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February 5, 2009

VIA FEDERAL EXPRESS

Public Utilities Commission of Ohio  
Attention: Renee Jenkins  
Docketing Division  
180 E. Broad Street, 10th Floor  
Columbus, OH 43215

PUCO

2009 FEB -6 AM 10:28

RECEIVED-DOCKETING DIV

RE: DP&L ESP Filing, Case No. 08-1094-EL-SSO *et al*

Dear Ms. Jenkins:

Enclosed are: (1) fourteen (14) copies of The Dayton Power and Light's Notice of Filing Depositions; and (2) deposition transcripts of:

- a. Gonzalez, Wilson
- b. Ibrahim, Amr A.
- c. Duann, Daniel J.
- d. Yankel, Anthony J.
- e. McClelland, Barry E.
- f. Pullins, Steven W.
- g. Fein, David I.
- h. Woolridge, J. Randall ✓
- i. Bowser, Joseph G.
- j. Sawmiller, Daniel J.
- k. Murray, Kevin M.
- l. Dickstein, Shelley J. (awaiting transcript)
- m. Frye, Mark R. (awaiting transcript)
- n. Higgins, Kevin C. (awaiting transcript)

Very truly yours,



R. Holtzman Hedrick

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Enclosures



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## BEFORE

## THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the : Case No. 08-1094-EL-SSO  
Application of The :  
Dayton Power and Light :  
Company for Approval of :  
Electric Security Plan :  
:

In the Matter of the : Case No. 08-1095-EL-ATA  
Application of The :  
Dayton Power and Light :  
Company for Approval of :  
Revised Tariffs :  
:

In the Matter of the : Case No. 08-1096-EL-AAM  
Application of The :  
Dayton Power and Light :  
Company for Approval of :  
Certain Accounting :  
Authority Pursuant to :  
Ohio Rev. Code Section :  
4905.13 :  
:

In the Matter of the : Case No. 08-1097-EL-UNC  
Application of The :  
Dayton Power and Light :  
Company for Approval of :  
its Amended Corporate :  
Separation Plan :  
:

- - -

## TELEPHONE DEPOSITION OF

J. RANDALL WOOLRIDGE, Ph.D.

FEBRUARY 3, 2009

- - -

I-N-D-E-X

1  
2 J. RANDALL WOOLRIDGE PAGE  
3  
4 By Mr. Faruki.....4  
5  
6  
7 Documents received and  
8 EXHIBITS marked for identification  
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12 (NO EXHIBITS MARKED)  
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1 APPEARANCES (Continued):  
2  
3  
4 JACQUELINE L. ROBERTS  
5 and RICHARD REESE, ESQ.  
6 10 West Broad Street  
7 Suite 1800  
8 Columbus, Ohio 43215  
9 (614) 466-8574  
10 Attorneys for Office of  
11 Ohio Consumers' Counsel  
12  
13 ---  
14 J. RANDALL WOOLRIDGE, Ph.D.,  
15 having been duly sworn, was examined and  
16 testified as follows:  
17 ---  
18 BY MR. FARUKI:  
19 Q. Professor, my name is Charlie Faruki.  
20 I introduced myself a couple minutes ago. I  
21 represent DP&L in this matter.  
22 Tell me what materials you have  
23 before you?  
24 A. I have my testimony and I have the  
25 testimony of Dr. Makhholm.

1 Telephone deposition of J.  
2 RANDALL WOOLRIDGE, Ph.D., Witness, on behalf of  
3 The Dayton Power and Light Company, pursuant to  
4 the Ohio Rules of Civil Procedure, taken in the  
5 offices of J. Randall Woolridge, Ph.D., Penn State  
6 University, Business Building, Suite 302, State  
7 College, Pennsylvania, February 3, 2009,  
8 commencing at or about one forty-five o'clock  
9 p.m., Eastern Standard Time, before Deborah Zitin,  
10 Registered Professional Reporter - Notary Public.  
11 ---  
12  
13 APPEARANCES:  
14  
15  
16  
17 FARUKI IRELAND & COX, PLL  
18 BY: CHARLES J. FARUKI, ESQ.  
19 500 Courthouse Plaza, S.W.  
20 10 North Ludlow Street  
21 Dayton, Ohio 45402  
22 (937) 227-3705  
23 Attorneys for The Dayton Power  
24 and Light Company  
25 (Via Telephone)

1 Q. Anything else?  
2 A. Nothing, no, I don't -- I mean, there's  
3 some Value Lines and that sort of thing sitting  
4 here. That's it.  
5 Q. You are a professor at Pennsylvania  
6 State University in the College of Business  
7 Administration; is that right?  
8 A. Yes.  
9 Q. For how long have you had that  
10 position?  
11 A. Over twenty-five years.  
12 Q. And let me ask you a couple of  
13 questions about your qualifications, which are  
14 listed in Appendix A to your testimony, if I  
15 could.  
16 I counted seventy-six cases in  
17 which you provided testimony on behalf of an  
18 office of consumers' counsel or public advocate in  
19 various jurisdictions.  
20 Would you accept that number,  
21 subject to check?  
22 A. Yes.  
23 Q. Is it accurate that most of your  
24 testimony, and by your testimony I'm only talking  
25 about rate of return testimony, if you've got

1 other academic interests, I'm excluding that.  
 2 Most of your testimony in  
 3 utility rate matters has been on behalf of such  
 4 offices, that is consumers' counsel or public  
 5 advocates?

