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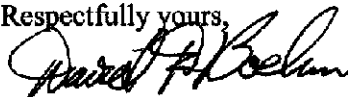
Public Utilities Commission of Ohio  
PUCO Docketing  
180 E. Broad Street, 10th Floor  
Columbus, Ohio 43215

**In re: Case Nos. 08-917-EL-SSO and 08-918-EL-SSO**

Dear Sir/Madam:

Please find enclosed an original and twenty (20) copies of the DEPOSITION OF CHARLES W. KING on behalf of THE OHIO ENERGY GROUP in the above-referenced matter.

Respectfully yours,



David F. Boehm, Esq.  
Michael L. Kurtz, Esq.  
**BOEHM, KURTZ & LOWRY**

MLKkew  
Encl.  
Cc: Daniel Conway, Esq.

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BEFORE THE  
PUBLIC UTILITY COMMISSION OF OHIO

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In The Matter Of The Application : Case No.  
Of Columbus Southern Power : 08-917-EL-SSO

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Company For Approval Of Its :  
Electric Security Plan, And :

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Amendment To Its Corporate :  
Separation Plan; And The Sale Or :

6

Transfer Of Certain Generation :  
Assets :

7

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In The Matter Of The Application : Case No.  
Of Ohio Power Company For : 08-918-EL-SSO

8

Approval Of Its Electric :  
Security Plan, And An :

9

Amendment To Its Corporate :  
Separation Plan :

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Washington, D.C.

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Friday, December 5, 2008

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Deposition of

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CHARLES W. KING, called for examination

15

by counsel for AEP Ohio Companies, pursuant to

16

notice, at the Offices of Snively King Mojoros

17

O'Connor & Bedell, Inc., Washington, D.C.,

18

commencing at 1:10 p.m., before Barbara A. Huber,

19

Notary Public in and for the District of Columbia,

20

when were present on behalf of the respective

21

parties:

22

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1 APPEARANCES:

2 On behalf of AEP Ohio Companies:

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5

6 On behalf of Ohio Energy Group:

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C O N T E N T S

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EXAMINATION BY:

PAGE

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Mr. Conway

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## 1 PROCEEDINGS

2 Whereupon,

3 CHARLES W. KING,

4 was called as a witness by counsel for AEP Ohio

5 Companies, and having been duly sworn by the

6 Notary Public, was examined and testified as

7 follows:

8 EXAMINATION BY COUNSEL FOR AEP OHIO

9 COMPANIES

10 BY MR. CONWAY:

11 Q This is Dan Conway. We are taking  
12 Mr. Charles W. King's deposition in lieu of his  
13 cross-examination testimony at the hearing. And  
14 the intention is to use the deposition transcript  
15 that we will get from this exercise as Mr. King's  
16 cross-examination testimony in the hearing because  
17 he is not able to attend the hearing that has been  
18 going on here in Columbus.

19 And, again, my name is Daniel R. Conway.  
20 I'm with the law firm of Porter Wright Morris &  
21 Arthur 41 South High Street, Columbus, Ohio 43215.  
22 I am an attorney for the AEP Ohio Companies, which

1 are called the Southern Power Company, and Ohio  
2 Power Company, who have filed applications in Case  
3 Numbers 08-917-EL-USD and Case Number  
4 08-918-EL-USD, which in short are their electric  
5 service plan applications. And we're about to  
6 take Mr. King's testimony.

7 Mr. King, if you can't hear me, or  
8 Barbara if you can't hear me, please speak up and  
9 let me know, and I will try to fix it from our  
10 end.

11 Now, Mr. King, do you have with you a  
12 copy of your prefiled direct testimony in this  
13 case?

14 A Yes, I do.

15 Q And did your counsel inform you that  
16 it's been marked for identification purposes as  
17 Ohio Energy Group Exhibit Number 4?

18 A Yes, he did.

19 Q And that testimony is your direct  
20 testimony in the cases that we just mentioned that  
21 you prepared or had prepared under your  
22 supervision?

1           A     Yes, it is.

2           Q     And if you take a look at your  
3     testimony, Mr. King, can you tell me, are there  
4     any additions or corrections that you need to make  
5     to it?

6           A     No, there are not.

7           Q     And if Mr. Boehm were to ask you  
8     questions in your prefiled direct testimony today,  
9     would the answers that appear in that document be  
10    the same today?

11          A     Yes, they would.

12          Q     And those answers are true and accurate  
13    to the best of your knowledge and belief?

14          A     Yes, they are.

15          Q     Mr. King, I have a few questions about  
16    your comparable group construction. So if you  
17    could turn to I think about page 4 of your  
18    testimony.

19          A     I have it.

20          Q     My understanding is, Mr. King, that you  
21    constructed one comparable risk group by using the  
22    entire list of electric utilities in Value Line's

1 data file, with the exception of one of them,  
2 which you excluded because of some special  
3 circumstances; is that right?

4 A That's correct.

5 Q And a result of that what you described  
6 in your testimony is that you were left with a  
7 group of 64 electric utilities in that comparable  
8 group; is that right?

9 A That's correct.

10 Q And those are listed on Schedule 1 of  
11 your testimony, Exhibit GWK-1?

12 A Yes, they are.

13 Q And then you constructed a second  
14 comparable risk group of non-utilities; is that  
15 correct?

16 A That's correct.

17 Q And for the construction of that group,  
18 you also used -- strike that.

19 For that group, you used the companies  
20 in the Value Line data file also; is that right?

21 A That's correct.

22 Q And I think that you described how you



1 corrected the second group of comparable firms,  
2 starting at page 5 of your testimony; is that  
3 right?

4 A That's correct.

5 Q And my understanding is that you first  
6 eliminated electric, gas, and water utilities from  
7 the population; and that got it from, oh, some  
8 number down to about 5587 firms?

9 A That's correct.

10 Q And then you screened the remaining  
11 firms by applying a range of ratios of gross plant  
12 to revenue; is that right?

13 A That's correct.

14 Q And the range of those ratios you got  
15 the range from the electric utility groups' data;  
16 is that right?

17 A That's correct.

18 Q In any event, at that point you reduced  
19 the population of your second group; you reduced  
20 it down to 657 firms?

21 A Yeah, that's correct. No, I think it  
22 got to -- oh, yeah, that's right, 657, that's the

1 intermediate number, right.

2 Q And then, as I understand it, you then  
3 eliminated smaller companies with a gross plant of  
4 less than a billion dollars, to get down to the  
5 260 figure; is that right?

6 A That's correct.

7 Q And your rationale for that adjustment  
8 or that screening step is that you believed that  
9 the smaller companies have higher return  
10 requirements than utilities?

11 A That's the conventional understanding.

12 Q Okay. And then after you had reduced  
13 the population of firms down to the 260 that were  
14 left after the \$1 billion cutoff that you applied,  
15 you then eliminated companies from the remaining  
16 260 for which Value Line had not calculated a  
17 beta?

18 A That's correct.

19 Q And that got you down to your 219 firms  
20 that comprise your second group of comparable  
21 firms, right?

22 A That's correct.

1 Q And those are listed on Schedule 2?

2 A That's right.

3 Q Can you tell, with regard to the first  
4 group, going back to the electric utilities  
5 comparable group --

6 A Yes.

7 Q -- how many of those 64 firms have a  
8 regulatory environment where all retail customers  
9 may shop for their generation service?

10 A You know, I cannot say. All those in  
11 the Northeast, Mid-Atlantic states, California,  
12 and Texas unquestionably have that arrangement  
13 because they all have restructured so as to spin  
14 off the generating plants. I would have to look  
15 more carefully at the rules governing the rest of  
16 the utilities in the country to know whether there  
17 is no retail sales, or whether it's a mixed bag.

18 Michigan is a good example, where there  
19 is choice; that is, customers may buy through the  
20 utility, but the utility serves the overwhelming  
21 majority as bundled retail service providers of  
22 vertically integrated electricity.

1           Q     Is it your understanding or do you have  
2     an understanding about whether or not Michigan has  
3     recently changed its rules for switching for  
4     customers of the electric utilities in that state?

5           A     Yes. But of course in 2007, which is  
6     the focus of this study, there was pretty much  
7     open choice. There is still choice, but I believe  
8     it's capped. And I haven't examined the  
9     legislation that carefully. But they did reign in  
10    the opportunity for retail -- for end-users to buy  
11    through the utility and acquire their own  
12    generation.

13          Q     And so customers of utilities in  
14    Michigan at this point do not have an unfettered  
15    right to shop for alternative generation service  
16    providers?

17          A     Yes. Even when they did, it was a  
18    relatively small percentage that actually did that  
19    shopping. It was most of the industrial  
20    customers, a small proportion of commercial  
21    customers, and virtually no residential customers.  
22    And that's the pattern everywhere where there is

1 retail choice.

2 Q But at this point in Michigan, it's your  
3 understanding that electric utilities' customers  
4 do no longer -- they no longer have a better  
5 choice to switch?

6 A Well, those that already had switched I  
7 think can continue to buy through the utility.

8 Q And with regard to the others?

9 A With regard to the others, I think there  
10 is a cap. And I do not know the details of that  
11 cap.

12 Q So in some respect, the others are  
13 restricted in their ability to switch?

14 A I believe they are.

15 Q Going back to the group of 64 electric  
16 utilities in that comparable group, that first  
17 comparable group, you would then agree that some  
18 of those firms have regulatory regimes where  
19 switching is not permitted?

20 A Yes.

21 Q Okay. And you don't know how many of  
22 the firms in the group have that regulatory

1 environment, sitting here today?

2 A No. It would be quite a research  
3 project to try and analyze each of these 64 firms.

4 Q And so you do not know how many of the  
5 64 firms must allow their customers to shop, and  
6 then must take them back as a regulated and  
7 service offer rate?

8 A I do not. I can sort of check down and  
9 probably identify a lot of them, but -- simply by  
10 the states they operate in. But the answer to  
11 your question is no, I do not know the exact  
12 number.

13 Q Now, turning your attention to the Ohio  
14 situation.

15 Would you agree that retail choice,  
16 which we have in Ohio under SD 211, and the right  
17 of the customers to return to standard service  
18 offer at a regulated rate would create risks for  
19 CSP and Ohio Power that that utilities that don't  
20 have those regulatory rules do not face?

21 A I would agree.

22 Q Do you know whether any of the electric

1 utilities out of the 64 in your first comparable  
2 group have an excess earnings test that puts them  
3 at risk of having to make refunds to customers on  
4 an annual basis?

5 A Well, all of the vertically integrated  
6 utilities have an excess earnings test, because  
7 they're all subject to rate-base rate of return  
8 regulation. And so the answer is excess earnings  
9 would apply to all of the utilities in the Midwest  
10 except for Illinois. It would apply to all the  
11 utilities in the Mountain states except Nevada.  
12 It would apply to the utilities in the  
13 Northwestern states, where we have -- continue to  
14 have vertically integrated rate-based rate of  
15 return regulated utilities.

16 Q How many of those states have an excess  
17 earnings test which would look backward to a prior  
18 year, and in the event that earnings had exceeded  
19 a certain level, read to the climb back of  
20 earnings and refunding of previously earned  
21 dollars to customers?

22 A Well, and Ohio is unique in that regard.

1 I would concede that.

2 Q So you would then again agree that none  
3 of the other utilities, if you exclude AEP from  
4 it, from the group, have that kind of an excess  
5 earnings test?

6 A No. Duke Energy and Energy First have a  
7 similar excess earnings test because of -- and  
8 they have utilities in the state of Ohio.

9 Q So other than Duke and First Energy and  
10 AEP, none of the remainder of the 64 firms has  
11 that same kind of excess earnings test as the Ohio  
12 utilities do?

