

BOEHM, KURTZ & LOWRY

ATTORNEYS AT LAW
36 EAST SEVENTH STREET
SUITE 1510
CINCINNATI, OHIO 45202
TELEPHONE (513) 421-2255
TELECOPIER (513) 421-2764

Via Overnight Mail

May 4, 2010

Mr. Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

RECEIVED

MAY 05 2010

**PUBLIC SERVICE
COMMISSION**

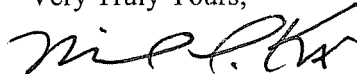
Re: Case No. 2009-00459

Dear Mr. Derouen:

Please find enclosed the original and twelve (12) copies each of the RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC. to KENTUCKY POWER COMPANY DATA REQUESTS and FIRST DATA REQUEST OF COMMISSION STAFF filed in the above-referenced matter. By copy of this letter, all parties listed on the Certificate of Service have been served.

Please place this document of file.

Very Truly Yours,



David F. Boehm, Esq.

Michael L. Kurtz, Esq.

BOEHM, KURTZ & LOWRY

MLKkew
Attachment

cc: Certificate of Service

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served by e-mailing a true and correct copy via electronic mail (when available) and regular U.S. mail (unless otherwise noted) to all parties on the 4th day of May, 2010.

Paul D Adams
Office of the Attorney General Utility & Rate
1024 Capital Center Drive
Suite 200
Frankfort, KY 40601-8204

Joe F Childers
Getty & Childers
1900 Lexington Financial Center
250 West Main Street
Lexington, KY 40507

Sam R Collins
470 Main Street, 2nd Floor, Suite 1
Post Office Drawer 1179
Hazard, KY 41702

Richard Hopgood
Wyatt, Tarrant & Combs, LLP
250 West Main Street
Suite 1600
Lexington, KY 40507-1746

Honorable Matthew R Malone
Attorney at Law
Hurt, Crosbie & May PLLC
The Equus Building
127 West Main Street
Lexington, KY 40507

Steven T Nourse
American Electric Power Service Corp
1 Riverside Plaza, Legal Dept 29th F
Columbus, OH 43215-2373

Honorable Mark R Overstreet
Attorney at Law
Stites & Harbison
421 West Main Street
P. O. Box 634
Frankfort, KY 40602-0634

Stephen A Sanders
Appalachian Citizens Law Center, Inc
317 Main Street
Whitesburg, KY 41858

Matthew J Satterwhite
American Electric Power Service Corp
1 Riverside Plaza, Legal Dept 29th F
Columbus, OH 43215-2373

Holly Rachel Smith
Hitt Business Center
3803 Rectortown Road
Marshall, VA 20115

Errol K Wagner
Director of Regulatory Services
American Electric Power
101A Enterprise Drive
P. O. Box 5190
Frankfort, KY 40602



David F. Boehm, Esq.
Michael L. Kurtz, Esq.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

RECEIVED

MAY 05 2010

PUBLIC SERVICE
COMMISSION

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

1. Please refer to Page 19, lines 4-20, and Page 20, line 1 of Mr. Kollen's testimony.
 - (a) Did Mr. Kollen review Recommendations V-1, V-2 and V-3 of the Schumaker & Company March 24, 2003 "Final Report Focused Management Audit of The Hazard Service Area of American Electric Power Power/Kentucky" prior to preparing his testimony? The recommendations are referenced in the Company's Response to the Staff's Second Set of Data Requests, No. 46. (A copy of the recommendations is attached as Exhibit 1 to these data requests)
 - (b) Does Mr. Kollen agree or disagree with Recommendations V-1, V-2 and V-3 of the Schumaker & Company Final Report?
 - (c) Please provide the basis, including any studies, reports or other documentation, for Mr. Kollen's agreement or disagreement with Recommendations V-1, V-2 and V-3 of the Schumaker & Company Final Report.

Response:

- (a) No.
- (b) Mr. Kollen can neither agree nor disagree without further information.
- (c) Please refer to the response to part (b) of this question.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

2. Please refer to Page 20, lines 2-11, of Mr. Kollen's testimony. Please identify:
- (a) The highest System Average Interruption Duration Index that in Mr. Kollen's opinion is consistent with Kentucky Power's obligation to provide reasonable service.
 - (b) The highest System Average Interruption Frequency Index that in Mr. Kollen's opinion is consistent with Kentucky Power's obligation to provide reasonable service.
 - (c) The highest Customer Average Interruption Duration Index that in Mr. Kollen's opinion is consistent with Kentucky Power's obligation to provide reasonable service.
 - (d) Please provide the basis, including any studies, reports or other documentation, for the responses to subparts (a)-(c) of this data request.

Response:

- (a) Mr. Kollen has not studied and does not have a recommendation on the highest reasonable SAIDI for KPC.
- (b) Mr. Kollen has not studied and does not have a recommendation on the highest reasonable SAIFI for KPC.
- (c) Mr. Kollen has not studied and does not have a recommendation on the highest reasonable CAIDI for KPC.
- (d) Refer to the responses to parts (a) through (c) of this question.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

3. Please refer to Page 22, Lines 2-5 of Mr. Kollen’s testimony.
- (a) Please explain and provide the basis, including any studies, reports or other documentation, for Mr. Kollen’s testimony that the experience of Public Service Company of Oklahoma “does not demonstrate the superiority of the cycle based approach compared to a performance based approach.”
 - (b) Does Mr. Kollen contend that the employment by Kentucky Power of a performance based vegetation management approach would be superior to the cycle based vegetation management approach?
 - (c) Please provide the basis, including any studies, reports or other documentation, for the responses to subpart (b) of this data request.

Response:

- (a) Refer to page 21 line 2 through page 22 line 7 of Mr. Kollen’s Direct Testimony. As noted in that testimony, the Company failed to provide any evidence that the cycle based approach was superior to a performance based approach despite repeated requests for such studies and analyses.
- (b) Mr. Kollen contends that the Company has not demonstrated that such a change in its approach to vegetation management is necessary or beneficial and has not justified the costs it proposes to recover.
- (c) Please refer to the responses to parts (a) and (b) of this question.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

4. Please refer to Page 26, lines 18-19 of Mr. Kollen's testimony. Please identify:
- (a) the specific costs Mr. Kollen is referring to when he testifies: "These costs already are embedded in the test year."
 - (b) the amount of the costs embedded in the test year and referred to by Mr. Kollen in his testimony quoted in subpart (a) of this data request.
 - (c) the portions of the application or supporting work papers supporting the response to subparts (a) and (b) of this data request.

Response:

- (a) The capital expenditures that already have been incurred and are reflected in the Company's rate base and capitalization.
- (b) Mr. Kollen does not have the information requested. Mr. Phillips acknowledges that the Company already has installed SCADA in 37 distribution stations out of 92. [Phillips Direct at 36-37]. These amounts are included in the Company's rate base and capitalization. The Company can obtain these amounts from its accounting records.
- (c) Please refer to the response to part (b) of this question.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

5. Please refer to Page 27, lines 6-20, and Page 28, lines 1-12 of Mr. Kollen’s testimony. Please identify:
- (a) which, if any, of these “reasons” would be addressed in whole or part by a “reliability” tracker that would allow Kentucky Power to recoup reliability associated costs above base rate amounts as they are incurred?
 - (b) the basis, including any studies, reports or other documentation, supporting the response to subpart (a) of this data request.

Response:

- (a) The Company has neither proposed a “reliability tracker” (rider) nor described how such a tracker would operate. If it had proposed such a tracker (rider), based only on the limited description reflected in the question, Mr. Kollen would oppose it. Such trackers (riders) are poor regulatory policy and may not be legal in Kentucky. The same reasons cited in the testimony in opposition to the Company’s request for incremental cost recovery also would be applicable to a tracker (rider). In addition, such a tracker (rider) would even more deeply involve the Commission in micromanaging the Company’s vegetation management, introduce a new form of ratemaking recovery, and reduce the cost control incentives inherent in the use of a historic test year for all revenues and costs.
- (b) Please refer to the response to part (a) of this question.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

6. Please refer to Page 13, lines 33-35 of Mr. Kollen's testimony in which he states: "The Company has failed to consider the effect on its costs and revenue requirement due to a richer common equity ratio to offset the rating agencies' imputation of debt equivalents for purchased power contracts."
- (a) Does Mr. Kollen agree that Kentucky Power's interest Rockport Unit Nos. 1 and 2 is a purchased power agreement of the type Mr. Kollen contends ?
 - (b) Please provide the basis, including any studies, reports or other documentation, supporting the response to subpart (a) of this data request.
 - (c) Please identify each Kentucky Power proceeding in which Kentucky Power has requested "a richer common equity ratio to offset the rating agencies' imputation of debt equivalents for purchased power contracts."
 - (d) Please identify and provide any rating agency's rating or report with respect to Kentucky Power in which the rating agency imputed a debt equivalent associated with the Rockport Purchase Power Agreement.
 - (e) Please identify the amount of incremental revenue increase that would be required in the current proceeding as a result of a richer common equity ratio to offset the rating agencies' imputation of debt equivalents for purchase power contract.
 - (f) Please provide all calculations supporting or relating to the responses to subparts (d) and (e) of this data request.

Response:

- (a) Yes. Typically, the capacity component of PPAs are included by the rating agencies as debt equivalents.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

(b) Please refer to the following link for the S&P's methodology:

<http://www2.standardandpoors.com/portal/site/sp/en/eu/page.article/2,1,1,0,1204836565848.html?vregion=eu&vlang=en>

(c) Mr. Kollen is not aware that this issue has been addressed in any prior KPCo proceeding for the Rockport PPA.

(d) Mr. Kollen is not aware that any rating agency has imputed a debt equivalent for the Rockport PPA. Mr. Kollen is aware that S&P's does not impute a debt equivalent for the Rockport PPA, but believes this is due to the fact that the PPA is internal to AEP rather than an agreement with an unaffiliated third party. The S&P's debt rating is determined on an AEP consolidated basis rather than on a standalone KPCo basis. Unlike the Rockport PPA, the wind power PPA is with an unaffiliated third party and would be included as a debt equivalent based on the S&P's published methodology (see response to part (b) of this question).

(e) Mr. Kollen has not performed the requested computation in this proceeding. However, Mr. Kollen performed a computation of the effect on the revenue requirement of an imputed debt equivalent for the proposed wind power purchased power contract in Case No. 2009-00545. Please see the confidential Exhibit ___ (LK-10) attached to his testimony in that proceeding.

(f) Refer to the response to part (e) of this question. In addition, please refer to the Company's response to KIUC 1-3 in this proceeding.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

7. Please refer to Page 19, lines 8-16, Page 20 lines 1-13, and Page 21, lines 1-7 of Mr. Barron's testimony.
- (a) Has Mr. Barron calculated the impact of the Company's proposed QP rate design on the total bill for higher load factor QP customers referenced by Mr. Barron at lines 10-11 of page 20 of his testimony?
 - (b) Has Mr. Barron calculated the impact of the Company's proposed QP rate design on the total bill for customers other than the higher load factor QP customers referenced by Mr. Barron at lines 10-11 of page 20 of his testimony?
 - (c) Please provide the results of the calculations described in subparts (a) and (b) of this data request and all supporting workpapers.

Response:

- (a) No.
- (b) No.
- (c) No such analyses of the impact of the Company's proposed QP rate design on the total bill for customers has been performed.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

8. Please refer to Page 8, lines 4-14 of Mr. Barron's testimony. Mr. Baron testifies that “residential customers did not pay sufficient revenues during the test year to even cover the operating expenses associated with their usage of power from KPCo, let alone a return on the invested capital (generating units, transmission plant, distribution facilities) built to serve these customers. Rather, KPCo’s return on investment built to serve residential customers was provided by all of the other KPCo rate classes (SGS, MGS, LGS, QP, CIP-TOD, MW, OL and SL).” To the extent Kentucky Power is not earning its authorized return on invested capital does Mr. Baron agree that the revenues provided by non-residential rate class customers classes (SGS, MGS, LGS, QP, CIP-TOD, MW, OL and SL) would not be sufficient, when combined with the revenues from residential customers, to provide Kentucky Power its authorized return on capital.

