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 period.

2 Q. Do you know, Mr. Nelson -- and certainly  
3 if you don't and if this is getting too far afield of  
4 your expertise, you can certainly so indicate. Do  
5 you know during peak or near peak times what the  
6 level of off-system sales is projected for 2009?

7 A. Well, I think you have a flaw in your  
8 logic. Peak is a point in time, so you'd have -- you  
9 know, a peak would occur at a certain hour --

10 Q. Yes.

11 A. -- of a month, and I don't know what you  
12 mean by, why would -- I'm not sure what you mean by  
13 or want that information for, and we wouldn't -- it  
14 wouldn't be useable information for me. That's why I  
15 made that comment.

16 Q. I think that perhaps one of my questions  
17 there could go to Mr. Roush. Would he be more  
18 appropriate to answer questions with respect to  
19 off-system sales and the demand being supplied to

20 off-system sales during peak time?

21 A. I would doubt it. The first thing that I

22 -- I don't understand your interest in AEP in total,

23 I'm not sure he would have that sort of information.

24 That's not information that's typically available.

25 But it seems to me that, you know, it

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 depends on your peak at the time. If it's a  
2 coincident peak, you may have a lot devoted to  
3 internal load at that point because that means that  
4 everybody's using power. We'd generally have less to  
5 sell at that peak period. I don't think anyone would  
6 readily have that type of information available.

7 Q. You're not willing to give anybody up; is  
8 that right?

9 A. No. But feel free to ask Mr. Roush. He  
10 may be able to answer it. I just have my doubts.

11 Q. Mr. Roush would be familiar with the  
12 schedule IRPD for interruptible service; is that  
13 correct?

14 A. Yes. I wouldn't be the one to ask on  
15 interruptible.

16 Q. Let's go to page 15 of your testimony,  
17 Mr. Nelson. You indicate there -- and I'm looking at  
18 lines 21 through 23. You indicate there that: "The  
19 Companies has made significant capital investment in

20 environmental facilities and are requesting capital

21 carrying costs on those facilities that are not

22 currently reflected in rates." Do you see that

23 statement?

24 A. Yes.

25 Q. When you say that the capital investment

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 is not currently reflected in rates, are you saying  
2 there that you haven't had a general rate case that  
3 would affect generation rates?

4 A. I believe I'd be speaking more to the  
5 proceedings we've had during the RSP period, and that  
6 in this instance we're only asking for incremental  
7 capital spend above what one might consider to have  
8 been included in those cases.

9 Q. Is it your understanding that the  
10 environmental -- or, that the capital investment that  
11 you're testifying to for the environmental facilities  
12 has not been included in the company's rate base in  
13 any particular case?

14 A. Yes, that's a fact. If you've defined  
15 rate base as a cost of service, that additional rate  
16 case, these investments are all capital spending  
17 since 2001 so we wouldn't have had a general rate  
18 case.

19 Q. But you've had a number of cases since

20 2001; is that correct?

21 A. We've had the RSP cases and --

22 Q. Yes.

23 A. -- that's why I say -- that's what I'm

24 referring to, is that we did -- 4 percent is obvious

25 we had an environmental component included in those

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 cases. I'm going beyond that and saying, well, let's  
2 assume that the 3 and 7 escalators also were relief  
3 from the environmental burden, so I've also given  
4 credit to that.

5 So that's why I come up with \$1.5 billion  
6 offset to the actual spend during this period and  
7 only are asking for a \$900 million incremental  
8 capital that you apply a return to.

9 Q. I appreciate your need to put that in the  
10 record.

11 Are the carrying costs on the facilities  
12 that you are requesting, are they already reflected  
13 in rates currently?

14 THE WITNESS: Could you reread that?

15 (Record read.)

16 A. No. I believe the previous answer would  
17 have responded to that, and my interpretation is  
18 that, you know, by offsetting the total spend with  
19 the 1.5 billion that I've identified from cases

20 during the RSP period means -- and subtracting that  
21 out, I believe the 900 million -- and I'm talking  
22 about Ohio Power Company at this point because we've  
23 been going through Ohio Power Company and I sometimes  
24 forget I'm only talking about one company -- but we  
25 start --

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           Let's turn to, so I won't make those  
2 mistakes, PJN-8. I tend to dwell on Ohio Power  
3 Company because it is the bigger company and, of  
4 course, has made more of an environmental spend, but  
5 there is also 563 million spent during this period by  
6 CSP for environmental. And, of course, I've provided  
7 a credit for CSP at 387 as an offset. For Ohio Power  
8 I mention it's about 1.5 billion offset.

9       Q. Now, for determining the base on which  
10 the carrying charges are applied, how did the company  
11 value the environmental investment?

12      A. It's what's on the books of the company.

13      Q. And what's on the books of the company  
14 since those -- let me ask you this. What's on the  
15 books of the company related to that investment,  
16 especially given the fact that it's never been in  
17 rate base under a traditional sense?

18      A. What's in or out of rate base doesn't  
19 affect the books of the company.

20 Q. Well, what is on the books of the  
21 company? Would that be the original cost of the  
22 investment, or would the investment be reduced by  
23 depreciation and other things that we normally see  
24 when an investment is rate based?

25 A. Well, it would be accounted for in

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 separate accounts. You'd have the original  
2 investment in some accounts, and then, of course, if  
3 it's in service and you've depreciated it, you'd have  
4 an accumulated depreciation reserve.

5 Q. So the base on which you calculate the  
6 carrying charges, would that reflect just the  
7 original cost, or would it reflect the accumulated  
8 depreciation reserve offset?

9 A. It would reflect the original cost. The  
10 reason I explain in my testimony is I've used a  
11 levelized carrying cost. We haven't specific -- if  
12 you did a rate-base type calculation, you would have  
13 different components. You would have depreciation  
14 expense. You'd have your other expenses associated  
15 with that investment plus the return component.

16 Generally what would happen is you'd  
17 have -- you'd start pretty high when the plant  
18 initially went in, and then over time that would be  
19 fully depreciated over its life. So what I've done

20 is used a levelized carrying cost that accounts for  
21 that, and in a sense it's a conservative approach  
22 because this equipment is relatively new so it  
23 wouldn't have been depreciated very much. We're only  
24 dealing with this short period. Some of it just went  
25 in service. Some of it is yet to go in service.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           If you did a traditional rate base  
2 calculation -- which I didn't want to get into  
3 because we're not in cost-of-service rate-making here  
4 and didn't want to file, you know, a cost-of-service  
5 type calculation -- you'd probably end up with a  
6 somewhat higher cost than the 84 million I've  
7 calculated, for example, for Ohio Power Company.

8       Q. But some of this investment has gone back  
9 to 2001; isn't that correct? Isn't the period of  
10 time that you're looking at investment from 2001  
11 through 2008?

12       A. Yes. This is the capital spend from 2001  
13 through 2008, and I don't mean to imply that what was  
14 spent in 2001 is necessarily -- didn't necessarily go  
15 in service in 2001. It can be CWIP or it could be in  
16 plant in service. The longer projects, like an FGD,  
17 would take several years to complete.

18       Q. But for purposes of your calculation it  
19 didn't matter to you whether it was plant in service

20 or CWIP.

21 A. No, it didn't, because I've left a  
22 simplifying assumption by applying a levelized  
23 carrying cost methodology. It can be CWIP or it  
24 could be in plant in service.

25 Q. And the investments we've been talking

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 about, those would be shown on PJN-9; is that

2 correct?

3 A. That's correct.

4 Q. And we would look at the column

5 Cumulative for 2008, that would be the 2001 through

6 2008 environmental expenditures?

7 A. Yes.

8 Q. And the cumulative for 2008 would include

9 projected expenditures for 2008; is that correct?

10 A. Yes. At the time I prepared this exhibit

11 there would have been a piece of it forecasted, yes.

12 Q. Would that be about six or seven months

13 of projections for that cumulative for 2008?

14 A. I think that's probably a good estimate.

15 Q. Does the company have the actual

16 environmental expenditures for the projected months

17 that are contained in the cumulative for 2008 column

18 in PJN-9?

19 A. We would have them. I don't have them

20 with me.

21 Q. Are those presented anywhere in the

22 company's filing?

23 A. No, they're not. I wouldn't expect a big

24 change in these numbers one way or the other. At one

25 point we might have had a data request around that,

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 as I recall. I think they were perhaps a little

2 higher than my estimates, but I . . .

3 Q. Mr. Nelson, are there any changes in the

4 cost listed for the cumulative column for 2008

5 resulting in the company reacting to court actions on

6 CAIR or CAMR?

7 A. I don't believe there would be any

8 significant change in the numbers related to care or

9 CAMR for 2008, no.

10 Q. To your knowledge, when you look beyond

11 the 2000 cumulative for 2009 through 2011, would you

12 expect any changes in the costs listed for those

13 periods of time resulting from the company reacting

14 to the court actions on CAIR and CAMR?

15 A. I believe there could be some change in

16 that period, though I think it would tend to be

17 rather minimal. We're going to proceed with FGDs and

18 so forth because we think other environmental

19 regulations are coming down, but the fact is we also

20 might have some changes, you know, because of capital

21 markets for the forecast numbers.

22 Q. And, in fact, you are aware, are you not,

23 of -- let me strike that.

24 Mr. Nelson, are you aware of statements

25 made by -- let me strike that.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           You are certainly familiar with CEO

2 Michael Morris; is that correct?

3       A. Yes.

4       Q. And are you aware of statements that he

5 recently made as recent as October 14th, 2008, with

6 respect to environmental spending in '09 and '10

7 being adjusted pursuant to the financial situation?

8       A. I don't recall anything specific hearing

9 that statement, but it seems logical.

10           MS. GRADY: May I approach the witness,

11 your Honor?

12           EXAMINER BOJKO: You may.

13       Q. Mr. Nelson, I'm going to hand you a

14 document, and it has a website and it comes from SNL

15 Extra, and I guess I am assuming that is not Saturday

16 Night Live extra, but the title of that document is

17 "AEP Morris warns continuing credit problems could

18 put projects beyond 2009 at risk." And I ask you if

19 you've seen that article and the statements made by

20 Mr. Morris contained therein.

21 A. I haven't seen this before you handed it

22 to me.

23 Q. If you could take a moment to review

24 that, I would appreciate it.

25 MR. CONWAY: Could I have the answer

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 reread to the question? I think it was a question,  
2 the last question.

3 (Record read.)

4 MR. CONWAY: Your Honors, I would make an  
5 objection to using the witness as a conduit to read  
6 into the record statements that some reporter has  
7 come up with that purport to be Mike Morris's  
8 comments.

9 EXAMINER BOJKO: Ms. Grady.

10 MS. GRADY: Well, your Honor, Mr. Nelson  
11 testifies in this case to the environmental --  
12 capital carrying costs on environmental costs, and  
13 that's included in the request before the Commission.

14 I'm just exploring to what extent those  
15 costs are going to change in the 2009 through 2010  
16 period. Mr. Nelson indicates he doesn't believe they  
17 will, and now we have information or a statement at  
18 least being made by the CEO of the company that they  
19 may be pulling back on the 2010 and 2011

20 expenditures. I believe it's relevant.

21 EXAMINER BOJKO: The objection is

22 sustained. The witness said he isn't familiar with

23 the document you're looking at, nor with Mr. Morris's

24 statement, so you can ask him if he knows, which I

25 think you just stated you did, and he gave his

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 opinion and we'll leave it at that.

2 Q. Mr. Nelson, would it surprise you if the  
3 CEO of the company was making statements that the --  
4 for 2010 and 2011 the company may need to put back on  
5 environmental expenditures because of the credit  
6 situation?

7 A. No, it wouldn't surprise me. In fact, I  
8 think I mentioned that in one of my previous answers,  
9 and I think I was a little mischaracterized in my  
10 testimony. You had asked me about 2008, whether that  
11 was going to change, and I said no. And then -- I  
12 don't think I -- I didn't mean to imply that we might  
13 not see changes in '9 and '10 and '11.

14 Q. And would you expect, in fact, changes in  
15 the 2009 through the 2011 period related to your  
16 environmental expenditures?

17 A. Well, since this is a forecast, first of  
18 all --

19 Q. Understood.

20       A. -- I always expect some changes from a  
21   forecast, and I will -- I do think, you know, the  
22   credit markets are going to have some impact on this.

23       Q.   And if the credit markets continue at  
24   that present stage -- at the present state, would you  
25   expect that the environmental spending in the 2009

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 through 2011 period may be affected?

2 A. Yeah, I would expect that it might be  
3 impacted.

4 Q. And by "impacted" would you mean that it  
5 would be your expectation that the expenditures shown  
6 for 2009 through 2011 may be decreased from the  
7 forecasted amount shown on PJN-9?

8 A. That would probably -- that would be my  
9 expectation, but I can't guarantee that they'd be  
10 decreased.

11 Q. Certainly. It is a forecast.

12 A. Yes.

13 Q. Now, for purposes of calculating the  
14 carrying cost, you are requesting to use the  
15 forecasted figures shown on PJN-9; is that correct?

16 A. Well, we better get a little more  
17 specific. The first column, the Cumulative for 2008,  
18 that we are requesting carrying costs specifically on  
19 that period, and Mr. Roush rolls those numbers into

20 his rates for 2009.

21 The expenditures 2009 through 2011 are

22 provided more for informational purposes. We do not

23 have a specific charge in the case for those

24 expenditures.

25 Q. Now, just so I understand, Mr. Nelson,

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 you're saying that the cumulative for 2008, the  
2 expenditures shown there become the basis for the  
3 environmental carrying charges requested by  
4 Mr. Roush; is that right?

5 A. Yes. Mr. Roush has used -- let's go back  
6 to I think you were on PJN-8.

7 Q. Or PJN-9.

8 A. Well, the carrying charges are calculated  
9 on PJN-8.

10 Q. But let's go back to the investment.

11 A. Okay.

12 Q. The investment's shown on PJN-9.

13 A. The specific component for environmental  
14 recovery in our ESP uses the first column, the 2008  
15 column.

16 Q. So is it your understanding, Mr. Nelson,  
17 that environmental expenditures for 2009 through 2011  
18 with respect to those forecasted costs, that the  
19 company is not requesting environmental -- or,

20 carrying charges on those?

21 A. That's correct. But I don't want to be

22 misleading. We do have a 3 and 7 percent increase

23 requested in the ESP. It's designed to recover other

24 costs, environmental might have been one of those

25 other costs.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. Would the carrying costs have been within  
2 that 3 and 7?

3       A. Yes. We didn't ask for any specific  
4 recovery on these numbers, so you can interpret it as  
5 there is no specific, you know, carrying cost beyond  
6 the 2008 numbers we cited. As I said, these out  
7 years are for more for informational purposes than  
8 anything.

9       Q. And the carrying cost that is calculated  
10 on the column Cumulative for 2008, again, that is not  
11 a carrying cost that will be trued up under the  
12 company's application.

13      A. No, not under the company's application.

14      Q. So to the extent that the company's  
15 expenditures differ from the forecasted amount shown  
16 on PJN-9, it's insignificant to the company, doesn't  
17 matter?

18           MR. CONWAY: Your Honor, may I have a  
19 clarification? Are we still talking about the

20 cumulative for 2008 figure?

21 MS. GRADY: Yes.

22 EXAMINER BOJKO: The six to eight months

23 projected within that figure?

24 MS. GRADY: Yes.

25 A. Yes. If you look at PJN-9 we've got

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 about \$3 billion of spend through that period. Most  
2 of that has already occurred and is actual. A small  
3 part would be forecast, and I think the forecast for  
4 this point in time would be pretty accurate because  
5 we're not forecasting way out; we're only looking at  
6 the next six months. These are ongoing projects.

7       So I think I would see no significant --  
8 I wouldn't see a reason to update the 2008 column  
9 because I don't think there's a significant change.

10       Q. Have you looked at the actual  
11 expenditures, environmental expenditures, for the  
12 forecasted months that are contained within the  
13 schedule and made that comparison?

14       MR. CONWAY: Your Honor, I think we  
15 already -- objection. We already went through this,  
16 and he already said that he -- my recollection is  
17 that he said when asked this question a few series of  
18 questions before is that the forecast could be higher  
19 or lower, and I think he said he thought that, if

20 anything, it might be a little higher.

21 EXAMINER BOJKO: I guess I'm not sure

22 that's exactly what he said. Why don't we let the

23 witness tell us what he said. And I think

24 Ms. Grady's question was actually "did you do an

25 analysis," but now --

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 MS. GRADY: Have you done a comparison,  
2 yeah.

3 EXAMINER BOJKO: Now that you've raised  
4 this issue, I think I need to know the answer to  
5 that.

6 Did you say that the -- I thought the  
7 statement Mr. Conway made was more pertaining to 2009  
8 to 2011 projected costs, but are you saying that the  
9 2008 projected costs contained therein might be  
10 higher? I just thought I heard you say they were  
11 probably pretty close because you know what you're  
12 going to do.

13 THE WITNESS: Yeah, for 2008. I thought  
14 we were talking about 2008 numbers.

15 EXAMINER BOJKO: Okay. So for 2008  
16 projections, do you see an increase, decrease, or  
17 stay the same?

18 THE WITNESS: I'll answer that question.  
19 I think she was asking me whether I've done a

20 comparison.

21 EXAMINER BOJKO: No; I know.

22 THE WITNESS: Okay.

23 EXAMINER BOJKO: I want to clear up

24 Mr. Conway's statement because I'm not sure I

25 understood that's what you said.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           THE WITNESS: I haven't looked at it  
2   probably within the last month or so, but I did -- I  
3   recall some discovery around could we update these  
4   numbers, and at least I recall looking at the  
5   updates, and I didn't see a significant difference in  
6   what we have on my schedule PJN-9 versus the new  
7   estimates.

8           EXAMINER BOJKO: Okay. Thank you, now  
9   let's go back to Ms. Grady's question.

10          Can you reread the analysis question?

11          (Record read.)

12         A. I recall looking at some data, I don't  
13   know at what point in time it would have been, that  
14   is, you know, if I looked at it, say, in October, I  
15   might have had actual data through September to  
16   compare. But I obviously don't have any actual data  
17   for all of 2008 yet.

18         Q. Do you have actual data for the projected  
19   months that are contained within PJN-9?

20       A. Only for those months that are in the  
21 books, that is, we probably have something through  
22 November -- or, I'm sorry, October at this point.

23       MS. GRADY: Would this be an appropriate  
24 time for a break?

25       EXAMINER BOJKO: Sure, we can go off the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 record.

2 (Recess taken.)

3 EXAMINER BOJKO: Let's go back on the

4 record.

5 Please finish, Ms. Grady.

6 Q. (By Ms. Grady) Mr. Nelson, let's go to

7 page 16 of your testimony, and I'm going to focus on

8 lines 2 through 3 where you indicate that:

9 "Investors require both a return on and of their

10 capital expenditures."

11 Now, when you're referring to carrying

12 charges and you're requesting carrying charges in

13 this case, you are referring to a return on and

14 return of investments, it is more than the cost of

15 money; is that correct?

16 A. That's correct.

17 Q. And the return piece comes in when you

18 include elements like depreciation, property expense,

19 and administrative and general expenses?

20       A. Yes. The depreciation is a good example  
21 of return of.

22       Q. And if we looked at PJN-10, we would see  
23 that the annual carrying charges you calculate  
24 include a return, depreciation, federal income taxes,  
25 property taxes, and general and administrative

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 expenses.

2 A. That's correct.

3 Q. Would you agree with me, Mr. Nelson, that

4 the recovery of such expenses is essentially what

5 occurs when projects are rate based?

6 A. Yes.

7 Q. And those are the kind of costs that then

8 would be recoverable under rate base methodology in a

9 general rate case?

10 A. Yes, that's correct. There would

11 probably be additional expenses, I'm sorry, like the

12 O&M to operate. If this was environmental equipment,

13 like the FGD, you'd have the O&M expenses associated

14 with the operation of that equipment as well, which

15 isn't included in this.

16 Q. It isn't included in the carrying cost?

17 A. It is not included in the carrying cost.

18 Q. So the end result of your carrying charge

19 calculation is comparable to what would occur in a

20 traditional rate case if those investments were

21 included in rate base.

22 A. I think it's comparable. Again, it's a

23 levelized approach so at any point in time it might

24 be a little different, but generally over the life of

25 the asset it would be comparable.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. Now, the cost of money, let's talk about  
2 the cost of money for a moment. The 8.11 percent for  
3 CSP and Ohio Power reflects the weighted average cost  
4 of capital that's used by Mr. Nelson on PJN-11, and  
5 that would include the cost of debt and equity?

6       A. That's correct.

7       Q. And you are seeking a carrying charge,  
8 Mr. Nelson, that includes the cost of equity under  
9 the principle that the company needs a full return on  
10 its investment and not under any particular authority  
11 other than that the company needs to recover its  
12 costs; is that correct?

13      A. Yes, that's correct. I'd say the company  
14 and the investor in the company needs that return.

15      Q. And you are seeking to recover  
16 depreciation, income tax expense, and the  
17 administrative and general expenses shown on PJN-10  
18 under the very same principle and not pursuant to any  
19 particular authority other than the company needs to

20 recover its costs; is that correct?

21 A. Well, particular authority? I would say

22 that we're recovering under Senate Bill 221.

23 Q. And what provision of Senate Bill 221

24 addresses carrying charges and the inclusion of

25 elements within carrying charges?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. I think there are several places that  
2 carrying charge might be mentioned. One I  
3 specifically remember is with the phase-in plan it  
4 mentions carrying costs. There may be other sections  
5 in the statute as well, but that's the one I recall.

6       Q. Now, in the sections that you are -- let  
7 me strike that.

8       You mention, Mr. Nelson, that carrying  
9 charges are mentioned in SB 221. Do you know if  
10 there is any definition of what is an appropriate  
11 carrying charge in Senate Bill 221?

12      A. I didn't see anything specific to an  
13 appropriate carrying cost.

14      Q. So there is nothing in 221 which would  
15 state that depreciation, income tax expense,  
16 administrative and general expenses, federal income  
17 tax expenses should be recovered as carrying charges  
18 on environmental investment?

19      A. No, nothing specific that I recall.

20 Q. Now, in calculating the carrying charges,

21 Mr. Nelson, you assume a 25-year life on the

22 environmental investment; is that right?

23 A. That's correct.

24 Q. And that's shown in the shaded column on

25 PJN-10?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes.

2       Q. And if we look at PJN-10, we would see  
3 that the longer the investment life associated with  
4 the property, the lower the carrying charge; is that  
5 right?

6       A. That's correct.

7       Q. Now, on page 18 of your testimony, you  
8 speak to Ohio Power Company's revenue requirement  
9 being reduced to recognize that as the environmental  
10 plant investment increases, it has an effect on the  
11 AEP pool capacity charge. Do you see that reference?

12      A. Yes.

13      Q. And I'm looking at --

14      A. Yes.

15      Q. -- the question posed on line 11 through  
16 13.

17           Now, speaking for OPCO, rate for OPCO and  
18 its ratepayers, the greater the environmental  
19 investment, the lower the revenue requirement due to

20 OPCO benefiting from receiving a higher pool capacity

21 charge as a surplus member of the pool; is that

22 right?

23 A. I don't think you can make that

24 conclusion.

25 Q. And why can't you make that conclusion?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       A. The revenue that's generated through the  
2 pool capacity receipts is driven by the cost, so it's  
3 a cost-based calculation, so one corresponds to the  
4 other, that is, as cost increases, then the capacity  
5 rate cost of Ohio Power goes up. As the surplus  
6 company increases, the capacity rate would go up, but  
7 you'd have both the cost and the revenue rising.

8       The reason I'm a little hesitant is  
9 because I think you used the term "revenue  
10 requirement," so I'm not sure the context.

11      Q. If I said instead that the greater the  
12 environmental investment, the lower the revenue --  
13 let me strike that.

14      If there's greater investment in  
15 environmental plant under the pool, do the Ohio Power  
16 companies benefit, greater investment being made by  
17 Ohio Power Company?

18      A. Yeah, there is a -- there is a return  
19 component on plant investment under the pool.

20 There's a carrying cost applied to the original plant  
21 investment. Environmental is a subset of the total  
22 generation plant that that carrying cost would be  
23 applied to. So in a sense if you're equating the  
24 benefit with a return component included in the  
25 carrying cost rate, that's a fair statement.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           Now, there's the other side of it.  
2   Environmental costs, some costs are also included in  
3   the capacity segment under the fixed operating rate.  
4   Obviously that's dollar-for-dollar recovery, that is,  
5   if their consumable expense goes up, Ohio Power would  
6   recover some of that through the pool. I think we  
7   had some of this discussion yesterday.

8       Q.   Yes. Now, under the company's proposal,  
9   the revenue requirement for OPCO is reduced by the  
10   carrying charges for the 2009 period only; is that  
11   right?

12      A.   I'll ask you to be a little more  
13   specific. Are you looking at a particular schedule  
14   or --

15      Q.   Let me try -- I didn't have the schedule  
16   written down, but let me look and see if I can figure  
17   that one out.

18      A.   Well, let me take you, I think it's  
19   probably schedule 8 that's relevant.

20 Q. Okay. The proposal PJN-8, and I hesitate  
21 to get into this because I thought I understood it  
22 earlier, the 84 -- 84 million jurisdictional revenue  
23 requirement that we talked about earlier as a credit.

24 A. Well, the 84 isn't the credit. The 84 is  
25 the revenue requirement. Can I walk you through just

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 the top of this schedule?

2 Q. Yes.

3 A. Okay. We'll stick with Ohio Power

4 Company, and we'll look at just the first column.

5 First item is 2 billion 294 million.

6 That's the total environmental spend period 2001

7 through 2008.

8 Q. Yes.

9 A. The next line is what we kind of called

10 the capital included in the RSP cases.

11 Q. Yes.

12 A. I hesitate because it wasn't specific

13 recovery for all that but we've given credit for it.

14 Next you get to the incremental, and this is what

15 we're asking the return on, is the incremental. We

16 take that times the carrying cost rate for the

17 25-year life of the property. We come up with a

18 carrying cost before pool allocation, so that's

19 126 million.

20           We then apply the 71 percent factor that  
21   says 29 percent of this cost is being recovered from  
22   other pool members in the AEP system, so we've  
23   excluded that, and that in theory would be a  
24   component of the revenue that we're getting. You  
25   know, you would just be getting revenue from two

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 sources. You'd be getting revenue from the internal  
2 customer and revenue from other pool members.

3 So you apply the 71 percent factor and  
4 that leaves carrying costs for internal load of  
5 89 million. Then the jurisdictional allocation  
6 factor is applied to get to the 84 million that we're  
7 requesting.

8 Q. So for purposes of carrying charges --  
9 and the carrying charges, again, you said that  
10 carrying charges, that the capacity pool -- that Ohio  
11 Power Company benefits from the capacity pool -- let  
12 me strike that.

13 The carrying charges that you have listed  
14 as 71 percent being allocated to the internal  
15 customers and the 29 being allocated out, that  
16 remains stable for 2009, 2010, and 2011, correct, in  
17 terms of seeking recovery for it?

18 A. Yes. Because we're only specifically  
19 asking for recovery of the 2008 period. I held that

20 cost -- that factor could vary. It would vary.

21 71 percent, you know, I did a point in time. I think

22 it was May 2008. I looked at that ratio and used

23 that ratio as a reasonable proxy. But, yeah, it

24 could vary over time.

25 Q. And you would expect that the more

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 environmental investment that you make, the higher  
2 the allocation to -- the less the allocation to the  
3 internal load, correct?

4 A. No, that's not correct. There's another  
5 factor in it because we're really talking about the  
6 capacity equalization rate.

