1	BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO
2	
3	In the Matter of the : Application of Ohio Edison:
4	Company, The Cleveland :
5	Electric Illuminating : Company, and The Toledo :
б	Edison Company for : Authority to Establish a : Case No. 08-935-EL-SSO
7	Standard Service Offer : Pursuant to RC §4928.143 :
8	in the Form of an : Electric Security Plan. :
9	
10	PROCEEDINGS
11	before Ms. Christine Pirik and Mr. Gregory Price,
12	Attorney Examiners, at the Public Utilities
13	Commission of Ohio, 180 East Broad Street, Room 11-C,
14	Columbus, Ohio, called at 9:00 a.m. on Monday,
15	October 20, 2008.
16	
17	VOLUME III
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2 3 WITNESS PAGE 4 Scott T. Jones Direct Examination by Mr. Hayden 11 Cross-Examination by Mr. Small 12 5 Cross-Examination by Ms. Fonner 29 6 Cross-Examination by Mr. Smith 43 Cross-Examination by Mr. Breitschwerdt 52 7 Cross-Examination by Mr. Lavanga 88 Cross-Examination by Mr. Boehm 102 Cross-Examination by Mr. Bell 122 8 Cross-Examination by Mr. McNamee 129 Redirect Examination by Mr. Hayden 9 136 Recross-Examination by Mr. Bell 138 10 Frank C. Graves 11 Direct Examination by Mr. Hayden 140 Cross-Examination by Mr. Small 143 12 Cross-Examination by Mr. Yurick 150 Cross-Examination by Ms. Fonner 153 13 Cross-Examination by Mr. Smith 169 Cross-Examination by Mr. Breitschwerdt 175 14 Cross-Examination by Mr. Lavanga 186 Cross-Examination by Mr. Boehm 190 Cross-Examination by Mr. Bell 15 202 Cross-Examination by Mr. McNamee 210 Redirect Examination by Mr. Hayden 16 218 17 Donald R. Schneider Direct Examination by Ms. Miller 225 18 Cross-Examination by Mr. Reese 227 Cross-Examination by Ms. Wung 291 19 Cross-Examination by Ms. Fonner 295 Cross-Examination by Mr. Breitschwerdt 297 20 Cross-Examination by Mr. Dunn 301 Cross-Examination by Mr. Bell 307 Cross-Examination by Mr. Wright 21 314 Examination by Examiner Pirik 325 22 Examination by Examiner Price 328 Redirect Examination by Ms. Miller 330 23 Recross-Examination By Mr. Bell 332

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1	9
1	Monday Morning Session,
2	October 20, 2008.
3	
4	EXAMINER PRICE: Let's go back on the
5	record.
6	Good morning. This is our third day of
7	hearing in Case No. 08-935-EL-SSO. My name is
8	Gregory Price. With me is Chris Pirik. We are
9	presiding over today's hearing.
10	Do we have any preliminary matters for
11	the Bench before we take our first witness?
12	MR. BURK: Yes, your Honor, just one.
13	What I would like to ask the Bench is to clarify the
14	ruling around the distribution case aspect of the
15	companies' ESP proceeding.
16	And what I wanted to make sure is that I
17	understand your ruling from the prehearing conference
18	correctly that the Attorney Examiners weren't
19	deleting or, yeah, deleting any aspect of the ESP
20	cases filed, they were just excluding evidence of the
21	distribution case with the understanding as was
22	stated that a distribution case order is going to be
23	issued.
24	But the clarification I was seeking was

25 that the Bench didn't make any changes to the ESP

1 cases filed by the companies.

2 EXAMINER PRICE: No, we are not intending on changing any aspect of the ESP case as filed by 3 4 the case. 5 All we are saying in the interest of 6 administrative efficiency is that can be decided in the distribution rate case, will be decided in the 7 distribution rate case and all other matters then 8 will be cited in this case. 9 MR. BURK: Thank you very much, your 10 11 Honor. 12 EXAMINER PRICE: Thank you. Anything else? 13 14 Seeing none, Mr. Hayden. MR. HAYDEN: Thank you, your Honor. 15 The 16 companies call Dr. Jones. 17 (Witness sworn.) 18 EXAMINER PRICE: Please be seated and 19 state your name and business address for the record. 20 That's the first test to be qualified as a witness, if you can make the microphone work. 21 22 THE WITNESS: My name is Scott T. Jones. 23 My business address is 20 University Road, Cambridge, 24 Massachusetts 02138. 25 EXAMINER PRICE: Please proceed,

1 Mr. Hayden.

2 MR. HAYDEN: Your Honor, if we could have marked for identification purposes the direct 3 4 testimony of Scott T. Jones as Company Exhibit 6. 5 EXAMINER PRICE: So marked. 6 (EXHIBIT MARKED FOR IDENTIFICATION.) 7 _ _ _ 8 SCOTT T. JONES being first duly sworn, as prescribed by law, was 9 examined and testified as follows: 10 11 DIRECT EXAMINATION 12 By Mr. Hayden: Dr. Jones, do you have before you what 13 0. has been marked as Company Exhibit 6? 14 A. Yes, I do. 15 Q. And is that your direct testimony in this 16 17 proceeding? 18 A. Yes, it is. 19 Ο. And do you have what has been marked previously as Company Exhibit 10? 20 21 A. Yes, I do. 22 Ο. The list of errata items from the 23 company? 24 Α. Yes. 25 Q. And are you responsible for those errata

	12
1	items by which your name is identified?
2	A. Yes. Those are errata items 31 through
3	33.
4	Q. Thank you.
5	And subject to those errata items, do you
6	have any further additions or corrections to your
7	testimony at this time?
8	A. No, I don't.
9	Q. And if I were to ask you the same
10	questions that are identified in your testimony
11	today, would your answers be the same?
12	A. Yes, they would.
13	Q. Thank you.
14	MR. HAYDEN: Your Honor, the witness is
15	available for cross.
16	EXAMINER PRICE: Thank you.
17	Mr. Small.
18	MR. SMALL: Thank you, your Honor.
19	
20	CROSS-EXAMINATION
21	By Mr. Small:
22	Q. Good morning, Dr. Jones. My name is Jeff
23	Small. I represent the office of the Ohio Consumers'
24	Counsel. I believe we met telephonically a while
25	back.

1	Α.	We did, yes.
2		How are you, Mr. Small?
3	Q.	I have a few questions for you today.
4	Let's get r	ight to it.
5		If you could turn to your page 2 of your
6	testimony.	
7	Α.	All right.
8	Q.	And line 16 and the related footnote 1
9	that's on -	- connected to line 16.
10		The footnote states that your
11	calculation	s, based on market data as of July 15,
12	2008, which	is exactly the same date found in
13	Mr. Graves'	testimony.
14		The direction to use July 15, 2008, is
15	from the Fi	rstEnergy companies, correct?
16	Α.	Yes.
17	Q.	Would you please turn to page 7 of your
18	testimony,	lines 10 through 11.
19		Do you have that?
20	Α.	Yes.
21	Q.	And at that point in your testimony you
22	mention rou	nd the clock energy prices for each year,
23	and on line	11 it says shown on Exhibit 2.
24		Do you see that?
25	Α.	Yes.

MR. SMALL: Your Honor, at this time I 1 2 would like to mark an exhibit to discovery questions and an Excel spreadsheet OCC Exhibit 8. 3 4 EXAMINER PRICE: So marked. (EXHIBIT MARKED FOR IDENTIFICATION.) 5 6 Q. Dr. Jones, I have marked a small packet of papers as OCC Exhibit 8 Responses to OCC's Request 7 for Production 85 and 86. Those are the first two 8 sheets. 9 Do you see that? 10 Yes, I do. 11 Α. 12 And they state that you are the witness Q. responsible. Are you the witness responsible for 13 14 these responses? 15 Α. Yes. 16 And attached to that a number of pages Ο. 17 which is a printout of an Excel spreadsheet which was -- is promised in the companies' response to 18 19 request for production 85 and 86. 20 Do you see that? Yes, I do. 21 Α. 22 And is this material the materials, the Ο. 23 information, that was supplied by you or on your behalf? 24 25 A. Yes, as far as I know, yes.

1 Q. Okay.

2 EXAMINER PRICE: Mr. Jones, Mr. Small, on 3 pages 4 of 11 and --

4 MR. SMALL: Yes, let me clarify that. 5 EXAMINER PRICE: Thank you. б Q. As the Attorney Examiner was about to observe, there are some handwritten marks on these 7 8 documents which are intended to guide the eye while 9 we are doing the cross-examination, so the titles at 10 the top of the page, those are not the companies' but 11 were added by the OCC, correct? 12 Yes. You asked me about the data. Α. Ι 13 assumed you were ignoring the handwritten remarks. 14 I am ignoring them, and as the Attorney Q. Examiner was about to comment, on page 4 of 11, set 15 1, there are some handwritten marks in the margin, 16 17 and that was also not supplied by you; is that 18 correct? 19 Α. That's correct. 20 EXAMINER PRICE: Thank you. 21 Q. I believe -- if there are any other handwritten marks in the margin, those are also 22 23 provided by the OCC and not by FirstEnergy, like on 24 the very last page.

A. Yes. There is some on -- that's correct.

16 1 Q. We will be using those in the questions. 2 I would like to work some of your calculations and for that purpose I have added the handwritten notes 3 4 so that we can find our way in the spreadsheet, which is a little bit difficult to navigate without the 5 6 notes. 7 First, the spreadsheet provides -- the 8 spreadsheet provided shows daily values for future 9 prices off peek and on peak for 2009, 2010, and 2011, 10 correct? 11 That's correct. Α. 12 Would you please turn to what I have Q. marked as set 1, 4 of 11. I think we were just 13 14 there. 15 I just want to go through a little bit about how these tables are put together so we can 16 17 find the numbers. 18 Do you have that? 19 Α. Yes. 20 Q. Okay. 21 Α. Recognizing you are about to describe a 22 spreadsheet on a screen to be continuous, not 23 breaking into pieces. 24 Yes, I know. That's the difficulty. Q. 25 That's the reason for the handwritten notes, so we

1 can find everything.

2 The data that you used in constructing your Exhibit 2 that is using July 15, 2008, that's 3 4 the date shown for -- on set 1, 4 of 11, as I have marked it, correct? 5 6 A. Yeah, for the forwards for that day. Forwards for that date. For 2009, 2010, 7 Ο. 8 and 2011? 9 A. Correct. And for on peak and off peak? 10 Ο. 11 Α. Correct. Okay, and turning to what I have marked 12 Q. as set 4 of 11, that's where we find the values for 13 that date; is that correct? 14 15 A. For July 15? Q. July 15. 16 17 Α. I don't know about the set 2 part. Mine says 4 of 11. Is that what you are referring to? 18 19 0. There are two sets of pages 11 in each 20 set. And the reason for this is normally it goes 21 across the screen but when you print it out, it comes 22 out in two different sets. 23 Α. Right. 24 On 4 of 11, second set, you recognize Q. 25 those numbers as numbers that you used in your

1 analysis, correct?

2 Α. Correct. Q. Okay. And just to complete this table, 3 4 this information that you provided runs through September 15, 2008, correct? 5 6 Α. Yes. 7 Q. And that's shown on -- if you could go to 8 set 1, 11 of 11, to the very end of it, this table is constructed to show September 15, 2008, is the last 9 date, correct? 10 11 Α. Correct. 12 And the corresponding numbers are in the Q. second set of numbers. 13 14 Α. Correct. 15 Q. All right. I am going to use these in 16 combination. 17 MR. SMALL: Your Honor, I would like to 18 mark OCC Exhibit 9. 19 EXAMINER PRICE: So marked. 20 (EXHIBIT MARKED FOR IDENTIFICATION.) 21 Q. Now, Dr. Jones, you have had a moment to 22 look at Exhibit 9. 23 Subject to check, if you want to take a moment to look it over, does exhibit -- OCC Exhibit 9 24 25 show the -- show plots of the numbers that are

contained in the Excel spreadsheet that is on peak 1 2 and off peak for 2009, 2010, and 2011? Well, subject to check, the trend appears 3 Α. 4 correct anyway. I haven't checked every individual 5 entry. 6 EXAMINER PRICE: Do you want to take some period of time and at least randomly check some of 7 8 these? 9 THE WITNESS: I could do that, yes. 10 EXAMINER PRICE: Let's go off the record 11 for 5 minutes, and if you need additional time after 12 that, we will give it to you. 13 (Recess taken.) 14 EXAMINER PRICE: Let's go back on the 15 record. Q. (By Mr. Small) Dr. Collin, we have taken 16 17 a short break. During that time have we been able to establish -- would you agree with me the plots 18 19 correctly state the data in the spreadsheet? 20 A couple of things. First of all, I am Α. not Dr. Collin. If he were up here --21 22 Ο. Excuse me, Dr. Jones. 23 Α. Second of all, I could only check four, and the problem is when you have got a numerical 24 25 spreadsheet and give somebody a graph, you are asking

me to read a number off a graph, so I don't know how 1 2 precise I can be, but in general the four numbers I checked looked about right, given that you are asking 3 4 me to read off the graph. I believe in a previous response you said 5 Ο. 6 that the -- you recognized that the trends looked right on the plots, correct? 7 8 Α. Generally speaking, yes. 9 Q. Dr. Jones, do you -- do you review this 10 type of information on a regular basis? I don't have a set schedule. I look at 11 Α. 12 it periodically. 13 0. Have you looked at it since September 15? 14 Α. Yes. Have these numbers trended generally 15 Q. lower from September 15 to present time? 16 17 Α. Generally speaking, yes. 18 MR. SMALL: Now, during the break I 19 handed out another two-page document that I would like marked as OCC Exhibit 10. 20 21 EXAMINER PRICE: So marked. 22 (EXHIBIT MARKED FOR IDENTIFICATION.) 23 Q. Dr. Jones, we are going to be looking at 24 the first of the two pages on OCC Exhibit 10. Do you 25 have that in front of you? Two pages of numbers.

Well, without careful review, they look 1 Α. 2 like they are identical. 3 Ο. They are not, but let's just look at the 4 first page. 5 Α. Okay. б Q. I would like to walk you through your calculations that resulted in your Exhibit 2. 7 8 At the top of OCC Exhibit 10, the first page, the July 15, 2008 off-peak and peak index 9 10 prices that you used are shown, correct? 11 Α. Yes. 12 And next the number of off-peak and peak Q. 13 hours you used are shown in a column -- it's to the 14 right of that table, correct? 15 Α. Yes. Did we lose the microphone there? 16 Ο. 17 Α. No. I said "yes." Thank you. I didn't hear you. 18 Q. 19 And the next column shows the index price 20 times hours. Subject to check, does that look like 21 the correct multiplication? 22 Α. It appears to be, yes. Okay. Now, for your numbers that you 23 Ο. 24 show in your testimony on Exhibit 2, you arrived at 25 them by adding the numbers for the particular years,

2000 -- there's two numbers at the top of that page 1 2 for 2009. You would add those numbers and divide by 8,760 hours, correct? 3 4 Α. In simple English, my numbers are the 5 weighted averages of the peak and off-peak hours for 6 those particular time periods. 7 Did you have any disagreement with what 0. 8 I -- I am just trying to work through this table. You would add, for instance, for 2009 9 183,062 to 304,947, add those two numbers and divide 10 by 8,760, correct? 11 12 Α. Right. 13 0. And those result in the numbers shown at 14 the top right of this table labeled "Jones' Prices," correct? 15 16 Α. Correct. 17 Q. Okay. In the middle of OCC Exhibit 10, first page, the September 15 forward index prices are 18 19 shown and this is taken from OCC Exhibit 8. 20 Can you confirm that? 21 Α. Well, like I said, to the extent I could compare a spreadsheet number with --22 23 Ο. No. I am just asking you to look the 24 number up in the spreadsheet. Those are the numbers 25 in the spreadsheet OCC Exhibit 8. They would be

1 found on the second set 11 of 11.

25

Q.

2 This is the reason why I put the notes in the margin, so that we can confirm that those are the 3 4 correct numbers. I have just transferred from OCC Exhibit 8 to OCC Exhibit 10. 5 6 Α. Yes. 7 Okay. And those numbers for 0. 8 September 15, 2008 as compared to the corresponding 9 numbers on July 15, 2008, the September numbers are all lower than the July numbers, correct? 10 11 Α. Yes. 12 And that would be shown at the bottom of Ο. this table where the 84.5 percent, for instance, 13 14 is -- is 33.15 divided by 39.25, does that look about right? 15 16 Subject to check, yes. Α. 17 Q. Thank you. 18 Now, using the numbers in the middle of 19 the table for September 15, 2008, again, the hours 20 are shown in the column to the right of that -- those tables, and then there's a column "Index Price Times 21 22 Hours." 23 Do you see that? 24 Α. Yes.

Does that look approximately right,

1 subject to check?

2	A. Yes.
3	Q. Okay. And the same procedure that was
4	used to produce the numbers in the upper right-hand
5	corner would be used, again, subject to check, would
6	produce the numbers shown on the right-hand side
7	called "September 15 Prices"?
8	A. Yes, subject to check, they are
9	approximately correct.
10	Q. And then the delta is, again, the
11	September 15 prices divided by the Jones' prices,
12	does that look about right, subject to check?
13	A. Yes, subject to check.
14	Q. I have my daughter's calculator here, but
15	I don't think we really need to go through that.
16	Now, do you agree that some years have
17	different numbers of peak and off-peak hours?
18	A. Leap years, for example.
19	Q. There might be a different arrangement of
20	holidays, for instance, as well?
21	A. Yes.
22	Q. Yes. Let's turn to the second page of
23	OCC 10.
24	Now, when you did your calculations, you
25	assumed there were the same number of hours peak and

off peak for 2009, 2010, and 2011; is that correct? 1 2 Α. That's correct. Q. Okay. Would you accept that 2011 3 4 actually has fewer -- subject to check, would you agree that there are more off peak and fewer peak 5 б hours for 2011 compared to 2009 and 2010? Did you 7 check into that? 8 A. I -- I don't recall looking at that. 9 Okay. You were suggesting that the Q. second table on OCC Exhibit 10 was exactly the same. 10 The second table differs in the number of hours peak 11 12 and off peak for 2011. 13 Do you see that? 14 Yes. It has 16 fewer hours. Α. 15 Q. Okay. Which would be 16 peak hours. 16 Α. 17 Q. Right. And more off-peak hours corresponding to that. 18 19 Α. Right. 20 Do you have any reason to believe that --Q. 21 I represent to you that this table has been constructed the same way as the other table except 22 23 for using different hours for peak and off-peak for 24 2011. 25 Do you have any reason to doubt that?

26 I don't have any reason to doubt the 1 Α. 2 construction of the table, but I haven't checked as to whether or not there is one fewer holiday in 2011 3 4 or not. Okay. So if the numbers --5 Q. б Α. Or one more holiday, I should say. So if the numbers for peak and off peak 7 Ο. 8 were correctly stated on the second page then, then the resulting prices that we worked through for the 9 Jones' prices and the September 15 prices would be 10 11 correct, subject to check? 12 Α. The arithmetic would be correct, other 13 things equal. 14 Right. Thank you very much. Q. Are we through with these exhibits? 15 Α. Yes, we are. 16 Ο. 17 Dr. Jones, do you agree that -- I'm 18 sorry. 19 Your calculations in arriving at Exhibit 20 2 of your testimony used forward prices. I think we 21 have established that, right? 22 Calendar forwards, yes. Α. When you say "calendar forwards," you 23 Ο. 24 mean for 2009, 2010, 2011? 25 Α. No, it's the provision amount of fixed

amount of energy for a 12-month period. 1 2 Q. And those are the periods. That's correct. 3 Α. 4 Dr. Jones, do you agree a forward Ο. 5 contract price is the expected real-time price that 6 would prevail at the term maturity of the contract? 7 Generally speaking, forward prices are Α. 8 the then-current market's best estimate of prevailing future spot prices at the maturity of the contract. 9 That's my definition. 10 11 Ο. Okay. That is then in theory you are 12 trying to predict what the spot price will be in the 13 future. 14 Generally speaking, yes. I'm not but Α. that's the market's estimate. 15 16 Okay. Would you please turn to page 14 Ο. 17 of your testimony. 18 Α. Okay. 19 Q. And line 11 where you discuss a 5 --20 \$7.50 per megawatt hour number. Do you see that? 21 Α. I do. 22 And that's for transmission and the Ο. 23 ancillary service cost, correct? 24 Α. That's correct. 25 Q. And that \$7.50 is ultimately factored

28 into your price for 2009 that was listed on page 2 of 1 2 your testimony, correct? A. That's correct. It's one of the cost 3 4 components buildup to the price. Q. Okay. Not only for 2009 but for 2010 and 5 б 2011 also? 7 A. It's an invariant number for those three 8 years. 9 Q. Now, does that \$7.50 get multiplied by the margins that you show on pages 25 and 26 of your 10 11 testimony? 12 A. Yes. 13 MR. SMALL: Thank you very much. I have 14 no further questions. 15 EXAMINER PRICE: Thank you. Mr. Yurick. 16 17 MR. YURICK: I have no questions of this 18 witness. Thank you. 19 EXAMINER PRICE: Ms. McAlister. 20 MS. McALISTER: No questions, thank you, 21 your Honor. EXAMINER PRICE: Ms. Fonner. 22 23 MS. FONNER: Thank you. 24 _ _ _ 25

1	CROSS-EXAMINATION
2	By Ms. Fonner:
3	Q. Good morning, Dr. Jones.
4	A. I can barely hear you, I'm sorry.
5	Q. Good morning, Dr. Jones.
6	A. Good morning.
7	Q. Cynthia Fonner from Constellation Energy.
8	We too had the opportunity to peak on the phone
9	sometime ago.
10	A. Yes, we did.
11	Q. I want to have you turn in your testimony
12	to pages 3 and 4. You make reference to the Revised
13	Code in there, correct?
14	A. I assume you are talking about at the
15	bottom of page 3, or are you talking about the
16	entirety of page 3?
17	Q. In the entirety, and specifically you
18	make reference to Sections 4928.143 and 142. Do you
19	see that?
20	A. Yes, and 141.
21	Q. And I take it you are familiar with the
22	Revised Code regarding standard service offers for
23	electric security plan and market rate offers; would
24	that be correct?
25	A. I am more familiar with the market rate

1 offers than I am with ESP, but I am generally

30

2 familiar with the code, yes.

And are you familiar that an ESP to be 3 Ο. 4 found more variable than an MRO it must be more variable in the aggregate? Are you familiar with 5 6 that language from the Revised Code? 7 Yes. I believe the language says Α. something to the effect if the Commission determines 8 9 that the ESP is more favorable in the aggregate than 10 the MRO, then it can approve the ESP. 11 And for purposes of your analysis, did Ο. 12 you look at FirstEnergy's ESP? I read through it, but because my task in 13 Α. 14 this case was to calculate what essentially would be the market price as of July 15, I cannot testify as 15 to the details, and I have no idea where some of the 16 17 numbers came from. 18 Are you familiar -- you indicated you are Ο. 19 familiar with some of the aspects of the ESP. Are 20 you familiar with the fact that the ESP contains a 21 minimum default service charge that is nonbypassable, 22 meaning that it would be charged to customers who 23 choose an alternate provider for their generation 24 supply?

25 A. It's my understanding, yes.

31 1 Are you familiar as well that there is a Ο. 2 standby charge that would be applied to those customers as well? 3 4 Α. Yes. 5 Q. Are you familiar that there are б generation deferrals that would be, again, applied to all customers, including those who are shopping, 7 8 regardless of whether they took generation service from FirstEnergy? 9 I'm familiar that a generation deferral 10 Α. 11 charge exists, but I don't know anything about the details. 12 13 And you did not include any of those 0. 14 components in your analysis because you were looking only at the market rate offer; is that correct? 15 16 That's right. I was -- I was simply Α. 17 responding to what appears to be the statutory test 18 in this case, which is the Commission is going to be 19 asked to make a determination of favorable in the 20 aggregate and you don't -- MRO is a totally different animal than ESP. 21 2.2 And you were not yourself trying to Ο. 23 compare the ESP to the MRO? 24 Α. No. 25 Q. Now, with respect to -- and with respect

to the MRO, you were not trying to find a competitive 1 2 price for what FirstEnergy's ESP offering would look like; is that correct? 3 4 I am not sure I understand the question. Α. 5 The phrase that's throwing me is am I "trying to find б a competitive price." I don't know what you mean by that. 7 8 Q. You are not trying to find out, for example, if an ESP-like product were bid 9 competitively, what that would look like? 10 11 No, I am not. Α. And with respect to the MRO, did you 12 Q. 13 review FirstEnergy's specific rate offer from this 14 proceeding? Yes, I reviewed it. 15 Α. And are you aware that the MRO would 16 0. 17 impose upon customers that shop uncollectible amounts from those customers who continue to take generation 18 19 supply from FirstEnergy? 20 Could you restate that, please? Α. 21 Q. Certainly. Were you aware that as part of FirstEnergy's market rate offer that customers who 22 23 take generation supply from a competitive supplier, 24 by that I mean someone other than FirstEnergy, would 25 nevertheless pay FirstEnergy for uncollectible

33 amounts related to generation supply from customers 1 2 who take generation from FirstEnergy? My recollection wouldn't -- probably 3 Α. 4 wouldn't be that description, but there is what I 5 would characterize as a nonbypassable charge. 6 Q. And did that factor into your calculations at all in --7 8 Α. No. 9 Q. -- for purposes of this testimony? 10 Α. No. 11 Q. Would you agree that a customer who shops pays uncollectibles for other customers affects 12 13 switching risks? MR. HAYDEN: Objection, your Honor. This 14 is outside the scope of Dr. Jones' testimony. 15 16 MS. FONNER: Dr. Jones talks rather 17 exactly about switching risks in his calculation in 18 the MRO. 19 EXAMINER PRICE: Overruled. 20 THE WITNESS: I'm sorry, I got lost in 21 the objections and so forth. What was the question 22 again? 23 MS. FONNER: Could you read the question 24 back for me. 25 (Record read.)

A. I don't have an opinion on that, I simply
 haven't considered that.

(By Ms. Fonner) But that that might be a 3 0. 4 consideration for a customer who is looking to shop; 5 would you agree? б Α. Well, the choice to shop is a decision at the margin, and the charge that you described, at 7 least in the context of how I think you are using it 8 9 or my understanding of it, would be -- tend to be a fixed cost. 10 11 So I don't know, you know, in that context it wouldn't be part of the decision calculus 12 13 at all. 14 Q. Well, would you agree a competitive supplier themselves has uncollectible risks from 15 16 their customers? 17 A. I would presume so. That's the nature of 18 the markets. 19 0. And that would be factored into the rate 20 that would be charged to a shopping customer by a 21 competitive supplier? Again, it's hard for me to say what would 22 Α. 23 be considered by any individual supplier, but to the 24 extent that it was characterized as a risk in the 25 expectational component of the supplier, then it

1 would come into play.

2	Q. And you recognize that a shopping
3	customer under those scenarios would be paying not
4	only for the uncollectible risk of the competitive
5	supplier but would also be paying for FirstEnergy's
6	uncollectible risks associated with its generation of
7	supply?
8	A. Well, not necessarily. That's what I
9	said before. I said to the extent that the
10	competitive supplier chooses to include that, that
11	is, if he considers it to be a meaningful risk,
12	perhaps, but that's going to differ from one supplier
13	to the next. And it could actually end up being
14	trivial in all cases.
15	Q. Let's step back.
16	When we are talking about the
17	uncollectibles, you understand that we are talking
18	about FirstEnergy imposing this charge on all
19	customers, including those who take supply from
20	someone else.
21	A. That's how they chose to structure their
22	MRO, yes. That's my understanding.
23	Q. And in that case a customer who shops
24	would be paying uncollectibles associated with
25	FirstEnergy's customers as well as uncollectible

risks for their own choice of supplier? Do you 1 2 recognize that? If such risks exist. 3 Α. Speaking of risks, you talk about 4 Ο. 5 switching risks in rather great detail, and on page б 20 of your testimony you speak specifically of aggregation programs. 7 8 Α. Okay. I am on page 20. Did you have a particular line in mind? 9 You make reference, first of all, that 10 Ο. 11 currently on line 4, approximately 50 percent of 12 residential customers and commercial customers are in 13 jurisdictions with aggregation programs, correct?

14 That's correct, that's an approximation. Α. 15 Ο. And on lines -- begin on 15, you make the assumption that in the future those numbers will be 16 17 50 percent, 75 percent, and ultimately 100 percent of 18 customers will take generation as part of a 19 government aggregation group for 2009, '10, and '11

20 respectively; is that correct?

21 Α. Let me be clear.

22 As I said in my deposition and as my 23 testimony indicates, this is a characterization of 24 the number of the percent of the customers who will 25 have opportunity to shop. It's not a shopping

1 forecast.

Q. And with respect to the aggregation
programs themselves, Ohio allows for opt-in and
opt-out aggregation programs; is that correct?
A. My understanding is you are in, and you
have to opt out voluntarily.
Q. Okay. And for an opt out, there are
certain steps that a community must take in actual
order for that to be approved.
A. I haven't I haven't studied that.
Q. Okay. So you are not aware of the fact
that in order to have an authorized aggregation
program, the majority of customers in that
jurisdiction must authorize that in an election?
A. Yeah. They have there has to be a
deliberate action to avoid being part of the
municipal aggregation program. You can't be a casual
activity.
Q. And as part of that authorization, there
has to be a plan of operation and public hearings?
A. I don't know what the level of detail is.
Q. And you don't know what time it might
take for that process to be completed?
A. Well, we have we have an estimate of
time in Steve Littlechild's report, his study of the

marketplace, and this is getting in, albeit, but the 1 2 period of time of that approximately one year. Okay. And with respect to the number of 3 Ο. 4 customers who have the opportunity to take service 5 under an aggregation program versus that who actually 6 do take service under an aggregation program, do you know what the percentage of customers are in Ohio 7 8 that are currently taking service under a government 9 aggregation program? As of today? 10 Α. 11 Ο. Yes, sir. No, I don't. The incentives to 12 Α. 13 participate in an aggregation program given an MRO as 14 I have laid it out would be substantially different than the incentives there are today. 15 16 And do you know what percentage who are 0. 17 taking -- participating in government aggregation programs are taking service from someone other than 18 19 FirstEnergy's affiliate FE Solutions? 20 As of today, I have no idea. Α. 21 Q. Now, government aggregation programs exist in other jurisdictions as well; it's not unique 22 23 to Ohio, is it? 24 That's my understanding, yes. Α. 25 Q. And your analysis does not take into

account -- you did not perform any analysis about 1 2 aggregation programs in those other jurisdictions included in your testimony, did you, sir? 3 4 Α. No. But, again, mine is not a shopping 5 forecast. It's simply pointing out there is ample б time for 100 percent of the customers in Ohio to become part of an aggregation program if they choose 7 8 to do so. In talking about switching risks in 9 Q. 10 general, are you aware of what percentage of those --11 of customers currently are shopping? 12 Α. I'm sorry? 13 Are you aware of what percentage of Ο. 14 customers in the FE service territory are currently 15 shopping? Α. Not at this moment. The last record I 16 17 have is, you know, the study from the Public 18 Utilities Commission, but it's not in October or 19 later. 20 Now, turning to your calculation of the Q. 21 margin, it's my understanding that you relied on essentially two things, a report from the Illinois 22 23 Commerce Commission regarding the comment, at Ameren 24 auctions, and Mr. Graves' analysis; is that correct? 25 Α. Yes. Those are the two references cited

in my exhibit -- various Exhibits 7, 8, 9, 10. 1 2 Q. And you did not conduct any independent analysis of your own? 3 4 Well, no, except that I am generally Α. 5 familiar with those auctions. My company advised on 6 some of those auctions. But the margins in those cases are not 7 0. something that's published, but rather they are 8 estimated or forecasted, correct? 9 Well, they are calculated from the 10 Α. difference between the -- the known costs and the 11 12 actual amount bid at that point in time. 13 And on page 25 of your testimony you use Ο. margins increasing for low shopping risk customers of 14 10 percent, 15 percent, and 20 percent for 2009, '10, 15 and '11 respectively. That's on lines 13 through 15. 16 17 Α. That's correct. And you did not include any workpapers 18 Q. 19 for that particular figure, rather that is an 20 assumption on your part; is that correct? 21 Α. No. I'm sorry, I don't know what you 22 mean I didn't provide workpapers. There's a cite to 23 the appropriate references. In fact, I have, you know, Exhibit I believe it's 6 or 7. 24 25 Q. But it's essentially a simple

1 calculation; it's a mathematical calculation that can 2 be performed?

3	A. Yes. What I did an array of auctions,
4	an estimate of the percent of the margins in this
5	case for low shopping risk customers based on the
б	actual outcome of the auctions.
7	Q. And on pages on page 26, for higher
8	shopping risk customers you essentially simply
9	doubled that calculation; is that correct?
10	A. No. Again, if you go to the array of in
11	this case high shopping risk customers, you would
12	find these percentages would would mirror the
13	individual percentages for the years in question.
14	Q. But, again, we are talking about a
15	mathematical equation?
16	A. It's an analytical calculation.
17	Q. Mr. Small spoke with you about some of
18	the price tests the Cinergy Hub and just to be
19	clear, that's the hub that you used for your
20	analysis, correct?
21	A. That's correct.
22	Q. And since the time of well, that was
23	discussed since the time of your deposition, but in
24	the months since your deposition those prices have
25	continued to fall; would you agree?

- A. Yes.

Q. And have you reviewed the prices at the
Cinergy Hub, the forward contracting prices at the
Cinergy Hub, prior to your testimony today?
A. Immediately after my deposition but not
any time commensurate with today.
Q. You had checked the prices at the Cinergy
Hub the day prior to your deposition; is that
correct?
A. That's correct.
Q. And you did not you have not checked
those did you not check those prices in
preparation for your testimony today?
A. No, I did not.
Q. Would you accept, subject to check, that
the current forward price peak at the Cinergy Hub is
now \$5 in 2009?
MR. HAYDEN: Objection, your Honor. He
just testified he has not even looked at these
numbers.
EXAMINER PRICE: Sustained.
Q. Would it surprise you that prices at the
Cinergy Hub had fallen approximately 22 percent since
your calculations of your July 15 price?
A. I have no way of making that

1 determination. I will stipulate that they are 2 certainly lower. 3 Q. And it may be in order of that magnitude? 4 A. I have no idea what the order of 5 magnitude is. 6 MS. FONNER: Nothing further. 7 EXAMINER PRICE: Thank you. Mr. Smith. 8 9 _ _ _ 10 CROSS-EXAMINATION 11 By Mr. Smith: Q. Good morning, Dr. Jones. My name is 12 Craig Smith. I represent Material Sciences 13 14 Corporation, an industrial customer. A. Good morning. 15 16 Q. Good morning to you. 17 I just want to get a sense of on Page 2 18 of your testimony you describe the purpose of your 19 testimony. 20 Α. Yes. 21 Q. What was your understanding would the 22 FirstEnergy companies use your findings for in 23 presenting this ESP case? 24 Basically according to the statute, my Α. 25 understanding comes from that which is the MRO was

a -- would be used to compare and evaluate on the 1 2 part of the Commission the proposed electricity security plan of the company. 3 4 Q. And based on your understanding of that 5 purpose, you developed three prices; is that correct, 6 for three different years? A. You are -- I was required to do that, 7 8 yes. 9 Q. Okay. And you stated those prices on page 1 of your testimony -- or actually on page 2 at 10 11 the bottom. 12 A. Yes, subject to the small change that's 13 in the errata for the second price. 14 Okay. So those lines 14 through 16. Q. That's correct. 15 Α. Now, in undertaking your review, you were 16 Ο. 17 not attempting to find the FirstEnergy Solutions price, were you? 18 19 Α. No, not necessarily. These are the 20 prices that a third-party provider would offer in 21 lieu of taking on a slice of the FirstEnergy's system supply for the SSO. 22 23 Q. And those -- would these be winning bid 24 prices? 25 Α. That would be my presumption.

45 1 Okay. And you are also presuming that Ο. 2 these prices were the result of having met the statutory requirements for the Commission to accept 3 4 the bids as outlined in the statute you quoted in 5 your testimony? б Α. I'm sorry. I don't understand. I hear your question, but I don't understand what it is that 7 8 it means. I'll strike the question. 9 Q. It's also your understanding on page 4 10 11 that the Ohio FirstEnergy companies' standard service 12 offer would require a full-requirements electric service; is that correct? 13 14 Α. Yes. And could you briefly describe a 15 Q. full-requirements agreement. 16 17 Α. It would be requirements for not only energy but capacity, ancillary services, and so 18 19 forth. It would be the complete ball of wax. 20 That's why I characterized it a moment 21 ago as stepping into the shoes of FirstEnergy for that slice of system. 22 23 0. But what other types of agreements could 24 FirstEnergy request rather than full requirements? 25 Α. Well, you could have partial

46 requirements, in other words the provision of energy 1 2 only. Q. Okay. Now, in writing your testimony, 3 4 were you writing it from the perspective of the operating companies or from the perspective of the 5 6 potential generation supplier? 7 The potential generation supplier. Α. 8 Q. Okay. Now, in order to begin your calculations, you looked at the directed cost 9 components, correct? 10 11 Α. Yes. 12 And could I summarize those as publicly Q. 13 available or at least comparable -- quantifiable? 14 Well, you could certainly characterize Α. them as numbers. Some of them came from the company 15 16 themselves because some of the direct costs, for 17 example, require actual load numbers that the company 18 would know, but it is -- these are numbers that can 19 be obtained. 20 Now, did those numbers come from Q. FirstEnergy Solutions? 21 22 I didn't get them from FirstEnergy Α. Solutions. I don't know what the source of the 23 24 numbers were. I acquired them from the witnesses in 25 this case.

1 0. Well, you understand the operating 2 companies do not own generation? I do that, yes, so my presumption is 3 Α. 4 there has to be some -- the owners of the generation -- the owner of the generation units would 5 б have to provide that. 7 Then you testify, page 5, about FE Ο. 8 provided the load forecast data for the rate -different rate classes. 9 10 Α. That's correct. 11 Now, did -- you received the load Ο. 12 forecast requirements, right? Α. 13 Yes. 14 Now, was that only for, I guess, retail Q. sales or -- stop that. 15 Are those retail sales forecasts or why 16 17 don't you describe what kind of forecast you 18 received? 19 Α. The load data that I received were for 20 the years 2005 to 2007, and so because my load numbers are the same as the LMPs for the same time 21 22 period for things like load shaping calculations, so 23 they are historic numbers in that regard. 24 Well, how many megawatts would the Q. 25 supplier have to serve as a full-requirements

1 generation provider?