Response:

All else being equal, (for example, assuming that the Company’s revenue requirement deficiency is correct, as filed by KPCo), then Mr. Baron agrees with the premise of the statement.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

9. Please refer to Page 15, lines 5-7, of Mr. Baudino's testimony. With respect to the criterion that a member of the proxy group receive at least 50% of its revenue from electric operations:
- (a) Please provide copies of all analyses, studies, and documentation prepared by Mr. Baudino demonstrating that the proportion of a company's revenues from electric utility operations is related to investors' risk perceptions.
 - (b) Please provide all analyses, studies, and documentation prepared by Mr. Baudino to support the use of a 50% of revenue from electric operations threshold in selecting the proxy group. If Mr. Baudino has performed no such analyses or studies, please provide a complete explanation supporting his selection of a 50% threshold, including any studies, reports or other documentation supporting the use of the 50% threshold.
 - (c) Please provide copies of any independent analyses, studies, or publications that support Mr. Baudino's position that the percent of revenues from electric utility operations is related to investors' risk perceptions.

Response:

- (a) Mr. Baudino did not perform the studies referred to in the question. Mr. Baudino employed regulated revenues as a selection criterion in order to develop a group of comparison companies that were similar to Kentucky Power in terms of business risk, which is a relevant risk characteristic considered by investors.
- (b) Mr. Baudino selected this criterion in order to include companies that derived a substantial portion of their operations from regulated electric operations. This is important because regulated electric operations are less risky than unregulated ventures. In Mr. Baudino's judgment, a 50% regulated electric revenue cutoff results in a reasonably sized group of companies for purposes of estimating the

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

cost of equity for the regulated electric operations of Kentucky Power. Mr. Baudino did not prepare any studies or documentation for the 50% regulated electric revenue criterion.

- (c) Mr. Baudino does not have any such studies or analyses. Also, please refer to the response to part (a) of this data request.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

10. Please refer to Mr. Baudino's testimony at Page 14, lines 16-23, Page 15, lines 1-17, and Table 1 on Page 16.
- (a) Please provide a complete list of all companies considered by Mr. Baudino for inclusion in his proxy group.
- (b) For each company listed in response to subpart (a) of this data request please provide the values or other pertinent information for each of the screening criteria used by Mr. Baudino to select his proxy group.

Response:

- (a) Mr. Baudino began with the Electric and Electric and Gas Companies listed in the AUS Report, which is included in response to Data Request No. 11.
- (b) From the AUS Utility Report for April 2010, Mr. Baudino then selected companies that, according to the report, met the 50% or greater regulated electric criterion and that were rated either BBB or Baa. This resulted in the following group of companies:

	S&P Rating	Moody's Rating
AES Corporation (NYSE-AES)	BBB	A3
Allegheny Energy, Inc. (NYSE-AYE)	BBB+	Baa1
Ameren Corporation (NYSE-AEE)	BBB	Baa1
American Electric Power Co. (NYSE-AEP)	BBB	Baa2
Avista Corporation (NYSE-AVA)	BBB+	Baa1
Central Vermont Public Serv. Corp. (NYSE-CV)	NR	Baa1
Cleco Corporation (NYSE-CNL)	BBB	Baa1
CMS Energy Corporation (NYSE-CMS)	BBB	A3
Duke Energy Corporation (NYSE-DUK)	A	Baa2
El Paso Electric Company (ASE-EE)	BBB	Baa1

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

Empire District Electric Co. (NYSE-EDE)	BBB+	Baa1
Entergy Corporation (NYSE-ETR)	A-	Baa1
FirstEnergy Corporation (NYSE-FE)	BBB+	Baa1
Great Plains Energy Incorporated (NYSE-GXP)	BBB+	A3
Hawaiian Electric Industries, Inc. (NYSE-HE)	BBB	Baa2
Northeast Utilities (NYSE-NU)	BBB+	A3
OGE Energy Corp. (NYSE-OGE)	BBB +	Baa1
PG&E Corporation (NYSE-PCG)	BBB+	A3
Pinnacle West Capital Corp. (NYSE-PNW)	BBB-	Baa2
PNM Resources, Inc. (NYSE-PNM)	BB+	Baa2
TECO Energy, Inc. (NYSE-TE)	BBB	Baa1
UIL Holdings Corporation (NYSE-UIL)	NR	Baa2
UniSource Energy Corporation (NYSE-UNS)	BBB+	NR
Westar Energy, Inc. (NYSE-WR)	BBB	Baa1

From the group the following companies were excluded:

AES Corporation – No dividends
Allegheny Energy – proposed merger
Ameren – 2009 dividend cut
CMS Energy – Dividend only resumed in 2007, significant historical earning fluctuations
Duke Energy – 2007 restructuring, no enough historical data to calculate EPS and DPS growth
El Paso Electric – no dividends
FirstEnergy – proposed merger
Great Plains Energy – dividend cut in 2009
Hawaiian Energy – Split dividend yield from Value Line, possible dividend cut
PNM Resources – below investment grade rating from S&P

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

11. Please provide a copy of the April 2010 AUS Utility Report referenced at Page 14, lines 21-22 of Mr. Baudino's testimony.

Response:

Please refer to the attached report.

NATURAL GAS DISTRIBUTION, TRANSMISSION AND INTEGRATED NATURAL GAS COMPANIES

RANK	COMPANY	PER SHARE DATA (A)				PERCENT (E)				NET PLANT				COMMON EQUITY				REGULATION					
		12 MONTHS EARNINGS AVAILABLE	CURRENT ANNUAL DIVIDEND	BOOK VALUE	STOCK PRICE 1/15/00	12 MONTHS EARNINGS AVAILABLE	DIV PAYOUT	DIV YIELD	BOOK VALUE	STOCK PRICE 1/15/00	COMMON SHARES	PERCENT OF EARNINGS	PERCENT OF DIVIDEND	PERCENT OF BOOK VALUE	PERCENT OF MARKET VALUE	NET PLANT \$ MILL	PLANT PER \$ MILL	S&P BOND RATING	MOODY'S BOND RATING	EQUITY RATIO (%)	COMMON EQUITY (\$ MILL)	TOTAL CAPITAL	ALLOWED ROE
1	AGL Resources Inc. (NYSE-AGL)	1.19	1.76	23.09	37.50	77.1	61	4.7	162	7.6	31.5	64	1.79	4,146.0	1.79	A-	A3	41	12.9	7.5	10.52	-	-
2	Amos Energy Corporation (NYSE-ATO)	2.25	1.34	24.41	28.80	92.5	60	4.7	118	5.5	12.8	60	1.00	4,523.2	1.00	BBB+	BBB+	51	9.6	8.0	11.71	-	-
3	Chesapeake Utilities Corporation (NYSE-CFK)	2.23	1.26	28.20	31.05	7.4	56	4.1	110	4.5	13.9	64	1.62	436.4	1.62	NR	NR	61	9.6	8.2	10.50	-	12/99
4	Delta Natural Gas Company (NDQ-DGAS)	1.53	1.30	17.58	29.90	3.3	85	4.3	170	7.4	19.5	57	1.56	129.2	1.56	NR	NR	45	8.8	6.8	-	-	-
5	El Paso Corporation (NYSE-EP)	-0.83	0.04	4.48	11.08	716.0	NM	0.4	247	0.9	NM	60	3.86	17,895.0	3.86	BB	BB	17	NM	2.5	-	-	11/02
6	Energy Corporation (NYSE-EGN)	3.57	0.52	27.66	47.20	71.9	15	1.1	171	1.9	13.2	43	0.50	1,440.4	0.50	BBB	A1	78	13.1	11.6	13.40	06/02	-
7	Energy Incorporated (NDQ-EGAS)	0.76	0.54	7.56	9.91	4.3	71	5.4	137	7.4	13.0	81	0.52	39.8	0.52	NR	NR	65	10.5	8.8	12.63	-	-
8	EQT Corporation (NYSE-EQT)	1.19	0.88	13.65	43.50	157.6	74	2.0	319	6.4	36.6	74	3.87	4,914.7	3.87	BBB	BBB	52	7.7	7.1	11.00	-	-
9	Laclede Group, Inc. (NYSE-LOG)	2.54	1.58	24.16	33.62	22.0	62	4.7	139	6.5	13.2	57	0.50	859.0	0.50	A	A3	50	10.7	7.5	-	-	10/05
10	National Fuel Gas Company (NYSE-NFG)	2.56	1.54	20.28	51.53	80.6	52	2.6	254	6.6	20.1	46	1.66	3,166.4	1.66	BBB	BBB	57	12.9	10.7	9.50	-	-
11	New Jersey Resources Corp. (NYSE-NJR)	1.60	1.36	17.21	36.82	42.0	85	3.7	214	7.9	23.0	42	0.45	1,071.0	0.45	NR	NR	61	9.2	6.5	10.30	-	10/08
12	NICOR Inc. (NYSE-GAS)	2.98	1.86	22.81	42.84	45.5	62	4.3	188	8.2	14.4	81	1.11	2,939.1	1.11	AA	A1	51	13.5	8.2	10.17	03/09	-
13	Northwest Natural Gas Co. (NYSE-NWN)	2.83	1.66	24.84	46.19	26.6	59	3.6	186	6.7	16.3	98	1.65	1,670.1	1.65	AA-	A1	47	11.7	8.3	10.20	-	-
14	ONEOK, Inc. (NYSE-OKE)	3.18	1.76	20.76	46.57	106.3	55	3.8	224	8.5	14.7	17	0.70	7,993.7	0.70	BBB	BBB	25	15.7	6.9	10.50	-	-
15	Piedmont Natural Gas Co. Inc. (NYSE-PNY)	2.49	1.12	13.50	27.36	73.5	45	4.1	203	8.3	11.0	86	1.51	2,317.5	1.51	A	A3	48	18.9	10.7	10.60	-	-
16	Questar Corporation (NYSE-STR)	2.27	0.52	19.87	43.05	176.3	23	1.2	217	2.6	19.0	30	2.57	7,804.9	2.57	BBB+	BBB+	61	11.6	9.4	10.00	08/08	-
17	RGC Resources, Inc. (NDQ-RGCO)	2.11	1.32	20.65	31.07	2.2	63	4.2	150	6.4	14.7	98	1.03	79.4	1.03	NR	NR	62	10.6	8.4	9.85	-	-
18	South Jersey Industries, Inc. (NYSE-SJI)	0.97	1.32	18.22	41.02	29.9	137	3.2	225	7.2	42.5	57	2.38	845.4	2.38	A	A3	50	11.0	7.1	10.00	07/04	-
19	Southern Union Company (NYSE-SUG)	1.37	0.60	18.93	25.32	124.4	44	2.4	134	3.2	18.5	32	1.60	2,179.0	1.60	BBB-	BBB-	39	9.9	7.3	10.03	-	-
20	Southwest Gas Corporation (NYSE-SWX)	1.94	1.00	24.63	29.60	44.8	52	3.4	120	4.1	15.3	83	1.60	3,034.5	1.60	BBB	BBB	46	8.2	7.2	10.20	-	-
21	Southwestern Energy Company (NYSE-SWN)	-0.12	0.00	6.79	43.42	343.4	0	0.0	NM	NM	NM	74	1.92	4,127.3	1.92	BB+	BB+	70	NM	NM	10.54	-	07/07
22	UGI Corporation (NYSE-UGI)	2.20	0.80	15.31	25.17	109.9	36	3.2	164	5.2	11.4	34	0.52	2,915.0	0.52	NR	NR	43	15.7	9.0	-	-	-
23	WGL Holdings, Inc. (NYSE-WGL)	2.24	1.51	22.35	33.78	50.4	67	4.5	151	6.8	15.1	52	0.87	2,277.0	0.87	AA-	AA-	56	10.2	7.4	10.20	-	-
24	Williams Companies, Inc. (NYSE-WMB)	0.46	0.44	14.33	22.70	589.4	96	1.9	158	3.1	49.3	19	2.20	18,644.0	2.20	BBB-	BBB-	49	4.7	5.8	-	-	-
25	AVERAGE						59	3.2	181	5.8	20.0							51	11.2	7.9	10.62		