13 A Well, not -- certainly not identical or  
14 even similar to the Ohio test. But I again state  
15 that those that continue to be vertically  
16 integrated have an excess earnings test, which is  
17 really not an excess earnings test. It's merely  
18 excess above what is necessary, the minimum  
19 necessary, to attract capital. That is a much  
20 more severe test than the Ohio excess earnings  
21 test.

22 Q And that kind of an excess earnings



1 test, is it typically initiated by the utilities  
2 commission on an annual basis?

3 A Some commissions do that. Georgia has a  
4 rotating three-year schedule of rate cases. And  
5 the rate cases are in effect initiated by the  
6 commission because it established those -- that  
7 schedule, and --

8 Q And what other jurisdiction besides  
9 Georgia has that format?

10 A I cannot say. California used to, but I  
11 don't think it does any more. But I'm not a -- I  
12 certainly haven't surveyed every utility  
13 commission in the country in that regard.

14 Q In your calculation of year-end returns  
15 on equities for the members of your two comparable  
16 groups, Mr. King, you used a year-end book equity  
17 amount; is that right?

18 A That's correct.

19 Q And --

20 A It was just because -- I'm sorry. It  
21 was because the data filed only had year-end  
22 equity quantities.

1           Q     Is year-end book equity often higher  
2     than beginning-of-year book equity?

3           A     Quite often. But the -- as long as the  
4     test is applied consistently, year-end equity  
5     return, it would be appropriate for both the  
6     derivation of the equity return and the  
7     application of that equity return to the Ohio  
8     utilities. In other words, it would be very  
9     unfair to use year-end equity return, and then  
10    apply it to your companies based on average year  
11    equity return. My rec --

12          Q     Did you do any kind of analysis to  
13    determine whether or not the consequences using  
14    year-end book equity, rates of return on equity as  
15    opposed to beginning of the year -- I'm sorry.  
16    Scratch that question.

17                Did you do any kind of analysis that  
18    evaluated the impact of using year-end book equity  
19    as contrasted with beginning-of-year book equity  
20    in your calculations, the kind of calculations  
21    that you present?

22          A     No, I did not, for the reasons I just

1 mentioned. As long as the derivation of the rate  
2 of return is consistent with the application of  
3 the rate of return, it is fair to the Ohio  
4 utilities. There's no particular reason to  
5 believe that the Ohio utilities would have  
6 significantly different ratios of year-end to  
7 average year equity. And so I assume that it  
8 would be fair to use year-end only.

9 Now, this test could be easily modified  
10 to use average equity. That would have meant for  
11 me to go back to Value Line and obtain the 2006  
12 year-end results, something that I -- I -- well, I  
13 could have done, but I think it would have been  
14 highly costly, and certainly cumbersome, and would  
15 not have significantly improved the test.

16 Q You're not opposed to such an approach  
17 then, I take it?

18 A No, not at all. Again, the key is that  
19 the derivation of the equity standards should  
20 match the application of the equity standard.

21 Q And you would not be opposed to an  
22 approach which consistently uses beginning-of-year

1 book equity?

2 A No, I would oppose that. It should be  
3 either end-of-year or average book equity, which  
4 could be average twelve months, or average  
5 beginning- and end-of-year.

6 Q And the reason that you opposed the use  
7 of beginning year book equity is what?

8 A Well, you're going back too far into  
9 history. As it is, we're using a retrospective  
10 year. That almost makes it an average of the two  
11 previous years. Because the beginning of the year  
12 is presumably the mid point of the last two years.  
13 If you want an accurate measure of book equity,  
14 you should use either year-end, or average  
15 beginning- and end-of-year; or, as I say, you  
16 could use average monthly, but that's refining it  
17 probably unnecessarily.

18 Q Let me ask you a few questions, if you  
19 will, about your calculation of the groups'  
20 average return on year-end equity. And first of  
21 all, let me focus on the second group, the  
22 non-utility group.

1           After you completed your steps for  
2     identifying the firms that are in the non-utility  
3     group, you calculated the groups' average return  
4     on the year-end equity being 14.14 percent?

5           And --

6           A     That's correct.

7           Q     -- I got that from page 6 of your  
8     testimony.

9           A     Yeah. It's also on Schedule 2, page 6.  
10    For some reason, Schedule 2 starts on page 2, but  
11    I -- nevertheless, that's the designation.

12          Q     You concluded that these non-utility  
13    firms are riskier than the AEPR companies, right?

14          A     Well, I think they always are, because  
15    they don't have the franchise monopolies that  
16    regulated utilities have.

17          Q     And then you adjusted the average earned  
18    returns for the non-utilities, to match the risk  
19    of the -- did you do it to match to the risk of  
20    the two Ohio utilities of AEP?

21          A     Well, I used the beta. And there is no  
22    beta measure for the Ohio utilities, because they

1 all subsidiaries of AEP, and don't sell stock in  
2 the open markets.

3 Q But let me ask you a question, just a  
4 clarification question for me.

5 At line 14, you're asked a question:  
6 Can the 14.4 percent return on equity for the  
7 non-utility group be considered comparable to the  
8 Ohio AEP companies?

9 That's at lines 14 and 15.

10 And then at line 17 you answer the  
11 question: No, these companies are much riskier  
12 than the AEP Ohio Companies.

13 And then the following question is --  
14 I'm about to ask you a question about this now --  
15 you were asked the question: How can you adjust  
16 the non-utilities' average return to match the  
17 risk of the two Ohio utilities of AEP?

18 And then you explain for that purpose,  
19 you can use the beta, as generated by Value Line.

20 Do you see that?

21 A That's correct.

22 Q At this point, even though the question

1 on lines 19 and 20 indicates -- indicated to me.  
2 anyway -- that you are adjusting the non-utilities  
3 average return to match the risk of the Ohio  
4 utilities, when I read your answer, the gist I got  
5 from it was that actually at this point you're  
6 adjusting the non-utilities' average return to  
7 match the risk of the utility group?

8 A Yeah, I had to do that of necessity,  
9 because there is no beta measure for the two AEP  
10 Ohio utilities.

11 Q Okay. I'm not talking about matching it  
12 to the AEP Ohio beta. I'm talking about -- or  
13 matching the non-utilities to the AEP Ohio at this  
14 point.

15 What I'm asking you is if what you're  
16 doing in this step is matching the non-utilities'  
17 average return to the --

18 A To the 64 utilities.

19 Q -- to the 64 utilities?

20 A That's correct.

21 Q Okay. There's another step further on  
22 down the line, to bring it back to the AEP Ohio

1 Companies, right?

2 A That's correct. That's an adjustment  
3 for capital structure, which has the affect of  
4 increasing the Ohio utilities' allowed return.

5 Q Thank you. All right.

6 But actually, but at the point that I am  
7 in your testimony, Mr. King, which is page 6,  
8 lines 22 through the end of the page, you are  
9 adjusting the non-utility group to synch it up  
10 with the electric utilities group, right?

11 A That's correct.

12 Q And the Value Line betas that you used  
13 in this step of your exercise, those are levered  
14 betas, right?

15 A Yes.

16 Q And that means that they reflect a  
17 combination that there's a financial risk,  
18 correct?

19 A That's correct.

20 Q In any event, you took the average of  
21 all the Value Line betas for the 219 non-utility  
22 group firms, which it was 1.08, right?



1 A Yes.

2 Q And then you took the average of the  
3 betas for the electric utility group, which is  
4 .89, correct?

5 A That's correct.

6 Q And subtracted one from the other, to  
7 get the .19 difference; is that right?

8 A Well, this is all on Schedule 4.

9 Q I was just looking at your testimony on  
10 page 7.

11 A Yeah, right. But it -- but this is set  
12 forth on Schedule 4, as well.

13 Q But the difference between the two  
14 average betas is .19, correct?

15 A That's correct.

16 Q And then you multiplied that difference  
17 by a risk premium measure, to come up with an  
18 adjustment factor; is that right?

19 A That's correct.

20 Q And you subtracted that product from the  
21 non-utilities --

22 A Return on equity.

1           Q     -- which is your average ROE; and then  
2     your got -- reflected to your risk adjusted return  
3     on the 219 firm group of 12.82 percent?

4           A     That's correct.

5           Q     And you had to make this adjustment  
6     because you did not believe that your non-utility  
7     group included firms whose risks were actually  
8     comparable of the risk of the 64 electric utility  
9     groups?

10          A     Yes, that's correct.

11          Q     And I suppose by the logic of it, you  
12     did it because you didn't believe that the  
13     non-utility groups' risks were a good match for  
14     the risks of AEP Ohio without adjustment, right?

15          A     That's correct. I explain that in my  
16     testimony.

17          Q     And then after having done that, you  
18     made another adjustment to the non-utility group  
19     because of your opinion that -- or your conclusion  
20     that AEP Ohio Companies' financial risk actually  
21     is greater than the average financial risk of the  
22     64 non-utility groups, right?

1           A     Well, I think I adjusted both the  
2     non-utility and the utility groups for the  
3     difference in their leverage ratios relative to  
4     the two AEP Ohio utilities. That's done on  
5     Schedule 5.

6           Q     And I think you mentioned earlier that  
7     the result of that last adjustment was an upward  
8     one for the --

9           A     No. I'm wrong. It reduced the -- their  
10    ROE.

11          Q     Their -- I'm -- excuse me. Can you  
12    repeat that?

13          A     I think it reduced the ROE.

14          Q     Whose ROE?

15          A     I'm sorry. The return on equity  
16    indicated by each of the two utilities. I'm  
17    looking at the --

18          Q     Well, let me just recap.

19                 We had 14.14 percent for the non-utility  
20    group --

21          A     Yes.

22          Q     -- before the adjusting started?

1                   And then you adjusted the return of the  
2   non-utility group so that it was more comparable  
3   to the utility group, right?

4           A     Yes. Yeah, I'm wrong. It did increase  
5   the -- the rate of return.

6           Q     Okay. So but at any rate, that first  
7   adjustment, you subtracted the 1.32 from the  
8   14.14, right?

9           A     Yeah. Right.

10          Q     Okay. And then there's another  
11   adjustment that you make in order to reflect the  
12   fact that the AEP Ohio Companies' financial risk  
13   is greater than the average risk of the utility  
14   group, right?

15          A     That's correct.

16          Q     All right. And that added back some  
17   amount to the previous step. And by my review,  
18   the result was -- I'm searching for it here, but  
19   I'm not coming up with it.

20          A     I'm sorry. Repeat again what you're  
21   trying to do. And I'll try and help you.

22          Q     Well, I'm trying to follow your method.

1 And we've gone over for the non-utility group. We  
2 went from 14.14. And then we subtracted 1.32.

3 A We got 12.82.

4 Q Right.

5 And then we had to add back something to  
6 account for the actual additional risk that the  
7 Ohio utilities faced compared to the average risk  
8 of the utility group, right?

9 A That's right. Because they had a lower  
10 equity ratio. And so the 12.82 went to 13.52 for  
11 that difference.

12 Q And that was for --

13 A That's for the non-utility group.

14 Q That was for CSP, correct?

15 And then --

16 A Well, that's right. CSP is 13.52. And  
17 Ohio Power 13.54. They have very similar equity  
18 ratios. And on the utility side, the 10.68 is  
19 adjusted upward to 10.88 for Columbus Southern,  
20 and 10.90 for Ohio Power.

21 Q Okay. I think I understand it now.

22 A The lines are lines 2 and 18 of

1 exhibit -- of Schedule 5. That's where you find  
2 the comparison.

3 Q And then when you're done with all those  
4 steps to come up with the -- I guess I'll call  
5 them risk adjusted return for each group -- the  
6 utility group on the one hand and the non-utility  
7 group on the other hand -- you average those two  
8 results for each of the Ohio companies; is that  
9 right?