6 A. Yes, and a few industrial groups, but  
 7 predominantly, yes, the former.

8 Q. Have you had occasion to comment on  
 9 testimony from Dr. Makholm previously?

10 A. No.

11 Q. Do you know him?

12 A. No.

13 Q. Do you agree with me that there are  
 14 differences of professional opinion that occur  
 15 with regard to the issue of appropriate capital  
 16 structure?

17 A. Yes.

18 Q. Same question, sir, with regard to  
 19 differences of professional opinion, with regard  
 20 to how to calculate rate of return?

21 A. Yes.

22 Q. Can you describe for me the objective  
 23 of the rate of return calculation?

24 A. Well, the objective is to calculate a  
 25 return required by investors.

1 Q. And when you say return required by  
 2 investors, you mean in the future?

3 A. An expected return, yes.

4 Q. Take a look at page two of your  
 5 testimony, if you will.

6 In a sentence that ends on line  
 7 twenty-one of page two, Professor, you refer to  
 8 the current volatile capital market conditions?

9 A. Yes.

10 Q. Would you give us a brief summary of  
 11 those?

12 A. Well, I think I do in my testimony. I  
 13 give a brief summary of, you know, the events of  
 14 the last six months or so, and I've documented  
 15 some of the volatility issues in stocks and bonds  
 16 and that sort of thing, the efforts of the  
 17 government and the federal reserve board to  
 18 resolve what started as a mortgage crisis, to sub  
 19 prime, to credit crisis, to an economic downturn.

20 Q. What is the effect of the current  
 21 volatile capital market conditions on the attempt  
 22 to calculate rate of return for a utility, such as  
 23 DP&L?

24 A. Well, I think I mentioned in my  
 25 testimony. I think there's been periods of

1 disequilibrium, in terms of where -- you know,  
 2 there's so much volatility that I feel, you know,  
 3 investors are trying to sort out the data, and try  
 4 to come up with some idea of what the expected  
 5 returns are in different markets.

6 Q. I see at the bottom of page two, line  
 7 twenty-three, you use the term disequilibrium, as  
 8 you just did.

9 What do you mean by that?

10 A. Volatility, when there's lots of  
 11 volatility it means that investors are having  
 12 difficulty valuing things.

13 Q. Is the effect of the conditions that  
 14 you are describing, one that tends to call for an  
 15 equity cost at the upper end of the range?

16 A. Well, I've estimated a range and used a  
 17 number at the upper end of my range, yes.

18 Q. And, is the reason that you use a  
 19 number at the upper end of the range, these  
 20 current market conditions?

21 A. Yes.

22 Q. If you turn the page, and I'm at the  
 23 top of page three, Professor, are there risks that  
 24 are presented to a company, a utility of DP&L's  
 25 size, from the current market conditions?

1 A. I don't understand your question.

2 Q. You know the approximate size of DP&L;  
 3 do you not?

4 A. Yes.

5 Q. I'm asking whether, from a financial  
 6 risk standpoint, the current market conditions  
 7 present any risks to DP&L?

8 A. Well, I mean, they present risks to all  
 9 companies, obviously, in terms of their operating  
 10 environment and to their -- to the capital market  
 11 environment, where they go to the markets for  
 12 capital.

13 Q. And, can you be more specific about the  
 14 risks presented to a utility of DP&L's size?

15 A. Well, I mean, the risks are of the  
 16 economic downturn and how it may affect the demand  
 17 for electric service.

18 Q. On page three you are talking, in  
 19 answer to question five, lines twelve and  
 20 thirteen, about the capital structure, which you  
 21 describe as extremely equity rich.

22 Would you explain that comment?

23 A. Well, I think I provide data in my  
 24 testimony that electric utilities generally have  
 25 much less common equity in their capital

1 structures than proposed by Dayton Power and  
2 Light.

3 Q. Are you saying that the capital  
4 structure proposed by DP&L is inappropriate?

5 A. Yes.

6 Q. For what reason?

7 A. Because the capital structures of other  
8 electric utilities have much less common equity in  
9 them.

10 Q. I understand that's true, but why is it  
11 inappropriate for DP&L to have the capital  
12 structure or the equity component that it proposes  
13 here?

14 A. Well, I mean, the management can  
15 propose a capital structure. As I indicate in my  
16 testimony, it's more equity than they've in their  
17 testimony -- in their capital structure in the  
18 past, but it's certainly -- if you look at  
19 companies in the marketplace that we estimate  
20 capital costs from, that they have much less  
21 common equity in their capital structures.

22 Q. On page four you are talking about the  
23 fact that you use both historic and projected  
24 growth rate measures, for example on line ten?

25 A. Yes.

1 Q. And what is your reason for using  
2 historic growth rate measure, as well as  
3 projected?

4 A. I believe that historic gives you a  
5 baseline to work from.

6 Q. Is the idea of using historic data to  
7 average out the ups and downs of the past periods?

8 A. Well, no, you know, obviously,  
9 investors have historic data. All investor  
10 information sources give you historic data and  
11 some of them also make projections.

12 So, obviously, it's something  
13 that investors see.

14 Q. I understand it's something they see,  
15 but why is the use of historic data of help or  
16 assistance in trying to determine anticipated  
17 growth rates?

18 A. Because I believe it's something that  
19 investors are aware of, and it has a -- it's an  
20 input into how they develop expectations.

21 Q. Does the use of historic data fail to  
22 capture the unique conditions of the present  
23 market?

24 A. I mean, it may or it may not.

25 Q. Do you think it does at this point?

1 A. I mean, it provides an indication of  
2 what's happened in the past, and investors are  
3 aware of that.

4 And, presumably, that's given  
5 that in some cases that's the only data they have  
6 to form expectations.

7 Q. Is it accurate that a current stock  
8 price reflects all of the information that is  
9 available and relevant to the market?