LATEST ISSUE - AUS MONTHLY REPORT

April 2010

COMPOSITE INDEX

ELECTRIC COMPANIES

YEAR	DIVIDEND YIELD	PRICE EARNINGS MULTIPLE
2000	5.4	13.6
2001	4.5	14.0
2002	5.0	14.8
2003	5.0	15.4
2004	4.4	18.4
2005	4.1	20.9
2006	3.8	20.8
2007	3.4	18.5
2008	3.9	16.1
2009	4.8	14.1
2010	4.3	18.2
YEAR TO DATE		
MAY	5.2	11.3
JUNE	5.2	13.6
JULY	4.8	14.9
AUGUST	4.7	15.1
SEPTEMBER	4.5	14.1
OCTOBER	4.4	14.8
NOVEMBER	4.4	14.7
DECEMBER	4.4	17.6
JANUARY	4.2	18.4
FEBRUARY	4.2	18.4
MARCH	4.5	17.4
APRIL	4.3	17.8

COMBINATION GAS & ELECTRIC COMPANIES

YEAR	DIVIDEND YIELD	PRICE EARNINGS MULTIPLE
2000	5.0	16.1
2001	4.1	15.3
2002	4.9	14.9
2003	3.8	15.3
2004	3.4	17.1
2005	3.3	18.9
2006	3.2	18.7
2007	3.3	18.3
2008	4.0	15.7
2009	5.2	12.8
2010	4.6	15.0
YEAR TO DATE		
MAY	5.7	11.4
JUNE	5.7	11.6
JULY	5.2	13.0
AUGUST	5.1	13.3
SEPTEMBER	4.9	14.0
OCTOBER	4.8	14.4
NOVEMBER	4.8	14.0
DECEMBER	4.8	14.2
JANUARY	4.5	15.0
FEBRUARY	4.4	15.3
MARCH	4.7	14.7
APRIL	4.7	14.9

NATURAL GAS DISTRIBUTION COMPANIES

YEAR	DIVIDEND YIELD	PRICE EARNINGS MULTIPLE
2000	4.3	19.0
2001	4.1	16.6
2002	4.3	17.3
2003	4.0	16.2
2004	3.3	17.0
2005	3.1	19.8
2006	3.1	17.2
2007	2.9	19.5
2008	13.1	17.4
2009	3.8	14.4
2010	3.3	21.0
YEAR TO DATE		
MAY	4.1	12.4
JUNE	4.1	13.3
JULY	3.8	14.5
AUGUST	3.8	14.4
SEPTEMBER	3.6	15.5
OCTOBER	3.5	16.1
NOVEMBER	3.4	16.7
DECEMBER	3.4	19.3
JANUARY	3.3	21.9
FEBRUARY	3.2	22.5
MARCH	3.3	19.4
APRIL	3.2	20.0

TELEPHONE COMPANIES

YEAR	DIVIDEND YIELD	PRICE EARNINGS MULTIPLE
2000	0.9	27.9
2001	0.9	26.3
2002	1.4	21.1
2003	1.7	21.6
2004	2.3	21.5
2005	2.6	22.5
2006	2.6	21.1
2007	2.7	20.1
2008	4.4	14.3
2009	6.0	14.6
2010	5.2	17.9
YEAR TO DATE		
MAY	7.0	11.4
JUNE	5.4	13.8
JULY	6.3	13.5
AUGUST	6.6	13.5
SEPTEMBER	6.2	14.8
OCTOBER	6.0	16.1
NOVEMBER	5.9	16.5
DECEMBER	6.1	19.0
JANUARY	5.7	19.0
FEBRUARY	4.6	19.1
MARCH	5.0	18.4
APRIL	5.6	14.6

SMALL TELEPHONE COMPANIES

YEAR	DIVIDEND YIELD	PRICE EARNINGS MULTIPLE
2000	2.4	24.4
2001	2.8	20.0
2002	2.6	20.1
2003	2.8	21.7
2004	2.6	19.3
2005	3.5	17.2
2006	3.8	21.6
2007	4.5	20.4
2008	8.3	16.1
2009	7.5	18.4
2010	4.5	16.2
YEAR TO DATE		
MAY	9.4	13.8
JUNE	8.1	18.8
JULY	5.8	20.9
AUGUST	5.6	24.4
SEPTEMBER	5.6	25.0
OCTOBER	5.2	28.2
NOVEMBER	5.0	28.4
DECEMBER	5.1	15.6
JANUARY	4.9	16.1
FEBRUARY	4.6	17.1
MARCH	2.9	15.8
APRIL	4.6	15.1

WATER COMPANIES

YEAR	DIVIDEND YIELD	PRICE EARNINGS MULTIPLE
2000	3.5	21.4
2001	3.4	21.4
2002	3.1	22.2
2003	3.2	23.2
2004	3.1	27.9
2005	2.8	28.7
2006	2.8	30.9
2007	2.8	28.1
2008	3.1	23.1
2009	3.5	21.3
2010	3.5	21.5
YEAR TO DATE		
MAY	3.6	19.1
JUNE	3.7	20.4
JULY	3.6	21.2
AUGUST	3.4	22.5
SEPTEMBER	3.5	21.7
OCTOBER	3.3	22.8
NOVEMBER	3.4	22.6
DECEMBER	3.6	20.8
JANUARY	3.5	20.8
FEBRUARY	3.6	20.2
MARCH	3.6	20.2
APRIL	3.4	23.6

COMBINATION ELECTRIC & GAS COMPANIES

	DIVIDEND	YIELD		
HIGH				
Empire District Electric Co. (NYSE-EDE)	7.0		AES Corporation (NYSE-AES)	0.0
Peppo Holdings, Inc. (NYSE-POM)	6.3		Constellation Energy Group, Inc. (NYSE-CEG)	2.7
Ameren Corporation (NYSE-AEE)	6.0		MDU Resources Group, Inc. (NYSE-MDU)	2.9
Unitil Corporation (ASE-UTL)	6.0		SEMPRA Energy (NYSE-SRE)	3.1
NiSource Inc. (NYSE-NI)	5.9		Wisconsin Energy Corporation (NYSE-WEC)	3.2
Duke Energy Corporation (NYSE-DUK)	5.8		NV Energy (NYSE-NVE)	3.7
Integrus Energy Group (NYSE-TEG)	5.8		CMS Energy Corporation (NYSE-CMS)	3.8
Vestron Corporation (NYSE-VVC)	5.7		Energy Corporation (NYSE-ETR)	3.8
CenterPoint Energy (NYSE-CNP)	5.5		Northeast Utilities (NYSE-NU)	3.8
Consolidated Edison, Inc. (NYSE-ED)	5.4		MGE Energy, Inc. (NDQ-MGEE)	4.2
MARKET/BOOK RATIO				
HIGH				
Exelon Corporation (NYSE-EXC)	233		Constellation Energy Group, Inc. (NYSE-CEG)	83
CenterPoint Energy (NYSE-CNP)	226		NV Energy (NYSE-NVE)	86
Dominion Resources, Inc. (NYSE-D)	213		NiSource Inc. (NYSE-NI)	88
NSTAR (NYSE-NST)	201		Peppo Holdings, Inc. (NYSE-POM)	89
Energy Corporation (NYSE-ETR)	179		Duke Energy Corporation (NYSE-DUK)	98
Public Service Enterprise Group (NYSE-PEG)	178		Black Hills Corporation (NYSE-BKH)	103
Wisconsin Energy Corporation (NYSE-WEC)	166		Empire District Electric Co. (NYSE-EDE)	106
AES Corporation (NYSE-AES)	165		Avista Corporation (NYSE-AVA)	111
MGE Energy, Inc. (NDQ-MGEE)	162		Unitil Corporation (ASE-UTL)	115
TECO Energy, Inc. (NYSE-TE)	162		DTE Energy Company (NYSE-DTE)	118
PRICE/EARNINGS MULTIPLE				
HIGH				
Alliant Energy Corporation (NYSE-LNT)	33.3		Public Service Enterprise Group (NYSE-PEG)	9.8
Unitil Corporation (ASE-UTL)	22.3		Exelon Corporation (NYSE-EXC)	10.9
Duke Energy Corporation (NYSE-DUK)	19.8		SEMPRA Energy (NYSE-SRE)	11.1
NiSource Inc. (NYSE-NI)	19.6		CenterPoint Energy (NYSE-CNP)	11.6
CH Energy Group, Inc. (NYSE-CHG)	19.5		UnitSource Energy Corporation (NYSE-UNS)	11.7
CMS Energy Corporation (NYSE-CMS)	18.9		AES Corporation (NYSE-AES)	11.8
Dominion Resources, Inc. (NYSE-D)	18.3		Energy Corporation (NYSE-ETR)	12.5
ALLETE, Inc. (NYSE-ALE)	17.7		Northwestern Corporation (NYSE-NWE)	12.9
Peppo Holdings, Inc. (NYSE-POM)	16.2		SCANA Corporation (NYSE-SCG)	13.0
MGE Energy, Inc. (NDQ-MGEE)	15.9		PG&E Corporation (NYSE-PCC)	13.3
RETURN ON BOOK VALUE OF COMMON EQUITY				
HIGH				
Exelon Corporation (NYSE-EXC)	22.6		Peppo Holdings, Inc. (NYSE-POM)	5.6
CenterPoint Energy (NYSE-CNP)	19.5		NV Energy (NYSE-NVE)	5.8
Public Service Enterprise Group (NYSE-PEG)	19.2		Unitil Corporation (ASE-UTL)	6.0
AES Corporation (NYSE-AES)	15.8		ALLETE, Inc. (NYSE-ALE)	6.9
Energy Corporation (NYSE-ETR)	14.9		Empire District Electric Co. (NYSE-EDE)	7.3
UnitSource Energy Corporation (NYSE-UNS)	14.6		Constellation Energy Group, Inc. (NYSE-CEG)	7.5
NiSource Inc. (NYSE-NI)	13.8		Black Hills Corporation (NYSE-BKH)	7.6
SEMPRA Energy (NYSE-SRE)	13.2		CH Energy Group, Inc. (NYSE-CHG)	8.2
PG&E Corporation (NYSE-PCC)	12.4		Ameren Corporation (NYSE-AEE)	8.3
Dominion Resources, Inc. (NYSE-D)	12.1		Avista Corporation (NYSE-AVA)	8.5
LOW				

NATURAL GAS DIST. & INT. GAS COMPANIES

	DIVIDEND	YIELD	LOW
HIGH			
Energy, Incorporated (NDQ-EGAS)	5.4		0.0
AGL Resources Inc. (NYSE-AGL)	4.7		0.4
Atmos Energy Corporation (NYSE-ATO)	4.7		1.1
Laclede Group, Inc. (NYSE-LG)	4.5		1.2
WGL Holdings, Inc. (NYSE-WGL)	4.7		1.9
Delta Natural Gas Company (NDQ-DGAS)	4.3		2.0
NICOR Inc. (NYSE-GAS)	4.3		2.4
RGC Resources, Inc. (NDQ-RGCC)	4.2		2.6
Chesapeake Utilities Corporation (NYSE-CPK)	4.1		3.2
Piedmont Natural Gas Co., Inc. (NYSE-PNY)	4.1		3.2