10 A That's correct.

11 Q And the final result is --

12 A It's 12.20 for Columbus Southern, and  
13 12.22 for Ohio Power. And those are in line 20 of  
14 Schedule 5.

15 Q Okay. And then let me go on. I have a  
16 few questions for you regarding your adder  
17 recommendation to come up with the benchmark for  
18 significantly excessive earnings.

19 A That's correct.

20 Q The adder is a total of 200 basis  
21 points?

22 A That's right.

1           Q     And that is the sum of the FERC adders  
2     that are used by the FERC to encourage investment  
3     by utilities that major in innovative transmission  
4     lines and for participation in RTO's?

5           A     Yes.

6           Q     And just to be clear about it, Columbus  
7     Southern and OPCO, they participate at PJM. So  
8     they're in an RTO.

9                     So under your approach, they get the  
10    benefit of the 50 basis points adder for that  
11    behavior, right?

12          A     Yes. That's not particularly the reason  
13    I included it, but that is true.

14                     MR. CONWAY: I'm all done.

15                     Do you have any redirect?

16                     MR. BOEHM: No. No redirect.

17                             (Discussion off the record)

18    BY MR. CONWAY:

19          Q     Mr. King, excuse me for having to go  
20    back on the record. I do have another question or  
21    two for you.

22                     If you could turn to your Schedule 1 of

1 Exhibit 1.

2 A (Witness examined document). I have it.

3 Q And there's an average return on equity  
4 that shows up at the bottom right-hand corner of  
5 the page?

6 A Yes.

7 Q 10.68 percent?

8 A That's correct.

9 Q And when you calculated the average,  
10 could you describe that?

11 Did you take -- and what I'm looking for  
12 is how you added and then applied a divisor to the  
13 column under return on equity.

14 A Well, that's what's done. But it's not  
15 that I did it. I used the Excel "average"  
16 command, which derives the mean. There is a  
17 separate command, which I could have used, to  
18 derive the median. I think I did. But I don't  
19 show it here because it was not significantly  
20 different than the mean. But the mean is the sum  
21 of the observations, divided by the number of  
22 observations.



1 Q Okay. So it's just a simple arithmetic  
2 average?

3 A That's correct.

4 Q Okay. Which then leads to the -- for me  
5 to the question: Did you consider conducting a  
6 return on equity or did you construct a return on  
7 equity that was calculated on a weighted basis,  
8 weighted for the amount of equity at --

9 A Well, I could have. But that would have  
10 distorted the results by exaggerating the affect  
11 of the largest of these utilities. I'm not sure  
12 that analytically that that's the appropriate  
13 approach. I can't tell you, though, whether it  
14 would be significantly different from the approach  
15 I used, which was a simple average of all of the  
16 utilities.

17 Q You said you're not sure -- I think you  
18 said you're not sure, but you didn't think that it  
19 would be appropriate to do that.

20 Is that what you said?

21 A That's correct.

22 Q Have you thought it through, or are you

1 just today thinking on it right here now and  
2 coming to that conclusion?

3 A Yes, I thought it through. If you use a  
4 weighted average, you give extraordinary weight to  
5 Exelon, to FPL Group, to Southern Company, and to  
6 AEP. I don't think it's appropriate to use that  
7 for the two Ohio utilities, which are much smaller  
8 than those big companies. I think it's much  
9 better to use a simple average, which captures  
10 both the large and the small companies.

11 Q Do you think that focusing you on lines  
12 62, the Wilmington capital, with a year-end common  
13 equity of \$20 million a return of equity of .10  
14 percent would unduly -- by including it in the mix  
15 would lead to a distortion by understating what  
16 the average ought to be?

17 A Well, you can pick that up. But then  
18 there are other companies. Let's look at Exelon  
19 Corporation, which has \$10 billion in common  
20 equity, and a return of 26.94. That is a  
21 distortion in the other direction. The reason we  
22 use the simple mean is to watch out these extreme

1 and outlying results, so that we get an expression  
2 of the overall return to the electric utility  
3 industry, which is the --

4 Q Is there a -- I'm sorry. You weren't  
5 done. I'm sorry.

6 A I'm sorry. Well, I think I'm finished  
7 now.

8 Q Refresh my recollection, which I --  
9 actually, I don't have one, about where whether  
10 you used a size screen on the 64 utilities?

11 A No, I did not use a size screen on the  
12 64 utilities. I used that only on the  
13 non-utilities.

14 Q Okay.

15 A I did throw out that one utility that  
16 had a negative return of 175 percent.

17 Q And I think you've already answered this  
18 question.

19 But you did not consider what would  
20 happen to the results of the Schedule 1  
21 calculation as you had similarly to the  
22 non-utility groups, screened those utilities which

1 had equity accounts less than a billion dollars?

2 A Well, it wasn't equity that I screened  
3 for, it was gross plant, which is a larger number.

4 Q Excuse me?

5 A And you're correct. I do not know what  
6 the result would be. But I'm just eyeballing  
7 these equity -- year-end equity numbers. And  
8 there's only a handful that would, I believe, have  
9 been eliminated.

10 Q Based on the billion dollar gross plant  
11 screen?

12 A Right. And I'm assuming gross plant  
13 would be at least twice the common equity number.  
14 It's probably even be more than that. Because  
15 common equity matches only a portion of the total  
16 asset value. A total asset value is computed not  
17 with gross plant, but with net plant.

18 Q Just a second.

19 You said there were a handful. Would  
20 that be the --

21 MR. BOEHM: I'm sorry. A handful of  
22 what, Dan?

1 MR. CONWAY: I'm sorry.

2 BY MR. CONWAY:

3 Q Mr. King, this is Dan Conway again.

4 A Yes, I understand.

5 Q You said that if you had screened this  
6 group of 64 with the \$1 billion gross plant  
7 factor, that you thought it would screen out only  
8 a handful of the utilities that are reflected on  
9 your Schedule 1?

10 A That's correct. I can go down and  
11 identify the ones that I think would have been  
12 screened out.

13 Q Well, let me -- I was just doing that  
14 while I was taking a break. Let me see if I'm on  
15 the same page as you there.

16 It would be number 8?

17 A Number 8, Central Vermont.

18 Q And it would be number 25 -- not 25  
19 excuse me.

20 A 26.

21 Q 26?

22 A That's right.

1 Q And it would be number 34?

2 A That's right.

3 Q And it would be number 57?

4 A No, I don't think so. I suspect that  
5 company, UIL Holdings, that's United Illuminating.  
6 I bet they have more than a billion dollars in  
7 gross plant.

8 Q Okay.

9 A It would number 59, though.

10 Q 59. Okay.

11 A And then 62.

12 Q And then 62.

13 A Sounds like about five or six.

14 Q Okay. Would you agree with me, just  
15 looking at those, that the general tendency of the  
16 ROE's are that they're below average for the  
17 group?

18 A Well, UI -- no, we didn't say UIL. They  
19 are below the average.

20 Q Okay. So if you did screen those out,  
21 you would expect that the 10.68 percent figure  
22 would increase to some degree?

1           A     It would be slightly higher, because we  
2     still would have 58 or 59, maybe -- yeah, 58 or 59  
3     utilities left.


4           MR. CONWAY: That's all I have. Thank  
5     you, very much.

6           MR. BOEHM: Thank you.

7  
8  
9  
10                   (Whereupon at 2:00 p.m., the  
11                   deposition of CHARLES W. KING  
12                   was adjourned.)

13  
14  
15  
16  
17  
18  
19  
20  
21  
22

1 CERTIFICATE OF NOTARY PUBLIC  
2 I, BARBARA A. HUBER, CSR, the officer  
3 before whom the foregoing deposition was taken, do  
4 hereby certify that the witness whose testimony  
5 appears in the foregoing deposition was duly sworn  
6 by me; that the testimony of said witness was  
7 taken by me in stenotypy and thereafter reduced to  
8 print under my direction; that said deposition is  
9 a true record of the testimony given by said  
10 witness; that I am neither counsel for, related  
11 to, nor employed by any of the parties to the  
12 action in which this deposition was taken; and,  
13 furthermore, that I am not a relative or employee  
14 of any attorney or counsel employed by the parties  
15 hereto, nor financially or otherwise interested in  
16 the outcome of this action.

17  
18  
19   
20 BARBARA A. HUBER, CSR  
21 Notary Public, in and for the  
22 District of Columbia  
My Commission Expires:  
March 14, 2012



**BEFORE THE  
PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of ) Case No. 08-917-EL-UNC  
Columbus Southern Power Company )  
for Authority to Establish a Standard )  
Service Offer Pursuant to R.C. § 4928.143 )  
in the Form of an Electric Security Plan )

and

In the Matter of the Application of ) Case No. 08-918-EL-UNC  
Ohio Power Company )  
for Authority to Establish a Standard )  
Service Offer Pursuant to R.C. § 4928.143 )  
in the Form of an Electric Security Plan )

**DIRECT TESTIMONY OF**

**CHARLES W. KING**

**ON BEHALF OF**

**OHIO ENERGY GROUP**

**SNAVELY KING MAJOROS O'CONNOR & BEDELL, INC.**

October 31, 2008

**DIRECT TESTIMONY OF**

**CHARLES W. KING**

**Q. Please state your name, position and business address.**

A. My name is Charles W. King. I am President of the economic consulting firm of Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King"). My business address is 1111 14<sup>th</sup> Street, N.W., Suite 300, Washington, D.C. 20005.

**Q. Please describe Snavely King.**

A. Snavely King, formerly Snavely, King & Associates, Inc., was founded by the late Carl M. Snavely and myself in 1970 to conduct research on a consulting basis into the rates, revenues, costs and economic performance of regulated firms and industries. The firm has a professional staff of 12 economists, accountants, engineers and cost analysts. Most of its work involves the development, preparation and presentation of expert witness testimony before federal and state regulatory agencies. Over the course of its 38-year history, members of the firm have participated in over 1000 proceedings before almost all of the state commissions and all Federal commissions that regulate the utilities or transportation industries.

**Q. Have you prepared a summary of your qualifications and experience?**

A. Yes. Attachment A is a summary of my qualifications and experience.

**Q. Have you previously submitted testimony in regulatory proceedings?**

A. Yes. Attachment B is a tabulation of my appearances as an expert witness before state and federal regulatory agencies.