7 Q. Yes.

8 A. There's also the factor of whose surplus  
9 and how many megawatts are surplus in the pool.

10 Q. But for Ohio Power Company customers,  
11 would that statement be true, since it is a surplus  
12 member?

13 THE WITNESS: Could you read the question  
14 back prior to my last answer to make sure I  
15 understand it?

16 (Record read.)

17 A. I think you could say that the more  
18 environmental investment that Ohio Power makes, the  
19 higher the capacity rate, but it wouldn't affect the

20 allocation factor.

21 Q. Fair enough. Thank you.

22 Mr. Nelson, I'm going to move on to OCC

23 Exhibit 6.

24 A. If you remind me what OCC-6 is.

25 Q. Yes, OCC Exhibit 6 was a document that

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 you provided in response to OCC's request for  
2 production of document 125, and the request was  
3 provide a copy of all workpapers supporting the  
4 supplemental information filing of October 16th,  
5 2008. Do you recall that?

6 A. Yes.

7 Q. And do you have a copy of that in front  
8 of you?

9 A. Yes, I do.

10 Q. Thank you. Now, Mr. Nelson, you are  
11 listed on that document as someone who is responsible  
12 for the preparation of that response?

13 A. Yes.

14 Q. So you are familiar with that document.

15 A. Yes.

16 Q. Let's go to the first page of that  
17 document entitled "Income Statement Summery." Do you  
18 have that?

19 A. Yes, I do. For Columbus Southern?

20 Q. Yes.

21 Can you tell me, and I'm looking down

22 about two lines from the top it says: "Memo: Total

23 Rate Relief by Class," and then there's a parentheses

24 that says "(excluding Goal Seek)." Can you tell me

25 what that is intended to mean, if you know?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Well, that's probably only of interest to  
2   our modelers, but the "excluding Goal Seek," is  
3   that --

4       Q. Yeah. What does that line represent?

5       A. Sometimes in a long-range forecast we may  
6   assume a certain ROE and we may just rather than do a  
7   precise estimate of rate relief, because you don't  
8   know what might happen in, say, 2012 for a particular  
9   company, that you may solve for a particular ROE.  
10   It's just different ways to model a result, and you  
11   may say, well, we think we're going to achieve this  
12   particular ROE, and that's what that means.

13       EXAMINER BOJKO: Mr. Conway.

14       THE WITNESS: But there are also other  
15   goal seeks. You could goal seek on an O&M spend.  
16   It's just a modeling of -- I'm done.

17       MR. CONWAY: Your Honor, I think that I  
18   objected to the use of the exhibit when it was first  
19   introduced by Mr. Kurtz. Or was it Mr. Randazzo?

20 EXAMINER BOJKO: I think it was

21 Mr. Kurtz.

22 MS. GRADY: Mr. Kurtz.

23 MR. CONWAY: I just wanted to reiterate

24 my earlier objection, not to interrupt the flow.

25 EXAMINER BOJKO: Your continuing

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 objection to the use of data responses which are  
2 underlying workpapers to the data filing that the  
3 company made on October 16th, 2008, is noted for  
4 the record.

5 MR. CONWAY: Thank you.

6 Q. (By Ms. Grady) So for purposes of our  
7 discussion, when we're trying to determine what the  
8 pro formas will look like for the ESP of the company,  
9 we wouldn't necessarily need to be worried about that  
10 little line; is that right?

11 A. The part in parentheses, right, we  
12 wouldn't have used goal seek in this particular  
13 forecast. We would have modeled, as we said, and I  
14 think the Commission required us to model our ESP  
15 plan as filed.

16 Q. Based upon the assumption that you will  
17 get 100 percent of the relief that you've asked for  
18 in your ESP.

19 A. Yes, exactly as we filed the request.

20 Q. Now, do you recall, Mr. Nelson, how  
21 Mr. Kurtz walked you through the company's projected  
22 deferred FAC for Ohio Power? Do you recall that?

23 A. Yeah, I think we had some discussions on  
24 the deferral.

25 Q. I would like to do the same for CSP. And

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 I would assume that we can use this schedule that's  
2 Attachment 1, page 1 of 12, to look at the fuel  
3 deferred expenses. So let's take a look at the 2009  
4 column, and in that column we see 110,093; is that  
5 right?

6 A. Yes.

7 Q. And that ties back, does it not, to  
8 schedules filed in this case, correct?

9 A. I think it was pretty close to what we  
10 filed in this case. I'm not sure.

11 Q. And that schedule -- which schedule would  
12 that have been? And apologize that I don't remember.

13 A. I think it was Mr. Assante's LVA-1, is  
14 what I recall.

15 Q. Right, LVA-1. So we would find in  
16 LVA-1 -- let me get that for a moment. Do you have a  
17 copy of that schedule?

18 A. No.

19 MS. GRADY: Could counsel provide that to

20 Mr. Nelson?

21 Q. If we're looking at LVA-1, we would see  
22 that for Columbus Southern Power for 2009 we see a  
23 deferred FAC expense or credit of \$112 million,  
24 correct?

25 A. Yes.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. So that's approximately what is shown on  
2 OCC Exhibit No. 6, page 1; is that right?

3 A. Yes. I consider those the same number.

4 Q. Now, let's move to 2010, although  
5 Mr. Assante did not provide estimates of the deferred  
6 FAC for 2010 and 2011, you have those estimates in  
7 this document, correct?

8 A. Yes. This document that is pro formas  
9 would reflect a forecast of FAC for 2010 and 2011.

10 Q. And so if I look at 2010, I see a figure  
11 of 61,325 and there's no parentheses around that  
12 number, is there?

13 A. That's correct.

14 Q. So would that mean that instead of  
15 projecting a need to defer the fuel adjustment clause  
16 expense, that that would actually reflect an  
17 overrecovery of the fuel adjustment clause expense?

18 A. It is the opposite sign, and what it  
19 means is using the 15 percent limiter, we were able

20 to actually eat into the deferred fuel balance in the

21 first year. So yes, that would be -- could be

22 considered an overrecovery.

23 I want to be a little careful there

24 because we do have the phase-in plan, and at some

25 point I might, when we get into actual discussions of

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1    deferrals and the methodology the company has used  
2    including the 15 percent limiter, I'd like to punt  
3    those to Mr. Roush if I could.

4        Q.    Okay. And if we look at 2011, we see  
5    another number, and that's 48,763 without brackets,  
6    and that would represent as well not the need to  
7    defer but overrecovery, to the extent that you accept  
8    that characterization.

9        A.    Yes. And in fact, I think if you sum the  
10   three numbers, you would find that there's no  
11   deferred fuel balance left for CSP at the end of the  
12   period.

13       Q.    Now, to the extent, Mr. Nelson, that it  
14   would appear in your projections that there is  
15   overrecovery in 2010 and 2011, is it plausible to  
16   argue then that perhaps the amount of increase sought  
17   in those particular years could be adjusted downward  
18   without the need for deferrals?

19       A.    Of course, we have -- for the fuel

20 clause, which I think we're dealing with here, the  
21 FAC, we haven't made any particular filing for 2010  
22 and '11.

23 Q. I understand that.

24 A. The fuel clause I think, and it's a  
25 little confused at this point, but I understand will

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 be under a quarterly fuel proceeding. At least at  
2 the start I would expect we would at least report  
3 quarterly to the Commission where we stood on  
4 recoveries and so forth, and at some point we could  
5 adjust rates through that proceeding, but I think the  
6 focus, of course, right now is establishing a proper  
7 fuel rate for 2009.

8 But what, I think that's, you know --  
9 this is a forecast as well, as we've talked about, so  
10 things will change and these numbers will be  
11 different, but we can adjust, and I think the idea is  
12 to still, you know, protect the customer from a large  
13 increase.

14 Q. The company is requesting, is it not, a  
15 15 percent increase in customers' bills from 2009  
16 through 2011 under their application; isn't that  
17 correct?

18 A. I'm not sure about that statement. I  
19 think you'd have to ask Mr. Baker.

20 Q. Now, Mr. Kurtz yesterday walked you  
21 through an example where you got to the projected  
22 return on equity under the pro formas assuming the  
23 full approval of the plan, and he walked through that  
24 with you for Columbus Southern Power. Do you  
25 remember that exercise?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       A. Yes, I do.

2       Q. And in that exercise what you did was you  
3 took the total proprietary capital and divided that  
4 by the income after income taxes. Do you recall  
5 that?

6       A. I think it's the reverse.

7       Q. The reverse? Well, I wasn't a math  
8 major.

9       A. It's the income divided by the equity  
10 balance.

11      Q. If we went through that exercise with  
12 Ohio Power, would you accept, subject to check, that  
13 for 2009 the return on equity projected would be  
14 12.6 percent?

15      A. I did the calculation. I got 12.7, but  
16 we're pretty close.

17      Q. That's close enough. Now, for 2010 did  
18 you do that projection as well?

19      A. Yes.

20 Q. What did you reach there?

21 A. I got 12.3.

22 Q. And for 2011?

23 A. I got 12.2. Did you get a different

24 number?

25 Q. I did. But I'm so far off that I must

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 have done something wrong.

2 A. Okay.

3 Q. Now, turning to page 3 of 12 of that  
4 document and, again, we're talking about OCC Exhibit  
5 6, I want to direct your attention to the line item  
6 called Over/Under Fuel Recovery. Do you see that?

7 MR. CONWAY: Is that in the adjustments  
8 to net income that you're looking at?

9 MS. GRADY: It's the Cash Flow Statement.

10 MR. CONWAY: Yes. Page 3 of 12 but  
11 within the --

12 MS. GRADY: Yes, Adjustments to Net  
13 Income section.

14 Q. Do you see that reference?

15 A. Yes, I see. It's very light but I can  
16 see it.

17 Q. Now, how is that different from the  
18 information shown on page 1 of 12 which we just  
19 talked about, the deferred fuel expense? Is there

20 any connection between the two?

21 A. There should be a connection but,  
22 unfortunately, I can't tell you all the connections.

23 Q. Can you tell me any of them?

24 A. Well, on page 1, that deferral is the  
25 difference between the total estimated expense for

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 the FAC versus the revenues being collected  
2 including -- with the limitation of the phase-in  
3 plan. And I would have a -- I'd have to sit down and  
4 reconcile that number. I can't really -- I guess I  
5 should have said I probably can't give you much --  
6 unless I sat and thought about it and looked at it,  
7 much explanation, that is.

8 Q. How long would you need to sit and think?

9 A. Probably a few days.

10 Q. Okay. We'll let it go at that.

11 A. We'd have to go back to the model and  
12 trace all this, but I believe everything ties in.

13 Q. Okay.

14 A. Now, the other thing with modeling, what  
15 you always have to be aware of is that for  
16 convenience you may stick an item on a particular  
17 line. This is a model, forecast model, that we use  
18 all the time for all our companies and so forth, so  
19 you never design a model for every data request or,

20 you know, it's a reasonable approximation of where

21 you're going to be.

22 Our model is very detailed. I don't want

23 to give that impression, but that's why I can't

24 answer these questions. I don't know, you know, what

25 exactly is in that line. It says, you know, has a

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 label on it, but is that label really descriptive of  
2 what is in that line. You'd hope it would be, but  
3 it's . . .

4 Q. I appreciate that. Thank you,  
5 Mr. Nelson.

6 Now, if I look also on page 3 of 12, the  
7 Change in Other Regulatory Assets, that ties back,  
8 does it not, to the deferred fuel expenses listed on  
9 page 1 of 12?

10 A. It does.

11 MS. GRADY: Your Honor, may I approach  
12 the witness?

13 EXAMINER BOJKO: You may.

14 MS. GRADY: At this time I would like  
15 marked as OCC Exhibit No. 7, I believe, the response  
16 of the company to interrogatory request No. 9-270.

17 EXAMINER BOJKO: I'm sorry, what was the  
18 number again?

19 MS. GRADY: 9-270, 9 representing the

20 ninth set. We did use some restraint.

21 MR. RESNIK: I won't debate that.

22 MR. MARGARD: She can't say it with a

23 straight face.

24 MR. RANDAZZO: What, you kept it under

25 300, or in the ninth set?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 EXAMINER BOJKO: Yeah, they didn't go to  
2 a tenth.

3 It will be so marked as OCC Exhibit 7 for  
4 identification purposes.

5 MS. GRADY: Thank you.

6 (EXHIBIT MARKED FOR IDENTIFICATION.)

7 Q. (By Ms. Grady) Are you familiar with that  
8 document?

9 A. Yes.

10 Q. And, in fact, you responded to this  
11 discovery request, correct?

12 A. Yes.

13 EXAMINER BOJKO: Yes, Mr. Conway?

14 MR. CONWAY: At this point, your Honor, I  
15 would observe that based on my brief review, this  
16 looks like it's connected to the workpapers that  
17 we've been discussing, OCC Exhibit No. 6 and,  
18 therefore, is connected to the supplemental filing  
19 information, and so I would just note again our

20 objection on the record to pursuit of this kind of

21 information and placement of it in the record.

22 EXAMINER BOJKO: Okay. Your objection is

23 noted.

24 Please continue, Ms. Grady.

25 MS. GRADY: Thank you, your Honor.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. Now, yesterday we had some discussion  
2 about margins from off-system sales. Do you recall  
3 those discussions?

4       A. Yes.

5       Q. And I believe yesterday you testified  
6 that the margins from off-system sales were not  
7 included in the fuel adjustment clause; is that  
8 right?

9       A. That's correct.

10      Q. Now, if you'd look at this response,  
11 Mr. Nelson, are the margins that we were discussing  
12 yesterday the margins that are shown as -- in  
13 subcomponent A for 2009 as 302,298?

14      A. Yesterday I don't believe we were talking  
15 about any particular margin. I think we were talking  
16 more about the concept of whether it was included in  
17 the FAC or not.

18      Q. But this would be consistent with that  
19 discussion; is that correct?

20       A.  Yes, if it's talking about margins, I

21  think it's consistent.

22       Q.  And we see, just for my understanding,

23  the margins that are shown for 2009, 2010, and 2011,

24  are those missing zeros?  Are there three zeros to be

25  added to each one of those?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes. They should be in millions -- or,  
2 thousands, I'm sorry. So it should be 302 million.

3       Q. So for 2009 we see a margin related to  
4 off-system sales of 302,298,000 and for 2010 there's  
5 a margin of 232,335,000, and for 2011 a margin of  
6 256,322,000; is that right?

7       A. That's correct.

8       Q. Now, those margins are combined AEP-Ohio;  
9 is that correct?

10      A. Yes.

11      Q. And we know from the filing, do we not,  
12 that -- let me strike that.

13           From the OCC Exhibit 6 we can determine  
14 the margins on a particular company basis; isn't that  
15 correct? And I would direct your attention to page 7  
16 of 12 for Columbus Southern.

17      A. I believe you can from these documents,  
18 but if you'll bear with me, I'll add the two  
19 companies.

20 Q. Thank you.

21 A. Yes, I just add the first year and they

22 tie out.

23 Q. So if we look at page 7 of 12 of OCC

24 Exhibit No. 6, we would see that the line entitled

25 Off-System Sales really means off-system sales

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 margins consistent with OCC Exhibit No. 7 but shown  
2 for Columbus Southern Power only.

3 A. That's correct.

4 Q. And if we looked at OCC Exhibit 6, page 8  
5 of 12, we would see the off-system sales margins for  
6 Ohio Power.

7 A. Yes.

8 Q. For that same time period.

9 A. That's correct.

10 Q. Now, going back to OCC Exhibit 7, in that  
11 response you state that: "Credits for OSS margins  
12 are a component of the current SSO and are therefore  
13 reflected in the ESP." Can you explain that  
14 statement to me and what you mean there?

15 A. Yes. The idea behind that statement  
16 responding I think to the discovery question, because  
17 you asked that specifically, is that in the '90s  
18 cases there would have been some level of off-system  
19 sales included in that case and, therefore, if you

20 assume that we continued those rates into the future,  
21 there would be some other off-system sales margins.  
22 And to be more specific, off-system sales margin  
23 probably would have been treated as a credit to cost  
24 of service in the old general rate case proceedings.

25 Q. So do you know the level of off-system

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 sales that would have been included in the 1990s  
2 cases and the margins associated with that that you  
3 are now assuming are components of the current SSO?

4 A. No, I do not.

5 Q. The next statement in that response, in  
6 OCC Exhibit 7, is that: "The Companies have not  
7 determined the amount of credits that will flow back  
8 through the ESP." Do you see that?

9 A. Yes.

10 Q. Can you explain to me at what point  
11 they're going to make that determination, if you  
12 know?

13 A. I don't know that we would make that  
14 determination in the sense that I don't know that  
15 we'd have any reason to.

16 Q. Is the company recommending that credits  
17 should flow back through the ESP rider for the OSS?

18 A. We're not changing that component of our  
19 standard service offer. I don't think we're

20 recommending any change to it. If there's something  
21 built into the standard service offer for off-system  
22 sales margins, they would continue, theoretically,  
23 but we're not specifically doing anything beyond that  
24 with off-system sales margins, as far as I'm aware.

25 Mr. Baker -- you probably want to follow

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 up this discussion with Mr. Baker.

2 Q. And you said if there's something  
3 associated with the SSO with regard to off-system  
4 sales, are you now questioning whether there is a  
5 component in there that relates to off-system sales?

6 THE WITNESS: Could you read my last  
7 answer back?

8 (Record read.)

9 Q. I thought I heard you say "if" in your  
10 response.

11 A. If I did --

12 Q. Then you didn't mean "if"?

13 A. Then I would like to take the "if" out.

14 Q. Now, in response, and I'm looking at OCC  
15 Exhibit 7 in subpart B, you correct OCC and say  
16 there's no usage on DMR-1 like you guys assumed, but  
17 you look at DMR-5 for the usage that's reflected in  
18 the ESP. Do you see that?

19 A. Yes.

20 Q. And then you go on to say that the  
21 forecast in the projected financial statements is a  
22 more recent forecast. Do you see that?

23 A. Yes.

24 Q. So the projected -- the projected  
25 financial statements is based upon a different

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 forecast than what is contained within the ESP

2 filing, is that right, in terms of usage?

3 A. I believe so. You might want to follow

4 up with Mr. Roush, but I believe he used an earlier

5 load forecast.

6 Q. Do you know the difference between the

7 forecast used for purposes of OCC Exhibit 6 from the

8 DMR-5 forecast?

9 A. No, I do not.

10 Q. Would Mr. Roush be able to address that?

11 A. Mr. Roush knows what he used in his

12 exhibits. I guess he may be able to.

13 Q. Would Mr. Roush know what forecast was

14 used for purposes of the income statements on OCC

15 Exhibit 6?

16 A. He may. Typically I don't know that it

17 would have been something that he would have looked

18 at. Alls I did was compare the load in this forecast

19 versus that schedule, and I know there's a

20 difference, but I don't have the numbers in front of

21 me.

22 Q. Do you recall what the difference was,

23 what the magnitude of the difference was, whether the

24 forecasted usage was greater in OCC Exhibit 6 than

25 DMR-5?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. I don't recall.

2       MS. GRADY: If I may have a couple  
3 minutes, or a moment, I may be finishing up with the  
4 cross. I just need to recheck.

5       EXAMINER BOJKO: You may.

6       Let's go off the record.

7       (Off the record.)

8       EXAMINER BOJKO: Let's go back on the  
9 record.

10      Q. Mr. Nelson, we've been talking about OCC  
11 Exhibit 6, and the assumption under OCC Exhibit 6 is  
12 that the company receives a hundred percent of what  
13 they're asking for; is that correct?

14      A. Yes.

15      Q. Has the company done any runs that would  
16 show the rate effects under the ESP if the  
17 projections for FAC numbers are used that are  
18 contained in OCC Exhibit No. 6?

19      A. Well, one thing I could say is I haven't

20 done anything outside what we've done here. I'm  
21 pretty sure that the rate impact for Ohio Power,  
22 because they keep a deferral through the whole period  
23 and they build on their FAC deferral, would be in the  
24 15 percent range for each year of the forecast.  
25 With CSP, that would be -- there might be

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 a change in that 15 percent, that is, there's a  
2 possibility that that 15 percent would be lower, say  
3 in the last year perhaps, I kind of recall that, that  
4 we may not need a full 15 percent in the last year  
5 under this scenario.

6 Q. Didn't the numbers show for 2010 and 2011  
7 that you might not need the 15 percent because --

8 A. We were only dealing with one component  
9 of the full forecast so I can't make that statement.

10 Q. With respect to the fuel adjustment  
11 clause component, the numbers would show that you  
12 might not need the 15 percent increase for year 2010  
13 and 2011, correct?

14 A. I don't recall that. I went to 2011  
15 because I specifically remember seeing something a  
16 little less than the 15 percent.

17 Q. I want to go very quickly to IEU Exhibit  
18 No. 2, which was entered or which was used yesterday  
19 during IEU's cross, the third quarter '08 earnings

20 release presentation. Do you have that exhibit in

21 front of you?

22 A. Oh, yes.

23 Q. And if you go to the very last page of

24 that exhibit, I want to focus your attention on the

25 column entitled Ohio Companies, \$148 million in rate

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 relief. Do you see that?

2 A. Yes.

3 Q. And where does that figure come from, and  
4 what is it attributable to?

5 A. I'm not -- I didn't do any analysis on  
6 this number so I'm not sure what it's composed of.  
7 We did have the 3 and 7 percent increases at the  
8 start of 2008, so that would be one component of it.

9 Now, we also have probably changes in the  
10 transmission cost recovery rider and a few other  
11 things, and then anything that went in partway in '07  
12 when you compare '08 to '07, if there was a change  
13 midway through the year, you'd pick up that  
14 annualization, so it could be composed of a lot of  
15 different items.

16 MS. GRADY: Mr. Nelson, I thank you for  
17 your time this morning.

18 That's all the questions I have, your  
19 Honors.

20 EXAMINER BOJKO: Thank you. Then I guess

21 we're to -- Mr. Nelson, you're not off yet.

22 THE WITNESS: Oh, I'm sorry.

23 EXAMINER BOJKO: Unless your counsel has

24 no redirect. You could encourage that outcome, I

25 guess.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           THE WITNESS: I was getting hungry I

2   guess.

3           EXAMINER BOJKO: Mr. Conway, do you have

4   any redirect?

5           MR. CONWAY: Your Honor, it might take a

6   little while for me to go through my notes from the

7   extensive cross-examination for Mr. Nelson, and I

8   wonder if we could defer that until after the lunch

9   hour.

10          EXAMINER BOJKO: That's fine, we'll

11   take -- we'll come back at 1 o'clock.

12          MR. CONWAY: Okay.

13          EXAMINER BOJKO: We're in recess.

14          (At 11:52 a.m. a lunch recess was taken

15   until 1:00 p.m.)

16                   - - -

17

18

19

20

21

22

23

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Friday Afternoon Session,

2 November 21, 2008.

3 - - -

4 EXAMINER BOJKO: Let's go back on the  
5 record.

6 Do you have any redirect for Mr. Nelson,  
7 Mr. Conway?

8 MR. CONWAY: Just a few questions, your  
9 Honor.

10 - - -

11 REDIRECT EXAMINATION

12 By Mr. Conway:

13 Q. Mr. Nelson, do you recall questions from  
14 counsel for OCC regarding an income statement summary  
15 that is on page 1 of 12 of OCC Exhibit No. 6?

16 A. Yes.

17 Q. And do you recall the questions that  
18 addressed several of the values in the fuel-deferred  
19 expense line on that income statement summary?

20       A.   Yes, I do.

21       Q.   And I believe the values that are in that

22 summary on that line that were discussed were the

23 roughly \$110 million deferred fuel expense for 2009

24 and then the values for 2010 and 2011 of positive

25 61 million, approximately, and a positive \$49 million

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 approximately. Do you recall that?

2 A. Yes.

3 Q. And the approximate 61 and 49 million in

4 the 2010 and the 2011 years, I believe that you

5 pointed out that they essentially were equal to, in

6 sum, the value for the 2009 year for the deferred

7 fuel expense. Do you recall that?

8 A. Yes.

9 Q. And I believe that my recollection is

10 that OCC's counsel in the course of discussing those

11 numbers with you characterized the ones -- the values

12 in the 2010 and 2011 periods as overrecovery numbers,

13 and -- do you recall that?

14 A. Yes.

15 Q. And do you agree with that

16 characterization?

17 A. No. What these numbers represent is one

18 of the options that's laid out on page 14 of

19 Mr. Roush's testimony where if we had headroom under

20 the 15 percent rate cap, that we would first use that

21 headroom to decrease the deferrals of 2009.

22 Q. Mr. Nelson, do you also recall a series

23 of questions from counsel for OCC regarding how the

24 companies will recover environmental costs for the --

25 that are not being recovered in the FAC but, rather,

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 non-FAC costs and the manner in which they might be  
2 recovered through the non-FAC portion of the standard  
3 service offer?

4 A. Yes.

5 Q. And I believe my recollection is that  
6 there was some conversation at that point about the  
7 companies' 3 percent and 7 percent annual increases  
8 for the non-FAC portion of the standard service offer  
9 rate. Do you recall that also?

10 A. Yes.

11 Q. Could you tell me your understanding of  
12 whether the 3 and 7 percent annual increases for the  
13 non-FAC portion of the SSO beginning in 2009 were  
14 cost based?

15 MS. GRADY: I'm sorry, could I have that  
16 question reread, please?

17 EXAMINER BOJKO: Can everybody hear  
18 Mr. Conway?

19 MS. GRADY: I'm not having any problem

20 hearing.

21 EXAMINER BOJKO: Could you speak up a

22 little bit or use a mic, Mr. Conway.

23 MR. CONWAY: Yes.

24 EXAMINER BOJKO: The fan has now kicked

25 back in so I know I'm having difficulty.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           Could you read it back, please?

2           (Record read.)

3           A.   They were not cost based, 3 and 7,  
4 beginning in 2009.

5           MR. CONWAY: Thank you, your Honor. I  
6 have no further questions.

7           EXAMINER BOJKO: Thank you.

8           Do we have any recross? Let's start at  
9 this end of the table.

10          MR. MASKOVYAK: No, your Honor.

11          MR. JONES: No, your Honor.

12          MS. ELDER: No, your Honor.

13          EXAMINER BOJKO: OCC?

14          MS. GRADY: Yes, your Honor.

15                       - - -

16          RE CROSS-EXAMINATION

17 By Ms. Grady:

18          Q.   Mr. Nelson, we were talking or you were  
19 talking with your counsel about the values for

20 Columbus Southern Power 2010-2011, the pro forma  
21 line, Fuel-Deferred Expenses for 2010-2011 as  
22 contained in OCC Exhibit 6, page 1 of 12.

23 A. Yes.

24 Q. And you indicated that the amounts shown  
25 in 2010 and 2011 would be used in a manner described

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 by Mr. Roush, and you cited to page 14 of his

2 testimony.

3 A. Yes. He laid out a couple different

4 options, and I think we had some discussion earlier,

5 I think Mr. Baker did, around which option the

6 company might chose. We chose to model an option in

7 these pro formas that I described in responding to

8 Mr. Conway.

9 Q. And the option that you were referencing,

10 are you talking about the fact that if there's an

11 overrecovery of the FAC in, for instance, 2010, that

12 instead of returning that -- those dollars to

13 customers, you would then use that money to draw down

14 the deferrals that are collected in the time period

15 of 2012 through 2018?

16 MR. CONWAY: Objection.

17 EXAMINER BOJKO: Mr. Conway.

18 MR. CONWAY: It continues to

19 mischaracterize Mr. Nelson's testimony, which was the

20 point of the redirect, to highlight that, and if  
21 Mr. Nelson can answer the question, I'll let it pass,  
22 but it's clearly mischaracterizing his testimony.  
23 EXAMINER BOJKO: I thought that was  
24 Ms. Grady's intent, I thought she was trying to  
25 understand his testimony.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1           Could you clarify if that's not your  
2 testimony?