2	A. They are listed in my exhibits.
3	Q. Okay. Can you summarize them quickly,
4	not by customer class, just total amounts?
5	A. I don't know you mean off the top of
6	my head what are the megawatts?
7	Q. I was just actually looking for a range.
8	A. I don't know without consulting because I
9	was paying more attention to the individual classes
10	but.
11	Q. Okay. So I can look at the exhibits and
12	come up with my own conclusion?
13	A. That's correct.
14	Q. Okay. And now, based on that usage
15	that is whatever that usage is that was the one
16	of your foundations for determining the market price?
17	A. Yes.
18	Q. Okay. Now, am I correct that the margin
19	is the subjective part of your analysis?
20	A. Well, it's not subjective. I didn't
21	you know, it's not my number and my number
22	exclusively in the sense that it was drawn from the
23	results of auctions in the four or five jurisdictions
24	where those auctions are taking place.
25	Q. Well, hypothetically if you were

testifying before the -- another state's commission that has shopping, would your testimony essentially be the same?

4 Α. Under these terms and conditions, yes. Okay. So it's -- it's not Ohio specific. 5 Q. б Α. It's not Ohio specific in the sense that -- well, we'd be talking about delivery to the 7 8 Cinergy hub, and subsequently to the FE load 9 forecast, because you have things like distribution losses and MISO charges, but the construct would be 10 11 the same, yes; the numbers would change. 12 Well, in looking at your analysis of the Ο. margin, which is another term for risks; is that 13 14 correct? 15 Α. That's correct. Okay. You put a lot of emphasis on 16 0. 17 shopping, true? 18 Yes. It was -- it is a large component. Α. 19 These components change. For example, this 20 discussion today about the decline in the energy 21 costs since my deposition or since the filing of this 22 testimony is just a piece of what would go into the 23 expectation of a third-party provider participating 24 in an MRO today but, you know, capital cost, risks, 25 and so forth are many times what they were in July

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1 today.
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2	In fact, if you were to hold an MRO
3	today, you might not get anybody to show up.
4	MR. SMITH: I move to strike that answer.
5	I don't believe it's responsive.
6	EXAMINER PRICE: Overruled.
7	MR. SMITH: May I have my previous
8	question reread, please.
9	(Record read.)
10	Q. Is that a yes?
11	A. Yes.
12	Q. And in putting that emphasis on shopping,
13	you did look at this particular point in your
14	testimony specific to Ohio situations, true?
14 15	testimony specific to Ohio situations, true? A. Yes.
15	A. Yes.
15 16	A. Yes.Q. And you reached certain conclusions,
15 16 17	A. Yes.Q. And you reached certain conclusions,correct?
15 16 17 18	 A. Yes. Q. And you reached certain conclusions, correct? A. Yes.
15 16 17 18 19	 A. Yes. Q. And you reached certain conclusions, correct? A. Yes. Q. Now, in reaching those conclusions, did
15 16 17 18 19 20	 A. Yes. Q. And you reached certain conclusions, correct? A. Yes. Q. Now, in reaching those conclusions, did you look back at the history of Ohio between the year
15 16 17 18 19 20 21	 A. Yes. Q. And you reached certain conclusions, correct? A. Yes. Q. Now, in reaching those conclusions, did you look back at the history of Ohio between the year 2000 through 2008 in terms of shopping percentages?
15 16 17 18 19 20 21 22	 A. Yes. Q. And you reached certain conclusions, correct? A. Yes. Q. Now, in reaching those conclusions, did you look back at the history of Ohio between the year 2000 through 2008 in terms of shopping percentages? A. Well, I'm certainly generally familiar

shopping, let's say, last year was lower than it was 1 2 during the initial days following the transition plan 3 with all the incentives that were in place, but I 4 can't tell you what the percentage was in '07 and 5 certainly not today. б Q. Well, did you -- were you aware that many of the largest industrial customers had special 7 8 contracts during that time? 9 During which time? I'm sorry. Α. 10 Ο. Between 2000 and end of 2008, special contracts in effect for industrial customers. 11 Α. I have no idea whether that's true or 12 13 not. 14 Now, returning back to your price Q. conclusions for 2009, 2010, and '11, can you estimate 15 how much -- what percentage of those prices would 16 17 reflect risk? You mean outside of the calculation that 18 Α. 19 I did to calculate the margin? 20 Well, fundamentally how did you determine Q. 21 the risk? Well, I -- we talk about -- talked about 22 Α. 23 it here already this morning, but we had individual 24 annual risks, let's call them risk adders, if you 25 like, for '09 through '11 for low risk shopping

52 customers and high risk shopping customers, and those 1 2 percentages have changed as you move out in time but they vary from, you know, as low as 10 percent to 3 4 40 percent. Q. And just in conclusion, those risks do 5 6 not specifically address the risks that FirstEnergy Solutions would have if they are the competitive 7 8 supplier? 9 Α. It's the risk that anyone participating 10 in an MRO would assess with respect to this margin. 11 MR. SMITH: Nothing further. 12 EXAMINER PRICE: Thank you. 13 NOPEC? 14 _ _ _ 15 CROSS-EXAMINATION By Mr. Breitschwerdt: 16 17 Q. Good morning, Dr. Jones. 18 Α. Good morning. 19 Ο. My name is Brett Breitschwerdt. I met 20 you briefly a few weeks ago. I am here on behalf of 21 NOPEC and Northeast Ohio Public Energy Council, which 22 is currently the largest governmental aggregation in 23 the state of Ohio, but we're excited based on your 24 testimony that either we are going to get a lot 25 bigger or we are going to have some serious

1 competition in the next couple of years.

2 Let me start out by talking generally about your exhibits. The way your exhibits fit 3 4 together, essentially Exhibits 2 through 7, you add all those numbers up and I think you referred to them 5 б earlier as direct costs, which gives you the market rate off prices for 2009, 2010, 2011 on Exhibits 8 7 8 through 9. Well, I think -- I think the direct costs 9 Α. appear in Exhibits 2 through 5. The margins appear 10 in Exhibits 6 and 7. 11 12 Q. Okay. So 2 through 7 incorporate the 13 direct costs, and margin and total prices are on 8 through 10; would that be correct? 14 The price calculations are -- by class 15 Α. are on 8 through 10. 16 17 Q. Okay, and have you reanalyzed any of the 18 calculations either of direct costs or margins based 19 on your Exhibits -- within your Exhibits 2 through 7 since July 15, 2008? 20 21 Α. No. In my opinion there is no need to. 22 But if the Commission or Commission staff Ο. 23 requested that you update this analysis, would you do 24 so? 25 Α. Well, if directed by the Commission, I

assume my client would instruct me to do so, you are 1 2 asking me to make an assumption, that's correct. All right. If you could turn to Exhibit 3 Ο. 4 8 of your testimony, please. I just -- I would like 5 for you to explain in the -- actually at the top you 6 have residential high shopping risk customers, residential low shopping risk, and then commercial 7 8 high and commercial low shopping risk customers. 9 Could you just explain why you separate 10 these customer classes into these two categories, 11 please? 12 Did you say page 8 or Exhibit 8? Α. 13 Ο. Exhibit 8. 14 Α. Oh, I'm sorry. Hang on. 15 Okay, and your question went to why did I divide these customers into the various risk 16 17 categories? 18 Ο. That's correct. 19 Α. The -- again, the risk categories go to 20 the opportunity for customers to shop -- currently 21 approximately half of FirstEnergy's customers are 22 members of organizations like the one you represent. 23 And so the other half are not such that 24 it -- in the first year of 2009 my presumption was 25 that only those that were currently members of

55 municipal aggregation organizations could participate 1 2 and that's the reason for the division. And so essentially the risk of this 3 Ο. 4 difference is based specifically on the ability -the current or future expected ability to participate 5 6 in large scale government aggregation; is that correct? 7 8 Α. And the risk that a supplier would be subject to, for example, in 2009. 9 I'm sorry, the risk a supplier would be 10 Ο. 11 subject to in 2009? 12 Yes. It's not only shopping risks but Α. 13 there are other risks. 14 Okay. In looking at the line where you Q. state what the margin is, I see taking, for example, 15 residential high and residential low, there's a 16 17 10-percent difference that you calculate there. 18 Would the -- that 10-percent difference 19 be based on the ability to participate in a large 20 scale government aggregation or are there other risks 21 associated with that 10-percent difference? 22 The division between 10 and 20 is a Α. 23 subject that is driven by the opportunity to shop. 24 Is that what your question was? 25 Q. Yes. And you -- in your testimony you

1 associate the opportunity to shop with the

2 opportunity to participate in large scale government 3 aggregation?

A. Right, but I don't want to leave you with the impression if you don't have the -- if you have a customer without the opportunity to shop doesn't mean that a supplier to the market faces no risk. In other words, it's not zero in this case; it's positive 10 percent.

Q. Correct, but the 10 percent difference between the 10 percent and 20 percent is what I was referring to and that 10 percent is based on the opportunity or ability to participate in large scale governmental aggregation.

A. Yes, carrying all other risks with it,
and that's as a result of my analysis of the other
auctions.

Q. Okay. And then in 2010, just to go through your Exhibits 9 and 10, that risk would -the difference in those risks would -- I'm sorry. Let me strike that.

The amount of risk that you associate with the opportunity to participate in large scale government aggregation would increase to 15 percent in 2010 and then 20 percent in 2011, correct?

57 If you compare 2000 -- the exhibit for 1 Α. 2 2010, are you asking me to compare 2010 to 2009 or 20 --3 4 Please turn to Exhibit 9. Ο. I have Exhibit 9. 5 Α. б Q. The margin between 30 percent and 15 percent is the 15 percent, correct? 7 8 Α. That's correct. It's once again the 9 increment of margin associated with the opportunity 10 of more people shopping rather than less. 11 Okay, and then in 2011 there is no high 0. 12 and low risk. You base the 40 percent -- or excuse 13 Strike that. me. 14 For 2001 there is no high and low shopping risk, and the reason for that is your 15 expectation that 100 percent of customers within the 16 17 FirstEnergy service territory will have the 18 opportunity to participate in governmental 19 aggregation at that time. 20 Α. That's correct. All customers within

21 FirstEnergy's territory would have the opportunity to 22 shop such that all customers would exhibit the same risk characteristics. 23

24 And you allocate 20 percent of the margin Ο. for 2011 to that risk. 25

58 Well, simply as it shows there's no -- I 1 Α. 2 haven't distinguished between customers in 2011. They all bear a 40-percent risk factor, so it's 3 4 shopping risk plus other things. 5 Q. Okay. So I did the math, and I б understand that you don't have a calculator, but just to -- for 2009 would you accept, returning back to 7 Exhibit 8, that it would be, for the residential 8 customers -- the additional risk of governmental 9 aggregation would be \$8.28 per megawatt hour? 10 And essentially what I did, I took the 11 12 82.82 which I calculate as the total direct cost and 13 added on the 10 percent of the margin that you 14 calculate resulting in --You are taking the difference between 15 Α. column 1 next to the last line and column 2 next to 16 17 the last line? 18 0. Yes. 19 Α. I had an arithmetic difference, that's 20 correct. For commercial \$7.98, subject to check? 21 Q. 22 Subject to check, that same arithmetic Α. 23 difference. 24 Okay. And then just for my Q. 25 clarification, at the beginning you said in your

59 errata sheet that, No. 31, that there is an error on 1 2 your calculation 2010 market price but you -- I am 3 not seeing where in your errata you explain what the 4 miscalculation was or what the reason for the change 5 was and I just want to make sure -б Α. Look across the row total entitled margin, 30 percent, 15, 15, 30, 30 percent, 15, those 7 8 number -- two numbers are reversed in the second 9 column, and that also appears in the spreadsheet calculation since that caused the numbers to change. 10 11 I see. But subject to check the Ο. 12 difference in margin associated with participation in 13 governmental aggregation 2010 for the rest of the 14 country for residential customers will be \$12.31 per 15 megawatt hour, and then \$11.85 for commercial 16 customers, the arithmetic difference as you --17 Α. Well, I don't know if you can -- I haven't done it, and the number went down for '09, so 18 19 I'm not quite sure that your arithmetic would be 20 correct. 21 But it was a small change, so unless you are going to ask me to confer -- confirm a very 22 23 specific number, we can probably move forward. 24 Okay, I think that would be reasonable. Ο. 25 I would just do the same thing for 2011, which there

are no changes, so I assume my arithmetic is correct
 here.

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It would be the difference -- the 3 4 margin -- the percentage of the price associated with the margin related to participation in governmental 5 б aggregation which we discussed earlier would be \$15.97 for the residential customers and then \$15.83 7 for commercial customers, which would be 20 percent 8 of that margin. 9 That's a calculation I have not 10 Α. 11 performed, but I hear what you are --12 Subject to check, would that be the Q. 13 reasonable way to make that calculation? 14 Α. I don't know about being "reasonable," but I understand your methodology. 15 Would you agree with it? 16 0. 17 Α. It would be consistent with your method. Would it be consistent with producing the 18 Q. 19 calculation that I am trying to get to essentially 20 the margin associated -- the percentage of price 21 associated with the margin related to governmental aggregation participation? 22 23 Α. It would be -- it could be consistent 24 with the methodology that you have employed from

25 beginning with Exhibit 9.

O. Okay. And looking at Exhibits 8 through 1 10, would you agree with me that the total direct 2 costs to serve FirstEnergy load actually decreases 3 4 over the three-year terms of either the electric 5 security plan or --6 Α. I'm sorry, increases or decreases? 7 0. Deceases. 8 Α. Are you asking about the energy costs? I am looking at the total direct costs 9 Q. 10 per megawatt hour as you set them forth on Exhibits 9, 10. My understanding is they decrease from 11 76.30 -- I'm sorry, starting on Exhibit 8, they 12 decrease from 77.32 to 76.39 to 75.41 over the three 13 14 years of your calculations. That's right, absent the increasing risk 15 Α. factor all else equal. 16 17 In other words, if I had a constant risk factor, you would see decline in them, small declines 18 19 but declines nonetheless. 20 Okay. So we can -- based on your Q. 21 calculation of the margin is what results in the increase over the three years? 22 23 Α. As it should. Risk always increases with 24 time. 25 Q. Okay. In preparing your analysis what

information, if any, did the companies provide you 1 2 regarding customer participation in governmental aggregations? 3 4 Α. Nothing. 5 Q. So did you request any information from б the companies? 7 Α. Well, I had -- like I said, I had the 8 Commission's study with respect to historical 9 information, and I presumed your question went to time periods after that study was completed. 10 11 In other words, you are asking me did 12 they -- did I ask them and did they tell me what 13 current participation was? 14 Or did you get any information from the Q. 15 companies regarding participation in governmental aggregation? 16 17 Α. Nothing other than what appears in that 18 study. I am not sure that they know. I have no 19 idea. 20 Did you review the sections of Senate Q. 21 Bill 221 relating to government aggregation? 22 Α. Yes. 23 O. And how did these sections of 221 inform 24 your analysis of customer participation in 25 governmental aggregation during the three years 2009,

1 2010, and 2011 that you discuss in your testimony?

2 Α. The structure of the Bill is such that if an MRO is the path that the Commission chooses to 3 4 pursue, that they will have put into place a heightened incentive for customers to participate in 5 б a government aggregation program. And can you explain what that incentive 7 Q. 8 is? They will -- once the Commission accepts 9 Α. 10 the MRO process, the ESP is off the table for residents of Ohio, and the residents of Ohio for 11 12 FirstEnergy companies will be subject to whatever bid 13 comes in, whatever winning bid comes in from the 14 marketplace, and that winning bid will establish the then-current level of electricity price, at least for 15 16 the year. 17 And depending upon the trend in energy

17 And depending upon the trend in energy 18 prices from that point forward, given the freedom to 19 choose, consumers will -- will presumably make that 20 choice at the margin. In other words, they will be 21 free to enjoy the opportunity to shop.

Q. Did you review the Senate Bill 221 provisions regarding governmental aggregation with relation to the electric security plan provisions of that Bill?

A. You would have to point me to that
 portion of the Bill.

Okay. Which portions --3 Ο. 4 Α. I don't have it in front of me. That's fine. Which portions did you 5 Q. б review? 7 Well, I read the Bill. What you are Α. 8 referring to doesn't spring to mind so that's why I 9 was asking you to refer me to a particular section. 10 Ο. To your knowledge are there different 11 provisions relating to governmental aggregation in 12 the electric security plan as opposed to the market 13 rate option is selected? 14 I don't recall off the top of my head. Α. So assuming they are not different 15 Q. provisions and provisions related to governmental 16 17 aggregation are the same regardless of whether the ESP or MRO would be selected by the Commission, your 18 19 analysis would, I guess, hold true, so to speak, regardless; is that a fair statement? 20 21 Α. Yeah. Let's be clear. 22 I mean, the ESP offers the Commission an 23 opportunity to effectively negotiate one-on-one with 24 FirstEnergy, whereas, the MRO throws the entire

25 process and all the risks associated with the process

1 open to the marketplace.

2 In other words, the MRO means the Commission has to have the stomach for taking on 3 4 what, in my opinion, are much higher risks than they 5 were in July. б And if they choose to do that, they choose to do that, but we are talking about two 7 8 different animals and there's no way to make an MRO an ESP or vice versa. 9 10 It makes no sense so, yes, my MRO 11 calculation stands today and is equally relevant, 12 which is why I made a comment a moment ago there is 13 no reason to recalculate this thing. 14 I understand that. I'm just saying to Q. say specifically related to the risk of governmental 15 aggregation participation which you calculate is a 16 17 large risk based on the incentives within Senate Bill 18 221, if those -- if those provisions of Senate Bill 19 221 apply equally regardless of whether an electric 20 security plan or market rate option is selected, would those risks be equal -- the risk of 21 participation in large scale governmental 22 23 aggregation? I think that's the guestion. 24 Well, actually I haven't considered it, Α. 25 but as I sit here, my reaction would be it would be

66 dependent upon the terms and conditions of the ESP. 1 2 Okay. In preparing your testimony did Q. 3 the companies provide you with the proposed electric 4 security plan? 5 Α. Well, yes, because it appears in their 6 proposal. 7 I'm sorry, the electric security plan? Ο. 8 Α. Basically the terms of the plan. I don't have the details, no. I don't know what went into 9 the calculations. 10 11 So when they were developing the electric 0. 12 security plan, they provided it to you --13 No, no. I thought you were asking me ex Α. post do I know what's in it, and the answer is 14 generally I am familiar with what's in it, but I had 15 16 no input while it was being developed. 17 Q. So it's fair to say the electric security plan as being proposed had no impact on your 18 19 testimony? 20 No. It wasn't my charge, and it isn't Α. 21 the statutory test. 22 Ο. Okay. 23 Α. It didn't make any difference to me what 24 they proposed in terms of my tasks in this case. 25 Ο. So it would also be fair that the

companies didn't provide you any forecast or analysis of the number of customers they expect to participate in governmental aggregations during 2009, 2010, and 2011?

A. That's right, because it's irrelevant for my study. Remember, I don't have a shopping forecast in my MRO. All I have is a measure of the opportunity to shop.

9 Q. It's irrelevant to your analysis what the 10 companies expect to -- sorry.

Just to state back to you what I think you just said, it's irrelevant to your analysis what the companies' forecast of their expectation or participation in governmental aggregation is during the term of the plan?

16 A. Are we talking about with respect to the17 ESP or the MRO? Does it matter?

Q. Neither of these -- neither of these options have been selected at this point, but Mr. Warvell stated on the plan a few days ago that the companies have a forecast and expectation of what customer participation in governmental aggregation would be in the year 2009.

Would that be relevant to your analysis?A. Not really, no. I suspect any provider

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1	under the MRO might have their different expectations
2	that might differ from Mr. Warvell.
3	Again, it's not relevant to my
4	forecast excuse me, to my estimate.
5	Q. So it wouldn't be relevant to your
6	estimate or your analysis that the companies expect
7	zero percent participation in governmental
8	aggregation in 2009, whereas, you propose 50 percent
9	participation in governmental aggregation in 2009?
10	A. I didn't propose 50 percent
11	participation. I simply indicate that the
12	opportunity to participate is available to have other
13	customers.
14	MR. BREITSCHWERDT: One moment, your
15	Honor.
16	Q. Would you agree with me in negotiating an
17	arm's length contract companies' standard service
18	offer assuming the electric security plan would be
19	approved, would you agree with me that negotiating an
20	arm's length contract to meet the companies' standard
21	service offer it would be economically unreasonable
22	for FirstEnergy Solutions or any other supplier of
23	generation not to take the risk of shopping into
24	account?

Okay. Slowly, because that's a long 25 Α.

1 question. Go ahead.

2 MR. BREITSCHWERDT: Would you mind reading it back, please. 3 4 (Record read.) 5 Α. Tell me who is negotiating this arm's 6 length transaction. 7 Let me clarify it. That wasn't clear, I 0. 8 apologize. It would be the operating companies' --9 this is the electric security plan proposal the 10 11 operating companies' are proposing to contract with 12 FirstEnergy Solutions to supply generation over the 13 three-year term --14 Α. Okay. -- for ESP. 15 Q. 16 So would you agree with me in negotiating 17 that arm's length agreement which has not yet been 18 negotiated that it would be economically unreasonable 19 for FirstEnergy Solutions not to take the risk of 20 shopping into account? 21 Α. Well, my presumption is that they would 22 certainly -- they would consider not only shopping 23 risk but all other risks facing them as a provider of 24 energy in all other -- you know, full service 25 requirements to meet this contractual obligation.

I mean, shopping should just be one of
 several risks they are taking.

And that would be -- and that risk would 3 0. 4 be incorporated into the price that they would negotiate with the operating companies. 5 6 Α. Subject to the terms and conditions of the ESP as approved by the Commission. 7 8 Ο. But if they are negotiating an arm's length contract, the terms -- I mean, they are one 9 entity over here that it's economically in their best 10 11 interest to obtain the best price they can, so the 12 terms of the ESP would be the operating companies' responsibility, so they are trying to negotiate a 13 14 price where they can sell generation based on the risk they perceive, correct? 15 16 Well, I don't -- you know, I'm not trying Α. 17 to be difficult here, but any supplier of full-requirements service will take into account 18 19 whatever risks they perceive, just as you would do if 20 it was an auto company or grocery store. 21 I mean, there is nothing unique about 22 this electricity market except that there are certain 23 things that have to be met, but it's still like any 24 other arm's length transaction; you always take into

25 account risks.

1

O. Okay. Thank you.

2 During your deposition we spoke, and you 3 made a couple of comments I just want to follow up 4 on.

5 You made a comment that shopping has б historically been highly variable in FirstEnergy's service territory, and you explain that by saying 7 8 that with the propensity of customers to shop tended 9 to increase with the opportunity to shop. 10 Do you remember that statement? 11 Yes. I think the study shows that Α. 12 shopping increased over time over the term of the 13 Commission study. 14 And do you recall what the term of that Q. 15 study was? 16 I think -- not off the top of my head, Α. 17 but my recollection it's somewhere between 2001 to 18 2005 or '6. 19 Ο. I think based on your testimony you say 20 that the highest level of shopping was in 2004. Okay, 2004. 21 Α. 22 2004. Ο. 23 Α. I don't recall off the top of my head. 24 But you -- I think you stated earlier you Q. 25 are unaware of the levels of shopping currently or

after the period of that study which you relied on; 1 2 is that correct? I don't know the specific levels. I know 3 Α. 4 that shopping has tended to decrease with the absence of the incentives. 5 б EXAMINER PRICE: Okay. I need some clarification on this issue because this came up 7 8 earlier. 9 You know that shopping has tended to decrease; is that correct, over time? 10 11 THE WITNESS: From 2004. 12 EXAMINER PRICE: Right. But in 2009, you 13 say I treat 50 percent of these customers as taking 14 generation from service; is that correct? 15 THE WITNESS: Let me be clear, Judge. 16 And maybe it's the word "take" is confusing people. 17 None of this is a forecast like those studies based on hard numbers and people that 18 19 actually shop. It's simply half of their consumers 20 will have the opportunity to shop because they are 21 already signed up with the municipal aggregators. 22 It's not an estimate of how many will 23 shop. It's what is the opportunity because it's the 24 opportunity the potential suppliers will use to gauge 25 the shopping risk.

1 Because nobody knows exactly how 2 consumers will behave in the future, but given the opportunity you have to assign a significant --3 4 EXAMINER PRICE: I am having trouble harmonizing the words on the page with the words in 5 б here. What I see you saying at page 20, lines 14 through 17, is "In my analysis, I treat 50 percent, 7 8 75 percent, and 100 percent of these customers as taking generation service as part of a governmental 9 aggregation group...." 10 11 Now, that doesn't seem to me to say 12 having the opportunity to take generation service. 13 That says taking generation service as part of a 14 governmental aggregator group. THE WITNESS: Well, perhaps it's an 15 unfortunate choice of words on my part, but elsewhere 16 17 in my testimony and certainly in my deposition and 18 today I've tried to make it very clear that it's the 19 opportunity to shop based upon the -- having had 20 people -- having signed up people for these municipal 21 aggregation programs, it's not a shopping forecast, 22 however.

23 EXAMINER PRICE: You are assuming by 2011 24 100 percent of FirstEnergy's customers will have the 25 opportunity to shop as part of a governmental

1 aggregation?

2 THE WITNESS: A third-party provider to this market would have to consider the fact that 3 4 because it takes approximately a year to sign up folks that aren't signed up, that by 2011, everyone 5 6 could be signed up. 7 EXAMINER PRICE: Now, I understand. 8 Thank you very much. 9 THE WITNESS: Okay. 10 EXAMINER PRICE: Thank you. 11 MR. BREITSCHWERDT: Thank you. 12 (By Mr. Breitschwerdt) And just as a Q. 13 follow up, we discussed Senate Bill 221 earlier, and 14 you would agree that Senate Bill 221 is supportive of the opportunity of Ohio consumers to participate in 15 16 large scale governmental aggregation, correct? 17 Α. Yes. There is nothing in the Bill that says people are somehow restricted from having the 18 19 opportunity to shop. 20 Q. Okay. Also following up on your deposition, we had a discussion and you made the 21 22 statement in response to a question that I asked that 23 you would be troubled by the premise that the 24 company's proposing its electric security plan in 25 assuming that there will be no shopping.

Assuming that, this premise that the 1 2 companies are proposing their electric security plan and assuming there would be no shopping would be 3 4 correct, why would this trouble you? Well, I don't recall that I said those 5 Α. 6 exact words, but I can answer your question. 7 The -- as I understand it, the companies -- Mr. Blank, I believe, is the witness for 8 9 the ESP, he starts with the notion of no shopping. And that's simply so he can ground his 10 analysis in a world of knowns or absolutes rather 11 12 than having to say something about shopping, just as I have for that matter. 13 14 In other words, I make a recommendation to the fact that in my testimony that the way I've 15 16 essentially set up the calculation of the direct 17 costs is to assume essentially that they are somehow 18 known, and then with the risk factor that I add on it 19 adjusted those hypothetically known from a 20 hypothetically known but those calculated known costs 21 upward to account for the risks in each of those 22 categories too. 23 Let me make sure I don't leave you with

24 the impression my calculation is direct cost just 25 because I can calculate them makes them somehow

absent of risk. They're not. They are loaded with
 risk.

In addition to the risks that are less 3 4 easily calculated such as capital costs and load variable and things of that nature so that you have 5 6 risks across this spectrum of costs whether it has to do with something you can look up in a Midwest ISO 7 8 document or something that we have to estimate 9 through other means. There's risks everywhere. 10 0. Following up on another statement you 11 made during your deposition, you stated that ideally 12 it goes without saying FirstEnergy would like no 13 customers to leave their service territory and shop. 14 Do you remember -- I guess will you 15 accept you made that statement during your deposition? 16 17 A. I'll accept I made a statement something to that effect. 18 19 I was simply pointing out that it's a 20 general business principle that any supplier, whether 21 they are an electricity supplier or tomato supplier, would like to have a large market rather than a 22 23 smaller market. It doesn't go to anything other than 24 that.

25 Q. And would you agree this statement the

general principle is equally true regardless of 1 2 whether the security plan option or the market rate option is approved by the Commission? 3 4 Α. Well, general principles are normally 5 true across specific recommendations but, yeah, I б don't -- I also don't want to leave you with the impression I am saying somehow they are going to 7 8 configure the ESP to prevent people from shopping, because that's not what I am talking about either. 9 10 All I mean is the general principle larger markets because of economies of scale are more 11 12 variable than smaller markets. And in -- within that statement that 13 0. 14 would include shopping by large scale government 15 aggregations. 16 Within what statement? Α. 17 Q. Within the statement that FirstEnergy --FirstEnergy would like no customers who shop, so that 18 19 would include shopping by large governmental 20 aggregation. 21 Α. No, it's not a statement by somehow restricting governmental aggregation the opportunity 22 23 of consumers to shop, it's simply a general business 24 principle bigger allows you to take advantage of

25 economies of scale provision of any product but

particularly capital intensive products such that 1 2 electricity suppliers just like automobile 3 manufacturers prefer a larger market share. That's 4 all. 5 Q. Okay. If could you turn to -- back to б Exhibit 8, please. 7 All right, I'm there. Α. 8 Q. If you will allow me one moment to get 9 there. I just -- the line that says "Load Shaping," 10 I just want to clarify that you've included the same 11 load shaping cost to the companies regardless of 12 whether they are within the 50 percent that are --13 you potentially would expect to have opportunity to 14 participate in large scale government aggregation or not; that's correct? 15 16 That's right. Α. 17 Q. So it's essentially irrelevant to the calculation of load shaping costs whether a customer 18 19 has the opportunity to participate in large scale 20 government aggregation; would you agree with that? 21 Α. The only way that number would change, if I were making a shopping forecast, but I'm not. It's 22 23 a -- the opportunity to shop. 24 And since I don't know what people 25 actually are going to do, the number remains the

1 same.

2 Q. Okay. If could you turn back to your Exhibit 3, please. 3 4 Α. Okay. In looking at the year 2009, all classes, 5 Q. 6 and then moving over to the load-shape price, would you agree with me that's the average price that the 7 8 companies' shape load would be for this year? Α. 2008? 9 10 Ο. I'm sorry? 11 Α. 2008? 12 Q. 2009. Oh, when you said "this year," I didn't 13 Α. 14 know what you meant. I apologize. Looking over in the column 15 Q. year 2009 over to load shape price, the 59.92, which 16 17 is all classes, is your average of the load shape 18 price. 19 Α. Well, the cost. It's the cost that any 20 supplier would bear because individual load by customer class differs from block energy. 21 22 You would have to shape your load and 23 it's based on the column A, for example, which 24 includes the hourly LMPs and the hourly loads from 25 2005 to 2007, the last two full years of data I had

1 when I filed my testimony.

2	So it's an estimate of the load-shaping
3	costs for 2009 based on actual historical numbers.
4	Q. Now, that would apply to any supplier
5	whether it was assessing the costs to serve this
б	shaped load; is that accurate?
7	A. Because this is a full-requirements
8	contract, they would bear the load-shaping costs by
9	customer classes demonstrated here.
10	Q. And the full requirements either for MRO
11	or the ESP because the
12	A. I don't know I don't know about the
13	components of the ESP. You are asking me about
14	something I didn't put together. I didn't
15	participate in.
16	These are the load shaping costs that
17	face suppliers to the marketplace. I am not going to
18	stipulate it's exactly what they would face in the
19	ESP because I don't know how to do that. I didn't
20	look at it, I didn't calculate it, I wasn't part it
21	have.
22	Q. Okay. Well, talk in generalizations then
23	if using your calculation of load shape price I
24	see that the shaping costs for residential and
25	commercial customers is twice as high or actually

more than the load shaping costs for industrial
 customers in 2009.

3 A. That's right. That's typical of most4 markets.

Q. So would it benefit a supplier if there were 90 percent industrial customers and only 10 percent residential or whatever -- I'm sorry, let me strike that.

9 If there were -- if the number of 10 residential customers and commercial customers was 11 reduced hypothetically by 25 percent, would you agree 12 with me that would improve the load shape that the 13 supplier would be considering serving?

A. It would tend to lower the load shaping costs for those group of consumers, but by the same token it would dramatically increase the shopping risk.

So if you are going to follow that with "I am better off in that consideration," the answer is probably not. But, yes, your load shape number would go down on average.

Q. So taking the hypothetical that NOPEC served 25 percent of the companies' commercial and residential customer load, specific to just this load shape price, the remaining load shape price for

the -- the SSO that potential suppliers would have 1 2 to -- would have the opportunity to serve the load shape price prior to the margin that you discussed 3 4 would go down; is that correct? 5 MR. HAYDEN: Excuse me, can we have that б reread. 7 (Record read.) Yeah, you are reciting a hypothetical 8 Α. where if you put it in the terms of hypothetical and 9 10 restate it so I can understand it, maybe I will try 11 and answer it. 12 Q. Okay, hypothetically NOPEC in a 13 governmental aggregation certificate was 25 percent, 14 just to use round numbers, of the residential and commercial customers in the year 2009. 15 Okay, so let me just stop you there and 16 Α. 17 continue in a moment, just so I understand in your hypothetical. 18 19 We've now left 2008 and we are in 2009 20 sometime presumably toward the end of the year, and 21 we observe that 25 percent of the customers that existed, the FE customers that existed let's say in 22 23 '08 are now participating in your municipal aggregation program, is that it? 24 25 Ο. Well, January 1, 2009 NOPEC signs a

contract hypothetically with a third-party supplier 1 2 and they take 25 percent of the residential and commercial customers from FirstEnergy's load, and so 3 4 this 36 million megawatt hours from 31 million 5 megawatt hours for 2009 that you have in Exhibit 3 is 6 reduced by 25 percent. 7 My question is what impact does that have 8 on the load shape price that you average out under all classes for the remaining load? 9 10 I guess would you agree with me that the

10 I guess would you agree with me that the 11 load shape price would be reduced and improved by 12 those 25 percent residential/commercial customers not 13 being served within the SSO because they have a 14 higher load -- higher load shape cost?

15 A. Well, your load shaping cost by customer 16 class is invariant to this. I guess, generally 17 speaking, you have got a \$5.50 cost to serve a 18 residential customer in either instance.

But you are just -- I don't know where you are going with this arithmetic, if you are just leaving it on Exhibit 3, then the answer is I don't know, but it probably doesn't change and -- because I haven't done the calculation.

Q. But I think you -- in essence you have done the calculation, because you get to a 59.92 --

and I apologize, I am not trying to be complicated. 1 2 I am -- for all classes if you go over 59.92 under the second to last column is load 3 shape -- is the load shape price which is the average 4 of the numbers above the 61.21; the 61.28; the 58.21; 5 6 the 46.89, multiplied by the load that those customers would be serving; is that correct? 7 8 Α. The 4.22 for all classes is -- well, we 9 could back our way through here. Basically what you do is you begin by 10 11 incorporating column -- column A, which subsequently ends up in column C and C ends up in E, which is part 12 13 of the load-shaping cost calculation finally, because 14 it determines out, but let's walk back to A and B for 15 a second. A and B are the total costs. Column A, 16 17 for example, is essentially column B times the -which is the QP times Q. The P is -- is -- I could 18 19 back it out of A, but whatever it is is the way to 20 get to the load-weighted cost. 21 And what I am saying is I haven't done the calculations to actually make the determination 22 23 whether the far right-hand column changes in a 24 meaningful way subset to 4.22, but in general if you

25 change my mix, my load-shaping costs probably will

change but I don't know that they would change in
 proportion to your 25 percent.

That's my problem. I don't -- without 3 4 having done the estimates, I don't know whether you have a 1-to-2 ability to compare in your 5 6 hypothetical. 7 MR. BREITSCHWERDT: That's all the 8 questions I have. I appreciate your clarifications. 9 EXAMINER PRICE: I think we are going to take a break before we take Mr. Stinson's questions, 10 but before the break I will ask -- I'll ask or I'll 11 12 forget them during the break. 13 You indicated that although the market -you agree that the market price of electricity has 14 declined since the time you filed your testimony; is 15 16 that correct? 17 THE WITNESS: The price of energy has 18 declined. 19 EXAMINER PRICE: Price of energy but you 20 have not recalculated the numbers. THE WITNESS: No, I have not, Judge. 21 22 EXAMINER PRICE: And can you explain 23 again to me why you did not recalculate the numbers? 24 THE WITNESS: Well, first of all, the 25 statutory requirement is one that suggests that the

Commission ought to take our MRO estimate and compare
 it with the stand -- with the ESP.

The point in time that you do that it seems to me is pretty much your own. They have the basis for making a contemporaneous comparison because all the analysis underlying FirstEnergy's presentation in this case took place at approximately

the same point in time.

8

If we were to redo it today, I would have 9 10 to cite to the fact that while energy costs have 11 declined, a number of other costs have increased 12 dramatically, and the reason I made the offhand 13 comment I am not sure anyone would show up, the 14 capital costs for requirement for participating in an 15 MRO are significant. And as you know by having read the paper or listened to the television, the capital 16 17 markets have shut down. Letters of credit which are required to participate in market offers like this 18 19 have gone through the roof, and every financial 20 institution that I am aware of, and it's not just for 21 electricity participation, it's across the board. And so it may very well be that 22 23 participants who would have been present in the hypothetical if this were done on July 15 wouldn't be 24

25 there today. There are a lot of other risks that are

1 much different than they were then.

2 Now, the question becomes then for the 3 Commission, it seems to me, do I request an update of 4 all the calculations and for the basis of my analysis 5 in this case?

б It strikes me as unnecessary. The Commission is being asked to make a determination in 7 8 the aggregate, and as to the point in time the 9 Commission simply has to say that the risks I would 10 have taken on July 15 are different than now, and 11 they may very well decide they don't have the stomach 12 for the risks that would prevail today, particularly since a lot of them are unknown. 13

EXAMINER PRICE: I am curious about your offhand comment you are not sure anyone would show up. You are not representing on behalf of the companies that the MRO would be a pointless act at this time.

19 THE WITNESS: All I am saying there are 20 key components in participation in an MRO today on 21 the risk and cost side that are significant, and 22 since the financial institutions tended to be the 23 participants in historic auctions, a lot of those 24 financial -- two things; some of those financial 25 institutions are no longer with us, and those that

are find themselves severely capital constrained. 1 2 I mean a financial institution has 3 trouble participating in the short-term capital 4 markets, not to mention the long-term market. They may not be able on behalf of their shareholders to 5 б participate in an MRO. Very significant risk. 7 EXAMINER PRICE: Okay. Thank you, let's 8 take --9 MR. STINSON: Your Honor, if I could, you are going to come back to me after the break. I want 10 11 the record to reflect I will have no questions. 12 EXAMINER PRICE: Then we will come back 13 to Mr. Lavanga after the break. 14 MR. LAVANGA: I will have a few. 15 EXAMINER PRICE: Come back at 11:15. Thank you. 16 17 (Recess taken.) 18 EXAMINER PRICE: Let's go back on the 19 record. 20 Mr. Lavanga. MR. LAVANGA: Thank you, your Honor. 21 22 _ _ _ 23 CROSS-EXAMINATION 24 By Mr. Lavanga: 25 Q. Good morning, Dr. Jones.