**Q. For whom are you appearing in this proceeding?**

A. I am appearing on behalf of the Ohio Energy Group ("OEG"). The members of OEG who take service from Ohio Power or Columbus Southern Power are: AK Steel Corporation, ArcelorMittal USA, BP-Husky Refining, Brush Wellman, E.I.,

1 DuPont de Nemours & Company, Ford Motor Company, GE Aviation, Griffin  
2 Wheel, PPG Industries Inc., The Procter & Gamble Co., Republic Engineered  
3 Products, Inc., Severstal Wheeling (formerly Wheeling Pittsburgh Steel), and  
4 Worthington Industries.  
5

6 **Q. What is the objective of your testimony?**  
7

8 **A.** The objective of my testimony is to recommend a methodology for implementing  
9 the "significantly excessive earnings" test embodied in the Am. Substitute Senate  
10 Bill No. 221 ("S.B.221"). The significantly excessive earnings test is found in  
11 Section 4928.143(F) of the Revised Code of Ohio. Applied to 2007 data, the  
12 methodology I recommend results in thresholds for significantly excessive  
13 earnings as follows: Columbus Southern 14.20%; Ohio Power 14.23%.  
14

15 **Q. What does this section of S.B. 221 say?**  
16

17 **A.** Section (F) states as follows:

18 With regard to the provisions that are included in an electric security  
19 plan under this section, the commission shall consider, following the end  
20 of each annual period of the plan, if any such adjustments resulted in  
21 excessive earnings as measured by whether the earned return on common  
22 equity of the electric distribution utility is significantly in excess of the  
23 return on common equity that was earned during the same period by  
24 publicly traded companies, including utilities, that face comparable  
25 business and financial risk, with such adjustments for capital structure as  
26 may be appropriate.  
27

28 **Q. In addition to meeting these statutory requirements, what other**  
29 **attributes should a "significantly excessive earnings" test have?**  
30

1 A. The test should be as simple and straightforward as possible, while still being  
2 fair to the utilities and their ratepayers. These criteria mean that the  
3 methodology for establishing the baseline return should be based on publicly  
4 available and clearly defined data, that it require a minimum of judgment or  
5 discretion, and that to the extent possible it should be equally applicable to all  
6 of the major electric utilities serving Ohio retail customers. Once the baseline  
7 is established, it is necessary for the Commission to use its judgment in  
8 setting the threshold over which earnings would be significantly excessive.  
9

10 Q. **How will you proceed to develop a methodology that conforms to these**  
11 **criteria?**  
12

13 A. The language requires the identification of a group or groups of utilities and other  
14 companies that bear the same business and financial risk as the subject Ohio  
15 electric utilities. Pursuant to this requirement, I will identify two comparison  
16 groups, one of utilities and the other of non-utilities. I will adjust the earned  
17 returns of each group to match the risks faced by the two AEP companies  
18 operating in Ohio. I will then average the utility and non-utility returns to derive  
19 a base line earned level of return. The final step is to apply an adder that  
20 describes the margin over this base line equity return that should be allowed  
21 before the earnings are considered significantly excessive.  
22

23 Q. **Have you identified utilities that are comparable to the AEP companies that**  
24 **provide retail electric service in Ohio?**  
25

26 A. Yes. The AEP companies -- Columbus Southern and Ohio Power -- are both  
27 vertically integrated companies whose generation, distribution and transmission  
28 facilities are regulated by the Public Utilities Commission of Ohio ("PUCO") and  
29 the Federal Energy Regulatory Commission ("FERC"). Most of the publicly  
30 traded electric utility companies in the country conform to varying degrees to this  
31 pattern. Many still have their generation function regulated, but even those

1 companies often engage in off-system sales at market based rates. For this  
2 reason, I have used the entire list of electric utilities, with one exception<sup>1</sup>, in  
3 Value Line's Datafile. This list consists of 64 publicly traded companies.  
4

5 **Q. What was the average return on equity of these companies during the most**  
6 **recent year?**

7  
8 A. Schedule 1 of my Exhibit \_\_\_\_\_ (CWK-1) presents the net income and the year-  
9 end equity amounts for each company for 2007 as reported in Value Line's  
10 Datafile. The average of the earned returns on equity for the 64 electric utilities is  
11 10.68 percent.  
12

13 **Q. Have you identified non-utility companies that are comparable to the two**  
14 **AEP Ohio companies?**

15  
16 A. That is a more difficult task because non-utility companies are intrinsically  
17 different from utilities. None have franchised monopolies, and none have their  
18 earnings constrained or protected by rate base/rate-of-return regulation. However,  
19 the statute requires that an effort be made to find non-utility companies that are as  
20 close to the subject Ohio companies as possible. The earned returns of the  
21 resultant sample of companies can then be adjusted for any measurable  
22 differences in risk.  
23

24 Accordingly, I began with the 5,688 companies that are found in the Value Line  
25 Datafile. I first eliminated the electric, gas and water utilities, which reduced the  
26 list to 5,587 companies. I then examined the capital intensity of the electric  
27 utilities and found that with only a handful of exceptions, the ratio of gross plant  
28 to revenue ranged between 1.2 and 5.0. Using these parameters, I found that 657  
29 non-utility companies fall within these limits.  
30

---

<sup>1</sup> That exception is the Evergreen Energy Co. which experienced a return on equity of -175% in 2007.

1 I then sought to eliminate small companies which would have higher return  
2 requirements than utilities, and particularly AEP which has over \$46 billion in  
3 gross plant. Eliminating all companies with gross plant less than \$1 billion  
4 reduced the list to 260 companies. Finally, I had to eliminate any companies for  
5 which Value Line had not calculated a beta, since I proposed to use the beta  
6 measure as the test of relative risk. The final list came to 219 companies. Those  
7 companies are listed in Schedule 2 of my Exhibit No. \_\_\_\_ (CWK-1).

8  
9 **Q. What was the average return on equity of these non-utility companies?**

10  
11 **A.** The average return on year-end 2007 equity of these companies was 14.14  
12 percent?

13  
14 **Q. Can this return on equity be considered comparable to the Ohio AEP**  
15 **Companies?**

16  
17 **A.** No. These companies are much riskier than the AEP's Ohio utilities.

18  
19 **Q. How can you adjust the non-utilities' average return to match the risk of the**  
20 **two Ohio utilities of AEP?**

21  
22 **A.** For this purpose, I use the "beta" measure as generated by Value Line. Beta is a  
23 measure of the co-variance of each stock with that of the overall stock market.  
24 The overall stock market's beta is 1.00. To the extent that beta is greater than  
25 1.00, the stock displays greater volatility and higher risk than the market. Betas  
26 less than 1.00 indicate less volatility and lower risk. The beta reflects all forms of  
27 risk, so it is the one comprehensive measure of risk that is available for most  
28 traded stocks.

29  
30 The betas for each of the 219 comparable non-utility companies are presented in  
31 column H of Schedule 2 of Exhibit No. \_\_\_\_ (CWK-1). The average beta for the

1 entire group is 1.08, reflecting the fact that these companies are, on average, more  
2 risky than the average for the market.

3  
4 In order to adjust for this higher level of risk, I identified the average beta of the  
5 electric utility comparison group. That average, shown in Column E of Schedule  
6 3 of Exhibit No. \_\_\_\_\_ (CWK-1), is .89, indicating a lower level of risk than the  
7 non-utility group.

8  
9 On schedule 4 of my exhibit I adjust the average return for the 219 non-utility  
10 companies to reflect the much lower risk associated with utility operations. For  
11 this purpose, I use the Capital Asset Pricing Model, which applies the beta to a  
12 risk premium of stock returns over bond yields. While there are many measures  
13 of the risk premium, the average historical risk premium between 1926 and 2008  
14 has averaged about seven percent.<sup>2</sup> Since we are measuring historical earned  
15 returns, this average is arguably appropriate for use as a risk adjustment. I apply  
16 the difference between the 1.08 beta of the non-utility group and the .89 beta of  
17 the utility group, which is .19, to the seven percentage point risk premium to  
18 derive an adjustment of 132 basis points, or 1.32 percent. A reduction of 1.32  
19 percent to the average non-utility earned return of 14.14 percent yields a risk-  
20 adjusted return of 12.82 percent.

21  
22 **Q. You have now calculated the risk-adjusted equity returns of both the utilities**  
23 **and the non-utilities. Are there any further adjustments that need to be**  
24 **made?**

25  
26 **A.** Yes. There is one further adjustment that should be made, and that is to recognize  
27 the financial risk differences of the AEP Ohio companies relative to the utility and  
28 non-utility comparison groups. Columbus Southern has a ratio of equity to total  
29 capital of 47.3 percent, and Ohio Power has a ratio of 47.7 percent. Schedule 3  
30 shows that the utility comparison group has a slightly less risky ratio of 49.2

<sup>2</sup> Stocks, Bonds, Bills and Inflation, 2008 Yearbook, Ibbotson Associates

1 percent, and Schedule 2 shows that the non-utility group's ratio is even less risky  
2 at 51.7 percent.

3  
4 On Schedule 5 of Exhibit No. \_\_\_\_\_ (CWK-1), I have adjusted both the utility and  
5 non-utility equity returns to recognize these differences in financial risk resulting  
6 from different capital structures. In both cases, I have computed a pre-tax return  
7 on total capital using, as the cost of debt, the 7.31 percent September 2008 yield  
8 on Moody's Baa corporate bonds as reported by the Federal Reserve. I have used  
9 the average equity percentage of the 64 electric utilities of 49.2 percent from  
10 Schedule 3, and the non-utility equity percentage of 57.1 percent from Schedule  
11 2.

12  
13 My adjustment recognizes the fact that the level of earned pre-tax net operating  
14 income is independent of the capital structure. On line 9 of Schedule 5, I set the  
15 pre-tax return on capital at the levels of the 64 electric utilities (11.90%) and the  
16 risk adjusted non-utility sample (13.86%). I then derive the return on equity for  
17 each AEP company by subtracting the weighted debt cost (line 14) from the  
18 composite return on capital of each sample group (line 9). In line 16, I de-weight  
19 the equity returns, and in line 18 I apply the companies' tax factors to derive the  
20 return on equity for each AEP company based on the two samples of comparable  
21 companies. In line 20, I average those equity returns to derive the base line  
22 comparable return on year-end equity for each company. They are:

23	▪ Columbus Southern	12.20%
24	▪ Ohio Power	12.22%
25		

26 **Q. What adder is appropriate to take these base line equity returns to the level**  
27 **of "significantly excessive?"**

28  
29 **A.** Here, it is necessary for the Commission to exercise its own judgment because  
30 there is no objective, generally accepted measure of a "significantly excessive  
31 return." I suggest the use of the adders that the FERC awards to encourage  
32 investment by utilities in major innovative transmission lines. FERC provides a



1 50 basis point adder for participation in Regional Transmission Organizations and  
2 another adder of up to 150 basis points as an incentive for investment. FERC  
3 apparently regards that these adders are fully sufficient to encourage risky  
4 investments in transmission lines that must traverse difficult terrain and encounter  
5 siting resistance. Anything more would be significantly excessive.

6  
7 **Q. Using FERC's 200 basis point adder, what would be the threshold of**  
8 **"significantly excessive earnings" on common equity?**

9  
10 **A. If we add 200 basis points to the base line returns on year-end equity, the**  
11 **thresholds of significantly excessive earnings are:**

12	▪ Columbus Southern	14.20%
13	▪ Ohio Power	14.22%
14		
15		

16 **Q. Are you recommending that the Commission adopt your methodology, but**  
17 **not these specific threshold numbers?**

18  
19 **A. Yes. These threshold numbers are merely illustrative of the results that are**  
20 **derived from the methodology that I recommend. The first application of the**  
21 **significantly excessive earnings test will be in 2010 and based on earned returns**  
22 **in 2009. The numbers may be quite different then.**

23  
24 **Q. With regard to the adder to the base line earned returns, why haven't you**  
25 **adopted the statistical confidence levels that the utilities' witnesses have**  
26 **recommended?**

27  
28 **A. The use of statistical confidence ranges would limit any finding of excessive**  
29 **earnings to so few observations that the test would become a cipher. A two-tailed**  
30 **95 percent confidence interval would mean that only 2.5 percent of all**  
31 **observations in the sample company groups would be deemed to have excessive**  
32 **earnings. A 90 percent confidence interval would increase that proportion to five**

1 percent. These intervals virtually ensure that no Ohio utility would ever be found  
2 to have experienced significantly excessive earnings.

3  
4 Another objection to the use of set confidence intervals is that they "hard wire"  
5 the definition of significantly excessive earnings in a manner that provides the  
6 PUCO with little or no flexibility. As the testimony and exhibits of Dr. Makhija  
7 demonstrates, the application of a 95 percent confidence interval to utility and  
8 non-utility company equity returns can lead to a very high excessive earnings  
9 threshold based on 2007 data. But 2007 was a relatively prosperous year. It now  
10 appears that in 2009, the first year that the significantly excessive earnings test is  
11 applied, earnings will probably be dramatically lower. The application of the Dr.  
12 Makhija's 95 percent confidence interval will likely result in a much lower  
13 threshold, one that could conceivably deprive the AEP companies of what would  
14 otherwise be judged adequate earnings. The Commission must retain the  
15 flexibility to adjust its excessive earnings test to reflect the circumstances of the  
16 day.