MARKET/BOOK RATIO

	MARKET/BOOK	RATIO	LOW
HIGH			
EQT Corporation (NYSE-EQT)	319		110
National Fuel Gas Company (NYSE-NFG)	254		118
El Paso Corporation (NYSE-EP)	247		120
South Jersey Industries, Inc. (NYSE-SJI)	225		134
ONEOK, Inc. (NYSE-OKE)	224		137
Questar Corporation (NYSE-STR)	217		139
New Jersey Resources Corp. (NYSE-NJR)	214		150
Piedmont Natural Gas Co., Inc. (NYSE-PNY)	203		151
NICOR Inc. (NYSE-GAS)	188		158
Northwest Natural Gas Co. (NYSE-NWN)	186		162
LOW			
Chesapeake Utilities Corporation (NYSE-CPK)			110
Atmos Energy Corporation (NYSE-ATO)			118
Southwest Gas Corporation (NYSE-SWX)			120
Southern Union Company (NYSE-SUG)			134
Energy, Incorporated (NDQ-EGAS)			137
Laclede Group, Inc. (NYSE-LG)			139
RGC Resources, Inc. (NDQ-RGCC)			150
WGL Holdings, Inc. (NYSE-WGL)			151
Williams Companies, Inc. (NYSE-WMB)			158
AGL Resources Inc. (NYSE-AGL)			162

PRICE/EARNINGS MULTIPLE

	PRICE/EARNINGS	MULTIPLE	LOW
HIGH			
Williams Companies, Inc. (NYSE-WMB)	49.3		11.0
South Jersey Industries, Inc. (NYSE-SJI)	42.5		11.4
EQT Corporation (NYSE-EQT)	36.6		12.8
AGL Resources Inc. (NYSE-AGL)	31.5		13.0
New Jersey Resources Corp. (NYSE-NJR)	23.0		13.2
National Fuel Gas Company (NYSE-NFG)	20.1		13.2
Delta Natural Gas Company (NDQ-DGAS)	19.5		13.9
Questar Corporation (NYSE-STR)	19.0		14.4
Southern Union Company (NYSE-SUG)	18.5		14.7
Northwest Natural Gas Co. (NYSE-NWN)	16.3		14.7
LOW			
Piedmont Natural Gas Co., Inc. (NYSE-PNY)			11.0
UGI Corporation (NYSE-UGI)			11.4
Atmos Energy Corporation (NYSE-ATO)			12.8
Energy, Incorporated (NDQ-EGAS)			13.0
Evergen Corporation (NYSE-EGN)			13.2
Laclede Group, Inc. (NYSE-LG)			13.2
Chesapeake Utilities Corporation (NYSE-CPK)			13.9
NICOR Inc. (NYSE-GAS)			14.4
ONEOK, Inc. (NYSE-OKE)			14.7
RGC Resources, Inc. (NDQ-RGCC)			14.7

RETURN ON BOOK VALUE OF COMMON EQUITY

	RETURN ON BOOK VALUE	OF COMMON EQUITY	LOW
HIGH			
Piedmont Natural Gas Co., Inc. (NYSE-PNY)	18.9		4.7
ONEOK, Inc. (NYSE-OKE)	15.7		7.7
UGI Corporation (NYSE-UGI)	15.7		8.2
NICOR Inc. (NYSE-GAS)	13.5		8.8
Evergen Corporation (NYSE-EGN)	13.1		9.2
AGL Resources Inc. (NYSE-AGL)	12.9		9.6
National Fuel Gas Company (NYSE-NFG)	12.9		9.6
Northwest Natural Gas Co. (NYSE-NWN)	11.7		9.9
Questar Corporation (NYSE-STR)	11.6		10.2
South Jersey Industries, Inc. (NYSE-SJI)	11.0		10.5
LOW			
Williams Companies, Inc. (NYSE-WMB)			4.7
EQT Corporation (NYSE-EQT)			7.7
Southwest Gas Corporation (NYSE-SWX)			8.2
Delta Natural Gas Company (NDQ-DGAS)			8.8
New Jersey Resources Corp. (NYSE-NJR)			9.2
Chesapeake Utilities Corporation (NYSE-CPK)			9.6
Atmos Energy Corporation (NYSE-ATO)			9.6
Southern Union Company (NYSE-SUG)			9.9
WGL Holdings, Inc. (NYSE-WGL)			10.2
Energy, Incorporated (NDQ-EGAS)			10.5

TELEPHONE COMPANIES

	DIVIDEND	YIELD	LOW
HIGH			
Frontier Communications Corp (NYSE-FTR)	13.4		0.0
Alaska Comm. Systems Group (NDQ-ALSK)	10.1		0.0
Windstream Corporation (NYSE-WIN)	9.0		1.3
CenturyTel, Inc. (NYSE-CTL)	8.3		5.6
Qwest Communications International (NYSE-Q)	6.6		6.4

	MARKET/BOOK	RATIO	LOW
HIGH			
PAETEC Holdings Corp. (NDQ-PAET)	308		
Verizon Communications (NYSE-VZ)	196		
BCE, Inc. (NYSE-BCE)	178		
AT&T Inc. (NYSE-T)	164		
General Communication, Inc. (NDQ-GNCMA)	118		

Telephone companies with NMs (Not Meaningful Figures) have been excluded from the Market/Book Ratios rankings.

	PRICE/EARNINGS	MULTIPLE	LOW
HIGH			
BCE, Inc. (NYSE-BCE)	20.1		8.7
Frontier Communications Corp (NYSE-FTR)	19.7		11.4
Telephone & Data Systems, Inc. (ASE-TDS)	19.4		11.6
Verizon Communications (NYSE-VZ)	15.4		12.2
Windstream Corporation (NYSE-WIN)	14.6		12.8

	RETURN ON BOOK VALUE	OF COMMON EQUITY	LOW
HIGH			
AT&T Inc. (NYSE-T)	12.6		1.3
Verizon Communications (NYSE-VZ)	12.4		5.1
CenturyTel, Inc. (NYSE-CTL)	8.1		7.8

WATER COMPANIES			
	DIVIDEND	YIELD	
LOW			
Artesian Resources Corp. (NDQ-ARTNA)	4.1		Southwest Water Company (NDQ-SWWC)
Middlesex Water Company (NDQ-MSEX)	4.1		SIW Corporation (NYSE-SIW)
American Water Works Co., Inc. (NYSE-AWK)	4.0		American States Water Co. (NYSE-AWR)
Connecticut Water Service, Inc. (NDQ-CTWS)	3.8		California Water Service Group (NYSE-CWT)
			1.9
			2.9
			3.2
			3.2
MARKET/BOOK RATIO			
LOW			
Southwest Water Company (NDQ-SWWC)	216.9		American Water Works Co. Inc. (NYSE-AWK)
Aqua America, Inc. (NYSE-WTR)	207.7		Artisan Resources Corp. (NDQ-ARTNA)
York Water Company (NDQ-YORKW)	202.6		American States Water Co. (NYSE-AWR)
Connecticut Water Service, Inc. (NDQ-CTWS)	188.2		Pennhuck Corporation (NDQ-PNNW)
			88.7
			150.4
			164.7
			165.2
PRICE/EARNINGS MULTIPLE			
LOW			
Pennhuck Corporation (NDQ-PNNW)	38.6		Connecticut Water Service, Inc. (NDQ-CTWS)
SIW Corporation (NYSE-SIW)	29.4		Artisan Resources Corp. (NDQ-ARTNA)
Middlesex Water Company (NDQ-MSEX)	24.7		California Water Service Group (NYSE-CWT)
Aqua America, Inc. (NYSE-WTR)	21.9		American States Water Co. (NYSE-AWR)
			18.6
			18.8
			18.9
			20.1
RETURN ON BOOK VALUE OF COMMON EQUITY			
LOW			
Connecticut Water Service, Inc. (NDQ-CTWS)	13.9		Pennhuck Corporation (NDQ-PNNW)
Aqua America, Inc. (NYSE-WTR)	9.6		SIW Corporation (NYSE-SIW)
York Water Company (NDQ-YORKW)	9.6		Middlesex Water Company (NDQ-MSEX)
American States Water Co. (NYSE-AWR)	8.8		California Water Service Group (NYSE-CWT)
			4.6
			6.0
			7.0
			7.4

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

12. Please provide a copy of all electronic spreadsheets (with formulas intact) relied on in the preparation of Mr. Baudino's testimony and exhibits with formulas intact.

Response:

Please refer to the attached spreadsheets.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)
COMPANY FOR A GENERAL ADJUSTMENT) Case No. 2009-00459
OF ELECTRIC RATES)

**RESPONSES OF KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC
TO KENTUCKY POWER COMPANY DATA REQUESTS**

13. Please provide a copy of Mr. Baudino's testimony filed with the Public Service Commission of Wisconsin in Case No. 6690-UR-119.

Response:

Please refer to the attached testimony.

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

**IN RE: APPLICATION OF WISCONSIN PUBLIC)
SERVICE CORPORATION FOR) DOCKET NO. 6690-UR-119
AUTHORITY TO ADJUST ELECTRIC)
AND NATURAL GAS RATES)**

**SURREBUTTAL TESTIMONY
OF
RICHARD A. BAUDINO**

**ON BEHALF OF THE
WISCONSIN INDUSTRIAL ENERGY GROUP, INC.**

**J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA**

September 2008

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

**IN RE: APPLICATION OF WISCONSIN PUBLIC)
SERVICE CORPORATION FOR) DOCKET NO. 6690-UR-119
AUTHORITY TO ADJUST ELECTRIC)
AND NATURAL GAS RATES)**

SURREBUTTAL TESTIMONY OF RICHARD A. BAUDINO

1 **Q. Please state your name and business address.**

2 A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc.
3 (“Kennedy and Associates”), 570 Colonial Park Drive, Suite 305, Roswell, Georgia
4 30075.

5 **Q. Did you submit Direct Testimony in this proceeding?**

6 A. Yes. I submitted Direct Testimony on behalf of the Wisconsin Industrial Energy Group,
7 Inc. (“WIEG”).

8 **Q. What is the purpose of your Surrebuttal Testimony?**

9 A. The purpose of my surrebuttal testimony is to address the Rebuttal Testimony filed by Mr.
10 Paul Moul, witness for Wisconsin Public Service Company (“WPSC” or “Company”).

11 **Q. On page 19, lines 15 through 16, Mr. Moul opined that your discussion regarding**
12 **the beneficial effect of the 2003 tax act "has already been incorporated into the**
13 **market evidence in this case." Please respond to Mr. Moul's position.**

14 A. The effect has indeed been incorporated into the market evidence in this case, which
15 supports the statements I made regarding a lower risk premium and lower required
16 returns for utility stocks, other things being equal. This is just simple economics. With

1 regard to Mr. Moul's observation that the equity risk premium has been higher for utilities
2 from 2003 through 2007, there have been other events that have likely pushed this
3 premium higher, such as the factors I cited on pages 26 and 27 of my Direct Testimony.

4 **Q. On page 20 of his Rebuttal Testimony, Mr. Moul took issue with several of the**
5 **companies you included in your comparison group. Please respond to his criticisms**
6 **of your group.**

7 A. In my Direct Testimony I presented the criteria I used for including companies in my
8 comparison group, one of which was that companies would need to have regulated
9 electric revenues of over 50% of total revenues. In my opinion, this selection criterion is
10 reasonable because it resulted in a large enough comparison group of electric utilities
11 with risk characteristics that are similar to WPSC. This group derives most of its
12 revenues from regulated electric operations and has bond ratings quite similar to WPSC.
13 Overall, my comparison group provides a reliable foundation for estimating the return on
14 equity for WPSC in this proceeding.

15 **Q. On page 21 of his Rebuttal Testimony, Mr. Moul suggested that an adjustment is**
16 **necessary to convert end-of-year returns from Value Line to average year returns**
17 **for purposes of estimating retention growth. Do you agree with Mr. Moul's**
18 **position?**

19 A. No. The forecasted numbers I obtained from Value Line were for the 3-year period from
20 2011 to 2013. In my view, these forecasts do not represent end-of-year values in the way
21 that Value Line's historical numbers do, but rather an average value over the three-year
22 forecasted time period. These forecasted numbers do not require an adjustment of the
23 kind that Mr. Moul recommended on page 21 of his Rebuttal Testimony. Mr. Moul's
24 criticism here is not well taken.