3           THE WITNESS: Yes. It isn't an  
4 overrecovery in 2010. What we're saying is that we  
5 would use the headroom under the 15 percent, that we  
6 could increase the FAC for -- to recover the prior --  
7 a piece of the prior underrecovery. So if you think  
8 of a normal fuel clause, you usually have a component  
9 to recover your current cost plus a component for  
10 over- and underrecovery.

11           In this instance, of course, we have a  
12 big underrecovery so we'd use this opportunity since  
13 we can, under one of the options is to have the  
14 15 percent rate increase. We've increased the FAC  
15 rate to recover some of that past underrecovery.

16           Q. And the headroom is created by the fact  
17 that the deferred FAC is less than the 15 percent  
18 that you're collecting from customers, isn't that  
19 correct, under your assumption?

20       A. I'm not sure I can answer that. Perhaps  
21 the questions of headroom are better directed to  
22 Mr. Roush. He does the limitations.

23       MS. GRADY: Thank you, Mr. Nelson.

24       EXAMINER BOJKO: Mr. Randazzo?

25       MR. RANDAZZO: No questions.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 EXAMINER BOJKO: Mr. Boehm?

2 MR. BOEHM: No questions, your Honor.

3 EXAMINER BOJKO: Mr. White?

4 MR. WHITE: No questions, your Honor.

5 EXAMINER BOJKO: Thank you, Mr. Nelson.

6 Ms. Grady?

7 MS. GRADY: Yes, your Honor, I'd like to

8 move for admission of OCC Exhibit No. 6 and No. 7 at

9 this time.

10 EXAMINER BOJKO: Any objections to the

11 admission of OCC's Exhibits 6 and 7?

12 MR. CONWAY: Your Honor, the companies

13 continue to object to the relevance of the

14 information that's included in OCC-6 and 7. It's the

15 same objection as we noted before.

16 EXAMINER BOJKO: Yes. Consistent with

17 our prior rulings, your objection is overruled and

18 OCC Exhibits 6 and 7 will be admitted.

19 MS. GRADY: Thank you, your Honor.

20 (EXHIBITS ADMITTED INTO EVIDENCE.)

21 MR. CONWAY: Your Honor, I'd also like to  
22 again move for the admission of Mr. Nelson's direct  
23 testimony, Companies' Exhibit No. 7, as well as his  
24 updated corrected Exhibits PJN-1, PJN-4, and PJN-13  
25 which was marked as Companies' Exhibit 7A.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 EXAMINER BOJKO: Any objections to the

2 admission of Mr. Nelson's testimony 7 or 7A?

3 Hearing none, they will be admitted.

4 (EXHIBIT ADMITTED INTO EVIDENCE.)

5 EXAMINER BOJKO: I believe Mr. Randazzo

6 has one.

7 MR. RANDAZZO: Yes, IEU Exhibit No. 2,

8 your Honor.

9 EXAMINER BOJKO: Any objection to the

10 admission of IEU Exhibit 2?

11 MR. CONWAY: Yes, your Honor.

12 EXAMINER BOJKO: Grounds?

13 MR. CONWAY: Grounds are that the

14 witness, Mr. Nelson, indicated clearly that he did

15 not participate in the preparation of it and only had

16 at most a passing familiarity with it, and the net

17 result of the cross-examination regarding that

18 exhibit was that Mr. Nelson agreed that statements

19 made in the agreement were statements in the exhibit,

20 so he did not provide a basis for admission of that  
21 document into the record.

22 EXAMINER BOJKO: Mr. Randazzo.

23 MR. RANDAZZO: Your Honor, I'm a bit  
24 curious here. It sounds like the objection is that  
25 the document doesn't speak for itself and does not

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 self-authenticate. Is counsel contesting the  
2 accuracy of the information in the document?

3 MR. CONWAY: Your Honor, my objection is  
4 that the exhibit did not relate to Mr. Nelson's  
5 testimony and, frankly, there is no -- Mr. Nelson is  
6 not a witness who can provide whatever context would  
7 be appropriate to explain the data that's included in  
8 the exhibit. The objection is not that it's an  
9 inaccurate or not authentic version of the company's  
10 document.

11 EXAMINER BOJKO: And it's a publicly  
12 filed document, is my understanding.

13 MR. CONWAY: Well, there --

14 MR. RANDAZZO: Yes, it's on AEP's  
15 website, your Honor.

16 MR. CONWAY: Yes, that's not the  
17 objection. The objection is that the witness doesn't  
18 provide a basis for it, and to the extent it needs  
19 explanation, it's not coming through Mr. Nelson and

20 so it's not appropriate at this time, I don't think,

21 to bring it into the record.

22 EXAMINER BOJKO: The objection's

23 overruled. IEU Exhibit 2 will be admitted into the

24 record.

25 (EXHIBIT ADMITTED INTO EVIDENCE.)

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1           MR. CONWAY: Your Honor, in light of the  
2 ruling I would request that Mr. Baker be able to  
3 provide comments on the context that is necessary in  
4 order to make this document useful for the Commission  
5 to consider.

6           EXAMINER BOJKO: Well, it is now an  
7 exhibit. Mr. Baker hasn't testified yet, so maybe  
8 the party intends to use it on him, or I'm assuming  
9 that you will also request rebuttal testimony at a  
10 later time as well.

11          MR. CONWAY: Okay.

12          EXAMINER BOJKO: With that I believe,  
13 AEP, do you have your next witness?

14          MR. NOURSE: Yes, your Honor. AEP calls  
15 William Castle.

16          EXAMINER SEE: Good afternoon,  
17 Mr. Castle, please raise your right hand.

18          (Witness sworn.)

19          EXAMINER SEE: Thank you. Have a seat.

20 MR. NOURSE: Your Honor, I'd like to mark  
21 the Prefiled Direct Testimony of William K. Castle as  
22 Companies' Exhibit 8.

23 EXAMINER SEE: The exhibit is so marked.

24 (EXHIBIT MARKED FOR IDENTIFICATION.)

25 - - -

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 WILLIAM K. CASTLE

2 being first duly sworn, as prescribed by law, was

3 examined and testified as follows:

4 DIRECT EXAMINATION

5 By Mr. Nourse:

6 Q. Mr. Castle, could you state your full

7 name for the record, please?

8 A. My name's William Kelly Castle.

9 Q. And by whom are you employed and in what

10 capacity, sir?

11 A. AEP Service Corporation, director - DSM

12 and resource planning.

13 Q. Do you have in front of you the document

14 that was just marked Companies' Exhibit No. 8?

15 A. I have a copy of it.

16 Q. Yes.

17 A. Okay.

18 Q. And is that a copy of your prefiled

19 direct testimony in these cases?

20       A.  Yes.

21       Q.  Was this document prepared by you or  
22 under your direction?

23       A.  Yes.

24       Q.  Do you have any changes, corrections,  
25 additions you'd like to make this afternoon?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. No.

2       Q. If I asked you the same questions  
3 contained in your testimony, would your answer be the  
4 same today under oath?

5       A. Yes.

6       MR. NOURSE: Thank your Honor. The  
7 companies would move for Exhibit 8 into the record  
8 subject to cross-examination.

9       EXAMINER SEE: Okay. Let's start at this  
10 end. Mr. White.

11       MR. WHITE: I just have a few brief  
12 questions.

13                   - - -

14       CROSS-EXAMINATION

15 By Mr. White:

16       Q. On page 6 and 7 of your testimony you  
17 state that the energy efficiency benchmarks and the  
18 peak demand reduction benchmarks are to be adjusted  
19 for economic growth and mercantile commitments.

20 A. Yes.

21 Q. Can you explain to me how the benchmarks  
22 would be adjusted for mercantile commitments?

23 A. It's my understanding that as mercantile  
24 customers commit their resources, those resources  
25 will be used to satisfy the benchmarks, but there

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 needs to be a subsequent increase in the overall  
2 baseline from which you're making the measurements  
3 from.

4 Q. Okay. And as resources, you mean?

5 A. Energy efficiency or peak demand  
6 resources.

7 Q. Okay. Are you aware of whether or not  
8 the resources that mercantile customers commit, if  
9 they have implemented these resources before the 2006  
10 date where the benchmarks are calculated, would those  
11 be counted towards the mercantile customers'  
12 commitments?

13 A. It's my understanding that that is  
14 allowed and that we would be pursuing those sort of  
15 resources.

16 Q. Okay.

17 MR. WHITE: No further questions, your  
18 Honor.

19 EXAMINER SEE: Thank you.

20 Mr. Kurtz.

21 MR. BOEHM: No questions, your Honor.

22 EXAMINER SEE: Mr. Randazzo.

23 MR. RANDAZZO: I think one.

24 - - -

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 CROSS-EXAMINATION

2 By Mr. Randazzo:

3 Q. Mr. Castle, the benchmarks that you  
4 describe on page 2 of your -- or, reference on page 2  
5 of your testimony in describing the purpose of your  
6 testimony, is it your understanding that those  
7 benchmarks apply irrespective of whether the  
8 companies are providing SSOs under -- or a standard  
9 service offer under an electric security plan or a  
10 market rate option?

11 A. Yes.

12 MR. RANDAZZO: That's all I have. Thank  
13 you.

14 EXAMINER SEE: Mr. Etter.

15 MR. ETTER: Yes, thank you, your Honor.

16 - - -

17 CROSS-EXAMINATION

18 By Mr. Etter:

19 Q. Good afternoon, Mr. Castle. My name is

20 Terry Etter. I'm with the office of the Ohio  
21 Consumers' Counsel, and we just have a few questions  
22 for you today.  
23 Let's focus first on Exhibits WKC-1a and  
24 1b to your testimony. 1a sets out AEP's proposed  
25 energy efficiency benchmarks for Columbus Southern

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Power for the years 2009 to 2011, and 1b has the  
2 proposed energy efficiency benchmarks for Ohio Power  
3 for the same period, correct?

4 A. Correct.

5 Q. These tables on the left start with  
6 retail sales, either normalized, actual sales, or  
7 forecasted sales, and make several adjustments in  
8 order to determine the proposed energy efficiency  
9 benchmarks for each company, correct?

10 A. That's correct.

11 Q. In making the adjustments to retail sales  
12 do you net out the industrial load lost during the  
13 period?

14 A. Industrial load lost during the period?

15 Q. Right.

16 A. I believe those figures would include any  
17 losses that are in there. They would be implicit in  
18 the actual data that's there.

19 Q. So they were netted out?

20       A.   Sure.  These are actual results.

21       Q.   What is your estimate of the industrial  
22 loading gigawatts per hour lost over 2006 to 2007?

23           EXAMINER SEE:  Mr. Etter, I'm going to  
24 need you to speak up or use the mic, please.

25           THE WITNESS:  I heard you.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Did you hear him?

2 EXAMINER SEE: No, I didn't.

3 Please read the question back.

4 Q. What is your estimate of the industrial  
5 load lost in gigawatt-hours over 2006 to 2007?

6 A. I don't have those figures.

7 Q. Now, each table has a column for  
8 adjustment for committed mercantile capabilities, but  
9 there are no figures in the column, just the notation  
10 that committed mercantile capabilities to help  
11 satisfy the benchmark would increase the baseline.

12 Do you know whether AEP has projected  
13 mercantile committed energy efficiency for the 2009  
14 to 2011 period?

15 A. I don't believe we've committed anything  
16 at this point, although we are pursuing it.

17 Q. Now, looking at your direct testimony  
18 starting on page 5, lines 19 to 22 and continuing on  
19 page 6 over to line 2, you state that the energy

20 efficiency savings obtained from the companies'

21 programs also meet the advanced energy requirements;

22 is that right?

23 A. Yes.

24 Q. SB 221 requires that 25 percent of AEP's

25 generation come from the alternative energy sources

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 by 2025; is that right?

2 A. Yes.

3 Q. And half of that or 12-1/2 percent has to  
4 be in the form of renewable energy.

5 A. That's right.

6 Q. So is it true that AEP will not need any  
7 other advanced energy source in order to meet the  
8 advanced energy standard?

9 A. If my interpretation is correct, that  
10 would logically follow.

11 Q. Now, on page 9, lines 22 and 23 of your  
12 direct testimony, you state that: "The renewable  
13 portfolio cost does not exceed the market or existing  
14 portfolio costs by 3 percent in the years covered by  
15 this plan." Is that correct?

16 A. Yes.

17 Q. Have you looked at the renewable  
18 portfolio costs beyond the three years covered by the  
19 plan?

20       A.  No, I haven't.

21       Q.  Does AEP-Ohio plan to sell any energy  
22  efficiency credits in the voluntary markets, also  
23  called white tags?

24       A.  I don't -- I'm not aware of any plans to  
25  do that at this point.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Q. Now, do you have with you today a  
2 response that you I believe helped prepare to some  
3 OCC discovery, it's RPD No. 7-93?

4 A. I don't have it with me.

5 MR. ETTER: Can I approach the witness,  
6 your Honor?

7 EXAMINER SEE: Yes.

8 MR. ETTER: And we would like to mark  
9 this as OCC Exhibit 8.

10 (EXHIBIT MARKED FOR IDENTIFICATION.)

11 Q. Are you familiar with this document,  
12 Mr. Castle?

13 A. I've seen it.

14 Q. Okay.

15 A. I think I could probably help you here.

16 Q. Well, let's see if you can answer some  
17 questions about it, then, okay? Let's look first at  
18 column 6, it's the one labeled "Interruptible  
19 Demand."

20 A. Okay.

21 Q. How was that interruptible demand figure  
22 determined?

23 A. How is it figured?

24 Q. Yeah. How was the figure determined?

25 A. In general terms those are contracts for

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 standard interruptible programs that are already in  
2 place at this point.

3 Q. And why is it or why does the  
4 interruptible demand remain constant for the years  
5 2008 through 2017?

6 A. I think simply because those are  
7 contracts that are already in place and so we're not  
8 forecasting additional contracts. These have some  
9 certainty around them.

10 Q. So that would change if there were  
11 additional contracts or if there were --

12 A. Additions or deletions, yes.

13 Q. Additions or deletions, okay. Now, in  
14 footnote (e) of this document it states that the "New  
15 wind capacity value is assumed to be 13 percent of  
16 nameplate." How is the 13 percent capacity value  
17 determined?

18 A. Again, I'll give you sort of a general  
19 answer because I don't actually calculate that, but

20 wind being an intermittent resource, it's really sort  
21 of a statistical look at the fact that the wind may  
22 be generating at its full nameplate capacity during  
23 times of system peak, and you would infer from that  
24 13 percent that on whole, in total over all of our  
25 wind generation 13 percent of the time it would be

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 going at full speed at the system peak.

2 Q. Would this value increase as new wind  
3 turbines came on line?

4 A. No, it wouldn't. It just pretty much  
5 varies with the geography, so if you're in a windy  
6 part of the country, you might have a higher number  
7 than 13 percent.

8 Q. And footnote (c) mentions under  
9 Efficiency Improvements, it mentions that the Amos 3  
10 will have a 35-megawatt energy efficiency improvement  
11 in 2009. Are the companies planning to use the  
12 35-megawatt improvement in Amos 3 to meet the energy  
13 efficiency benchmarks in Revised Code 4898.66?

14 A. I know we didn't list that specifically  
15 in Ms. Sloneker's testimony, but I don't see why we  
16 wouldn't seek to use that. I don't know what the  
17 energy impact of that might be. That's a megawatt  
18 impact there.

19 Q. And if you were to use this, would you

20 net out the efficiency gains against other plant

21 deratings cited in the rest of the footnote?

22 A. I'm not sure how that would play out.

23 MR. ETTER: That's all I have, your

24 Honor. Thank you.

25 Thank you, Mr. Castle.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 EXAMINER SEE: Thank you.

2 Ms. Elder?

3 MS. ELDER: No questions, your Honor.

4 EXAMINER SEE: Mr. O'Brien?

5 MR. O'BRIEN: No questions, your Honor.

6 EXAMINER SEE: Mr. Maskovyak?

7 MR. MASKOVYAK: No questions, your Honor.

8 EXAMINER SEE: Mr. Margard?

9 MR. MARGARD: No questions, your Honor.

10 Thank you.

11 EXAMINER SEE: Any redirect for the

12 witness?

13 MR. NOURSE: No, your Honor.

14 EXAMINER SEE: Thank you, Mr. Castle.

15 THE WITNESS: Thank you.

16 EXAMINER SEE: Mr. Nourse, did you move

17 for the admission of --

18 MR. NOURSE: Yes, I did, your Honor. I

19 can re-move if that's helpful.

20 EXAMINER SEE: No problem.

21 MR. ETTER: And OCC moves for the

22 admission of OCC Exhibit 8 also, your Honor.

23 EXAMINER SEE: Are there any objections

24 to the admission of Companies' Exhibit No. 8, the

25 direct testimony of Mr. Castle?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1           There are none, Company Exhibit 8 should  
2 be admitted into the record.

3           (EXHIBIT ADMITTED INTO EVIDENCE.)

4           EXAMINER SEE: Are there any objections  
5 to the admission of OCC Exhibit 8?

6           MR. NOURSE: No, your Honor.

7           EXAMINER SEE: If that's the case, OCC  
8 Exhibit 8 should also be admitted into the record.

9           (EXHIBIT ADMITTED INTO EVIDENCE.)

10          MR. NOURSE: If you're ready, your  
11 Honor, the companies call Jay Godfrey to the  
12 stand.

13          EXAMINER SEE: Okay.

14          MR. NOURSE: I'd like to mark his  
15 prefiled testimony as Exhibit No. 9.

16          EXAMINER SEE: The exhibit will be so  
17 marked.

18          (EXHIBIT MARKED FOR IDENTIFICATION.)

19          EXAMINER SEE: Please raise your right

20 hand, Mr. Godfrey.

21 (Witness sworn.)

22 EXAMINER SEE: Thank you.

23 Have a seat.

24 - - -

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1

2

JAY F. GODFREY

3 being first duly sworn, as prescribed by law, was

4 examined and testified as follows:

5

DIRECT EXAMINATION

6 By Mr. Nourse:

7 Q. Good afternoon, Mr. Godfrey. Could you

8 state your full name for the record, please?

9

A. Jay F. Godfrey.

10

Q. By whom are you employed and in what

11 capacity?

12

A. American Electric Power Service

13 Corporation. I'm currently the managing director of

14 renewable energy.

15

Q. Do you have a copy of the exhibit we just

16 marked as No. 9?

17

A. If you're referring to my prefiled

18 testimony, yes, I do.

19

Q. Yes. Is that your testimony -- was that

20 prepared by you or under your direction?

21 A. Yes, it was.

22 Q. Do you have any corrections, additions,

23 or changes you'd like to make this afternoon?

24 A. No, I do not.

25 Q. If I were to ask you all the questions in

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 your prefiled testimony today under oath, would your  
2 answers be the same?

3 A. They would.

4 Q. Thank you.

5 MR. NOURSE: Your Honor, the companies  
6 would move for admission of Exhibit No. 9 subject to  
7 cross-examination.

8 EXAMINER SEE: Any cross for Mr. Godfrey,  
9 Mr. Maskovyak?

10 MR. MASKOVYAK: No, your Honor.

11 EXAMINER SEE: Mr. O'Brien?

12 MR. O'BRIEN: No, your Honor.

13 EXAMINER SEE: Ms. Elder?

14 MS. ELDER: No, your Honor.

15 EXAMINER SEE: Mr. Etter?

16 MR. ETTER: Yes, just a few questions,  
17 your Honor.

18 - - -

19 CROSS-EXAMINATION

20 By Mr. Etter:

21 Q. Good afternoon, Mr. Godfrey. My name is

22 Terry Etter, and I'm with the OCC.

23 On pages 4 and 5 of your prefiled

24 testimony you mention three specific wind projects

25 owned by AEP, Fort Davis, Trent Mesa and Desert Sky.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 The Fort Davis project has been decommissioned; is  
2 that right?

3 A. That's correct.

4 Q. And the output from Trent Mesa and Desert  
5 Sky is sold to unaffiliated utilities under long-term  
6 contracts?

7 A. That's correct.

8 Q. How long do these contracts run?

9 A. These are long-term contracts that are  
10 subject to confidentiality provisions. They're both  
11 located in Texas and so are not affiliated with the  
12 AEP companies.

13 Q. Does AEP have any wind projects that it  
14 uses for its own purposes?

15 A. If by "AEP" you refer to the AEP family  
16 of companies, yes, we do.

17 Q. Are there any specifically in use in  
18 Ohio?

19 A. No, there are not.

20       Q. I believe in a discovery response it was  
21 mentioned that there were projects in Ohio, Indiana,  
22 West Virginia, Virginia, and Michigan basically for  
23 the familiarity of AEP personnel to wind projects.  
24 Are those still in operation?

25       MR. NOURSE: Mr. Etter, could you

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 indicate which discovery response you're referring  
2 to, please?

3 MR. ETTER: Okay.

4 EXAMINER SEE: And also please speak up,  
5 Mr. Etter, or move the mic closer to you.

6 MR. ETTER: Yes, it was in response to  
7 interrogatory No. 9-281.

8 MR. NOURSE: Thank you.

9 A. Could you repeat the question?

10 Q. Yeah. In response to the  
11 interrogatory -- I'll read the response. It says:  
12 "As part of the program to familiarize AEP System  
13 companies and their customers with distributed  
14 generation devices, five 10-kilowatt wind turbines  
15 were installed in 200 at several AEP System Sites in  
16 Ohio, Indiana, West Virginia, Virginia, and  
17 Michigan."

18 A. Now I recall the context.

19 Q. Are those still in operation?

20       A. There are still a few that are still in  
21 operation. I am aware of one of them that is still  
22 in operation in Fort Davis. We did donate one or  
23 more of those to other entities. I believe one was a  
24 technical school. One of the ones in, I think it was  
25 West Virginia, it was to a technical school. But

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 since that time the companies gained vast experience

2 elsewhere with utility deployments.

3 Q. On page 7 of your testimony you discuss

4 renewable energy certificates; how are those used?

5 A. Well, renewable energy certificates are

6 used typically in states that have renewable

7 portfolio standards to represent or affirm that you

8 have a specific amount of renewable energy. So it's

9 a compliance type mechanism.

10 Q. And on page 11 you state that: "AEP-Ohio

11 will likely have a need to satisfy a portion of its

12 renewable energy obligations by using RECs purchased

13 from the broker market." Why is that?

14 A. Yes, that's correct. I believe in my

15 testimony I refer to the fact that during this

16 three-year ESP period we have a requirement that is

17 increasing under Senate Bill 221.

18 At the same time we in the middle of this

19 year went out for proposals. We are in the

20 short-list process getting ready to sign at least one  
21 of those contracts, and that would be for a project  
22 that gets constructed next year, and so by definition  
23 if it gets constructed next year and gets put in  
24 service maybe by the end of next year, you wouldn't  
25 have any production or RECs in 2009 to satisfy the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 requirements under 221, but you would have production  
2 and RECs because they're bundled to satisfy the  
3 requirements in 2010 and 2011.

4 Does that help?

5 Q. Well, what portion of the obligation will  
6 likely involve purchased RECs?

7 A. We're estimating substantially all of it  
8 in 2009.

9 Q. And how about beyond 2009?

10 A. We do not expect that we will need to  
11 purchase RECs on the open market to meet subsequent  
12 obligations during the ESP period.

13 Q. Does AEP currently have any RECs that  
14 could be used to satisfy at least a portion of  
15 renewable obligations, renewable energy obligation?

16 A. Yes, it does. AEP-Ohio specifically has  
17 some RECs left over from its green tariff.

18 Q. And do you have an estimate as to what  
19 portion of the obligation those might be used to --

20 for the renewable energy obligation?

21 EXAMINER SEE: Speak up, please,

22 Mr. Etter.

23 MR. ETTER: I'm sorry.

24 Q. What portion of those that AEP currently

25 has, of the RECs AEP currently has, could be used --

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 what portion would those RECs -- what portion of the  
2 renewable energy obligation would those RECs satisfy?  
3 I'm sorry.

4 A. Sure. I believe the question of how much  
5 will we have left over at the end of this year and  
6 then how much will we need to go out into the broker  
7 market to satisfy what we will need to meet the 2009  
8 obligations, this is only an estimation because I do  
9 not know what the final figures are under the green  
10 tariff. But I think we'll have approximately 25,000  
11 RECs leftover, and that's just a very rough estimate,  
12 and a total obligation of approximately a hundred  
13 thousand for the entire year of 2009. So that would  
14 leave us short about 75,000. And again, this is very  
15 approximate. It gives you an order of magnitude.

16 Q. Thank you.

17 Now, on page 7 of your testimony you  
18 mention that AEP entered into a long-term agreement  
19 to purchase in the neighborhood of 4.6 million

20 emission reduction offsets. How will those offsets

21 be used?

22 A. Well, I believe I handled that in the

23 response. If you can give me a moment -- do we want

24 to talk about the OCC request? Was there a question

25 that was pretty close to that?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       Q. Yeah. But if you can -- if you want to  
2 take a moment and find it, that would be fine.

3       A. Sure. Thank you.

4           I think I found it. This is a question  
5 that is similar to interrogatory request 9-287, if I  
6 could refer to that. But the agreement that I  
7 referred to in my prefiled testimony related to a  
8 long-term agreement to purchase carbon offsets,  
9 emission reduction credits, and it was entered into  
10 on behalf of AEP Service Corp, on behalf of all of  
11 the operating companies.

12          This is an agreement that does not come  
13 into play until 2010, and we have not, one, we  
14 haven't paid for any of these yet because it's pay  
15 upon delivery, but two, we haven't figured out how  
16 we're going to allocate these amongst the operating  
17 companies.

18          The 4.6 million credits was an aggregate  
19 over the life of the contract, so it's substantially

20 less, you know, credits on an annual basis. So you  
21 have a subset of 4.6 million and then you have -- we  
22 have seven regulated operating companies.

23 Q. Now, that would be over a period of eight  
24 years; is that correct?

25 A. That's correct.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. Do you anticipate that any of these  
2 offsets will be used to meet AEP-Ohio's renewable  
3 energy obligation?

4 A. Under my reading of Senate Bill 221,  
5 these credits do not qualify under that. This is  
6 more of a carbon mitigation plan, you know, that the  
7 company has undertaken.

8 Q. Now, on page 17 of your direct testimony  
9 you state that the O&M renewable prices offered as  
10 part of AEP's RFP was approximately \$80 per  
11 megawatt-hour for nonsolar resources and \$300 per  
12 megawatt-hour for solar resources. Do you see that?

13 A. Yes.

14 Q. What percentage of the \$80 per megawatt  
15 hour price for nonsolar resources do you believe is  
16 the REC value?

17 A. Well, if you look at the price -- and  
18 when I'm referring to the \$80, that would be for the  
19 all-in price of wind. When you look at that price,

20 there's three components. There's the energy value  
21 which is, you know, in most cases throughout the  
22 country is the highest value of a bundled price.  
23 You've got a little bit of capacity value in this, as  
24 Witness Castle told you that wind is currently  
25 allocated approximately at 13 percent capacity value,

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 so a hundred megawatt wind farm would have  
2 13 megawatts of capacity value because of the  
3 coincidence of the wind production vis-a-vis our peak  
4 load. So you've got a little bit of capacity value,  
5 a lot of energy value, and then the rest of it by  
6 definition I guess would be your imputed REC price.

7       So if -- again, not knowing exactly what  
8 the market price of energy is, but if the market  
9 price of energy is \$50 next year and capacity value  
10 is \$55, and these are all hypotheticals, and we're  
11 paying \$80, then, you know, 80 minus 55 would be \$25.