17  
18 Q. Does this complete your testimony?

19  
20 A. Yes. It does.

**Comparable Electric Utilities  
Return on Equity**

Name	Ticker Symbol	(Millions of Dollars)				Return on Equity
		Year-end Common Equity	Pre Tax Income	Income Tax	Post-Tax Income	
1 Allegheny Energy	AYE	2,534.7	686.8	260.8	416.0	16.41%
2 Allete	ALE	742.6	137.2	47.7	89.5	12.05%
3 Alliant Energy	LNT	2,662.5	576.6	255.8	320.8	12.05%
4 Ameren Corp	AEE	6,730.0	986.0	330.0	656.0	9.75%
5 American Elec Power	AEP	10,076.0	1,666.0	516.0	1,150.0	11.41%
6 Avista Corp	AVA	914.0	82.8	24.3	38.5	4.21%
7 Black Hills	BKH	969.9	145.3	45.6	100.1	10.32%
8 Central Vermont Public Svc.	CV	188.4	22.6	8.8	15.8	8.39%
9 Centerpoint Energy	CNP	1,810.0	594.0	196.0	399.0	22.04%
10 CH Energy Group	CHG	522.2	85.4	21.9	43.5	8.33%
11 Cleco Corp	CNL	1,009.9	105.2	25.6	79.6	7.86%
12 CMS Energy Corp	CMS	2,116.0	287.0	108.0	179.0	8.46%
13 Consolidated Edison	ED	8,852.0	1,388.0	452.0	936.0	10.57%
14 Constellation Energy	CEG	5,327.0	1,200.8	404.2	796.4	14.95%
15 Dominion Resources	D	8,390.0	2,133.0	713.0	1,420.0	15.12%
16 DPL Inc	DPL	871.7	334.3	122.5	211.8	24.30%
17 DTE Energy	DTE	6,863.0	610.0	153.0	457.0	7.81%
18 Duke Energy	DUK	21,199.0	2,234.0	712.0	1,522.0	7.16%
19 Edison International	EDX	8,393.0	1,643.0	492.0	1,151.0	13.71%
20 El Paso Electric	EE	666.5	109.2	34.5	74.8	11.22%
21 Empire District Electric Co	EDE	539.2	47.6	14.4	33.2	6.15%
22 Energy East Corp	EAS	3,208.0	366.5	114.1	252.4	7.87%
23 Entergy Corp	ETR	7,836.8	1,674.4	514.4	1,160.0	14.80%
24 Exelon Corp	EXC	10,133.0	4,176.0	1,446.0	2,730.0	26.94%
25 FirstEnergy Corp	FE	8,977.0	2,192.0	883.0	1,309.0	14.56%
26 Florida Public Utilities	FPU	48.9	5.0	1.7	3.3	6.75%
27 Fortis Inc	FTS.TO	2,595.0	242.0	33.2	208.8	8.05%
28 FPL Group	FPL	10,735.0	1,680.0	368.0	1,312.0	12.22%
29 Great Plains Energy	GXP	1,566.3	230.7	71.5	159.2	10.18%
30 Hawaiian Electric	HE	1,273.5	144.9	51.4	93.6	7.35%
31 IDACORP, Inc.	IDA	1,207.3	96.0	13.7	82.3	6.81%
32 Integrys Energy	TEG	3,232.7	267.1	86.0	181.1	5.60%
33 ITC Holdings Corp	ITC	563.1	109.9	36.7	73.3	13.02%
34 Maine & Maritime Co	MAM	42.9	4.7	2.0	2.6	6.10%
35 MDU Resources	MDU	2,515.6	512.8	190.0	322.8	12.83%
36 MGE Energy	MGEE	427.7	76.7	27.9	48.8	11.42%
37 Nisource Inc	NI	5,076.6	484.1	172.1	312.0	6.15%
38 Northeast Utilities	NU	2,908.3	360.9	109.4	251.5	8.65%
39 Northwestern Corp.	NWE	823.0	85.6	32.4	53.2	6.46%
40 Nstar	NST	1,701.9	358.9	133.4	225.5	13.13%
41 OGE Energy	OGE	1,680.9	380.9	116.7	244.2	14.53%
42 Otter Tail Corp	OTTR	623.2	81.9	28.0	54.0	10.31%
43 Pepco Holdings	POM	4,018.4	488.7	182.2	286.5	7.36%
44 PG & E Corp	PCG	8,545.0	1,545.0	539.0	1,006.0	11.77%
45 Pinnacle West Capital	PNW	3,531.6	449.7	150.9	298.8	8.46%
46 PNM Resources	PNM	1,691.9	63.1	3.2	59.9	3.54%
47 Portland General	POR	1,316.0	219.0	74.0	145.0	11.02%
48 PPL Corp	PPL	5,538.0	1,304.0	270.0	1,034.0	18.67%
49 Progress Energy	PGN	8,417.5	1,027.0	334.0	693.0	8.23%
50 Public Services Enterprises	PEG	7,295.0	2,383.0	1,060.0	1,323.0	18.14%
51 Puget Energy Inc	PSD	2,521.9	257.3	72.6	184.8	7.33%
52 Scana Corp	SCG	2,953.0	467.0	140.0	327.0	11.07%
53 Sempra Energy	SRE	8,315.0	1,559.0	524.0	1,135.0	13.65%
54 Sierra Pacific Res	SRP	2,996.6	284.9	87.6	197.3	6.58%
55 Southern Co	SO	12,337.0	2,617.0	835.0	1,782.0	14.44%
56 TECO Energy	TE	2,017.0	309.6	126.0	183.6	9.10%
57 UIL Holdings	UIL	464.3	77.2	30.5	46.7	10.08%
58 Unisource Energy	UNS	690.1	97.5	39.1	58.4	8.46%
59 Utili Corp	UTL	100.3	13.2	4.5	8.7	8.67%
60 Vectren Corp	VVC	1,233.7	218.2	76.0	143.2	11.61%
61 Westar Energy	WR	1,826.0	232.2	63.8	168.4	9.22%
62 Wilmington Capital M	WCMA.TO	20.0	0.0	0.0	0.0	0.10%
63 Wisconsin Energy	WEC	3,098.0	554.1	216.4	337.7	10.90%
64 Xcel Energy	XEL	8,296.8	870.4	294.5	575.9	9.15%
Average						10.68%

Non-Utility Comparison Group  
Equity Ratios, Returns on Equity and Betas  
(Dollars in Millions)

Company	Ticker Symbol	A Common Equity	B Reported Capital	C Equity Ratio	D Pre Tax Income	E Income Tax	F Post-Tax Income	G Return on Equity	H NYSE Beta
1 AES Corp	AES	3,164.00	19,793.00	16.0%	1,421.00	685.00	736.00	23.28%	1.85
2 Air Products & Chemical	APD	5,495.60	8,472.10	64.9%	1,359.50	940.00	1,018.50	18.53%	1.00
3 Alaska Communication	ALSK	74.01	503.22	14.6%	32.84		32.94	44.51%	0.50
4 Alexander & Baldwin	ALEX	1,130.00	1,582.00	71.4%	208.00	66.00	142.00	12.57%	1.00
5 Allied Waste	AWI	3,285.90	9,989.80	32.8%	579.40	229.40	350.10	10.85%	1.20
6 American Tower (Class A)	AMT	3,022.09	7,305.55	41.4%	197.48	74.60	122.88	4.07%	1.90
7 Ameristar Casinos Inc	ASCA	503.12	2,144.74	23.5%	121.25	48.73	72.52	14.41%	0.90
8 Anadarko Petroleum	APC	16,315.00	27,515.00	59.3%	6,328.00	2,551.00	3,778.00	23.16%	0.90
9 AngloGold Ashanti Ad	AU	2,552.00	4,118.00	62.0%	422.00	116.00	304.00	11.91%	1.05
10 Apache Corp	APA	15,273.91	19,389.58	78.8%	4,672.61	1,860.25	2,812.36	18.41%	0.90
11 Aracruz Celulose SA	ARA	2,397.11	3,699.48	64.5%	629.90	107.31	432.58	18.12%	1.10
12 Arch Coal	ACI	1,523.85	2,617.26	58.2%	155.07	(19.85)	174.92	11.48%	1.25
13 AT&T Inc	T	115,367.00	172,822.00	66.8%	25,910.00	8,870.00	17,040.00	14.77%	1.10
14 Alco Ltd	ALCO	1,573.20	4,955.70	31.7%	561.80	92.00	469.80	28.87%	0.55
15 ATLAS AMERICA INC	ATLS	413.16	2,407.55	17.2%	49.97	14.64	35.33	8.55%	1.40
16 Atmel Corp	ATML	823.47	843.88	97.6%	67.89	27.15	40.74	4.95%	2.45
17 ATP Oil & Gas Corp	ATPG	309.86	1,701.71	18.2%	47.98	(0.63)	48.61	15.69%	0.95
18 Bancor Gold	ABX	15,256.00	16,406.00	92.9%	1,446.00	341.00	1,105.00	7.24%	0.85
19 BCE Inc	BCE	14,338.00	27,653.00	51.5%	2,343.00	318.00	2,025.00	14.12%	0.80
20 Bery Petroleum (Class A)	BRY	459.67	904.97	50.8%	156.45	55.28	101.17	21.95%	0.90
21 Bill Barrett Corp	BBG	773.51	1,047.51	73.8%	43.99	17.24	26.75	3.46%	1.40
22 Bois D'Arc Energy Inc	BDE	802.49	682.49	88.3%	122.10	43.43	78.67	13.06%	1.40
23 Boyd Gaming	BYD	1,365.40	3,651.33	37.9%	184.93	64.02	120.91	6.73%	1.05
24 Briskow Group Inc	BRG	724.78	1,569.51	46.2%	152.25	44.52	107.73	14.86%	1.10
25 Brookfield Asset Man	BAM	6,600.00	32,161.00	20.5%	856.00	68.00	787.00	11.92%	1.00
26 BT Group ADR	BT	10,780.95	30,377.86	35.5%	4,999.47	1,159.09	3,840.38	35.55%	1.00
27 BUCKEYE PARTNERS L.P	BPL	1,090.17	1,939.34	56.2%	137.56		137.56	11.70%	0.70
28 Buckeye Technologies	BKI	347.15	792.54	43.8%	43.83	13.72	30.11	6.67%	1.50
29 BURLINGTON NORTHERN	BNI	11,144.00	18,875.00	58.0%	3,030.00	1,158.00	1,874.00	16.82%	1.00
30 CABOT OIL & GAS 'A'	COG	1,070.25	1,400.25	76.4%	257.53	61.80	195.73	15.49%	1.05
31 Cameco Corp	CCO	2,743.86	3,460.98	79.3%	466.93	26.46	436.47	15.91%	1.05
32 Canadian National Railway	CNI	10,177.00	15,540.00	65.5%	2,553.00	828.00	1,725.00	16.95%	1.00
33 Canadian Natural Resources	CNQ	13,319.00	24,261.00	54.9%	2,582.00	128.50	2,453.50	16.08%	0.80
34 Canadian Pacific Railway	CP	5,457.90	9,604.10	56.8%	942.80	270.40	672.40	12.32%	0.95
35 Carnival Corp	CCL	19,983.00	28,276.00	70.0%	2,424.00	16.00	2,408.00	12.06%	1.10
36 Catalyst Payer Corporation	CTL	988.60	1,778.60	55.6%	(131.50)	(100.00)	(31.50)	-3.19%	0.95
37 Cedar Fair LP	FUN	285.09	2,020.55	14.1%	144.73	102.02	42.71	14.89%	0.70
38 Cemex Ads	CMX	14,946.18	31,494.09	47.6%	2,907.47	439.31	2,468.16	16.51%	1.30
39 Centennial Communications	CYCL	(1,082.87)	963.89	-112.3%	16.52	8.02	8.50	-0.79%	1.25
40 Centurytel Inc	CTL	3,409.20	5,143.58	55.5%	568.50	214.20	354.30	10.39%	0.80
41 Charter Communications	CHTR	(7,890.87)	12,086.00	-55.3%	(1,081.00)	323.10	(1,404.10)	17.79%	1.95
42 Charter Semiconductor	CHRT	1,516.88	3,296.00	46.0%	10.25	(91.43)	101.68	6.70%	1.80
43 Chesapeake Energy	CHK	11,075.00	23,080.00	48.0%	2,804.44	1,066.11	1,738.33	15.70%	1.00
44 China Southern Airlines	ZNH	1,678.92	4,685.80	35.8%	385.11	112.16	272.95	16.28%	1.25
45 CH2M/AREX ENERGY CO.	XEC	3,253.28	3,746.44	87.0%	544.62	198.15	346.47	10.63%	1.05
46 Cincinnati Bell	CBB	(807.40)	1,334.30	-60.5%	167.80	71.80	96.00	-11.80%	1.60