10 A. I believe that's fairly accurate, yes.

11 Q. Is another way of saying that the  
12 current stock price represents the market's  
13 assessment of the common stock's current value?

14 A. Yes.

15 Q. In the discounted cash flow or DCF  
16 model, when one is estimating required return on  
17 common equity, is it true that you should measure  
18 the expected dividend yield and the corresponding  
19 growth rate concurrently?

20 MS. ROBERTS: Charlie, I'm  
21 sorry, I couldn't quite hear your question.  
22 Could you say that again?

23 This is Jackie.

24 MR. FARUKI: Sure, Jackie.

25 I'll have the reporter read it

1 back. She'll probably do a better job than  
2 I.

3 - - -

4 (The Reporter read back a  
5 preceding portion of the testimony as  
6 directed:

7 "Q. In the discounted cash flow  
8 or DCF model, when one is estimating  
9 required return on common equity, is it  
10 true that you should measure the expected  
11 dividend yield and the corresponding growth  
12 rate concurrently?"

13 THE WITNESS: I have one  
14 question.

15 By concurrently, what do you  
16 mean?

17 - - -

18 BY MR. FARUKI:

19 Q. For the same time periods?

20 A. Again, I don't understand your -- you  
21 mean for the same -- at the same moment in time?

22 Q. No, not necessarily the same moment in  
23 time.

24 Should the measurements of  
25 these two numbers be for the same time period?

1 A. I don't think so. I mean, the dividend  
2 yield is, obviously, the dividend divided by the  
3 price. The growth rate is a measure of  
4 expectations of the future.

5 Q. DCF -- people using the DCF method have  
6 sometimes based historical calculations on  
7 earnings per share or dividends per share or book  
8 value per share; is that right?

9 A. Yes.

10 Q. All three being possible growth rate  
11 measures?

12 A. Yes.

13 Q. And is growth in dividends per share  
14 the preferable way to do this?

15 A. I mean, according to theory, it's  
16 dividend per share, but according to model,  
17 they're really all growing at the same rate.

18 Q. That may be according to the model, but  
19 in reality they don't necessarily all grow at the  
20 same rate; do they?

21 A. No.

22 Q. My statement was correct?

23 A. Yes. I'm sorry. Sorry.

24 Q. It was the way I asked my question,  
25 Professor; not you.

1 A. Sorry about that.

2 Q. That's okay.

3 Dividend growth rates are  
4 generally more stable than the other two measures  
5 of expected growth; is that right?

6 A. Generally, book value growth rates are  
7 fairly stable normally, as well. Certainly,  
8 they're both more stable than earnings growth  
9 rates.

10 Q. Are there any disadvantages of using  
11 dividends rather than earnings?

12 A. Well, there are not a lot of sources of  
13 forecasts of dividends.

14 Q. What sources are there?

15 A. Value Line is the only one that I'm  
16 aware of.

17 Q. That's the only one I'm aware of, too.  
18 I thought maybe there was another.

19 As used in the DCF model,  
20 growth commonly has two components, dividends and  
21 market appreciation.

22 Would you agree with that?

23 A. I guess, I'm not sure. I don't believe  
24 that's true. I mean, the growth rate is the  
25 expected growth rate in dividends, earnings, that

1 sort of thing.

2 Q. Do you agree that using historical  
3 stock price, along with current growth  
4 expectations, or combining an updated stock price  
5 with past growth expectations, tends to bias  
6 downward the market required rate of return on  
7 common?

8 A. No, not necessarily.

9 Q. Why do you say that?

10 A. I mean, if historic growth rates are  
11 good measures of expectations, it shouldn't do  
12 that.

13 Q. And do you know -- with respect to DP&L  
14 you said not necessarily before, which is why I'm  
15 asking this.

16 Do you know with respect to  
17 DP&L, if using historic stock price data in the  
18 calculation tends to bias the number downward?

19 A. I guess, I'm not sure what you mean by  
20 historic stock price information.

21 I don't think I used any  
22 historic stock price information. Other than I  
23 used six months of dividend yields to estimate a  
24 dividend yield.

25 But, I mean, that's the only

1 thing I would have used in terms of a historic  
2 stock price.

3 Q. All right, that was the fault of my  
4 question, Professor.

5 Let me amend that to say, use  
6 of historic dividend information, does that tend  
7 to bias the resulting number downward?

8 A. No.

9 Q. Why not?

10 A. Because it really is a matter of  
11 getting a measure of what the dividend yield is.

12 Part of it is -- I mean, one  
13 reason I use six months, as well as a current  
14 dividend is the earnings forecasts and the  
15 dividends forecasts, they come out over time.  
16 They don't come out at the day that you make that  
17 calculation. They tend to come out over a period  
18 of time.

19 So, you're really linking up  
20 the projections in the historic data with the  
21 dividend yield.

22 Q. Take a look at page five of your  
23 testimony. There's a section starting at line  
24 eighteen where you speak about the most  
25 significant areas of disagreement between Dr.

1 Makholm and yourself?

2 A. Yes.

3 Q. With regard to the first one, the sole  
4 use of upwardly biased EPS growth rate  
5 projections, why do you call them upwardly biased  
6 EPS growth rate projections?

7 A. Well, I mean, I provide some studies in  
8 my testimony that, certainly, the growth rate  
9 projections of Wall Street analysts have been  
10 found to be upwardly biased, and I also provide  
11 evidence about Value Line, as well.