12       Q. And is that pretty typical, do you think,  
13 of what the market does?

14       A. Well, the market price for wind energy is  
15 very resource dependent, and so the market price I'm  
16 paying for wind in, say, Oklahoma and Texas is going  
17 to be substantially cheaper, I mean, very much close  
18 to the market price of energy, whereas the farther  
19 you move away from the very windy areas in the United

20 States, the higher the break-even cost, you know, for

21 a bundled product would have to be.

22 And so, you know, subtracting out the

23 energy value -- which differs by regions, you know,

24 your REC prices are going to get bigger.

25 MR. ETTER: That's all the questions I

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 have. Thank you, Mr. Godfrey.

2 EXAMINER SEE: Mr. Randazzo, did you have  
3 questions for this witness?

4 MR. RANDAZZO: No questions.

5 EXAMINER SEE: Mr. Kurtz.

6 MR. BOEHM: Mr. Boehm.

7 EXAMINER SEE: I'm sorry, Mr. Boehm.

8 MR. BOEHM: You've just made me about ten  
9 years younger. Thank you.

10 I have no questions. Thanks.

11 EXAMINER SEE: Mr. White?

12 MR. WHITE: No questions, your Honor.

13 EXAMINER SEE: And Mr. Margard.

14 MR. MARGARD: No questions, your Honor,  
15 thank you.

16 EXAMINER SEE: Mr. Nourse, any redirect?

17 MR. NOURSE: No questions, thank you.

18 THE WITNESS: Thank you.

19 EXAMINER SEE: Thank you.

20 Are you ready to go to the next witness,

21 Mr. Resnik?

22 Can you give me five minutes?

23 MR. RESNIK: Whatever.

24 EXAMINER SEE: Let's go off the record.

25 (Discussion off the record.)

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



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

3 MR. NOURSE: Your Honor, can I renew my  
4 motion to admit Exhibit No. 9, please?

5 EXAMINER SEE: Is there any objection to  
6 the admission of Companies' Exhibit 9?

7 Hearing none, Companies' Exhibit 9 is  
8 admitted into the record.

9 MR. NOURSE: Thank you, your Honor.

10 (EXHIBIT ADMITTED INTO EVIDENCE.)

11 EXAMINER SEE: Let's go off the record.

12 (Recess taken.)

13 EXAMINER BOJKO: Let's go back on the  
14 record.

15 Mr. Resnik, would you like to call your  
16 next witness?

17 MR. RESNIK: Companies call Mr. Greg  
18 Earl.

19 EXAMINER BOJKO: Mr. Earl, please raise

20 your right hand.

21 (Witness sworn.)

22 MR. RESNIK: I have marked as Companies'

23 Exhibit No. 10 the Prefiled Direct Testimony of

24 Mr. Earl.

25 EXAMINER BOJKO: Ten?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 MR. RESNIK: Ten.

2 EXAMINER BOJKO: The testimony will be so  
3 marked.

4 (EXHIBIT MARKED FOR IDENTIFICATION.)

5 - - -

6 GREGORY A. EARL

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

9 DIRECT EXAMINATION

10 By Mr. Resnik:

11 Q. Please state your name for the record.

12 A. My name is Gregory A. Earl.

13 Q. Mr. Earl, do you have before you a copy  
14 of what's been marked as Companies' Exhibit No. 10?

15 A. Yes, I do.

16 Q. Can you identify that exhibit for the  
17 record?

18 A. That would be my direct testimony filed  
19 in this case.

20 Q. Are there any corrections that need to be

21 made to your prefiled testimony?

22 A. No, there are not.

23 Q. If I were to ask you the questions that

24 appear in Companies' Exhibit No. 10, would your

25 answers be the same as they appear in the testimony?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes, they would be the same.

2       Q. Thank you.

3       MR. RESNIK: Your Honor, no further

4 questions for Mr. Earl. He is available for

5 cross-examination.

6       EXAMINER BOJKO: Okay. Did we have a

7 volunteer to begin? Mr. Randazzo.

8       MR. RANDAZZO: Yes, just a couple of

9 questions if I might.

10               - - -

11               CROSS-EXAMINATION

12 By Mr. Randazzo:

13       Q. Mr. Earl, how are you?

14       A. Good, thank you.

15       Q. If you would turn to page 5 of your

16 testimony, please, which is Companies Exhibit No. --

17       MR. RESNIK: 10.

18       MR. RANDAZZO: 10. Thank you. Sorry.

19       A. I'm there.

20       Q. You discuss the reasons why you've asked  
21 line extension charges be addressed in this  
22 proceeding. Are you familiar with the Commission's  
23 rules that have been issued on line extensions?

24       A. Yes, I am familiar with them.

25       Q. And were those rules published after you

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 prepared your testimony?

2 A. Yes, they were.

3 Q. Okay. You haven't addressed the effects  
4 of the rules on your recommendations here, have you?

5 A. No, I have not.

6 MR. RANDAZZO: Thank you. That's all I  
7 have.

8 EXAMINER BOJKO: Okay.

9 Mr. Boehm, you have no questions?

10 MR. BOEHM: No questions, your Honor.

11 EXAMINER BOJKO: Mr. White?

12 MR. WHITE: No questions, your Honor.

13 EXAMINER BOJKO: Mr. O'Brien?

14 MR. O'BRIEN: Thank you, your Honor.

15 Contrary to my previous assertions, I do have one  
16 question for this witness.

17 EXAMINER BOJKO: Could you speak up a  
18 little bit, please.

19 MR. O'BRIEN: Maybe I better turn on this

20 here microphone.

21 - - -

22 CROSS-EXAMINATION

23 By Mr. O'Brien:

24 Q. Good afternoon, Mr. Earl. My name is Tom

25 O'Brien. I'm representing the Ohio Hospital

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Association in this proceeding.

2 A. Good afternoon.

3 Q. I have one question for you.

4 A. Okay.

5 Q. Could you please turn to page 12 of your

6 testimony, and the bullet point at the top of that

7 page starting on line 1.

8 A. I'm there.

9 Q. At the bottom of that bullet point the

10 sentence says: "In addition, the project will be

11 charged 100 percent, plus tax gross up of any premium

12 costs required by the customer."

13 Could you please give me an idea of what

14 would constitutes a premium cost?

15 A. Sure. Generally our distribution

16 construction would involve overhead facilities. A

17 good example of premium costs might be the request by

18 the customer to construct line extension facilities

19 underground.

20 Q. So would it be fair to say -- I'm sorry  
21 this is a second question. Would it be fair to say  
22 that a premium cost would be a cost incurred because  
23 the customer requests facilities that would be  
24 different than those proposed by the company for the  
25 same service?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. The distinction -- to answer your  
2 question, let me just start off by describing when we  
3 receive a service request, our starting point is a  
4 basic service plan, which generally would be the  
5 least-cost plan to meet the needs that the customer  
6 has requested. If that basic service plan, if  
7 there's something different than that basic service  
8 plan the customer wants, that would drive the cost of  
9 the plan higher. Those costs would be premium  
10 service costs.

11       MR. O'BRIEN: Thank you, Mr. Earl.

12       That concludes my cross-examination, your  
13 Honor.

14       EXAMINER BOJKO: Mr. Earl, doesn't AEP  
15 currently have in place line extension policies that  
16 would define what premium service is?

17       THE WITNESS: Yes.

18       EXAMINER BOJKO: Maybe it would be  
19 helpful if you tell us what that definition is.

20           THE WITNESS: I don't know if I have the  
21 definition in front of me, though I believe -- well,  
22 give me a second to look.

23           I guess if I could go back to the  
24 explanation I gave Mr. O'Brien, is that with respect  
25 to line extensions we have a basic service cost and a

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 premium service cost, and the basic service cost  
2 would be generally the least-cost method for  
3 providing the service that the customer has  
4 requested.

5 EXAMINER BOJKO: But in your tariff  
6 schedules there is a specific definition for premium  
7 service, isn't there? How about this, didn't the  
8 Commission order or approve I guess a settlement that  
9 would have contained the definition of premium  
10 services in 01-2708?

11 THE WITNESS: We approved a settlement at  
12 the time. I'm struggling and I really should know  
13 this, whether there was a specific definition of what  
14 premium service costs were.

15 EXAMINER BOJKO: I'm not trying to be  
16 tricky, but the company does have a policy --

17 THE WITNESS: I understand. Yes, we do.

18 EXAMINER BOJKO: I just wanted to make  
19 that clear from Mr. O'Brien's questions.

20 Let's go to Ms. Elder. Do you have any?

21 MS. ELDER: No questions, your Honor.

22 EXAMINER BOJKO: All right. Let's go to

23 OCC.

24 - - -

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 CROSS-EXAMINATION

2 By Mr. Idzkowski:

3 Q. Yes, hi, Mr. Earl.

4 A. Good afternoon.

5 Q. I have a few questions about your  
6 testimony. You testify on page 3 in your testimony  
7 that: "Generally, customers are required to pay a  
8 Contribution in Aid of Construction toward the cost  
9 of local facilities since they're uniquely benefiting  
10 from the construction of such facilities." Correct?

11 A. That's correct.

12 Q. Does AEP also benefit from the  
13 construction of such facilities?

14 A. Sure. We benefit from having an  
15 additional customer on our system, an additional  
16 plant in service, absolutely.

17 Q. Okay. And you state I think in your  
18 testimony regarding residential -- basic up-front  
19 residential line extension charges, you say those

20 should go up; is that correct?

21 MR. RESNIK: I'm sorry, do you have a

22 page reference?

23 MR. IDZKOWSKI: Yeah. Page 6.

24 MR. RESNIK: Thank you.

25 Q. There's a chart. Do you have your

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 testimony there?

2 A. Yes, I do.

3 EXAMINER BOJKO: Could you maybe turn you  
4 your microphone on?

5 MR. IDZKOWSKI: Off?

6 EXAMINER BOJKO: On. I don't think it's  
7 on.

8 MR. RANDAZZO: I didn't know we could  
9 request they be turned off.

10 EXAMINER BOJKO: I did request that for  
11 Mr. Boehm or Mr. Bell's clicking the other day.

12 MR. IDZKOWSKI: I'll try to sit closer or  
13 speak up.

14 Q. (By Mr. Idzkowski) Did you find that on  
15 page 6, Mr. Earl?

16 A. On page 6, yes.

17 Q. So according to this chart, single-family  
18 development -- that's a dwelling then, correct, a  
19 single-family dwelling in a development?

20       A.   Yes, in a development.

21       Q.   It's going to go from \$375 per lot, and

22 if you turn the page one page to page 7, your chart

23 says that's going to go up to \$500 per lot.

24       A.   That's correct.

25       Q.   So it's going to go up a third, right,

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 \$125?

2 A. That's correct.

3 Q. And in the second line, multifamily  
4 projects, that would be a condo or apartment building  
5 or something.

6 A. That's correct.

7 Q. And that's going to go from a hundred to  
8 \$200 so that's going to go up a hundred percent.

9 A. That's correct.

10 Q. And then a single-family dwelling not in  
11 a development, that would be a house, a single-family  
12 house away from a development then, correct?

13 A. Yes.

14 Q. And that's going to go up 33 percent,  
15 that's going to go up \$125, correct?

16 A. Yes, that's correct.

17 Q. And you state in your testimony that the  
18 justification for the increase in charges that a  
19 major -- I think you call it an underlying driver --

20 is the significant increase in material costs,  
21 namely, steel, copper, and aluminum, correct?

22 A. That's correct.

23 Q. So these changes in materials have caused  
24 AEP to request this increase. You're an engineer,  
25 correct?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes, I am.

2       Q. You're not a financial or a commodities  
3 expert?

4       A. No, I'm not a financial or commodities  
5 expert, but I have been involved with this line  
6 extension issue since its inception in 2001 and was  
7 involved in the negotiations that took place to  
8 establish the figures that we're dealing with today  
9 and was familiar with what the cost of providing  
10 service to single-family developments, multifamily  
11 developments and so forth and have had the ability to  
12 watch the prices --

13      Q. The prices of these materials?

14      A. Well, prices of the projects on a per-lot  
15 basis or a per-unit basis to escalate substantially  
16 since the original charges were put in place.

17      Q. Okay. But you're not -- would you say  
18 you're an expert on the price of metals?

19      A. I'm not an expert on the price of metals.

20 I consider myself an expert on this particular

21 subject, and that's why I'm here today.

22 Q. Sure. But then you track the price of

23 these metals, aluminum, copper, steel, correct?

24 A. No, I do not.

25 Q. You do not? Where did you get your

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 information that they've gone up?

2 A. I think you'll find in Mr. Boyd's

3 testimony there's an exhibit that he references that

4 shows the escalation of prices in those commodities

5 and, you know, that was brought out in my testimony

6 as a matter of explanation.

7 What my observation particularly was

8 relevant to, is the fact that these projects --

9 project costs have escalated substantially, and I

10 brought in with that observation so that it wouldn't

11 just stand alone what the cause may have been. And I

12 believe I reference the fact that there are, you

13 know -- there's the commodity price increases that

14 you would see in Mr. Boyd's testimony and --

15 Q. Well, on page 7, if you can look at lines

16 8 to 12, the reason I'm asking you these questions is

17 because you're just -- on page 7 in those lines I

18 think you say: "The underlying driver in these

19 project costs increases is the sharp increase in

20 material costs over the last several years. Steel,

21 copper and aluminum prices have soared."

22 So you're testifying about steel, copper,

23 and aluminum prices generally, correct, on that line?

24 A. I'm testifying about from line 8 to line

25 9 the underlying driver of these project cost

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 increases is the sharp increase in material costs  
2 over the last several years.

3 Q. Yes.

4 A. Transformers, conductors, all the other  
5 items that go into the construction of a line  
6 extension.

7 Q. Well, to begin, these raw material prices  
8 have directly impacted AEP's cost. So are you  
9 familiar with what the raw material prices are for  
10 metal -- now for metal, copper, or steel?

11 A. No more familiar than I am by looking at  
12 the exhibit that was presented in Mr. Boyd's  
13 testimony.

14 Q. So you can't say if they've gone down  
15 which, in fact, they have; is that correct?

16 MR. RESNIK: Excuse me, can I have that  
17 question read back, please?

18 EXAMINER BOJKO: You may.

19 (Record read.)

20 MR. RESNIK: Well, I'll object to counsel

21 testifying. If he wants to end the sentence before

22 the "in fact they have" --

23 MR. IDZKOWSKI: I'll strike that part of

24 it.

25 EXAMINER BOJKO: How about you rephrase

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 the question.

2 Q. Are you aware that they have? Are you  
3 aware if they have?

4 A. Can you give me a complete question?

5 Q. Yes. Are you aware if copper prices have  
6 fallen since your testimony --

7 A. I am not aware.

8 Q. -- was written?

9 A. I am not aware of that.

10 Q. You're not?

11 A. No.

12 Q. Are you aware that aluminum prices  
13 evidently have fallen since your testimony?

14 A. I'm not aware of that either.

15 Q. Or steel prices.

16 A. I'm not aware of that either.

17 Q. Are you aware of any way that the current  
18 national and worldwide financial downturn has  
19 affected the outlook for prices for coal and aluminum

20 and steel?

21 THE WITNESS: I'm sorry, could you reread

22 his question, please?

23 (Record read.)

24 EXAMINER BOJKO: Mr. Resnik.

25 MR. RESNIK: Your Honor, I'm going to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 object, at least to the portion of the question  
2 concerning coal. Second of all, I'm going to object  
3 because I think the question mischaracterizes the  
4 witness's testimony.

5 EXAMINER BOJKO: I think I just heard the  
6 witness say he didn't know as a response to all the  
7 previous questions, so I think it's going to be  
8 sustained. I don't think coal was asked before so  
9 you may ask specific to coal, but that particular  
10 question's going to be sustained.

11 MR. IDZKOWSKI: Your Honor, I misspoke if  
12 I said coal.

13 EXAMINER BOJKO: Okay, then sustained  
14 permanently in its entirety.

15 MR. IDZKOWSKI: If I may approach the  
16 witness, your Honor.

17 EXAMINER BOJKO: You may.

18 Q. (By Mr. Idzkowski) Mr. Earl, can you --

19 THE WITNESS: Do I have permission to get

20 my glasses?

21 EXAMINER BOJKO: You may.

22 MR. IDZKOWSKI: It is small.

23 EXAMINER BOJKO: Could you tell us what

24 you just handed the witness while the witness is

25 obtaining bifocals?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           MR. IDZKOWSKI: Yes, I can. It's a  
2 printout from a web page of Kitco Corporation. It's  
3 a metals retailer. I'm just going to ask him if he's  
4 familiar with that.

5           EXAMINER BOJKO: The answer is he already  
6 said he wasn't familiar with any of these items, so  
7 showing him a document is not going to make him  
8 familiar.

9           MR. IDZKOWSKI: Your Honor, he said he  
10 was unfamiliar with what? All prices, all matters  
11 regarding prices of commodities?

12          EXAMINER BOJKO: What is this document  
13 pertaining to?

14          MR. IDZKOWSKI: This document pertains to  
15 copper prices.

16          EXAMINER BOJKO: He said copper was one  
17 he didn't know about.

18          MR. IDZKOWSKI: He didn't know -- all  
19 right.

20 EXAMINER BOJKO: You can't refresh his

21 memory if he ever knew about it.

22 MR. IDZKOWSKI: No. I was going to ask

23 him -- I wasn't going to refresh his memory.

24 EXAMINER BOJKO: I think you already

25 asked him so sustained.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 MR. IDZKOWSKI: Thank you.

2 Q. (By Mr. Idzkowski) Mr. Earl, could you  
3 take a look at your Exhibit GAE-1, please?

4 A. I'm there.

5 Q. Thank you. And on the second page of  
6 that exhibit regarding multifamily, page 1 -- have  
7 you found that?

8 A. Yes.

9 Q. There's a blacked-out column on that  
10 page. Is that column supposed to be identified as  
11 the number of units?

12 A. That's correct.

13 Q. If you look at the first few lines, the  
14 first one lists a two-unit dwelling and that job  
15 costs \$6,947.

16 EXAMINER BOJKO: I'm sorry, which page of  
17 the exhibit are you on?

18 MR. IDZKOWSKI: Page 2.

19 EXAMINER BOJKO: Two, thank you.

20 MR. IDZKOWSKI: Of Exhibit GAE-1.

21 EXAMINER BOJKO: Thank you.

22 MR. IDZKOWSKI: It's the second page,

23 they're not marked by numbers.

24 EXAMINER BOJKO: Thank you. Well, it

25 says Multi-Family page 1, right --

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 MR. IDZKOWSKI: Yes, it does. Yes.

2 Q. (By Mr. Idzkowski) Are you there?

3 A. Yes.

4 Q. Okay. Do you see where the first local

5 facility cost is \$6,947?

6 A. Yes.

7 Q. And it served two units.

8 A. Presumably a duplex.

9 Q. Okay. So that's about half that for

10 each. It's about \$2,470 per unit.

11 A. I don't think your math is correct.

12 Q. I'm sorry, what would it be?

13 A. More like 3,450.

14 Q. Okay. 3,400. I can't read my own

15 writing, \$3,470. And the job on line 2 cost \$15,728.

16 A. That's correct.

17 Q. And that covered seven units, so that was

18 approximately, if I can read my writing, \$2,200 per

19 unit.

20       A.   Sounds about right.

21       Q.   Okay.  And then on the third line, that

22  job cost \$29,859.

23       A.   That's correct.

24       Q.   And that served 50 units, so roughly

25  \$597 apiece.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. That's correct.

2       Q. Given this wide disparity in costs, why  
3 is it reasonable to make the lower cost line  
4 extensions pay the same amount as those who were  
5 incurring higher costs?

6       A. What we were trying for in the concept of  
7 the line extension program was to -- there was a  
8 desire to have some price certainty on the part of  
9 the developers so that they would know going into a  
10 project what their expected up-front payment was  
11 going to be. There was a recognition that from one  
12 project to the next, whether there is 2 units per  
13 building or 8 units per building or 15 units per  
14 building, when you're looking at a cost per unit  
15 there is going to be a wide variation. There are  
16 going to be -- somewhere a cost per unit is going to  
17 be significantly higher or lower than others.

18       On the average, though, the line  
19 extension proposal from our standpoint, we were

20 trying to have an outcome that places a reasonable  
21 portion of the line extension cost on the part of the  
22 developer, so it's a shared responsibility between  
23 the developer and the other ratepayers.

24 And from the process standpoint, there's  
25 benefits of having a fixed price program so that the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 developer knows going into the project what their  
2 contribution is going to have to be.

3 Q. Can you take a look at your testimony  
4 starting on page 11, please? There you're talking  
5 about nonresidential line extensions and the charges  
6 for those.

7 A. I'm there.

8 Q. So AEP is proposing changes in those line  
9 extension charges also in your testimony, correct?

10 A. That's correct.

11 Q. And here we have designations in the  
12 table, in this chart rather, GS-1 and GS-2 and 3 and  
13 4. What are those GS classifications?

14 A. They're in reference to general service  
15 tariffs for the nonresidential customers. GS-1  
16 customers would generally be a customer less than 10  
17 kW demand, and they're a nondemand customer. The  
18 other two categories are GS-2, 3, and 4 are customers  
19 who were greater than 10 kW demand served at the

20 distribution level, and that third category is GS-3  
21 and 4, they're transmission level service customers,  
22 transmission voltage services.

23 Q. Can you give us an example of a GS-1?

24 A. You know, GS-1 might be a barbershop in a  
25 strip shopping center, a small commercial entity.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Q. Okay. What would a McDonald's be?

2 A. Would probably be a 2, 3, or 4 -- or 2 or  
3 3 rather.

4 Q. All right. Now, in this chart you're  
5 proposing the prices -- well, in the testimony --

6 A. Not on the chart on page 11 I'm not.

7 Q. Well, in your following testimony on page  
8 12.

9 A. Yeah.

10 Q. You say: "All nonresidential projects  
11 will be charged an upfront payment equal to  
12 40 percent." So you want to increase these  
13 percentages in this chart on page 11 from, say, a  
14 GS-1 from 25 to 40 percent.

15 A. That's correct. And correspondingly  
16 lowering the charges for the GS-3 and 4 transmission  
17 customers from their prior point of a hundred percent  
18 to 40 percent. What we found and what our experience  
19 has been over the past seven years in working with

20 this program was there are some commercial and  
21 industrial customers that come in at a certain point  
22 of demand that they could either take distribution  
23 service or transmission service, and we were finding  
24 that the line extension program costs may have been  
25 influencing them to choose one service option over

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 another just as a means of taking advantage of a  
2 smaller up-front contribution.

3       We really felt with that experience that  
4 we would be better served by having one common  
5 percentage across the general service group of  
6 customers, and 40 percent provided us with a, you  
7 know, with a point where we're somewhat revenue  
8 neutral, I'll call it, across that broad class of  
9 customers raising it for the GS-1, 2, and 3  
10 distribution customers and lowering it for the GS-3  
11 and 4 transmission customers.

12       Q. Just in comparing the residential and  
13 nonresidential, it's apparent that there's a smaller  
14 increase, a much smaller increase in some cases for  
15 the residential -- or rather the nonresidential line  
16 charges than the residential.

17       A. Well, I think you're comparing --

18       MR. RESNIK: Excuse me, is there a  
19 question?

20 EXAMINER BOJKO: Was that a question?

21 MR. IDZKOWSKI: No. Not yet, no.

22 THE WITNESS: I'm sorry.

23 Q. Are we shifting -- are there two separate

24 pots we're talking about here, two separate amounts,

25 or are we somehow shifting line extension costs from

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 nonresidential to residential?

2 A. I don't believe we're shifting it per se.

3 If you looked at the derivation of the residential

4 line extension charge, one of the premises was that

5 when the \$375 was established for single family in a

6 development, with respect to our, you know, estimated

7 project cost at the time of \$1,300 we -- you do that

8 math and the percentage contribution was about

9 28 percent.

10 And the premise from going to \$500 on the

11 residential side was to maintain that percentage

12 contribution at 28. I think the figure is

13 28.8 percent. So we were maintaining that same

14 percentage contribution on the part of the

15 residential single-family development just reflecting

16 the fact that the price of materials were increasing

17 and the project costs were increasing.

18 And I -- I'll stop there.

19 Q. You're finished with your answer?

20       A.  Yes.

21       Q.  Okay.  Thank you.  Just so I'm sure and  
22 just to back up a bit, your information regarding  
23 metals prices, copper, aluminum, steel that you  
24 talked about, that's information you got from who?

25       A.  I believe I said that the chart in

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Mr. Boyd's testimony was the chart that I was looking  
2 at.

3 Q. And you did no independent -- to support  
4 your testimony about the need for line extension  
5 charge increases, you've done no independent research  
6 or study or you've not looked on line or anything to  
7 know what the prices are currently this day that  
8 we're testifying of these metals, correct?

9 A. That's correct.

10 MR. IDZKOWSKI: Thank you. I have no  
11 further questions.

12 EXAMINER BOJKO: But you did do an  
13 analysis of what the projects actually cost.

14 THE WITNESS: Absolutely. That was my  
15 fundamental analysis, was to look at the changes in  
16 the project costs.

17 EXAMINER BOJKO: And you took an average  
18 from those costs to get the 500.

19 THE WITNESS: Right.

20 EXAMINER BOJKO: And the 900 -- is it

21 900?

22 THE WITNESS: Well, the multifamily is a

23 \$200 contribution and the single-family is a

24 \$500 contribution.

25 EXAMINER BOJKO: Did anybody else have

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 any questions?

2 Oh, staff, did you have any questions?

3 MR. MARGARD: No, thank you, your Honor.

4 - - -

5 EXAMINATION

6 By Examiner Bojko:

7 Q. I have one more question, Mr. Earl.

8 Could you turn to page 5 of your testimony? I need

9 you to clarify the timing or the dates or what's

10 currently in effect. On page 5 on the first bullet

11 you seem to say that the up-front contributions from

12 developers for single family ended on 12/31/07, but

13 then on the next page in the chart you say these are

14 the current line extension charges for Ohio Power and

15 CSP for residential projects. Is that date correct,

16 '07, or is this still the program that you're

17 using today for '08?

18 A. Yeah. Let me clarify that. On page 5 of

19 the testimony, that first bullet point, for Ohio

20 Power the up-front payment for single family in a  
21 development expired on 12/31/07. The surcharges also  
22 expired on 12/31/07, but then we came back to the  
23 Commission in early '08 and asked for an extension of  
24 those.

25 The Columbus Southern Power program is

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 still in place set to expire at the end of 2008 with  
2 respect to surcharges and the up-front payment  
3 associated with single-family development.

4 Q. And I guess I'm assuming that the  
5 Commission approved that application that you said --

6 A. Yes.

7 Q. -- to extend the Ohio Power.

8 A. The extension of the collection of  
9 surcharges for Ohio Power, yes.

10 Q. But not the up-front payments?

11 A. That was not requested.

12 Q. Well then on page 6 on your chart when  
13 you say what are the current line extension charges,  
14 the up-front payment would not be 375 for the Ohio  
15 Power?

16 A. That would be clearer, yes.

17 Q. And to your knowledge do the rules  
18 adopted by the Commission a few weeks ago address the  
19 line extension policies for both residential and

20 nonresidential customers?

21 A. To my knowledge, they do.

22 Q. And is it your understanding that when

23 those rules become effective, that AEP would no

24 longer need specific line extension policies in place

25 as you've proposed in your application?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. I don't believe that that's true. I  
2   mean, my understanding is that, you know, the rules  
3   are out there, but then -- and maybe I'm treading on  
4   turf that's not my expertise, but my expectation  
5   would be that we file tariffs that are consistent  
6   with those rules, and if we propose a program for,  
7   say, residential line extensions, the Commission then  
8   would be expected to evaluate the consistency of our  
9   application with what the content of those rules are.