Non-Utility Comparison Group  
Equity Ratios, Returns on Equity and Betas  
(Dollars in Millions)

Company	Ticker Symbol	A Common Equity	B Reported Capital	C Equity Ratio	D Pre Tax Income	E Income Tax	F Post-Tax Income	G Return on Equity	H NYSE Beta
47 Cit Group	CIT	8,428.80	61,102.80	10.5%	(272.30)	(194.40)	(77.90)	-1.21%	1.30
48 Clayton Williams Ene	CWEI	180.80	590.98	27.2%	15.29	9.80	8.60	6.08%	0.95
49 Cogeco Cable Inc	CCA.TO	1,185.66	2,176.30	53.8%	96.86	12.17	84.69	7.27%	0.80
50 Cogeco Inc	CGO.TO	392.48	1,428.71	27.5%	82.73	18.35	64.38	18.40%	1.05
51 Comcast Corp	CMCSK	41,340.00	71,163.00	58.1%	4,049.00	1,803.00	2,246.00	5.44%	1.25
52 Comcast Corp (Class A)	CMCSA	41,340.00	72,633.00	56.9%	4,349.00	1,800.00	2,549.00	8.17%	1.30
53 Compentia Vale Do Ri	RIO	22,757.72	51,393.94	63.7%	16,453.72	4,063.95	12,389.77	37.80%	1.60
54 Constock Resources	CRK	771.64	1,531.84	50.4%	183.88	85.17	108.81	14.10%	1.06
55 Consol Energy	CNX	1,214.41	1,703.34	71.3%	353.04	101.13	251.91	20.74%	1.35
56 CONSOLIDATED COMM. H	CNSL	155.38	1,047.00	14.8%	18.09	4.67	11.42	7.35%	0.80
57 Corning Inc	GLW	9,496.00	11,010.00	86.2%	2,421.00	151.00	2,270.00	23.90%	1.80
58 Corrections Corp of America	CXW	1,221.97	2,197.65	55.6%	212.82	80.31	132.51	10.84%	0.80
59 COVANTA HOLDING CORP	CVA	1,026.06	3,123.24	32.9%	200.28	40.12	160.16	15.61%	1.55
60 CSA Corp	CSX	8,685.00	15,155.00	57.3%	1,895.00	681.00	1,214.00	14.09%	1.05
61 Danbury Res Inc	DNR	1,404.37	2,084.70	67.4%	393.41	140.26	253.15	18.03%	1.00
62 DEUTSCHE TELEKOM ADR	DT	62,034.58	111,861.07	55.5%	3,811.32	2,023.63	1,587.69	2.58%	1.10
63 Devon Energy	DVN	21,846.00	28,930.00	75.5%	4,224.00	1,078.00	3,146.00	14.40%	1.00
64 DIAMOND OFFSHORE	DO	2,877.06	3,380.13	85.1%	1,246.53	341.35	905.18	31.46%	1.05
65 DINEQUITY INC.	DIN	205.86	2,641.50	7.8%	(2.75)	(2.24)	(0.51)	-0.25%	0.90
66 Dryships Inc.	DRYS	1,024.66	2,073.74	49.4%	340.40	3.00	340.40	33.21%	1.20
67 Dynegy Inc (Class A)	DYN	4,506.00	10,445.00	43.1%	267.00	3.00	264.00	5.85%	1.65
68 Eagle Materials	EXP	405.68	805.63	50.4%	144.38	48.61	97.77	24.10%	1.90
69 Emeritus Corp	ESC	458.50	1,667.21	27.5%	(47.92)	0.81	(48.73)	-10.63%	0.80
70 Enbridge Inc	ENB.TO	5,143.30	14,512.80	35.4%	916.30	209.20	707.10	13.75%	0.80
71 Entana Corp	EAC	20,704.00	28,644.00	70.1%	5,831.00	1,731.00	4,100.00	19.80%	1.00
72 Encore Acquisition	EAC	948.15	2,068.39	45.8%	24.15	14.47	9.68	1.02%	1.30
73 Energen Corp	EGN	1,378.65	1,941.02	71.0%	478.64	187.42	291.22	22.43%	0.90
74 Energy Partners Ltd	EPL	101.87	686.47	17.4%	(137.49)	(44.60)	(92.89)	-91.10%	0.90
75 Enso International	ESV	3,752.00	4,043.40	92.8%	1,253.70	281.70	992.00	28.44%	1.10
76 EOG Resources	EOG	6,878.46	8,175.09	85.4%	1,830.88	551.18	1,079.70	15.47%	1.00
77 EQUINIX, INC.	EQX	814.43	1,492.88	54.6%	(4.71)	0.47	(5.18)	-0.64%	1.55
78 Equitable Resources	EQT	1,097.47	1,850.97	59.3%	319.24	144.38	174.85	15.93%	0.85
79 FreepT-Memoran C&G	FCX	14,084.00	25,414.00	55.4%	4,964.93	1,942.93	3,022.00	21.46%	1.55
80 FRONTIER COMMUNIC.	FTR	987.89	5,734.79	17.4%	301.70	112.70	189.00	16.94%	1.05
81 Gax Corp	GMT	1,148.50	3,261.90	35.2%	286.60	72.80	183.80	16.16%	1.45
82 Gaylord Entertainment	GET	841.49	1,920.53	49.0%	104.65	62.98	101.68	10.89%	1.10
83 General Communication	GNMA	251.92	790.79	31.9%	25.48	11.96	13.50	5.36%	1.15
84 Grey Wolf Inc	GW	899.50	934.50	70.6%	265.39	95.50	169.89	26.78%	1.05
85 HELIX ENERGY SOLUTIO	HLX	1,846.56	3,572.10	51.7%	322.83	107.43	215.20	11.65%	1.20
86 Hellenic Telecommunications Organization SA	OTE	6,098.59	14,719.75	41.4%	1,828.53	613.51	1,215.02	16.92%	0.90
87 Helmerich & Payne	HP	1,815.51	2,280.51	80.3%	689.44	210.89	378.76	20.86%	1.20
88 Hombeck Offshore Se	HOS	592.31	1,111.86	50.6%	148.60	53.91	94.78	16.80%	1.20
89 Host Hotels And Resorts	HST	5,332.00	10,805.00	49.3%	553.00	3.00	550.00	10.32%	1.05
90 Hukky Energy Inc	HSE.TO	11,650.00	13,758.00	84.7%	4,127.00	913.00	3,214.00	27.59%	0.90
91 Hutchinson Techn	HTCH	599.54	978.49	61.3%	(9.63)	(12.21)	2.58	0.43%	1.05
92 IAMGOLD CORP.	IMG.TO	1,751.31	1,757.01	98.7%	(0.68)	41.37	(42.05)	-2.40%	0.75

Non-Utility Comparison Group  
Equity Ratios, Returns on Equity and Betas  
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Company	Ticker Symbol	A Common Equity	B Reported Capital	C Equity Ratio	D Pre Tax Income	E Income Tax	F Post-Tax Income	G Return on Equity	H NYSE Beta
93. Infrason Technology	IFX	7,783.62	9,937.57	78.1%	(401.29)	124.51	(525.10)	-6.78%	1.85
94. Intel Corp.	INTC	42,762.00	44,742.00	95.6%	9,166.00	2,180.00	6,976.00	16.31%	1.25
95. International Speedway	ISCB	1,159.08	1,534.09	75.6%	186.06	91.25	94.81	8.18%	0.60
96. International Speedway (Class A)	ISCA	1,159.08	1,534.09	75.6%	244.21	82.30	151.91	13.11%	0.65
97. Iron Mountain	IRM	1,795.45	5,028.30	35.7%	223.02	69.01	154.01	8.58%	0.85
98. Isle Of Capri-Casino	ISLE	168.01	1,685.80	11.2%	(58.38)	(64.82)	8.46	4.50%	1.15
99. JetBlue Airways	JBLU	1,038.00	3,524.00	29.6%	41.00	23.00	18.00	1.74%	1.10
100. Kansas City Southern	KSU	1,688.30	2,831.30	59.9%	228.20	66.60	159.60	9.41%	1.30
101. Kinder Morgan Energy	KMP	3,688.90	10,891.50	33.8%	1,072.50	71.00	1,001.50	27.15%	0.65
102. Kinross Gold	KGC	4,832.20	5,338.00	90.6%	404.60	75.80	330.80	6.85%	0.95
103. Kirby Corp.	KEX	789.83	1,065.85	72.2%	199.83	76.49	123.34	16.02%	1.15
104. KT Corporation	KTC	9,482.08	15,873.70	59.7%	1,547.15	381.00	1,166.05	12.30%	0.80
105. Landry's Restaurants	LNY	316.89	1,118.37	28.3%	32.33	13.99	19.35	5.79%	1.15
106. Las Vegas Sands Corp	LVS	2,280.27	9,778.27	23.1%	329.87	21.59	308.28	13.64%	1.60
107. LEVEL 3 COMMUNIC.	LVT	1,070.00	7,902.00	13.5%	(708.00)	(22.00)	(687.00)	-64.21%	1.25
108. LIFE TIME FITNESS INC.	LTM	572.55	1,127.58	50.8%	113.23	45.72	68.01	11.88%	1.00
109. Louisiana-Pacific	LPX	1,819.50	2,305.30	78.9%	(249.30)	(146.90)	(100.40)	-5.52%	1.35
110. Magellan Midstream P	MMP	871.18	1,785.70	48.8%	244.35	1.56	242.78	27.87%	0.70
111. MAGNA ENTERTAINMENT	MEC	262.71	742.02	48.9%	(110.44)	(2.57)	(107.87)	-28.74%	1.00
112. Manitoba Telecommunications Services	MBT	1,404.00	2,070.20	67.8%	288.00	123.30	164.70	12.09%	0.55
113. Maruti Maruti	MLM	945.99	1,794.17	52.7%	378.58	116.07	262.51	27.75%	1.25
114. Masses Energy	MEE	784.00	1,886.07	41.6%	128.07	44.87	83.20	10.61%	1.35
115. McDonald's Corp	MCD	15,278.00	22,593.50	67.6%	3,572.10	48.50	3,522.60	23.05%	1.15
116. Memoran Exploration	MMR	112.35	1,081.22	10.6%	(89.56)	(1.10)	(88.66)	-66.57%	1.10
117. Mediamax Communications	MCC	(253.06)	2,897.41	-8.8%	(48.84)	53.68	(102.32)	40.43%	1.35
118. Melex Corp	MECH	1,335.35	1,817.34	68.6%	522.86	147.19	375.67	28.13%	0.95
119. MGM Mirage	MGM	6,080.70	17,235.93	35.2%	1,553.34	813.42	639.92	10.58%	1.05
120. Microchip Technology	MCHP	1,036.22	2,188.35	47.4%	377.75	73.80	303.95	29.33%	1.05
121. Micron Technology	MU	7,752.00	9,739.00	79.6%	(168.00)	30.00	(198.00)	-2.55%	1.60
122. Minerals Technologies	MTX	751.17	852.17	87.1%	86.28	28.35	57.92	7.71%	0.95
123. Morguard Corp	MRC	496.21	1,593.68	31.3%	14.42	12.78	1.66	0.33%	0.35
124. Mylan Labs	MYL	3,312.82	8,110.14	40.8%	(1,081.06)	73.96	(1,154.02)	-34.83%	0.65
125. Nabors Industries	NBR	4,514.12	7,625.55	57.7%	1,218.40	257.20	961.20	21.25%	1.10
126. National Fuel Gas	NFG	1,630.11	2,428.11	67.1%	338.48	131.81	206.67	12.37%	0.85
127. NATIONAL SEMIC.	NSM	1,748.80	1,765.40	98.8%	530.60	153.30	376.30	21.49%	1.30
128. Newmont Mining	NEM	7,548.00	10,231.00	73.8%	845.00	292.00	553.00	6.93%	0.80
129. Nexen Inc	NXY	5,810.00	10,220.00	54.9%	1,886.00	792.00	1,094.00	19.68%	1.00
130. Noble Corp	NE	4,068.32	5,062.50	84.8%	1,485.38	282.22	1,203.16	27.83%	1.00
131. Noble Energy	NBL	4,808.80	6,669.89	72.2%	1,348.76	423.69	923.07	19.20%	1.00
132. NORBORD INC.	NBD	360.00	840.00	42.8%	(90.00)	(45.00)	(45.00)	-12.50%	0.80
133. Nordisk Southern	NSC	9,727.00	15,728.00	61.9%	2,237.00	773.00	1,464.00	15.05%	1.05
134. NRG Energy Inc	NRG	4,526.00	13,646.00	33.2%	946.00	377.00	569.00	12.57%	0.95
135. NUSTAR ENERGY L.P.	NS	1,894.83	3,440.45	58.0%	161.74	11.44	150.30	7.53%	0.55
136. OCCIDENTAL PETROLEUM	OXY	22,623.00	24,564.00	92.9%	7,880.50	3,461.50	4,405.00	18.30%	1.00
137. Orient-Express Hotel	OEH	848.53	1,507.14	56.3%	83.57	14.81	48.76	6.75%	1.05
138. Overseas Shipholding	OSG	1,818.03	3,348.35	54.3%	174.85	(3.65)	178.50	9.82%	1.10