1 Good morning. Α. 2 My name is Mike Lavanga. I am an Q. attorney for Nucor Steel Marion. I have just a 3 4 couple questions for you this morning. All right, sir. 5 Α. б Q. Can you turn to page 10 of your testimony. 7 I'm there. 8 Α. 9 Now, in this section you are talking Q. about estimating the capacity costs that an MRO 10 supplier would incur to meet the MISO resource 11 12 capacity rules, correct? 13 Α. Correct. 14 So this is not an attempt to estimate the Q. actual capacity or fixed costs of the generation 15 16 plant used by the supplier to generate the kilowatt 17 hours? Well, because we don't have a final 18 Α. 19 determination of the structure or methodology for 20 calculating the market-based capacity cost estimate, what I did was take the estimate from FirstEnergy of 21 22 the last contract they negotiated and simply held it 23 constant through time. 24 So I'll admit there is a certain apparent

25 disconnect between some effort to figure out what

1 market capacity costs are going to be.

2 Q. Okay. I mean, there is also no penalty 3 Α. 4 provisions in here. We don't know anything. High degree of risk associated with this. 5 б Q. Right. Just to be clear, the suppliers in Midwest ISO today don't get this capacity payment. 7 8 This is a resource adequacy plan that's being developed by Midwest ISO? 9 That's right. What I did was stop short 10 Α. 11 of any effort to fulfill whatever would be necessary 12 if that plan were approved and we knew everything we needed to know. 13 14 Okay. Dr. Jones, if a supplier ends up Ο. getting this capacity cost payment under the Midwest 15 ISO adequacy rules, isn't it likely that the energy 16 17 cost is going to be down because some of that 18 capacity is going to be recovered through this --19 this new energy or this new capacity payment? 20 Α. Well, no, I can't -- I can't answer that 21 in the affirmative because the missing piece is notably penalties for not maintaining enough capacity 22 23 to satisfy the reserve requirement. 24 I mean, there is a lot of things in here

25 we learned from, for example, experience in PJM and

their capacity markets that third-party suppliers would have to take into account. It's just too fluid to make --

Q. How would penalties factor in? Let's 4 assume that the supplier has met its resource 5 б adequacies requirement under the Midwest rule. They are going to get a separate capacity payment? 7 8 Α. That's right. And so wouldn't you expect the energy 9 Q. costs to double somewhat to reflect that? 10 11 My only point is as I sit here today, I Α. 12 don't know that I could make that expectation. I 13 simply don't know. 14 Okay. And you just said before that you Q. got the capacity price from FirstEnergy? 15 That's right. 16 Α. 17 Q. And this is -- was it based on a contract? 18 19 Α. It was based on a contract for capacity in '09 and the first few months of 2010. 20 21 Q. Did you see this contract? No, I didn't. 22 Α. 23 Q. Do you know who from FirstEnergy provided 24 it -- provided you the price? 25 Α. Mr. Warvell provided me the price.

And when did you say you received that 1 Ο. 2 price? Just prior to filing testimony so it 3 Α. 4 would have been -- my understanding is it was a price 5 that prevailed in the marketplace in early July. 6 Q. Okay. Can you turn to page 11 of your testimony. 7 8 Α. Yes. 9 Now, here on line 18 you say that you Q. assume a -- a 113.5 percent reserve margin? 10 11 Α. That's correct. 12 And did you also get the reserve margin Q. 13 estimate from FirstEnergy? 14 Α. Yes, I did. It was more in line of confirming an estimate because in other work that we 15 16 have done for FirstEnergy and other work we have done 17 elsewhere, this is the -- particularly for 18 FirstEnergy, this is what they've used in prior 19 studies, and I wasn't surprised at all when they said 20 use 13-1/2 percent so. 21 Q. And when you say they used it in prior studies, do you know what those studies were? 22 23 Α. Well, I have been involved with 24 FirstEnergy -- representing FirstEnergy since the 25 transition plan, and my recollection is even in the

transition plan for an estimate we had -- we used 1 2 13 percent. Is it possible that the actual reserve 3 Ο. 4 margin is going to be higher? Yes, it sure is. In fact, it wouldn't 5 Α. 6 surprise me at all. 7 And just to make sure I have your 0. 8 calculation right, you -- to calculate the cost of 9 capacity for each kilowatt of peak demand, you would multiply the cost in this case 2.20 times the --10 11 times 1.135 which will give you an effective cost of 12 250 per kilowatt of peak demand? 13 Well, we can look at the exhibit. Α. 14 Exhibit 4, and it's a simple matter of walking across 15 the page. 16 You can see that we have the peak hourly 17 load requirement is what is increased in order to determine the capacity, which is then multiplied by 18 19 the 2.20 to get the cost per year -- annual cost per 20 year per megawatt. 21 Q. Okay. Let's stay on Exhibit 4. Now, 22 this exhibit is where you use the capacity costs to 23 calculate class specific costs of supply for the MRO 24 provider; is that correct? 25 Α. Correct.

Q. Now, in your customer classes I notice 1 you have residential, commercial, industrial. You 2 don't have street lighting. 3 4 Α. That's right. 5 Q. Why is that? б Α. It was a very small portion of the total load, and we didn't break it out separately. 7 8 Q. So it's included in one of the other 9 classes? 10 Α. Frankly, I would have to go to the 11 workpapers to tell you that. 12 Q. Dr. Jones, isn't it correct this exhibit 13 demonstrates the affect of load factor on the price 14 per megawatt hour of capacity? By "load factor" do you mean if the peaks 15 Α. in -- the load peaks, the load shape? 16 17 It's simply grossing up the peak hourly 18 load to reflect the necessary capacity. 19 Ο. Well, would you agree that the load 20 factors is the average load divided by peak load for 21 a particular class? 22 A. By class, yes. 23 Q. Okay. Is it fair to say that the price 24 per megawatt hour gets lower as the load factor goes 25 up?

1 Yes. Given that it's an invariant cost Α. 2 per kilowatt month, that would be the expectation. So if you look at the cost per megawatt 3 Ο. 4 hour, take just the commercial class in 2009 as an example, the overall commercial load factor in this 5 exhibit is lower than the industrial so the 6 commercial class has a higher cost per megawatt hour; 7 is that correct? 8 9 Α. Yes. 10 Ο. And the residential class has the highest 11 cost per megawatt hour in this exhibit because it has 12 the lowest load factor? 13 Well, it has -- it has a different peak Α. 14 hourly load. In other words, your capacity requirements to serve your residential customers and 15 ultimately the shape of that load is substantially 16 17 different. 18 Dr. Jones, if you used a higher capacity Ο. 19 cost than the 2.20 that's listed here, wouldn't that 20 result in the price differential between the classes 21 increasing? 22 Α. If I were to use a -- another cost per 23 kilowatt month that was constant and higher, would it 24 result in an absolute difference in the far 25 right-hand column; is that what you are asking me?

Q. That's correct.

	~
2	A. Well, not having done the arithmetic but
3	I any time you take the relevant relationship
4	would remain the same. The numbers would change.
5	Q. The rel you mean the relationship
б	between the classes would stay the same?
7	A. The percentage changes would stay the
8	same because you are multiplying by a constant, but
9	the numbers would certainly change.
10	MR. LAVANGA: Can you read that answer
11	back, please.
12	(Record read.)
13	Q. Well, let's try to walk through an
14	example here. Let's try doubling the capacity cost
15	from 2.20 to 4.40.
16	A. Okay.
17	Q. Now, if you run the numbers through the
18	way you have on your chart here, wouldn't that rate
19	in the residential price at the end increase from
20	8.18 to 16.36?
21	A. Yes, but the all customer class, which is
22	essentially the weighted average of the others, would
23	simply double.
24	Q. Well, I am not asking about the all
25	customer class. I am asking about the relationship
20	

between the residential, commercial, and industrial 1 2 classes. So if I -- we have the commercial under 3 4 that example going up to 16.36. Then if we did the same thing for the industrial, that would give us --5 б Α. 8.80. That's correct. 7 Ο. 8 Α. But those shares are the same, hence, the cross-customer number would simply double, say, if 9 10 you have got higher numbers. 11 Yeah, the differential is going to double Ο. 12 as well. 13 Yeah, sure, of course. It's a constant. Α. 14 Okay. Let's turn back to the main part Q. 15 of your testimony for a second on page 14. Okay. I'm there. 16 Α. 17 Here you have a 7.50 per megawatt hour Q. per price for transmission and ancillary services? 18 19 Α. Correct. 20 And that's an average cost? Q. 21 Α. Yes. That's a cost I am assuming that 22 would apply to all customer classes. 23 Ο. Would you agree that most of the 24 transmission costs incurred by a supplier will be 25 based on peak demands and not megawatt hour?

A. Actually I haven't given that any
 thought. I would presume other things equal, that's
 probably the case, yes.
 Q. So as a result, they would actually vary

5 based on class depending on peak demand of the class? A. What is the term, "they would vary depending on peak demand by other class"? I don't get it.

9 Q. Well, the cost to the supplier. 10 A. Well, given this is a fixed number, any

11 time you change the base to which this is going to be 12 applied, the sum will increase, if that's what you 13 are trying to ask me -- excuse me, the product will 14 increase, not the sum.

Q. Now, I think my question is simply that if you agree that transmission costs will be based on peak demands, aren't -- isn't the cost to supply the various classes going to differ based on the class load factor?

20 A. The ultimate impact on the cost of 21 fulfilling a contract with hypothetically different 22 mix of industrial, residential, and commercial 23 customers would certainly result in different 24 aggregate costs based on this and another -- a number 25 of factors that are driven off the peak load.

Q. Would you agree that because of the 1 2 different class load factors as shown in your Exhibit 4 it would be more precise to assign these 3 4 demand-related costs to each class by peak demand 5 rather than simply applying an average? 6 Α. Let me make sure I get this straight. 7 You are asking me -- now, Exhibit 4 8 doesn't contain this number you are referring to, you understand that? 9 0. I understand that. 10 11 Okay. So given that it's not in this Α. 12 exhibit, what is out of this exhibit you are 13 extracting and asking me to consider? 14 Q. The class load -- the class load factors reflected in Exhibit 4. 15 16 A. Column B? 17 Q. Yes. Okay. Now, what am I going to do with 18 Α. 19 column B? 20 Q. The question is simply -- well, the premise is the classes have different load factors, 21 22 correct? 23 Α. Yes. 24 Wouldn't it be more appropriate to assign Q. 25 these transmission-related costs based on load

100 factor, and wouldn't the costs be different based on 1 2 cost factor rather than applying simply a -- your 7.50 per megawatt hour across all classes? 3 4 Α. I guess I haven't considered that, so the answer is I don't know. 5 6 Q. Okay. Can you go to page 17 of your testimony, Dr. Jones. 7 8 Α. All right. I'm there. 9 Q. This is where you discuss shopping risk. 10 Α. It starts here, yes. 11 Ο. And the margin in your calculation 12 reflects shopping risk, correct? 13 Α. In part, yes. 14 And you said a pretty sizable portion of Q. it is shopping risk? 15 16 Α. Yes. 17 Q. It's correct the margin would be quite a 18 bit smaller if there was no shopping risk? 19 Α. Yes. 20 Would you agree that the likelihood of Q. 21 classes shopping is highly dependent on the difference in price under the -- between the rate 22 23 under the MRO and the rate in the the market for an 24 alternative retail supplier? 25 Α. Well, the shopping has a propensity to

grow whenever the alternative price is more
 attractive to the consumer, or in this case the
 aggregator.

So that any time you have a significant 4 5 differential between the prevailing price and 6 whatever price emerges from the MRO, if it's favorable to the consumer, then, sure, the 7 8 probability that someone will shop dramatically 9 increases. 10 Ο. Okay. Would you agree that whether a 11 given customer class will shop is also very dependent 12 on how the utility assigns and recovers its MRO costs from the different classes? 13 14 Well, again, I haven't taken into account Α. alternative formulations of the MRO in the 15 hypothetical, but I suppose it would be the case, 16 17 yes. 18 Have you analyzed the cost assignments Ο. 19 and rate design of the FirstEnergy ESP proposal to 20 determine whether there are going to be shopping risks that occur? 21 22 Α. No.

Q. And did you assume any particular cost allocation or rate design in order to determine the margin and shopping risk under the MRO analysis that

1 you did?

2 A. Did I determine what again? Q. Did you use any particular cost 3 4 allocation or rate design in your analysis? 5 Α. Just what appears in my exhibits. 6 MR. LAVANGA: I think that's all I have. Thank you, Dr. Jones. 7 8 THE WITNESS: You're welcome. 9 EXAMINER PRICE: Mr. Boehm. 10 MR. BOEHM: Just a few, your Honor. 11 _ _ _ 12 CROSS-EXAMINATION 13 By Mr. Boehm: 14 Q. Dr. Jones, my name is David Boehm, and I represent the Ohio Energy Group, which is a group of 15 large industrial customers in Ohio. 16 17 I am going to jump around a little bit, Dr. Jones, because we've covered a lot of topics, but 18 19 I want to start off with something pretty basic here. 20 You say in your testimony -- you describe 21 the market in the Cinergy hub as a liquid market; 22 isn't that correct? 23 A. That's correct. 24 Q. And you got your data from your Exhibit 25 No. 2 from July 15 from that market; is that right?

1 A. That's correct.

±	A. mat S correct.
2	Q. By the way, were those closing prices, or
3	was that the difference between bidding and asked?
4	A. Settlement prices.
5	Q. Settlement prices.
6	Please tell me in your words what you
7	regard as a liquid market. What are the
8	characteristics of a liquid market?
9	A. The characteristics of a liquid market is
10	a market in which there are sufficient numbers of
11	buyers and sellers such that you can be confident
12	that the price prevailing at that market accurately
13	represents market conditions.
14	Q. So the products from which those prices
15	were derived in your Exhibit No. 2 are based in
16	not on hypothetical transactions but transactions
17	that actually took place?
18	A. That's correct.
19	Q. Okay. Have you looked back to see to
20	that to that market to see whether the Cinergy hub
21	is still liquid?
22	A. Well, they have since the number of
23	products that are available to that hub remain the
24	same, my presumption is it is equally liquid today as
25	it was then.

104 0. Okay. Just a question in passing, you 1 2 mentioned before that all risks increase with time. 3 Do you have any explanation as to why the 4 numbers in your Exhibit 2 trend lower for the forward 5 years? б Α. They trend lower because the costs -- the direct costs tend to be lower. 7 8 Q. You responded, and I hope I am correctly characterizing this, to a question from the Bench 9 10 about what I perceive to be that you concede that the 11 prices of power have gotten lower of late, still 12 lower than September 19 -- or September 15. 13 But I thought I heard you say to the 14 Bench that after he -- after the ALJ asked you 15 whether you had recalculated your MRO price that you didn't -- you didn't think that that was -- that was 16 17 either important or relevant or likely change anything. 18 19 Please help me and give me -- give me a 20 better idea what your response was, and then if you 21 would -- did you say something like that? 22 What I said was I have considered it Α. 23 unnecessary. 24 Okay. And tell me, please, why you think Q. 25 it was unnecessary.

Because the statutory requirement is that 1 Α. 2 the Commission have before it a set of contemporaneous data, all of which were produced at 3 4 the same point in time such that it can make a 5 comparison in the aggregate between the company б proposal in the form of an ESP and what a market rate offer would be at that point in time. 7 8 Whether you conducted that analysis on

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9 July 15 or whether you conducted it today, it seems 10 to me that it doesn't make any difference, because as 11 I explained to the Judge, there are a number of other 12 risks that are dramatically heightened today that the 13 Commission would have to take into account that 14 weren't present on July 15.

But the two relevant dates, frankly, for considering prices under an MRO are July 15 and the date MRO takes place. Anything in between is just another calculation.

Q. You weren't implying, were you, Doctor,
 that the cost decline, the basic cost of energy,
 would affect both ESP and the MRO equally --

22 A. No.

23 Q. -- so that the relationship stayed the 24 same, were you?

25 A. I didn't say that.

1

Q. I just wanted to make sure.

2 And you say the reason is that the only 3 relevant points in time are when the MRO begins, the 4 MR -- what was the other point in time? I said July 15 or the date the MRO 5 Α. 6 actually is offered to the marketplace. In other words, the date that the Commission has made its 7 8 decision to reject the ESP and subject itself to the risk of marketplace. 9 10 0. And why is July 15 the date on the 11 alternative? I understand the MRO. Why July 15? 12 Because it's a date where we have a Α. 13 constant set of analyses that the Commission can feel 14 confident that will allow them to make a comparison 15 in the aggregate. 16 And if they could get a constant set of Ο. 17 data for a more recent date, wouldn't that statement 18 be true of the more recent date? 19 Α. It would be true of the more recent date, 20 but it would in my opinion be a lot of unnecessary 21 work. 22 Q. And it wouldn't be germane in your mind 23 at all as to what the ultimate date -- price at the 24 MRO was that the market had fallen significantly from 25 July 15?

107 1 Let's be intellectually honest. Would Α. 2 you be asking me the same question if the price of energy had risen dramatically since July 15? 3 4 Well, my motivation for asking 0. questions --5 б EXAMINER PRICE: Wait a second. We are going to strike that response. That was way beyond 7 8 nonresponsive. I am going to direct you to answer 9 his previous question again. MR. BOEHM: Would you read the question, 10 11 please. 12 (Record read.) 13 Did you mean by that that you are asking Α. 14 me to assume when the MRO actually takes place, that the current price would still be in place; is that 15 16 what you are asking me? 17 Q. No. I am just asking you for on your analysis if somebody had given you, say, the October 18 19 10 prices that you have on -- the equivalent of the 20 October 10 prices that you have on your Exhibit 2 and 21 said now give me your analysis of what -- of what the 22 MRO prices would be, are you telling me you would 23 still come up with the same end result as you have in 24 your testimony now? 25 Α. Of course not.

Q. Okay. You would come up with a lower
 number, wouldn't you?

3 A. Possibly.

Q. Okay. Under what circumstances wouldn't5 it be a lower number?

б Α. I explained to you before, you have -now, if you were to do this today, you would have to 7 8 separately consider risks that have risen dramatically in the aggregate which were not there, 9 10 at least not as they are today, that may, in fact, in 11 sum cause me to say that capital costs, for example, 12 present a much higher risk today than even shopping risk so that you have a different mix of factors; 13 14 that's A.

B, by the time the MRO actually takes place, we don't know whether or not the price cost will just as easily be going back up again as to be going back down. That's why I said really and truly the only other relevant date is the one when the Commission pulls the trigger and says we're not going to consider ESP, we are going to do an auction.

And at that point in time they will be faced with the market's perception of the cost of supplying the size and service of FirstEnergy.

25 Q. Well, I understand the second date, but

109 the first date is an attempt to guess what that 1 2 number is going to be, isn't it? Before the MRO it's an expert's best 3 Α. 4 estimate of what that is going to be. 5 Q. Okay. And if markets are trending б significantly downward, doesn't that represent in your mind a significant -- an important factor? 7 8 Α. It's certainly a factor, but they could be trending significantly upward by the time MRO 9 10 takes place. 11 EXAMINER PRICE: Excuse me, Mr. Boehm. 12 Isn't it the case the closer the date 13 gets to the date when the Commission has to pull the 14 trigger is -- the better data closer in time to when the Commission would have to make the decision is the 15 16 better data the Commission could choose upon? 17 THE WITNESS: Generally speaking, the closer the date you get to the auction, the more 18 19 reliable your estimates of the actual auction outcome 20 will be. 21 EXAMINER PRICE: Thank you. 22 MR. BOEHM: Thank you. 23 0. (By Mr. Boehm) Moving on to another 24 subject, Dr. Jones, isn't it ironically true that 25 the -- to the extent that you increase risk premiums

to reflect shopping risks, risks of shopping go up; 1 2 wouldn't you agree? I'm sorry, I don't understand that 3 Α. 4 question. Okay. To the extent that a -- the 5 Q. 6 alternatives to a customer are an MRO in the market. 7 Α. Right. 8 0. And the MRO reflects the companies' assessment of its risks that its customers will go 9 10 shopping. 11 Who is "the company" in this case? Α. 12 Well, the supplier in this case Q. 13 FirstEnergy Services. Do you agree they are -- I'm 14 sorry, used the -- I've fallen into the old habit of calling the utility "the company." 15 FirstEnergy Services, if, in fact, they 16 17 turn out to be the supplier in this case, okay? 18 My understanding was what you are trying 19 to do here is you are trying to gauge what the price 20 of power would be based on a July 15 input and your assessment of risks that bidder or supplier would 21 22 want to add on to those. One of those major risks as 23 I understand it is the fear that its customers will 24 go shopping.

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25 A. That's correct.

111 Q. Okay. And what the customer was looking 1 at is the MRO price on the one hand and he is looking 2 at the market price on the other hand, right? 3 4 When you say "market," I am assuming you Α. 5 mean the alternative that's being offered, say, by an 6 organization like Brett, like NOPEC. No. I'm talking about what the market 7 Ο. 8 would offer, the liquid market on the Cinergy hub. 9 Α. Energy prices. 10 Ο. Right. Yep. 11 And our energy prices at work here? Α. Wouldn't that be the alternative for a 12 Q. 13 customer if he was looking at an MRO price of, say, 14 let's name something, \$85 a megawatt hour and he was 15 looking at the market price and the market price was \$55 a megawatt hour, wouldn't he choose the market 16 17 price? 18 Those are apples and oranges. Α. 19 Ο. Why is that so? 20 Because the MRO price is an all in price Α. 21 for certain system -- slice of system, and the energy price at the Cinergy hub is just that, it's energy at 22 23 that location. 24 I agree there are add-ons to that -- to Q. 25 that Cinergy hub price, but one of the add-ons is not

1 a risk premium, right?

2	The customer who went to buy on that
3	market wouldn't have any risk that he was going to
4	leave the system because he's just the customer. He
5	would be buying he would be buying on that on
6	that market. He wouldn't pay anything at risk
7	premium, would he?
8	A. You who is this person that can buy
9	energy to satisfy the requirements? I don't get it.
10	Q. He is the customer of FirstEnergy.
11	A. But the customer of FirstEnergy is hooked
12	up to their transportation transmission
13	distribution system.
14	I mean, it's not just the energy cost at
14 15	I mean, it's not just the energy cost at the Cinergy hub, and besides that, the cost at the
15	the Cinergy hub, and besides that, the cost at the
15 16	the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers
15 16 17	the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers that were attempting to supply this license.
15 16 17 18	the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers that were attempting to supply this license. Q. My question to you, Dr. Jones, if, in
15 16 17 18 19	<pre>the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers that were attempting to supply this license. Q. My question to you, Dr. Jones, if, in fact, a large industrial customer well capitalized</pre>
15 16 17 18 19 20	<pre>the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers that were attempting to supply this license. Q. My question to you, Dr. Jones, if, in fact, a large industrial customer well capitalized decided I didn't like the MRO price, he could go in</pre>
15 16 17 18 19 20 21	<pre>the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers that were attempting to supply this license.</pre>
15 16 17 18 19 20 21 22	<pre>the Cinergy hub, and besides that, the cost at the Cinergy Hub would be applicable to all purchasers that were attempting to supply this license. Q. My question to you, Dr. Jones, if, in fact, a large industrial customer well capitalized decided I didn't like the MRO price, he could go in this Cinergy hub and buy product there, could he not? A. He could hedge his cost in the Cinergy</pre>

1 A. By incurring additional costs which may 2 add up to your \$84.

Grant you, I am starting at the beginning 3 0. 4 now, which is the bare cost of power, right? And I 5 want to discuss with you what you think are 6 appropriate adders for that customer, okay? 7 Would that customer have to pay a 8 shopping risk? But the basis for your example is not the 9 Α. 10 statutory requirement here. In other words, the 11 statutory requirement asks the Commission to compare 12 an MRO price cost, however you want to call it, with 13 the -- with the program provided by FirstEnergy, and 14 I don't get what -- what I don't understand is your 15 insistence on incorporating a prevailing spot price at the Cinergy hub with either of those two examples. 16 17 Q. Let's go back to what I understood to be

18 your definition of shopping risks.

Your definition of a shopping risk as I understood it was the risk that a customer would find that he could go out in the marketplace and get power cheaper than the MRO.

23

That's correct.

24 Q. Is that right?

Α.

A. That's correct, because I would then be

114 required to supply -- I would be the winner of the 1 2 MRO, and I would be supplying that slice of system for FirstEnergy's SSO customers. 3 4 Now, what I am discussing is from the Ο. 5 point of view of that shopper who may or may not make б that election, what his perception of his alternatives are, aren't --7 8 Α. What election are you referring to? 9 Q. To go shopping. 10 Α. All right. So he chooses not to shop. 11 No. He chooses -- he is making the Ο. 12 decision should he take MRO or should he go shopping, 13 okay? 14 Α. Okay. Now, isn't it, first of all, almost 15 Q. entirely true, given the construct of the MRO here 16 17 that the -- that the shopping option for that 18 customer will almost invariably be cheaper? 19 Α. No. 20 Q. Isn't -- isn't that true because when he 21 goes shopping, he won't be paying some of the add-ons 22 that you have included from the MRO customer? 23 Α. No. 24 Will that shopping customer pay anybody a Q. 25 risk premium against the chance that he will go

2	A. Yes.
3	Q. Who
4	A. He will pay a risk premium that's
5	assigned that's built into the cost of supplying
6	him power by whoever the third party is that's
7	supplying him power.
8	Q. So in your example, then, of the MRO,
9	there are two risk premiums; one from the seller,
10	right?
11	How many risk premiums are there on the
12	MRO?
13	A. There is just one risk premium.
14	Q. Okay. On let's take
15	A. Shopping risk.
16	Q. For 2009, the \$55.71.
17	A. The energy cost?
18	Q. Uh-huh, that's the energy cost.
19	Now, you are telling me that this this
20	industrial customer in our example, when he goes
21	shopping and he buys this product, he will pay the
22	seller a risk premium on top of that 55.71?
23	A. Yes. Because the seller will have other
24	customers he has to supply too because he is
25	supplying his licenses.

116 So you are saying when he goes to close 1 0. 2 the deal, he won't pay 55.71, he will pay 55.71 plus a risk premium? 3 4 Α. Plus lots of other things, yes. No, but plus a risk premium? 5 Q. 6 Α. My presumption is whoever is willing to supply him the power will assign a risk premium --7 8 you started all this with shopping, so I will end it 9 with shopping -- will apply shopping risk premium, 10 yes. And how would this be assessed? In other 11 0. 12 words, the deal won't close at 55.71; it will close 13 at that plus something? 14 Α. Plus a lot. That he will pay to the seller. 15 Q. Correct. 16 Α. 17 Q. I've never heard of this market. Tell me 18 how that would be done. 19 Α. Because he has to approach a third-party 20 provider of electricity as much as for -- in place of 21 approaching whoever the --22 You said a third party, didn't you? 0. 23 MR. HAYDEN: Excuse me, could we let the 24 witness answer? MR. BOEHM: Go ahead. I'm sorry. 25

117 1 The only use that the Cinergy hub has for Α. 2 an industrial customer other than part of his negotiations with whomever is going to supply him the 3 4 power is that he can hedge his exposure there, but other than that I don't understand the nature of your 5 6 question. 7 Did you say that he had to go to a third Ο. 8 party? A. You started this by contrasting your 9 hypothetical customer in this case as --10 11 EXAMINER PRICE: I think you need to 12 answer his question directly and not reanalyze his 13 question. 14 Someone other than providing MRO to -- I Α. guess I was understanding you to be talking about. 15 16 No, no. Let me go back again. Ο. 17 I'm a customer. I am buying on Cinergy's 18 market. I see the board. It says 55.71. I say 19 bingo, I want it. Do I pay that guy anything more than 55.71? 20 21 Forget about third parties. Do I pay him 55.71 or something else? 22 23 Α. You mean the person that's willing to 24 sell power at the Cinergy Hub? 25 Q. Yes.

No, you pay him the 55.71. 1 Α. 2 That's what I want to know. Q. 3 I'm sorry, if you are just buying in the Α. 4 open market. 5 Q. Is there anybody that I pay a risk 6 premium to? 7 Α. For that 55.71? 8 Q. For that same product, that same power that I am buying. Is there somebody I pay a risk 9 10 premium to? 11 A. Not if you leave the power at the Cinergy 12 hub, no. 13 Okay. Now, isn't it true that a Ο. 14 customer -- let's call it a well capitalized industrial customer then. His choices -- and this, 15 as I understand it, reflects your definition of 16 17 shopping risks. 18 His choices are he can go with the MRO or 19 he can go with the market, granted you add on a lot 20 of ancillary load following, da, da, da, on top of 21 it, but there are some things that you have in the 22 MRO that don't get added onto it, and one of them is 23 a shopping risk, right? 24 Well, see, this is where -- this is where Α. 25 I have trouble understanding -- if you are just

talking about compiling individual cost components as 1 2 opposed to risk facing an MRO supplier to the FirstEnergy companies, if we've gotten away from the 3 4 statutory requirements of this proceeding and we are 5 now talking in a hypothetical about buying power at 6 Cinergy and arranging for delivery to your factory somewhere, that's a very distinct and isolated event. 7 8 It's -- and I don't understand -- yes, you're right. I can always agree -- excuse me, 9 10 arrange to take power at Cinergy, and if somebody is willing to negotiate with me, then I could probably 11 12 get it delivered to my load sync, but I don't 13 understand how that applies in this case. 14 I'm not suggesting, Dr. Jones, that your Q. 15 job -- your testimony goes to the comparison of the MRO and shopping. It goes to the comparison of the 16 17 MRO and I suppose it's going to be used in the ESP. 18 What I am looking at is what a customer's 19 view will be in the real world when he sees your MRO 20 price and what he perceives to be his economic 21 alternatives? Right, and that's why I said earlier that 22 Α. 23 any large industrial unless -- well, any large 24 industrial will most likely look at whatever 25 prevailing price at the Cinergy hub at whatever point

1 in time they are attempting to arrange this

2 transaction.

And if they choose, they could buy the 3 4 power directly for delivery of the Cinergy hub. A simpler way would be just hedge your position would 5 б be a lot cheaper but whatever you want to do. 7 I am trying to do an apples to apples. Ο. 8 So it is true, is it not, Dr. Jones, that 9 the higher the risk premium is to the extent it raises the MRO price and in comparison to the 10 11 shopping price, the higher that risk premium is the 12 more it, in fact, will induce shopping; isn't that 13 true? 14 Certainly greater the differential Α. between the prevailing MRO -- the contractual MRO 15 price and prevailing market price will drive 16 17 shopping, absolutely, greater that as that 18 differential widens in a favorable fashion to 19 consumers. 20 I assume you are not talking about it 21 being higher than MRO but lower, then, yes, they would certainly be at an increased propensity to 22 23 shop. 24 Following up on one other question with Q.

25 respect to that shopping risk and the magnitude of

that shopping risk, and this may be viewed as a 1 2 truism, I guess, if, in fact, a customer base or part of a customer base, a customer class, said to the 3 4 company "We will guarantee you that we won't go shopping in this three-year period" or whatever the 5 6 period is, "to that extent the risk disappears," 7 doesn't it? 8 Α. No, because a verbal guarantee might be a 9 nice gesture, but unless the contract is in place, my expectation is that as a potential supplier to 10 11 market, those risks still exist. 12 Well, I'm sorry. I wasn't -- I wasn't Ο. 13 completely accurate. I didn't mean a verbal 14 commitment. 15 I meant a contract. If he signs a contract and he waives his right to go shopping with 16 17 respect to that customer, there aren't any shopping 18 risks; isn't that true? 19 Α. After the MRO is in place and if 20 contracts are signed and for whatever reason they 21 would sign them they will guarantee not to shop, then 22 obviously that individual company shopping risk, the 23 risk that company would shop, would go down, 24 obviously, yeah. 25 MR. BOEHM: Thank you. I think that's

all my questions. Thank you, Dr. Jones. 1 2 EXAMINER PRICE: Mr. Bell. 3 MR. BELL: Thank you. 4 5 CROSS-EXAMINATION б By Mr. Bell: 7 Q. Dr. Jones, my name is Langdon Bell, and I 8 represent the Ohio Manufacturers Association. 9 In response to a question by counsel for 10 Nucor you had indicated, and to use your own terms, I 11 believe you said "I have been representing 12 FirstEnergy for about 10 years"; is that correct? I don't know whether I said 10 years but 13 Α. 14 certainly since we -- we were -- I was a witness for 15 the company in their initial transition deregulation 16 case. 17 Q. And have you provided services to 18 FirstEnergy in the interim? 19 Α. On occasion, yes. 20 Q. And as I understand it, your firm 21 specializes in strategic planning, does it not? 22 No, I wouldn't say that. We specialize Α. 23 in litigation support and strategic planning mainly 24 for energy companies but not entirely. 25 Q. Thank you, that was going to be my next

1 question.

2 And the strategic advice that you provide energy companies is in large measure advice relative 3 4 to regulatory matters; is that correct? 5 Α. Well, it would depend upon what point in б my company's life you were to ask me that question. Currently the answer is no. 7 Back in the late -- late '90s the answer 8 to that question would have been yes simply because 9 10 our involvement with companies undergoing regulatory matters varies from time to time. Right now, it's 11 12 mainly nonregulated. 13 In response to a question by counsel you 0. 14 had expressed -- maybe an expression with regard to current conditions, correct? 15 Α. Correct. 16 17 Q. Current markets tightening up, locking 18 up? 19 Α. Capital markets, yes. 20 Capital markets. Is that reflected in Q. 21 the fact that today investors are willing to take 22 almost no return on short-term treasuries in order to 23 secure the security of the obligation? 24 The demand for short-term treasury bills Α. 25 is an indication of a lack of willingness to engage

1 in other forms of lending.

2	Q. Would you agree, Dr. Jones, that in times
3	of uncertainty individuals and entities tend to
4	become engaged in economic retrenchment being more
5	conservative?
6	A. Yes, but it's usually a reflection of
7	risk perception, and they tend to at some point
8	withdraw from markets if it gets high enough.
9	Q. And that's true with respect to consumers
10	purchasing any and all goods, automobiles?
11	A. It's true with respect to the human
12	animal, yes.
13	Q. If, in fact, the economic conditions that
14	we are currently witnessing become prolonged, would
15	you expect that to affect dramatically affect the
16	competitive market for electricity?
17	A. How do you mean "affect"?
18	Q. Well, I think you had indicated, for
19	instance, that on MRO if if there was a
20	competitive bid, you might not get any bids.
21	A. That's right, I did say that, yes.
22	Q. If there are no bidders, who is left to
23	provide the service?
24	A. FirstEnergy, the load-serving entity.
25	Q. And if you are in FirstEnergy's position

125 at that point in time, would there be a possibility 1 2 absent regulatory oversight to abuse the market position held by FirstEnergy? 3 4 Α. I don't have any reason to answer that 5 yes or no. I don't expect, since they are a 6 regulated entity, there was any abuse. It's a competitive market. 7 8 0. In the next three years? 9 Α. Correct. Well, for the next 30 years. 10 It's a regulated market, and it's highly competitive. 11 On page 20 of your testimony, you state Ο. 12 on lines 14 and 15 "In my analysis, I treat...." 13 Do you see that? 14 Yes, I do. Α. Paraphrasing that, is that statement 15 Q. reflective of you are assuming those percentages? 16 17 Α. Frankly, I don't know if you were in the room, but we had this discourse, the Judge and I, a 18 19 little earlier. 20 I came in late, and I apologize. I have Q. another practice. 21 I don't doubt that. 22 Α. 23 Basically it is my assumption that 50, 24 70, and 100 percent of customers would have the 25 opportunity to choose to accept an offer by an

1 aggregator as time passes.

2	Q. Could you not equally assume that for
3	whatever reason any customer has 100 percent
4	opportunity to date to choose another supplier?
5	A. That's absolutely correct, except for the
б	small residential and commercial, it's harder for
7	them to do it.
8	Q. You speak there with respect to
9	aggregators that was formed in the early 2000 in the
10	northeastern aggregation group?
11	A. That's right.
12	Q. How many other aggregation groups within
13	the service territories of CEI, Ohio Edison, and
14	Toledo Edison have been formed?
15	A. I don't know offhand. The Commission
16	asked, I indicated there were a number of them, but I
17	actually don't recall.
18	Q. Well, can you tell me with respect to
19	do you know what percentage of or number what
20	percentage of the customers of FirstEnergy's
21	operating companies, total customers, what percentage
22	were being served by aggregators?
23	A. It varies with time, but as of '04, it
24	was approximately half. In fact well, it varied
25	by the utilities, some as high as 60 plus.

Number of customers 50 percent --1 Ο. 2 Oh, you are talking about Α. residential/commercial customers. 3 4 I am talking about total number of 0. 5 customers. б Α. Oh, I don't know. But yet you are assuming when you say 7 Ο. 50 percent, is that just residential? 8 9 Α. No. It's the percent -- remember, this 10 is not a load -- excuse me, this is not a shopping 11 forecast. This is simply the number of total 12 customers that would have the opportunity to shop. It's not a forecast. 13 14 With respect to the other 50 percent, why Q. 15 do they not have an opportunity? Because they are not currently signed --16 Α. 17 well, they do in theory but they are not currently signed with an aggregator so the presumption would be 18 19 that the opportunity to costs or whatever you want to 20 say would be sufficient such that they could be 21 assumed not to have the opportunity to shop even 22 though, of course, by law they do. 23 0. With respect to your risk assessment 24 leading you to construct a margin, that is based upon

25 historical analysis, correct?

128 Well, it was based on my assessment of 1 Α. 2 the market as of July 15, so, I guess, yeah, it's historical in that regard. 3 4 Q. Well, it was also based for purposes of 5 the shopping credit on the experience in the б 2006/2007 time frame, was it not? 7 No. It was -- well, sort of it was based Α. on the fact that as of today roughly half the 8 residential and commercial customers are signed up 9 10 with aggregators and that given the studies have 11 shown it takes approximately a year to sign -- for 12 the process to take place to sign up additional 13 municipalities, that certainly there is ample time by 14 2011 to have signed up everyone. 15 Ο. Do we today have a power supply reservation rider? 16 17 Α. I'm sorry. Who is "we" and what are you referring to? 18 19 0. Are today's customers today subject to a 20 power supply reservation rider? I don't know. 21 Α. Do you know whether today potential 22 Ο. 23 customers are subject to a minimum default service 24 rider? 25 Α. I don't know offhand.