1 **Q. On page 22, lines 1 through 9 of his Rebuttal Testimony, Mr. Moul recommended**
2 **that all the growth rates that were contained in your DCF analysis be included in**
3 **your return on equity recommendation. Please respond to Mr. Moul’s testimony.**

4 A. I disagree with Mr. Moul. In my Direct Testimony, I provided detailed explanations as to
5 why I do not believe double-digit growth rates should be included in my DCF analysis.
6 In fact, Mr. Moul failed to rebut any of the specific comments I made as to why double-
7 digit earnings growth is unlikely to continue in the long run for certain companies in my
8 comparison group. Thus, my testimony on this matter still stands.

9 Further, since I excluded both high and low growth rate in Method 3, the results
10 are not biased as Mr. Moul claimed on page 22 of his Rebuttal Testimony.

11 **Q. On page 23 of his Rebuttal Testimony, Mr. Moul takes issue with your use of the 5-**
12 **year Treasury note as a proxy for the risk-free rate in the Capital Asset Pricing**
13 **Model (“CAPM”). Please respond to this criticism.**

14 A. Mr. Moul’s criticism shows the difficulty of estimating the CAPM in the real world. In
15 fact, the long-term Treasury Bond carries interest rate risk due to its long maturity and,
16 thus, is not truly risk-free. Using a shorter maturity, such as five years, lessens this risk;
17 although I agree with Mr. Moul that shorter-term Treasuries are more susceptible to the
18 operations of Federal Open Market Committee (“FOMC”). There is no perfect proxy for
19 the risk-free rate and, therefore, it is prudent to use both a medium-term and long-term
20 Treasury bond as proxies for the risk-free rate in the CAPM.

21 **Q. On page 25, Mr. Moul testified that he was not in a position to comment directly on**
22 **the Ibbotson/Chen study you cited in your Direct Testimony. Please respond to this**
23 **statement.**

24 A. A discussion of the Ibbotson/Chen study is included in the Morningstar *Stock, Bonds,*
25 *Bills and Inflation Yearbook* that I cited in my Direct Testimony and is available for

1 purchase from Morningstar. I assume Mr. Moul could have access to this information if
2 he had purchased this publication.

3 **Q. Does this complete your testimony?**

4 A. Yes.

3211711_1

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

**IN RE: APPLICATION OF WISCONSIN PUBLIC)
SERVICE CORPORATION FOR) DOCKET NO. 6690-UR-119
AUTHORITY TO ADJUST ELECTRIC)
AND NATURAL GAS RATES)**

**DIRECT TESTIMONY
OF
RICHARD A. BAUDINO**

**ON BEHALF OF THE
WISCONSIN INDUSTRIAL ENERGY GROUP, INC.**

**J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA**

August 2008

**BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN**

**IN RE: APPLICATION OF WISCONSIN PUBLIC)
SERVICE CORPORATION FOR) DOCKET NO. 6690-UR-119
AUTHORITY TO ADJUST ELECTRIC)
AND NATURAL GAS RATES)**

TABLE OF CONTENTS

I. QUALIFICATIONS AND SUMMARY.....	1
II. REVIEW OF ECONOMIC AND FINANCIAL CONDITIONS	3
III. DETERMINATION OF FAIR RATE OF RETURN.....	7
Discounted Cash Flow (“DCF”) Metho	10
Capital Asset Pricing Model.....	20
Conclusions and Recommendations.....	25
IV. RESPONSE TO WPSC WITNESS PAUL MOUL.....	28

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

**IN RE: APPLICATION OF WISCONSIN PUBLIC)
SERVICE CORPORATION FOR) DOCKET NO. 6690-UR-119
AUTHORITY TO ADJUST ELECTRIC)
AND NATURAL GAS RATES)**

DIRECT TESTIMONY OF RICHARD A. BAUDINO

I. QUALIFICATIONS AND SUMMARY

1 **Q. Please state your name and business address.**

2 A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates, Inc.
3 (“Kennedy and Associates”), 570 Colonial Park Drive, Suite 305, Roswell, Georgia
4 30075.

5 **Q. What is your occupation and by whom are you employed?**

6 A. I am a consultant with Kennedy and Associates.

7 **Q. Please describe your education and professional experience.**

8 A. I received my Master of Arts degree with a major in Economics and a minor in Statistics
9 from New Mexico State University in 1982. I also received my Bachelor of Arts Degree
10 with majors in Economics and English from New Mexico State in 1979.

11 I began my professional career with the New Mexico Public Service Commission
12 Staff in October 1982 and was employed there as a Utility Economist. During my
13 employment with the Staff, my responsibilities included the analysis of a broad range of
14 issues in the ratemaking field. Areas in which I testified included cost of service, rate of

1 return, rate design, revenue requirements, analysis of sale/leasebacks of generating plants,
2 utility finance issues, and generating plant phase-ins.

3 In October 1989, I joined the utility consulting firm of Kennedy and Associates as
4 a Senior Consultant where my duties and responsibilities covered substantially the same
5 areas as those during my tenure with the New Mexico Public Service Commission Staff.
6 I became Manager in July 1992 and was named Director of Consulting in January 1995.
7 Currently, I am a consultant with Kennedy and Associates.

8 Exhibit ____ (RAB-1), Schedule 1 summarizes my expert testimony experience.

9 **Q. On whose behalf are you testifying?**

10 A. I am testifying on behalf of the Wisconsin Industrial Energy Group, Inc. ("WIEG").

11 **Q. What is the purpose of your Direct Testimony?**

12 A. The purpose of my direct testimony is to address the allowed return on equity for
13 Wisconsin Public Service Corporation ("WPSC" or "Company").

14 **Q. Please summarize your Direct Testimony.**

15 A. I recommend that the Public Service Commission of Wisconsin (the "Commission")
16 approve a rate of return on equity ("ROE") for WPSC of 10.30%. This recommendation
17 is based on the results of my Discounted Cash Flow ("DCF") analyses for a comparison
18 group of electric companies.

19 WPSC witness Paul Moul recommended a return on equity for the Company of
20 11.50%. This ROE is excessive, will result in unreasonable rates for WPSC's customers,
21 and should be rejected by the Commission. In Section IV of my testimony I will

1 demonstrate how the analyses presented by Mr. Moul systematically overstated the
2 investors' required return for WPSC.

3 II. REVIEW OF ECONOMIC AND FINANCIAL CONDITIONS

4 **Q. Mr. Baudino, what has the trend been in long-term capital costs over the last few**
5 **years?**

6 A. Exhibit ____ (RAB-1), Schedule 2 presents a graphic depiction of the trend in interest
7 rates from January 1998 through July 2008. The interest rates shown are for the 20-year
8 U.S. Treasury Bond and the average public utility bond from the Mergent Bond Record.
9 As one can see, the yields on long-term Treasury and utility bonds have declined since
10 early 1998, although the rates have been quite volatile. The bond market volatility is not
11 a recent phenomenon, though, as it actually began in the early 1970s, when inflation
12 became more of a sustained long-term concern.

13 Yields trended downward from 2002 through 2006, with the 20-year Treasury
14 bond yield declining from 5.69% to 4.78% at the end of December 2006. The yield on
15 the average public utility bond also decreased significantly over that time, falling from
16 7.83% in March 2002 to 5.83% in December 2006, a decline of 200 basis points. Public
17 utility bond yields fell far more than long-term Treasury yields over the last four years.

18 2007 saw a rise in bond yields, fueled in part by investors' concerns over turmoil
19 and defaults associated with the sub-prime lending market. 20-year Treasury yields rose
20 to 5.29% in June 2007 and utility bond yields reached 6.34% during that month.
21 However, Treasury yields began to fall again in July 2007 and trended downward early in
22 2008, although rates have risen slightly since April. The July 2008 20-year Treasury

1 yield stood at 4.62%, while the average public utility bond yield actually increased to
2 6.50%.

3 In short, current bond yields are either at or near their lowest levels in recent
4 history. Public utility bond yields are now near their lowest level over the past ten-year
5 historical period. Indeed, the average of public utility bond yields has not been as low as
6 it is now since 1967-68—nearly 40 years ago.

7 **Q. What effect does the current interest rate environment have on utility stocks?**

8 A. The decline in bond yields over the last ten years suggests a related decline in the
9 required return on equity on the part of the investing public. In general, utility stocks are
10 interest rate sensitive, meaning that as bond yields decline, utility company dividend
11 yields also fall, leading to a decline in the return on equity. The results of my return on
12 equity analysis in the subsequent section of my Direct Testimony are consistent with
13 these historically-low bond yields.

14 **Q. In 2003, Congress enacted a change in tax policy that lowered the tax rate on**
15 **dividends and capital gains. Please explain the effect of this tax change on utility**
16 **common stocks and on investor required returns for utilities.**

17 A. All other things being equal, the dividend tax rate reduction means that investors should
18 require lower pre-tax rates of return for utilities than was true before the tax change
19 became law. This is because after-tax dividend streams are now more valuable due to the
20 reduction in federal taxation. Thus, for a given stock price, investors will discount the
21 future dividend payments at a lower return on equity.

1 The stock prices that I use in my cost of equity analyses fully incorporate the
2 effects of this change in tax rates and on the expected returns for utilities.

3 Moreover, because there was no change in the tax treatment given to bonds,
4 investors will require lower risk premiums for stocks as compared to utility bonds. Since
5 expected stock returns are now lower relative to bond yields, the expected risk premium
6 of utility stocks over bonds should also be lower.

7 **Q. How does the investment community regard the electric utility industry as a whole?**

8 A. The following quotes from Value Line suggest that electric utilities are still viewed as
9 more conservative and stable investments than the market as a whole.

10 The May 30, 2008 Value Line report on the Electric Utility (East) companies
11 stated the following:

12 Generally stable, if unexciting, returns attract investors to utility
13 stocks, especially during times of economic and equity-market
14 turmoil. The fact that the group continues to under perform
15 benchmarks perhaps speaks to a perception that the current
16 economic slowdown will be both shallow and short lived.
17 Nevertheless, we don't discount a "flight to safety"-induced
18 sector rotation, particularly given the recent spate of bad economic
19 news. Indeed, the Federal Reserve's increasingly dour outlook for
20 GDP growth and employment has some investors abandoning
21 more economically sensitive issues.

22 And Value Line's June 27, 2008 report on the Electric Utility (Central) companies
23 stated the following:

24 The Electric Utility Industry may be of interest because its average
25 dividend yield is almost twice that of all dividend-paying stocks
26 under Value Line review. Those of a conservative bent might
27 consider investing in companies with at least an average yield,
28 reasonable growth prospects, and a Safety rank of 2 or higher. But
29 a note of caution: Many of these companies are already trading
30 within their 3- to 5-year Target Price Range.

1 **Q. Mr. Baudino, what is your view regarding the state of the electric industry today?**

2 A. Despite the recent tumult in the financial markets, regulated utilities are still considered
3 safe-harbor investments. Further, the electric industry is entering a more stable, less risky
4 environment than it experienced during the last few years. Many electric companies
5 exited more risky unregulated operations and strengthened their financial position over
6 the last decade. This means that companies that focus on core electric operations will be
7 lower risk than those with unregulated and/or deregulated operations and investments.
8 And although utility share prices pulled back over the last few months, regulated electric
9 operations are still considered relatively low-risk investments.

10 **Q. Briefly describe Wisconsin Public Service Corporation.**

11 A. WPSC is a wholly-owned subsidiary of Integrys Energy Group, a diversified holding
12 company with both regulated utility and unregulated energy operations. According to
13 Integrys Energy's 2007 Form 10-K, unregulated energy operations contributed
14 \$98.0 million of the company's \$251.3 million income available for common
15 shareholders. By comparison, total regulated electric operations generated \$87.4 million
16 in income available for common shareholders.

17 According to Integrys' 2007 Annual Report to Shareholders, WPSC operates in
18 northeast and central Wisconsin and a portion of upper Michigan. The Company serves
19 approximately 433,000 electric customers and 314,000 natural gas customers. Electric
20 generating capacity was rated at 1,757.4 megawatts ("mWs"), with a peak summer 2007
21 demand of 2,305 mWs.