10       EXAMINER BOJKO: Thank you.

11       Any redirect, Mr. Resnik?

12       MR. RESNIK: Just very short, your Honor.

13               - - -

14       REDIRECT EXAMINATION

15   By Mr. Resnik:

16       Q. Mr. Earl, when you were talking about  
17   nonresidential customers, and I think you were saying  
18   that some choose between taking distribution service  
19   or transmission service --

20       A.   Yes.

21       Q.   -- are you talking about choosing between

22   distribution -- excuse me -- taking service at a

23   distribution level voltage or a transmission level

24   voltage?

25       A.   Yes.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 MR. RESNIK: Thank you.

2 EXAMINER BOJKO: Thank you for that  
3 clarification.

4 Anybody on that limited clarification,  
5 does anyone have recross?

6 Okay, thank you, Mr. Earl.

7 THE WITNESS: Thank you.

8 MR. RESNIK: Your Honor, companies move  
9 for the admission of Companies' Exhibit No. 10.

10 EXAMINER BOJKO: Any objection to the  
11 admission of Mr. Earl's testimony?

12 Hearing none, it will be admitted.

13 MR. RESNIK: Thank you.

14 (EXHIBIT ADMITTED INTO EVIDENCE.)

15 EXAMINER BOJKO: Would you like to move  
16 on to your next witness, Mr. Resnik?

17 MR. NOURSE: Your Honor, companies would  
18 call Karl Boyd to the stand.

19 EXAMINER BOJKO: Mr. Boyd, please raise

20 your right hand.

21 (Witness sworn.)

22 MR. NOURSE: Your Honor, the companies

23 would mark as Exhibit No. 11 the Prefiled Testimony

24 of Karl G. Boyd.

25 EXAMINER BOJKO: It will be so marked.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 (EXHIBIT MARKED FOR IDENTIFICATION.)

2 - - -

3 KARL G. BOYD

4 being first duly sworn, as prescribed by law, was

5 examined and testified as follows:

6 DIRECT EXAMINATION

7 By Mr. Nourse:

8 Q. Good afternoon, Mr. Boyd. Could you

9 state your full name for the record.

10 A. Karl G. Boyd.

11 Q. And by whom are you employed, and in what

12 capacity?

13 A. I'm employed by American Electric Power

14 Service Corporation as the vice president of

15 distribution operations for Ohio Power and Columbus

16 Southern Power.

17 Q. Do you have a copy of the exhibit that

18 was just marked Companies' Exhibit No. 11?

19 A. Yes.

20 Q. Is that your direct testimony prepared by

21 you or under your direction in this case?

22 A. Yes, it is.

23 Q. Do you have any corrections, additions,

24 or changes you'd like to make this afternoon?

25 A. No, I don't.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. If I were to ask you all the questions  
2 contained in your testimony, would your answers be  
3 the same under oath today?

4       A. Yes, they would.

5       Q. Thank you.

6       MR. NOURSE: Your Honor, companies would  
7 move for admission of Exhibit No. 11 into the record  
8 subject to cross-examination.

9       EXAMINER BOJKO: It will be so moved.

10       Do we have any volunteers to go first?

11       MR. REESE: Yes, your Honor.

12       EXAMINER BOJKO: Mr. Reese.

13       MR. REESE: Lead counsel just said I  
14 wanted to go first.

15               - - -

16       CROSS-EXAMINATION

17 By Mr. Reese:

18       Q. Good afternoon, Mr. Boyd.

19       EXAMINER BOJKO: She's working the Roush

20 angle not going on until Monday.

21 MR. REESE: I understand.

22 Q. Mr. Roush, I'm --

23 EXAMINER BOJKO: Mr. Boyd.

24 MS. GRADY: You can do Roush if you want.

25 THE WITNESS: I won't be very responsive

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 to his questions.

2 Q. Good afternoon, Mr. Boyd.

3 A. Good afternoon.

4 Q. I'm looking at page 2 of your testimony,

5 looking down around lines 19 through 21. Your

6 responsibilities include overseeing AEP Ohio's

7 distribution system vegetation management program,

8 asset management programs, reliability programs, and

9 major capacity programs; is that correct?

10 A. Yes.

11 Q. Now, you also ensure that these different

12 plans that the company implements comply with the

13 Commission's Electric Service and Safety Standards;

14 is that correct?

15 A. That's correct.

16 MR. REESE: Your Honor, I wanted to

17 approach the witness. I want to give him a copy of

18 the Commission's rules because I'm going to have

19 several questions on those if that's okay.

20 EXAMINER BOJKO: Are these the current

21 Commission rules?

22 MR. REESE: Yes.

23 EXAMINER BOJKO: You may --

24 MR. REESE: I'm going to ask him

25 questions on the current rules. Is that okay?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 EXAMINER BOJKO: Please.

2 Q. (By Mr. Reese) Can we look at page 3 of  
3 your testimony, please, Mr. Boyd. You state here in  
4 your testimony at lines 3, 4, and 5 that you're  
5 giving an overview through your testimony of  
6 AEP-Ohio's current power quality and service  
7 reliability programs; is that correct?

8 A. Yes.

9 Q. Now, you have in parens on line 4 what  
10 you refer to as momentary interruptions, correct?

11 A. Yes.

12 Q. And momentary interruptions, are those  
13 measured by MAIFI?

14 A. Yes.

15 Q. Okay. And can you define what a  
16 momentary interruption is?

17 A. It's an interruption in the electric  
18 service that lasts less than 5 minutes.

19 Q. So anything less than 5 minutes, okay.

20 And that's as distinguished from service reliability,  
21 which would be outages that lasted longer than 5  
22 minutes?

23 A. That's correct.

24 Q. Okay. Now, as I understand it, beginning  
25 at line 6 you discuss the three-year enhanced service

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 reliability plan. Is it okay with you if we refer to

2 that as the ESRP?

3 A. Yes.

4 Q. Okay. And that consists of four

5 reliability programs; is that correct?

6 A. That's correct.

7 Q. Now, in terms of this three-year enhanced

8 service reliability plan, there are different

9 horizons of achievements, goals, if you will, within

10 your testimony. Are all of those goals achieved

11 within the three years covered by the ESRP, or do

12 some of them have longer horizons?

13 A. I'm not certain which goals you're

14 referring to.

15 Q. Maybe I can give you an example. On the

16 vegetation management, we'll get into that a little

17 bit more in a little while, I believe that you've

18 discussed moving somewhat towards more of a

19 cycle-based approach and away from the same amount of

20 reliance on a performance-based approach, but I  
21 believe that you've stated that it's going to take a  
22 number of years, I believe through 2012 or 2013, to  
23 actually get to where you're on a cycle-based  
24 program.

25 A. What we have in testimony and what we

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 filed with the ESP is a three-year program because  
2 that was the length of the period of the ESP filing.  
3 What we recommend for vegetation, though, is a  
4 five-year program which then would move us to a point  
5 that we could be on a more cycle-based program.

6 Q. Okay. Are there some of the other  
7 programs that you've recommended in here that  
8 basically take five years to achieve your goals but  
9 are only -- have the forecasted expenditures for  
10 three years of the ESRP?

11 A. Again, I don't know what you mean by  
12 "goals." If you mean complete the work or meet the  
13 reliability improvements that we say, those are  
14 different end points. But to the last part of your  
15 question is that -- for example, the URD program, the  
16 underground cable injection and replacement program,  
17 is that we envision that as being a ten-year program  
18 but only describe and cost out the first three years  
19 of that program.

20 Q. Okay. Thank you.

21 Now, I believe you and I discussed this  
22 in your deposition. Can you explain to me the  
23 difference between circuit miles and line miles?

24 A. Yes. For vegetation programs we speak in  
25 line miles, which is the number of miles that you

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 might clear, and some line miles have more than one  
2 circuit, whereas -- and so we wouldn't count that  
3 same mile twice because there's two circuits on that  
4 mile.

5 In other situations we refer to circuit  
6 miles, and that would be identifying each of those  
7 circuit conductor lengths separately.

8 Q. Thank you.

9 Looking on page 4 of your testimony at  
10 lines 6 and 7 you talk about approximately  
11 "32,000 miles of overhead distribution lines, the  
12 majority of these lines are located in rural areas."  
13 Can you tell me what percentage is located in rural  
14 areas, approximately?

15 A. No. I don't have that number off the top  
16 of my head.

17 Q. Can you define "rural" for me?

18 A. In this portion of the testimony we're  
19 speaking to line miles that are in, say, in southeast

20 Ohio or line miles that would be through the  
21 farmlands in western Ohio or around Chillicothe.

22 Q. So there's no specific definition of  
23 rural.

24 A. That's correct.

25 Q. Okay. Now, on line 12 of your testimony

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 on page 4 you discuss the principal causes of service  
2 interruptions in 2007, excluding events such as major  
3 storms, that most of those were equipment failures  
4 and tree-related contacts. Do you know what the  
5 major causes of service interruptions were during  
6 major storms?

7 A. That depends on the event. If we look at  
8 Hurricane Ike, the major cause there were high winds.  
9 If we go back and look at the ice storms of 2004 in  
10 December or January 2005, the major cause there is  
11 ice, so it depends on the event.

12 Q. Now, you say during the Hurricane Ike  
13 related windstorms, that the major cause was wind.  
14 Does that mean it just blew the lines over? Blew  
15 trees onto the lines?

16 A. As we record cause codes is that we try  
17 to do that in a way that provides the most  
18 information to do analysis, and we would not code  
19 when the wind blows more than 60 miles an hour that

20 it blew a tree over, and it has a line outage, we

21 would record that event as a wind outage.

22 Q. So if a large branch or a tree was blown

23 onto the wires or if a pole was snapped due to the

24 high winds, that wouldn't be differentiated, that

25 would just be cause coded to the major storm or the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 high wind?

2 A. For that situation, yes.

3 Q. Now, in line 15 of your testimony on page

4 4 you reference equipment failures, and that they

5 represent approximately 33 percent of sustained

6 nonmajor event outages and tree-related outages

7 caused approximately 20 percent.

8 Somewhat related to an earlier question,

9 do these percentages change during a major event or a

10 major storm? Would you still expect roughly

11 33 percent of your nonmajor event outages to be

12 caused by equipment failures?

13 A. Again, it depends on the nature of the

14 event. If it was a typical summer event, it could

15 cause lightning to overvoltage equipment or directly

16 damage equipment. But generally I'd say no, that

17 these would reverse, is that we actually see much

18 fewer equipment outages during major events, and most

19 of those outages are a direct result of wind or ice

20 or materials coming into the circuits.

21 Q. On line 17 you talk about "Short

22 momentary interruptions can also occur when a tree

23 branch is blown against a line." Again, that's

24 referring to outages of less than 5 minutes, correct?

25 A. That particular line is, yes.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. Okay. And I guess that would be another  
2 reason to focus on some additional vegetation  
3 management measures, correct?

4       A. Yes. And then we're recommending that  
5 one of the enhancement programs is that we do  
6 additional vegetation management for the benefit of  
7 momentary sustained outages and also hardening the  
8 systems for the more ordinary weather events that we  
9 have.

10      Q. I have a related question. When you have  
11 a branch or a tree that falls and takes out, just  
12 snaps or takes down an individual service drop line,  
13 how do you treat that? Do you dispatch a crew to put  
14 that back up? How does that work?

15      A. Well, if it happens outside of  
16 significant weather events, that would be the case  
17 that a customer calls and reports an outage or a wire  
18 down, is that we would dispatch a single service  
19 truck to that location to analyze the situation and

20 make repairs if that person can by themselves, and if  
21 repairs would require more than one person, then  
22 another servicer may join that individual or we may  
23 call out a crew.

24 Q. If you were -- if you dispatched a crew  
25 to a residence and there was perhaps a series of

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 momentary outages that you can see upon inspection  
2 was caused by maybe a branch that was touching the  
3 line or whatever, would you trim that branch? Would  
4 you trim that tree?

5 A. The form of your question I believe --  
6 let me respond to what I think you're asking, is that  
7 if a servicer was called out and the customer was  
8 complaining of momentary outages, is that the  
9 servicer would inspect those facilities and make an  
10 analysis of what would be necessary to correct that  
11 situation, and if a limb was in contact with a line  
12 and had rubbed that line to where it's allowing an  
13 interruption to occur, is that they would trim that  
14 limb, yes.

15 Q. And they would differentiate that from if  
16 it was just rubbing the line and not causing any  
17 service disruption?

18 A. It depends on the circumstances, is that  
19 sometimes they may remove that limb or sometimes they

20 may request a customer to remove that limb.

21 Q. Now, in the instance that the decision is

22 made to not -- for the company not to remove or trim

23 that line, what does the company do? Do you

24 deenergize the line and have the customer contract to

25 have it trimmed? How does that work?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. We may. We'd analyze that situation, and  
2 if it was a small limb, we may remove it, if it would  
3 be unsafe for the customer, to remove the limb from  
4 the line. We may trim the tree such that the  
5 customer could do that or we may deenergize the  
6 service and lay it on the ground. Depends on the  
7 circumstance.

8       Q. Okay. Let's look at page 5 of your  
9 testimony. Do you know, looking at your asset  
10 management programs discussed from line 12 on page 5  
11 through line 18 on page 6, do these asset management  
12 programs roughly track what's in the -- referenced in  
13 the Commission's rules in rule 27, if you know?

14      A. Yes, I believe they do.

15      Q. Do you know if any of these asset  
16 management programs changed within the last three to  
17 four years?

18      A. Yes, a couple of them have.

19      Q. Do you know which ones?

20       A. On the second one there, the Pole  
21   Inspection and Maintenance Program is that there's  
22   been a change in that program that we requested. On  
23   the recloser maintenance program, there's been a  
24   change on the frequency and added inspection on  
25   batteries for that program.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Q. Do you know how many -- do you know what  
2 the ESSS requirements are for pole inspections, how  
3 many pole inspections, what percentage you're  
4 supposed to do each year?

5 A. The second bullet on page 5, is that what  
6 you're referring to?

7 Q. Yeah. And I'm thinking of ESSS rule 7 --  
8 or 27, excuse me. Do you know what that rule  
9 requires in terms of frequency of pole inspections?

10 A. What we filed on that rule is to do pole  
11 inspections on a ten-year basis.

12 Q. So 10 percent of your poles every year?

13 A. Well, but there's a qualifier to that, is  
14 that we inspect poles that have age greater than 20  
15 years, and it's not necessarily 10 percent of the  
16 poles each year, but inspect the pole population over  
17 a ten-year period.

18 Q. But is it -- let's look at the rule for a  
19 second. You have that. I want to look at rule 27.

20 It's towards the back.

21 A. Do you know what page number it is?

22 Q. No. I don't think they have page -- I'm

23 not sure. Mine's not marked. But it would be

24 1-10-27(D)(1).

25 MR. NOURSE: Your Honor, could I peer

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 over Mr. Boyd's shoulder here? I don't have a copy  
2 of them with me.

3 EXAMINER BOJKO: Sure.

4 A. I see that.

5 Q. Okay. Looking at (D)(1), at least 1/5 of  
6 all distribution circuits and equipment shall be  
7 inspected annually. I'm not sure, but does -- are  
8 poles included in that requirement, if you know?

9 A. I specifically asked you if you were  
10 referring to the pole inspection and maintenance  
11 program on the bottom of page 5, and that program is  
12 outside of that bullet. That bullet refers to item  
13 No. 1 on page 5, which is a five-year program.

14 Q. So you have a pole inspection and  
15 maintenance program that's filed to comply with --  
16 what is that -- (E)(1)(a) below, and then there is a  
17 separate requirement that you inspect all your poles  
18 under (D)(1)?

19 A. Yeah. We filed our -- the work plan

20 under two different components for several years by  
21 two different categories there, and the conversation  
22 I had previously was around the pole inspection  
23 program and not the overhead facility inspection  
24 program.

25 Q. So this is just clarification for me.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 The distribution circuits and equipment inspection  
2 does or does not include poles under (D)(1)? That's  
3 a separate issue?

4 MR. NOURSE: Your Honor, I would just  
5 object. The extent Mr. Boyd knows, he can answer,  
6 but I don't think it's fair to take him through --  
7 he's familiar with our programs. He's familiar with  
8 the requirements in general. He oversees the entire  
9 distribution operation in Ohio. And I don't think we  
10 need to go through each subsection of the rule and  
11 try to match it up with particular areas of the  
12 programs that he discusses in his testimony.

13 MR. REESE: Your Honor, Mr. Boyd  
14 references the ESSS several places in his testimony,  
15 specific rules and subsections.

16 EXAMINER BOJKO: If Mr. Boyd knows, he  
17 can answer the question.

18 Do you know the answer, Mr. Boyd? Do you  
19 need the question reread?

20       A. No. I'm uncertain whether that applies  
21 to section 27 or section 26, but what I do know is  
22 that on an annual basis every March we file our work  
23 plan as to what work was completed against that work  
24 plan that applies to these rules, and we also file  
25 the plan for the current year which applies to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 completing these rules.

2 Q. Okay. Now I'm looking at line 16 on page  
3 5 of your testimony. You're discussing the overhead  
4 circuit facilities inspections, and you discuss here  
5 that AEP-Ohio, this is at line 17, visually inspects  
6 its overhead facilities to identify deficiencies and  
7 potential problems, correct?

8 A. Yes.

9 Q. Now, this visual inspection, do you know  
10 approximately what percentage of this is done by  
11 driving the circuits as opposed to walking or some  
12 other form of inspection?

13 A. The majority of the inspections is done  
14 by driving in those locations. Where our facilities  
15 go across country, under our roadways, we would walk  
16 those line miles.

17 Q. Now, as part of your ESRP you've proposed  
18 some cable injection and cable replacement  
19 components; is that correct?

20       A. That's correct.

21       Q. Do you know under your proposed plan, is  
22 there a higher percentage that you're recommending  
23 for injection or replacement?

24       A. The higher percentage would be for  
25 injection of residential cable. But when it comes to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 the cable where we're talking about that cable that's  
2 within the stations or exiting the station, that's an  
3 underground duct and such, that power cable, we would  
4 propose replacement.

5 Q. Is that because it involves digging?

6 A. No. Actually, it's that some cable is  
7 suitable for injection and some is not. Some doesn't  
8 have the physical characteristics that allows  
9 injection to occur.

10 Q. At the top of page 7 of your testimony  
11 you discuss the fact that AEP completes various  
12 distribution reliability improvements and capacity  
13 additions, and then you give some examples of some of  
14 the improvements that have been done during 2007.

15 Is there a healthy percentage of this  
16 that is due to load growth, or is this due to  
17 overloading, which you reference in the answer at the  
18 top of page 7?

19 A. On an annual basis we look at the

20 performance of the distribution systems and analyze

21 the previous peak demands, and our strategy is to

22 address loading conditions before they reach an

23 overload, so these were done to prevent overloads.

24 Q. And what are the consequences of an

25 overload, substation outage? What would that cause?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. It depends on the magnitude of the  
2   overload. There may be no consequence if the  
3   duration and the magnitude is small.

4       Q. Looking at question and answer beginning  
5   on line 10 on page 7, here where you discuss the  
6   distribution vegetation management program.

7       MR. REESE: Your Honor, can I approach  
8   the witness?

9       EXAMINER BOJKO: You may.

10       MR. REESE: Your Honor, I'd like to mark  
11   this as OCC Exhibit 9.

12       EXAMINER BOJKO: What is this?

13       MR. REESE: It's a interrogatory request,  
14   third set. It's 3-50 from OCC.

15       EXAMINER BOJKO: As OCC Exhibit 9?

16       MR. REESE: Yes, ma'am.

17       EXAMINER BOJKO: It will be so marked.

18       (EXHIBIT MARKED FOR IDENTIFICATION.)

19       Q. (By Mr. Reese) Now, Mr. Boyd, beginning

20 at line 10 you discuss the distribution management  
21 program, distribution vegetation management program  
22 that is part of your ESRP; is that correct?

23 A. Yes.

24 Q. Now, this is proposed to be an addition  
25 to the vegetation management programs that the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 company is currently conducting; is that right?

2 A. It is intended to be incremental to the  
3 programs we're conducting, yes.

4 Q. So it's additional.

5 A. Yes.

6 Q. Now, on interrogatory request No. 3-50,  
7 if I can read it: "To the extent the Company has not  
8 followed its vegetation management plan as filed with  
9 the PUCO, what are the reasons for deviation from the  
10 vegetation management plan and how has each deviation  
11 been communicated to the PUCO?"

12 Your response was: The company has not  
13 deviated from the vegetation management plan because  
14 the plan is intended to change as circumstances  
15 warrant.

16 Mr. Boyd, will that be the same with the  
17 ESRP vegetation management plan?

18 MR. NOURSE: Mr. Reese, can I clarify?  
19 At the beginning of your question I thought you

20 referred to page 10, or line 10, page 7 and that

21 discussion as being the veg management program as

22 part of the ESRP.

23 MR. REESE: Well, it is discussing the

24 current plan.

25 MR. NOURSE: Current plan.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 MR. REESE: I did jump ahead.

2 MR. NOURSE: Thank you.

3 Q. But let's jump ahead now and talk about  
4 the ESRP, which is going forward. Under the ESRP  
5 will the company be able to deviate from the plan  
6 because the plan is intended to change as  
7 circumstances warrant?

8 A. It is our desire to work closely with the  
9 PUCO staff to develop that work plan if approved, and  
10 it is our, certainly our full intent to complete and  
11 spend all the dollars allocated for those programs to  
12 do that work.

13 But as we begin that program, as we  
14 transition from a performance-based program to a  
15 more cycle-based program, we will need to identify  
16 what is the best way to move from one program to  
17 another, which will require some flexibility, but as  
18 we develop that program on an annual basis, we want  
19 to work with staff to identify those areas that we

20 get the greatest value the quickest for the

21 additional resources.

22 Q. So the staff would know ahead of time if

23 you were deviating from the vegetation management?

24 A. We want to work as close with the staff

25 as they want us to be, and if they want us to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 identify on an going-forward basis the precise  
2 circuits and the locations on those circuits where  
3 we're going to do maintenance, we can do that.

4 But I'm also saying that we also need to  
5 have flexibility in the plan to address current  
6 issues such that we are not letting some customers  
7 where we need to do work continue to suffer if we  
8 have an opportunity to improve that service as well.

9 Q. Well, would this plan be filed as part of  
10 a Rule 27 filing, or would it be a separate tracking,  
11 or how would that be done?

12 A. We're open to doing that in a manner that  
13 is satisfactory to the Commission.

14 Q. So do you see the company as tracking the  
15 ESRP program separately from your regular vegetation  
16 management practices and procedures?

17 EXAMINER BOJKO: I think you mean ERSP.

18 MR. REESE: ESRP.

19 EXAMINER BOJKO: Yes, I apologize, ESRP.

20 MR. REESE: That's okay.

21 A. As we define this ESRP plan as  
22 incremental, is that we want to have the clarity with  
23 the staff, as well as that base amount that we  
24 historically had been spending on vegetation  
25 management is, to me, very much part of the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 discussion that we have on how those resources are  
2 allocated as well and how we use those in the plan.

3 But, as I say, going forward the plan  
4 still needs to be performance based to some extent  
5 such that we continue to address current reliability  
6 issues for our customers.

7 Q. I'll be coming back to that in a little  
8 bit. Thank you.

9 Now, your current vegetation management  
10 program employs a performance-based approach,  
11 correct?

12 A. Yes.

13 Q. By the way, I'm looking at line 3 of your  
14 testimony on page 8. And one of the selling points  
15 from the company's perspective of this approach is  
16 because it's a dynamic and flexible. I see that at  
17 line 11. Is that correct?

18 A. That's correct.

19 Q. Now, on line 16 on page 8 of your

20 testimony you state that AEP-Ohio will not be able to  
21 maintain its current level of service at the current  
22 level of spending on the distribution system; is that  
23 correct?

24 A. Yes.

25 Q. Now, was this true in the past, in other

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 words, let's say in 2004, was that level of spending  
2 that the company -- was that level of expenditure  
3 that the company allocated in 2004 enough to maintain  
4 reliable service?

5 A. Yes. We have been providing reliable,  
6 safe service, but as that testimony on page 8 says,  
7 there are two forces that are working against us  
8 going forward, and one is inflation is eroding the  
9 value of the dollars that we have to do work, and the  
10 second is that the aging of the infrastructure is  
11 requiring more maintenance to those facilities.

12 Q. That's always been true, right? I mean,  
13 spending is impacted by those variables and always  
14 has been; isn't that true?

15 A. Yes. But I think what has transpired is  
16 that since the last rate filing is that we've done  
17 things to improve the effectiveness of the  
18 organization and reduce costs, and to continue to do  
19 that will not provide the sufficient level of funding

20 we need to meet our customers' future expectations

21 for reliability.

22 Q. Is the company's service as reliable as

23 it was ten years ago?

24 A. I can't speak to that.

25 Q. How about two years ago?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes.

2       Q. But you're not sure about ten years ago.

3       A. No.

4       Q. How about five years?

5       A. I would say it's more reliable than it

6 was five years ago, but our customers are expecting

7 greater reliability.

8       Q. Can you tell me -- I know, that's one of

9 the things we'll be talking a little bit more about,

10 but I know in your testimony you talk about

11 customers' increasing expectations. Do you know what

12 that means? I mean, I think the way -- well, let's

13 just -- I'll just move ahead here for a minute and we

14 can come back to this section.

15       Let's go to page 13 of your testimony

16 briefly. We've got a customer satisfaction chart

17 here at the top of page 13. Survey results show for

18 the first half of 2008 that one in every four

19 residential respondents and one in every three

20 commercial respondents believed their future  
21 reliability expectations would increase. I'm  
22 confused. Do you know what the other 76 percent of  
23 residential customers expected? Does that mean  
24 they -- their expectations weren't going to increase,  
25 or do we know that breakdown?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       A. We do know that breakdown, but I don't  
2 have it off the top of my head.

3       Q. Okay. Now, this is a survey that is used  
4 in part to align customers' interests with the  
5 company's reliability efforts; is that correct?

6       A. What do you mean by "interests"?

7       Q. Well, let me rephrase it. You used the  
8 survey to align customers' interests and expectations  
9 with the programs you were going to undertake; is  
10 that correct?

11       MR. NOURSE: Your Honor, I object to the  
12 form of the question.

13       I think you were asking whether the  
14 programs were designed to align with what our  
15 perception of customer interests are. We can't  
16 change customer expectations. If you don't want to  
17 rephrase, I would ask that it be read back.

18       EXAMINER BOJKO: Could you reread the  
19 question?

20 (Record read.)

21 Q. Let me just read from your testimony,

22 page 12. "Is AEP-Ohio providing safe and reliable

23 service to its customers?

24 "Yes. AEP-Ohio's asset programs are

25 designed to ensure the customers' expectations are

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 aligned with the Companies' ability to provide safe  
2 reliable service."

3 Is this survey part and parcel of trying  
4 to determine what those expectations are and whether  
5 they're aligned with the companies' ability to  
6 provide reliable service?

7 A. The survey is used for a number of  
8 different measures, and one portion of that survey is  
9 around asking customers about what their expectations  
10 are for future reliability but also about how have we  
11 performed historically.

12 Q. No; I see that. Back to page 13. So  
13 when we look at this phrase "believed their future  
14 reliability expectations would increase," could you  
15 give me your interpretation of what that phrase  
16 means? Or reinterpret it for me. That means that --  
17 let's just use the residential sample here.  
18 24 percent of residential respondents think they will  
19 expect better reliability in the future.