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1	MR. BELL: No further questions.
2	EXAMINER PRICE: Thank you.
3	Hospitals.
4	MR. SITES: No questions, your Honor.
5	EXAMINER PRICE: City of Cleveland.
6	MR. DUNN: No questions.
7	EXAMINER PRICE: Commercial Group.
8	MS. WUNG: No questions, your Honor.
9	EXAMINER PRICE: Staff.
10	MR. McNAMEE: I have a few.
11	
12	CROSS-EXAMINATION
13	By Mr. McNamee:
14	Q. Good afternoon, Dr. Jones.
15	A. Good afternoon.
16	Q. Let's talk about load shaping.
17	A. All right.
18	Q. Let's be very basic. If I'm a supplier,
19	in order to cover my obligation, I'm going to go out
20	and procure firm power out into the future. And I am
21	going to procure enough firm power that I think it's
22	going to cover my obligation; is that right?
23	A. Well, you are I am assuming you are
24	not a generator and so that this is the case of
25	anybody supplying this slice of service.

1 You would -- you would go into the 2 marketplace and, for example, at the Cinergy hub you would obtain 5 by 16 blocks for peaks, and you would 3 4 obtain the corresponding off-peak blocks to supply as much of that as possible. 5 6 And then you would engage in a load-shaping exercise to complete your analysis but 7 8 you would always be subject to variations of load and 9 load shape. 10 Ο. Okay. So for any given hour I would 11 endeavor to have enough supply available to me to 12 meet the demand that I expect to have. 13 Α. Presumably, yes. 14 And I would be wrong in every hour? Q. 15 Α. Chances are, yes. Okay. Now, I could be wrong in several 16 Ο. 17 ways, okay? I could be long. I could have more supply reserve for myself than my demand actually 18 19 turns out to be at that point. 20 That's correct, sir. Α. 21 Q. Okay. In that situation I would take 22 that extra power and I would sell it, wouldn't I? 23 Α. Yes. 24 Okay. Now, I would sell that for either Q. 25 more or less than the price for the firm power that I

131 had already arranged for myself. I would sell it for 1 2 something. You would sell it for something. I don't 3 Α. 4 know whether it would be more or less. 5 Q. That's exactly the point, you don't know б whether --7 You don't know. It's risk. Α. 8 Q. Okay. Now, conversely, in a given hour I could be short. If I'm short, I need to go out and 9 10 procure power. 11 Α. That's correct. 12 Okay. Power that I procure would be Q. either more or less expensive than the firm power 13 that I had set aside for that hour. 14 Probably more, since you found yourself 15 Α. 16 short it means that demand is higher than you 17 anticipated. 18 Q. Or I guessed wrongly. 19 A. Or you guessed wrongly. 20 Q. Okay. So in sum then we have sales or purchases, either gains or losses, and those all net 21 22 out to something over time. 23 Α. That's correct. 24 Okay. Is there any -- take that back. Q. 25 Companies have needed to do load-shaping

132 exercises for a long time to do -- to perform this 1 2 function that we have been talking about. 3 Α. Yes. 4 Okay. And FirstEnergy has done this Ο. 5 presumably? 6 Α. Presumably, yes. 7 Okay. But there's no empirical source Ο. 8 that we can turn to to look to see what these load-shaping costs have actually been over any 9 historic period for FirstEnergy, is there? 10 11 Not without acquiring that information Α. 12 from FirstEnergy, I don't think you could, no. Okay. And that lack of information is 13 0. 14 why you have system -- or method for estimating this 15 expense. 16 That's correct, and recognize, as I say Α. 17 in my testimony, that these calculations such as 18 load-shaping costs are done with the expectation of 19 certainty and so that the uncertainty which you 20 eloquently presented the last few moments would be 21 part of the risks that are added on separately. 22 Q. Fair enough. 23 Dr. Jones, what is LMP? 24 Α. Locational marginal price. 25 Q. Okay, what does that mean?

It means the price prevailing at the 1 Α. 2 various nodes throughout in this case FirstEnergy's service territory. 3 4 Ο. Okay. When is LMP paid? When is LMP paid? 5 Α. б Q. Yes. You mean on what day? I'm sorry. 7 Α. 8 Q. Let me -- that wasn't a very well phrased 9 question. Try again. If I have reserved a given amount of 10 power during a particular hour for myself. 11 12 Α. Yes. Q. As we discussed before, do I pay LMP for 13 14 that power? Well, the locational marginal price is 15 Α. used to determine the sort of the cost getting to the 16 17 load zone, to the sync. 18 Q. Okay. 19 Α. From the hub in this case in my analysis. 20 Q. Okay. And I am only -- but I'm only exposed to that LMP to the extent of my load 21 following; isn't that correct? 22 23 Α. And to the extent that you are moving power to that point for whatever the reason, yes. 24 25 Q. Okay. Do you have an idea of what

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1	percentage of all the transactions that the company
2	would do are used for or all the megawatt hours
3	that are used for load shaping, any portion?
4	A. No, I don't.
5	Q. No idea?
6	A. Not as I sit here, no.
7	Q. But let me be sure on this. The only
8	time that I'm that I have to pay LMP is when I'm
9	procuring the load-shaping power; isn't that right?
10	A. Well, you are yes, that's true, and I
11	guess I thought are you asking me do I know today
12	what, for example, the costs are in my column A of
13	Exhibit 3 which is based on '05 to '07 data? Do I
14	know what that would be if I updated the table? The
15	answer is I don't know.
16	But your question the answer to your
17	question is yes, in general, yes, I am not
18	disagreeing with you. I am just trying to understand
19	what the dollar figure is that you are referring to.
20	Q. All right. Well, then then I guess as
21	a supplier, I would never pay the average LMP that
22	you have, for example, listed in your column D on
23	Exhibit 3, would I?
24	A. Probably not.
25	MR. McNAMEE: That's all I needed. Thank

2	THE WITNESS: You're welcome.
3	EXAMINER PRICE: Let's go off the record.
4	(Discussion off the record.)
5	(At 12:25 p.m., a lunch recess was taken
6	until 1:30 p.m.)
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1	Monday Afternoon Session,
2	October 20, 2008.
3	
4	EXAMINER PRICE: Mr. Hayden.
5	MR. HAYDEN: Just one question, your
6	Honor.
7	
8	SCOTT T. JONES
9	being previously duly sworn, as prescribed by law,
10	was examined and testified further as follows:
11	REDIRECT EXAMINATION
12	By Mr. Hayden:
13	Q. Dr. Jones, in your examination you were
14	asked a question by the Bench about whether obtaining
15	forward prices closer to the time that an MRO would
16	occur would be better.
17	Do you recall that question?
18	A. Yes, in general I recall, yes.
19	Q. Okay. And can you clarify your answer to
20	that question, please?
21	A. Well, first of all, it was my
22	understanding the question being asked had to do with
23	the energy component of the ultimate price.
24	And other things equal, the energy
25	component taken at a date nearer the point in time

when the MRO would actually take place would most 1 2 likely be -- it's not certain -- but most likely 3 would be a better representation of then-prevailing 4 energy prices at the time the MRO was executed, but 5 the assumption is other things equal, meaning that б from the point of view of the price a participant in the MRO would bid, you would have to take into 7 8 account all those other risks that I talked about on 9 a number of occasions this morning which have gone up 10 in my opinion, so that there's not necessarily a 11 correspondence between what I would estimate the MRO price to be and the trend energy price, not to 12 13 mention the fact even if we do it today, there is a 14 chance the energy price component would be higher 15 today, other things equal. 16 MR. HAYDEN: Thank you. 17 Your Honor, I have no further questions. 18 EXAMINER PRICE: Mr. Small. 19 MR. SMALL: No questions, your Honor. 20 EXAMINER PRICE: Mr. Yurick. 21 MR. YURICK: No questions, thank you. 22 EXAMINER PRICE: Miss McAlister. 23 MS. McALISTER: No questions, your Honor. 24 MS. FONNER: No questions. 25 EXAMINER PRICE: Mr. Smith.

1	138 MR. SMITH: No questions.
2	EXAMINER PRICE: Mr. Breitschwerdt.
3	MR. BREITSCHWERDT: No questions, your
4	Honor.
5	EXAMINER PRICE: Mr. Lavanga.
б	MR. LAVANGA: No questions, your Honor.
7	EXAMINER PRICE: Mr. Boehm.
8	MR. BOEHM: No questions, your Honor.
9	EXAMINER PRICE: Mr. Bell.
10	MR. BELL: One question.
11	
12	RECROSS-EXAMINATION
13	By Mr. Bell:
14	Q. All other things being equal is the
15	qualifier in your response to the Bench's question.
16	Is that also not predicate for your testimony as
17	represented on page 25, line 2, where you talk about
18	the risk other things equal?
19	A. Yes, I use that term.
20	MR. BELL: Thank you.
21	EXAMINER PRICE: Ms. Wung.
22	MS. WUNG: No questions, your Honor.
23	EXAMINER PRICE: Mr. McNamee.
24	MR. McNAMEE: Nothing, your Honor.
25	EXAMINER PRICE: I don't have any

1 questions.

2 You're excused. Thank you. 3 MR. HAYDEN: Your Honor, at this time I 4 would move for the admission of Company Exhibit 6, the direct testimony of Scott T. Jones. 5 б EXAMINER PRICE: Any objection to the 7 admission of that exhibit? 8 Seeing none, it will be admitted. (EXHIBITS ADMITTED INTO EVIDENCE.) 9 MR. SMALL: OCC moves OCC Exhibits 8, 9, 10 and 10. 11 12 EXAMINER PRICE: Any objection to the admission of OCC Exhibits 8, 9, and 10? 13 14 Seeing none, those exhibits will be admitted. 15 16 (EXHIBITS ADMITTED INTO EVIDENCE.) 17 EXAMINER PRICE: Mr. Burk, your next 18 witness. 19 MR. BURK: Mr. Hayden. 20 MR. HAYDEN: Your Honor, the companies call Frank Graves. 21 22 (Witness sworn.) 23 EXAMINER PRICE: Please be seated and 24 state your name and business address for the record. 25 THE WITNESS: My name is Frank C. Graves.

1 I work at the Brattle Group, 44 Brattle Street,

2 Cambridge, Massachusetts 02138.

3 EXAMINER PRICE: Mr. Hayden. 4 MR. HAYDEN: Your Honor, I would ask to have marked for identification the direct testimony 5 б of Frank Graves as Company Exhibit 7. 7 EXAMINER PRICE: So marked. 8 (EXHIBIT MARKED FOR IDENTIFICATION.) MR. HAYDEN: I would also ask to have 9 10 marked for identification as Company Exhibit 7A the 11 response to OCC Set 3 RPD-29, please. 12 EXAMINER PRICE: So marked. 13 (EXHIBIT MARKED FOR IDENTIFICATION.) 14 _ _ _ FRANK C. GRAVES 15 being first duly sworn, as prescribed by law, was 16 17 examined and testified as follows: 18 DIRECT EXAMINATION 19 By Mr. Hayden: 20 Q. Mr. Graves, do you have before you what 21 has been marked as Company Exhibit 7? 22 A. I do. 23 Q. And is that your direct testimony in this 24 proceeding? 25 A. Yes, it is.

141 And do you have before you what has been 1 Ο. 2 marked as Company Exhibit 7A, which is a response to OCC Set 3, RPD-29? 3 4 Α. Yes. 5 Q. And could you explain what that is, б please. Yes. The latter, 7A, is that what you 7 Α. 8 are referring to? 9 Yes, I am. Q. 10 Α. Yeah. 7A is a response to the set of 11 interrogatories that were sought from the OCC, and it's specially germane now because in that response I 12 13 identified an error that occurred in one of my 14 calculations in Exhibit 2, and I provided the corrections which I can describe now. 15 Okay. Please do that. 16 0. 17 Α. The original filing of Exhibit 2 in column 8 is a column labeled "Forward Adjustment," 18 19 and that measures the increase in forward prices from 20 the time of the auctions in column 1 and 2 to the 21 present or to July 15 of this last summer, and it had 22 been previously calculated with the wrong 23 denominator, that is, the percentages were expressed 24 in terms of percentage change as a percentage of the 25 new price as opposed to the old price.

1 So in the revised exhibit I corrected 2 that, and it makes them all slightly higher because 3 forward prices have generally risen a little bit, so 4 the correct denominator was lower than was originally 5 used. б The net effect, as you see in the last column, that my results for Exhibit 2 are about \$7 7 8 per megawatt hour higher on average with some 9 difference in the pattern across the individual 10 utilities. 11 0. Thank you. 12 Do you have any additional corrections to 13 your testimony at this time? 14 Α. Just the follow-up where those materials 15 appear in my testimony and on page 15, lines 11 and 12, there are two specific numbers taken from that 16 17 exhibit. Line 11, the number 76.35 should read 77.55, and line 12, the number 93.80 should read 18 19 106.59. 20 And other than those corrections which we Q. 21 have just talked about, Mr. Graves, if I were to ask 22 you the same questions which are contained in your testimony today, would your answers be the same? 23 24 Α. They would. 25 MR. HAYDEN: Thank you, your Honor.

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The

witness is available for cross. 1 2 EXAMINER PRICE: Thank you. Mr. Small. 3 4 MR. SMALL: I am going to retrieve one of 5 those migrating microphones. 6 7 CROSS-EXAMINATION 8 By Mr. Small: Q. Good afternoon, Mr. Graves. Jeff Small, 9 Office of the Ohio Consumers' Counsel. 10 11 A. Good afternoon. Q. I have a couple of quick inquiries about 12 your correction sheet, FirstEnergy Exhibit 7A. 13 14 Α. Okay. This is not a complete response to the 15 Q. OCC request for production 29, is it? There were 16 17 other documents promised by this -- by this response 18 to the request for production, correct? 19 Α. Yes, there were workpapers. 20 Yes. And they are not attached to this, Q. 21 are they? 22 A. Correct. Q. Okay. So the correction portion of 23 your -- that you just stated is the portion on the 24 25 first page labeled B; is that correct?

144 Yes, B describes the correction and then 1 Α. 2 the table that's attached fulfills it. So the table gives the empirical 3 0. questions and D describes the corrections? 4 Α. 5 That's right. б Q. The rest of this is not part of your corrections. 7 8 Α. No. The others were just straight responses to the requests for information. 9 O. Okay. Would you please turn to page 14 10 11 of your testimony and line 8. 12 On that line you state a date of July 15, 13 2008. 14 Do you see that? Α. I do. 15 What's the significance of that date for 16 Ο. 17 your testimony? 18 Α. That's the reference date for the 19 calculations that I performed, that is, to the extent 20 possible, all the data is contemporaneous to that time frame. 21 22 Q. And did you base your testimony on 23 July 15, 2008, because you were instructed to do so 24 by the FirstEnergy companies? 25 Α. In one sense, yes, in that it was

important that my analysis be synchronized with that
 of Dr. Jones so the results would be comparable so we
 both used that date.

4 Other than that, it was just a date that 5 was about the time when we were finishing the 6 analysis, so it was a very appropriate current 7 reference point.

Q. Did you discuss that date with Dr. Jones?
A. No. I did not discuss my report at all
with Dr. Jones before it was finished.

11 Q. So the date came from FirstEnergy? 12 A. I believe that's right. We agreed we 13 wanted to -- we probably asked them what date we 14 should be using since we had middle of the month 15 analyses and we wanted to synchronize, so they said, 16 hey, let's use the 15th.

Q. Okay, I'm a little bit confused. You are using "we." Are you referring to you and your associates, or are you talking about you and

20 Dr. Jones?

A. My associates and I wanted to make sure we were filing in a time frame that was relevant for the way FirstEnergy's other witnesses were going to file.

25 Q. Would you please turn to page 7, lines 12

1 and 13 of your testimony.

25

2 Α. Okay. You mention "large amounts of customers 3 0. 4 switching for the FirstEnergy companies." Α. 5 I see that. б Q. Do you understand that those switching statistics were arrived at after incentives for 7 8 switching were built into stipulations as part of 9 cases that launched competition in the state of Ohio? Yes, I'm generally familiar with that. 10 Α. 11 Ο. Is there anything in the FirstEnergy 12 proposal in this -- in this proceeding that would 13 tend to repeat that experience? 14 Is there anything -- any similar type of incentives that would drive customers switching up 15 16 again the way that happened in the past? 17 Α. I'm not aware of any policy that's attached to the MRO or ESP filing that in any way is 18 19 trying to promulgate more switching which in that 20 sense is perhaps different than prevailed in the 21 early 2000s. But market circumstances are such now 22 that substantial switching is plausible. 23 0. And what circumstances are those? 24 I think the high and volatile prices Α.

we've observed could easily change dramatically one

147 direction or the other over the next couple of years 1 2 and that could induce customers to migrate back and forth between alternative services. 3 4 I understand from your testimony that you Ο. reviewed auction results from other states; is that 5 б generally true? 7 Α. Certainly. 8 Q. Are you aware that FirstEnergy EDUs have conducted one auction in Ohio and then a second 9 process was begun for the FirstEnergy companies? 10 11 Α. Generally. 12 Did you -- did you study the Q. 13 circumstances of the FirstEnergy auction that was 14 conducted in Ohio or the auction that was conducted for customers that would be served by FirstEnergy? 15 Not in close detail. I'm aware that 16 Α. 17 there was one, I believe, in the late 2004. And that's a period that is sufficiently prior to this 18 19 analysis that I didn't think it would be informative 20 to incorporate in this study. So I know a bit about 21 it, but I didn't study its details closely. 2.2 And did you collect any data from that Ο. 23 circumstance in Ohio for the FirstEnergy auction? 24 Α. No, I did not.

25 Q. Did you in your analysis use a capacity

adjustment for -- of \$2.10 or \$2.20 -- .20 per 1 2 kilowatt month figure? Did you use that in your 3 analysis in particular for preparing Exhibit 2 in 4 your testimony? 5 Α. Yes, that's implicit in column 12 of б Exhibit 2. 7 And did I correctly state the magnitude Q. of it? 8 A. Yes, I believe it was around \$2.20 or 9 10 \$2.25, something like that, per megawatt date. 11 And you use those figures from Ο. 12 FirstEnergy, correct? 13 Α. Yes. 14 And those are DNR prices for sometime in Q. 15 July or August; is that correct, as you understood 16 it? 17 A. My understanding is that they are based on transactions in which there were capacity prices 18 19 for July and August which were materially higher 4 to 20 5 hundred dollars a megawatt day, but that if you 21 convert those to an annualized basis, it's about \$26,000 a kilowatt year, which is consistent with 22 23 \$2.20.

Q. Do you agree that there is quite a bit of subjectivity involved in that concerning what bidders

will bring to the process in assessing the risk
premium or other kinds of premiums that might be
factored into -- into the analysis of generation
prices?

5 Α. I assume you are referring to an MRO type fixed price bidding situation or some other context? 6 7 I'm referring to the context of your Q. 8 testimony which is, as I understand it, adding 9 premiums in order to come up with your final results. 10 Α. I would certainly agree there is a lot of 11 extra judgment that is involved in my experience with people -- parties that have bid in these kinds of 12 proceedings. It's not a subjective analysis. 13 14 It can be done quantitively, but you have 15 to make judgments about ranges of risk and customer behavior and things like that about which there is no 16 17 certainty. 18 MR. SMALL: I have no further questions. 19 Thank you, your Honor. Thank you. 20 EXAMINER PRICE: Mr. Yurick? 21 22 MR. YURICK: Good afternoon. I just 23 really have maybe one, maybe two questions. 24

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1 CROSS-EXAMINATION 2 By Mr. Yurick: If you could turn to page 10 of your 3 Ο. 4 testimony. 5 Α. Okay. б Q. And if you look at lines 6 through 8, you say "There are reasons to expect that the Ohio 7 8 Companies' customer-switching risk will be greater 9 than that reflected in the adjusted comparables used above." 10 11 Do you see that? 12 Α. I do. 13 Have you conducted any real life inquiry 0. 14 into the frequency of shopping customers among the companies' customers to determine whether or not in 15 16 comparison with other customers in other 17 jurisdictions the Ohio companies' customer switching 18 occurs more often or less often? 19 Α. No, I am not relying on a specific 20 assessment of how much more likely it might be in 21 other settings, but it's certainly true from other 22 experience in other states that, for instance, 23 industrial customers have shown a much greater 24 propensity to switch and they are part of the SSO 25 service block in this proceeding.

1 Ο. Okay. 2 And customer aggregation can only help Α. And I think that's more prevalent here than it's 3 so. 4 been in other settings. As you sit here, you don't know whether 5 Q. 6 that happens more frequently in Ohio than these comparable jurisdictions or not; isn't that correct? 7 8 Α. I don't have any specific 9 parameterization of how much more it might be likely 10 to occur. Well, it might be less? 11 Ο. 12 It's pretty likely. Α. It might be less though; you just don't 13 Ο. 14 know? It's a problem, but I think it would be a 15 Α. better expectation to believe it would be more. 16 17 Q. Well, I understand that, but you -- the fact of the matter is in a real -- in real terms you 18 19 don't know whether it happens -- it could happen less 20 likely in Ohio; isn't that right? 21 Α. Fair enough, but I guess I'm trying to put myself in the shoes of an analyst who would be 22 23 worried about this problem as a potential bidder in 24 the MRO process, and from my experience in dealing 25 with parties that like to participate in that sort of

service, I think they would take customer aggregation
 in the industrial mix into account and probably
 forecast greater propensity to shop than they have
 seen elsewhere.

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Q. Well, sir, if I was -- if I was a forecaster and I was worried about it, wouldn't it be reasonable for me to look at historically what the experience has been?

9 A. If you had good data and you had the time 10 to compile other sources of information, sure, but 11 many times you rely on surrogate analyses such as 12 what's happened in other states, what's been the 13 history of the state generally without, in effect, 14 refreshing it for very current customer perceptions 15 because that's all you have.

Q. Yeah, but you would have access to the frequency of customers switching data from the company if you wanted it, right?

A. I suspect it's available, but I haven'tstudied it.

21 MR. YURICK: I understand that.

22 I have no further questions.

23 EXAMINER PRICE: Thank you.

24 Ms. McAlister?

25 MS. McALISTER: No questions.

1	EXAMINER PRICE: Ms. Fonner.
2	MS. FONNER: Yes, please.
3	
4	CROSS-EXAMINATION
5	By Ms. Fonner:
6	Q. Good afternoon, Mr. Graves. I'm Cynthia
7	Fonner from Constellation Energy.
8	A. How are you?
9	Q. Looking at page 3 of your testimony,
10	lines 14 through 19 indicates that as part of your
11	analysis, you were trying to establish a market price
12	for FirstEnergy's ESP; is that correct?
13	A. It's phrased that way. What I was
14	actually trying to do is find a market price as a
15	reference point for their ESP but not to explicitly
16	price a market expectation of what their an
17	ESP-like service would be worth.
18	So that I'm trying to find out what a
19	full requirements fixed price product would be worth
20	and then that, I understand, is an input to the
21	consideration of the Commission as to whether they
22	prefer that arrangement to the ESP.
23	Q. Would you agree that in evaluating
24	whether an ESP is more favorable in the aggregate
25	than a market rate offer, that actually pricing that

1 ESP product would provide the best comparison between
2 those two options?

If the problem at hand were to decide if 3 Α. 4 the ESP is a bargain on its own terms, then 5 understanding it component by component might be very 6 useful, but I understand the problem to be a bit different, which is to compare a fixed price MRO with 7 8 its risk and procurement characteristics to an ESP with different service characteristics and decide 9 whether the difference in prices is offset by 10 differences in benefits. 11 12 Okay, let's talk about some of those 0. differences in terms of characteristics. 13 14 At page 17, lines 9 and 10, you indicate 15 "that a charge will be applied to any customer who wishes to leave -- "customers who wish to leave SSO 16 17 with the right to return to the fixed SSO price in 18 the future." 19 Did you consider -- well, first of all, 20 would you consider that an impediment to customers 21 switching potentially? 22 If it were mandatory that, if you wish, Α. 23 you make -- you pay the standby charge, then it would

24 clearly alter the threshold price at which you would

25 be willing to switch because you would have to be

compensated for the standby price itself. It's not 1 2 mandatory, so you can leave and not incur that. So I think it really creates a risk 3 4 protection for customers who want to come back and are willing to pay a premium to do so. 5 б Q. The alternative being to come back at the higher of the market price times 160 percent or the 7 8 higher of the ESP. Do you understand that's the 9 alternative to payment of the SBC? That's one of the alternatives. 10 Α. The 11 other alternative is to not come back, continue to 12 procure on market terms. 13 And did you factor that SBC potential Ο. 14 into your analysis? Well, as I described here, I understood 15 Α. at the time of writing this testimony that it would 16 17 be applied to anyone coming -- who wanted to leave 18 SSO and then return. 19 I now understand that that actually only 20 applies to the ESP consumers, that is, if that is the source of the SSO and not if the MRO is the source of 21 the SSO. But with that perception that it affected 22 23 the SSO departures generally, I incorporated it by 24 suggesting that it would dampen some of the risk.

Are you aware of the fact that SBC charge

25

Ο.

1 actually increases in each year of the plan?

2 Α. Yes, I understand that. And would you expect that that would have 3 Ο. 4 an inverse affect on switching in that as the SBC 5 charge increased, switching would be dampened for 6 that particular year? Would you expect that to be the case? 7 8 Α. Well, again, to the extent it is -- it 9 was mandatory or overwhelmingly preferred, it does 10 make it less profitable to switch until prices have fallen a long ways in the market. And the bigger it 11 12 is the father -- the longer you have to wait. 13 But, again, it's not mandatory so you 14 don't have to pay that. And I want to talk about some of the 15 0. other components of the ESP. Have you read the ESP 16 17 itself? 18 Yes, I have. Α. 19 Ο. And are you familiar with rider MDS which 20 is a minimum default service charge? 21 Α. Generally.

Q. And are you aware of the fact that that's nonbypassable? And what I mean by nonbypassable, I mean it's applied to all customers, even those who choose a competitive supplier for their generation?

157 1 Yes. I understand it to be embedded in Α. 2 the generation charge if you are on ESP, and it becomes a surcharge if you are shopping. 3 4 And are you aware of the fact that there Ο. is, as part of the ESP, a deferral of generation 5 6 that, again, is nonbypassable such that customers of competitive providers would be paying for generation 7 8 used by customers of FE? On returning to service after leaving the 9 Α. shopping, I believe that's correct. 10 You are not aware of the fact that 11 Ο. 12 regardless of whether you are currently taking 13 service from a competitive retail electric supplier, 14 all customers would be required to pay generation deferral amounts? 15 16 No, I am aware of that. I guess what I Α. was meaning is it's deferred, and so it doesn't 17 happen until after the ESP period that you would 18 19 start recovering those costs. 20 You understand that it's possible for a Q. 21 person to be taking generation service and, therefore, paying for generation service from a 22 23 competitive retail electric supplier during the time 24 of the ESP plan? 25 Α. Sure.

1 And that the generation deferral Ο. 2 component means that later on that same customer will be paying for generation that they did not take from 3 4 FirstEnergy. Do you understand that component of it? Α. I do. I think I'm trying to say the same 5 б thing, it's just a little awkward, there are some amounts that are deferred until after the ESP period, 7 8 and then everyone pays them whether they shopped or 9 didn't in the interim. That's my understanding 10 anyway. 11 I think we are on the same page now. Ο. 12 Thank you. 13 And are you aware one of the other 14 aspects is that force of the ESP is to have customers pay uncollectible amounts of generation service from 15 16 FirstEnergy Solutions -- from FirstEnergy rather? 17 Α. I'm aware of the fact of that. I have no 18 sense of the magnitude or any analysis of it. 19 Ο. And would those factors impact the risks 20 that would be incumbent under the ESP as compared to an MRO? 21 22 Can you be more specific about whose Α. 23 risks you are talking about? 24 Sure. Would you -- would you agree that Ο. 25 customers taking supply from a competitive retail

electric supplier under an MRO would in some cases - I'm sorry. Let me strike that.

Would you agree that those particular components of the ESP plan we went through, MDS, SBC, the generation of deferral, if you were to competitively price the ESP would have an affect on that price?

A. I guess I'm still not entirely sure what you mean by "competitively priced," but I agree those affect the way costs would be incurred by FirstEnergy in providing the ESP service and do reduce some of the risks at least with respect to some of those items.

And, of course, they are aware of that themselves and I suspect incorporated in their own pricing of that. I don't know whether competitive pricing would be different.

Q. But you did not -- other than the SBC we discussed, you did not incorporate any of those different risks in your analysis of the MRO; is that correct?

A. No. As I said earlier, I wasn't trying to project the cost of the ESP because, in fact, I wasn't aware of 99 percent of the terms of the ESP nor was it my assignment.

I was supposed to figure out what a fixed
 price full-requirements auction like service would
 cost.

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4 Okay. And similarly with respect to Ο. certain riders that exist under the ESP fuel 5 б transportation surcharge, fuel cost adjustment, and capacity cost adjustment, those are all elements that 7 8 would decrease FirstEnergy's risk in supplying its 9 customers that supplier under the MRO would not have; 10 would you agree with that? 11 Yes, again, restricting attention to Α. 12 those factors they tend to reduce risks for FirstEnergy in providing ESP. On the other hand, 13 14 they incur other kinds of risks in the way they have offered it an MRO provider would not incur so there 15 are trade-offs of different kinds. 16 17 Q. When you say they incur risks, you are aware of the fact the riders give FirstEnergy 18 19 guaranteed recovery of those costs, correct? 20 MR. HAYDEN: Objection, your Honor. At 21 this point the witness has testified that he's -he's not here to testify on these riders, it's 22 23 outside the scope of his testimony, and there has 24 been a protracted line of questions here about these 25 riders which he's not here to testify on.

161 1 EXAMINER PRICE: Isn't he here to testify 2 as a comparison for the ESP and the MRO? MR. HAYDEN: Your Honor, he -- he is not 3 4 testifying on the mechanics or the specifics of the riders themselves which this line of questioning is 5 6 going to. 7 EXAMINER PRICE: Ms. Fonner? 8 MS. FONNER: The heart of this proceeding is to determine whether an ESP is more favorable in 9 10 the aggregate in the MRO, and as part of that, we 11 need to look at all components, including riders, 12 that apply, including different nonbypassable charges 13 and others, actually do an apples-to-apples 14 comparison and to give you and the Commission a true sense of what is really going to be more favorable 15 for customers and consumers in Ohio in the FES 16 17 service territory. 18 EXAMINER PRICE: I agree. Overruled. 19 THE WITNESS: Can I hear the question 20 again? 21 (Record read.) 22 I would qualify your description in two Α. 23 ways; one, it's my understanding, again, not perfect 24 and probably better addressed for company witnesses, 25 that the riders don't, in fact, track every variance

1 in every cost item they are associated with.

2 There are thresholds and delays and various things that don't kick in until certain 3 4 extreme points or times have elapsed, so they 5 certainly don't give perfect recovery of the factors 6 they're even riding. 7 Second, I don't know how reliable the 8 rider cost recovery mechanisms are themselves. There may be standards of prudence and reasonableness that 9 10 are applied to those and or that in principle would 11 arise if they are not explicitly stated now, and I 12 would expect those to not be bulletproof simply because in regulatory processes if something is 13 14 unreasonable, customers rightly tend to be able to complain about them. 15 Fair enough. 16 Ο. 17 But these are elements that a supplier under an MRO does not have that cost recovery, would 18 19 you agree? That they have -- they are expected to

20 bid in all -- in prices that they will have to live 21 with?

A. Yes, I agree MROs are set up -- or this one is proposed and most auctions of its kind are set up to be decided one criteria alone, which is price and everything is fixed as an obligation by design.

1 The ESP is not like that.

2	Q. Moving on to some shopping risks, and you
3	discussed this briefly before, but I wanted to talk
4	in a little bit more detail on pages 5 and 6 with
5	respect to government aggregation programs increasing
б	the shopping risk.
7	A. Okay.
8	Q. Now, you do not know what what
9	percentage of those jurisdictions that have
10	aggregation programs currently in Ohio are actually
11	taking service under that from someone other than an
12	EDU; is that correct?
13	A. I have not investigated that.
14	Q. And aggregation in Ohio is can be
15	either opt in or opt out, correct?
16	A. Generally I am aware that that's the
17	case.
18	Q. So any kind of aggregation would not
19	change overnight but rather through an aggregation
20	program there are certain steps one must go through
21	in order to be qualified as an aggregator.
22	A. I generally understand that to be the
23	case, but I couldn't tell you how the details.
24	Q. And even if somebody were already
25	certified as an aggregator, you would expect them to

1 do due diligence regarding sending out offers before 2 they actually committed to a supply contract; would 3 you agree?

A. You would hope so. There's been some5 history of that not occurring.

6 Q. Assuming people have done their due 7 diligence, you would expect that to be the case.

8 A. There are certainly some things you would 9 want to investigate. The better aggregators will do 10 so.

11 And you mentioned some states in terms of Ο. 12 comparables and government aggravation programs exist in some of those jurisdictions currently, correct? 13 14 Α. Yes, there are places where government aggregation goes on. I don't think it has gone in 15 any length to the same extent in regions where I took 16 17 my data from.

Q. Well, they actually do have governmentaggregation programs in New Jersey, do they not?

- 20 A. I believe so.
- 21 Q. And Pennsylvania?

A. I couldn't tell you for sure about that.

23 Q. Maryland?

A. Yes, I believe it's allowed.

25 Q. Illinois?

- A. Don't know.

2	Q. And turning very briefly to Exhibit 1,
3	this looks at customers switching generally, not with
4	respect to aggregation specifically; is that right?
5	A. That's correct, although it's my
6	understanding in Ohio a lot of that has been
7	historically attributable to aggregation.
8	Q. And the figures that you use here are for
9	2006, I noticed.
10	A. Through 2006, yes.
11	Q. And are you aware of the fact that the
12	most recent switching statistics ending June 30,
13	2008, would put total sales for Cleveland Electric
14	Illuminating at just over 12 percent, Toledo Edison
15	12.67, and Ohio Edison 18?
16	A. Not specifically. I understood they were
17	down, but I didn't know the numbers.
18	Q. Turning to Exhibit 2 now, if you would,
19	you include a capacity price adjustment in column 12,
20	I believe.
21	A. That's correct.
22	Q. And did you make that based upon the
23	capacity prices that exist on the day these
24	particular procurements were run or the capacity
25	prices that existed based upon the delivery period?

Well, it varied because in some cases 1 Α. 2 there was in PJM's circumstance an RPM price that prevailed and prescribed the future, and when that 3 4 was available, I used it for the early auctions. 5 In 2006, for ComEd in particular there б was no UCEP -- I mean RPM arrangement in place yet, and so I used historical UCAP prices for that. 7 8 Q. With the exception of Illinois, you would have used whatever the prevailing capacity price was 9 on the date the event was run? 10 11 Yes. They don't -- they are not daily, Α. they don't change daily in the RPM world but, that's 12 13 right, the price that is prevailed for the future 14 years at the time of those auctions. 15 And other than Ameren, are the rest of Q. those EDCs part of PJM? 16 17 Α. Yes. And you spoke about the RPM market which 18 Q. 19 was new in 2007, correct? 20 Α. Yes. 21 And you would agree there was some Q. 22 uncertainty prior to that time of what the results of 23 the new capacity market would be? 24 Sure. Up until the day it's -- the Α. 25 auctions occurred -- I mean -- yes, the auctions

1 occurred, then you didn't know the prices.

2 And it's only very recently that the RPM Q. auctions actually are three years forward looking. 3 4 In the initial auctions it was only one planning 5 year. 6 Α. That's correct, and then they added a couple more six months later installments. 7 They 8 worked out to three years ahead. 9 Q. When I say "planning year," you understand I'm referring to June 1 through May 31? 10 11 Α. Yes. And the schedule for RPM for -- was as 12 Ο. follows, if you recall, April, 2007, for the 13 14 2007/2008 planning year; May, 2007, for the 2008/2009 planning year; October, 2007, for the 2009/2010 15 planning year; and February, 2008, for the 2010/2011 16 17 planning year. 18 Would you agree that was the schedule of 19 the -- of those initial RPM auctions, subject to check? 20 21 Α. That sounds right. 22 So when these initial auctions were held Ο. 23 in looking at the ComEd up through the first 24 Rockland, those would have been run prior to the 25 first RPM auction, correct?

1

A. Yes, that's correct.

2 So you don't know what bidders in those Q. auctions assumed the capacity was going to be in 3 4 submitting their prices, do you? 5 Α. No, not explicitly. We assumed they were б guessing on the basis of what occurred. And you talked about the -- as with 7 Ο. Mr. Jones, you used July 15, 2008, for purposes of 8 9 your calculations, correct? Yes, for the forward prices. 10 Α. 11 And since that time forward prices have Ο. 12 come off rather dramatically; would you agree? 13 Α. It varies by horizon. The near term 14 forward prices have fallen off a fair amount in PJM, 15 less so in Cinergy, and less so in out years than the 16 current year. 17 Q. And specifically for 2009, the Cinergy peak has dropped approximately -- has dropped 18 19 17 percent, in the PJM approximately 29.5 percent; is 20 that what --21 Α. I haven't calculated it in percentage terms but that's plausible. 22 23 0. And there has been a continuous trend 24 downward since July 15; do you agree with that in 25 terms of the forward prices?

169 1 Again, speaking highly averaged level of Α. 2 annual strips, I suspect that's true. There may be 3 some months it has gone up over the course of a year 4 but on average I think whole year strips are down 5 again more so than the near year than for out years. б MS. FONNER: Thank you. I don't have anything further. 7 8 EXAMINER PRICE: Thank you. 9 Mr. Smith. 10 11 CROSS-EXAMINATION 12 By Mr. Smith: 13 Ο. Good afternoon, Mr. Graves. My name is 14 Craig Smith. I'm representing the Material Sciences 15 Corporation, an industrial customer. 16 In your testimony you describe the 17 assignment and in performing your assignment were you looking at this from the perspective of FirstEnergy 18 19 operating companies or the suppliers to the 20 FirstEnergy operating companies? 21 Α. Really neither. I was just asked to investigate what a -- an unidentified qualified 22 23 player in the market would probably think an MRO 24 price ought to be as of the middle of the summer. Ιt 25 wasn't with an eye to what any portion of FirstEnergy

1 might think about it.

2 Q. Who's assuming the shopping risk; the 3 supplier or the standard service offer provider in 4 your analysis?

5 Α. My analysis is agnostic as to how the б supplier will cover his obligation. It might not cover it at all. He might buy spot power and just 7 8 take his chances on being able to sell it at a fixed 9 price, and then he is responsible for the risks incurred in that way, or he might buy it with 10 11 flexible upstream contracts so my perspective is 12 entirely from the point of view of the standard service offer provider stuck with the fixed service 13 14 sales, fixed price sales.

Q. And do you not agree to the extent the SSO provider assumes risk depends on the tariffs between the provider and the customers?