22 **Q. How is WPSC viewed by the major bond rating agencies?**

1 A. WPSC's senior secured bond rating is A+ from Standard and Poor's and Aa3 from
2 Moody's. Both of these senior secured ratings are solidly in the upper end of investment
3 grade rankings for S&P and Moody's.

4 In its November 27, 2007 report on the Company, S&P noted:

5 The corporate credit rating on WPSC is one notch higher than that
6 of its parent due to regulatory insulation provided to Wisconsin
7 utilities based on the Public Service Commission of Wisconsin's
8 authority to determine the utility's capital structure and restrict
9 dividends to the parent. These regulatory requirements help
10 insulate WPSC from Integrys' higher risk non-regulated business
11 pursuits.

12 * * *

13 WPSC's stand-alone business risk profile score is a "4" (business
14 profiles are categorized from "1" (excellent) to "10" (vulnerable)).
15 The business profile is characterized by a largely stable customer
16 base, supportive regulatory environment, and low production costs.
17 However, the profile is partially offset by the large capital
18 spending that WPSC must maintain through 2009.

19 * * *

20 Even with its large capital budget, Standard & Poor's still expects
21 WPSC to manage its financial measures adequately during this
22 building phase.

23 All in all, the bond rating agency reports on WPSC are very favorable and
24 indicate that the Company is well positioned financially to support its strong A/Aa bond
25 ratings. WPSC's electric utility operations lend strong support to Integrys Energy's
26 financial profile and corporate credit rating.

27 **III. DETERMINATION OF FAIR RATE OF RETURN**

28 **Q. Please describe the methods you employed in estimating a fair rate of return for**
29 **WPSC.**

1 A. I employed a Discounted Cash Flow (“DCF”) analysis for a group of comparison electric
2 companies to estimate the cost of equity for the Company’s regulated electric operations.
3 I also employed several Capital Asset Pricing Model (“CAPM”) analyses, although I did
4 not directly incorporate the results into my recommendation.

5 **Q. What are the main guidelines to which you adhere in estimating the cost of equity**
6 **for a firm?**

7 A. Generally speaking, the estimated cost of equity should be comparable to the returns of
8 other firms with similar risk structures and should be sufficient for the firm to attract
9 capital. These are the basic standards set out by the United States Supreme Court in
10 *Federal Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944), and *Bluefield*
11 *W.W. & Improv. Co. v. Public Service Comm’n*, 262 U.S. 679 (1922).

12 From an economist’s perspective, the notion of “opportunity cost” plays a vital
13 role in estimating the return on equity. One measures the opportunity cost of an
14 investment equal to what one would have obtained in the next best alternative. For
15 example, let us suppose that an investor decides to purchase the stock of a publicly traded
16 electric utility. That investor made the decision based on the expectation of dividend
17 payments and perhaps some appreciation in the stock’s value over time; however, that
18 investor’s opportunity cost is measured by what she or he could have invested in as the
19 next best alternative. That alternative could have been another utility stock, a utility
20 bond, a mutual fund, a money market fund, or any other number of investment vehicles.

21 The key determinant in deciding whether to invest, however, is based on
22 comparative levels of risk. Our hypothetical investor would not invest in a particular

1 electric company stock if it offered a return lower than other investments of similar risk.
2 The opportunity cost simply would not justify such an investment. Thus, the task for the
3 rate of return analyst is to estimate a return that is equal to the return being offered by
4 other risk-comparable firms. Failing this, the subject firm will be impaired in its ability
5 to attract capital.

6 **Q. What are the major types of risk faced by utility companies?**

7 A. In general, risk associated with the holding of common stock can be separated into three
8 major categories: business risk, financial risk, and liquidity risk. Business risk refers to
9 risks inherent in the operation of the business. Volatility of the firm's sales, long-term
10 demand for its product(s), the amount of operating leverage, and quality of management
11 are all factors that affect business risk. The quality of regulation at the state and federal
12 levels also plays an important role in business risk for regulated utility companies.

13 Financial risk refers to the impact on a firm's future cash flows from the use of
14 debt in the capital structure. Interest payments to bondholders represent a prior call on
15 the firm's cash flows and must be met before income is available to the common
16 shareholders. Additional debt means additional variability in the firm's earnings, leading
17 to additional risk.

18 Liquidity risk refers to the ability of an investor to quickly sell an investment
19 without a substantial price concession. The easier it is for an investor to sell an
20 investment for cash, the lower the liquidity risk will be. Stock markets, such as the New
21 York and American Stock Exchanges, help ease liquidity risk substantially. Investors
22 who own stocks that are traded in these markets know on a daily basis what the market

1 prices of their investments are and that they can sell these investments fairly quickly.
2 Many electric utility stocks are traded on the New York Stock Exchange and are
3 considered liquid investments.

4 **Q. Are there any indices available to investors that quantify the total risk of a**
5 **company?**

6 A. Yes. Bond ratings are a good tool that investors use to determine the risk comparability
7 of firms. Bond rating agencies such as Moody's and Standard and Poor's perform
8 detailed analyses of factors that contribute to the business and financial risk of a
9 particular investment. The end result of their analyses is a bond rating that reflects these
10 risks. For instance, as noted earlier, Standard and Poor's bond rating for WPSC is A+.
11 This very high rating reflects the low risk of investment in WPSC relative to all other
12 rated businesses.

13 **Discounted Cash Flow ("DCF") Method**

14 **Q. Please describe the basic DCF approach.**

15 A. The basic DCF approach is rooted in valuation theory. It is based on the premise that the
16 value of a financial asset is determined by its ability to generate future net cash flows. In
17 the case of a common stock, those future cash flows take the form of dividends and
18 appreciation in stock price. The value of the stock to investors is the discounted present
19 value of future cash flows. The general equation then is:

1
$$V = \frac{R}{(1+r)} + \frac{R}{(1+r)^2} + \frac{R}{(1+r)^3} + \dots + \frac{R}{(1+r)^n}$$

2 Where: *V = asset value*
3 *R = yearly cash flows*
4 *r = discount rate*

5 This is no different from determining the value of any asset from an economic point of
6 view; however, the commonly-employed DCF model makes certain simplifying
7 assumptions. One is that the stream of income from the equity share is assumed to be
8 perpetual; that is, there is no salvage or residual value at the end of some maturity date
9 (as is the case with a bond). Another important assumption is that financial markets are
10 reasonably efficient; that is, they correctly evaluate the cash flows relative to the
11 appropriate discount rate, thus rendering the stock price efficient relative to other
12 alternatives. Finally, the model I employ also assumes a constant growth rate in
13 dividends. The fundamental relationship employed in the DCF method is described by
14 the formula:

15
$$k = \frac{D_1}{P_0} + g$$

16 Where: *D₁ = the next period dividend*
17 *P₀ = current stock price*
18 *g = expected growth rate*
19 *k = investor-required return*

20 Under the formula, it is apparent that “k” must reflect the investors’ expected return. Use
21 of the DCF method to determine an investor-required return is complicated by the need to
22 express investors’ expectations relative to dividends, earnings, and book value over an
23 infinite time horizon. Financial theory suggests that stockholders purchase common
24 stock on the assumption that there will be some change in the rate of dividend payments

1 over time. We assume that the rate of growth in dividends is constant over the assumed
2 time horizon, but the model could easily handle varying growth rates if we knew what
3 they were. Finally, the relevant time frame is prospective rather than retrospective.

4 **Q. What was your first step in conducting your DCF analysis for WPSC?**

5 A. My first step was to construct a comparison group of companies with a risk profile that is
6 reasonably similar to WPSC.

7 **Q. Please describe your approach for selecting a comparison group of electric
8 companies.**

9 A. I used several criteria to select a comparison group. First, using the August 2008 issue of
10 the AUS Utility Reports, I selected electric companies that were rated A by either
11 Moody's or Standard and Poor's. WPSC currently carries senior secured bond ratings of
12 A+ from S&P and Aa3 from Moody's, so using the either/or criterion for an A rating
13 assures that the companies in the comparison group carry bond ratings that are similar to
14 WPSC.

15 From that group, I selected companies that had at least 50% of their revenues
16 from electric operations and that had long-term earnings growth forecasts from Value
17 Line and either Zacks Investment Research ("Zacks") or First Call/Thomson Financial. I
18 will describe Zacks and First Call/Thomson Financial later in my testimony. From this
19 group, I then eliminated companies that had recently cut or eliminated dividends, were
20 recently or currently involved in merger activities, or had recent experience with
21 significant earnings fluctuations.

1 I also eliminated Duke Energy due to a major corporate restructuring that will
 2 significantly affect future earnings. I also eliminated PPL Corp. because its future
 3 earnings growth is tied to significantly higher expected wholesale prices and not to retail
 4 sales of electricity. I also eliminated Exelon Corp. because most earnings and growth is
 5 expected to come from an unregulated generation subsidiary.

6 The resulting group of the comparison electric companies that I used in my
 7 analysis is shown in the table below.

8

WISCONSIN PUBLIC SERVICE CORP. COMPARISON GROUP		
	<u>S&P Rating</u>	<u>Moody's Rating</u>
1 ALLETE, inc.	A-	NR
2 Alliant Energy	A-	A2
3 Consolidated Edison	A-	A1
4 DPL, Inc.	A-	A2
5 DTE Energy	A-	A3
6 Edison International	A	A2
7 Entergy Corp.	A-	Baa2
8 FPL Group, Inc.	A	Aa3
9 NSTAR	AA-	A1
10 Progress Energy	A-	A2
11 Public Service Enterprise Gp	A-	A3
12 Southern Company	A	A2
13 Wisconsin Energy	A-	Aa3
14 Xcel Energy	A-	A3

9

10 **Q. What was your first step in determining the DCF return on equity for the**
 11 **comparison group?**

12 A. I first determined the current dividend yield, D_1/P_0 , from the basic equation. My general
 13 practice is to use six months as the most reasonable period over which to estimate the

1 dividend yield. The six-month period I used covered the months from February through
2 July 2008. I obtained historical prices and dividends from Yahoo! Finance. The
3 annualized dividend divided by the average monthly price represents the average
4 dividend yield for each month in the period.

5 The resulting average dividend yield for the group is 3.96%. These calculations
6 are shown in Exhibit ____ (RAB-1) Schedule 3.

7 **Q. Having established the average dividend yield, how did you determine the investors'**
8 **expected growth rate for the electric comparison group?**

9 A. The investors' expected growth rate, in theory, correctly forecasts the constant rate of
10 growth in dividends. The dividend growth rate is a function of earnings growth and the
11 payout ratio, neither of which is known precisely for the future. We refer to a perpetual
12 growth rate since the DCF model has no arbitrary cut-off point. We must estimate the
13 investors' expected growth rate because there is no way to know with absolute certainty
14 what investors expect the growth rate to be in the short term, much less in perpetuity.

15 In this analysis, I relied on three major sources of analysts' forecasts for growth.
16 These sources are Value Line, Zacks, and First Call/Thomson Financial.

17 **Q. Please briefly describe Value Line, Zacks, and First Call/Thomson Financial.**

18 A. Value Line is an investment survey that is published for approximately 1,700 companies,
19 both regulated and unregulated. It is updated quarterly and probably represents the most
20 comprehensive and widely used of all investment information services. It provides both
21 historical and forecasted information on a number of important data elements. Value

1 Line neither participates in financial markets as a broker nor works for the utility industry
2 in any capacity of which I am aware.

3 Zacks, according to its website, “was formed in 1978 to compile, analyze, and
4 distribute investment research to both institutional and individual investors.” Zacks
5 gathers from a variety of analysts their opinions on earnings growth forecasts for many
6 firms including regulated electric utilities. The analysts’ estimates are combined to
7 produce consensus average and median estimates of earnings growth.

8 Like Zacks, First Call/Thomson Financial provides detailed investment research
9 on numerous companies. First Call/Thomson also compiles and reports consensus
10 analysts’ forecasts of earnings growth. I obtained these forecasts from Yahoo! Finance.