12 Q. Do you have specific facts as to The  
13 Dayton Power and Light Company to indicate that  
14 you think its growth rate projection is upwardly  
15 biased?

16 A. Not specifically.

17 I mean, I have studies that  
18 relate to the market in general, and electric  
19 utilities in general, but not specific to one  
20 company.

21 Q. With regard to the point number two,  
22 this is page five, line twenty-one, Professor,  
23 measurement and magnitude of the equity risk  
24 premium, can you summarize your disagreement with  
25 Dr. Makholm on that?

1 A. I mean, I discuss it in my testimony.

2 I mean, Dr. Makholm uses two  
3 measures, one are historic stock and bond returns  
4 and the second approach is, he applies a DCF  
5 model, the S&P 500. And if you look at my  
6 testimony, and it really goes from pages  
7 fifty-nine through sixty-six, I provide an  
8 assessment of the issues. The issues -- I mean,  
9 I'm sorry, I'm sorry, I have -- that is wrong.  
10 That's my fault. Sorry about that.

11 Between pages seventy-two and  
12 eighty-three I summarize the issues with the two  
13 approaches used by Dr. Makholm, and it's  
14 generally, the historic approach -- there are a  
15 number of issues about using historic stock and  
16 bond returns as a measure of expectations.

17 And, number two is, the DCF  
18 model he uses for the S&P uses analysts' EPS  
19 growth rates, projected growth rates, as a growth  
20 rate for the DCF model for the S&P, and it goes  
21 back to the problem of the upwardly biased  
22 analysts' growth rate projections.

23 Q. Are both of these disagreements you  
24 have with Dr. Makholm, the use of historic stock  
25 returns and the use of analysts' EPS growth rates

1 in the DCF models, ones that you would agree that  
2 are simply matters of professional difference?

3 A. I don't know if I would call it  
4 professional difference. I think the issue of  
5 historic -- in both cases there's a lot of  
6 empirical evidence that supports my position on  
7 this, and it's by well-known academics, and it's  
8 by investment banking firms, it's by, you know,  
9 chief financial officers.

10 So, I mean, it's my opinion  
11 there's a lot -- I have -- there's a lot of  
12 empirical research that supports my position, and  
13 I cite that in my testimony.

14 Q. I'm sorry, where would that be cited?

15 A. Well, I mean -- well, again, I'd go  
16 back to pages -- it's really contained in the  
17 pages between seventy-two and eighty-three, is  
18 where most of that is, and the studies -- and, as  
19 well as the studies I performed on analysts'  
20 growth rate forecasts, and those are really  
21 highlighted in my testimony between pages sixty  
22 and sixty-six.

23 Q. Thank you.

24 Let me ask you some questions  
25 about your comparable group. Have you examined

1 whether the companies in your comparable group  
2 have changed their earnings retention strategies?

3 A. No.

4 Q. Do you know whether dividends paid,  
5 relative to earnings per share, have decreased for  
6 the companies in that group?

7 A. Specifically, I'm not sure, no. I  
8 mean, I have not included that as part of my  
9 analysis.

10 I've --

11 Q. Go ahead. I thought you were finished.

12 Go ahead.

13 A. No, I'm sorry, no, that was my fault.

14 I mean, I've reviewed their  
15 retention rates. I've used their retention rates,  
16 but I haven't really analyzed their retention  
17 rates over time.

18 Q. If companies are retaining a larger  
19 portion of their earnings, does the use of  
20 dividend payout growth rates understate the effect  
21 on growth of the increase in retained earnings?

22 A. No, not necessarily.

23 I mean, retention rates tend to  
24 change over time. Certainly, right now, companies  
25 tend to be keeping their dividends the same.

1 Their earnings are going down. So, it's changing  
2 their retention rates.

3 I mean, I think, you know,  
4 retention rates tend to change, go up and down  
5 over time, and that's for all companies.

6 Q. Would you agree, however, that if  
7 retention rates are increasing for the companies  
8 in your comparable group, that means that the use  
9 of dividend growth is an inappropriate growth rate  
10 to consider in the DCF model?

11 A. No.

12 Q. Doesn't the use of dividend growth rate  
13 in the DCF model for company -- for a group of  
14 companies that is not -- that is increasing its  
15 retention rate, mean that that factor is not fully  
16 capturing reasonable going forward growth  
17 expectation?

18 A. No.

19 Q. Why do you say no?

20 A. Because, as I said, you know, retention  
21 rates go up, retention rates go down. They change  
22 over time.

23 Obviously, you can't change --  
24 you know, companies are not going to change their  
25 retention rates forever, and in arriving at growth

1 expectation, you have to take into account that  
2 these go up and down over time.

3 I mean, they don't go one  
4 direction forever, because, obviously, then the  
5 retention would be zero, if they continued to  
6 increase it. So, it's going to go up and down  
7 over time depending on earnings, because companies  
8 tend to keep relatively stable dividends and  
9 earnings go up and earnings go down.

10 Q. You've used Value Line estimates for  
11 growth and book value; is that right?

12 A. Yes.

13 Q. Are those values calculated by  
14 multiplying Value Line's estimate of future total  
15 capitalization, by Value Line's estimate of the  
16 company's common equity ratio, and then dividing  
17 that product by the number of common shares  
18 outstanding?

19 A. Can you repeat that? You're talking --  
20 the reference, I didn't --

21 Q. Are these Value Line estimates  
22 calculated by multiplying Value Line's estimate of  
23 future total capitalization, by Value Line's  
24 estimate of the company's common equity ratio, and  
25 then dividing that product by the number of common

1 shares outstanding?