20       A. There's a number of questions in that  
21   portion of the survey, and those questions begin  
22   first about how are we doing today, and the response  
23   to some of those questions are around reliability and  
24   outages.

25       For example, one of the questions is

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 around: How long do you expect the service to be out  
2 when service is out? And more than half the  
3 customers -- or, more than 40 percent of the  
4 customers expect that to be an hour or less.

5 Another question around current  
6 performance is: How well are we doing at providing  
7 reliable service? And 85 percent of our residential  
8 customers saying we're doing acceptable or -- doing  
9 well or very well.

10 This particular question then is in that  
11 series of questions. Then they say -- well, looking  
12 forward they ask: Do you expect or are your  
13 expectations for reliability changing and are they  
14 changing to where you expect greater levels of  
15 reliability? And then that's what this is responding  
16 to.

17 Q. Does the survey ask why they will be  
18 expecting greater reliability in the future?

19 A. I don't believe so.

20       Q. Okay. So part of the survey was an  
21   empirical -- had empirical questions like: How long  
22   do you expect to be out of service when you're out of  
23   service?

24       A. Yes.

25       Q. Let's go back to page 8 of your

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 testimony. Before I do that, I want to ask you a

2 question. I'm jumping around here a little bit.

3 MR. REESE: Your Honor, I have a number

4 of questions forthcoming on responses to both

5 Commission staff discovery requests as well as

6 interrogatories posed by OCC. I have a packet that

7 has those responses in it, and I was just wondering

8 if it would be okay if I gave a copy of this to

9 counsel and the witness for some of those upcoming

10 questions. I don't need it marked as an exhibit.

11 EXAMINER BOJKO: Let's go off the record

12 for a minute.

13 (Discussion off the record.)

14 (Recess taken.)

15 EXAMINER BOJKO: Let's go back on the

16 record.

17 Before we took a break counsel for OCC

18 was going to talk to counsel for AEP about some

19 interrogatories and requests for production of

20 documents.

21 Mr. Nourse or Mr. Reese.

22 MR. NOURSE: Yes, your Honor. We are

23 stipulating to admitting those discovery responses

24 with a couple reservations or caveats. Number one,

25 in several cases we objected and then went ahead

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 without waiving and provided information that was  
2 responsive, and I just reserve the right to argue to  
3 the extent OCC uses that on brief or other parties  
4 use that on brief to go ahead and respond that what  
5 they're arguing is not relevant or, you know, we  
6 don't want to waive our -- because he's not going to  
7 ask him about it, we don't know what they're going to  
8 use it for, for expediency we'll go ahead and stip in  
9 as long as we can apply and argue that it should be  
10 disregarded in our brief.

11 EXAMINER BOJKO: So you're agreeing that  
12 they're accurate responses of the company as issued  
13 as a response to a discovery request, but you're not  
14 agreeing to the relevancy of those documents  
15 pertaining to specific issues that might be raised or  
16 how they're used in briefs.

17 MR. NOURSE: Right. And secondly, I just  
18 want to have adequate time later to make sure we  
19 didn't supplement any of those with just responses

20 included in the packet, and so I'll just keep that  
21 reservation, and I believe Mr. Reese agreed to take  
22 out several of the items he's not going to present  
23 for reasons we agreed on the side.

24 MR. REESE: That's right, your Honor. As  
25 Mr. Nourse mentioned, some of these of course they

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 objected to and did not respond at all. I won't be  
2 asking any questions on those. And other than that,  
3 Mr. Nourse has tabbed -- ones that are tabbed I'm not  
4 going to be asking any questions on.

5 I can provide this to Mr. Boyd for his  
6 reference while he's on the stand, and I will not be  
7 asking any questions on the ones that are  
8 appropriately marked either that the company objected  
9 to and there was no response provided or was provided  
10 at the direction of another witness.

11 EXAMINER BOJKO: Do you have or can you  
12 create a packet of the actual stipulated responses  
13 that we will be placing in the record as an exhibit?

14 MR. REESE: I can do that, your Honor.

15 EXAMINER BOJKO: You mean you don't have  
16 it with you today?

17 MR. REESE: No.

18 EXAMINER BOJKO: You didn't make copies  
19 of all those? You're going to do that over the

20 weekend and provide us that on Monday morning.

21 MR. REESE: Yeah, I can do that. Just to

22 be clear, anything I actually ask questions on, okay?

23 Is that okay?

24 MR. NOURSE: You're going to just present

25 to the record anything you ask questions on?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 MR. REESE: Yeah, that's correct.

2 MR. NOURSE: Okay. We're good.

3 EXAMINER BOJKO: Okay.

4 MR. REESE: Your Honor, this was mainly

5 for us to agree what I'm not going to ask any

6 questions on as far as I'm concerned.

7 EXAMINER BOJKO: Let's go off the record

8 for a minute.

9 (Discussion off the record.)

10 EXAMINER BOJKO: Let's go back on the

11 record.

12 Mr. Reese, could you please proceed with

13 your cross of Mr. Boyd?

14 MR. REESE: Sure.

15 Q. (By Mr. Reese) Mr. Boyd, I'm going to

16 provide you with some of these responses. I may ask

17 a couple of clarifying questions, albeit very few.

18 MR. NOURSE: Mr. Reese, could I just ask,

19 if you are going to ask him about a particular

20 response, that you indicate the number and who the

21 witness is listed at the bottom, please.

22 MR. REESE: Yes, sir.

23 MR. NOURSE: Thank you.

24 Q. Okay. Mr. Boyd, I'm looking at page 8 of

25 your testimony, bottom of the page. I'm just looking

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 at the last three lines of your testimony where you  
2 say a phrase here "with all else remaining the same,  
3 could result in reduced service reliability."

4 Can tell me what you mean by the phrase  
5 "with all else remaining the same"?

6 A. Yeah, what we're saying there is if the  
7 dollar spent is devalued because of inflation and  
8 cost escalation, is that it won't go as far to  
9 improve reliability as it did in subsequent ones we  
10 did in the current year.

11 Q. Okay. Could I call your attention to the  
12 rules in the packet I gave you earlier with the ESSS  
13 rules? I'm looking specifically -- and again I  
14 apologize, there aren't any page numbers, but I'm  
15 looking specifically at rule 26(B)(1).

16 EXAMINER BOJKO: Let's go off the record  
17 for one second.

18 (Discussion off the record.)

19 EXAMINER BOJKO: Let's go back on the

20 record.

21 Mr. Reese, could you please repeat that

22 Administrative Code section again?

23 MR. REESE: Yes.

24 Q. Mr. Boyd, I'm looking at rule

25 4901:1-10-26 entitled Annual System Improvement Plan

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Report, and that is section (B)(1) or rule (B)(1).

2 A. Yes, I found it.

3 Q. What (B)(1) discusses is the contents of  
4 the plan, what the plan that the company files should  
5 provide for, a plan for future investment in safety,  
6 reliability, and service quality improvements for the  
7 electric utility's transmission and distribution  
8 facilities/equipment that will ensure continued  
9 quality, safe, and reliable delivery of energy  
10 service to customers. Do you see that?

11 A. Yes.

12 Q. Have the company's annual reports filed  
13 under -- let's just use the 2007 report. Did the  
14 company's -- I'm sorry, let me take that back,  
15 2007-2008 reports. Did they provide evidence that  
16 the company was providing quality, safe, and reliable  
17 service?

18 A. Yes.

19 Q. Now, on a continuum you've stated in your

20 testimony that the company will be unable to sustain

21 its current level of reliable service. Can you tell

22 me on a continuum, is the service declining now?

23 Will it decline in six months? A year? Can you give

24 me sort of a time frame?

25 A. In a previous question I responded that I

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 believed that the level of service has improved in  
2 the last five years, and as we think about looking  
3 forward is that the impacts would not be immediate  
4 but would occur over time as the dollar is eroded by  
5 inflation and the age of the infrastructure continues  
6 to cause increased outages.

7 Q. Now, when you state that the company's  
8 service has improved over the last five years, has it  
9 improved from less-reliable service?

10 A. No.

11 Q. So it was reliable before that?

12 A. Yes.

13 Q. But it will not remain reliable if the  
14 ESRP is not funded?

15 A. Yes. Or if we don't find, you know,  
16 another mechanism to invest more in distribution  
17 maintenance and facilities in the distribution plant.

18 Q. Now, you mentioned that the company's  
19 reliability has improved over the last five years.

20 Can you give me sort of a range in years there what

21 years you're talking about?

22 A. If we compare the most recent year or

23 2007, and the question you asked me, you said 2002 to

24 the present, and that's what I'm referring to.

25 Q. Okay. Now, I realize you haven't been in

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 your current position, but doesn't some of that  
2 improvement come with -- a result of additional  
3 expenditures that AEP made as a result of a  
4 reliability case, the settlement with the staff?

5 A. Yes.

6 Q. And as I recall, the company reported  
7 that it spent 60.5 million in incremental dollars to  
8 meet the terms of that settlement in case number  
9 03-2570. Does that sound familiar?

10 A. That's correct.

11 Q. And the company was also required by the  
12 Commission to spend an additional \$10 million on  
13 vegetation management.

14 A. That's correct.

15 Q. So those expenditures undoubtedly went  
16 towards the improving reliability that you've  
17 discussed; is that correct?

18 A. That's correct.

19 Q. Now, absent that settlement with staff

20 and the \$10 million that you were ordered to spend,  
21 would your reliability have remained the same or  
22 declined?

23 A. I don't know.

24 Q. It's likely, though, that it's better  
25 than it would have been if you hadn't spent that

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 money; is that correct?

2 A. Those incremental dollars that we spent  
3 added value and improved reliability.

4 Q. Now, if you know, are any of the  
5 expenditures that you've referenced in your testimony  
6 on I believe it's chart 10 -- I'm sorry, you list  
7 incremental costs of the four programs on page 37 in  
8 chart 10. Does any of that include somewhere in  
9 there recovery for any of the expenditures spent as a  
10 result of 03-2570?

11 A. None whatsoever.

12 Q. Okay. So that burden still continues to  
13 be borne by shareholders, as far as you know?

14 A. The additional expense was not recovered.

15 Q. Okay.

16 EXAMINER BOJKO: Was not recoverable or  
17 recovered?

18 THE WITNESS: Recovered.

19 EXAMINER BOJKO: Recovered.

20 THE WITNESS: Yes.

21 Q. Just a little while ago I was talking to  
22 you about Rule 26. I wanted to ask you one more  
23 question on Rule 26, specifically (B)(3).

24 A. Yes, I see that.

25 Q. Do you see that?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       A. Yes.

2       Q. (B)(3) reads, the first sentence: "A  
3 report by service territory of the age, current  
4 condition, reliability, and performance of the  
5 electric utility's transmission and distribution  
6 facilities." Do you see that?

7       A. Yes.

8       Q. Have your Rule 26 annual reports over the  
9 last several years reflected the fact that you have  
10 an aging distribution system?

11      A. Yes.

12      Q. Can you give me some examples of how that  
13 aging distribution system was reflected in your  
14 reports, if you know?

15      A. Well, I believe it's reflected in the  
16 initial pages of that report that show the amount of  
17 plant in service, the depreciation and such.

18      Q. So the reference to the aging system was  
19 made by referencing the depreciable life of certain

20 assets?

21 A. I believe that those values do

22 demonstrate that, yes.

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

24 I'm looking at chart 1 here. Do you know what any of

25 these commodity prices are today or, say, as of

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 November 21st?

2 A. No, I don't know as of today, but I do  
3 follow the commodity price of copper closely and look  
4 at it on nearly a daily basis, and I look at it for  
5 not just what is the absolute value of the copper  
6 price, but also is it moving down such that maybe  
7 there's less theft of that commodity from our  
8 facilities. It's having a huge impact on reliability  
9 where that's being stolen and causing us to have  
10 outages for customers.

11 But I've also looked at this same report  
12 from the Bureau of Labor Statistics for the end of  
13 the month October.

14 Q. Okay. And what does that reflect in  
15 terms of the price of copper?

16 A. The price of copper is still around, as  
17 in October, the 450 percent range.

18 Q. Okay. Let's go to page 10 of your  
19 testimony. Looking at line 5, "The notion of 'all

20 else remaining the same' brings me to the second  
21 force. Based on my experience, I know that 'all  
22 else' does not remain the same because asset failure  
23 rates are increasing." When did asset failure rates  
24 begin to increase?

25 A. It depends on the asset, but if we take a

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 look at cutouts, we began seeing that trend since the  
2 year 2000.

3 Q. Now, as I recall from case number 06-222,  
4 wasn't that the fact that there were faulty cutouts  
5 in the manufacture of the cutouts?

6 A. The cutouts were failing in what we  
7 believe to be a premature way because of cracking and  
8 ice creating that cutout to fail.

9 Q. That was a manufacturing flaw, correct?

10 A. We believed that. The manufacturer  
11 guarantees those cutouts for a shorter period than  
12 what we think the useful life would be.

13 Q. Haven't a number of companies settled  
14 with that manufacturer because of the faulty cutouts?

15 A. I don't know what other companies have  
16 done.

17 Q. Okay. Can you give me, other than the  
18 cutouts, what are these other asset failure rates  
19 we're discussing? Transformers?

20       A. The trend for transformers has increased.

21 The failure of arresters has been increasing. The  
22 number of crossarms as well.

23       Q. Is that because they're old?

24       A. Well, not necessarily.

25       Q. Okay. If, for instance, transformer

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 failure rates are increasing now more than in the  
2 past, what reason would that be other than just the  
3 fact that they're old?

4 A. Again, it could be manufacturing quality.

5 Q. So you have an increased incidence of  
6 failure of transformers that aren't old?

7 A. Well, maybe I misspoke. We have an  
8 increase in transformer failures. I don't know what  
9 the specific age of those transformers are.

10 Q. But it could be just because they're old.

11 A. It could be, that's right.

12 Q. And distribution rates have always been  
13 around to take care of replacing transformers when  
14 they needed replacing; is that correct?

15 A. Distribution rates provide revenues for  
16 us to replace equipment, and we've done a lot of  
17 that. For example, the net distribution plant in  
18 service for CSP since the last rate case has more  
19 than doubled. It's 114 percent of what it was back

20 in 1991.

21 Q. Your revenues were doing okay, too, over  
22 that period, weren't they?

23 A. I don't know about revenues.

24 Q. Okay. At page -- I'm sorry, line 10 of  
25 your testimony you talk about "given the funding to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 go beyond traditional means of maintaining the energy  
2 delivery infrastructure." What does "traditional"  
3 mean?

4 A. What page is that again?

5 Q. I'm sorry. Page 10, line 10. You talk  
6 about to go beyond traditional means of maintaining  
7 energy delivery. What does "traditional" mean?

8 A. I think traditional means is what we have  
9 historically done, and what we're proposing is that  
10 we begin to modernize the distribution plant by using  
11 new technologies, by using new technologies to help  
12 determine the problem assets before they fail.

13 Q. At the bottom of page 10 you begin  
14 discussing sensitivity of customers to power quality  
15 issues. Do you see that?

16 A. Yes.

17 Q. Now, elsewhere in your testimony --  
18 strike that.

19 Has there been -- has the company been

20 failing to meet its SAIFI targets in the last four to

21 five years?

22 A. Did you say SAIFI?

23 Q. SAIFI, that's correct.

24 A. That's correct.

25 Q. Now, SAIFI measures only sustained

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 outages; is that correct?

2 A. That's correct.

3 Q. And SAIFI is an empirical measure,

4 correct? It's not a sensitivity issue; it's an

5 absolute measure. Is that right?

6 A. Yes.

7 Q. Okay. So momentary outages, are they

8 increasing as well, or do you have a way to measure

9 that?

10 A. We don't know that. We don't really have

11 a way to measure that. The only means we have to

12 measure MAIFI is through the SCADA system and what's

13 happening at those locations and stations on breaks.

14 But that doesn't measure the full magnitude of MAIFI.

15 Q. But if there were, in fact, more

16 momentary outages, that wouldn't, if you were or

17 could in fact measure MAIFI and the MAIFI measures

18 were reflecting more momentary outages, that's not a

19 customer sensitivity issue, right, that would just be

20 an empirical measure?

21 A. No; that would be a customer sensitivity

22 issue.

23 Q. Well, I guess it could be both, right?

24 It could be sensitive to it, but it's also occurring.

25 A. Yes.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. So if you have more momentary outages,  
2       you're going to be more sensitive to it; is that  
3       correct?

4       A. Are you asking me specifically as an  
5       individual? I can't speak to how the customers  
6       react, but I believe that customers would be  
7       sensitive to increasing numbers of momentary outages.

8       Q. And their sensitivity would increase if  
9       they had more sustained outages, right?

10      A. Yes.

11      Q. Okay. Now, do you think that discussing  
12      this whole issue of momentary outages, would it  
13      benefit customers or the company to utilize a MAIFI  
14      measure of some kind to keep records of it?

15      A. Well, and we do keep records to the  
16      extent that we can, and the one thing that the DA  
17      program that we're recommending and the gridSMART  
18      program that we're recommending, that provides a  
19      means of more accurately measuring the customer

20 experience around MAIFI.

21 Q. What percentage of your network is served  
22 by SCADA at this time?

23 A. I don't know that number.

24 Q. Let's look at page 12 of your testimony.

25 Now, here at the bottom of page 12 from lines 12 to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 17 you discuss customer satisfaction with your AEP

2 service that AEP is providing. Do you see that?

3 A. Yes.

4 Q. And you say "with the exception of two

5 devastating ice storms." Obviously, I guess the --

6 what's implicit here is that people weren't really

7 happy after the ice storms because they experienced

8 outage; is that correct?

9 A. Yes.

10 MR. REESE: Your Honor, can I approach

11 the witness?

12 EXAMINER BOJKO: You may.

13 Q. I just have a couple of quick questions

14 regarding -- have you seen this restoration plan

15 before?

16 A. Yes.

17 Q. Okay.

18 EXAMINER BOJKO: For the record --

19 MR. REESE: I'm sorry.

20 EXAMINER BOJKO: -- you've handed the

21 witness a 2008 distribution system service

22 restoration plan.

23 MR. REESE: That's correct.

24 EXAMINER BOJKO: Are you going to mark

25 this?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 MR. REESE: No, your Honor. I just have

2 a couple of questions for him, thank you.

3 Q. (By Mr. Reese) I see there's a table.

4 You have basically different levels of events that

5 are outlined as part of this plan; is that correct?

6 A. What page are you referring to?

7 Q. Oh, I'm sorry.

8 EXAMINER BOJKO: I'm sorry, did we

9 establish whether the witness was familiar with this

10 document?

11 MR. REESE: Yes, I asked him that.

12 EXAMINER BOJKO: Oh, I'm sorry. You

13 asked him if he was familiar with it?

14 THE WITNESS: He asked me if I'd seen it.

15 EXAMINER BOJKO: That's what I thought.

16 Are you familiar with this document?

17 THE WITNESS: Yes.

18 EXAMINER BOJKO: Thank you.

19 Q. (By Mr. Reese) Beginning on page 17,

20 Mr. Boyd, going through page 20 we have a discussion

21 of level 1, level 2. Do you see this?

22 A. Yes.

23 Q. And these are basically -- these

24 different levels, does that reflect how many

25 customers are out and for how long they're out, or

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 does it reflect the actual severity of an event such  
2 as a storm?

3 A. It reflects the expected duration of the  
4 storm and the required resources to provide  
5 restoration.

6 Q. Okay. Now, I know as part of this  
7 plan -- let me just ask you. I can keep looking for  
8 the page. I'm sorry, I don't have this one marked.  
9 You send a representative from the company to the EMA  
10 during these more significant events, don't you, the  
11 Emergency Management Agency? Does that sound  
12 familiar?

13 A. Yeah. That's part of the plan. Yes.

14 Q. Okay. Have you ever heard of anything  
15 referred to as a rapid response team that's  
16 formulated as part of working with the Commission and  
17 staff? Does that sound familiar?

18 A. No.

19 Q. Okay. I'm referencing right now page 74

20 of the report, and this ties in I think there's some  
21 discovery, but I'm looking at discussion on page 74  
22 that discusses major storm definitions and cost  
23 reporting. Do you see that?

24 A. Yes.

25 Q. Now, is this Appendix 1 basically aimed

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 towards internal budgeting processes within AEP?

2 A. Yes. The definition here is for internal  
3 use.

4 Q. And for internal purposes you're  
5 following a method to classify major events that is  
6 in IEEE; is that correct?

7 A. For this purpose, yes.

8 Q. And that's the only purpose that it's  
9 used for in the plan here.

10 A. I don't know without referring further to  
11 the document, but the major storm definition here is  
12 different than what we use for reporting to the PUCO.

13 Q. Okay. Looking at page 14 of your  
14 testimony, on line 13 you discuss that "Control and  
15 response functions have not changed for decades."  
16 Can you tell me why not?

17 A. This is referencing to the way that the  
18 system is designed and performs, for the most part,  
19 but there has been some additions, such as SCADA

20 where we have reporting per station on the status of  
21 the distribution station, a distribution feeder  
22 breaker. This is referring to as you get out onto  
23 that circuit, is that the design of that circuit and  
24 how it responds has not changed.

25 And what we're asking for is to begin to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 modernize that system such that we begin to use more  
2 21st century technologies to provide realtime  
3 information on the system operation and performance.

4 Q. Okay. On page 15 of your testimony,  
5 looking at line 6, "As long as equipment is properly  
6 functioning and serving the customer needs, it is  
7 reasonably anticipated that it will continue to  
8 function properly for several years."

9 So I guess I go back to the simple  
10 example of a pole. If it's functioning and serving  
11 the customers' needs, what does that mean in terms of  
12 a pole, that it's upright?

13 A. No. For example, a pole is that -- when  
14 we do the ground line inspection program and look at  
15 that pole to see whether or not it has sufficient  
16 strength and life, is that that's a ten-year program,  
17 that we would look at those poles on a ten-year  
18 basis. When we look at that pole, we determine  
19 whether or not that pole would have sufficient

20 strength to remain in service for the next ten years,  
21 if it doesn't, we'd replace it, if it does, then we'd  
22 continue to get that additional value out of that  
23 pole.

24 Q. Now, you discussed the company's use of  
25 infrared scanning and electromagnetic interference

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 detection devices. Do you see that?

2 A. Yes.

3 Q. Now, I think part of the ESRP is to

4 increase the usage of those devices; is that right?

5 A. The infrared technology has more age on

6 it than the infrared -- or, the radio frequency

7 devices, but we began using the radio frequency in

8 the last three or four years and have continued to

9 develop the technology around that and interpret the

10 information that we get from that, and what we're

11 proposing in the overhead and circuit inspection

12 program, the incremental program, was begin using

13 that technology to help us determine the performance

14 of some of the electrical equipment on the poles that

15 you cannot see through a physical inspection.

16 Q. If you know, what percentage of

17 deficiencies or potential deficiencies will be

18 detected by the increased use of infrared? Do you

19 have any projection?

20       A. No, I don't have a percentage, but as we  
21 use that equipment and have developed the use of that  
22 technology is that we are able to, say, augment a  
23 visual inspection to determine how a connector may be  
24 performing. A connector that has deteriorated or  
25 loose may show heating, and that allows us -- but it

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 shows us how many devices are there and what the load  
2 is at that time, but I can't give you a percentage of  
3 accuracy on that. As I said, it depends on the  
4 circumstance, but it is an enhancement to the current  
5 inspection program.

6 Q. It's an enhancement in what way, just  
7 that you're going to be using it more?

8 A. No. It's an enhancement because it  
9 allows us to find equipment that we would not have  
10 found otherwise and helps us prevent outages by  
11 replacing that equipment before it fails.

12 Q. Help me out here. This is fairly  
13 expensive equipment. What's preventing the company  
14 from using it as often as it would like to now?

15 A. Is that some of the equipment has some  
16 expense to it, but some of it isn't that expensive  
17 but what we're asking for is that this is beyond what  
18 is included in the current inspection programs, and  
19 we're looking for cost recovery for improving and

20 modernizing our inspection -- overhead inspection

21 program.

22 Q. On line 18 of your testimony, your

23 answer, "Continued focus on current level of

24 distribution reliability improvement programs can

25 take the reliability of a distribution system only so

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 far." Can you tell me what you mean by that  
2 statement?

3 A. Yes. Is that without using, say, the new  
4 technology that is available to us is that we will  
5 not necessarily locate some of the equipment that may  
6 fail before it does fail, and it's that as we want to  
7 improve the reliability, which is what we think our  
8 customers expect, is that we need to do more than  
9 what we have done in the past.

10 Q. Doesn't this first line of your answer  
11 here imply that the programs that you currently  
12 utilize are not adequate?

13 A. The programs are adequate to provide safe  
14 and reliable service, but if we want to improve that  
15 level of service, we need to augment those programs.

16 Q. But aren't you also saying earlier in  
17 your testimony that you can't maintain reliable  
18 service without additional funding?

19 MR. NOURSE: Objection, your Honor. I

20 think that mischaracterizes Mr. Boyd's testimony. He

21 says he can't maintain current levels, not that it's

22 not reliable.

23 EXAMINER BOJKO: Mr. Boyd can answer no

24 if he doesn't believe that's an accurate statement.

25 Can you respond or --

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 THE WITNESS: Can I hear the question

2 again?

3 (Record read.)

4 A. I believe that does misrepresent what I  
5 said. I said before that we were providing safe and  
6 reliable service, but if we want to go to that next  
7 level, as we think our customers expect, is that we  
8 need to do more.

9 Q. Fair enough. So this next level of  
10 service that you're trying to attain, what's that  
11 driven by? Is that driven by the customer  
12 expectations?

13 A. Yes. And the survey results that we had,  
14 I spoke to those earlier, I think indicates that  
15 customers are expecting reliability -- or, better  
16 reliability in the future, and I think Senate Bill  
17 221 provides for and states that there must be  
18 alignment between customer expectations and the  
19 distribution, and what we're asking for is for the

20 additional funds to meet those future expectations.

21 Q. In addition to the survey, how else are

22 you aligning the customer expectations?

23 A. Is that we have daily contact with our

24 customers, and we work with them and we see that

25 through our contacts. We see that through some

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 customer complaints.

2 Q. Customer complaints would indicate  
3 they're not happy with the current level of service,  
4 wouldn't it?

5 A. But some of those customer complaints,  
6 though, are around power quality, which may be an  
7 impact of momentaries.

8 Q. Which is still reliability, correct?

9 A. More around power quality, is that we  
10 have some customers that are sensitive to power  
11 quality issues that might occur on adjacent circuits,  
12 and the more that we can do to minimize power  
13 interruptions and momentaries, the overall power  
14 quality improves, even for those customers that  
15 aren't directly outaged by an event.

16 Q. So still at the bottom of page 15 where  
17 there's still -- you discuss the need to address  
18 AEP-Ohio's aging infrastructure, so I'm still trying  
19 to get at your distribution system is aging all the

20 time. What's unique about 2008? Wasn't your system  
21 aging in 1995 and 2000, and what did you do about it  
22 then?

23 A. Is that as we look at the performance of  
24 the system, we see that there are more equipment  
25 failures, more equipment problems, and equipment

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 problems are the leading cause of outage today, is  
2 that we have done more work to address that, but  
3 every year there are more system and more plant in  
4 service and the need -- the cost to maintain that and  
5 improve that grows as we add more facilities. As we  
6 add more facilities there's more plant to age on a  
7 daily basis.

8 Q. Would you say your plan is targeted more  
9 towards power quality or reliability issues?

10 A. Could you explain that a little bit? I  
11 don't understand the question.

12 Q. Well, you made a distinction early in  
13 your testimony between -- I'm sorry if I misspoke.  
14 You made a distinction between power quality and  
15 service reliability issues. Does the ESRP go more  
16 towards dealing with power quality or service  
17 reliability issues?