18 Certainly and, again, I have analyzed it Α. 19 under the perspective of the prices being appropriate 20 to a fixed price full-requirements service whose prices don't change, and the only tariff-like 21 adjustment that I have incorporated in my analysis is 22 23 the -- my overly generalized understanding there 24 would be a standby charge for all SSO customers if 25 they switched and wanted to come back. That turns

out to not be true. It only applies to ESP 1 2 customers. But other than that, I'm treating it as a fixed price full requirements service. 3 4 And the primary risk that you perceive is Ο. 5 committing by contract to purchasing electricity and 6 having customers migrate to other suppliers through shopping? 7 8 Α. The primary risk to the SSO supplier; is that your question? 9 10 Ο. Yes. 11 That's certainly a very large risk. I Α. 12 wouldn't say it's the only risk but that's one that 13 is a big factor. 14 There's other risks associated with the uncertainty costs of load balancing as you try to react to shapes 15 16 that aren't exactly what you expected. There is 17 credit risk. There's regulatory rule changes. 18 There's lot of things that can happen, but customer 19 switching is a significant one. 20 In doing your analysis you essentially Q. 21 developed three exhibits. Exhibit 2 determines 22 comparables. 23 Α. Correct. 24 Okay. And in your direct testimony you Q. 25 introduced revised Exhibit 2, correct?

In my answer to the interrogatories --1 Α. 2 and I guess just now I also introduced it, yes, that's right. 3 4 This Exhibit 2 that you provided through 0. 5 interrogatories, does this replace the Exhibit 2 in 6 your prefiled testimony? 7 Α. Yes. 8 0. Now, how did you determine the average price of \$95.13 as your adjusted result? 9 At the bottom of column 14, that's what 10 Α. 11 you are talking about? 12 Yes. Just the method. Q. 13 Α. It's simply a weighted average -- I mean, 14 an arithmatic average of the numbers above it. Okay. Now, in your prefiled testimony 15 Q. you did not provide an average. 16 17 Α. No, that's true. Okay. And you did not think it was 18 Ο. 19 important to average the numbers in the prefiled 20 testimony? 21 Α. The reason I'm providing an average here is to show the overall affect of the change of the 22 23 correction I made. 24 I guess an average is interesting, although I think 25 the more interesting takeaway from this kind of

173 analysis is that there is potentially a fairly wide 1 2 range of uncertainty regarding what these prices will be and it depends on the bidders' perception of the 3 4 circumstances at the time as to how much of a premium they would impose, and so I wanted to provide the 5 6 range more than a spot estimate. 7 Well, with your revised Exhibit 2, when Ο. 8 you go to page 15 in your testimony, you provide a 9 range of numbers. 10 Α. Yes. 11 Are those numbers still accurate on page Ο. 15, lines 10 through 14? Or did they change because 12 13 of your revision -- revised Exhibit 2? 14 The numbers on lines 11 and 12 did change Α. 15 as I stated when I was giving the errata to my 16 testimony. 17 Okay, would you please tell me again. Q. To restate those for you, sure. 18 Α. The 19 first one of \$76.35 goes to \$77.55, and the second

20 one goes to 106.59.

21 Q. Thank you.

You also performed a modified constructed cost. Now, is your model similar to the previous expert witness Jones' testimony about determining direct costs and then determining risk? A. Yes. The basic concept is the same. We
 adjust for risks slightly differently, but we are
 fundamentally doing the same analysis.
 Q. You did not come to exactly the same

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5 answers.

6

A. That's correct.

Q. Okay, and that's because of different
adjustments for risk and also perhaps different
timing periods? I mean --

10 A. Certainly a substantial component is the 11 way we adjusted for risk, there may be some other 12 nuisances as to exactly precisely what data he was 13 relying on to what I was relying on.

Q. Do you not agree the risk adjustment is really that perceived by the -- well, for Dr. Jones it was by the supplier. And your risk analysis adjustment would be as perceived by the SSO provider, correct?

A. I don't think Dr. Jones and I have a
distinction in mind as to who is bearing the risk.
Maybe you and I have a semantic issue that's arisen.
I'm talking about the risks falling on the provider
whose responsible for guaranteeing the power at a
fixed price, and I was calling that the SSO provider.

175 Maybe you are calling the companies the SSO provider, 1 2 and they are procuring it through MRO or ESP, let's call the MRO winner the supplier and then that's who 3 4 I am talking about. 5 Q. So both you and Dr. Jones are talking б about the MRO winner? 7 Correct. Α. 8 MR. SMITH: I have nothing further. 9 EXAMINER PRICE: Thank you. Mr. Breitschwerdt. 10 11 MR. BREITSCHWERDT: Thank you. 12 13 CROSS-EXAMINATION 14 By Mr. Breitschwerdt: Q. Good afternoon, Mr. Graves -- or 15 Dr. Graves. My name is Brett Breitschwerdt, and I 16 17 have a few questions on behalf of NOPEC, which is the 18 largest governmental aggregation in the state of 19 Ohio. 20 Sure. Α. 21 Q. Earlier when you were responding you made 22 a response to a question from counsel for OCC about a 23 2004 FirstEnergy auction, and you said the 2004 24 period was sufficiently prior to this analysis, which 25 I understood you to mean in your testimony that you

1 did not think it would be informative.

2 Do you remember making that statement?

3	A. I do, yes.
4	Q. Well, I guess my question to you then is
5	your analysis of governmental aggregation in Ohio and
6	outside, what is the time period of that analysis
7	let's start with in Ohio what is the time period
8	of that analysis in Ohio?
9	A. Well, that's a bit of a
10	mischaracterization of my testimony to say I have
11	done a study of aggregation in Ohio and its history.
12	I understand from PUC documents, I believe, that in
13	around the 2002 and '3 period there was a very
14	successful process of aggregation that some 90 or 95
15	percent of customers who did switch were
16	participating in aggregation programs, and the
17	switching reached levels of 30 to 40 percent on
18	average and some cases 60 percent, I believe, below
19	the Ohio Edison's territory as I recall.
20	And that's and that there still is an active
21	process there with organizations such as your own but
22	that's about the extent of an empirical study I did.
23	Q. So that would be the extent of your
24	analysis of governmental aggregation was shopping
25	generally, I guess you say; is that fair to say?

1 Yes. I am not relying on a specific Α. 2 belief about how well it's going to work and 3 precisely what the rate of aggregation or switching 4 will occur. I'm just observing that there are structures in place 5 б and they have proven successful in the past at creating a great deal of switching. 7 8 Q. Okay. Regarding your Exhibit 1, if you 9 could turn there, please. 10 Α. Sure. 11 Just for my clarification, I looked at 0. 12 this and, honestly, I couldn't tell which of these 13 lines was the Ohio FirstEnergy companies, the 14 analysis. You have a black and white copy. 15 Α. I do. 16 Ο. 17 Α. It's the highest one. Okay, so starting in 2000 and ramping up 18 Q. 19 to the approximately 35 percent until 2005, and it 20 looks like a pretty steep decline at that point 21 starting in 2005; is that accurate? 22 Α. I see that, yes. 23 Ο. Do you -- in your analysis did you assess 24 the significance of that 2005 point where there is a 25 sharp decline in the amount of, I guess, shopping

1 generally?

2	A. I have a suspicion what's causing it, but
3	I haven't studied it or, you know, related it to a
4	specific individual customer's decisions.
5	But there was a marked spike in power prices in late
6	2005 in response to, for instance, the influence of
7	Hurricane Rita and the prices shot up substantially,
8	and it's plausible that the market base services
9	being offered by aggregators no longer looked as
10	attractive as the rate stabilization plan prices of
11	companies like FirstEnergy.
12	Q. So this I guess sharp decline in shopping
13	generally and participating in aggregations didn't
14	necessarily form your analysis going forward of the
15	action of participation in governmental aggregation;
16	is that a fair characterization?
17	A. Well, let me reinforce that. I'm

speculating precisely what went on there, but to the 18 19 extent that is a response to the sudden appeal of the 20 RSP prices compared to what was being offered by 21 aggregators, it in a way proves my point that anybody who is supplying an MRO product has to be quite 22 23 concerned about customers migrating quickly back and 24 forth if market circumstances become unfavorable 25 relative to the regulated or a fixed price

alternative, and it can happen -- you can lose money
 going both directions.

So the high amount of volatility in 3 4 customer shopping is a risk factor that I did take into consideration. 5 б 0. So -- so taking that forward to the proposed ESP starting in 2009, your testimony on page 7 8 17 does address your understanding of what a -- is it 9 fair to characterize it a market-based analysis what 10 the ESP price would be over the next three years in 11 \$92 and \$90 per megawatt hour? 12 MR. HAYDEN: Can we have it reread, 13 please. 14 (Record read.) 15 Α. The 92 to 90 dollar range is not -- there is two clarifications I would like to make; one, 16 17 that's not a forecast for the ESP, that's a market reference price, an MRO-type price to which the ESP 18 19 could be, and its different service characteristics 20 can be compared. So I think that's a likely MRO 21 price, at least it was as of July 15.

Does it take into account the switching behavior that we just discussed on Figure 1? Yes, I guess so, in that it's based on believing a certain minimum risk premium is likely to be observed in the

1 MRO.

2 And I made a judgment about what that would be based on with the history, but it's not 3 4 explicitly forecasting a degree of switching. It 5 just says that switching looks high enough to merit a б substantial risk premium. 7 So did you analyze the actual ESP plan in Ο. 8 coming to this 92 to 90 dollar market-based price and 9 the implication that would have on switching? 10 Α. No. This is not an attempt to lay my 11 guess of ESP against this forecasted MRO price and 12 decide that merits a certain amount of switching risk 13 premium. 14 I'm simply saying if I was a customer --I mean, a supplier bidding in an MRO process over the 15 next three years, I would expect to offer my services 16 17 at around \$92 to \$90 a megawatt hour. 18 I put them in that order because I think 19 it would decline slightly over time and that would 20 incorporate a risk premium for me to be able to cope 21 with the amount of customer switching history suggests possible. 22 23 0. Okay. Talking in generalizations, would 24 that also hold true, this price that you propose for

25 a third-party supplier that would be considering

contracting to serve the load of a large governmental
 aggregation such as NOPEC, the organization I

3

represent?

4 Α. It applies to a slice of system, so if 5 NOPEC was to go out and take on an equal percentage б of every load class or happen to aggregate in a town which was cross-sectionally pretty much like the 7 8 entire load mix of these customers, then, sure, that might be a price that a NOPEC analyst would also 9 think is a reasonable price to offer going forward. 10 11 Okay, and based on the fact NOPEC's load Ο. 12 is residential and commercial customers, how would 13 that, general speaking, generally I understand you 14 haven't done the analysis, how would this impact the

15 92 to 90 dollar megawatt price? What would it make 16 it go up or make it go down?

A. It's tough to do say without doing an analysis. I think there is two offsetting affects. One is it sounds like you would be restricting your market to customers who are less likely to switch than the industrial base that's a substantial portion of the slice of the system. So that would tend to decrease the risk premium.

24 On the other hand, you would be working 25 with customers whose load shape would be less flat

182 and more exposed to peak prices and so there might be 1 2 an increase in the expected costs for load shape differences, and I don't know which would dominate. 3 4 Okay. But regardless that -- the price Ο. 5 you propose as market based is higher than the price 6 the companies are proposing under their electric security plan option; would you agree with that? 7 Okay. Strike that. Let's walk through it just 8 quickly and I'll move on. 9 For 2009, do you know what the company's 10 11 proposing their full requirements SSO price to be? 12 I know the generation component of it is Α. \$75 before the deferral and that would be 67.50 with 13 14 the deferral. Q. Okay. Well, let's use that as the 15 hypothetical we are working, 67.50. 16 17 Ms. Fonner spoke with you earlier about the minimum 18 default service rider. 19 Do you recall that? 20 Yes. Α. 21 Q. And so that would be a nonbypassable charge of \$10 per megawatt hour or 1 cent per 22 23 kilowatt hour that perspective third-party supplier 24 that would be coming to serve a load of a large 25 governmental aggregation would have to incur -- the

1	183 price to make a contract successful would have to be
2	lower than 57.50; Would you agree with that?
3	MR. HAYDEN: Can I have that question
4	reread back, please.
5	(Record read.)
6	Q. Sorry. I can
7	A. I think I understand your question, and I
8	believe that's correct, that for me to first
9	switching, I would have to I don't gain any
10	advantage unless I can save more than \$10 because I'm
11	going to pay the \$10 as an MDS charge if I go
12	shopping, so I need to be \$10 below the generation
13	component.
14	Q. Okay. And that would be for a
15	full-requirements product that would be equal to what
16	the companies' SSO product would be; is that would
17	you agree with that?
18	A. I am not sure what you mean by "equal
19	to," but it would cover your power requirements to
20	the same extent.
21	Q. All right. So it would cover the same
22	risk, it would include all the direct components that
23	the companies' SSO price would, transition capacity;
24	is that correct?
25	A. I think that's correct but that's getting

into a little of the details of the ESP at a level I
 may not be the best spokesperson for.

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Q. Just one more question. Based on your analysis of the marketplace can you tell me whether a full-requirements product as the way we have just discussed it whether it's feasible to find this product in the -- in the current electricity market for \$57.50?

Well, it is certainly inconsistent with 9 Α. 10 my analysis that would be prevalent out there. At least as of the middle of the summer that would be an 11 12 extraordinary price which I guess is part of what has to be considered the ESP is being offered under terms 13 14 that are low relative to these numbers but with other arrangements added to the deal. 15

16 It's not strictly comparable to the MRO 17 because not everything is fixed, but in exchange it 18 offers other benefits.

19 Q. But wouldn't that impact the amount of 20 switching that would occur?

I guess what I am saying, the governmental aggregation can't get price below \$57.50 from a third-party supplier, how are they going to provide to their customers a benefit to take service from a third-party supplier as opposed to taking 1 service from the companies' SSO price?

A. Sure. Well, you wouldn't expect on day one that the ESP would be set up to be any better than anybody else could do anywhere else either. They are both based on market circumstances but over -- and so they ought to have about the same value but different terms.

On the other hand, over time 8 circumstances can change. Once you have locked down 9 a price, whether it's 57.50 or 67.50 minus 10 or 10 11 something else, if the market prices fall a lot, then 12 it can become attractive then to switch, so NOPEC 13 might find itself not able to provide a bargain right 14 away but potentially it will provide a bargain, and 15 they may also be selective subsets of customers who 16 can be carved off who have lower risk than the slice 17 of system generally, so they can be offered service 18 at another price.

There is more than one way to participate in the market, but it -- I wouldn't expect there to be a big opportunity right away, that's for sure.

Q. Okay, right away based on your analysis of the quote/unquote marketplace for the full-requirements product anywhere between 2009 and 25 2011, would you think that opportunity would arise?

1 Well, there has been a great deal of Α. 2 discussion this morning about the fact that forward prices have fallen a lot even since July 15, and 3 4 while it's not plausible to speculate they will continue to fall, it's certainly possible that they 5 б would continue to fall and so that -- and they've fallen enough that it -- I could see alternative 7 8 services getting interesting in the near future, so I 9 would say never say never. So there's a slim chance. 10 Ο. I don't know. I don't know how slim. 11 Α. 12 MR. BREITSCHWERDT: Fair enough. That's 13 all I have. Thank you. 14 EXAMINER PRICE: Mr. Lavanga. 15 16 CROSS-EXAMINATION 17 By Mr. Lavanga: 18 Good afternoon, Mr. Graves. My name is 0. 19 Michael Lavanga. I'm an attorney for Nucor Steel 20 Marion. I just have a couple very quick questions for you. 21 22 Α. Okay. 23 Q. Can you turn to your Exhibit No. 4, 24 please. 25 A. Okay. I have it.

187 1 Okay. I'm looking at the capacity prices 0. 2 on the second line for 2009, 2010, and 2011. I'm sorry, line 2? 3 Α. 4 Ο. Yes, I'm sorry. 5 Α. Yes. б Q. Line 2 there are three values there, capacity prices or capacity costs for 2009, 2010, and 7 8 2011. 9 Α. Yes. 10 Ο. Where did you get these prices again, this capacity costs? 11 12 These are the same capacity prices we Α. discussed earlier. FirstEnergy supplied to us their 13 14 recent experience in capacity contracting, which I 15 believe was based on a transaction in early July. 16 And it involved prices that involved capacity 17 payments in July and August only of around \$420 per 18 megawatt day or something like that as I recall, and 19 higher pricing in 2010 and '11, and when you convert 20 those to dollars per megawatt day this much load, it's \$69.07 and so on. 21 22 Okay. And who at -- who at FirstEnergy Ο. 23 provided you with this information? I believe it was Mr. Warvell. 24 Α. 25 Q. And have you made any independent

estimates aside from the information you received 1 2 from FirstEnergy? No, I have not. We wanted to use a 3 Α. market estimate -- a market price to describe what 4 5 people were actually trading at, and we understand 6 that's what this is. 7 Q. And if I heard correctly in response to questions from Mr. Small, you said that this 69.17 8 price in 2009 converts to a price per kilowatt month 9 of about \$2.10? 10 11 Yeah, \$2.10, \$2.20, something like that, Α. 12 I believe that's right. And would you, subject to check, that the 13 0. 14 82.50 in 2010 would convert to a dollar per kilowatt month price of about 2.51? 15 That sounds about right. 16 Α. 17 Q. Okay. And the 95.45 in 2011 would convert to a dollar per kilowatt month price of about 18 19 2.90; is that correct? 20 Subject to check, that certainly sounds Α. 21 plausible. 22 Ο. Okay. And then the average of these 23 three months would be about \$2.51? 24 Yes, that's my understanding. Α. 25 Q. And then if I'm correct, on line 3, you

1 increase this number by the reserve margin, which is
2 13.5 percent?

Yes. The capacity is grossed up by 13.5 3 Α. 4 percent reserves. The peak is. And then you multiply those and get row 4. 5 6 Q. Okay. So if I were to take the \$2.10 dollar per kilowatt month price for 2009 and applied 7 the reserve margin, I would get \$2.35 a kilowatt 8 month? 9 I'm sorry, could you say that again? 10 Α. 11 If I were to take the \$2.10 dollar per Ο. 12 kilowatt month price for 2009 and applied the 13 reserve -- the reserve margin, that would get me to 14 about 2.39 or 2.39 per kilowatt month for 2009? Converting it back to an effective price for the 15 16 amount of loads, not for the load plus reserves; is 17 that what you are doing? 18 Well, what I'm trying to do is apply the Q. 19 reserve margin to the dollar per kilowatt month 20 prices that we just ran through. 21 Α. Oh, okay. So you are just grossing up the prices by 13-1/2 percent. 22 23 Q. Exactly. 24 Yes, exactly. Α. 25 Q. 2.39 for 2009 or 2.85 per kilowatt month

1 for 2010?

2 A. I haven't done those calculations but I 3 believe you. 4 Q. Okay. And then doing the same thing for 2011, you are looking at about \$3.30 kilowatt month. 5 6 A. Okay. Q. Okay. And then subject to check, that 7 8 would average out over the three years to about 2.48 per kilowatt? 9 10 A. That sounds about right. 11 Q. And would you agree with me those are 12 only the costs of capacities and that doesn't include 13 any energy costs for operating the capacities or 14 supplying any energy? 15 A. Certainly. 16 MR. LAVANGA: That's all I have. Thanks, 17 Dr. Graves. 18 EXAMINER PRICE: Mr. Boehm. 19 MR. BOEHM: Yes, your Honor. Thank you. 20 _ _ _ 21 CROSS-EXAMINATION 22 By Mr. Boehm: Q. Mr. Graves, my name is is David Boehm, 23 24 and I represent the Ohio Energy in this case. 25 Mr. Graves, were you in the room this morning when

1 Dr. Jones -- thank you, when Dr. Jones was on the 2 stand?

A. Yes. Q. Okay. I take it that you would then agree with Dr. Jones that given some qualifiers, it is the bare bones market price, if you want to call that -- call it that, is more indicative of what the

8 MRO price would be if and when it's triggered is the 9 date that price gets closer to that -- to the MRO?

10 That's very clumsy.

11 That an October 10 price would be more 12 indicative of what the MRO price -- price would be 13 than, say, July 15, just because it's closer in time, 14 all other things being equal?

A. I need to be a little bit more carefulabout what you mean by "an October 10 price."

17 Q. Okay.

A. We've discussed the fact that forward prices for energy have gone down since July 15 but a lot of other circumstances have changed in ways we haven't quantified.

You would certainly need to quantify every one of those factors if we wanted to try to get a refreshed estimate. And it's not -- many of them would be quite difficult to do.

192 1 It's also not clear whether we are in a period that might shake out in a way that two months 2 from now current prices aren't -- in such a fashion 3 4 that current estimate isn't very indicative of what 5 will eventually happen. б Q. Okay. A couple of things now, Mr. Graves. The other things that you need to 7 8 quantify are things that you've attempted to quantify and Dr. Jones has tried to quantify with respect to 9 the July 15 information; isn't that right? 10 11 Α. Yes, you need to quantify everything on 12 the page as well as any other --13 Those -- excuse me. Ο. 14 -- peculiar to current circumstances. Α. 15 Q. And those are difficult to quantify now, aren't they? 16 17 Α. Sure. I think there are three or four things that would be very difficult to quantify now 18 19 almost certainly are more expensive than they were at 20 the time, but I don't know precisely how much. 21 Q. The one thing we wouldn't have to 22 estimate with respect to October 10 is what the price 23 was on the board, right? We would know that. 24 The price on the -- I'm --Α. 25 Q. The price in the marketplace, the bare

193 bones market price we will call it, we wouldn't have 1 2 to estimate that; we would know that? We would know where the forward curve is 3 Α. 4 to the extent that is visible over the entire term. In fact, it isn't very liquid out very far and so it 5 6 becomes less meaningful as you go out two, three years out, but we would be able to see the changes in 7 8 front end for sure. 9 Well, you don't disagree with Dr. Jones Q. 10 that the Cinergy hub is and continues to be a liquid 11 market though, right? 12 I agree with that, but just generally Α. 13 there is less trading in distant futures than there 14 are in near term futures, and I haven't looked at whether future volumes have become even thinner in 15 response to the credit crisis. 16 17 Q. Are you familiar with gas prices at all, 18 Dr. Graves? 19 Α. Not at the level of a trader but I 20 certainly know generally their history. 21 Q. Are you familiar with where gas prices are right now? Henry Hub, ballpark? 22 23 Α. To a first approximation, yes.

24 Q. Ballpark where?

25 A. \$8 a million BTU goes outs.

1 You think they are \$8? Ο. 2 That's a ballpark. I haven't looked at Α. it for a while. Are they better or worse? 3 4 Ο. You need to check them. It's 6 and 5 change. 6 Α. Okay. Okay. Would you agree with me, 7 Q. 8 Dr. Graves, that in the marketplace in many, many hours -- in relatively many hours of the -- of the 9 10 day the price of gas sets the price for power, for 11 electric power? 12 I think you need to be careful about what Α. 13 market region you are looking at. It's more true in 14 PJM than in MISO, and it's probably more true in 15 eastern PJM than in PJM in generally. 16 It's true the gas is on the margin to the 17 greater extent of its share of energy, but it's not a very big share of energy in MISO, so I wouldn't 18 19 expect it to be the dominant in MISO. It's only 20 about 27 percent in the margin PJM, which is a lot 21 more gas than MISO. 22 But it tends to set the margin. When we 0. 23 talk about "the margin," we are talking about on-peak 24 hours, right? 25 Α. Well, that wasn't what I was meaning.

Usually on the margin means just price setting, 1 2 whether it's on or off peak. Then would you agree with me that it sets 3 Ο. 4 the margin more on peak than off peak? Yes, I would think that's true. 5 Α. б Q. Would you agree with me those tend to be the higher prices? 7 8 Α. Sure. 9 Yeah. Would you agree with me as a Q. general matter, Mr. Graves -- is it Dr. Graves? 10 11 Α. No, Mr. Graves. 12 -- Mr. Graves, that in times of economic Q. 13 downturn parties tend to conserve natural gas? 14 Α. I have no reason to disagree with that. People are income constrained, they would consume 15 16 generally less of lots of things. 17 Q. Would you then expect that in times of economic downturn, the price of gas would fall? 18 19 Α. In the short run, generally I would. 20 But, of course, prices depend on supply and demand 21 and developers also tighten their belts. And if they 22 tighten their belts faster than the customers do, 23 then prices can rise. 24 If you would take it as a hypothetical Q.

25 that -- let's take as a hypothetical that prices of

gas and just four or five months ago let's assume 1 2 they were around 13 or 14 bucks an M? Yes, I am aware of that. 3 Α. 4 They are around 6 and change right now. Ο. 5 Would you see any correlation to that and what's б happening in the economy generally? Certainly in a pure statistical level, 7 Α. 8 yes, it's obviously correlated. Things are soft and energy prices are down. Oil prices are down. 9 10 The causal relationships are a little more complex, 11 so some portion of that is coming from oil prices, 12 some portion probably because of resession, some perhaps because of fears of pending collapse in the 13 14 market and gas being priced on a forward-looking basis if there is fears about the future, they could 15 be driving it down for reasons that haven't even 16 17 materialized in the current economy. 18 And we know, do we not, from our Ο. 19 conversations this morning, that the price of 20 electricity has been trending down; isn't that right? 21 Α. The energy component of the near-term forward prices have gone down, yes. 22 23 0. And do you have any personal opinion, Mr. Graves, as to whether or not predictions, that I 24 25 am sure you have here as I have, about a coming

1 recession, do you put any stock in those?

A. I think that's increasingly the consensus opinion of professional economists and it's not my specialty but people I respect seem to believe that it's likely.

I don't know that you can, again, per se convert that to a presumption of ongoing declining prices because it affects both supply and demand and it's not at all clear which is going to be more effective.

11 But certainly, Mr. Graves, if you had to 0. 12 do your analysis over again, not -- and I respect the 13 fact you had July 15 at the time and you had to do it 14 from this point forward and you saw all of these things happening, one way or another you would have 15 16 to factor those into your projections, would you not? 17 Α. Sure, if the task was to restate the analysis on a current basis, I would take all of 18 19 those factors into consideration and I would try to 20 make adjustments for other changes.

Like I'm confident there is increased risk aversion, probably higher risk premiums is associated with people's willingness to participate in this sort of transaction, maybe a smaller amount of absolute participation that would occur at all in

willingness to supply this kind of power. 1 2 You would -- so you would have to take all those into consideration. 3 4 I'm not sure at all whether this relates, 0. 5 but I would like you to go to your revised exhibit 6 that you had. 7 Α. Okay. 8 0. And that was your revised Exhibit 2. I have it. 9 Α. 10 Ο. And I am not sure I understand, Mr. Graves, column 8 adjusted from change in forward 11 12 prices from auction date to July 15, 2008. Could you 13 explain that to me? 14 Sure. Column 2 describes the date at Α. which the various auctions transpired, and they were 15 for services starting in column 4. 16 17 So at the time of those auctions there was a fowrard price for power at some nearby hub, for 18 19 example, for ComEd, the Northern Illinois hub power 20 was trading forward at the time, and we have public 21 data on what the price of the calendar strip was 22 beginning 1-1-2007 to the end of that year. 23 Now, we are wondering how much different 24 prices are by July 15, 2008. So we go back to the 25 Northern Illinois hub and we find out what the

average price of the 12-month strip is on July --1 2 from August 1 to the end of July and compare that price to the price that it had back on September 5, 3 4 2006, and it turns out to be 14.27 percent higher, and so I'm moving up the result in column 6 for the 5 6 change in forward prices since that day. 7 And if you were required, Mr. Graves, to Ο. 8 do a calculation of more recent date, then you would make the same sort of adjustment from your numbers as 9 of -- as of July 15 to whatever the current date 10 11 would be? 12 Yes, you could do that. Α. So those numbers could be -- could be a 13 Ο. 14 negative number; is that correct? It's possible for some of them. 15 Α. 16 Ο. Yeah. 17 Certainly not all of them but some of Α. 18 them. 19 Q. Okay. Now, I may be misquoting you so 20 please correct me. I thought that in your discussion 21 or colloquy with counsel for Nucor that you at one point said, well, you couldn't expect the ESP to be 22 23 better than the MRO starting off. 24 Did you say something like that? 25 Α. Yes.

Q. Okay. And would you explain that, why you wouldn't expect the ESP to be better than the MRO starting off?

4 Sure. The MRO prices that I've tried to Α. 5 estimate and Dr. Jones has estimated and that б prevailed in these kinds of trend -- auctions in the past are designed -- are constrained to be a certain 7 8 kind of service, it's a fixed price service where for full requirements and the supplier takes all of the 9 10 procurement and delivery risks associated with doing 11 so, and so there's certain kinds of risk premiums and 12 so on built in.

13 The ESP as I understand it by design not 14 quite an equivalent service, it's not intended to be 15 a full requirements fixed price nothing ever changes service because if it were, they could just 16 17 participate in it -- just hold an MRO and FirstEnergy could bid to be a supplier in that and we would find 18 19 out what the best price was for that kind of service 20 and we would be done.

That isn't what happened. Instead it's set up to describe a different kind of service which has various kinds of commitments to the future, various kinds of associated other benefits, various kinds of adjusters, riders and the like, and various 1 kinds of risk protections built into it.

And in exchange it has a very different price, but all together if you -- if FirstEnergy was doing its homework on the date it offered its ESP price and that date was the same as Dr. Jones and I were doing our MRO estimates, the present value of what the two offers ought to be worth ought to be about the same thing.

9 That isn't to say the cash payments 10 wouldn't be identical under the two because they are 11 not designed to provide the service in exactly the 12 same way.

Certain kinds of risks are transferred in one case more to customers than others and the other case they are borne by the supplier, so you pay for it under the MRO and flow it through the ESP and the result is a different price. But it doesn't mean it's a different value.

Subsequently, market conditions can change and an MRO being offered at a different date can have an inherently different base because market circumstances have changed.

But that wouldn't tell you -- you couldn't have expected that on day one that it would turn out to be better than the ESP or worse than the

1 ESP.

2 MR. BOEHM: Okay. Thank you. I think that's all, your Honor. Thank you. 3 4 EXAMINER PRICE: Thank you. Mr. Bell? 5 6 _ _ _ 7 CROSS-EXAMINATION 8 By Mr. Bell: Q. Just a few questions. 9 10 Α. Okay. 11 Is it correct, Mr. Graves, that both you Ο. 12 and Dr. Jones and Dr. Vilbert all engage in a 13 mathematical averaging approach to identifying the 14 requirements of FirstEnergy, be it in terms of return or be it in terms of the market price? 15 MR. HAYDEN: Objection. Mr. Graves 16 17 cannot testify as to what Dr. Vilbert or Dr. Jones 18 did in their calculations. 19 EXAMINER PRICE: Sustained. 20 Q. Mr. Graves, it is correct, is it not, 21 that you have engaged in an arithmatic computation to 22 quantify the perceived risk premium required by a 23 provider of last resort? 24 Yes, that's correct. Α. 25 Q. And would you agree that the -- that that

1 risk is peculiar to the individual and the

2 perceptions held by that individual at the time the 3 risk is undertaken?

A. I agree that different participants could perceive those risks differently, but if there were a competitive process, there would be the participant who had the most optimistic release about it would prevail and then it would be an objective feature of their price.

Q. But in any event, the measurement of the risk is taken at the time the risk is assumed, is it not?

A. To a first approximation. There is a little time to do the analysis and then, you know, a day or a few days after that the transactions occur that are being priced, but as close as possible.

Q. Let me put it this way, Mr. Graves, if -if I'm undertaking a risk today, is not my perception of the risk dependent in large measure upon the duration over which that risk extends?

21

A. Certainly a factor.

Q. And is not my perception of that risk based upon conditions as they exist and as they may influence my perception at the time I undertake the risk?

1 Well you are -- your willingness to Α. 2 participate in the transaction and your -- or the compensation you require for being exposed to that 3 4 risk is a special assessment. If you're eccentric in that belief 5 б compared to other market participants, you might be foreclosed from being in the transaction, but 7 8 everyone comes with a different perception of the key factors. 9 Are you saying then that risk and the 10 Ο. difference in risk is in the mind of the risk-taker 11 12 at the time the risk is undertaken? 13 Α. It's kind of a hugely general question. 14 Maybe it could be more. Of course, if you were to ask me about a specific type of transaction and a 15 specific circumstance. 16 17 Q. I take it you can't answer the question as posed? 18 19 Α. I think that might be right. Yeah, I 20 can't get more specific without you being more 21 specific. 22 I think Mr. Boehm touched on it and some Ο. previous counsel, and I am now walking down the same 23 24 path with respect to the credit markets currently 25 freezing up, as I believe Dr. Jones expressed.

1 Do you have any opinion as to the 2 duration of the economic downturn that we are now experiencing and what effect that will have upon the 3 4 risks as you have attempted to measure them? 5 Α. I have a suspicion but I'm not a macro б economist who specializes in the financial sector, so it would not be maybe many of your own views on it, 7 8 but I think we will face a problem of some length, two to three years, to work through, and I suspect it 9 will substantially increase the price of risk and the 10 cost of credit for the next -- certainly the next 11 12 several months as we work through gaining --13 regaining confidence in the market.

And then maybe by, you know, next spring or sometime, we'll have more confidence and we will be trying to encourage transactions with highly discounted interest rates and so on, again, but I think that's months away at least.

19 Q. I take it then you do not share the 20 opinion articulated by the Chairman of the Federal 21 Reserve today that he expects the current problems to 22 persist for some time suggesting that maybe Congress 23 ought to even consider another stimulus package and 24 that he's leaving the Federal Reserve door open for 25 another rate reduction?

206 1 MR. HAYDEN: Objection. I move to strike 2 that entire question from the record. EXAMINER PRICE: Grounds? 3 4 MR. HAYDEN: He's not here to testify on what the Federal Reserve Chairman is saying on 5 6 current events, nor also he's assuming facts that's not in evidence. 7 8 EXAMINER PRICE: Sustained. 9 Q. (By Mr. Bell) My point being this; would 10 you agree that economic conditions are going to cause 11 a retrenchment on the part of consumers and 12 businesses alike? 13 In general I would expect business Α. activity to slow down. I am not sure that's the same 14 thing as a retrench. But I do think that's likely 15 for several months or a couple of years, so I'm -- I 16 17 think we are in agreement on that. And if, in fact, that occurs, will that 18 Q. have an impact upon cost of commodities, such as 19 20 gold? 21 Α. Gold --Natural gas is suggested by Mr. Boehm. 22 Ο. 23 Α. Well, we discussed that it will, but the 24 effects are complex, it could certainly reduce 25 demand, but it could also reduce supply and

207 ultimately switch over -- for those that is reduced 1 2 more will have the dominant affect on price, and my concern in the context of the Commission thinking 3 4 about the MRO prices, either now or in the future, would be that those pressures, while they may be 5 6 pushing energy down, it may be pushing up costs of other difficult to quantify like risk premiums. 7 8 The cost of credit, even the ability to participate in auctions and the net effect could be 9 that prices go up for those kinds of services --10 I apologize, I didn't mean to interrupt 11 0. 12 you. 13 You've not attempted to quantify those

14 risks, have you, Mr. Graves? You are just saying 15 they are offsetting risks?

That's correct, my analysis is dated 16 Α. 17 July 15. We weren't in this situation at that time. So that while from a current perspective 18 Ο. 19 in perceiving one's risk out into the future, the 20 economic retrenchment that we are witnessing and have 21 witnessed in the reduction in commodity costs show lost supply and demand; less demand, the prices go 22 23 down, supply comes up, you acknowledge that that's 24 happened, but offsetting that are other undefined 25 risks, I take it, that you have not measured?

1 MR. HAYDEN: Objection. That's a 2 mischaracterization of what he testified. 3 0. Have you measured those other risks, 4 offsetting risks? MR. HAYDEN: Your Honor, I have a pending 5 б objection. 7 EXAMINER PRICE: I think he rephrased his 8 question. His second question is unobjectionable. 9 No. As I said, my analysis is the only Α. 10 analysis I have done is the analysis in my report and 11 that describes midsummer conditions, and the best I 12 can offer you now is to comment on the direction that 13 I think those other factors may have and some of them 14 are very difficult to measure, because part of the 15 problem is very poor liquidity and some of the very 16 factors you would otherwise rely on to estimate 17 prices, so there's not as much to observe that you 18 would need to incorporate those into an analysis. 19 Ο. Ignore known price changes on the basis 20 of unknown future risk; is that the essence of your 21 testimony, Mr. Graves? 22 No. The essence of my testimony is I Α. 23 developed an analysis centered on the middle of the summer and the ESP service was offered under the same 24 25 circumstances and the same set of prevailing economic

209 beliefs, so there's very useful data available here 1 2 to think about whether the cash differences in the 3 cost of those two proposals are commensurate with the 4 changes in benefits and risks that can go with them. They are not identical services, and I 5 б think the best way to think about that is at the time, given that they were developed under similar 7 8 circumstances, we can look at them then and what we 9 see in the interim is just information about how the risk characteristics of the services might unfold. 10 11 We don't have proof because we haven't really said 12 anything, but we certainly have evidence, for 13 instance, MRO prices which change around depending on 14 when they occur. The ESP prices would do that to 15 nearly the same extent. 16 Is that a good thing or not? That's the 17 Commission's test to assess. 18 Q. Are you finished? 19 Α. Yes. 20 MR. BELL: Thank you, Mr. Graves, I have 21 no further questions. 22 EXAMINER PRICE: Mr. Dunn?

23 MR. DUNN: No questions, your Honor.

24 EXAMINER PRICE: Hospital.

25 MR. SITES: No questions, your Honor.

1		210
		EXAMINER PRICE: Ms. Wung?
2		MS. WUNG: No questions, your Honor.
3		EXAMINER PRICE: Mr. McNamee.
4		MR. McNAMEE: Oh, thank you.
5		
6		CROSS-EXAMINATION
7	By Mr. McN	amee:
8	Q.	Goods afternoon, Mr. Graves.
9	Α.	Hi.
10	Q.	Let me see, your predecessor on the
11	stand, Dr.	Jones, used a calculation of yours in his
12	Exhibit 7.	
13	Do you hap	pen to have his testimony in front of you?
14	Α.	I don't.
15	Q.	You don't.
16		EXAMINER PRICE: Maybe can you supply the
17	witness wi	th a copy of Dr. Jones' testimony?
18		MR. McNAMEE: He can have mine.
19	A.	I'm sorry, what exhibit did you say?
20	Q.	6 and 7 actually.
21	Α.	Okay.
22	Q.	Do you have column denominated Reserve
23	Margin	or there is a column denominated "Reserve
24	Margin."	
25	Α.	Yes, I see that.