2 A. I don't know.

3 Q. Do you agree that capitalization, as  
4 well as equity ratios, are affected by a company's  
5 earnings retention strategy?

6 A. Now, what do you mean by  
7 capitalization? Their market capitalization?

8 Q. Yes, sir.

9 A. Now, how do you define that?

10 Q. How do I define market cap?

11 A. Yes.

12 Q. How do you define it?

13 A. The price per share times the number of  
14 shares outstanding.

15 Q. Over time does a company's earnings  
16 retention strategy affect the total amount of  
17 market capitalization, as you've just defined it?

18 A. It may and it may not.

19 Q. If companies are adjusting their  
20 retention strategies to retain a larger portion of  
21 their earnings, wouldn't those strategies affect  
22 capitalization and equity ratios?

23 A. Again, it may or it may not. Again, as  
24 I said, these retention ratios go up; they go  
25 down.

1 It depends -- you know, the  
2 dividends tend to stay stable, the earnings go up  
3 and go down relative, but the companies tend to  
4 keep their dividends strategies fairly stable.

5 Q. Have you examined whether these  
6 capitalization and equity ratios have been  
7 changing in your comparable group for this case?

8 A. I haven't looked at that specifically,  
9 but, as I said, they go up and down over time.

10 Q. Let me turn to a different subject.

11 In your growth rate analysis  
12 you elected to use median rather than means; is  
13 that right?

14 A. What growth rate analysis?

15 Q. I didn't write the page number down.  
16 Let me see if I can find that.

17 There was a portion of your  
18 testimony where you explained that you elected to  
19 use the median and you distinguished that from the  
20 average.

21 Do you remember where that is?

22 A. No.

23 I mean, I used both the mean  
24 and the median when I looked at growth rates.

25 Let me see, though. That

1 reference -- let me check to see. I should know.

2 I do remember where it is.

3 Hold on.

4 Q. Sorry, I failed to write it down,

5 Professor.

6 A. That's all right. I got it here  
7 someplace. Page thirty, line seventeen, eighteen,  
8 I just was trying to pick up the reference you  
9 were thinking about and then I figured it out.

10 Q. Yes, thank you.

11 And why did you use both mean  
12 and median in this analysis?

13 A. Just because I'm trying to get a  
14 measure of central tendency. With a number of  
15 these -- you know, if a distribution is symmetric  
16 without outliers, the mean and median should be  
17 about the same.

18 And in this case there are a  
19 lot of numbers that are not symmetric. The  
20 distributions are not symmetric. So, I try -- as  
21 a way of getting a measure of central tendency, I  
22 include both.

23 Q. When you use the term measure of the  
24 central tendency, what are you talking about?

25 A. Well, there's different measures of

1 central tendency. The mean is the average. The  
2 median is the middle observation. The mode is the  
3 most common observation.

4 So, there's different measures  
5 of central tendency, trying to get an indication  
6 of what's -- where the central tendency is in the  
7 distribution.

8 Q. Are there significant differences  
9 between the means and medians that you present in  
10 your growth rate analysis?

11 A. Well, there are differences. I don't  
12 know if -- I mean, in terms of significance, are  
13 you talking about statistical significance?

14 Q. Well, we can start -- I didn't mean to  
15 restrict it to that, but, yes, we can start with  
16 that question.

17 A. I mean, I haven't done any test of  
18 statistical significance.

19 Q. You acknowledge that the mean of a set  
20 of numbers gives equal weight to each company in  
21 the group, while the median does not; is that  
22 correct?

23 A. No, that's incorrect.

24 Q. Why is that incorrect?

25 A. Because the median gives equal weight

1 to everyone, as well.

2 Q. How does the mean give equal weight to  
3 everyone, when the magnitude of the numbers that  
4 are being used differ?

5 A. Well, I mean, they're both given the  
6 same weight. It's an ordinal measure as opposed  
7 to a cardinal measure. So, they're both given the  
8 same weight.

9 Q. Did you make a calculation that  
10 eliminated median EPS growth rates from your  
11 analysis?

12 A. Did I make -- no, not that I'm aware  
13 of.

14 Q. If you eliminated dividends per share,  
15 book value per share, and the median EPS growth  
16 rates from your calculation, do you know what the  
17 effect would be on the mean of your comparable  
18 groups earnings?

19 A. No.

20 Q. You don't know?

21 A. No.

22 I mean, I don't think that's  
23 the right thing to do, but I haven't made that  
24 calculation.

25 Q. And why would you say that's not the

1 right thing to do?

2 A. Well, I'll just point to my testimony.  
3 I explain it there.

4 I think the best explanation is  
5 probably -- I mean, it's in my general discussion  
6 of growth, which is between pages twenty-eight and  
7 thirty.

8 Q. I think there's a difference between  
9 you and Dr. Makhholm, also, with regard to using  
10 mid year book values for shares; is that right?

11 A. I'm not sure if there is. I'm sorry,  
12 I'm not -- if you could point me to something, I  
13 can acknowledge that as yes or no, but I don't  
14 have -- I don't know where that -- what the  
15 reference would be.

16 Q. I'm not sure that I can point to a  
17 page.

18 Is it accurate that Value  
19 Line's estimate of future returns provide end of  
20 year values?

21 A. What do you mean by future returns?

22 Q. Future returns on equity?

23 A. Yes, I believe they do.

24 Q. Do you know whether Dr. Makhholm used  
25 book values from the two most recent years to

1 create a mid year value?

2 A. I'm not sure. He may have.

3 Q. Did you know of anything wrong with  
4 such a methodology?

5 A. Again, I'm not sure. I would have  
6 to -- I'd have to look at that. I haven't really  
7 looked at it that closely.