11 **Q. Why did you rely on analysts’ forecasts in your analysis?**

12 A. Return on equity analysis is a forward-looking process. Five-year or ten-year historical
13 growth rates may not accurately represent investor expectations for dividend growth.
14 Analysts’ forecasts for earnings and dividend growth provide better proxies for the
15 expected growth component in the DCF model than historical growth rates. Analysts’
16 forecasts are also widely available to investors and one can reasonably assume that they
17 influence investor expectations.

18 **Q. How did you use your data sources to estimate growth rates for the comparison
19 group?**

20 A. Exhibit____(RAB-1) Schedule 4, page 1, presents the details of the calculations for the
21 Value Line, Zacks, and First Call/Thomson Financial forecasted growth estimates. These

1 earnings and dividend growth estimates for the comparison group are summarized on
2 Columns (1) through (5) of page 1 of Exhibit ____ (RAB-1) Schedule 4.

3 I also used the sustainable growth formula in estimating the expected growth rate.
4 The sustainable growth method, also known as the retention ratio method, recognizes that
5 the firm retains a portion of its earnings to fuel growth in dividends. These retained
6 earnings, which are plowed back into the firm's asset base, are expected to earn a rate of
7 return. This, in turn, generates growth in the firm's book value, market value, and
8 dividends.

9 The sustainable growth method is calculated using the following formula:

$$10 \quad G = B \times R$$

11 *Where:* $G = \text{expected retention growth rate}$
12 $B = \text{the firm's expected retention ratio}$
13 $R = \text{the expected return}$

14 In its proper form, this calculation is forward-looking. That is, the investors' expected
15 retention ratio and return must be used in order to measure what investors anticipate will
16 happen in the future. Data on expected retention ratios and returns may be obtained from
17 Value Line.

18 The expected sustainable growth estimates for the comparison group are
19 presented in Column (3) on page 1 of Exhibit ____ (RAB-1) Schedule 4. The data came
20 from the Value Line forecasts for the comparison group.

21 **Q. Mr. Baudino, do you have any concerns with respect to the analysts' forecasts**
22 **shown in Exhibit ____ (RAB-1) Schedule 4?**

1 A. Yes. Several utilities in my comparison group have excessive double-digit dividend and
2 earnings growth forecasts. These companies include DPL, Inc., Entergy, FPL Group, and
3 Public Service Enterprise Group. In my experience, growth rates exceeding 10% do not
4 represent reasonable long-term growth forecasts for a mature, more steady, state electric
5 utility industry.

6 With respect to DPL, Value Line reported that it expects 2008 earnings to
7 increase 16% due to the sale of emission allowances, wider margins on energy sales, and
8 fewer plant outages. Value Line also noted that smaller gains are likely in the next 3 to 5
9 years.

10 For Entergy, Value Line expects an increase in earnings of 18% in 2008 driven by
11 wider margins on nuclear operations, retail rate increases and a lower number of common
12 shares.

13 Value Line also shows much higher earnings over the next few years for FPL
14 Group, which may be driving the consensus forecast of 10.14% from Zacks.

15 In the case of Public Service Enterprise Group, earnings per share rose a
16 spectacular 73% from 2006 to 2007. Value Line cited expected higher margins from coal
17 and nuclear plant output and lower interest expenses that could increase earnings by 12%
18 in 2008.

19 In conclusion, I believe that the double-digit growth forecasts for these companies
20 in my comparison group are due to special circumstances and do not represent long-term
21 earnings or dividend growth expectations beyond the next five year period. As such, they
22 are considered outliers in my DCF analysis.

1 **Q. How did you approach the calculation of earnings growth forecasts in this case?**

2 A. For purposes of this case, I looked at three different methods for calculating the expected
3 growth rates for my comparison group.

4 For Method 1, I calculated the average of all the growth rates for the companies in
5 my comparison group using Value Line, Zacks, and First Call/Thomson.

6 For Method 2, I calculated the median growth rates for my comparison group.
7 The median value represents the middle value in a data range and is not influenced by
8 excessively high or low numbers in the data set. The median growth rate for each
9 forecast provides additional valuable information regarding expected growth rates for the
10 group.

11 For Method 3, I omitted double-digit growth rates and growth rates that were near
12 zero (less than 1%) from the calculation of the averages. This is similar to omitting the
13 high and low values from the calculation. These calculations are shown on page 1 of
14 Exhibit ____ (RAB-1) Schedule 4.

15 The expected growth rates produced by all three methods fall in a range from
16 5.77% to 7.75%.

17 **Q. How did you proceed to determine the DCF return of equity for the electric
18 comparison group?**

19 A. To estimate the expected dividend yield (D_1) for the group, the current dividend yield
20 must be moved forward in time to account for dividend increases over the next twelve
21 months. I estimated the expected dividend yield by multiplying the current dividend
22 yield by one plus one-half the expected growth rate. I should note that for Method 3, I

1 excluded the dividend yields for companies whose growth rates were excluded from each
2 respective source.

3 I then added the expected growth rates to the expected dividend yield. The
4 calculations of the resulting DCF returns on equity are presented on page 2 of Exhibit
5 ____ (RAB-1) Schedule 4.

6 **Q. Please explain how you calculated your DCF cost of equity estimates.**

7 A. Page 2 of Exhibit ____ (RAB-1) Schedule 4 presents the DCF results using the three
8 different methods I described above. Method 1 uses the average growth rates for the
9 comparison group. I used the Value Line earnings and dividend growth forecasts and the
10 consensus analysts' forecasts. The average DCF cost of equity result is 11.08%. The
11 midpoint of the four growth rates is 10.92%.

12 Method 2 employs the median growth rates from Value Line, Zacks, and First
13 Call/Thomson. The average DCF return on equity is 10.48% and the midpoint of the
14 results is 10.46%.

15 Method 3 employs the growth rates for the group excluding double digit growth
16 forecasts and forecasts less than or equal to 1.0%. The average of these growth rates
17 results in a DCF estimate of 10.31%. The midpoint of the growth rates results in a DCF
18 estimate of 10.35%.

19 Of the three methods of calculating the expected growth rate, Method 3 is the
20 most reasonable at this time. Method 1 contains a number of excessive growth forecasts
21 that are not expected to hold for the long term. Regarding Method 2, the median growth
22 rate represents the middle of each range of growth rates and thus contains only one (or

1 the average of two) growth rates. It does not account for all the expected growth rates in
2 each range. Thus, in this proceeding it is not as representative of investor expectations as
3 an average growth rate would be. Method 3 excludes these growth rates, yet contains a
4 reasonably broad range of growth forecasts from widely used and reliable sources. Thus,
5 I recommend that the Commission adopt a return on equity for WPSC of 10.30%.

6 **Capital Asset Pricing Model**

7 **Q. Briefly summarize the Capital Asset Pricing Model (“CAPM”) approach.**

8 A. The theory underlying the CAPM approach is that investors, through diversified
9 portfolios, may combine assets to minimize the total risk of the portfolio. Diversification
10 allows investors to diversify away all risks specific to a particular company and be left
11 only with market risk that affects all companies. Thus, the CAPM theory identifies two
12 types of risks for a security: company-specific risk and market risk. Company-specific
13 risk includes such events as strikes, management errors, marketing failures, lawsuits, and
14 other events that are unique to a particular firm. Market risk includes inflation, business
15 cycles, war, variations in interest rates, and changes in consumer confidence. Market risk
16 tends to affect all stocks and cannot be diversified away. The idea behind the CAPM is
17 that diversified investors are rewarded with returns based on market risk.

18 Within the CAPM framework, the expected return on a security is equal to the
19 risk-free rate of return plus a risk premium that is proportional to the security’s market, or
20 non-diversifiable risk. Beta is the factor that reflects the inherent market risk of a
21 security and measures the volatility of a particular security relative to the overall market
22 for securities. For example, a stock with a beta of 1.0 indicates that if the market rises by

1 15%, that stock will also rise by 15%. This stock moves in tandem with movements in
2 the overall market. Stocks with a beta of 0.5 will only rise or fall 50% as much as the
3 overall market. So with an increase in the market of 15%, this stock will only rise 7.5%.
4 Stocks with betas greater than 1.0 will rise and fall more than the overall market. Thus,
5 beta is the measure of the relative risk of individual securities vis-à-vis the market.

6 Based on the foregoing discussion, the equation for determining the return for a
7 security in the CAPM framework is:

8
$$K = R_f + \beta(MRP)$$

9 *Where:* K = Required Return on equity
10 R_f = Risk-free rate
11 MRP = Market risk premium
12 β = Beta

13 This equation tells us about the risk/return relationship posited by the CAPM. Investors
14 are risk averse and will only accept higher risk if they receive higher returns. These
15 returns can be determined in relation to a stock's beta and the market risk premium. The
16 general level of risk aversion in the economy determines the market risk premium. If the
17 risk-free rate of return is 3.0% and the required return on the total market is 15%, then the
18 risk premium is 12%. Any stock's required return can be determined by multiplying its
19 beta by the market risk premium. Stocks with betas greater than 1.0 are considered
20 riskier than the overall market and will have higher required returns. Conversely, stocks
21 with betas less than 1.0 will have required returns lower than the market as a whole.

22 **Q. In general, are there concerns regarding the use of the CAPM in estimating the**
23 **return on equity?**

1 A. Yes. As briefly discussed earlier, there is some controversy surrounding the use of the
2 CAPM.¹ There is evidence that beta is not the primary factor in determining the risk of a
3 security. For example, Value Line's "Safety Rank" is a measure of total risk, not its
4 calculated beta coefficient. Beta coefficients usually describe only a small amount of
5 total investment risk. Moreover, a considerable amount of judgment must be employed
6 in determining the risk-free rate and market return portions of the CAPM equation. The
7 analyst's application of judgment can significantly influence the results obtained from the
8 CAPM. My past experience with the CAPM indicates that it is prudent to use a wide
9 variety of data in estimating returns. Of course, the range of results may also be wide,
10 indicating the difficulty in obtaining a reliable estimate from the CAPM.

11 **Q. How did you estimate the market return portion of the CAPM?**

12 A. The first source I used was the Value Line Investment Survey for Windows for August 1,
13 2008. Value Line provides a summary statistical report detailing, among other things,
14 forecasted growth in dividends, earnings, and book value for the companies Value Line
15 follows. I have presented these three growth rates and the average on page 2 of Exhibit
16 ____ (RAB-1) Schedule 5. The average growth rate is 11.61%. Combining this growth
17 rate with the average expected dividend yield of the Value Line companies of 1.57%
18 results in an expected market return of 13.18%. The detailed calculations are shown on
19 page 1, Exhibit ____ (RAB-1) Schedule 5.

1 For a more complete discussion of some of the controversy surrounding the use of the CAPM, refer to *A Random Walk Down Wall Street* by Burton Malkiel, pp. 229 – 239, 1999 edition.

1 I also considered a supplemental check to this market estimate. Morningstar
2 publishes a study of historical returns on the stock market in its *Ibbotson S&P 2008*
3 *Valuation Yearbook*. Some analysts employ this historical data to estimate the market
4 risk premium of stocks over the risk-free rate. The assumption is that a risk premium
5 calculated over a long period of time is reflective of investor expectations going forward.
6 Exhibit ____ (RAB-1) Schedule 6 presents the calculation of the market return using the
7 historical data.

8 **Q. Please address the use of historical earned returns to estimate the market risk**
9 **premium.**

10 A. The use of historic earned returns on the S&P 500 to estimate the current market risk
11 premium is rather suspect because it naively assumes that investors currently expect
12 historic risk premiums to continue unchanged into the future regardless of present or
13 forecasted economic conditions. Brigham, Shome, and Vinson noted the following with
14 respect to the use of historic risk premiums calculated using the returns as reported by
15 Ibbotson and Sinquefeld (referred to in the quote as "I&S"):

16 There are both conceptual and measurement problems with using
17 I&S data for purposes of estimating the cost of capital.
18 Conceptually, there is no compelling reason to think that investors
19 expect the same relative returns that were earned in the past.
20 Indeed, evidence presented in the following sections indicates that
21 relative expected returns should, and do, vary significantly over
22 time. Empirically, the measured historic premium is sensitive both
23 to the choice of estimation horizon and to the end points. These

1 choices are essentially arbitrary, yet can result in significant
2 differences in the final outcome.²

3 In summary, the use of historic earned returns should be viewed with a great deal
4 of caution. There is no real support for the proposition that an unchanging, mechanically-
5 applied historical risk premium is representative of current investor expectations and
6 return requirements.