211 1 And that's credited to you, I believe. Ο. 2 Well, the calculation is his, but it's Α. derived from data that I compiled in past 3 4 proceedings. Okay. What data is that? How did --5 Q. б how --7 It's described right there and it's Α. 8 visible right there's the average, his observed 9 margin is the average of the margins in column just to the left of that which in turn were taken from a 10 11 hearing in Maryland on the question of what kinds of 12 risk premiums tended to prevail in full requirements 13 outsourcing and whether or not those risk premiums 14 could be eliminated through a managed portfolio 15 procurement. 16 How were those observed margins 0. 17 determined? 18 Α. To some extent in a fashion that's 19 analogous to the constructed cost methods that 20 Dr. Jones and I both did here. 21 I took data from about 50 public procurements full requirements service that had 22 23 occurred since 2003, I believe that is the first one, 24 first PGS auctions in New Jersey, and reconstructed 25 what I thought would be the cost of service to

convert wholesale prices, then prevailing for energy capacities ancillary services congestion and so forth into an expected cost for the retail service in those territories at that time, and I compared that cost to the auction prices that prevailed, and the difference was a margin largely distributed to risk but also to other factors.

Q. Okay. This observed margin as you calculated it would include all of the other sorts of risks that you discuss elsewhere in your -- in your testimony this season. Your testimony that we are looking at right now would be a summation, if you will?

A. Sure, I guess that's fair enough to say. They describe everything else that the parties who won those auctions felt was necessary to justify participation in those services would have and beyond the components that I had estimated.

Now, there is at least two or three reasons why that margin might be present. One is I might have estimated the numbers that they would use in their analysis incorrectly, so I may have relied upon estimates that they didn't share, so there could be an estimation factor in it.

Another is risk premium, they demand a

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risk premium for the switching risks and all the
 utility risks and credit risks and so on.

And then the third is it's plausible, but I don't think likely, that the auctions themselves allowed the parties to obtain a premium of some kind to give to the extent they weren't competitive auctions.

8 Now, I should say none of them were found 9 to have that problem that -- not at least in the data 10 I relied upon, so I don't think that's present, but 11 the margin is the result of the character of the 12 auction, my estimation technique and risk premiums 13 that the parties to the auction wanted to earn.

Q. Okay. So I'm trying to determine what was actually observed. The only thing that was observed was the bid price, right?

A. Sure, and we don't know that the parties who won would call it a risk premium or they might call it a profit margin. We don't know.

Q. Okay. So the balance -- what you have is an observed price with your calculation of what that observed price breaks down into, right?

A. I have an observed price in the auction and then we have my calculations what some of the notable elements of cost would be and the residual 1 that I couldn't explain with known elements is the 2 margin.

3	Q. Okay. All right. And you use the same
4	methodology that you did in your testimony to derive,
5	I guess, this what's been denominated as a reserve
6	margin, the methodology is the same.
7	A. Well, here both of us used ran that
8	process in reverse we built up a structural model of
9	what the known elements were to create an MRO service
10	and then added on a risk premium of the same
11	magnitude that's been observed in other auctions
12	where people were providing that kind of service.
13	Q. Okay. All right. Speaking of auctions,
14	Mr. Graves, you are aware, are you not let's
15	let me preface this.
16	Long ago you were asked about the 2004
17	FirstEnergy auction.
18	A. I remember.
19	Q. Okay? You are aware, aren't you, that
20	although that auction was in 2004, the actual
21	contract period that would have been served by the
22	that auction was 2006, 2007, and 2008, which overlaps
23	at least in part with the procurements that you used
24	in your analysis.

25

A. Yes, a little bit. It does overlap, but

it starts -- but it was transpired long before then.
 The period the MISO hadn't yet been put into
 operation, Hurricane Katrina, it was a very different
 environment.

5 As we point out, it was for service that 6 began in a year later and that by itself creates a 7 difference between what I was trying to estimate and 8 what occurred then.

9 Q. Although you just testified I think that 10 the procurements that auctioned went back to 2003; 11 isn't that right?

A. Yes, for purposes of estimating a risk premium, so I do use those in Exhibit 7 going all the way back to 2003, but I don't use those in my comparable analysis, those are all much more contemporaneous and I only use auctions that had service beginning in 2007 or later. So it would have been Exhibit 2, there is no 2003 auctions in that.

19 Q. Why would you reach to a different 20 period, to different risk? Why would you reach -- in 21 fact, why would you reach farther back to measure a 22 risk premium?

A. Well, I think the risk premium, though sensitive to other factors, like forward prices and capacity rules and so on, is in some ways less

sensitive to those than all the other factors that 1 2 I'm updating my comparables and construction cost 3 analysis, because what's to the extent -- especially 4 to the extent risk is rising from customer switching, 5 the big concern is what's the likelihood that prices б will change after the auction price is set to some level that makes customers wants to leave. 7 8 That question remains interesting going back to 2003, even though it admittedly is slightly 9

10 different circumstances in a way than asking about 11 the character forward price's asking price in 2003 12 doesn't.

Q. Okay. Again, long ago in your
cross-examination you indicated that you used RPM
capacity prices in one of your calculations.

16 A. Correct.

Q. Those, of course, would not apply tobidders for FirstEnergy load in Ohio, correct?

19

A. That's right.

Q. Okay. And those RPM capacity prices would be significantly higher than the capacity prices used by Dr. Jones that he got from the company?

A. Yes, and they are also higher than the ones I used for the FirstEnergy assessments.

- 1
- Q. Okay.

2	A. I don't apply RPM prices to Ohio. I
3	apply the same capacity prices that Dr. Jones used.
4	Q. Okay. Let's talk about Maryland and New
5	Jersey a little bit. You deal with some or you
6	considered some procurements there.
7	Would you agree with me there are
8	differences in the electricity matters in Maryland
9	and New Jersey versus Ohio?
10	A. Sure, and there are some similiarities.
11	Q. Okay. Would you agree there is more
12	congestion in New Jersey and in Maryland than there
13	is FirstEnergy?
14	A. Yes, that's my understanding, and I take
15	that into account in my analysis.
16	MR. McNAMEE: Okay. That's all we need.
17	Thanks so much.
18	EXAMINER PRICE: Mr. Hayden?
19	MR. HAYDEN: Your Honor, if we could have
20	a minute, please?
21	EXAMINER PRICE: Certainly.
22	MR. HAYDEN: Can we take a break, 5, 10
23	minutes?
24	EXAMINER PRICE: Yeah, why don't we take
25	our 15-minute break here. We will return at 3:50 and

218 then if you don't have any questions or very brief, 1 2 and then go on to Mr. Schneider. 3 (Recess taken.) 4 EXAMINER PRICE: Let's go back on the record. 5 6 Mr. Hayden. 7 MR. HAYDEN: Yes, your Honor just a 8 couple of questions. 9 - - -10 REDIRECT EXAMINATION 11 By Mr. Hayden: 12 Q. Mr. Graves, in your examination there was 13 some questions about whether or not you were 14 testifying on what the price would or should be in ESP. 15 16 Do you remember that? 17 Α. Yes. Can you clarify your answer on that 18 Q. 19 point, please? 20 Α. Yes. Just to make sure it's clear, 21 I'm -- my testimony should not be construed as an 22 attempt to say what a fair price for the ESP services 23 are. 24 My testimony is about the price of an MRO 25 full-requirements fixed price service as of the

middle of the summer, and that is an input to the 1 2 Commission's consideration of whether they prefer service under those terms and prices as they would 3 4 appear to have been available in July to the ESP as 5 it was designed in July. б Q. Thank you. And you were also asked some questions 7 about riders in the ESP and their affect on prices 8 over time. 9 10 Do you recall those questions? 11 Generally, yes. Α. And is there any analogous effect in the 12 Q. 13 MRO? We've talk about MRO, it results in a 14 Α. once and for all fixed price, because at the time 15 each MRO auction occurs, the bidders offer a fixed 16 17 price but, in fact, if MRO process is adopted, there 18 will be a series of installments of procurements 19 beginning with 100 percent of the first 17 months 20 being procured at the end of this year, and then 21 two-thirds being procured for 29 months and one-third 22 for 41 months, with subsequent auctions layered in 23 two per year in the future to fill in their future 24 requirements at a time.

And as a result, the price that customers

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220 would see from all those iterative MROs would be a 1 2 price that ebbed and flowed over a fairly long cycle with the -- with the changes in the market and it 3 4 would tend to move up or down somewhat akin to the fashion the riders will cause the ESP price to 5 6 change. 7 MR. HAYDEN: Thank you. I have no 8 further questions, your Honor. 9 EXAMINER PRICE: Mr. Small? 10 MR. SMALL: No questions, your Honor. 11 EXAMINER PRICE: Mr. White. 12 MR. WHITE: No questions. 13 EXAMINER PRICE: Ms. Wung. 14 MS. WUNG: No questions. 15 EXAMINER PRICE: Ms. McAlister. 16 MS. McALISTER: No questions. 17 EXAMINER PRICE: Ms. Fonner. 18 MS. FONNER: No questions. 19 EXAMINER PRICE: Mr. Smith. 20 MR. SMITH: No questions. 21 MR. BREITSCHWERDT: No questions. 22 EXAMINER PRICE: Mr. Stinson. 23 MR. STINSON: No questions, your Honor. 24 EXAMINER PRICE: Mr. Lavanga. 25 MR. LAVANGA: No questions, your Honor.

221 1 EXAMINER PRICE: Mr. Boehm. 2 MR. BOEHM: No questions, your Honor. EXAMINER PRICE: Mr. Bell? 3 4 MR. BELL: Surprisingly, no. 5 EXAMINER PRICE: Mr. Dunn. 6 MR. DUNN: No questions, your Honor. 7 EXAMINER PRICE: Staff? 8 MR. McNAMEE: No questions. 9 EXAMINER PRICE: Thank you, you're 10 excused. MR. HAYDEN: Your Honor, I move for the 11 admission of Company Exhibit 7, direct testimony of 12 13 Frank Graves. 14 EXAMINER PRICE: Any objections to the admission of Company Exhibit 7? 15 Hearing none, it will be admitted. 16 17 (EXHIBITS ADMITTED INTO EVIDENCE.) 18 MR. HAYDEN: Also move for the admission 19 of Company Exhibit 7A, which is a correction to 20 Mr. Graves' testimony response to OCC Set 3 RPD-29. EXAMINER PRICE: Any objections to the 21 admissions? 22 23 MR. SMALL: Yes, your Honor. 24 EXAMINER PRICE: Mr. Small. 25 MR. SMALL: Yes. I have no objections to the table, which is page 3 of this exhibit, and I have no objections to part B on the first page, which is essentially his explanation for why he is offering the exhibit.

5 And I have no objections to the last 6 sentence on the first page and continuing over to the 7 second page, which is again an explanation for why 8 this substituted table has been presented. 9 I do object to the admission of anything else on the

10 page. It was not presented through the witness. Ιt 11 was not verified, and in response to my questions, it was clear that the response here was incomplete. 12 13 And there is other material which other parties would 14 have the right to inspect and admit other portions of it if -- if these parts were admitted, so the OCC 15 objects to the other parts of it that I have not 16 17 described.

18 EXAMINER PRICE: Mr. Hayden.

MR. HAYDEN: Your Honor, we are really trying to move in a correction to his testimony and I didn't hear the letters that Mr. Small said, but I believe those corrections are encompassed in the response part B and D, or the last section there of and the table which was included in the pack that I'm handing out.

223 1 I am not trying to move in for admission 2 the remainder, which I think is in response to what Mr. Small is talking about here. 3 4 EXAMINER PRICE: So the parts that 5 everybody is in agreement is part B; is that correct, 6 Mr. Small? 7 MR. SMALL: You said B? 8 EXAMINER PRICE: B. MR. HAYDEN: B. 9 10 MR. SMALL: Yes, we are in agreement. 11 EXAMINER PRICE: Okay. And part D? Mr. Hayden, did you say D? 12 13 MR. HAYDEN: I said D, yes. 14 MR. SMALL: And I was saying the last sentence of D. 15 16 EXAMINER PRICE: The last sentence of D. 17 MR. SMALL: Starting "Mr. Graves is submitting," and continuing on to the second page. 18 19 EXAMINER PRICE: Is that acceptable, 20 Mr. Hayden? 21 MR. HAYDEN: Are you saying the last three sentences which spill over onto the next page? 22 23 EXAMINER PRICE: I believe he is. 24 Is that correct? 25 MR. SMALL: That's correct.

224 MR. HAYDEN: Your Honor, these sentences 1 2 just clarify that this is -- this is a correction to his testimony. 3 4 EXAMINER PRICE: He's not objecting to 5 those sentences. That's the part that's б unobjectionable. He is objecting to the first two sections. 7 8 MR. HAYDEN: Then we are in agreement. 9 EXAMINER PRICE: Okay. Just to clarify 10 then, Company Exhibit 7A will be moved in to the 11 extent and only to the extent that includes Section B 12 and the last paragraph of Section D and the table. That exhibit will be admitted. 13 14 (EXHIBITS ADMITTED INTO EVIDENCE.) 15 MR. McNAMEE: Your Honor. 16 EXAMINER PRICE: Ms. NcNamee? 17 MR. McNAMEE: Your Honor, during the break I handed out, hopefully to everybody in the 18 19 room, updated schedules of our accounting witness, 20 Mr. Tufts. Those are docketed today. 21 In addition to giving them out to I hope everybody -- did everybody get one? Missed one --22 23 they have been served electronically on everyone. 24 EXAMINER PRICE: Thank you. 25 Ms. Miller, are you next?

225 1 MS. MILLER: I am, thank you, your Honor. 2 The companies call Donald R. Schneider. 3 (Witness sworn.) EXAMINER PRICE: Please be seated and 4 state your name and business address for the record. 5 6 THE WITNESS: Donald R. Schneider, senior vice president of Energy Delivery, and senior vice 7 8 president of the utilities. 9 EXAMINER PRICE: Ms. Miller, please 10 proceed. 11 MS. MILLER: Your Honor, the companies 12 would like to premark the direct testimony of 13 Mr. Schneider as Company Exhibit 3. 14 EXAMINER PRICE: So marked. 15 (EXHIBIT MARKED FOR IDENTIFICATION.) 16 _ _ _ 17 DONALD R. SCHNEIDER being first duly sworn, as prescribed by law, was 18 19 examined and testified as follows: 20 DIRECT EXAMINATION 21 By Ms. Miller: 22 Q. Good afternoon, Mr. Schneider. How are 23 you today? 24 Α. I'm good. 25 Q. Do you have before you what has been

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1	premarked for identification as Company Exhibit 3?
2	A. I do.
3	Q. Is Company Exhibit 3 your direct
4	testimony in this proceeding?
5	A. Yes.
б	Q. Do you also have before you what was
7	previously marked in this proceeding as Company
8	Exhibit 10?
9	A. I do.
10	Q. And Company Exhibit 10 is the company's
11	errata; is that correct?
12	A. That's correct.
13	Q. Do you sponsor the items on Companies'
14	Exhibit 10 that bears your name?
15	A. I do.
16	Q. And if you were asked the same questions
17	in your testimony subject to the changes made on the
18	errata, would your answers be the same?
19	A. Yes.
20	MS. MILLER: The witness is ready for
21	cross.
22	EXAMINER PRICE: Thank you.
23	Mr. Small Mr. Reese, I'm sorry.
24	MR. REESE: I'm shorter.
25	

1	CROSS-EXAMINATION
2	By Mr. Reese:
3	Q. Good afternoon, Mr. Schneider.
4	A. Good afternoon.
5	Q. I believe we've talked before.
6	I wanted to call your attention to Page 2 of your
7	testimony, line 17.
8	As I understand it, you are sponsoring
9	paragraphs A3E, A3F, A3G, and A4F of the companies'
10	Application; is that correct?
11	A. That's correct.
12	Q. Or the plan.
13	A. That's correct.
14	Q. Thank you.
15	MR. REESE: May I approach?
16	EXAMINER PRICE: You may.
17	MR. REESE: Thank you.
18	MR. WHITE: Excuse me, Rick, is that
19	going to be marked as an exhibit?
20	MR. REESE: No, it isn't.
21	Q. Mr. Schneider, what I have provided you
22	is the portion of the Application. If you flip back
23	several pages, you'll come to the paragraphs that we
24	were just discussing. I believe it would be page 21.
25	A. I'm on page 21.

1 Okay. At the top of 21 of the Ο. 2 Application or paragraph, this is A3E, I want to talk to you about this paragraph first. 3 4 It's my understanding based on this 5 paragraph that you're -- that the FirstEnergy 6 companies are proposing a delivery service improvement rider; is that correct? 7 8 Α. That's correct. And this rider would be in place for the 9 Q. period January 1, 2009, through December 31, 2011; is 10 11 that correct? 12 Α. That's correct. 13 Ο. Now, this is not numbered as your 14 testimony is, but approximately six lines down we have a sentence that begins with "The DSI rider will 15 help enable the companies to manage the increasing 16 17 costs providing electric distribution service." 18 Do you see that? 19 Α. Are you still in paragraph E? 20 Q. Yes, I'm. 21 Α. Yes, I see that. 22 "We have the need to expend capital for Ο. 23 equipment far earlier than before." 24 Can you explain why there is a need to expend capital for equipment far earlier than before? 25

Yes. That's referencing the extended 1 Α. 2 lead times that we are experiencing with our suppliers of large transformers. 3 4 Ο. Are there any other examples? We have a similar situation with new 5 Α. б large vehicles. We recently experienced the financial organization that was leasing some of those 7 vehicles for us, quit leasing them, and so now we 8 9 have to place orders directly through capital 10 expenses. Continuing with that sentence "the need 11 0. 12 to train new employees to replace retirees." What is new about the current time frame regarding 13 14 training new employees? Could you repeat that question? 15 Α. 16 (Record read.) 17 Α. We are referring to the magnitude of new 18 employees that we need to hire and bring into the 19 organization to replace retiring employees. 20 Q. Now, there is an expanded need, if you 21 will, to train new employees. Has FirstEnergy -- the 22 FirstEnergy companies in Ohio neglected to keep up 23 with hiring? 24 No, not at all. Where we find ourselves Α. 25 today is that at about 50 percent of our work force

in the Ohio companies will be retirement eligible in
 the next three to five years.

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And we've established what I think to be one of the best programs in the industry. We refer to it as our PSI program, Power Systems Institute, and we've had that program up and running in the state for about -- about seven -- seven or eight years.

9 Now, we have had to ramp up over that 10 seven or eight-year period, but now we now have six 11 schools around the state of Ohio and the recruiting 12 that we do is primarily out of high schools, and we 13 will bring in individuals that graduate from high 14 school into our PSI program. They will spend two 15 years in this program.

16 It is some physical work, it's also 17 technical work, mathematics, electrical circuit 18 theory, that sort of thing.

They will also spend a portion, primarily the summertime they come to work for us on a full-time basis, and once they then graduate from the PSI program after that two years in school, then we bring them into a training program as a full-time employee.

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And then over about the next five years

1 they can ramp up and become, you know, a full -- what 2 I would call a full-fledged lineman.

So we haven't neglected at all, but we 3 4 are at a point now where we are bringing in in 2009 I think we will bring in about 200 or 220 new employees 5 6 into -- into our organization, so this would be 220 that would have graduated from PSI. They would have 7 8 started in 2007, graduate in 2009, and start that 9 five years training program in-house. 10 Ο. So these 220-odd employees that are just coming out of training, how many employees are they 11 12 replacing? 13 I don't know exactly that number in Α. 14 the -- you know, in the time frame that those 15 employees will be coming in. 16 Our hope is actually that we have an 17 overlap because, again, these employees, although they are very well trained in the classroom and some 18 19 physical work, they are not in a position where we 20 could let them out kind of by themselves. In other 21 words, they are not full-fledged lineman. 22 So what we really need to go through, one 23 of the things creates the challenge for us, we need to put these new employees with the trained veterans 24 25 to allow that five-year transition of knowledge.

232 So our hope is actually that the way we time this is 1 2 that the new employees will have about five years worth of veterans and, again, that's about the time 3 4 frame we see 50 percent of our employees being 5 eligible for retirement, so we will have a smooth 6 transition there. 7 Was FirstEnergy doing this five years Ο. 8 ago? 9 Α. To a much lower magnitude, five years 10 aqo. But, yes. 11 Can you give me an idea of the magnitude? 0. 12 I can't go back five years, but I can Α. 13 tell you that in 2007 we graduated about a third of 14 that number, about 70 employees versus the 210 so, 15 and, again, you have got to remember that when I talk 16 about an individual graduating, so then you have to 17 back up from there five -- two years, because if they 18 graduated in '07, that means they started the program 19 in 2005. 20 So in '07 we graduated about 70 in Ohio, 21 and if you go back about seven or ten -- seven or eight years when we first started the program, I 22 23 think we started with two schools so we had about 40 24 individuals enrolled in the school, and so that kind

25 of breaks it out for you.

1 I'm still trying to understand, there's Ο. 2 something unique about the current time frame that requires the company to offer this DSI rider. 3 Is it 4 all right if we refer to it as the DSI rider? 5 Α. Yes, that's fine. 6 Q. You've offered this rider in part to train new employees. I'm still not clear on why that 7 8 rider is necessary now for the company to train 9 employees as opposed to two years ago, three years ago, five years ago, ten years ago. What's unique 10 about 2009? 11

A. It's really the magnitude. Again, as I tried to explain, if you go back in time, we started with our first school probably about eight years ago. We had about 40 -- about 30 students enrolled in that first school. Today as you look into 2009, we are now up to about 220 students.

We pay the tuition for those students in the school. That's an expense, and then we also will be graduating about 210 from the schools and we will be putting them on our payroll, especially increasing our staffing level beyond what you would see today.

Q. Do you have an idea of how many employees are dedicated to distribution service reliability within the FirstEnergy Ohio operating companies now

1 as compared to 2005?

2 Α. Well, I can partially answer that question. 3 4 I believe right now that our Ohio companies have about 2,500 employees. They are all 5 6 dedicated to providing reliable service to our 7 customers. 8 Going back to 2005, I don't know the exact number that we had back in 2005. 9 The 2,500 number is for all of your 10 Ο. 11 employees in Ohio; is that correct? 12 Α. That's correct. That's what I was 13 referring to. 14 The DSI rider is not to help pay those Q. 2,500, isn't it a subset of those 2,500? 15 The DSI rider -- could you rephrase that? 16 Α. 17 I am not sure I understand the question. 18 Well, back to the paragraphs A through E, 0. 19 the sentence we are still on, "The rider will help 20 enable the companies to manage increasing costs. One of those increasing costs is the need to train new 21 22 employees and to replace retirees." 23 Now, you've mentioned there's 2,500 24 employees of the FirstEnergy operating companies in

25 Ohio; is that correct?

1 A. That's correct.

2	Q. Now, when you are talking about training
3	and replacing employees, are you talking about
4	training and replacing those 2,500 or some subset of
5	that 2,500 that are dedicated to providing
6	distribution system reliability?
7	A. Now, I understand your question.
8	Really what I was trying to explain what our
9	challenge is, we are going to be bringing on 200 new
10	employees in 2009.
11	And we actually hope that we don't lose
12	any of our experienced employees in 2009 because we
13	need to provide this transition.
14	That 200 or 210 will keep recurring every
15	year, so what was 200, an additional 200 employees in
16	2009 will be 400 in 2010 and 600 in 2011, 800 in
17	2012.
18	And then what you hope to do is as you
19	build that up and you look to where to our
20	existing demographics, you hope there is about a
21	
	five-year transition where we actually would be, if
22	five-year transition where we actually would be, if you just look purely at the numbers, you would say
22 23	
	you just look purely at the numbers, you would say

and, of course, that comes at a cost, is because an 1 2 individual coming straight out of PSI, even as good as it is, they are not a fully competent lineman. 3 4 You can't put them by themselves like you would a fully competent lineman. So it's the overstaffing 5 б that we are referring to here. So it's not possible that FE is 7 0. 8 understaffed right now? 9 Α. I don't believe we are understaffed right 10 now. Do you have the same number of lineman 11 Ο. that you had five years ago? 12 13 Α. I don't know the answer to that. 14 Q. Let's continue on with the sentence, the 15 need to replace -- excuse me, components of an aging distribution system, the distribution system --16 17 and -- isn't the distribution system comprised of various components, such as poles, conductors, 18 19 arrestors, substations, animal guards? 20 When you say "an aging distribution 21 system," I don't understand that. You are not going 22 to build an entire system, are you? I'm sorry, there was a lot there. Could 23 Α. you maybe just break that down just a little bit and 24 25 just ask one question at a time?

237 1 The distribution system is comprised of Ο. 2 many components; is that correct? 3 Α. That's correct. 4 It's composed of -- comprised of poles, Ο. comprised of transformers, animal guards, cutouts, 5 6 substations; is that correct? 7 Those would all be examples of our Α. 8 distribution system. Well, in particular when you mention an 9 Q. aging distribution system, which components of the 10 11 distribution system are you referring to in specific? 12 Α. Many of those components that you 13 mentioned, to give you an example in CEI alone, we have over 300 of our distribution transformers that 14 15 are over 50 years old. 16 In fact, we have two that are over 100 17 years old, and they are still operating fine today, 18 but they are -- they are very old. 19 Ο. And why haven't they been replaced? 20 Because they are still meeting the needs Α. of the customer. 21 22 And if the DSI is approved, you will Ο. 23 replace those transformers? 24 Α. Well, I wouldn't say we would replace 25 those specific transformers, the ones that I just

mentioned, but the point of the DSI improvement --1 2 DSI rider is that when we look at our system and our infrastructure in all three of our operating 3 4 companies, we are not different than other utilities 5 around the country. 6 We all -- we all are struggling with the same issue, and that is an aging infrastructure. 7 8 Much of our infrastructure was built to support the Baby Boomers as they bought homes and built homes. 9 For example, in Cleveland in CEI the average age of 10 the home is 48 years old. Well, that's when a lot of 11 12 our stuff was put in the ground was, you know, 48 13 years ago to support that large build out, and now we 14 find ourselves with a large majority of our infrastructure being well past what -- what was 15 16 originally anticipated when those systems were put in 17 place. 18 Well, haven't ratepayers being paying all Q. 19 along for updates and upgrades of the distribution 20 system so that they receive reliable service? 21 Α. Could you repeat the question? 22 MR. REESE: Can you read it back for him, 23 please. 24 (Record read.) 25 Α. Yes, I think the customers have been

providing the utilities revenue and I think we have 1 2 been providing excellent reliability. But what I'm talking about today is as we 3 4 look to the future and we look at the age of this infrastructure, I believe things are -- things 5 б need -- they are different today than they have been in the past three or five years. 7 8 Q. Now, I may be a bit premature, we may come back to this again when we go over your 9 testimony, but you talk -- you mentioned a little bit 10 ago about these transformers, some of which were 50 11 12 to 100 years old. 13 Would any of those -- would those 14 transformers be maintained or replaced absent approval of the DSI? 15 That's two different questions. Could 16 Α. 17 you ask that one at a time? I two questions but I'll ask it again. 18 Q. 19 A little while ago you mentioned some old 20 transformers. I believe you said they were 50 --21 some were 50 to 100 years old; is that correct? That's correct. 22 Α. 23 Q. You gave that as an example of the aging distribution system; is that correct? 24 25 Α. That's correct.

Q. Now, if the DSI rider is not approved, 1 2 will those transformers be maintained properly and/or replaced as needed? 3 4 Α. Yeah. That's what had me crossed up is 5 the first time you asked the question I think you 6 said "maintained or replaced." "And/or" is a little easier for me to address. 7 8 Obviously we will continue to maintain the transformers. Our ability to replace the 9 transformers would, of course, be limited because the 10 11 DSI rider will provide us a revenue that will allow 12 us to be more proactive towards replacing some of our 13 aging infrastructure. 14 Q. Now, I see from the paragraph E, last 15 three lines, that the proposed DSI rider is two-tenths of a cent per kilowatt hour; is that 16 17 correct? Are you referring to the last line where 18 Α. 19 it says 0.2 cents? 20 Q. That's right. 21 Α. Yes, that's correct. 22 Ο. And how did you arrive at the two-tenths 23 of a cent? 24 We looked at all the things that we Α. 25 believed we needed to do to continue to ensure the

reliability of our system for our customers. 1 We 2 looked at the aging infrastructure, we looked at the 3 need to replace the retiring employees, we looked at 4 the \$2 billion -- or I'm sorry, the \$1 billion commitment that is included in here. 5 6 And when you put all those things together, we came up with a dollar value that is 7 8 representative of this 0.2 cents. 9 Now, did I read in your testimony -- we Q. can cover this again in a little bit, but did I read 10 11 in your testimony that the DSI is not cost based? 12 I'm just asking if you know. 13 The DSI is not cost based, that's Α. 14 correct. 15 Q. Okay. Let's move on to paragraph F on page 21 of the Application. The first sentence, "In 16 17 order to align customers' and the companies' 18 interests." 19 How do you align customers' interests 20 with the companies'? I think if you read the rest of that 21 Α. sentence, it talks about the rider is going to be 22 23 subject to an upward or downward adjustment based on 24 a reliability performance. 25 Ο. There is a discussion here of this upward

or downward adjustment each annual period. 1 That 2 adjustment will take place for each of the Ohio operating companies; is that correct? 3 4 That's correct. There's a -- the very Α. 5 last sentence in the paragraph that talks about that, 6 the annual adjustment shall not exceed the 15 percent. 7 8 Ο. While we are on the 15 percent, can you 9 tell me why 15 percent? Why is that cap 15 percent? 10 Α. It was management's discretion. That's 11 what we have put in the proposal. 12 So in a given year and, again, we will be Ο. 13 getting into this in more detail because we are 14 talking about SAIDI as the measurement that you are 15 basing this on the performance band for SAIDI, if one of the three operating companies, let's say, Ohio 16 17 Edison, I believe the target that you've proposed for 18 each of the companies is -- well, the existing 19 targets for Ohio Edison and Toledo Edison are 120 20 minutes per year; is that correct? For SAIDI? 21 Α. That's correct. 22 Ο. And you are proposing a new target for 23 CEI of 120 minutes; is that correct? 24 For SAIDI, that's correct. Α. 25 Q. That's correct. And that's an increase

1 of about 25 minutes from what the current CEI SAIDI
2 target is?

That's correct. 3 Α. 4 Okay. And the performance band would Ο. 5 extend as proposed by the FirstEnergy companies, the б performance band would range from a low of 90, which is actually good, to a high of 135; is that correct? 7 8 Α. Yes. What we have proposed is that if we would perform better than 90 minutes of SAIDI, there 9 would be an incentive based on the table that's 10 11 attached to the Application. 12 Above 135 minutes there would essentially be a 13 penalty, and when you look at that -- at those 14 values, 90 minutes is really extremely good. 15 It's very near top decile when you look at the EI statistics 135 minutes is actually still 16 17 just slightly outside the top quartile, so it would represent performance that would be better than 18 19 probably 65 percent of the -- of the companies in the 20 United States. 21 EXAMINER PRICE: Mr. Reese, one second 22 please. 23 You have titled your rider Delivery Service Approval;

25 THE WITNESS: That's correct.

is that correct?

24

1 EXAMINER PRICE: I am not sure whose service is approved if the Ohio Edison customer, and 2 you are reading your SAIDI target of 120 minutes and 3 4 you have a new SAIDI target of 120 minutes, that's 5 not an improvement, is it? 6 THE WITNESS: Just because you change the target doesn't --7 8 EXAMINER PRICE: But that is the target, if you hit your target last year and you hit the new 9 target, that will not be an improvement, will it? 10 THE WITNESS: So for Ohio Edison the 11 12 target is 120 last year? 13 EXAMINER PRICE: Huh-uh, existing target 14 is 120; is that correct? THE WITNESS: Yes, that's correct. 15 16 EXAMINER PRICE: And the new target will 17 be 120. 18 THE WITNESS: That's correct. 19 EXAMINER PRICE: If you hit the target 20 last year and you hit the new target, that's not an 21 improvement, is it? 22 THE WITNESS: No, but Ohio Edison did 23 better than their target last year. 24 EXAMINER PRICE: I understand, I am 25 talking about the targets now, I'm just talking about

1 the targets.

2 My point is you haven't improved the targets. You are calling this a delivery service 3 4 improvement rider, but out of the three operating 5 companies, two are not changing their targets and one 6 is increasing their target, is that not correct? 7 THE WITNESS: That's correct. However, I 8 think when you look at the bands that we are 9 establishing, we will be striving to do better than 10 what the target is. 11 In fact, Toledo Edison has historically 12 performed much better than their target, and Ohio 13 Edison finished better than the target, so we want to 14 continue to improve and continue to maintain in some 15 cases. 16 EXAMINER PRICE: So why would you not 17 make the targets more stringent for Ohio Edison and 18 Toledo Edison? 19 THE WITNESS: Because we believe 120 20 minutes represents and optimal point. We are 21 balancing cost of reliability versus the reliability 22 for the customers. 23 EXAMINER PRICE: Thank you. 24 (By Mr. Reese) Now, those that know me, Q. 25 Mr. Schneider, know I don't live on the sunny side of

the street, so let's talk about the instance in which your SAIDI performance, let's, again, back to Ohio Edison for a given year is extraordinarily high or poor, let's say it's 175 minutes instead of the outer bands of 135, and again, even above the target of 120. Why should there be a 15 percent cap on an adjustment to the DSI?

8 A. I'm sorry, you said a lot. You kind of 9 lost me when you talked about the sunny side of the 10 street, to be honest about it.

11 Could you just maybe ask it one question at a time? 12 Q. Okay. If the companies -- if Ohio 13 Edison's SAIDI is extraordinarily bad in a given 14 year, let's use 2009, and instead of the target of 15 120 and instead of the outer bands of 135 it comes in 16 at 175.

Why should the DSI adjustment be limitedor capped at 15 percent?

A. I think I understand what you are asking. You are asking me if -- if this is all approved, that it's in place starting in 2009 and so, therefore, the targets are established and the bands are established and Ohio Edison performs at a level of SAIDI that would be above the 135, you are asking me why would you cap that at 15 percent?

Q. No. That was a three-part question. Can you repeat it? Sorry, that's a joke.

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3 Yes.

4 Α. When we established 15 percent, we believed that that created an incentive opportunity 5 б on the low side and a penalty on the high side that would incent our companies to -- to go the extra 7 8 mile, if you will, to provide better reliability for our customers. 9 So the rider will be providing the 10 0. 11 company additional revenue; is that correct? 12 Α. That's correct. 13 0. And if, back to my hypothetical with Ohio 14 Edison, if it has a particularly bad year and the SAIDI measure comes in at 175, which we would all 15 agree is pretty bad. 16 17 Α. I can't agree to that. 18 Q. You won't agree with that? 19 Α. No. 20 So if the outer band of performance at Q. 21 which a -- an adjustment would be made to the DSI is 22 something well beyond that outer performance band, 23 you wouldn't consider that poor? 24 I can't -- I can't use the word "poor" Α. 25 because I don't know all of the situations that way

driven that level of performance in that given year. 1 2 Q. But you did characterize 89 as good. 3 Α. I characterized 89 as good compared to 4 EEI standards as you look at what other companies have done. 5 б I think even at 170 I think that, again, although I would need to know all the specifics about 7 8 what occurred, that would be better than at least one other utility in the state's target. 9 We can deal with them later, but right 10 Ο. now we are talking about your company and about your 11 12 historical performance. 13 You've proposed a performance band and yet you are saying if the company performs outside 14 15 that performance band, it's not necessarily an indicator that they are performing poorly; is that 16 17 what you are saying? 18 That's correct. As a matter of fact, Α. 19 again, the 135 would put any one of my companies in a 20 position that they would be better than about 21 65 percent of the companies across the country. That would still be very good performance. 22 23 Ο. But you still maintain that 89 would be 24 good.

25 A. Eighty-nine would be outstanding. That

1 would be excellent.

2 Okay, okay. Let's go stick with the cap Q. question for a minute though. 3 4 Why is there an upper or lower limit? 5 Why 15 percent? б Α. Again, that was -- that was management's discretion what we put in the plan. We think that 7 8 it's significant enough to incent our employees at our operating companies to -- to go the extra mile, 9 10 to provide the reliability to our customers, you 11 know, the best reliability they possibly can. 12 Haven't you proposed that the rider Ο. itself is an incentive? 13 14 No. The rider itself is not adjusted Α. based on performance. 15 The rider is not ajusted on performance? 16 Ο. 17 The rider .2, it isn't to a 15 percent adjustment up or down; isn't that correct? 18 19 Α. Well, the base rider starts out at .2 20 times the kilowatt hours. That's the portion that 21 I'm saying is not adjustable based on performance. 22 The 15 percent is either on top of that 23 or below that, so if you think about the DSI rider 24 just for -- just to make the example, I think that 25 that probably comes out to about \$115 million a year,

250 and so \$115 million would be subject to a 15 percent 1 2 increase or 15 percent decrease based on performance. 3 Ο. Within this 15 percent, this zone above 4 or below the performance band, there's certain 5 incents, and I don't have it with me, but just -- I 6 think it was in your tariff pages. If you are not comfortable answering this, let me know. 7 8 But there are -- there can be incremental -- there can be an incremental downgrade 9 10 of performance or -- strike that. Let me start over. 11 There can be an adjustment of less than 15 percent up or down; is that correct? 12 13 Are you referring back to the performance Α. 14 band? 15 Q. Correct? Α. The annual? 16 17 Q. Correct? Yes, it could be less than 15 percent. 18 Α. 19 Q. Now, there is -- how were -- how are the 20 incremental adjustments to the rider calculated? 21 In other words, if, going back to Ohio Edison, if they perform at 137, which is 2 minutes outside the 22 performance band, that would -- that would result in 23 24 some adjustment; is that correct? 25 Α. That's correct.

Q. And how is that incremental adjustment 1 2 calculated? There's a -- I don't have it with me, but 3 Α. 4 there was a table that was provided with the Application that would lay out that math. 5 6 Q. Can you give me -- do you have any idea what the rationale was for those increments? How 7 8 they were arrived at? A. No, I don't. 9 10 Ο. Do you know who would? Α. 11 I believe Greg Hussing was responsible 12 for laying out the implementation. 13 Ο. Does Mr. Hussing have anything about the 14 rider in his testimony? Α. I can't be sure. 15 Do all customers -- well, I'm sorry, 16 Ο. 17 rephrase, I would like to rephrase. 18 Will all customers experience this 19 two-tenths of a cent per kilowatt adjustment or will 20 it be -- I'm sorry, DSI? Will all customers see that or some customers' DSI be higher or lower? 21 22 DSI charge applies to our distribution Α. 23 customers. 0. So will all distribution customers 24 25 experience a two-tenths of a cent per kilowatt DSI or

1 will it be different for different classes of

2 customers?