8 MR. FARUKI: Let's go off the  
9 record.

10 ---

11 (Discussion off the record)

12 ---

13 BY MR. FARUKI:

14 Q. Could you take a look at page  
15 eighty-five of your testimony, Professor?

16 A. Okay.

17 Yes.

18 Q. On page eighty-five, and I have a  
19 reference in particular to line three and line  
20 thirteen, you're indicating that DP&L is  
21 requesting a return on the fuel deferrals at an  
22 overall rate of return grossed up for deferred  
23 income taxes; is that right?

24 A. Yes.

25 Q. And your reference in your footnote

1 issue.

2 Q. With regard to a different portion of  
3 this section on page eight-five, I think it's line  
4 thirteen and fourteen, Professor, you indicate  
5 that, in your view, DP&L should not earn an  
6 overall rate of return on the fuel deferral  
7 because it is not a capital investment; is that  
8 right?

9 A. Yes.

10 Q. Are you familiar with rate based  
11 calculations in Ohio?

12 A. Just very generally.

13 Q. Do you agree that the rate base  
14 includes more items than capital investments, such  
15 as coal inventories, working capital from lead lag  
16 studies and accumulated deferred income tax  
17 balances?

18 A. Yes.

19 Q. All of the rate base items have the  
20 opportunity to earn an overall rate of return  
21 grossed up for income taxes; is that correct?

22 A. Yeah, I mean, the deferrals somewhat  
23 have different characteristics, is what -- I mean,  
24 as I look at it, they have different  
25 characteristics than that.

1 there on page eighty-five is to Mr. Campbell's  
2 testimony on page five?

3 A. Yes.

4 Q. Does Mr. Campbell's testimony refer to  
5 a gross up for deferred income taxes?

6 A. I believe it does. I don't have it  
7 right here in front of me, but as I remember, it  
8 was a deferred -- a gross up for income taxes, I  
9 guess, and that was my understanding as I remember  
10 looking at it but I don't have his testimony right  
11 here.

12 Q. And what was the source of that  
13 understanding?

14 A. Just my review of it.

15 Q. And when we talk about grossing up for  
16 income taxes, we're talking about grossing up for  
17 current federal income taxes that are due from the  
18 company when the regulatory asset is established  
19 or created; is that right?

20 A. Yes.

21 Q. Do you understand that DP&L proposes in  
22 this case simply to recover the current federal  
23 income taxes that it will pay to the government  
24 related to the fuel deferral?

25 A. I'm not sure. I'm not sure on that

1 Q. Before we get to -- I'll ask you about  
2 that in a minute, but the rate base items that I  
3 mentioned, all have the opportunity to earn an  
4 overall rate of return grossed up for current  
5 federal income taxes; correct?

6 A. Yes.

7 Q. Is it your view that fuel deferral is  
8 dissimilar, in some way, from these items?

9 A. Somewhat, yes.

10 Q. Can you explain to me why you believe  
11 that to be so?

12 A. Well, I think I explain it there.

13 It's more like an item that's  
14 going to be there and it's going to disappear, in  
15 terms of it -- as I remember the numbers are, it  
16 peaks in like 2010 or '11, and then, it basically  
17 amortizes and goes away, based on the customer  
18 charges.

19 Q. Well, the commodities, such as coal and  
20 the working capital, also get used over time;  
21 don't they?

22 A. But they're replaced by -- I mean,  
23 they're always there.

24 Q. And why does that fact make a  
25 difference with regard to your view on an overall

1 rate of return?

2 A. Because it's an amortizing asset. It  
3 goes away.

4 Q. Let me ask you about page eighty-eight.

5 I think it's really a response  
6 to the question at the bottom of page eighty-five.

7 You are indicating that the  
8 Commission has only allowed interest rate returns  
9 on deferrals for American Electric Power's  
10 windstorm deferral and Transmission Cost Recovery  
11 Rider deferral; is that correct?

12 A. Yes, I mean, those are just some  
13 examples I cited.

14 Q. Are you familiar with the recovery  
15 periods for those deferrals?

16 A. I don't remember exactly what they are.

17 Q. Aren't they both for one year?

18 A. I mean, they're short-term, but I don't  
19 know exactly for how long.

20 Q. But you remember they were relatively  
21 short-term?

22 A. Yes.

23 Q. Were the amounts of those deferrals  
24 relatively small when compared to the estimated  
25 fuel deferral balance at issue here?

1 A. I don't recall.

2 Q. Do you know how long the possible fuel  
3 and recovery -- I'm sorry, possible deferral and  
4 recovery period is for deferred fuel costs?

5 A. I think it can be up to ten years.

6 Q. Would you accept up to twelve years,  
7 two years of deferral and ten years of recovery?

8 A. Yes, I mean, I guess I was talking  
9 about the recovery, as opposed to the deferral.

10 Q. Maybe I asked you this.

11 Do you recall the order of  
12 magnitude of either the 2009 or 2010 deferrals?

13 A. Yeah, I do.

14 Q. Tell me what those are, please?

15 A. I think they are in the area of a  
16 hundred million.

17 Q. Would you accept a hundred and  
18 sixty-three million in 2009, and fifty-two million  
19 approximately, in 200 -- I'm sorry, I'll withdraw  
20 that.

21 Would you accept fifty-two  
22 million in 2009 and a hundred and eleven million  
23 in 2010?

24 A. Yes.

25 Q. Is it accurate that the storm damage

1 and TCR deferrals that you reference in your  
2 testimony, are not comparable to the fuel deferral  
3 here either in magnitude or period of recovery?