Non-Utility Comparison Group  
Equity Ratios, Returns on Equity and Betas  
(Dollars in Millions)

Company	Ticker Symbol	A Common Equity	B Reported Capital	C Equity Ratio	D Pre Tax Income	E Income Tax	F Post-Tax Income	G Return on Equity	H NYSE Beta
139 Packaging Corp	PKG	760.86	1,159.36	65.6%	287.86	97.50	170.06	22.35%	0.85
140 PARKER DRILLING	PKD	534.72	888.44	60.2%	144.19	38.55	105.63	19.75%	1.45
141 PATTERSON-UTI ENERGY	PTEN	1,896.03	1,948.03	97.4%	870.80	232.18	438.64	23.13%	1.15
142 Peabody Energy	BTU	2,518.67	5,658.39	44.5%	340.83	(73.11)	418.94	16.63%	1.15
143 Penn Virginia Corp	PVA	810.09	1,561.25	51.9%	81.25	30.50	50.75	6.28%	0.90
144 Petrobank Energy & R	PBG.TO	451.30	753.10	59.9%	101.67	9.55	92.12	20.41%	0.80
145 Petro-Canada	PCZ	11,870.00	15,209.00	78.0%	4,907.00	2,174.00	2,733.00	23.02%	0.80
146 PETROHAWK ENERGY	HK	2,008.89	3,604.02	55.7%	86.03	33.13	52.90	2.63%	0.80
147 Petroleum Development	PETD	395.52	630.52	62.7%	54.19	20.58	33.21	8.40%	1.00
148 PETROQUEST ENERGY IN	PQ	302.24	451.07	67.0%	84.25	23.66	40.62	13.44%	0.85
149 PHH CORP.	PHH	1,528.00	5,978.00	26.9%	484.00	(34.00)	468.00	32.57%	0.85
150 Photonics Inc	PLAB	854.28	845.53	77.4%	21.83	4.72	16.91	2.58%	1.70
151 PINNACLE ENTERTAIN.	PNK	1,052.35	1,893.57	55.6%	8.53	9.78	(1.15)	-0.11%	1.15
152 Praxair Inc	PX	5,142.00	8,508.00	60.5%	1,639.00	419.00	1,220.00	23.73%	1.00
153 Precision Drilling T	PDU.TO	1,316.67	1,436.48	91.7%	349.03	6.21	342.82	26.04%	0.85
154 Plide International Inc	PDE	3,470.40	4,586.10	75.7%	615.00	173.70	433.30	12.54%	1.10
155 PROVIDENT ENERGY	PVX	1,741.81	3,321.14	52.4%	185.08	74.17	91.89	5.28%	0.50
156 Questar Corp	STR	2,577.90	3,599.10	71.6%	798.00	294.90	503.10	19.52%	0.85
157 Quicksilver Resource	KWK	1,058.35	1,892.17	56.8%	178.06	60.90	117.16	10.87%	1.20
158 Qwest Communications	Q	583.00	14,213.00	4.0%	1,084.00	(3.00)	1,067.00	189.52%	1.60
159 Republic Airlines Holdings	RJET	428.08	2,207.96	19.3%	133.86	51.21	82.75	19.42%	0.80
160 Republic Services	RSG	1,303.90	2,669.30	45.4%	509.20	190.60	315.40	24.18%	0.75
161 ROGERS COMMUNICATION	RGI	4,624.00	10,658.00	43.4%	871.00	278.75	692.25	14.97%	1.30
162 Rowan Companies	RDC	2,348.43	2,788.92	84.8%	700.11	241.01	459.10	19.55%	1.20
163 Royal Caribbean Cruise Line	RCL	6,757.34	12,103.89	55.8%	603.40	-	603.40	8.63%	1.10
164 Savvis Inc	SVVS	151.89	865.50	22.8%	(8.60)	1.36	(9.98)	-8.68%	1.35
165 SBA Communications	SBAC	837.39	2,242.39	15.0%	(60.80)	0.86	(61.55)	-18.28%	2.30
166 Seacor Holdings	CKH	1,621.81	2,559.57	63.4%	373.31	130.44	242.87	14.98%	1.00
167 SEMICONDUCTOR MFG IN	SMI	3,012.51	3,679.87	81.9%	(90.89)	(29.72)	(50.97)	-1.69%	1.00
168 Shaw Communications (Class B)	SURB.TO	1,994.04	4,765.55	41.8%	531.35	142.87	388.48	19.48%	1.15
169 Sherritt International Corp	S.TO	2,650.10	3,239.90	81.8%	599.90	208.10	391.80	14.78%	0.85
170 SINGAPORE TELECOMMUN	SGAPY	15,214.13	19,320.74	78.7%	3,247.93	378.40	2,869.53	18.66%	0.70
171 Sirius Satellite	SIRI	(792.73)	485.88	-163.2%	(562.81)	2.43	(565.24)	71.30%	1.55
172 Six Flags Inc	SIX	(559.08)	1,886.45	-28.1%	(237.86)	6.20	(244.06)	43.68%	1.25
173 Southern Union	SUG	1,936.44	5,166.13	37.9%	323.97	95.25	228.72	11.68%	1.05
174 Southwest Airlines	LUV	6,941.00	8,991.00	77.2%	762.00	291.00	471.00	6.79%	1.05
175 Southwestern Energy	SWN	1,646.50	2,624.10	52.7%	357.02	136.85	221.17	13.43%	1.10
176 Speedway Motorsports	TRK	827.67	1,256.11	65.9%	154.32	61.02	93.30	11.27%	0.75
177 ST. MARY LAND & EXPL	SM	863.34	1,435.84	60.1%	300.26	110.55	189.71	21.97%	0.90
178 Stanwood Hotels	HOT	2,076.00	5,666.00	36.6%	777.00	190.80	586.20	28.24%	1.30
179 Simcoelectronics	STM	9,573.00	11,590.00	81.9%	715.00	35.00	680.00	7.10%	1.70
180 STOLT-NIELSEN ADR	SNAY	1,354.48	1,781.42	76.0%	158.24	6.15	153.08	11.30%	1.25
181 Stone Energy	SGY	895.80	1,285.80	69.9%	211.43	68.34	143.08	16.15%	1.10
182 Suncor Energy	SU.TO	11,913.00	15,424.00	75.3%	3,345.00	513.00	2,832.00	24.39%	0.90
183 Swift Energy	SFY	836.05	1,423.05	58.8%	244.55	91.66	152.89	18.25%	1.15
184 Talisman Energy	TLM.TO	7,863.00	12,925.00	62.1%	2,017.00	971.00	1,046.00	13.14%	1.00

Non-Utility Comparison Group  
Equity Ratios, Returns on Equity and Betas  
(Dollars in Millions)