MS. MILLER: Objection, your Honor. 3 That 4 goes more into the implementation of the DSI rider and not the purpose of the DSI rider. 5 EXAMINER PRICE: Okay. But I don't 6 understand the grounds for your objection. 7 8 MS. MILLER: This witness' testimony is 9 not pertaining to the implementation of the DSI rider as he had indicated, that's Mr. Hussing. 10 11 EXAMINER PRICE: Mr. Reese. 12 MR. REESE: Your Honor, Mr. Schneider is 13 sponsoring these paragraphs of the Application. And 14 this is where the two-tenths per kilowatt is set forth and it's not sponsored by any other witness 15 16 that I am aware of. 17 EXAMINER PRICE: He can answer it if he 18 knows. 19 THE WITNESS: I don't know. 20 (By Mr. Reese) Now, talking about the Q. 21 range of -- the performance range in paragraph F, and 22 there's reference to -- about halfway down paragraph 23 F, on page 21, there's a discussion which I believe 24 you go into in a little more depth in your testimony, 25 but it talks about this revised target for CEI.

1	Do you see that?
2	A. Yes, I do.
3	Q. Now, the current target for SAIDI, as I
4	understand it, for CEI is 95 minutes; is that
5	correct?
б	A. That's correct.
7	Q. And the companies' proposal as part of
8	the DSI is to increase CEI's target from 95 to 120
9	minutes; is that correct?
10	A. That's correct.
11	Q. I don't have my calculator with me but I
12	had it with me yesterday and I think that's about a
13	26 percent increase in the SAIDI target for CEI; does
14	that sound right to you, subject to check?
15	A. Subject to check, that sounds about
16	right.
17	Q. And in addition to the adjustment of
18	CEI's SAIDI targets, the company is recommending that
19	there be a rear lot adjustment factor, or I'm sorry,
20	a real lot reduction factor applied to CEI circuits
21	where 50 percent or more of the customers are served
22	by rear lot facilities; is that correct?
23	A. Could you read that back, please.
24	(Record read.)
25	A. That's correct.

254 O. Can you tell me what the -- I believe 1 2 there's been some back and forth on exactly how many circuits are impacted by the rear lot reduction 3 4 factor. Do you know where that number stands right 5 now? б Α. I believe the numer is 439 circuits. Q. So approximately 439 of CEI's circuits 7 8 would be subject to the rear lot reduction factor; is that correct? 9 10 Α. That's correct. 11 Q. And that reduction factor operates --12 that reduction factor, I believe, is a .5; is that 13 correct? 14 That's correct. Α. 15 So even though CEI's SAIDI target is Q. recommended to be changed to 120 minutes, and its 16 17 performance band would be -- then be identical to the 18 other two operating companies would be 90 to 135, in 19 fact, the band would be wider than that, wouldn't it? 20 Α. That's not correct. We've proposed a band for CEI the same as Ohio Edison and Toledo 21 22 Edison. 23 Ο. So the band would remain the same? 24 And the target, that's correct. Α. 25 EXAMINER PRICE: So what does the rear

1 lot reduction factor modify?

2 THE WITNESS: What the rear lot reduction factor is intended to do, if you look at the three 3 4 companies, CEI, as we just discussed, has about -about 50 percent of their circuits that's just 5 б slightly less than 50 percent as 439 where 50 percent or more of the customers are served from rear lot. 7 8 If you compare that to Ohio Edison and 9 Toledo Edison, those two companies have less than 10 percent of their circuits and so you have a 10 structural difference between CEI and the other two 11 12 companies with all these rear lot facilities. And the rear lot facilities are much more 13 14 difficult to repair timewise, just takes longer for 15 our employees to get into the back. They can't back their trucks into the backyards. They have got all 16 17 kinds of obstacles back there, like dogs and swimming pools and that kind of thing. 18

And so what we have attempted to do with the rear lot reduction factor is adjust CEI's minutes to -- to compensate for that structural difference, and that would then put all three of those companies on a level playing field.

EXAMINER PRICE: But in essence then for
50 percent of your circuits their SAIDI target would

be 240 rather than 120 because it would cut their 1 2 outage minutes in half, that would be the net affect, would it not? 3 4 THE WITNESS: I don't think so. 5 EXAMINER PRICE: Fair enough. б You say in your testimony that that rear lot reduction factor is necessary to do an 7 8 apples-to-apples comparison of the three companies; is that correct? 9 10 THE WITNESS: That's correct. 11 EXAMINER PRICE: But on the other hand, 12 on page 9 of your testimony you say that IEEE 13 examines the reliability performance and has already 14 done the apples-to-apples comparison. So I don't understand if the existing 15 system with the 2.5 Beta method creates an 16 17 apples-to-apples comparison, why we need to do a 18 further adjustment to do an apples-to-apples 19 comparison. 20 THE WITNESS: It is true on page 9 when I talk about the IEEE 2-1/2 Beta method, by design when 21 you do a 2-1/2 Beta method, you don't look at any 22 23 kinds of exclusions, you don't look at storm 24 exclusions, you don't look at rear lot reduction 25 factors.

257 1 You look at the raw numbers and then you apply statistical analysis for the raw numbers and, 2 therefore, you can look at utilities across any --3 4 any operating company. 5 It doesn't necessarily even have to be б Ohio, so that level sets all operating companies one against the other. 7 The rear lot reduction factor that we 8 are -- we are proposing is for our SAIDI -- our DSI 9 10 rider adjustment, so it's two different things. 11 EXAMINER PRICE: Fair enough. 12 Mr. Reese. 13 (By Mr. Reese) Okay. Let's look at 0. 14 footnote 16 at the bottom of 21, under paragraph F there. 15 16 "For techical reasons, the DSI rider is 17 actually effective through 2013. But the charge in 2012 to 2013 is zero cents per kilowatt hour." 18 19 Can you explain that to me? 20 Yes. What we are trying to lay out there Α. 21 is that the 15 percent that's associated with the performance band either incentive or penalty would 22 23 continue into years '12 and '13. However the DSI 24 rider is to be set to zero. 25 0. So it will be either a credit or

1 incentive buildup for the company in that year, even 2 though the DSI has fallen off?

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3 A. That's correct.

Q. Can you describe a -- the rear lot facilities to me? What constitutes a rear lot facility? Is it the existence of a transformer, a pole, a cutout, an animal guard. What, in fact, makes it a rear lot facility?

Sure. It would be all of those things. 9 Α. When I am talking about rear lots, if you think about 10 11 a home setting here and a home setting here and the 12 two property boundaries abutt each other, and then 13 our facilities run right down through the back of 14 those two -- of those two lots, so the poles, the conductors, all the things you mentioned, would be 15 what I refer to as rear lot facilities as opposed to 16 17 if the pole line was in the front of the house.

Q. So let's pretend I'm living on Elm Street in Cleveland. And I've got a wire running across my property. I have a fence that separates me from my neighbor in the rear.

The only thing transferring my property line there is a wire. I don't have any poles. I don't have any transformers. I don't have any animal guards. I don't have any arrestors.

1 Would I be subject to this rear lot 2 reduction factor? A. Your hypothetical example, I don't know 3 4 the answer to that. What we've provided is that the 439 circuits that we would designate as rear lot 5 6 would be identifying in advance. And so all --7 Q. You haven't -- they haven't already been identified? 8 9 A. They have been identified internally to the company. We would need to provide that list of 10 circuits to staff. 11 12 Q. And what criteria would you expect staff 13 to review to determine whether, in fact, those 50 percent of the customers in a particular circuit 14 were served via rear lot facilities? 15 16 A. Could you repeat the question? 17 (Record read.) Α. I don't know. I wouldn't want to speak 18 19 for what the staff might do to verify that. 20 Q. Okay. Let's pretend I want to review it. 21 I would like to know how you determine what a rear lot facility is. 22 23 You've come up with 439 circuits where 50 percent or more of the customers are served through 24 25 rear lot facilities.

1 In order for me to evaluate for my 2 client, I need to understand how you've done that. Can you tell me? 3 4 So are you asking me how we decided what Α. was a rear lot circuit? 5 6 Q. Yes. Yes. Okay. I can explain that. 7 Α. 8 So we took a look at -- at where the facilities lot -- where they were actually on the 9 10 property lines, whether it was in the front of the 11 house right adjacent to a main street or if it was in 12 the rear of the house. 13 If it was in the rear of the house 14 serving that customer in the rear lot, then we denoted that customer as a rear lot served customer. 15 16 We then took a look at the circuit and 17 said if more than 50 percent of the customers were served from rear lot facilities on that particular 18 19 circuit, then we designated that as a rear lot 20 circuit. Sort of circular, isn't it? 21 Q. 22 Did you see -- did you have to see --23 does the company need to see a particular type of 24 facility, a pole, a transformer, a squirrel quard, a 25 cutout, to determine that it's a rear lot facility?

261 1 I'm not trying to -- I am not trying to Α. 2 dodge your question. It's just so obvious to me. I have been in the rear lots and I know exactly what 3 4 I've seen in the rear lots. 5 Q. You need to stay out of those rear lots, б you will get in trouble. Some are some areas you could get in 7 Α. 8 trouble, but so it's very clear to me when we talk about rear lot facilities, I mean it's literally a 9 10 pole line running through the -- every -- you know, 11 through the rear of multiple homes. 12 Okay. We will move on. Q. 13 EXAMINER PRICE: One second, Mr. Reese. 14 Nonetheless getting back to my question 15 earlier for the purposes of the incentive part of your DSI rider, that 15 percent, you are only going 16 17 to count outages to those rear lot facilities half of what they actually are? A customer was out 60 18 19 minutes, you will only record 30 minutes? 20 THE WITNESS: That's right. 21 EXAMINER PRICE: And this is on top of the increasing the CEI target of 95 to 120? 22 23 THE WITNESS: That's right. 24 EXAMINER PRICE: Do you know why CEI 25 target was initially set at 95?

1 THE WITNESS: I don't know that, sir. 2 EXAMINER PRICE: Do you know why they didn't have a rear lot -- any sort of rear lot 3 4 reduction when they originally determined the target? THE WITNESS: I don't know that either. 5 б EXAMINER PRICE: Can you explain what has changed that the Commission should now change the 7 8 target the way outage is calculated? 9 THE WITNESS: Well, when we look at CEI 10 in all the factors, the age of the system, we really believe that the optimal point when we try to balance 11 12 the cost to achieve the reliability and what -- and 13 what it would ultimately cost the customers, we think 14 that 120 is an optimal point. We believe that 95 is just extremely 15 aggressive, and whether you look at the rear lot 16 17 facilities, we think that CEI is, quite frankly, 18 different than all of the other utilities that we own 19 and, quite frankly, we think it's probably different 20 than many utilities around the country with all the rear lot facilities. 21 22 EXAMINER PRICE: Don't you think most 23 utilities have some unique factor that they would

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24 characterize as to what makes them unique amongst all

25 the other utilities?

1 THE WITNESS: Yes, I think that's 2 probably correct, and I think that those utilities I 3 think the way the Commission weighs proposed changes 4 for storm exclusions and that sort of thing, I think 5 works fine, and really what we're here to do is б propose a change to our target as well as incorporate in the rear lot reduction factor. 7 8 EXAMINER PRICE: Thank you. 9 Mr. Reese. 10 Ο. (By Mr. Reese) Moving to page 22 of the 11 Application, I see on the third line here we are 12 talking about the DSI -- well, starting on the second line, "The DSI rider shall not be considered a 13 14 contribution in native construction or be used in determination of excessive earnings." 15 16 I'm particularly interested in this 17 "determination of excessive earnings." Would that be a good question for Mr. Blank to answer why it would 18 19 not be considered? 20 I think you could ask Dave that question. Α. 21 Q. Do you know the answer -- do you 22 understand it? 23 Α. Yes, I understand the question. 24 Okay. Can you explain why any revenue Q. 25 generated through the DSI rider should not be

1 considered?

2	A. In general when we look at all the things
3	we need to get down in our distribution system, you
4	know, the things we have already talked about,
5	replacing the aging infrastructure, bringing on the
6	new employees, those things will all be very
7	expensive for us.
8	And if you then take the revenue and
9	apply that to excessive earnings, it wouldn't really
10	fulfill its need for us to provide the financial
11	health for the companies to be able to do those
12	things.
13	Q. Isn't it still an incentive
14	A. I'm sorry, isn't what still an incentive?
15	Q. The DSI.
16	A. Are you talking about the piece
17	associated with the performance band or the kind of
18	the base DSI?
19	Q. Well, the base DSI, unless and until you
20	are found to be ex what's the term, excessive
21	earnings, it's still an incentive, isn't it?
22	A. I wouldn't call the DSI the base piece
23	the incentive. I don't want to get that confused.
24	The base piece, the two-tenths of a cent per kilowatt
25	is a revenue that we have proposed, the incentive

piece that comes out at 15 percent plus or minus, 1 2 that's the incentive piece that helps us ensure that our -- our reliability expectations are aligned with 3 4 the customers' expectations. 5 EXAMINER PRICE: The base piece, the б revenue. 7 THE WITNESS: Yes. 8 EXAMINER PRICE: Let's go back to your earlier comment this is not a cost based rider. How 9 10 does CEI -- how does the companies propose that this 11 be accounted for? Going to go into an account 12 subject to audit by the staff? THE WITNESS: Now, I think you will have 13 14 to ask Dave Blank that question. I'm not familiar with how we'll account for it. 15 16 EXAMINER PRICE: Okay. What was your 17 basis for saying it's not a cost basis rider? 18 THE WITNESS: My basis there is that my 19 general understanding of ratemaking is that you need 20 to show -- in standard ratemaking you need to show 21 cost and then reimburse for cost. 22 EXAMINER PRICE: And since this is future 23 expenditures --THE WITNESS: That's right. 24 25 EXAMINER PRICE: That's why you are

saying it's not -- we will ask that question of 1 2 Mr. Blank. 3 THE WITNESS: Correct. 4 Ο. (By Mr. Reese) Finally, in paragraph G on page 22, the companies commit to making capital 5 б investments in their distribution system in the aggregate of at least \$1 billion, and that's over a 7 8 five-year period; is that correct? 9 A. You left out one pursuant to this plan 10 so --With that word in there what's the 11 Ο. 12 answer? 13 Α. Yes. 14 Q. Thank you. And this says investments in the 15 distribution system. Can you give me some examples 16 17 of what those investments are that are specifically 18 reliable related? 19 Α. There would be a lot of them. For 20 example, at CEI we have a program in place to harden the backbone to add sectionalization fusers and 21 reclosers, we have an enhanced vegetation management 22 23 program in all three operating companies. 24 EXAMINER PRICE: What enhanced 25 vegetation, being capital expenditures?

1 THE WITNESS: There is a part of it 2 that's capital, yes, sir. I want to ask you a couple of questions 3 0. 4 on Attachment E to the Application. Now, as I understand it, Attachment E 5 goes into some depth regarding some of the pieces of б your testimony including the DSI and the smart grid 7 study. Attachment E as I handed out to you is three 8 pages long; is that correct? 9 10 Α. That's right. 11 Let's go to the second paragraph in Ο. 12 Attachment E on the first page. The DSI rider is 13 expected to provide adequate resources, okay. Let's 14 stop there. Are the resources that FirstEnergy -- the 15 FirstEnergy companies have available at the current 16 17 time inadequate? 18 When we look to the future and the things Α. 19 that we need to get done to ensure continued 20 reliability of the system, we believe that we need additional revenues. 21 22 So without the DSI, FirstEnergy would 0. 23 have inadequate resources to maintain healthy serious sustainable distribution utilities? 24 25 Α. I wouldn't use the word "inadequate." I

268 would say that it would be extremely difficult to get 1 2 done all the things that we need to do to ensure the reliability for our customers. 3 4 0. On the second sentence of that second 5 paragraph you state, or the attachment reads, the DSI б rider will ensure that customers' and companies' expectations are aligned. 7 How does the rider ensure that 8 9 expectations are aligned? We were referring to the fact that part 10 Α. of the rider includes the commitment for a billion 11 12 dollars. It includes replacing of the aging 13 infrastructure. Includes the hiring of the new 14 employees. And it also has the performance band that ensures that we are aligned when it comes to 15 16 reliability. 17 Q. I believe you just said that part of the rider includes the \$1 billion. Did you misspeak 18 19 there? I mean, your testimony supports the \$1 20 billion, but that's not part of the rider, is it? I see the rider and the billion dollars 21 Α. part and parcel of our ESP, so it's all part of our 22 23 ESP.

Q. But the billion dollars is not part of the rider, correct?

1 Α. That's correct. 2 Q. Thank you. Let's continue with this sentence, second 3 4 sentence, second paragraph. And that the companies replacing sufficient emphasis 5 6 on and dedicating sufficient resources to energy delivering and reliability. 7 8 So the DSI rider will help ensure that the companies' placing sufficient emphasis on its 9 reliability? 10 11 Α. The DSI rider is intended to provide a 12 revenue that will allow us to do the things we need 13 to do to continue to provide the reliability service. 14 So without the rider, will the companies Q. be able to provide reliable service? 15 16 It would be extremely difficult. Α. 17 Q. Will the companies be able to provide 18 reliable service without the rider? 19 Α. It will be extremely difficult. I don't 20 know. 21 Q. So if the Commission does not approve the rider, the company is unsure of whether it's-- it 22 will be able to deliver reliable service to its 23 24 customers? 25 MS. MILLER: Objection, your Honor. Ι

270 1 think the witness has answered this twice now. 2 EXAMINER PRICE: Sustained. Let's look at the third paragraph here on 3 0. 4 attachment E. The last sentence for the period 2012 through 2013, "The DSI rider will remain in place to 5 6 effectuate any SAIDI performance adjustments." 7 Now, those SAIDI performance adjustments 8 we are talking about are the 15 percent, somewhere 9 within that 15 percent range up or down? 10 Α. Yeah, what we are referring to here is 11 that we have that performance band and it's capped at plus or minus 15 percent, and so that either penalty 12 or incentive that's associated with the maximum 13 14 15 percent would continue for '12 and '13. 15 Q. Okay. EXAMINER PRICE: I can understand why it 16 17 would continue through '12. I don't understand why it would continue through '13. Because of the 18 19 performance incentive in place for more than a year 20 after it's adjusted? 21 THE WITNESS: It's based on the calendar year and it is evaluated by April 1 after the 22 23 calendar year. 24 EXAMINER PRICE: I understand. Now, I

25 think -- I think I understand. Thank you.

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1	Q. (By Mr. Reese) Now, the under the
2	SAIDI reliability target section you have a
3	discussion about the existing targets of Ohio Edison
4	and Toledo Edison and establishing a new SAIDI target
5	for CEI; is that correct?
6	A. Yes, that's correct.
7	Q. By setting this new target, that will
8	affect the targets that are set under Rule 10 of the
9	ESSS; is that correct?
10	A. Our proposal would only have us change
11	the SAIDI target for Rule 10.
12	Q. Do you know what other current
13	reliability indices are part of your Rule 10 targets
14	which other measures have targets?
15	A. I believe there are targets for CAIDI and
16	SAIFI.
17	Q. And you are not proposing any change to
18	SAIFI or CAIDI?
19	A. To the targets, no, only for SAIDI.
20	Q. And so the ESP, in fact, proposes a
21	change to the ESSS or the companies' ESSS report; is
22	that correct?
23	A. Could you repeat that?
24	Q. Yeah. Let me rephrase it.
25	Is it the companies' intention to modify

its SAIDI target through the filing of this plan? 1 2 Α. For CEI? 3 O. For CEI. 4 Α. Yes. 5 EXAMINER PRICE: Unless I'm mistaken, it б was always my understanding that SAIDI is the product of CAIDI times SAIFI; is that correct? 7 8 THE WITNESS: That's correct. 9 EXAMINER PRICE: Why would you not 10 since -- okay, since SAIDI then is derived from CAIDI 11 and SAIFI, why would you leave your CAIDI and SAIFI 12 targets unchanged? 13 THE WITNESS: Because the only thing in our ESP that is, you know, that we tie the 14 performance to is SAIDI, so we believe that you can 15 still treat the SAIFI and CAIDI through the existing 16 17 ESSS rules, and the only thing we would have to 18 change is SAIDI. 19 EXAMINER PRICE: Okay. 20 (By Mr. Reese) Do you know how long CEI Q. has had a SAIDI target of 95? 21 22 Not specifically, but I believe it's been Α. 23 at least the last five or seven years. 24 Q. Could it have been back to the mid-'90s 25 even?

A. Could be.

T	A. Could De.
2	Q. All right. Let's talk about the
3	development of the rear lot reduction factor. Middle
4	of the paragraph we are talking about restoration
5	times that are roughly double for these rear lot
б	facilities.
7	Do you see that? Fourth line down in the
8	paragraph.
9	A. Yes, I see that.
10	Q. You say "roughly double." Can you give
11	me a measurement?
12	A. Yes. When I went out and talked to a
13	number of our crews that performed this work at CEI,
14	we just talked about some hypothetical cases and I
15	said so what kind of time does it take you if you had
16	a failed cutout on a front line?
17	And they said that in general that would
18	be somewhere around, say, an hour and a half. And I
19	said so, now, what if it's a rear lot, and they said
20	in general probably around three hours, about double.
21	Q. Did they tell you why?
22	A. Yeah. They gave me a lot of good
23	examples. Probably the most striking one that I
24	remember was when they talk about a front lot, they
25	just simply pull up in their bucket truck, they make

1 the area safe, they set the wheel chocks, they jump 2 in the buckets and away they go.

3 When they go to the rear lot, first of 4 all, they can't take their truck back there because 5 of the driveways of the residence, it won't support 6 the truck. So they have to do everything manually. 7 When they first get back to the rear lot, 8 and a lot of cases there are obstacles, including one of the guys was telling me about dogs, and so you 9 10 have got these dogs, the dog box is right where they 11 will have a fence up and they will have the dog box 12 there.

13 So they have got to get ahold of the 14 customer to take care of the dog. Once they get the 15 dog taken care of, then whatever they have to take to 16 the rear lot, if it's a new cutoff, they have to drag 17 it back. They have to climb the poles. So it takes 18 about twice as long.

19 EXAMINER PRICE: Okay. That all sounds 20 like a very anecdotal review. Have you performed any 21 analytical studies which would demonstrate that rear 22 lot outages take twice as long to perform?

THE WITNESS: That just comes from my experience, sir, just talking to my lineman. I don't do that work but I talked to several of the lineman

and I went and actually visited them where they do
 this work.

EXAMINER PRICE: So the answer would be 3 4 you haven't performed any analytical studies. THE WITNESS: We did take a look at some 5 б analysis, I think we provided it in an interrogatory where we looked at some historical SAIDI performances 7 and we looked at what we would consider rear lot 8 9 versus front lot, and it proved out that .5 would be 10 about the right number.

11 Q. (By Mr. Reese) Can you tell me any other 12 companies that use a rear lot reduction factor when 13 calculating the reliability of performance?

14 A. I don't know of any.

Q. And, again, the factor of .5 is because service restoration is roughly double; is that

17 correct?

18 A. That's correct.

Q. Under the reliability reporting requirements on the second page of the Attachment E, you talk about all of the reporting requirements pursuant to OAC 4901.1-10. We will refer to that as an ESS from now on, if that's all right.

Each of the companies' SAIDI targets will be calculated -- calculated using the methodology

which has been accepted by the Commission staff as of
 the filing of this plan.

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That means what's currently on file with 3 4 the staff as part of your annual ESSS filing? I'm sorry, I didn't understand the 5 Α. б question. 7 Okay. You are referencing ESSS rule or Ο. 8 chapter 10, the first two sentences here, that's the ESSS. 9 10 Α. Yes. 11 You state that the attachments states Ο. 12 each of the companies' SAIDI targets will be 13 calculated using the methodology which has been 14 accepted by the staff as of the filing of this plan. So this is the methodology accepted by 15 the staff as of your last ESSS filing? 16 17 Α. What we were trying articulate here is that we were not suggesting any changes to the major 18 storm exclusion criteria. 19 20 So that was specific to the major storm. Q. 21 Α. Correct. 22 Okay. Now, the rear lot reduction factor Ο. would be applied for CEI to its targets under Rule 23 24 10; is that correct? 25 Α. You wouldn't apply it to the targets.

1 You would apply it to the actual performance.

2 Q. So you would apply it to the minutes.3 A. Correct.

Q. So if, in fact, the filing of this plan results in the Commission accepting 120 minutes as the new SAIDI targets for CEI, those 120 minutes will still be subject to the reduction factor; is that correct?

9 A. No. The target would be 120. And you 10 would simply apply the rear lot reduction factor to 11 the customer minutes of interruption on those 12 circuits that we identify as rear lot circuits, so 13 you wouldn't change the target. It would be -- it 14 would be 120 minutes. You just compare your actual 15 performance against that.

Q. Okay. So, in other words, the 120 minutes would be calculated differently for CEI than for Ohio Edison and Toledo Edison; is that correct?

19 A. No.

20 Q. It would not be calculated any 21 differently even though a rear lot reduction factor 22 is applied?

A. No. The targets -- the targets would just be established. They wouldn't be calculated. You just have 120 minutes as your target.

Q. The minutes, the total minutes of outages experienced by the CEI circuits, they go into -- let me rephrase that.

Down on the fifth line of this paragraph
under "Reliability Reporting Requirements," in the
case of CEI, a rear lot reduction factor would be
applied to customer outage minutes; is that correct?
A. That's correct.

9 Q. So the customer outage minutes for CEI 10 would be calculated differently than customer outage 11 minutes for Ohio Edison or Toledo Edison; is that 12 correct?

13 A. There would be no rear lot reduction14 factor applied to Ohio Edison or Toledo Edison.

Q. So they would be calculated differently,correct?

A. To the degree you don't have a rear lotreduction factor, yes.

Q. Finally, on this paragraph the Commission's approval on this plan shall constitute any waiver required for purposes of complying with the Ohio Administrative Code -- excuse me, with the Ohio Administrative Code with respect to establishing and calculating reliability indices and performance targets.

279 1 Now, that says a lot right there. Is 2 that specific to one rule under the ESSS or does it apply to the entire ESSS? 3 4 That's a fairly broad statement. Let me 5 give you an example. б Rule 10 deals with system reliability. Rule 11 deals with circuit reliability. 7 8 Is it the intention with the language here in Attachment E that approval of a plan would 9 constitute waivers for any other rules other than the 10 11 system reliability rules under Rule 10? 12 MS. MILLER: Objection, your Honor. I 13 think that that's a mischaracterization of the scope 14 of this sentence as it pertains to the ESSS rules. 15 Not all of the ESSS rules pertain to reliability 16 indices or performance targets. 17 It's actually Rule 10 that addresses those and in no other place in the ESSS rules would 18 19 you find reliability indices and performance targets. 20 It's specifically Rule 10 that addresses that. 21 EXAMINER PRICE: Well, actually, I think there is an element of reliable indices in Rule 11. 22 23 I think that's why Mr. Reese was asking the question. 24 Your objection is overruled. 25 Α. I'm not totally versed in all of the

rules. Maybe if you could ask me specific parts of
 the rules how this might change the rules, I could
 try to answer your question.

Q. Well, that's why I'm troubled by -- why I saked the question. The statement here, the sentence is very broad.

7 "Constitutes any waiver required for purposes of 8 complying with the Ohio Administrative Code with 9 respect to establishing and calculating reliability 10 indices and performance targets."

In your testimony and in some of the other discussion we have had here today we've talked about a SAIDI performance target. And you've talked about a new target for CEI and SAIDI reliability targets for the three companies, three operating companies all set at 120 minutes.

Those are SAIDI performance measurements. And I believe what you're talking about there is system reliability, which is what's measured under Rule 10 of Chapter 10.

There is a separate rule, Rule 11, that is circuit specific that deals with, for instance, there is a requirement that the company report on its percent worst performing circuits every year, and some of those measures that can be reported on

1 include SAIDI, for instance.

2 Now, this sentence refers -- constitutes any waiver that talks about the Ohio Administrative 3 4 Code. I just wondered if you meant that to be limited to Rule 10 that deals with system 5 б reliability. 7 In Rule 10 we would be looking to change Α. 8 the SAIDI target. We would be looking to incorporate the rear lot reduction factor. 9 10 In Rule 11 I believe that you have to -you identify every year your 8 percent worst 11 12 performing circuits 13 Ο. That's right. 14 And so for CEI let's say there's Α. something just north of a thousand circuits at CEI, I 15 think it's a thousand-fifty-six, but just to keep the 16 17 math simple, if it was a thousand circuits, we would still have to report our 80 worst performing 18 19 circuits. 20 But in -- but in reporting your -- your Q. 21 calculating which are your 80 worst performing circuits, would you incorporate the rear lot 22 23 reduction factor or are you going -- does this waiver 24 encompass asking for, for purposes of Rule 11, 25 incorporating the rear lot reduction factor or are

282 you going to calculate the minutes from those 1 2 circuits a different way than you do for Rule 10? No. We would calculate them the same, so 3 Α. 4 it has the potential to change a circuit that would fall into that worst performing list. You would 5 б still have the eight worst performing or it may be different. 7 8 EXAMINER PRICE: CEI circuit that might otherwise fall within that 80 percent may not. 9 10 THE WITNESS: That's right. 11 EXAMINER PRICE: Are there any other instances that you know of off the top of your head 12 13 where you are asking for where this request for a 14 waiver would encompass part of Rule 10 or Rule 11 or 15 anything else? 16 THE WITNESS: None that come to the top 17 of my head. (By Mr. Reese) I'm looking at the second 18 Ο. 19 full paragraph, actually the first paragraph under 20 SAIDI performance band. 21 Just looking at the last phrase, this talks about an adjustment to the DSI, "Nor shall it 22 23 be construed as a punitive measure in response to 24 inadequate service." 25 Can you tell me what you mean by that?

A. I'm sorry, I didn't catch up to where you
 were.

3	Q. Okay. It's the last full sentence of the
4	second paragraph. "The performance band is set to
5	achieve top quartile performance in the industry and,
6	thus, a SAIDI financial adjustment that reduces the
7	DSI rider does not represent nor shall it be
8	construed as a punitive measure."
9	What does that mean? I am not quite sure
10	why that's there.
11	A. We were simply articulating even at 135
12	minutes, if you go outside of 135 minutes there would
13	be a financial adjustment, but that is still very
14	good reliability. And so we wanted to articulate
15	that it was not inadequate service.
16	Q. I'm looking I'm in your testimony at
17	page 4.
18	A. Okay, I'm there.
19	Q. All right, I'm looking at page I'm
20	sorry, lines 14 to 17, which deals with the the

22 companies' financial wherewithal to remain healthy

rider and the fact that the rider will provide the

and capable of continuing their ongoing commitments

24 to the energy delivery and customer service business.

25

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Do you see that?

- A. I do.

-	
2	Q. Does this imply that the company won't
3	continue its ongoing commitments to the energy
4	delivery and customer service business if the DSIR is
5	not approved?
6	A. Could you read that back, please.
7	(Record read.)
8	A. We will work very hard to continue to
9	meet the needs of our customers, but as I start there
10	on line 13, it's going to be very difficult. The
11	challenges that we face put us in a position where
12	we we need the revenue associated with the DSI
	rider.
13	rider.
13 14	Q. Okay. Thank you.
14	Q. Okay. Thank you.
14 15	Q. Okay. Thank you. Now, in your testimony you've proposed
14 15 16	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on
14 15 16 17	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back
14 15 16 17 18	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back to 2003, whether the companies' SAIDI performance
14 15 16 17 18 19	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back to 2003, whether the companies' SAIDI performance have fallen outside that band at any time, and if so,
14 15 16 17 18 19 20	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back to 2003, whether the companies' SAIDI performance have fallen outside that band at any time, and if so, which companies?
14 15 16 17 18 19 20 21	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back to 2003, whether the companies' SAIDI performance have fallen outside that band at any time, and if so, which companies? A. I recall that we did provide an
14 15 16 17 18 19 20 21 22	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back to 2003, whether the companies' SAIDI performance have fallen outside that band at any time, and if so, which companies? A. I recall that we did provide an interrogatory, so I'm going to go by memory. I don't
14 15 16 17 18 19 20 21 22 23	Q. Okay. Thank you. Now, in your testimony you've proposed this performance band. Do you know offhand, based on performance over the last five years, let's go back to 2003, whether the companies' SAIDI performance have fallen outside that band at any time, and if so, which companies? A. I recall that we did provide an interrogatory, so I'm going to go by memory. I don't have the number in front of me, but I believe that in

1 been below the 90 one year.

2 Q. Now, with the Application of the rear lot reduction factor, would CEI have still fallen outside 3 4 the upper band? 5 Α. Again, I think that was a question that б was asked in an interrogatory and we provided an answer. I believe -- I'm going by memory because I 7 don't have that in front of me. 8 I believe there was still at least one 9 10 year that with the rear lot reduction factor, it may 11 have been two, one or two years that CEI would have 12 still been above the 135 minutes, you know, looking back over the last five. 13 14 Did you look at historical performance Q. 15 when establishing a performance band? The proposed performance band? 16 Α. 17 Q. Yes. 18 Α. Yes. 19 Ο. And 90 to 135 was established why? 20 Because -- just give me an idea why you came up with 21 that particular range. 22 You have to start with we established Α. 23 first the target of 120 minutes. Again, we think 24 that that's the optimal spot when you are trying to 25 balance reliability and cost to obtain.

1 We then wanted to establish an 2 asymmetrical band around that 120 minutes, so we established 90 on the bottom side that so you would 3 4 have to go from 120 down to 90 before you would get 5 an incentive payment. б On the upside you would have to go only 15 minutes to be in a penalty, so it would be 7 asymmetric and it would be skewed to benefit the 8 9 customers. In addition to that, when you look at 90 10 11 minutes, that is very close to top decile performance 12 in the IEEE study, and the 135 is just slightly out 13 of top quartile. 14 Let's go to page 8 of your testimony. Ο. 15 Looking at line 6, "A performance range is typically a symmetrical band that recognizes that with changing 16 17 weather conditions and other factors outside the 18 companies' control using an absolute number as a 19 performance criterion is not practical." 20 Do you see that? 21 Α. I do. 22 Isn't that really what's done with SAIDI, 0. 23 CAIDI, SAIFI, and other performance measures that are 24 part of the ESSS? Aren't the targets absolute 25 numbers?

A. Today, you are referring to in today's
 environment?
 Q. No.
 A. Yes. They just have a single number.

5 Q. And you are not proposing that the ESSS 6 change, are you, in terms of their being an absolute 7 number for a target?

8 A. Other than what we have already talked 9 about, which we changed CEI's target to the 120, no, 10 for SAIDI.

11 So using an absolute number as a Ο. 12 performance criterion is practical for the ESSS, but not for calculation of the DSIR; is that correct? 13 14 I didn't make any mention of what ESSS Α. 15 should be. I'm just saying that when I look at performance of a distribution system, I think that a 16 17 band is more practical than an absolute number.

Q. Well, you are talking about SAIDI targets and there are SAIDI targets in the ESSS and so you are just saying having a target in the ESSS is not practical?

22 A. I didn't say that.

Q. Oh, okay. I have just a couple ofquestions remaining.

25 This regards the Smart Grid Study. You

reference a Smart Grid Study in your testimony; is 1 2 that correct? 3 Α. That's correct. 4 I take it the companies are going to pay 0. for this study; is that correct? 5 6 Α. That's correct. 7 Do you have an estimated cost for this 0. 8 study? I believe it would be less than a million 9 Α. 10 dollars per company. 11 Now, your testimony states the study will Ο. 12 be completed by December 31 of 2009. Do you know when the study will begin? 13 No, other than the fact that we'll --14 Α. we'll start it soon enough to make sure that it's 15 completed by the end of 2009. 16 17 Q. If you know, how will the Smart Grid 18 Study interface with the AMI pilot program and the 19 dynamic pricing pilot program also proposed by the 20 companies? At this point I don't know. One of the 21 Α. 22 things we will need to do as we start to prepare to 23 take this study on is we will have to interview some 24 companies that provide that kind of service and we'll 25 look to them to provide us some guidance on where

1 they may see some touch points.

2	Q. Do you know if this study includes a
3	cost/benefit analysis?
4	A. It will.
5	Q. Do you know if this study will estimate
6	operational savings, demand response, avoided cost
7	savings, and customer benefits?
8	A. That I don't know until I talk to some of
9	the suppliers of this kind of service and get an
10	understanding we will just need some guidance
11	there on how far to go with this study and we will
12	have to talk to the experts to get that guidance.
13	Q. So has the companies selected a
14	consultant to do the study?
15	A. We have not.
16	MR. REESE: One second, please.
17	No further questions.
18	EXAMINER PRICE: Thank you.
19	Mr. White?
20	MR. WHITE: No further questions.
21	EXAMINER PRICE: Ms. Wung.
22	THE WITNESS: Yes, your Honor, just a
23	few.
24	
0 F	

1	CROSS-EXAMINATION
2	By Ms. Wung
3	Q. Good afternoon, Mr. Schneider.
4	A. Good afternoon.
5	Q. My name is Grace Wung. I am here on
6	behalf of The Commercial Group, which is a group of
7	commercial end users.
8	EXAMINER PIRIK: You need to pull the
9	microphone closer.
10	Q. Is this better, can you hear me now?
11	A. Yes.
12	Q. I just have one follow-up question to
13	Mr. Reese's question.
14	Do you recall his question with regards
15	to past performance, SAIDI performance in the past
16	five years?
17	A. Yes.
18	Q. And you gave an example of TE being below
19	95 for one, CEI being 135 for two years?
20	A. To my recollection, again, we provided an
21	interrogatory and I looked at those numbers probably
22	three weeks ago, so I'm just going by memory.
23	Q. Okay. Thank you for the using the best
24	of your recollection.
25	If you were to take these post

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25 If you were to take those past

performances for the operating companies and placed 1 2 them in the current performance band under your ESP 3 current proposal, is there any year in which the 4 companies would have received a perform, an incentive 5 under the new plan based on past year performances? б Α. Going by memory, I think there was one year that Toledo Edison may have been a couple 7 8 minutes better than the 90 cutoff, so if there wasn't -- what I can't remember, was there an offset 9 10 at CEI in that particular year. 11 But to the degree that we would have 12 received a performance payout in any of the five 13 years, it would be very small. Because it was only a 14 couple of minutes better than the target. And actually --15 Q. I'm sorry, than the lower end of the 16 Α. 17 performance band. Going back to that -- let's go back to 18 Ο. 19 the lower end of this performance band and Mr. Reese 20 and I think the Hearing Examiner asked you this 21 question, how exactly are you guys determining what 22 is the -- let me back up. 23 Would you believe it's safe to say SAIDI is a measure of a service quality? 24 25 Α. I wouldn't define it as service quality.