4 A. Well, they're shorter and smaller, I  
5 believe.

6 Q. On the bottom half of page eighty-six,  
7 and I believe the top of page eighty-seven, you  
8 are expressing your opinion that the proper  
9 carrying charge for the balance of the fuel  
10 deferral should be the cost of long term debt; is  
11 that right?

12 A. Yes.

13 Q. Do you know -- well, let me back up.

14 You do know that the possible  
15 deferral and recovery period for the deferred fuel  
16 costs is ten years as you said; right?

17 A. Yes.

18 Q. And do you know the source of the  
19 funding for the cash outlays by DP&L to fund the  
20 expenditures of those size?

21 A. No.

22 Q. Due to the size of these expenditures,  
23 is it reasonable to believe that they're going to  
24 be funded in the ratio of the overall cost of  
25 DP&L's capital weighting?

1 A. I do not know.

2 Q. Is it reasonable for DP&L to carry  
3 these costs for a long period of time, with only a  
4 debt return, when it's going to cost the company  
5 more than that to carry them?

6 A. Well, again, it's going to amortize  
7 itself over, you know -- and I forget the exact  
8 figures, but, you know, it amortizes itself over  
9 ten years. So, it's there and it disappears over  
10 ten years.

11 Q. I understand it's there and it  
12 disappears.

13 But the company is going to pay  
14 more than the amount represented by your proposed  
15 carrying charge in order to carry these funds;  
16 isn't it?

17 A. Well, I mean, it's going to -- I mean,  
18 it's like -- I just view it like a -- it's like a  
19 mortgage. It's there. It goes away. It  
20 amortizes itself.

21 And it just appears that the  
22 appropriate charge for something like that should  
23 be their debt cost rate.

24 Q. Why do you say it just appears that  
25 that should be the appropriate cost?

1 A. Because it's a special item in a way.  
2 Again, it's not a capital  
3 investment. It's not like something that's in --  
4 you know, like coal or something that's in your  
5 inventory and it's going to go there forever.

6 This is something that's there  
7 and it disappears.

8 Q. That being the case, why do you select  
9 the debt cost?

10 A. Because it's short-term, relatively  
11 short-term, and it amortizes. It's like an  
12 amortizing mortgage.

13 Q. Let me change subjects again. I want  
14 to go back to the mean and median issues, and this  
15 would be directing you to approximately page  
16 eighteen, Professor.

17 A. Okay.

18 Yes.

19 Q. Actually, not on that page.

20 Is it accurate that medians are  
21 commonly used in statistics when outliers in the  
22 sample would otherwise bias results?

23 A. I mean, yes, that's what I said in my  
24 testimony.

25 Q. But here, when you have composed your

1 comparable group, all the utilities are comparable  
2 to the subject company, DP&L; right?

3 A. I really don't know what you're  
4 talking -- I mean, I'm looking at page eighteen.

5 Q. I think I gave you the wrong page  
6 number reference, so let me retract that.

7 A. I'm kind of lost here, yes.

8 Q. I was actually back, flipping through  
9 your schedules, Professor, on your comparable  
10 group. So, I don't have a page of testimony to  
11 give you.

12 Is it accurate that when you  
13 are doing your comparable group studies for the  
14 DCF analysis, what you've done is select utilities  
15 that are comparable to DP&L?

16 A. Well, I mean, what I try to do is  
17 select publicly traded utilities, which have -- I  
18 mean, first of all, they're primarily electric  
19 utilities and they're also electric utilities that  
20 have a relative -- or, are small, given the  
21 universe of utilities.

22 So, I mean, that's why I put in  
23 the constraint that they have less than ten  
24 billion in terms of revenue.

25 I mean, I think on page -- on

1 exhibit JRW-4, I show the makeup of the group, and  
2 as it turns out, the group, itself, has, you know,  
3 average operating revenue of two point nine  
4 billion, net plant of five point two billion.

5 So, the intention is to  
6 capture, in terms of the universe of electric  
7 utilities, smaller primary electric utilities.

8 Q. And the idea of a proxy group, it is to  
9 be constructed to be representative of the company  
10 that's being investigated or examined?

11 A. Yes.

12 Q. If that is the case, then why would you  
13 use a median as opposed to a mean average when  
14 conducting a proxy group analysis?

15 A. I don't understand your question.

16 MR. FARUKI: Off the record.

17 ---

18 (Discussion off the record)

19 ---

20 BY MR. FARUKI:

21 Q. If you would look at your exhibit  
22 JRW-10, that lists your thirteen company proxy  
23 group; right?

24 A. Yes.

25 Q. And you've got mean and median figures

1 in your bottom two rows?

2 A. Yes.

3 Q. And given the purpose of a proxy group,  
4 why are you using a median here?

5 A. I explained that in my testimony.

6 I mean, there was some  
7 number -- you know, these are not just symmetric  
8 distributions, and there tend to be outliers in a  
9 lot of these.

10 So, it's just another measure  
11 of central tendency I'm pulling into it.

12 Q. Are you saying there were outliers in  
13 this particular proxy group, or are you saying  
14 that that's, in general, why you use the median?