18 A. It really does both. It will improve the  
19 performance of the system around sustained and

20 momentary outages, and as you reduce those, that

21 improves power quality.

22 Q. Now, we discussed earlier about SAIFI

23 targets. SAIFI targets involve reliability -- or,

24 I'm sorry, the frequency of outages, and the company

25 has been failing to meet its targets with the staff.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Is that a indicator that reliability isn't what it

2 should be or not?

3 A. What I think the SAIFI measures are

4 indicating, and if you look back at those prior to

5 2002, that number -- that there was a degradation in

6 2002, and I think Witness Cleaver also notes that in

7 his testimony, is that that is the time that we

8 automated our outage reporting system, and prior to

9 that when there was an outage, it was a paper system,

10 and the person in the truck needed to fill out a

11 paper saying what was the cause of outage, and what

12 the location was, and how many customers that were

13 impacted.

14 In 2002 we automated that process, and in

15 automating that, we improved the accuracy, and with

16 the technology that we have today is that the outage

17 case is created when the customer calls in the

18 system, and each one of those has to be identified,

19 and there's data in the system that connects the

20 customer to the location on the grid where that

21 outage occurred.

22 So we have much more accurate information

23 around how many customers are impacted. Each outage

24 case must be closed out on the system. The

25 individual in the truck now has an on-line system

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 where they report that information, and they can't  
2 close that out until that outage is captured.

3 What we saw in 2002 was an increase in  
4 the accuracy, and that caused our SAIFI and CAIDI  
5 indices to rise. There was a study done by an  
6 outside firm that we shared with the staff in the  
7 workshop, and what the industry saw from that report  
8 was a 22 percent increase in SAIFI and a 42 percent  
9 increase in CAIDI due to automating and creating  
10 greater accuracy around reporting.

11 Q. So the frequency of outages hasn't  
12 increased. Is that what you're telling me?

13 A. I'm saying that the accuracy of reporting  
14 has increased, and that has caused that SAIFI number  
15 to rise.

16 Q. That's the reason for the entire  
17 increase?

18 A. What I'm saying, that is a reason for a  
19 substantial part of that increase. Whether there's

20 more beyond that, I don't know that. I know  
21 equipment failures are increasing so SAIFI is  
22 increasing as a result of that. But there's other  
23 work we've done that may have decreased that, so I  
24 don't know what the net effect is on outage cases and  
25 SAIFI as a result.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 But that study done by an outside firm of  
2 automation reflected those changes in indices that I  
3 mentioned earlier.

4 Q. So it's the automated outage detection,  
5 I'm sorry if I'm using laymen's terms, but that is  
6 really why the indices look worse than they should.

7 A. I believe that's the substantial portion  
8 of why those indices change and that's why they  
9 changed in the year 2002.

10 Q. Is the company going to ask for a change  
11 to any of its targets as a result of a filing of the  
12 ESRP?

13 A. As you know, I'm new to AEP-Ohio. I've  
14 been here since January. But in discussion with my  
15 staff and in looking at the documents from  
16 conversations with PUCO staff is that we've had a  
17 number of times where we've talked about changing  
18 those indices but never did. It never was the -- my  
19 interpretation -- it was never the right time to

20 change them.

21 Q. Do you know where AEP ranks with IEEE in  
22 terms of its SAIDI performance, what quartile?

23 A. We filed a response to that in discovery,  
24 and I don't recall SAIDI versus CAIDI or SAIFI, what  
25 quartile we were in.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. Would it have been third or fourth

2 quartile?

3 A. Yes.

4 Q. Was it third or fourth quartile in 2002;

5 do you know?

6 A. I don't know that. And I think 2002 is

7 the year that the indices jumped, so if you were

8 going to make that comparison, you would go back

9 prior to 2002.

10 Q. So I think we discussed earlier about the

11 percentage -- I'm on page 19 of your testimony -- the

12 percentage of your circuits that are walked versus

13 driven, or I just asked you a question about it, I

14 didn't ask the percentages. Do you know what

15 percentage of your circuits by mile perhaps are

16 walked right now?

17 A. No, I don't. But if you look at this

18 program, it's more than walking them. It's that we

19 propose to walk them, but we also propose to climb or

20 do an overhead inspection on a number of circuits,  
21 and that is really an incremental change from what we  
22 have done historically. And it will really provide  
23 us a better opportunity to get a closer look at that  
24 equipment to make sure that it's not going to fail,  
25 that it's serviceable till the next inspection.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. On page 22 of your testimony you discuss  
2 on line 16 the top five causes of equipment failure,  
3 and it excludes major events and transmission-caused  
4 outages which are cutouts, underground conductor,  
5 et cetera. And I asked a similar question earlier.  
6 Isn't it important to know the top five causes of  
7 equipment failure during major events?

8 A. Equipment failures really contribute to a  
9 small amount of outages during major events. Most of  
10 that is around the weather conditions and such. And  
11 as we look at these programs, I think they will also  
12 enhance the performance of the systems for ordinary  
13 storms.

14 Q. When you say "ordinary storm," does --  
15 ordinary storm is not excludable for reporting; is  
16 that correct?

17 A. No. I'm not using it in that way.

18 Q. Okay.

19 A. I'm thinking more around the ice storm of

20 2004 and 2005, December-January, and Hurricane Ike.

21 I'm thinking of those as the extraordinary events.

22 If I think about that ice storm of 2004 and the one

23 up in Lima in 2005 is that the -- we can follow

24 NESC's codes for construction of our facilities. And

25 NESC codes for the northern part of the state is

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 built for heavy ice, which is half inch radial ice,  
2 and four pound wind per square foot, and what we had  
3 was ice more than one inch, which exceeded the  
4 designed capabilities of the system. I'm saying  
5 those were extraordinary events of the system, it's  
6 not built for and NESC does not design for.

7 Q. Would a properly maintained distribution  
8 system withstand a significant storm better than one  
9 that wasn't properly maintained?

10 A. Yes.

11 Q. I'm looking on page 25 of your testimony  
12 regarding equipment failures. There it's chart 4,  
13 and again we're looking at this three-year plan, this  
14 three-year plan that's reflected with, I guess, a  
15 decline in number of equipment interruptions. This  
16 plan is funded for three years, or that's what the  
17 ESRP covers; is that correct?

18 A. This shows three years, and we see this  
19 overhead equipment plan as five years, but we only

20 requested funding for the ESP period.

21 Q. And that would cover 60 percent of the

22 circuits.

23 A. Approximately, yes.

24 Q. Okay.

25 A. Well, 60 percent of the line miles.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 Q. Okay. Now, if you know, didn't AEP move  
2 towards a performance-based vegetation management  
3 program several years ago?

4 A. Yes.

5 Q. And now it's proposing to move to a more  
6 cycle-based approach, according to your testimony; is  
7 that right?

8 A. That's correct.

9 Q. And why is that specifically?

10 A. It's to meet customers' growing  
11 expectations for reliability. Doing more in a  
12 proactive way to prevent outages will help us get  
13 there. It's that the performance-based program is  
14 more reactive in nature, and a cycle-based is more  
15 proactive. So a proactive program, a cycle-based  
16 program, which we believe should be also a blend of  
17 performance based, will allow us to mitigate outages  
18 before they occur.

19 Q. So it was probably a mistake to move

20 towards performance based.

21 A. No, I don't believe it was a mistake to

22 move to performance based. It's that if you're going

23 to maximize the value of the dollars spent, a

24 performance program really puts those dollars in a

25 location that maximizes their value for reliability.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. So cycle-based isn't the best use of the  
2 dollars.

3 A. To move reliability forward I think we've  
4 got to move to a cycle based. It's that a  
5 performance based creates more value for the dollar  
6 spent because it is a much more focused program.

7 Q. So cycle based is extra?

8 A. A cycle based would require additional  
9 funding, that's correct.

10 Q. And I believe we discussed this in your  
11 deposition, and it's probably here further on in your  
12 testimony, but I think you discussed that it was  
13 going to take about five years of doubling, in  
14 effect, doubling tree crews to get to where you could  
15 implement a four-year cycle-based program. Is that  
16 roughly correct?

17 A. That's correct. As we move toward a  
18 cycle based, it is our desire to trim trees for at  
19 least a four-year clearance, and that then would

20 allow us to move more to a four-year cycle, but there  
21 will be some locations and there will be some tree  
22 species such that we don't get a four-year clearance,  
23 and that's really the value of the data tool that we  
24 want to add to the forest program to help us be more  
25 proactive in the areas where we don't believe the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 clearing cycle will provide at least a four-year

2 clearance.

3       So on the cycle base you never fully move

4 away from performance because that has to be a part

5 of the program.

6       Q. Now, when you discuss this four-year

7 cycle-based program, that does mean roughly 48

8 months, right?

9       A. That's correct. Is that I'm not saying

10 that if we trimmed a circuit in April that four years

11 later exactly in April, but within a window of time

12 is that we'd be back and inspect and trim as

13 appropriate around four years.

14       Q. So reasonably close to that 48 months.

15       A. Yes.

16       Q. Okay. Do you know how long it is -- how

17 long it takes now to trim a circuit from end to end?

18 Let's just say circuit 10012. What should I

19 expect -- what length of time does it take for that

20 circuit to be trimmed end to end currently?

21 A. We aren't trimming circuits end to end

22 currently.

23 Q. So there's no end to end going on.

24 A. There may be some, but I don't know how

25 much of that there would be. Most of the program is

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 more performance based where we really focus in on  
2 doing that work where it provides the greatest  
3 reduction in reliability -- or greater reduction in  
4 customer outage.

5 Q. Can you tell me how your trees outside of  
6 right-of-way programs will change under the ESRP if  
7 at all?

8 A. Is that trees outside the right-of-way  
9 are now creating more outages than trees in. Trees  
10 in the right-of-way have been relatively flat over  
11 the last four or five years, and trees out have  
12 increased in number, and without the ESRP we're going  
13 to focus more on trees out because that is becoming a  
14 leading cause. With the ESRP we'll be able to do  
15 more of that, is that we really want to focus our  
16 tree crews on removing trees versus trimming trees.

17 Q. Okay. Can you tell me if additional tree  
18 trimming will have an effect on reducing  
19 animal-caused outages as well?

20       A. It may, yes. Is that we think that those  
21 trees are also a highway for animals to get onto the  
22 facilities, and if we remove that tree, that limits  
23 the number of locations that animals can get onto the  
24 lines. But I'll tell you I see going across  
25 roadways, I see squirrels and chipmunks running down

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 the cables. But I believe overall it will have a  
2 beneficial impact.

3 Q. Fewer fried squirrels?

4 A. Yes.

5 Q. Mr. Boyd, do you think that if you had  
6 implemented some of your ESRP vegetation management  
7 programs, that the effects of the windstorm would  
8 have been lessened on outages?

9 A. Are you referring to Hurricane Ike?

10 Q. The windstorm.

11 A. The one in September of this calendar  
12 year?

13 Q. Uh-huh.

14 A. Okay. Did some analysis of circuits that  
15 were recently trimmed here in Columbus versus those  
16 that hadn't been trimmed recently, and the  
17 performance was no different, is that Hurricane Ike  
18 winds were such that the right-of-ways that we can  
19 maintain were violated enough times that it didn't

20 show up in a difference in performance within the

21 city here, within the communities.

22 Q. So tree trimming wouldn't have impacted

23 the number of outages or the length of the outages.

24 A. I think that had we performed this, is

25 that there may have been some beneficial effect, but

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 the data that we've looked at says is that we would  
2 have had as many customers out, is that Hurricane Ike  
3 with multiple hours of winds up to 75 miles an hour  
4 really brought a lot of things into the distribution  
5 lines.

6 Q. Isn't that study kind of hard to do if  
7 you're not trimming end to end on circuits?

8 A. We looked at the breaker zones, which is  
9 a finite area where we knew where we had done that  
10 work in the last year and those areas where we had  
11 not, because I had the same question that you had  
12 there, and I wanted to see how the system performed.  
13 And I think Ike's one of those extraordinary events  
14 that we cannot afford to build or trim to, is that  
15 today as we look to remove trees outside the  
16 right-of-way, those danger trees, is that those trees  
17 are on customer properties where we have no legal  
18 right to do that work, and we try to negotiate, but  
19 it's difficult to remove those, and if we were, the

20 community would look different, and I just don't

21 think that we can achieve that.

22 Even as we clear right-of-ways today

23 where we have rights, there's multiple times a year

24 that after we trim that we're in litigation, and to

25 do that work would require the sheriff's department

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 there to allow our crews to access those facilities.

2 Q. Well, you can build that into the ESRP,  
3 can't you, the sheriff's salaries? Just kidding.

4 If you implement -- okay, you've given me  
5 your opinion on the impact on the vegetation  
6 management, but if you implemented all four of the  
7 programs that you've discussed in the ESRP, do you  
8 think that would have had any impact on either the  
9 number or duration of the outages during the  
10 windstorm, or as a result of the windstorm?

11 A. Yes.

12 Q. But not the vegetation management.

13 A. I think that the distribution automation  
14 piece would provide us information and would have  
15 provided some opportunity to sectionalize and keep  
16 some customers in service. I think by having more  
17 realtime data is that we could have responded more  
18 quickly to larger outages to restore those customers  
19 and reduce the duration in that way.

20           And I'm not saying that the vegetation  
21 management programs would not have any impact on  
22 events like Ike, but I think where you see more of  
23 that impact is on the ordinary events where you just  
24 don't have the large trees coming so far out of the  
25 right-of-way into the distribution circuits.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. Do you know if AEP has reviewed its  
2 mutual assistance agreements as a result of the  
3 windstorm?

4       A. No, I don't.

5       Q. So looking at page 31 of your testimony  
6 where you're discussing the enhanced vegetation  
7 management initiative and looking at the chart, some  
8 of this, let's look for instance at trees removed,  
9 some of these are going to be outside the  
10 right-of-way; is that correct?

11      A. That's correct.

12      Q. Those are -- is that primarily what you  
13 referred to as danger trees?

14      A. Yes.

15           MR. REESE: Your Honor, can I have a  
16 moment?

17           EXAMINER BOJKO: You may.

18           Please continue, Mr. Reese.

19      Q. Now, as part of this plan, Mr. Boyd, the

20 ESRP, you would anticipate that the company would  
21 come closer to meeting its SAIFI targets; is that  
22 correct?

23 A. As part of the testimony, as part of the  
24 discovery we stated that we believe there will be  
25 definite reliability benefits to these programs and

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 certainly are willing to work with the Commission  
2 staff on quantifying those programs and making  
3 those -- targeting improvements for those individual  
4 programs.

5 Q. In the past when the company's failed to  
6 meet these targets, wouldn't it have made sense to  
7 implement some of these programs back then, or is the  
8 ESSS enough of an incentive for the company?

9 A. I think Senate Bill 221 provides a  
10 mechanism for us to modernize our system and requests  
11 that we align customers' expectations with  
12 reliability, and these programs are designed to move  
13 us in that direction.

14 Q. Mr. Boyd, doesn't Senate Bill 221 also  
15 provide that the Commission should examine the  
16 current reliability of the company?

17 A. Yes.

18 Q. And is the language from 221 where you  
19 came up with the language about aligning customers'

20 expectations?

21 A. No. I think we've used that language

22 previously with Commission staff.

23 Q. Shouldn't any review of the company's

24 reliability look at whether they've been dedicating

25 enough resources in the past?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Yes.

2       Q. In other words, this isn't -- Senate Bill  
3 221 wasn't just aimed at deciding or encouraging the  
4 company to come forward and ask for more money from  
5 its distribution plan; isn't that correct?

6       MR. NOURSE: Objection, your Honor. I  
7 think he's already answered, you know, the specific  
8 criteria that he was asked, but now he's just asking  
9 whether the Senate bill was intended to allow  
10 companies just to come in for more money.

11       EXAMINER BOJKO: Sustained.

12       MR. REESE: No further questions, your  
13 Honor.

14       EXAMINER BOJKO: Mr. White.

15       MR. WHITE: No questions, your Honor.

16       EXAMINER BOJKO: Ms. Elder?

17       MS. ELDER: No questions, your Honor.

18       EXAMINER BOJKO: Mr. Maskovyak?

19       MR. MASKOVYAK: Just a few questions,

20 your Honor.

21 - - -

22 CROSS-EXAMINATION

23 By Mr. Maskovyak:

24 Q. Mr. Boyd, I'd like you to turn to page 12

25 of your testimony, and looking at the question and

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 answer beginning at line 6, on line 14 it talks about  
2 a report about the percentage of people responding  
3 well to the ability of AEP to provide electricity  
4 without interruption. Did you attend any of the  
5 public hearings?

6 A. No.

7 Q. Did any of your staff?

8 A. I don't know.

9 Q. Did you have -- have you seen any of the  
10 testimony from the public hearings?

11 A. No.

12 Q. Have you heard any reports from the  
13 public hearings?

14 A. Yes.

15 Q. Would it surprise you, then, to learn  
16 that it would appear that far less than 85 percent of  
17 the people appear to be happy with the overall  
18 quality of the service from the public hearings of  
19 people who gave information about their experience

20 with the quality of AEP service?

21 MR. NOURSE: Your Honor, I object to that

22 general characterization.

23 EXAMINER BOJKO: Sustained. There are at

24 least three "appears" in your question.

25 Q. Would it surprise you that the public who

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 gave testimony on the issue of quality gave them in a  
2 manner that represented a percentage less than  
3 85 percent satisfaction?

4 MR. NOURSE: Your Honor, I object to --

5 EXAMINER BOJKO: Sustained.

6 MR. NOURSE: -- characterizing the  
7 evidence in the record.

8 MR. MASKOVYAK: All right. I'll move on.

9 Q. Mr. Boyd, if you would turn to page 14,  
10 I'm looking now at line 7 where you talk about the  
11 AEP systems being challenged to keep up with customer  
12 expectations now and in the future. Can you tell me  
13 what those customer expectations are?

14 A. From a couple different sources is that  
15 from the MSI survey that I referenced earlier and  
16 provided in response to discovery, is that more than  
17 half of customers think that two is as many  
18 momentaries as they ought to see per year. More than  
19 40 percent of customers think that service ought to

20 be restored when there's an outage in an hour or  
21 less. 44 percent of those customers that responded  
22 in the survey believe -- in this last survey or  
23 quarter that zero sustained outages was an acceptable  
24 level, and that changed from a year ago where that  
25 was 20 percent of the customers responding.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1           And I think in our daily conversations  
2 with customers and as we work with them to resolve  
3 issues with modern technology is that they're  
4 frustrated with momentaries and want to see the level  
5 of service improve.

6       Q. Can I take from your response that it is  
7 your belief that customers are not currently  
8 satisfied, then, with the level of quality that you  
9 are delivering?

10      A. No. I'm saying that their expectations  
11 are changing, and that was a good bit of my  
12 testimony, is that the customers' expectations are  
13 changing.

14      Q. Do you believe that you are currently  
15 meeting those changing expectations?

16      A. The purpose of this program is to meet  
17 those changing expectations.

18      Q. I'd like to take you farther down your  
19 page at line 18 when you talk about energy efficiency

20 and gridSMART. Is that intended to be connected up  
21 to the question of customer expectations? Is that  
22 part of their expectations?

23 A. I don't know that I'm the right witness  
24 to respond to the energy efficiency items, but the  
25 gridSMART and distribution automation is a way to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 improve reliability and have more realtime

2 information about the performance of the system.

3 Q. And in your surveys are customers asking  
4 for gridSMART technology?

5 A. I don't believe that's one of the  
6 questions.

7 Q. So you don't know if part of their  
8 expectations is the need for gridSMART technology.

9 A. I didn't look at the survey questions to  
10 resolve an answer to that question.

11 Q. I'd like to take you to page 15 of your  
12 testimony.

13 EXAMINER BOJKO: Before you move on, do  
14 you think that employing gridSMART technology would  
15 get you to the level of I think you said that most  
16 customers are beginning to say zero sustained outages  
17 are acceptable? Do you think employing the gridSMART  
18 gets to that level?

19 A. No. And the system will not perform with

20 zero interruptions. What gridSMART and distribution  
21 automation does is provide us realtime information on  
22 how the system's performing and allows us to more  
23 quickly address those problems as they occur rather  
24 than waiting till the customer complains.

25 EXAMINER BOJKO: Have you done any

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 surveys to determine at what cost customers would  
2 like to see their interruptions either minimized or  
3 improved?

4 THE WITNESS: That was not part of that,  
5 not to my knowledge.

6 EXAMINER BOJKO: Please continue.

7 MR. MASKOVYAK: Thank you, your Honor.

8 Q. (By Mr. Maskovyak) I'm turning to page 15  
9 of your prefiled testimony, Mr. Boyd, and looking at  
10 the answer to the question at the top of the page and  
11 turning to line 5, you state that: "Just because  
12 equipment is old and/or beyond its original expected  
13 useful life does not mean it will fail in the near  
14 future." And you go on to talk about how it  
15 continues to function.

16 As I understand that answer, you are  
17 providing a rationale for keeping equipment in  
18 service even though it may be past its useful life,  
19 however that's defined, because it's still working

20 well.

21 A. Well, in your question I see a

22 contradiction in terms. If it's past its useful

23 life, it's not performing well. But what I'm saying

24 is that we simply would not replace equipment because

25 it's old. If it's performing its intended function

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 and will do so until the next inspection period, is  
2 that we would continue to utilize that and gain value  
3 from those assets.

4 Q. Okay. Then I guess I'm a little bit  
5 confused. Were you here when Ms. Sloneker was  
6 testifying?

7 A. Yes.

8 Q. She explained that in response to  
9 questions from other counsel, that by using gridSMART  
10 the intent was to replace current technology or  
11 current meters even though they were still operating  
12 fine, so that rationale seems contradictory to what  
13 you just explained to me.

14 A. And I don't remember Witness Sloneker's  
15 testimony in its entirety, but I believe is that if  
16 we take equipment out of service, and let me use  
17 equipment that we might replace, as we do  
18 distribution automation, is that equipment has  
19 sufficient life to warrant putting it back in

20 service, is that we would place that equipment in  
21 service elsewhere on the system to avoid purchase of  
22 new equipment.

23 Q. Okay.

24 MR. MASKOVYAK: Thank you. I have no  
25 further questions, your Honor.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 EXAMINER BOJKO: Thank you.

2 Mr. O'Brien.

3 MR. O'BRIEN: Thank you, your Honor.

4 - - -

5 CROSS-EXAMINATION

6 By Mr. O'Brien:

7 Q. Good afternoon, Mr. Boyd. My name's Tom

8 O'Brien. I'm representing the Ohio Hospital

9 Association in this proceeding, and being 5:00, I'm

10 going to try to be as efficient as I possibly can

11 here.

12 Could you please turn to page 2 of your

13 testimony. Line 21 you reference major capacity

14 programs being a portion of your responsibilities.

15 My question to you is, what constitutes a major

16 capacity program as opposed to any other kind of

17 capacity program?

18 MR. NOURSE: Could I have the question

19 read back, please?

20 (Record read.)

21 EXAMINER BOJKO: Line 21, page 2.

22 MR. NOURSE: I'm sorry, page 21, line 2?

23 MR. O'BRIEN: No, page 2, line 21.

24 MR. NOURSE: Okay, thank you.

25 EXAMINER BOJKO: Please respond.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. Is that I am more directly involved when  
2 we're doing system capacity additions for circuit  
3 additions, additional station capacities, is that  
4 work goes on under my direction but I may not have  
5 specific knowledge when we change out a transformer  
6 in a neighborhood because another customer has added  
7 an air conditioner.

8       Q. Okay. No, I follow that. Thank you.  
9 That answers my question.

10       And this goes to the general topic of  
11 your testimony, and that is the enhanced service  
12 reliability plan. I hope I'm not duplicating any  
13 ground covered by Mr. Reese here, but I'm trying to  
14 understand what is the enhancement part of this, that  
15 is to say, what is expanding relative to some kind of  
16 baseline in terms of all of these programs?

17       A. Many things are expanding in contrast to  
18 the base programs. The distribution automation is  
19 deploying, 21st century technology in the field in

20 a programmatic way, is that the overhead inspection  
21 program is deploying new technology to help us  
22 identify equipment before it fails. We're modifying  
23 a visual inspection on overhead facilities to do more  
24 climbing inspection, more hands-on inspections, is  
25 that we're doubling the scope of the forestry program

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 to address more trees in a calendar year, in the  
2 cable program is that we're creating a plan to  
3 address cable that is at the end of its life and  
4 causing reliability problems for those customers. So  
5 a number of things are incremental and different.

6 Q. Okay. So we're talking about new and  
7 different techniques for essentially managing the  
8 system.

9 A. That's a big part of it, yes.

10 Q. Thank you. That helps.

11 Turning to page 4 starting at line 15,  
12 and this is a follow-up to a discussion you had with  
13 Mr. Reese, you have referenced here equipment  
14 failures causing approximately 33 percent of outages  
15 and tree-related outages of approximately 20 percent.  
16 I believe you indicated that those statistics are  
17 derived from event reporting by the crews when they  
18 encounter the outage; is that accurate?

19 A. Yes. The system we have today is an

20 on-line system where the crew reports the cause of  
21 outage.

22 Q. And it's determined at the time of  
23 reporting what the category of causation is going to  
24 be?

25 A. Yes. We look for that crew to report the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 root cause of that outage.

2 Q. So if reported that way, there isn't a  
3 possibility that the same event could wind its way  
4 into two different categories?

5 A. No. Is that the system designed such  
6 that you can only report one cause for each outage.

7 Q. Okay. Thank you. If you could turn your  
8 attention to page 6 of your testimony. Do you see  
9 the fourth bullet point down? You talk about network  
10 system program in this list of programs. Could you  
11 please -- do you see that --

12 A. Yes.

13 Q. -- reference in your testimony? Could  
14 you please describe for me what a network system is  
15 or what it refers to? Excuse me.

16 A. Yes. In Ohio we have two network  
17 systems. One is in the city of Columbus and the  
18 other one is in the community of Canton, and they  
19 serve the downtown area of those communities.

20 Q. If I were to ask you what a network  
21 service was, would that be a part of service provided  
22 over a network system?

23 A. That would be service provided from those  
24 two different systems.

25 Q. And why is network service used?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       A. Is that this program is a program that we  
2 report to in the ESSS rules, and there are specific  
3 maintenance programs around maintaining that network  
4 system.

5       Q. Are there cost differences between a  
6 network system and an overhead system?

7       A. Cost differences for the customer?

8       Q. Well, for AEP, for the company. Does one  
9 cost more than another?

10      A. Is there a unit basis? I mean, the  
11 overhead system costs more than a network system, but  
12 there's a lot more of it.

13      Q. Okay, I follow that. How about per  
14 circuit mile?

15      A. Yes. A network system would be more  
16 expensive per circuit mile than an overhead system.

17      Q. Why would that be?

18      A. It's an underground system and the  
19 components cost more. The load density is much

20 greater. There's more demand on a mile of network  
21 system than there would be a typical mile of overhead  
22 system.

23 Q. Are there any advantages to a network  
24 system as compared to an overhead system?

25 A. Yes. I just couldn't imagine what an

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 overhead system would look like if we were to provide  
2 overhead service to the community of Columbus  
3 downtown. I mean, there would be wires this big  
4 around running up and down the alleys, and there  
5 would be all kind -- I mean, you couldn't put an  
6 overhead system in downtown Columbus to service that  
7 load.

8 Q. I think I've got the picture.

9 A. Yeah.

10 Q. To the extent that network service is  
11 more expensive, who bears the cost differential of a  
12 network service versus an overhead system service?