I mean SAIDI is System Average Interruption Duration 1 2 Index. Q. So you -- but it is a performance your of 3 4 performance? 5 Α. It is a measure of reliability б performance, yes. 7 And, again, going back to that measure of 0. 8 reliability performance, how exactly would you classify a level that's too low or a level that's too 9 10 high? 11 I wouldn't qualify a level that's too Α. 12 high or too low. There's no specific criteria that you 13 Ο. 14 would use? 15 How did you -- again, how did you get to the 95 to 120? 16 17 A. Yes, the bandwidth we talked a little bit about, again, if you look at the 2006 IEEE study, 18 19 they looked at I think it was 100 or 102 utilities 20 around the country, they used the 2-1/2 Beta 21 methodology and they established that I think top 22 quartile, the cutoff was like 102 minutes. 23 You know, below 102 would be in the top 24 quartile, in fact, I think the top decile was I 25 believe it was like 89 or 88 minutes, so when we

established 90, that would be among the very best in 1 2 the country. MS. WUNG: Thank you, Mr. Schneider. I 3 4 have no other questions. 5 EXAMINER PRICE: I keep waiting for the б hearsay objection from the parties and I don't hear it on the study. 7 8 Can you give a cite to that study that you are -- I know it's referenced at page 9 of your 9 10 testimony, but can you give the title more kind of a 11 where can the parties find this study? 12 THE WITNESS: I believe we did provide 13 that -- that study as part of an interrogatory, but IEEE is the Institute of Electrical and Electronic 14 15 Engineers, and so you could go on their website, I 16 believe, and look for that study. 17 EXAMINER PRICE: Thank you. 18 Ms. McAlister. 19 MS. McALISTER: I have no questions, your 20 Honor. 21 EXAMINER PRICE: Ms. Fonner. 22 MS. FONNER: Very briefly. 23 _ _ _ 24 25

1	CROSS-EXAMINATION
2	By Ms. Fonner:
3	Q. Good afternoon, Mr. Schneider. I'm
4	Cynthia Fonner from Constellation Energy.
5	A. Good afternoon.
6	Q. I have just a few questions for you.
7	With respect to SAIDI, can you tell me
8	currently is SAIDI performance a component of the
9	compensation of any employee of FirstEnergy?
10	A. Yes, it is.
11	Q. And is that a plan that employs that
12	applies to all employees of FirstEnergy?
13	A. We actually have two different places
14	that SAIDI performance shows up. We have what's
15	called a short-term incentive compensation program
16	that I participate in, and SAIDI is a direct link to
17	my performance or to my incentive compensation.
18	In addition to that we have a 401K
19	matching plan that all employees at FirstEnergy
20	participate in, and there's a a metric there
21	called operational performance, and SAIDI performance
22	resides in that. And that would apply to all
23	employees that participate in the 401K.
24	Q. Turning now to the Smart Grid, if I
25	wanted any information regarding what the study plan

was, the proposal, the components, I would find that 1 2 in Attachment E to the Application; is that correct? To the degree we have developed it thus 3 Α. 4 far, I would say that we -- we haven't developed a full flow working document to articulate what that 5 6 study would entail. 7 But to the extent it has been developed, Ο. 8 everything is in Attachment E? I believe that's correct. 9 Α. Would you say that there is a fair level 10 Ο. of interest in the Smart Grid at the national level? 11 12 Α. Yes, I would say that's true. 13 Ο. And you are familiar with the fact that 14 NARUC and FERC have a joint collaborative regarding the Smart Grid? 15 16 I am not familiar with that. Α. 17 Q. Are you familiar with the fact that other 18 jurisdictions, they're three electric distribution 19 utilities, are in the process of posting workshops, 20 collaborative workshops regarding Smart Grid? 21 Α. Again, I believe there is a -- there is a 22 fair amount of interest in Smart Grid around the 23 industry. 24 And is it your position that the Q. 25 companies would not undertake a smart -- a study of

1	Smart Grid technology but for the ESP?
2	A. I don't know the answer to that.
3	Q. And just to be clear, FES's proposal is
4	not a collaborative study in any way, correct, it's
5	something that would be internally only?
6	A. That's correct.
7	Q. And in terms of the entities with whom
8	you would share those results, that is limited to
9	Commission staff and OCC?
10	And just for reference, I'm my
11	question is based upon page 11 of your testimony,
12	lines 9 through 11.
13	A. That's correct, we would share it with
14	the Commission staff and the OCC.
15	Q. And that's all. Nobody else.
16	A. That's all that we've proposed.
17	MS. FONNER: Thank you. Nothing further.
18	EXAMINER PRICE: Mr. Smith.
19	MR. SMITH: No questions.
20	EXAMINER PRICE: Mr. Breitschwerdt.
21	MR. BREITSCHWERDT: Just a very few.
22	
23	CROSS-EXAMINATION
24	By Mr. Breitschwerdt:
25	Q. At the very beginning of OCC

discussion -- good afternoon. My name is Brett 1 2 Breitschwerdt. I am here on behalf of NOPEC and Ohio 3 School's Council. 4 At the very beginning of the discussion 5 you were referenced to the Application, page 21, б Section E. If you could turn there, I just have a very few questions. 7 You talked with Mr. Reese on behalf of 8 OCC about the need to train new employees to replace 9 retirees. 10 Do you recall that discussion? 11 12 Α. I do. 13 Ο. And you discussed the PCI program. 14 Do you recall that? Α. I do. 15 And PCI, what does that stand for again? 16 Ο. 17 Α. Power Systems Institute. Okay. And the candidates for involvement 18 Q. 19 in Power Systems Institute would be high school 20 graduates? Primarily. The nature of PSI it's --21 Α. it's a full day, so it -- you know, when you go off 22 23 to class, it's five full days, so it makes it very 24 difficult to -- an individual that may already have a 25 job, may have a family, that sort of thing, it's

difficult for those individuals, so primarily we
 target high schools.

3 Ο. I see. Okay. 4 And when you say "target high schools," that means target for candidates to enroll in the 5 6 program? 7 Correct, recruit from high schools. Α. 8 Q. And would those high schools be in the companies' service territories? 9 Α. 10 Yes. Outside the service territories as well 11 Ο. 12 or just within the service territories? There may be a few high schools that are 13 Α. 14 outside of the territory. An area that comes to my mind is we have a school associated with Youngstown 15 16 State University in Youngstown, Ohio, and if you go 17 about 30 miles south of Youngstown, you actually 18 leave our service territory. We may do some 19 recruiting in those high schools, but it would be 20 primarily our service territory. 21 Q. So approximate percentage of high schools then outside, say, 95 percent within the territories 22 23 of the companies? 24 Α. I don't know.

25 Q. That's okay. That's fine.

1 And for the PSI program what type of 2 skills do you seek from these high schools students 3 that are candidates? Can you just kind of give an 4 overview of what you expect?

A. Sure. When we go out and recruit, one of the things that we do is we invite these individuals to come out to one of our climbing schools if we are talking about a lineman. We also have substation.

9 If we are just talking about linemen, we 10 invite them to come out and we look at their physical 11 capabilities, can they climb a pole, are they 12 comfortable on a pole, and then as we progress, we 13 then also have some entrance exams, if you will, to 14 see if they have the analytical ability to become a 15 lineman.

16 Q. So mathematics or kind of --

17 A. Correct.

18 Q. -- academic aptitudes?

19 A. Correct.

Q. Would you agree with me that there is a benefit to the Ohio utilities of public school districts within the companies' service territories effectively educating the students and preparing them for the work force?

25

A. I think that would be a benefit to the

utilities and nonutilities to have kids coming out of 1 2 high school that are prepared to enter the work 3 force, yes. 4 MR. BREITSCHWERDT: That's all I have. 5 Thank you. 6 EXAMINER PRICE: Mr. Stinson. 7 MR. STINSON: No questions, your Honor. EXAMINER PRICE: Mr. Lavanga. 8 9 MR. LAVANGA: No questions, your Honor. 10 EXAMINER PRICE: Mr. Dunn. 11 MR. DUNN: Yes, your Honor, just a 12 couple. 13 14 CROSS-EXAMINATION 15 By Mr. Dunn: 16 Q. Mr. Schneider, my name is Greg Dunn. I'm 17 representing the City of Cleveland. Just got a 18 couple of questions mostly on --19 Α. I'm sorry, I'm having trouble hearing 20 you. 21 EXAMINER PRICE: Pass one of our 22 microphones down. 23 MR. DUNN: I just don't have enough 24 energy for the Langdon Bell method. 25 Q. Good afternoon, Mr. Schneider. My name

is Greg Dunn. I'm representing the City of 1 2 Cleveland. I have a couple of questions about the rear lot reduction factors. 3 4 Did I hear you say that there are 439 circuits in CEI that have -- that you have identified 5 б as rear lot circuits? 7 A. I'm going by memory. I believe that number is correct. 8 Q. And that -- you did testify the company 9 has identified them? 10 11 A. That's correct. Q. And are you providing that to staff or 12 13 will you be providing that to staff? 14 We have not provided it yet, but we would Α. provide it to staff. 15 16 Q. And when would you be doing so? 17 A. I don't know. Q. Would you be willing to do so in the very 18 19 near future? A. Yes. I think all the -- I think all they 20 21 would have to do is request it, to tell you the 22 truth. 23 Q. Well, I think we will be doing so. 24 How many of these 439 circuits are in the 25 city of Cleveland? If you know.

1	A. I don't know.
2	Q. And did you testify that the restoration
3	times on these rear lot circuits are roughly double
4	the restoration times on other circuits?
5	A. That's correct.
6	Q. And in your page 10 you testified that at
7	least \$1 billion will be spent to address
8	distribution system improvements.
9	A. You are referring to page 10 of your
10	testimony?
11	Q. Yes, sir.
12	A. Line 6?
13	Q. Yes, sir.
14	A. Yes.
15	Q. And, well, of that billion dollars, well,
16	can any of that money be spent to improve the
17	restoration times on these rear lot circuits?
18	A. We've not specifically articulated pieces
19	of the billion dollars. So I just don't know sitting
20	here today what what part of the billion dollars
21	may be spent to improve the restoration time.
22	Q. Can improvements be made on those rear
23	lot circuits that will improve restoration time?
24	A. Things can be done. I'm just not sure
25	that they to improve restoration time it takes

investment in more equipment, for example, and what 1 2 I'm struggling with is I would want to look at the economic analysis to determine whether or not that's 3 4 the best place in the interest of our customers to 5 spend the money. б Q. When you say "in the interest of your customers," what do you mean there? 7 8 Α. Well, when we do a -- an evaluation of where to spend our capital, we use a what I think is 9 10 a pretty sophistocated methodology of racking and 11 stacking one project against another project for any 12 of the capital expenditures. So in this particular case you may be 13 14 comparing, say, a track vehicle, an additional track vehicle that you can use in a rear lot facility 15 16 compared to a recloser that would limit the 17 customers' affect when we have trouble. 18 So we would want to rack and stack all of 19 those capital investments, and I'm just not sure 20 where some of the things that you would do to improve 21 restoration time would, you know, would stack out 22 compared to other things. 23 Ο. So theoretically, customers in these rear 24 lots may not have their situation improved, but the

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25 billion dollars in the restoration times improved --

304 1 I don't know that their restoration time Α. 2 would be improved, but the billion dollars would improve, it's designed to improve the overall 3 4 reliability of the system, so obviously, one of the things you do is work to reduce the number of outages 5 б in the first place. 7 And you have been out at some of these 0. 8 rear lot circuits and have observed the types of housing and lot size? 9 10 Α. Correct. 11 Ο. And would you say that these are small 12 lots on average? 13 Α. Generally speaking, yes. 14 And they have a higher density per plant Q. mile than is normal in your service area? 15 I want to make sure I understand your 16 Α. 17 question. Could you perhaps rephrase it? 18 Sure, I would be glad to. Q. 19 There are -- there is less plant per 20 customer in these customers than on your average. 21 Α. I don't know about on average. If you compare two communities, communities that have lots 22 23 of rear lot. You have a higher customer count for 24 those facilities than a rural area, say, out towards 25 Ashtabula.

305 1 So I would agree in general that the areas that have rear lot facilities would have a 2 3 higher customer density per plant. I just don't know 4 on average. 5 Q. Thank you. And are there certain maintenance б advantages to high density? 7 8 Α. From a maintenance perspective, these rear lot facilities are extremely difficult to 9 maintain. 10 Q. By the question, though, is that there 11 12 are advantages to higher densities, that you have less plant to maintain. 13 14 I would have to do an analysis around Α. The top of my head I think that the difficulty 15 that. you have in maintaining those rear lot facilities 16 17 outweighs the fact that you have higher density of 18 customers. 19 I understand where you are -- what you 20 are thinking. 21 Q. And you have not done that analysis? 22 I have not done that analysis. Α. 23 Ο. But we don't know if there are certain 24 advantages to maintenance in high density areas? 25 Α. I have not done an analysis. I do

believe my opinion would be, just sitting here 1 2 thinking about it, that the difficulties that we have in maintaining those facilities outweighs the fact 3 4 that you have higher customer density. But you have not in your testimony 5 Q. 6 factored in any of those advantages whereas you've -you've considered the disadvantage. 7 8 Α. I wouldn't say we didn't factor any of that in. I think the rear lot reduction factor that 9 you are talking about, is that what you are talking 10 about in my testimony? 11 12 Yes. Q. 13 That was purely based on the restoration Α. time that it takes about twice as long to restore 14 15 power on a rear lot facility. 16 MR. DUNN: That's all I have, your Honor. 17 EXAMINER PRICE: Thank you. 18 Mr. Bell? 19 MR. BELL: I am not going to let you 20 down. 21 _ _ _ 22 CROSS-EXAMINATION 23 By Mr. Bell: 24 Q. Good afternoon, Mr. Schneider. I guess 25 I'm the cleanup batter for the time being.

A. Good afternoon.

2	Q. I'm Langdon Bell, representing the Ohio
3	Manufacturers Association. Just a couple of pickups.
4	Would you agree that ESSS is directed
5	toward absolute reliability without regard to the
6	cost or the revenues associated with securing
7	improved performance?
8	A. I don't know what all went into the ESSS
9	targets that were established.
10	Q. Would you agree that your DSI rider is
11	primarily directed toward the generation of revenue?
12	A. No, I wouldn't agree with that.
13	Q. Did I understand you correctly to state
14	that the DSI rider is projected to generate something
15	in the order of \$115 million?
16	A. Per year, that's correct.
17	Q. And did I understand that the performance
18	adjustment component is only 15 percent of that?
19	A. It has a kind of a cap and a ceiling,
20	yes, of 15 percent.
21	Q. So that that 15 percent applied to the
22	115 million would place FirstEnergy companies at
23	risk, since we have been measuring risk throughout
24	these proceedings or perceived risks at the 16.25
25	million applying the 15 percent factor of the total

1 dollars, correct?

2 Are you just taking the 115 million that Α. I said was roughly what was represented by the DSI 3 4 rider? 5 Q. What was to be generated, yes. б Α. Multiply that times 15 percent. That's correct. 7 Q. 8 Α. And you are saying that's the maximum 9 penalty that we would pay? That's correct. Or the maximum reward 10 Ο. you would receive. 11 12 Α. That --13 That is the amount you are "at risk?" Ο. 14 I wouldn't quantify -- I wouldn't use the Α. term "at risk." 15 Again, I think that there is a cap both 16 17 on the incentive, the potential incentive and there is a cap on the penalty side. I wouldn't say that 18 19 it's risk. 20 And with respect to the performance band Q. 21 that you have, I thought you had indicated there is only a slight chance that you would be rewarded; 22 23 isn't that correct? 24 No, I don't believe that's correct. I Α. 25 think you may be referring to a question that I

309 answered earlier where somebody was asking me about 1 2 the historical performance and whether or not we would have been in --3 4 Utilizing your past experience as Ο. 5 representing your future exposure, you have a slight б chance of being rewarded, correct? When you look at our historical 7 Α. 8 performance. 9 Q. Yes. 10 Α. Again, I believe there was a year or 11 perhaps two years that we would have been -- we would 12 have had a slight incentive payment at Toledo Edison 13 that would have also been one or two years that we 14 would have been into a penalty situation at CEI. 15 Ο. So that with respect to the overall revenues that are generated from three companies, not 16 17 two, you would have a slight chance of being rewarded 18 in Toledo Edison a slight chance of being penalized 19 in CEI, and Ohio Edison would be, what, pure revenue? 20 Given the performance bands that you have established 21 based upon historical practice? 22 I don't think you can necessarily use the Α. 23 historical performance as a -- as a proxy for what we 24 would have going forward.

25 Q. You can't use the historical performance

as a proxy. Didn't you, Mr. Schneider, go out and 1 2 talk to your linemen and say how -- as far as your historical performance, how much longer has it taken 3 4 you in the past to service a rear lot versus a front lot because the line runs on the back of the property 5 6 as opposed to the front of the property? 7 MS. MILLER: Objection, your Honor. 8 Argumentative. 9 EXAMINER PRICE: Overruled. 10 Α. I am not sure what your question was. 11 Ο. I think the question speaks for itself. 12 With respect to this billion dollars in capital commitment, that billion dollars of 13 14 commitment is suggested in my friend Greg's inquiry of view isn't directly related in any way, shape, or 15 form to the improvement of reliability on the 16 17 distribution system, is it? I'm sorry, could you read the question 18 Α. 19 back. 20 (Record read.) 21 Α. I don't agree with that. 22 All right. Let me follow-up Mr. Dunn's Ο. 23 inquiry of you. 24 Your background is with CEI. I have got 25 a lot of background with CEI as well. Doesn't CEI

and hasn't CEI experienced substantial capital 1 2 investments associated with just moving customers Plain Dealer facility moving, as I recall that 3 4 illustration was utilized in a past case where you 5 weren't securing a new customer, you were just б following the load, so to speak, from one location to another? 7 8 If the capital expenditure is made simply to follow that customer's load, where is there an 9 10 improvement, measurable improvement in reliability? 11 Α. There was a lot there. Could you maybe 12 just ask me one question at a time? 13 Yes. When you -- when the capital Ο. 14 investment is made to follow load, where is there an improvement in reliability? 15 I'm not familiar with the example you are 16 Α. 17 giving. Let me give you another example. I can 18 Ο. 19 give you lots of examples, Mr. Schneider. 20 Much of the distribution capital 21 investment made by CEI in recent years has been to 22 serve new load in the southern suburbs in Richland, 23 in Medina, in Strongsville, has it not? 24 MS. MILLER: Objection, your Honor. 25 Assuming facts not in the record.

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1	MR. BELL: I am asking the witness.
2	EXAMINER PRICE: Exactly. Overruled.
3	MR. BELL: It's his service territory,
4	they are making the capital investment.
5	EXAMINER PRICE: Mr. Bell.
б	MR. BELL: Apologize.
7	A. If you are asking me do we have to invest
8	capital to
9	Q. Serve new load?
10	A. To serve any load, the answer is yes.
11	Q. With respect to those dollars of
12	investments, assuming you make them billion dollar
13	investments to serve a growing service territory in
14	Medina County, how does that improve the reliability
15	in Cuyahoga County and specifically the city of
16	Cleveland?
17	A. If you are asking me does spending
18	dollars in Medina County help the City of Cleveland's
19	reliability; is that what the question is?
20	Q. You can so interpret it.
21	A. I can think of a couple of examples
22	perhaps that spending money in Medina County could
23	help the reliability of
24	Q. Might conceivably.
25	A. I can think of a couple of examples. Or

1 at least one example.

2 Q. Doesn't your basic premise give us more money, this DSI rider is directed towards the 3 4 generation of revenue and in view of the fact we will 5 have more money available, we perhaps can spend it on б improving the reliability to existing customers? 7 MS. MILLER: Again, objection, your 8 Honor. Argumentative. 9 EXAMINER PRICE: Sustained. 10 MR. BELL: No further questions. EXAMINER PRICE: Thank you. 11 12 Staff? 13 MR. WRIGHT: Thank you, your Honor. I 14 will try to eliminate some. 15 16 CROSS-EXAMINATION 17 By Mr. Wright: Q. My name is Bill Wright, Mr. Schneider. I 18 19 represent the Commission staff. 20 Let's start with the rear lot reduction 21 factor. If you know, you may have been asked this 22 before, you are not aware, are you, that -- of any 23 other state that has such an adjustment? 24 No, I am not aware of. Α. 25 Q. And you would agree with me, certainly,

that the challenges as you have laid them out in your 1 2 testimony, all utilities face those to one extent or another? If you know. 3 4 A. We, I think that CEI is very unique in 5 the magnitude of facilities that are served by rear 6 lots. 7 Q. You have not studied any other utilities 8 in this regard in the state of Ohio, have you? We have looked at Toledo Edison. Is that 9 Α. still on Toledo Edison and Ohio Edison and there's --10 11 I'm sorry, no, on FirstEnergy. 0. 12 Α. Not in detail we have not. 13 0. Okay. And this is not a new problem, 14 these are not new challenges for CEI. They have faced these for years, have they not? 15 That's correct. 16 Α. 17 EXAMINER PRICE: Off the record one 18 minute. 19 (Discussion off the record.) 20 Q. You are proposing in this case to change 21 the -- to increase by I believe approximately 26 percent the SAIDI reliability index for CEI; is that 22 23 right? 24 That's correct, our proposal would be to Α.

establish 120 as the SAIDI target.

25

315 EXAMINER PRICE: Mr. Wright, can you turn 1 2 your microphone on? 3 MR. WRIGHT: Oh, I'm sorry. How do you 4 do that? EXAMINER PIRIK: It's in the back. 5 б EXAMINER PRICE: Mr. Lavanga will turn on Mr. Wright's microphone. 7 8 MR. WRIGHT: There's nothing back here. 9 I will try to speak up. EXAMINER PRICE: Okay. That's fine. 10 11 Q. (By Mr. Wright) One will suffice. 12 I believe you've testified earlier, have 13 you not, that you are not aware when the existing CEI 14 SAIDI target was established; is that right? Α. 15 That's correct. 16 Q. You had no part in that? 17 A. I did not. Are you aware whether or not that target 18 Q. 19 was actually proposed by CEI? A. I don't know. 20 21 Q. Do you believe that reliability targets 22 should be aggressive? 23 Α. I believe that reliability targets should 24 reflect the -- the point that is optimal when you are 25 trying to balance the reliability of the system and

1 the cost to incur.

2	Q. Okay. Let's talk about that for just a
3	minute. Optimal, as you describe it, would compare
4	the cost of the company I guess to achieve a
5	particular result with the cost of the customer; is
б	that how you are using that term?
7	A. I'm sorry, could you read that back.
8	MR. WRIGHT: Repeat the question, please.
9	(Record read.)
10	A. No. Really what I was I was what I
11	was thinking about was the cost you have to spend to
12	achieve you are trying to balance that and you
13	have to look at each of the systems kind of
14	independently, if you will, so, you know, an older
15	system like CEI's is going to be more difficult to
16	achieve low levels of SAIDI than, you know, perhaps a
17	brand new system.
18	And so what you are trying to do is
19	balance off what it's going to ultimately cost the
20	customers for that reliability.
21	Q. Okay. Now, you are proposing under the
22	DSI rider you would have I will use the term dead
23	band that would extend from approximately 90 to 135
24	minutes under which there would be no penalty or
25	reward; is that right?

1 That's correct. We established a Α. 2 performance band. So that if the DSI rider performance 3 0. 4 standard were adopted, the company could actually not meet its new SAIDI target of 120 minutes and yet 5 б still not be penalized, correct? 7 The penalty would -- you wouldn't incur a Α. 8 penalty until you got out of the 135 minutes. Which -- which is in excess of the 120 9 Q. SAIDI target that the company is proposing in this 10 11 case, correct? 12 Α. That's correct. So why would 135 not be an optimal level 13 Ο. 14 for the company? In as much as there is no risk to the company up to that point? 15 Again, when I refer to 120 minutes as the 16 Α. 17 optimal target, I believe that that represents 18 excellent value for our customers to balances off the 19 reliability performance with the cost to achieve. 20 I also believe that you need to have a performance band around that to take into account 21 22 things that are outside of our control, like weather, 23 for example. 24 As you define what's optimal though under Ο. 25 those circumstances, how is -- how is that optimal

level compromised anyway, it's not costing any 1 2 company any more? The company is not being penalized as well, correct? 3 4 Α. I'm sorry, I don't understand the question. 5 6 Q. I will withdraw the question. 7 Much of your testimony, I believe, is 8 premised upon trying to do what will align company interest and customer interest; is that fair? 9 10 Α. Yes. 11 Ο. Now, the -- I apologize for jumping 12 around, this is something I forgot a moment ago. 13 With respect to the rear lot reduction 14 factor, the affect of that, were it to be applied, would be to understate, intentionally understate the 15 companies' response time in rear lot situations; is 16 17 that not correct? 18 No, that's not correct. Α. 19 Ο. Isn't the companies' proposal to reduce 20 the response restoration minutes by approximately a factor of .5 or one-half regardless of what the 21 22 actual response is? 23 Α. For purposes of calculating SAIDI, yes. 24 Just to be clear, we would -- we would submit the --25 the raw numbers and then the adjusted numbers just

319 the same as we do for, say, major storm exclusions 1 2 today. You anticipated my next question, but for 3 0. 4 purposes of evaluating the companies' performance under SAIDI, we would be looking at the net minutes, 5 б the net being after the rear lot reduction factor was applied, correct? I believe that's what you just 7 8 said. 9 For purposes of seeing where you would Α. fall in the performance band, for example? 10 11 Ο. Yes. 12 Α. That's correct. 13 Is it your testimony that SAIDI is a su 0. -- a superior reliability indicator to either SAIFI 14 or CAIDI? 15 16 Α. No. 17 Q. Okay. Let's turn to your testimony for a minute. Is it fair to say that, Mr. Schneider, that 18 19 most of your background has been in plant --20 plant-related activities and fuel acquisition? 21 Α. The majority of my career has been spent in the power plants, that's correct. 22 23 0. Okay. Now, turning to page 3 of your 24 testimony, the first question and answer there, you 25 talk about a number of different types of equipment

320 that comprise the companies' distribution system. 1 2 FirstEnergy already has a program in place to maintain its distribution system, does it 3 4 not? It has for some time? 5 Α. I am not sure what you mean by "a program б in place." 7 Well, the company -- I assume you receive Ο. 8 a budget, an annual budget, do you not? To -- that 9 it would be used, among other things, to -- to perform maintenance on existing distribution systems 10 11 for the operating companies? 12 We develop an annual budget both O and M Α. 13 budget and a capital budget. 14 Okay. And is it not correct that that Q. budget is currently funded through customer rates? 15 And I know you are not appearing as rate design or 16 17 rate expert. 18 Α. I don't know that I can answer that 19 question. As you said, I'm not a rate design expert. 20 Q. Do you know where the funds come from 21 that are budgeted to you of budgeting cycle for purposes of capital and O and M for the distribution 22 23 system? 24 I would say they come from a variety of Α.

sources, including revenue from the customers,

including funds that we borrow from banks. 1 2 Now, the items that you mentioned --Q. well, strike that. Strike that. 3 4 You say at line 7, you mention 8 --5 approximately 8,000 energy delivery and customer service employees. Could you define for me what you 6 mean by "customer service employee"? 7 8 MS. MILLER: Clarify, we are still on 9 page 3? 10 MR. WRIGHT: Excuse me? 11 MS. MILLER: We are still on page 3? 12 MR. WRIGHT: Yes, page 3, line 7. 13 There is two ways to look at customer Α. 14 service. We have a department that reports to me 15 that's a customer service department in the general sense and all of the employees serve the customer. 16 17 Q. I believe my question was as you use the term "customer service employee," is that something 18 19 different than an energy delivery employee? 20 Α. Yeah. In my testimony I was referring to 21 the group of individuals that are in the customer 22 services organization that also reports to me. 23 Ο. Those would -- those would be people I assume handling customer complaints and other types 24 25 of customer issues as opposed to the people out in

322 the field working on outages and things like that; is 1 2 that correct? A. That's correct. 3 4 Q. Okay. 5 MR. WRIGHT: If I may have just a moment, б your Honor. 7 EXAMINER PRICE: Certainly. 8 Q. Turning to page 10 of your testimony, the first question and answer on that page. This is the 9 so-called \$1 billion commitment. 10 11 What if any portion of this \$1 billion is 12 incremental to -- to capital spending that's already 13 been budgeted for the companies over the next five 14 years? If you know. A. Could you rephrase that? 15 16 MR. WRIGHT: Could you read the question 17 back, please. 18 (Record read.) You are comparing apples to oranges 19 Α. 20 there. Whatever we have in a budget --21 EXAMINER PRICE: Please answer his question directly. 22 23 A. I don't know. EXAMINER PRICE: Mr. Schneider, you are 24 25 senior vice president for energy delivery.

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1	THE WITNESS: Yes, sir.
2	EXAMINER PRICE: Do you have a capital
3	budget plan for the next five years?
4	THE WITNESS: We have a capital budget
5	plan. We don't have a capital budget approved, sir.
6	EXAMINER PRICE: Okay. To what degree
7	does the \$1 billion talked about in your testimony on
8	page 10, is that over and above what's already
9	planned in your capital budget?
10	THE WITNESS: The problem I'm having is
11	the billion dollars that we talk about here is a
12	commitment. We are saying that we will spend a
13	billion dollars.
14	The fact that we have a five-year budget
15	that has not been approved by our Board of Directors,
16	for example, is not a commitment. I'm having trouble
17	even trying to compare the two.
18	EXAMINER PRICE: That's fine. Thank you.
19	Mr. Wright.
20	Q. How does the \$1 billion commitment
21	compare with capital expenditures for the companies
22	over the next excuse me, over the, say, the
23	previous two or three years if those expenditures
24	were maintained at or about the same levels? If you
25	Imperi

25 know.

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1	A. I don't I don't know.
2	MR. WRIGHT: That's fine. That's fine.
3	Okay one minute, your Honor. I know it's late.
4	THE WITNESS: Could we back up to that
5	previous question?
6	EXAMINER PRICE: I am sure that
7	MR. WRIGHT: There is not a question
8	pending.
9	EXAMINER PRICE: I am sure on redirect
10	your counsel will be happy to ask you any questions
11	you would like asked.
12	MS. MILLER: I will.
13	MR. WRIGHT: No further questions. Thank
14	you.
15	EXAMINER PRICE: Thank you.
16	
17	EXAMINATION
18	By Examiner Pirik:
19	Q. I have just a couple of questions. I
20	want to follow up on something Mr. Wright asked you
21	because I want to understand that the SAIDI target is
22	120. Correct?
23	A. The target that we are proposing.
24	Q. For all three companies is 120.
25	A. That's correct.

325 1 So to the extent that the SAIDI that is Ο. 2 calculated falls between 120 and 135, the companies aren't asking for insulation for -- from any type of 3 4 action or proceeding from the Commission or whatnot with regard to the fact that they didn't hit their 5 6 target at 125, are they? Or 120, I'm sorry. 7 We are asking that for CEI that ESSS Α. 8 target be changed to 120 for SAIDI. No change to CAIDI or SAIFI. 9 10 Ο. Correct. That's not my question. 11 My question is the SAIDI target is 125 12 and then you have this performance band of 90 to 135. That performance band doesn't prohibit the Commission 13 14 in any way from, say, your SAIDI is 130. Just because it's within that performance 15 16 band doesn't mean that there isn't some action -- the 17 company is not asking for a waiver of action from the 18 Commission if the SAIDI is above 125 -- or 120. The 19 only purpose for that band is the financial incentive 20 Yes, I see what you are saying. At one Α. 21 point, your Honor, I think you said 125, just to be 22 clear. 23 Ο. Right, I keep correcting it. 24 It's 120, and that would be the target Α. 25 that we would ask to have changed in ESS. And so

326 if -- if we posted a 130, for example, outside of 1 2 what the ESP covers, we are not proposing anything there other than to change the target. 3 4 So you are not asking the Commission to Ο. 5 waive the possibility of some action that they could 6 follow through on if you -- if, in fact, your SAIDI comes out at 130. 7 8 Α. That's correct. Okay. The only purpose of that 90 to 135 9 Q. band is the financial incentive; is that correct? 10 11 Α. That's correct. 12 The target 120. Q. The target is 120, that's correct. 13 Α. 14 I just wanted to be sure I understood Q. 15 that. 16 Now, going over to the Smart Grid Study 17 that you intend on doing, are you aware that -- that there have been discussions in various industries of 18 19 perhaps the gas industry piggybacking on Smart 20 Grid-type technology that could be developed by the 21 electric companies? 22 I'm not aware of that. Α. 23 Q. Do you know whether or not -- I mean, if, 24 in fact, that is, you know, those types of 25 technologies are of interest to the Commission,

327 would -- is that in any way going to be part of the 1 2 study as far as the potential for having those types of industries piggyback on the technologies that you 3 4 all will be looking into? When we laid this out, we haven't thought 5 Α. of that, but then, again, we haven't talked to some б of the experts, so they -- we may find in fact they 7 8 suggest something around that. I just -- at this point I don't know 9 because we haven't had those discussions. 10 11 EXAMINER PIRIK: That's all I had. 12 13 EXAMINATION 14 By Examiner Price: 15 Q. Actually before we go on to redirect, I have something that's just -- I'm just asking this so 16 17 the record's clear. 18 Can you define in simple terms what SAIDI 19 measures? 20 Α. SAIDI. 21 Q. State --22 Α. Average Interruption Index. 23 Q. Yes. 24 So it's customer minutes of interruption Α. 25 divided by total customers within that sample, so if

328 you are talking about an entire company, say, for 1 2 example, CEI, it would be the customers would be around 730,000 I think is our customer count. 3 4 I think you are even trying to think too 0. 5 hard. б SAIDI represents the average interruption that a customer would experience in the year average 7 amount of interruptions that a customer would have 8 experienced in a year; is that not correct? 9 It's the duration. Α. 10 11 O. The duration? 12 Α. The duration, yes. 13 0. And SAIFI representation the average 14 number of interruptions customers would have experienced? 15 Right, the frequency. 16 Α. 17 Q. And CAIDI represents the --18 Α. The average interruption duration for the 19 customers that have had outages. 20 Q. Yes. Thank you, I wanted to make sure we had something in the record to explain all of our 21 22 acronyms. 23 Α. Okay. 24 EXAMINER PRICE: Thank you. 25 Redirect.

1 MS. MILLER: Can I have a couple of 2 minutes, your Honor? 3 EXAMINER PRICE: You sure may. 4 (Recess taken.) 5 EXAMINER PRICE: Let's go back on the б record. 7 Ms. Miller. MS. MILLER: I do have two questions. 8 9 10 REDIRECT EXAMINATION 11 By Ms. Miller: 12 Mr. Schneider, there was some discussion Q. 13 regarding parts of the DSI rider having an incentive 14 mechanism or incentive and whether the DSI writer in whole was an incentive. 15 16 Could you clarify your response? 17 Α. Yes. Clearly in my testimony there was an area that specifically talks about incentives, 18 19 that being the performance bands, but if you look at 20 it from a holistic perspective, there is a revenue 21 associated with DSI and, of course, part of the 22 overall plan includes the commitments to spend a 23 billion dollars and do all the other things we need 24 to do to continue to ensure reliability for the 25 system.

So from a holistic perspective you could
 look at it as incentive based -- you know, in its
 totality.

Q. And you were asked about capital spending and in previous years and how it compared to capital spending going forward or as the company's proposed in the plan. Can you clarify your answer?

8 A. Yeah. I think the question I was asked 9 was how does the billion dollars commitment compare 10 to what you've actually spent in the last two to 11 three years.

12 And although I can't remember exactly 13 what our spending was in those previous, say, three 14 years, a billion dollars would probably represent 15 something on the order of close to twice as much as 16 we spent over the last two to three years.

MS. MILLER: No further questions, yourHonor.

19 EXAMINER PRICE: Mr. Reese?

20 MR. REESE: No questions.

21 EXAMINER PRICE: Mr. White.

22 MR. WHITE: No questions.

23 EXAMINER PRICE: Ms. Wung.

24 MS. WUNG: No questions.

25 EXAMINER PRICE: Ms. McAlister.

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1	MS. McALISTER: No questions.
2	EXAMINER PRICE: Mr. Smith.
3	MR. SMITH: No questions.
4	EXAMINER PRICE: Mr. Breitschwerdt.
5	MR. BREITSCHWERDT: No questions.
6	EXAMINER PRICE: Mr. Dunn.
7	MR. DUNN: No questions.
8	EXAMINER PRICE: Mr. Lavanga.
9	MR. LAVANGA: No questions.
10	EXAMINER PRICE: Mr. Bell.
11	MR. BELL: I am not going to let you
12	down.
13	
14	RECROSS-EXAMINATION
15	By Mr. Bell:
16	Q. And that increment can be associated with
17	serving new load or moving load having no impact upon
18	the reliability of all of your existing customers
19	today, correct?
20	A. No, I don't think that's correct. I
21	think if you looked at what our load growth was in
22	the previous two or three years compared to what we
23	would anticipate our load growth to be at least in
24	the next two to three years, significantly reduced.
25	Just because of everything going on in

the economy, the housing coupled with the burst and 1 2 that sort of thing. 3 MR. BELL: Thank you. That's all. 4 EXAMINER PRICE: Mr. Dunn. 5 MR. DUNN: No questions, sir. 6 EXAMINER PRICE: Mr. Wright. 7 MR. WRIGHT: One question. 8 9 RECROSS-EXAMINATION 10 By Mr. Wright: 11 Q. Again, having to do with SAIDI. Why has 12 the company chose to build its incentive mechanism 13 around SAIDI as opposed to SAIFI or CAIDI? 14 Α. I think that SAIDI drives you to look at both CAIDI and SAIFI, obviously, because I think 15 earlier it was stated that it's really a mathematical 16 17 equation. 18 There are things if you just look at 19 SAIFI, there are things you could do to improve SAIFI 20 that don't necessarily help CAIDI and vice versa. I 21 think SAIDI would represent us having to balance 22 those things off. 23 MR. WRIGHT: Thank you. 24 EXAMINER PRICE: I have one final 25 question and you can go home. Just a follow-up on my

1 colleagues's question.

2	You have a broad waiver language that we
3	have discussed about the broad waiver language in the
4	Application Rule 10 has consequences for the company
5	that can be proposed by the staff or by the
6	Commission if the company fails to reach any
7	performance targets.
8	And I just wanted to clarify that the
9	broad waiver language does not apply to any action to
10	be taken or proposed by the Commission or its staff
11	under Rule 10 in the event that your SAIDI
12	performance was north of 120 but below the 135?
13	THE WITNESS: That's correct.
14	EXAMINER PRICE: You're excused.
15	Ms. Miller.
16	MS. MILLER: Your Honor, at this time the
17	companies wish to move into evidence Company Exhibit
18	3.
19	EXAMINER PRICE: Any objections?
20	Hearing none, 3 will be admitted.
21	(EXHIBIT ADMITTED INTO EVIDENCE.)
22	EXAMINER PRICE: See you all tomorrow
23	morning. We are off the record.
24	(The hearing was adjourned at 6:50 p.m.)
25	

1	CERTIFICATE
2	I do hereby certify that the foregoing is
3	a true and correct transcript of the proceedings
4	taken by me in this matter on Monday, October 20,
5	2008, and carefully compared with my original
6	stenographic notes.
7	
8	Karen Sue Gibson, Registered
9	Merit Reporter.
10	(KSG-5000)
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