15 A. It's a general reason to use the  
16 median.

17 Q. Take a look at -- I'll withdraw that.

18 With regard to your Exhibit  
19 JRW-11, Professor --

20 A. Yes.

21 Q. -- the pricing model analysis --

22 A. Yes.

23 Q. -- is the result of your CAPM analysis  
24 lower than recent bond issuances for utilities?

25 A. You mean the yield?

1 Q. Yes, sir.

2 A. In some cases, yes.

3 Q. You used historical equity risk premium  
4 in this calculation; is that right?

5 A. As I explained in my testimony, I used  
6 a little bit of everything.

7 I used historic -- I mean,  
8 there's three ways to get an equity risk premium.  
9 Using historic returns, using surveys and looking  
10 at what are called ex ante models, where you look  
11 at studies over time that measure expected return  
12 and compare those to risk free rates to get a risk  
13 premium.

14 So, I used all three  
15 approaches. So, one approach was using historical  
16 returns.

17 Q. To the extent you're using historical  
18 returns, that's backward looking?

19 A. Yes. I mean, that's one way of looking  
20 at and arriving at an equity risk premium.  
21 There's some issues with that, but that is one way  
22 to get there.

23 Q. Why do you say there's some issues with  
24 that?

25 A. Well, I mean, I explained that in my

1 testimony.

2 I mean, there's -- in my  
3 testimony, between pages seventy-one and -- pages  
4 seventy-one and eighty I explained, you know, some  
5 of the empirical issues that have been evaluated,  
6 discussed, reviewed in studies of using historic  
7 returns as measures of -- as ways to measure ex  
8 ante or expected market risk premium.

9 Q. Did the premium -- the set of risk  
10 premium figures that you used that are historical,  
11 are those shown on your JRW-11 page five?

12 A. Yes, they are.

13 Q. And would you explain this chart to me?

14 A. These are -- well, at the top are  
15 different studies of the historical risk premium.  
16 I mean, obviously, the Ibbatsan study is probably  
17 the best known, but it's only one of the studies  
18 of historical returns.

19 You know, in different studies  
20 of historical returns they use different time  
21 periods, they use different market indices, they  
22 use different measures of return.

23 So, I mean, you see there,  
24 there's a number of different studies that come up  
25 with different historical risk premiums.

1 Q. Were you gathering all the studies you  
2 could on this subject?

3 A. Every one I could find.

4 Q. Is it accurate that many of these  
5 reported returns are lower than the risk free rate  
6 at the applicable time?

7 A. I don't understand your question.

8 Q. Well, the time period you have here is  
9 historical and that -- or, I should say time  
10 periods, plural, that you have here are  
11 historical, and this data is backward looking, not  
12 forward looking; right?

13 A. Certainly.

14 And Dr. Makholm used the same  
15 data, but he relied only on one of the historical  
16 studies, the Ibbatsan study.

17 MR. FARUKI: Why don't we take  
18 ten minutes, Professor.

19 - - -

20 (At this point, a short recess  
21 was taken, after which time the deposition  
22 resumed.)

23 - - -

24 BY MR. FARUKI:

25 Q. Professor, again, on page eighty-three

1 of your testimony you have a section headed, the  
2 Financial Performance of Dayton?

3 A. Yes.

4 Q. Would you tell me how that fits into  
5 the rest of your analysis?

6 In other words, I've read the  
7 section, and I'm sure it's just me, Professor, but  
8 I'm not sure what point you're making here?

9 A. Well, the Consumer Counsel's Office  
10 just asked me to do a standard financial analysis  
11 of Dayton and make some conclusions about it.

12 Like, you know, this would be a  
13 standard -- a very standard thing like a Wall  
14 Street analyst would do, and I just downloaded the  
15 data and analyzed data.

16 They asked me to do it and I  
17 did it. That was the purpose.

18 Q. All right. So, it's not something that  
19 you did because some other piece of your analysis  
20 depends on it?

21 A. No.

22 I was asked to do a summary  
23 financial analysis and that's what I did.

24 MR. FARUKI: I don't believe I  
25 have any other questions, Professor. Thank

you for your time.

---

(DEPOSITION CONCLUDED - 3:00 p.m.)

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C E R T I F I C A T E

COMMONWEALTH OF PENNSYLVANIA :

: SS

COUNTY OF MONTGOMERY :

I, DEBORAH ZITIN, Registered  
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<p><b>A</b></p> <p><b>academic</b> 6:1</p> <p><b>academics</b> 20:7</p> <p><b>accept</b> 5:20 35:6,17 35:21</p> <p><b>account</b> 23:1</p> <p><b>Accounting</b> 1:12</p> <p><b>accumulated</b> 32:16</p> <p><b>accurate</b> 5:23 12:7 12:10 29:18 35:25 38:20 39:12 44:4</p> <p><b>accurately</b> 47:13</p> <p><b>acknowledge</b> 27:19 29:13</p> <p><b>adjusting</b> 24:19</p> <p><b>Administration</b> 5:7</p> <p><b>advocate</b> 5:18</p> <p><b>advocates</b> 6:5</p> <p><b>affect</b> 9:16 24:16 24:21</p> <p><b>ago</b> 4:20</p> <p><b>agree</b> 6:13 15:22 16:2 20:1 22:6 24:3 32:13</p> <p><b>ahead</b> 21:11,12</p> <p><b>allowed</b> 34:8</p> <p><b>amend</b> 17:5</p> <p><b>Amended</b> 1:17</p> <p><b>American</b> 34:9</p> <p><b>amortize</b> 37:6</p> <p><b>amortizes</b> 33:17 37:8,20 38:11</p> <p><b>amortizing</b> 34:2 38:12</p> <p><b>amount</b> 24:16 37:14</p> <p><b>amounts</b> 34:23</p> <p><b>analysis</b> 21:9 25:11 25:14 26:12 27:10 28:11 39:14 40:14 41:21,23 45:5,10 45:19,23</p> <p><b>analyst</b> 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