13 A. The cost for overhead underground network  
14 system is recovered through our rates. There isn't a  
15 different cost of service for an underground customer  
16 versus an overhead customer. That's determined by  
17 tariff and demand.

18 Q. Can you tell me if the time for outage  
19 repairs on network service is any different than that

20 same time line on an overhead system?

21 A. It depends on the circumstance, but last

22 week, and I shouldn't mention this but we had an

23 outage on the network system here in Columbus, and to

24 finalize those repairs we're still working on that

25 today.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. In the event of a failure on a network  
2 system, is there any redundancy or alternate pathways  
3 that are available if there's a cut on a network's  
4 system?

5       A. Yes. There's redundancy built into a  
6 network system, but the extent of the outages that  
7 we've had this last week did result in outages for  
8 those customers served on that network. The  
9 redundancy in a network system is built more around  
10 our need to be able to maintain that.

11       On an overhead system we can work that  
12 system energized using insulated buckets and rubber  
13 gloves and insulated tools. We cannot do that in an  
14 underground system. We have to deenergize a portion  
15 of that to do maintenance, so the redundancy in that  
16 system facilitates us being able to provide service  
17 without long extended outages to do routine  
18 activities.

19       Q. Thank you.

20 MR. O'BRIEN: Your Honor, may I approach

21 the witness?

22 EXAMINER BOJKO: You may.

23 MR. O'BRIEN: Your Honor, I'd like the

24 following document marked as OHA Exhibit No. 1,

25 please.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 EXAMINER BOJKO: It will be so marked.

2 (EXHIBIT MARKED FOR IDENTIFICATION.)

3 EXAMINER BOJKO: Can you explain what the  
4 document is, just for the record?

5 MR. O'BRIEN: For the record, I have  
6 handed the witness the response to OHA Interrogatory  
7 Request No. 2-3 and it essentially contains an  
8 Attachment 1, which is American Electric Power  
9 underground distribution planning criteria.

10 Q. (By Mr. O'Brien) Mr. Boyd, are you  
11 familiar with this document?

12 A. Yes, I've seen it before.

13 Q. And are you responsible for this response  
14 to the OHA data request?

15 A. Yes.

16 Q. Could you please turn to the first page  
17 of this Attachment 1 here, and you'll see there is a  
18 definition of a radial-loop about 3/4 of the way down  
19 the page.

20 A. Yes.

21 Q. Could you please explain for the record

22 what a radial-loop is?

23 A. Yes. In some of our underground

24 facilities, such as a commercial park or a

25 residential subdivision, is that we will construct

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 underground facilities that will run between -- from  
2 an overhead circuit through a protective device to  
3 underground pad mounts, that each pad mount may serve  
4 a number of customers, and at some point on that  
5 circuit there will be an open point to where you have  
6 duplication of that system on the other side to  
7 another riser, and that system is operated normally  
8 open at that point.

9 But there is the opportunity, such as a  
10 cable failure, is for our crews to be dispatched,  
11 after the customer calls and reports an outage to be  
12 dispatched to identify which of the halves of that  
13 radial-loop is impacted and then to isolate and  
14 identify the faulted section, then perform some  
15 switching on the pad mount transformers to restore  
16 customers to service.

17 Q. And similar to the question that I asked  
18 you about network service, can you tell me what the  
19 advantage of a radial-loop would be compared to

20 conventional overhead service, if there is any?

21 A. Well, the advantages are the aspect of

22 not -- per customer of not having to look at the

23 overhead lines and have underground facilities. But

24 those customers are subject to the same outages if

25 you're looking at reliability advantages, for the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 same outages as other customers that are served off  
2 of that overhead circuit.

3 And doing that in a radial-loop with an  
4 open point and the opportunity to perform switching  
5 when an outage does occur allows us to restore  
6 service without having to identify the specific  
7 location within the earth where that fault occurred,  
8 digging that up, and repairing it before service is  
9 restored.

10 Q. So would a radial-loop have any impact on  
11 the duration of outages for customers on the affected  
12 circuit?

13 A. If that was just a radial circuit where  
14 there wasn't loop opportunities, is that the outages  
15 would be longer.

16 Q. But the loop opportunity affects duration  
17 how?

18 A. Because with a loop we can identify the  
19 faulted section relatively quickly with the tools we

20 have by identifying the specific location within the  
21 earth where the cable is faulted, it takes different  
22 tools and a longer period of time, plus, then you  
23 have to do the excavation, and it allows us to not  
24 have to do one call in the middle of the night and  
25 wait for the gas company and everybody else to

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 respond such that we can dig and allows those folks

2 to do that on a routine basis.

3 Q. Thank you.

4 Now, does what's been marked as OHA

5 Exhibit 1 explain at all when a radial-loop is called

6 for in network design?

7 A. The document we've been referring to,

8 that exhibit?

9 Q. Yes.

10 A. A radial-loop isn't used in network

11 systems as I've --

12 Q. I'm sorry, I misspoke. Does this

13 document explain when a radial-loop would be, you

14 know, its deployment would be called for?

15 A. I'd have to read through the document.

16 I'm not that familiar with the document to be able to

17 say.

18 Q. Okay. I'll withdraw that question.

19 Mr. Boyd, I want to ask you a couple of

20 questions, general questions, about feeder and  
21 substation design. That would be within the scope of  
22 your responsibilities, wouldn't it? And I'm not  
23 referring to any particular portion of your testimony  
24 at the moment.

25 A. I don't have direct responsibility for

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 substation activity, but I have some knowledge of  
2 that. I may be able to respond to your question.

3 Q. Let me ask this question. When planning  
4 for circuit capacity, what customer load is  
5 considered when trying to determine what the ultimate  
6 capacity of a circuit has to be?

7 A. Well, generally we're looking at the peak  
8 demand on that circuit, so we're looking at all  
9 customer load on that circuit that would contribute  
10 to the peak demand and the capacity of the circuit.

11 Q. Would that be a coincident peak or a  
12 noncoincident peak?

13 A. Well, if you're referring to the peak  
14 that might be -- we'd be looking at the coincident  
15 peak of all the customers on that circuit. If  
16 another -- if you're speaking to AFS provisions, is  
17 that we would look at the noncoincident peak of that  
18 individual customer as to how that might apply to the  
19 coincident peak of the customers already on that

20 circuit.

21 Q. And I'll come back to AFS peak, but for  
22 the moment I'm just asking for general circuit  
23 design. Are you concerned with the coincident peak  
24 of the customer --

25 A. Coincident peak, yes, for all the

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 customers served on that circuit.

2 Q. Understood. On the same design topic,  
3 can you tell me what the company's temperature design  
4 point is for when you design a circuit? Do you  
5 understand what I'm asking about when I ask that  
6 question?

7 A. What the ambient temperature design is --

8 Q. Yes.

9 A. -- or conductor temperature?

10 Q. Ambient.

11 A. Of the atmosphere?

12 Q. Right.

13 A. Interestingly enough I don't know for  
14 distribution service but I do know for station  
15 transformers. And it's 30 degrees C for station  
16 transformers.

17 Q. Is there a humidity design point?

18 A. I don't know that.

19 Q. Now, can you tell me why temperature and

20 humidity design points would be relevant in the  
21 consideration of designing a circuit?  
22 A. Yeah. As you design for the capacity of  
23 the circuit, you're looking at the thermal loading of  
24 that circuit, and as that conductor picks up more  
25 load, it dissipates more heat so you have to do that

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 design around how will that conductor dissipate or  
2 that transformer dissipate heat, and you pick a  
3 thermal or ambient temperature such that you know  
4 that that device is dissipating enough heat at that  
5 design temperature.

6 Q. Can you tell me if transformers have  
7 normal load ratings and in addition have emergency  
8 load ratings?

9 A. Yes, they do.

10 Q. Can you tell me approximately how much  
11 larger an emergency load rating for a transformer  
12 would be versus its normal rating?

13 A. No, I can't.

14 Q. Can you tell me if there is a typical  
15 durational rating for a transformer's emergency  
16 capacity?

17 A. Yes. That load, emergency load rating  
18 changes with the duration of the load, is that it  
19 would have a higher rating for a two-hour demand on

20 that transformer versus an 8- or a 12-hour demand.

21 Q. I ask you now to turn to page 10 of your  
22 testimony, and on lines 7 and 8 you're talking about  
23 the increasing asset failure rate. Have you done any  
24 quantification of that increasing rate of failure?

25 A. I don't believe so. What we do, such as

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 cutouts, we track the number of failures that we have  
2 for those devices, but as far as have we done  
3 analysis 1 percent, 2 percent, whatever, I don't know  
4 that we've done that.

5 Q. Now, would that same answer apply to the  
6 reference on page 15 of your testimony to age-related  
7 failures and the question I asked you about  
8 quantification?

9 A. No, I don't know whether we've done that.

10 Q. Turning now to page 12 of your testimony  
11 where you discuss this market -- strike that.

12 International survey, single question for  
13 you on this, are you aware of how MSI determined its  
14 residential -- how it solicited its residential  
15 respondents and its commercial respondents?

16 A. Different process for each, I believe.  
17 For the residential customers is that we look at the  
18 zip code where those customers reside and pick a  
19 quantity of customers to respond from that zip code,

20 and then MSI -- MSI does all this. We're not  
21 involved. We just look at the results. They do the  
22 surveys. It's independent of us.  
23 But they then will ask that customer if  
24 it's a territory that might be divided, is that  
25 they'll ask them who they receive service from, and

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 if it's not from AEP-Ohio or Columbus -- Columbus &  
2 Southern or Ohio Power, then they'll end the call.  
3 But if that customer responds that they're one of our  
4 customers, then they'll ask them if they're the  
5 individual that typically, you know, is involved with  
6 electric service and paying the bills and then  
7 continue down a list of questions for that customer.

8 I'm not as sure on the commercial side,  
9 but I believe is that we do that in a similar way, or  
10 we provide that information to MSI and they try to  
11 pick a random sample. Now, that's a little bit  
12 different, though, for those customers that have  
13 managed accounts, and that process is a little  
14 different and done by a different survey organization  
15 I believe.

16 Q. Okay. Thank you, that answers my  
17 question.

18 Could you please turn to page 17 of your  
19 testimony, specifically line 21. Is the company

20 proposing any metrics for determining how we're going  
21 to measure this better improved service quality?  
22 A. With respect to sustained outages is that  
23 we want to work with the Commission staff to quantify  
24 that as we spend the incremental dollars for those  
25 programs that we receive the estimated reliability

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 benefits as described in my testimony, so we'd be  
2 looking at moving the reliability metrics associated  
3 with that for those specific outage causes.

4 Q. Has the company considered what those  
5 metrics might be?

6 A. Not in great detail, but I guess in  
7 working with the staff, and I think there's something  
8 underway now to maybe look at changing the metrics  
9 around reliability performance, but we'd work with  
10 the staff to do that.

11 Q. My next question relates to charts 5  
12 through 10, I think they go up to 10, don't they?  
13 Yeah. Each one of these charts down at the bottom  
14 has an incremental cost, and I think this -- well, I  
15 want to find out whether or not this relates to the  
16 question I asked you very early on in my  
17 cross-examination as to -- I'm interested in what the  
18 baseline cost is against which this incremental cost  
19 is added.

20           You know, I asked you about charts 1  
21 through -- 5 through 10. If the answers are  
22 different for any particular chart, please let me  
23 know.

24           MR. NOURSE: Your Honor, could I have  
25 just a minute. I don't think chart 6 falls in that

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 category. I'm looking at the rest of them.

2 MR. O'BRIEN: That's correct, your Honor.

3 I'm sorry.

4 MR. NOURSE: 5, 7, 8, 9, 10?

5 MR. O'BRIEN: Yeah.

6 Q. Of the charts that have the incremental  
7 cost row down at the bottom, I'm just trying to  
8 understand what the baseline cost would be to which  
9 the increment applies.

10 A. The baseline costs are not shown on these  
11 charts, but the incremental costs are the costs that  
12 we are historically spending on these programs for  
13 those activities, and we'd certainly want to work  
14 with staff to help define what that baseline is and  
15 would work on providing appropriate clarity into our  
16 expenditures such that these cost additions would be  
17 incremental to the expenditures in these programs.

18 Q. But would it be safe to say that the  
19 dollars, these incremental dollars that are listed in

20 these charts, are driven by the enhanced activities

21 we discussed in my previous questioning?

22 A. Yes.

23 Q. Okay. Thank you.

24 I have just a very few questions left,

25 but I must find them. Let's go off the record.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 (Off the record.)

2 EXAMINER BOJKO: Let's go back on the  
3 record.

4 Mr. O'Brien.

5 Q. Mr. Boyd, can you tell me about how often  
6 circuit capacity is reviewed? And was that a clear  
7 question?

8 A. That's a clear question. I'm just  
9 thinking of the answer. Is that I'm not certain  
10 whether every circuit is reviewed on an annual basis,  
11 but certainly when we see that a circuit demand has  
12 changed and if the history of that circuit has been  
13 to where it's been loaded near capacity. I'm not  
14 certain of the answer.

15 Q. If I modified that question to apply  
16 directly to an AFS-affected circuit, would you be  
17 able to tell me what the duration of review would be  
18 then?

19 A. No, I cannot.

20       Q. When you evaluate a circuit for capacity  
21 relative to AFS service being added to that circuit,  
22 what capacity level of the customer requesting the  
23 AFS service is used?

24       A. I'm not certain, but I would assume it's  
25 the peak demand of that customer.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       Q. And similar to our previous discussion  
2 about customer peak demand, would that be coincident  
3 or noncoincident?

4       A. I'm not certain.

5       Q. And, again, when evaluating the capacity  
6 of a circuit in conjunction with an AFS customer, is  
7 the emergency rating of the circuit and serving  
8 transformers considered?

9       A. I don't know what rating of equipment  
10 that they use.

11      Q. Thank you.

12           MR. O'BRIEN: One moment, your Honor.

13           Thank you, Mr. Boyd. That's all the  
14 questions I have.

15           EXAMINER BOJKO: Mr. Jones.

16                   - - -

17           CROSS-EXAMINATION

18 By Mr. Jones:

19      Q. Good evening, Mr. Boyd.

20       A.   Good evening.

21       Q.   My name is John Jones, and I represent  
22   staff in this proceeding. I have a few questions for  
23   you.

24           In regard to the distribution automation  
25   initiative, do the companies already have an

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 automated switching program in operation in Ohio?

2 A. I believe we'll have one before the end  
3 of the hearing in service.

4 Q. Okay.

5 A. You mean distribution automated, yes.

6 EXAMINER BOJKO: What time period is  
7 that, Mr. Boyd?

8 THE WITNESS: I think I'm safe.

9 Q. Mr. Boyd, where in Ohio do the companies  
10 plan to implement DA?

11 A. With respect to the one that we're  
12 placing in service in December?

13 Q. Yes.

14 A. I believe it's the Rosemont Darden area  
15 south of Chillicothe.

16 Q. Okay. And that would be inside the  
17 gridSMART phase 1 area?

18 A. No; outside.

19 Q. Outside.

20       A.   Yes.

21       Q.   And how many -- first of all, I want to  
22 ask you how many circuits would be affected by

23 Attachment A inside phase 1 area?

24       A.   Approximately 70.

25       Q.   And outside the phase 1 area?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1       A. With the DA-enhanced reliability plan,

2 approximately 20 in the first three years.

3       Q. Approximately 20?

4       A. Yes. I believe that's correct.

5       Q. Now, Mr. Boyd, are the communication

6 pathways and technology different for the DA outside

7 the gridSMART phase 1 area as compared to inside

8 phase 1 area?

9       A. They may be.

10      Q. And can you describe those differences?

11      A. Is that within the gridSMART area I

12 believe we're looking to use a mesh communications

13 network, and outside the gridSMART area we may use

14 cellular or radio communications technology.

15      Q. Okay. Mr. Boyd, can you tell me whether

16 AEP's proposed DA initiative involves switches that

17 are activated automatically, remotely, or both?

18      A. I'm not sure of the distinction that you

19 have between automatically or remotely.

20 Q. Well, let's start with automatically. Is

21 it an automatic switch, or how does it work?

22 A. Well, okay. The switch would be -- I

23 thought you were asking around would we use

24 centralized intelligence for that switch or would we

25 use distributed intelligence for that switch.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. And your answer would be?

2 A. Is that for the gridSMART area we'd most  
3 likely use centralized intelligence, but we may use  
4 remote intelligence -- or, distributed intelligence  
5 outside the gridSMART area.

6 Q. Okay. And for the proposed initiative,  
7 the DA initiative, is it dependent upon a supervisory  
8 control and data acquisition system at each  
9 substation serving the circuits where DA would be  
10 installed?

11 A. It could be but not necessarily.

12 Q. And why not? Why wouldn't it be  
13 necessary?

14 A. Is that with distributed intelligence you  
15 can use DA without having SCADA.

16 Q. Now, looking at the outside circuits, the  
17 20 outside circuits you're referring to, didn't AEP  
18 estimate that there would be no SAIDI performance  
19 improvements for a DA that would be installed outside

20 of gridSMART area 1?

21 A. No.

22 Q. There would not be any SAIDI performance

23 improvements for --

24 A. No. We said that we did not calculate

25 that.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 Q. Did not calculate that.

2 A. That's correct. But there would be  
3 improvement.

4 Q. And how do you know that?

5 A. Is that just as we know there would be  
6 improvement in the gridSMART area, is that we would  
7 deploy that where it would provide the maximum  
8 benefit for that technology and that location, is  
9 that in the gridSMART area we looked back at the  
10 previous year 2007 and looked at each of those  
11 circuits on the outages that we had and what the  
12 consequences would have been had we deployed  
13 gridSMART.

14 And what we found is that SAIDI would  
15 have been reduced for that entire 70 circuits by 65  
16 minutes. We would expect a similar improvement in  
17 the areas where we deploy DA outside the gridSMART  
18 area, but we don't know the specifics because we  
19 haven't determined yet where that might be deployed.

20 Q. Okay. And as to the estimate for the DA  
21 cost, was that not projected to be \$11.7 million for  
22 the 20 circuits?

23 A. 11.7 million, yes.

24 Q. Yes. And I believe you had provided that  
25 in chart 10 on page 37 of your testimony as well as

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 your Exhibit KGB-1, correct?

2 A. And also on chart 9.

3 Q. Thanks.

4 And for further clarification on the 20  
5 circuits outside the phase 1 area, that would be  
6 spread across both the CSP and OP service areas?

7 A. Yes.

8 Q. And other than what you mentioned what  
9 would go in effect for December, other circuits  
10 outside of phase 1 area have yet to be identified; is  
11 that an accurate statement?

12 A. For the incremental program, that's  
13 correct.

14 Q. Okay. And for clarification also, how  
15 many circuits then would be affected with what's  
16 going to be implemented in December outside the phase  
17 1 area?

18 A. On that circuit that is a 34 distribution  
19 circuit itself between two stations, and there are

20 customers served along that circuit, but that circuit  
21 also provides subtransmission service to two  
22 substations which have circuits within them. So what  
23 we would do would not only provide reliability  
24 enhancements for the customers directly served from  
25 the circuit between those two stations, it would also

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 provide isolation of faults on the source to those  
2 substations. So it would impact more circuits than  
3 the 19-9 distribution circuit that it is applied to.

4 MR. JONES: Your Honor, if I could just  
5 have a second.

6 EXAMINER BOJKO: Did you say the cost was  
7 11.6 or 11.7?

8 THE WITNESS: If I look at chart 10, I  
9 see 11.7 if I add those two numbers.

10 EXAMINER BOJKO: So look at chart 9.

11 THE WITNESS: Yeah. There's likely a  
12 rounding error as we rounded the division between CSP  
13 and OP and then carried that down to the bottom row.

14 EXAMINER BOJKO: But they're both meant  
15 to represent the same cost.

16 THE WITNESS: The same amount, yes.

17 EXAMINER BOJKO: Thank you.

18 Q. (By Mr. Jones) Mr. Boyd, you testified as  
19 to what's being implemented at Chillicothe. That's

20 not part of your plan here; is that correct? That's

21 something you already started.

22 A. Yes; and hope to have in service soon.

23 Q. Mr. Boyd, can you tell me, describe for

24 me the difference between the mesh and the cellular

25 as to what you described for the technology

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 difference?

2 A. Really reaching beyond my understanding  
3 of how that technology operates.

4 Q. Okay. Would there be any other witnesses  
5 for AEP that could provide a more in-depth  
6 description or not?

7 A. Not that's testified -- I mean, not that  
8 hasn't already testified. Witness Sloneker could  
9 have I believe.

10 Q. Okay. Mr. Boyd, as to what you testified  
11 to, the distributed intelligence, does that require  
12 communication back to the dispatch?

13 A. It does not, but we would include that  
14 into our system design, but it can operate isolated.

15 Q. Okay.

16 A. But we want that information.

17 Q. Okay.

18 MR. JONES: That's all I have. Thank  
19 you.

20 Thank you, Mr. Boyd.

21 EXAMINER BOJKO: Thank you.

22 Mr. Nourse, do you have any redirect?

23 MR. NOURSE: A couple questions, your

24 Honor.

25 - - -

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

REDIRECT EXAMINATION

By Mr. Nourse:

Q. Mr. Boyd, earlier you had questions about what the companies are doing to address aging infrastructure. Do you recall that from Mr. Reese?

A. Yes.

Q. Now, is it the case relative to the programs, the asset management programs, they were formalized around 2000, the year 2000, in conjunction with implementation or adoption of the ESSS rules, and did those programs exist prior to that time?

A. No.

Q. I'm sorry. I kind of asked you a compound question. Let me break it down. The asset management programs, the activities underlying those programs that are reported now in the ESSS rules, first of all, do you know about when the ESSS rules were adopted?

A. Around 2000. I thought that was the

20 question you were asking, did those exist prior,

21 okay.

22 Q. I guess the question -- they were

23 formalized, let's say, for the reporting. Did the

24 underlying activities that are formalized now in that

25 reporting, did those activities occur prior to 2000?

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1       A. Yes. We performed those activities prior  
2 to 2000.

3       Q. Okay. Now, you also received some  
4 questions I believe from Mr. Reese about in  
5 conjunction with replacement of equipment, and I  
6 understand your answers to have been along the lines  
7 of, well, when we inspect it we believe it will be in  
8 service beyond the next inspection cycle so we leave  
9 it in the field. Do you recall that?

10      A. Yes.

11      Q. So you wouldn't normally replace it under  
12 general distribution maintenance policies?

13      A. That's correct.

14      Q. Now, is there a distinction to be drawn  
15 with the gridSMART aspect in the company's current  
16 proposal for replacing smart meters with existing  
17 conventional meters?

18      A. Yes; is that we may replace meters that  
19 no longer provide the functionality that more modern

20 meters might provide.

21 Q. So in the case of the gridSMART program,  
22 the advanced technology capabilities of those smart  
23 meters provides the basis for that replacement.

24 A. That's correct.

25 Q. Thank you.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1           And you had some questions about some of  
2 the ESRP programs that extend beyond the three-year  
3 term of the ESP. Do you recall that?

4       A. Yes.

5       Q. And relative -- and I believe you stated  
6 that basically the programs, the three years, the  
7 revenue collected in the three years of the ESP and  
8 the rates designed to collect those revenues paid for  
9 three years of those costs, even though the costs of  
10 those programs would extend beyond the three-year  
11 term; is that correct?

12      A. That's correct.

13      Q. Now, is it fair to say that the cost  
14 proposed to be recovered during the three-year period  
15 of the ESP are commensurate, in your opinion, with  
16 the benefits that would be received within the  
17 three-year period of the ESRP?

18      A. That's correct.

19      Q. Okay. Now, can I ask you, do the

20 reliability indices reflect outages caused by a major

21 storm?

22 A. The indices that we report to the

23 Commission exclude major storm.

24 Q. Now, take an example. If a circuit is

25 strengthened by maintenance, will there be instances

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 where a weather-related event will not result in a  
2 major event even though the same weather event would  
3 have resulted in a major event prior to the  
4 maintenance?

5 A. That's possible.

6 Q. Okay. To that extent would you expect  
7 some negative effects on indices as a result of  
8 performing the maintenance?

9 A. That's correct, is that as we do this  
10 work, and the system performs better for weather  
11 events is that some events that now meet the current  
12 criteria for exclusion may not fall -- move that  
13 high.

14 MR. NOURSE: Thank you, your Honor.  
15 That's all I have.

16 EXAMINER BOJKO: Mr. Reese, do you have  
17 any recross?

18 MR. REESE: No, your Honor.

19 EXAMINER BOJKO: Staff?

20 MR. JONES: No, your Honor.

21 EXAMINER BOJKO: Mr. O'Brien?

22 MR. O'BRIEN: No, your Honor.

23 EXAMINER BOJKO: Ms. Elder?

24 MS. ELDER: No.

25 MR. MASKOVYAK: No, your Honor.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

1 EXAMINER BOJKO: Okay.

2 MR. WHITE: What about me?

3 EXAMINER BOJKO: Mr. White?

4 MR. WHITE: No, your Honor. I had some

5 but . . .

6 EXAMINER BOJKO: Just I wasn't going to

7 go through everything.

8 MR. NOURSE: I renew my motion for

9 admission of Exhibit 11, your Honor.

10 EXAMINER BOJKO: Any opposition to the

11 admission of Boyd Direct Testimony Exhibit 11?

12 Hearing none, it will be admitted.

13 (EXHIBIT ADMITTED INTO EVIDENCE.)

14 MR. REESE: Your Honor, I'd like to move

15 Exhibit 9 for OCC.

16 EXAMINER BOJKO: Any opposition to

17 Exhibit 9?

18 It will be admitted.

19 (EXHIBIT ADMITTED INTO EVIDENCE.)

20 EXAMINER BOJKO: How about OHA Exhibit 1,

21 do you move that?

22 MR. O'BRIEN: Your Honor, I so move.

23 EXAMINER BOJKO: Thank you. Any

24 opposition?

25 MR. MASKOVYAK: No.

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481



1 EXAMINER BOJKO: You may step down

2 Mr. Boyd.

3 It will be admitted as OHA Exhibit 1.

4 (EXHIBIT ADMITTED INTO EVIDENCE.)

5 EXAMINER BOJKO: The order I have for

6 Monday is Fein, Smith, Medine, Finamore, Cleaver, and

7 then obviously Roush and Baker if we can get to them.

8 MR. CONWAY: No problem.

9 MR. ETTER: What time are we going to

10 start on Monday?

11 EXAMINER BOJKO: We will start at 9 a.m.

12 on Monday. We will at 9 a.m. from here on out except

13 for December 1st, the Monday after Thanksgiving.

14 I'd also like to note quickly on the

15 record that we discussed the briefing for the

16 1/1/09 plan. The briefs will be due December

17 3rd instead of December 2nd initially. They will

18 be due December 3rd, and we will not have reply

19 briefs regarding that issue.

20           Thank you, and we are adjourned until

21 Monday morning at 9 a.m.

22           (The hearing adjourned at 6:24 p.m.)

23                   - - -

24

25

ARMSTRONG & OKEY, INC., Columbus, Ohio (614) 224-9481

CERTIFICATE

I do hereby certify that the foregoing is  
a true and correct transcript of the proceedings  
taken by me in this matter on Friday, November 21,  
2008, and carefully compared with my original  
stenographic notes.

---

Maria DiPaolo Jones, Registered  
Diplomate Reporter, CRR and Notary  
Public in and for the State of  
Ohio.

(3302-MDJ)

- - -

20

21

22

23

24

25

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**

**12/8/2008 11:12:28 AM**

**in**

**Case No(s). 08-0917-EL-SSO**

Summary: Transcript AEP Volume V 11/21/08 electronically filed by Mrs. Jennifer D. Duffer on behalf of Armstrong & Okey, Inc.