Company	Ticker Symbol	A Common Equity	B Reported Capital	C Equity Ratio	D Pre Tax Income	E Income Tax	F Post-Tax Income	G Return on Equity	H NYSE Beta
185 Teck Cominco Ltd B	TCKS.TO	7,719.00	9,211.00	83.8%	2,583.44	598.44	1,687.00	21.86%	1.30
186 TEEKAY CORP.	TK	2,687.87	7,973.27	33.7%	178.82	-	178.82	6.65%	1.05
187 Telefonica SA ADR	TEF	29,593.75	98,588.48	30.0%	13,089.66	2,300.55	10,789.11	36.40%	1.10
188 Telefonos De Mexico	TMX	3,874.86	11,158.11	34.7%	3,724.98	1,087.26	2,637.72	68.59%	0.65
189 Telephone & Data	TDS	3,825.66	5,558.56	70.6%	685.39	269.05	416.34	10.81%	1.10
190 TELSTRA CORPORATION	TLSYY	10,808.83	20,995.21	51.5%	4,113.47	1,242.28	2,871.19	26.56%	0.75
191 Telus Corporation	TTO	6,926.20	11,508.70	60.2%	1,491.50	233.60	1,257.90	18.18%	0.85
192 TELBEC INC.	TMB.TO	566.00	1,906.00	29.7%	132.00	(5.65)	137.65	24.32%	0.75
193 Time Warner Telecommunications	TWTC	568.23	1,936.55	29.2%	(99.27)	1.00	(40.27)	-7.11%	1.55
194 Transalta Corp	TA.TO	2,296.50	4,004.00	57.4%	328.20	20.40	308.80	13.43%	0.60
195 Transcanada Corp	TRP	9,697.00	22,182.00	43.8%	1,810.00	480.00	1,330.00	13.81%	0.60
196 Transocean Inc	RIG	12,566.00	23,651.00	53.1%	2,805.00	238.00	2,567.00	20.43%	1.10
197 Tsakos Energy Naviga	TNP	854.54	2,200.12	38.8%	150.00	-	150.00	21.06%	0.65
198 Ultra Petroleum Corporation	UPL	853.57	1,143.57	74.8%	255.86	105.82	150.04	21.12%	1.00
199 Union Pacific	UNP	15,565.00	23,128.00	67.4%	3,009.00	1,154.00	1,855.00	11.80%	0.95
200 Unit Corp	UNT	1,434.81	1,555.41	92.2%	413.41	147.15	266.26	16.55%	1.05
201 United Rentals	URI	2,018.00	4,718.00	42.8%	478.00	173.00	305.00	15.15%	1.40
202 UPM-KYMMENE OYJ	UPMKY	10,665.92	15,838.49	67.5%	461.33	333.35	127.98	1.20%	1.15
203 Us Cellular	USM	3,156.15	4,198.44	75.1%	548.50	218.71	329.79	10.33%	1.00
204 Vail Resorts Inc	MTN	714.03	1,307.77	54.8%	100.65	39.25	61.40	8.65%	1.00
205 Verizon Communications	VZ	50,581.00	78,734.00	64.2%	10,641.00	3,787.00	6,854.00	13.55%	0.85
206 VITRO S.A.B. DE C.V.	VTO	895.96	2,004.84	34.7%	15.39	4.12	12.27	1.78%	0.85
207 Volcanium Cellulose	VCP	3,683.00	5,080.00	76.4%	648.00	48.75	600.25	15.45%	1.15
208 Vulcan Materials	VMC	3,759.60	5,285.42	71.1%	697.50	197.26	470.24	12.51%	1.20
209 W&T OFFSHORE INC	WTL	1,151.34	1,603.10	68.9%	218.74	72.44	144.30	12.53%	1.40
210 Waste Connections	WCN	775.20	1,494.70	51.9%	159.00	59.90	99.10	12.78%	0.80
211 Waste Management	WMI	5,792.00	13,800.00	42.0%	1,698.00	618.00	1,080.00	18.65%	0.90
212 Westjet Airlines Ltd	WJA.TO	849.90	2,207.54	43.0%	270.85	57.29	213.56	22.45%	0.85
213 Weyerhaeuser Co	WY	7,881.00	14,040.00	56.8%	374.00	11.00	363.00	4.55%	1.20
214 WHITING PETROLEUM CO	WLL	1,490.82	2,359.07	63.2%	207.16	76.56	130.60	8.76%	1.20
215 Williams Companies	WMB	6,375.00	14,132.00	45.1%	1,413.00	540.00	873.00	13.65%	1.70
216 Williams Partners LP	WPZ	161.48	1,161.48	13.9%	164.63	-	164.63	101.95%	0.60
217 Woodside Petroleum L	WOPEY	4,465.82	5,007.71	89.2%	1,616.93	503.31	1,112.62	24.91%	0.90
218 Wynn Resorts Ltd	WYNN	1,948.15	5,481.49	35.5%	394.24	83.98	310.26	16.95%	1.15
219 XTO Energy	XTO	7,341.00	14,261.00	55.7%	2,642.00	923.00	1,719.00	21.65%	0.90
220 Average				51.71%				14.14%	1.08



**Electric Utility Comparison Group  
Equity Percentages and Betas**

Name	A Ticker Symbol	B (\$ Millions)		C Total Reported Capital	D Equity Percent	E Beta
		Year-end Common Equity				
1 Allegheny Energy	AYE	2,534.7	8,479.3	39.1%	2.10	
2 Alliant	ALE	742.6	1,153.5	64.4%	0.95	
3 Alliant Energy	LNT	2,662.5	4,329.5	61.5%	0.90	
4 Ameren Corp	AEE	8,730.0	12,638.0	53.3%	0.80	
5 American Elec Power	AEP	10,079.0	24,342.0	41.4%	1.15	
6 Avista Corp	AVA	914.0	1,548.9	59.0%	1.00	
7 Black Hills	BKH	989.9	1,634.2	63.2%	1.10	
8 Central Vermont Public Svc.	CV	188.4	311.8	60.4%	0.86	
9 Centerpoint Energy	CNP	1,810.0	10,174.0	17.8%	0.70	
10 CH Energy Group	CHG	522.2	948.1	55.1%	0.86	
11 Cleco Corp	CNL	1,009.9	1,780.5	56.7%	1.35	
12 CMS Energy Corp	CMS	2,118.0	8,212.0	25.8%	1.55	
13 Consolidated Edison	ED	8,852.0	16,687.0	53.0%	0.70	
14 Constellation Energy	GEG	5,327.0	10,190.7	52.3%	0.95	
15 Dominion Resources	D	9,390.0	22,898.0	41.0%	1.05	
16 DPL Inc	DPL	871.7	2,437.1	35.8%	0.90	
17 DTE Energy	DTE	5,853.0	12,824.0	45.6%	0.80	
18 Duke Energy	DUK	21,199.0	30,897.0	69.1%		
19 Edison International	EIX	8,393.0	18,375.0	45.7%	1.05	
20 El Paso Electric	EE	888.5	1,321.8	50.4%	0.80	
21 Empire District Electric Co	EDE	538.2	1,081.1	49.9%	0.85	
22 Energy East Corp	EAS	3,206.0	7,108.7	45.1%	0.85	
23 Entergy Corp	ETR	7,836.8	17,902.0	43.8%	0.85	
24 Exelon Corp	EXC	10,133.0	22,189.0	45.7%	0.90	
25 FirstEnergy Corp	FE	8,977.0	17,846.0	50.3%	0.90	
26 Florida Public Utilities	FPU	48.9	98.9	49.4%	0.55	
27 Fortis Inc	FTS.TO	2,595.0	7,666.0	33.8%	0.50	
28 FPL Group	FPL	10,735.0	22,015.0	48.8%	0.80	
29 Great Plains Energy	GXP	1,568.3	2,709.8	57.8%	0.85	
30 Hawaiian Electric	HE	1,273.5	2,501.8	50.8%	0.70	
31 IDACORP, Inc.	IDA	1,207.3	2,384.2	51.1%	1.00	
32 Integrys Energy	TEG	3,232.7	5,552.0	58.2%	0.85	
33 ITC Holdings Corp	ITC	583.1	2,041.5	27.8%	0.75	
34 Maine & Maritimes Co	MAM	42.9	70.4	61.0%	0.35	
35 MDU Resources	MDU	2,515.6	3,578.1	68.4%	0.85	
36 MGE Energy	MGEE	427.7	660.1	64.8%	0.85	
37 Nisource Inc	NI	5,076.6	10,871.0	47.6%	0.95	
38 Northeast Utilities	NU	2,908.3	5,974.6	48.7%	0.85	
39 Northwestern Corp.	NWE	823.0	1,848.4	49.8%		
40 Nstar	NST	1,701.9	4,248.2	40.1%	0.75	
41 OGE Energy	OGE	1,680.9	3,025.5	55.6%	0.75	
42 Otter Tail Corp	OTTR	523.2	882.1	59.3%	0.75	
43 Pepco Holdings	POM	4,018.4	8,753.0	45.9%	0.90	
44 PG & E Corp	PCG	8,545.0	16,976.0	50.3%	0.95	
45 Pinnacle West Capital	PNW	3,531.6	6,558.7	53.0%	1.00	
46 PNM Resources	PNM	1,691.9	2,935.8	57.6%	0.95	
47 Portland General	POR	1,316.0	2,829.0	50.1%		
48 PPL Corp	PPL	5,538.0	12,747.0	43.4%	0.95	
49 Progress Energy	PGN	8,417.5	17,252.0	48.8%	0.95	
50 Public Services Enterprises	PEG	7,295.0	16,041.0	45.6%	0.95	
51 Puget Energy Inc	PSD	2,521.9	5,202.7	48.5%	0.80	
52 Scana Corp	SCG	2,953.0	5,952.0	49.6%	0.80	
53 Sempra Energy	SRE	8,315.0	13,071.0	63.6%	1.00	
54 Sierra Pacific Res	SRP	2,896.6	7,134.4	42.0%	1.25	
55 Southern Co	SO	12,337.0	27,608.0	44.7%	0.75	
56 TECO Energy	TE	2,017.0	5,175.4	39.0%	1.10	
57 UIL Holdings	UIL	464.3	843.6	49.2%	0.80	
58 Unisource Energy	UNS	690.1	2,214.9	31.2%	0.70	
59 Unitil Corp	UTL	100.3	262.8	38.2%	0.45	
60 Vectren Corp	VVC	1,233.7	2,479.1	49.8%	0.90	
61 Westar Energy	WR	1,826.0	3,738.3	48.8%	0.90	
62 Wilmington Capital M	WCMA.T	20.0	38.9	51.4%	0.45	
63 Wisconsin Energy	WEC	3,098.0	6,302.1	49.2%	0.80	
64 Xcel Energy	XEL	5,296.8	12,748.1	49.4%	1.05	
Average				49.2%	0.89	

**Comparable Non-Utility Companies  
Risk Adjustment to Return on Equity**

	A	B	C	D	E
	Average Beta	Risk Premium	Adjustment To Non- Utilities	Non- Utilities ROE	Adjusted Non-Utilities
1 Electric Utilities	0.89				
2 Comparable Non-Utilities	<u>1.08</u>			14.14%	<b>12.82%</b>
3 Difference	0.19	7.0%	1.32%		

**AEP Ohio Utilities**  
**Adjustment for Capital Structure Differences - Significantly Excessive Earnings Test**

	A	B	C	D	E	F	G
	Source	Electric Distribution Utilities	Columbus Southern	Ohio Power	Non-Utility Companies	Columbus Southern	Ohio Power
1 Equity Proportions	Sch 3 & 4	49.2%			51.7%		
2 Risk-adjusted Return on Equity	Sch 2 & 5	10.68%			12.82%		
3 Corporate Tax Rate	Avg. 3 Ln 17	35.82%			35.82%		
4 Tax Multiplier	1/(1-Ln 3)	1.56			1.56		
5 Post-Tax Return on Equity	Ln 2 * Ln 4	16.64%			19.97%		
6 Weighted Cost of Equity	Ln 1 * Ln 5	8.18%			10.33%		
7 Cost of Debt	Fed Reserve	7.31%			7.31%		
8 Weighted Cost of Debt	Ln 7 * (1-Ln 1)	3.72%			3.53%		
9 Composite Capital Cost	Ln 6 + Ln 8	11.90%	11.90%	11.90%	13.86%	13.86%	13.86%
10 Year-end Common Equity (\$000)	FERC Fm 1		1,166,877	2,291,017		1,166,677	2,291,017
11 Year-end Total Capital (\$000)	FERC Fm 1		2,464,901	4,804,849		2,484,901	4,804,849
12 Equity Percent	Ln 10/Ln 11		47.3%	47.7%		47.3%	47.7%
13 Cost of Debt	Fed Reserve		7.31%	7.31%		7.31%	7.31%
14 Weighted Cost of Debt	(1-Ln 12) * Ln 13		3.85%	3.82%		3.85%	3.82%
15 Weighted Cost of Equity	Ln 9 - Ln 14		8.05%	8.08%		10.01%	10.03%
16 Unweighted Cost of Equity Post Tax	Ln 15/Ln 12		17.01%	16.94%		21.14%	21.04%
17 Income Tax Rate	Company Filings		36.05%	35.62%		36.05%	35.62%
18 Cost of Equity Pre-Tax	Ln 16*(1-Ln 17)		10.88%	10.90%		13.52%	13.54%
19 Adjusted Non-Utilities Cost of Equity	Ln 18 Cols G,H,I		13.52%	13.54%			
20 Average Utilities & Non-Utilities	(Ln 16 + Ln 19)/2		12.20%	12.22%			
21 Premium on ROE	FERC		2.00%	2.00%			
22 Threshold for SEE	Ln 19 + Ln 20		14.20%	14.22%			