7 **Q. How did you determine the risk free rate?**

8 A. I used the average yields on the 20-year Treasury bond and five-year Treasury note over
9 the six-month period from February through July 2008. The 20-year Treasury bond is
10 often used by rate of return analysts as the risk-free rate, but it contains a significant
11 amount of interest rate risk. The five-year Treasury note carries less interest rate risk
12 than the 20-year bond and is more stable than three-month Treasury bills. Therefore, I
13 have employed both of these securities as proxies for the risk-free rate of return. This
14 approach provides a reasonable range over which the CAPM may be estimated.

15 **Q. What is your estimate of the market risk premium?**

16 A. Exhibit ____ (RAB-1) Schedule 5, line 9 of page 1, presents my estimates of the market
17 risk premium based on a DCF analysis applied to current market data. The market risk
18 premium is 8.64% using the 20-year Treasury bond and 10.17% using the five-year
19 Treasury bond.

2 Brigham, E.F., Shome, D.K. and Vinson, S.R., "The Risk Premium Approach to Measuring a Utility's Cost of
Equity," *Financial Management*, Spring 1985, pp. 33-45.

1 Utilizing the historical Ibbotson data on market returns, the market risk premium
2 ranges from 5.20% to 7.10%. This is shown on Exhibit ____ (RAB-1) Schedule 6.

3 **Q. How did you determine the value for beta?**

4 A. I obtained the betas for the companies in the electric company comparison group from
5 most recent Value Line reports. The average of the Value Line betas for the electric
6 group is .81.

7 **Q. Please summarize the CAPM results.**

8 A. The CAPM results using the 20-year and five-year Treasury bond yields and Value Line
9 market return data range from 11.22% to 11.51%.

10 The CAPM results using the historical Ibbotson data range from 8.74% to
11 10.27%. These results are shown on Exhibit ____ (RAB-1) Schedule 6.

12 **Conclusions and Recommendations**

13 **Q. Please summarize the cost of equity you recommend the Commission adopt for**
14 **WPSC.**

15 A. I recommend that the Commission adopt the DCF model I developed and the cost of
16 equity estimates for the comparison group of electric utility companies that I compiled.
17 The average results for the electric company comparison group using the constant-growth
18 DCF model and the expected growth rate forecasts ranged from 10.31% to 11.08%.
19 Based on this range of results, I recommend that the Commission adopt a 10.30% return
20 on equity for WPSC in this proceeding.

1 My recommendation in this case is based on a DCF growth rate analysis that is
2 somewhat different from the approach I have taken in past cases. As I mentioned earlier
3 in my testimony, there are a number of double-digit growth forecasts for certain
4 companies in my comparison group that are not expected to hold for the long term.
5 Including all of these growth rates in the analysis will overstate the investors' expected
6 long-term growth rate and, in turn, inflate the DCF results. It was necessary, therefore, to
7 mitigate the effect of these overstated growth rates in order to more accurately estimate
8 investors' expected growth in dividends for the comparison group. Method 3
9 accomplishes this goal. Thus, I recommend that the Commission adopt a 10.30% return
10 on equity for the Company, which is based on the average results of Method 3.

11 **Q. Some of your CAPM results are higher than your DCF results. Why did you not**
12 **take this into account in your recommended return on equity?**

13 A. Although I would note that my proposed rate of return on equity of 10.30% falls well
14 within the CAPM range, it is my opinion that the CAPM results for the comparison group
15 are likely overstated at this time for a number of reasons.

16 First, this overstatement is due, in part, to the application of Value Line's beta for
17 the group of .81. Value Line determines its betas based on five years of historical price
18 data. Over the last five years, utility share prices in general have been quite volatile due
19 to restructuring, deregulation, the California energy crisis, and the increase of unregulated
20 investments that were more risky than core electric operations. These factors may have
21 increased Value Line's historical betas for electric utilities, all other things being equal.

1 It now appears that the industry will be more stable going forward and, in my opinion,
2 historical betas are likely to fall from their current level.

3 Second, a recent study by Ibbotson and Chen³ suggests that the historical risk
4 premiums I presented in Exhibit ____ (RAB-1) Schedule 6 may be too high. The
5 Ibbotson/Chen study estimated a revised risk premium that factors out rising
6 price/earnings ratios over time, which inflated achieved historical returns. The
7 assumption in this analysis is that price/earnings ratios would not be expected to rise
8 continuously into the future. The results of the study indicate a revised historical risk
9 premium of 4.33% to 6.35%, well below the historical risk premiums of 5.2% to 7.1%
10 shown in Exhibit ____ (RAB-1) Schedule 6. Incorporating the lower revised risk
11 premiums from the Ibbotson/Chen study would result in CAPM estimates of 8.01% to
12 9.67%, which would place my proposed rate of return on equity of 10.30% significantly
13 above the top of that range. These results are also shown on Exhibit ____ (RAB-1)
14 Schedule 6.

15 **Q. In Section II of your Direct Testimony, you mention the passage of the 2003 tax bill**
16 **that reduced taxes on qualifying dividends to 15%. Do you believe that this reduced**
17 **tax rate on dividends has affected the investor required returns for electric utility**
18 **companies?**

3 *Stocks, Bonds, Bills, and Inflation 2007 Yearbook*, Morningstar, pp. 172 - 176.

1 A. Yes. As I stated earlier, I believe that the new favorable tax rate on dividends has
2 reduced the investors' required pre-tax cost of equity for electric utilities. Basic
3 economic theory supports this proposition.

4 Prior to the passage of the 2003 tax bill, dividends were taxed at the normal tax
5 rates, which could be as high as 35%. These same dividends are now being taxed at a
6 much lower 15% rate. What this means is that for a given after-tax rate of return, such as
7 7% for example, an investor would now require a lower pre-tax return in order to earn
8 that 7% after-tax return. In the realm of regulation, experts must estimate, and
9 commissions must set, a pre-tax rate of return on equity that will be applied to a
10 company's rate base. With lower tax rates on dividends, these pretax returns will
11 inevitably decline.

12 In conclusion, all other things being equal, the reduction in dividend taxation
13 should lead to lower required returns for investors. When viewed from this perspective, a
14 10.30% return on equity for WPSC is quite reasonable.

15 IV. RESPONSE TO WPSC WITNESS PAUL MOUL

16 **Q. Have you reviewed WPSC's prefiled Direct Testimony on return on equity?**

17 A. Yes. I reviewed the testimony of Mr. Paul Moul. Based on his analyses, Mr. Moul
18 concluded that a fair ROE for WPSC was 11.50%.

19 **Q. Do you agree with Mr. Moul's recommendation?**

20 A. No. Mr. Moul's recommended ROE is greatly overstated and would result in excessive
21 rates for WPSC's customers. I recommend that the Commission reject his recommended

1 11.50% ROE. The following section of my testimony responds to the analyses presented
2 by Mr. Moul and explains how they overstate the investor-required return on equity for
3 WPSC.

4 **Q. Turning to Mr. Moul's analyses, please summarize your conclusions regarding his**
5 **results.**

6 A. Based on my review of Mr. Moul's return on equity analyses, my conclusions are as
7 follows:

- 8 1. Mr. Moul included a leverage adjustment to his DCF analysis that is
9 inappropriate and that led to a significant overstatement of his recommended DCF result.
- 10 2. Mr. Moul's risk premium analyses are overstated due to the use of a
11 median historical return.
- 12 3. Mr. Moul's recommended CAPM result of 14.27% is excessive due to an
13 inappropriate beta adjustment, inflated market premiums, and a size adjustment that
14 should be rejected.
- 15 4. Mr. Moul's Comparable Earnings analysis is not applicable for ratemaking
16 purposes and should be rejected.

17 **Discounted Cash Flow Model**

18 **Q. Please summarize Mr. Moul's DCF analysis.**

19 A. Mr. Moul applied a constant growth DCF analysis to a combination group of nine electric
20 and gas utilities. Schedule 6 of Exhibit ____ (PRM-1) presents the five-year projected
21 growth rates relied upon by Mr. Moul in formulating his growth rate recommendation of

1 6.25%. These forecasted growth rates range from 3.94% to 6.68%. Thus, Mr. Moul's
2 recommended growth rate of 6.25% is near the top of this range.

3 Mr. Moul included a "leverage modification" in his DCF calculation, which
4 increased his result by 0.89%, or 89 basis points. This calculation is shown on page 30 of
5 his Direct Testimony. Mr. Moul testified on page 26 of his Direct Testimony that "the
6 need for the leverage adjustment arises when the results of the DCF model (k) are to be
7 applied to a capital structure that is different than indicated by the market price." In Mr.
8 Moul's opinion, the DCF result must be adjusted upward when market-to-book ratios are
9 greater than 1.0.

10 **Q. Is Mr. Moul's leverage adjustment to his DCF result appropriate?**

11 A. No. Mr. Moul's leverage adjustment is inappropriate, inflates his recommended DCF
12 result, and should be rejected by the Commission.

13 First, setting the allowed cost of capital for ratemaking purposes properly utilizes
14 book values of common equity, preferred stock, and long-term debt. The actual book
15 values of capitalization support the utility's investment in plant in service. With respect
16 to the allowed return on common equity, commissions utilize market returns on book
17 value in order to fairly compensate the equity investor for the use of his or her capital.
18 Market-based returns are used for common equity because, unlike debt, there is no
19 contractual cost for common equity. Thus, the return on equity must be determined using
20 current market data, and then applied to the percentage of equity in capital structure
21 based on book value.

1 It is inappropriate to inflate market-based ROE calculations from the DCF with an
2 adjustment for M/B ratios that are greater than 1.0. Market prices can deviate from book
3 value for any number of reasons. For example, investors may expect utilities to earn
4 more than their required rate of return on equity, which would cause an increase in
5 market stock prices above book value per share. In uncertain times, investors may view
6 regulated utilities as safe investments, causing a flight to quality and thereby bidding up
7 stock prices.

8 Market based cost of equity estimates applied to the book value of equity is the
9 appropriate means in setting a fair rate of return on invested capital for a regulated utility.
10 Results from the DCF should not be adjusted upward to account for or to prop up high
11 M/B ratios, as Mr. Moul has done in this case. Mr. Moul's leverage adjustment is biased
12 in favor of shareholders and results in financial harm to ratepayers.

13 Further, it is highly doubtful that investors would take the complicated and
14 circuitous route to required return on equity that Mr. Moul proposed in his Direct
15 Testimony. Instead, it is much more likely that investors would take a more direct
16 approach and use market data on stock prices and expected growth to estimate a DCF
17 return on equity.

18 Finally, I would note that bond rating agencies and securities analysts do not
19 assess a utility company's risk based on the market value of its capital structure, but on
20 the book value of its common equity. It is reasonable to assume that investors assess
21 capital structure risk in the same manner.

1 **Q. What is the DCF result from Mr. Moul's analysis if the leverage adjustment is**
2 **excluded?**

3 A. Excluding the 0.89% leverage adjustment results in a DCF cost of equity of 10.28%,
4 which is nearly identical to my recommended ROE in this case.

5 **Risk Premium Analyses**

6 **Q. Briefly summarize Mr. Moul's risk premium analyses.**

7 A. Mr. Moul developed a range of risk premiums using historical returns on the S&P Public
8 Utility Index and public utility bonds. Total returns and risk premiums were measured by
9 Mr. Moul over four different historical time periods, which are all shown on Schedule 8
10 of Exhibit ____ (PRM-1). Mr. Moul presented risk premiums that ranged from 5.37% to
11 6.40%.

12 On page 34 of his Direct Testimony, Mr. Moul discussed these results and chose a
13 risk premium of 5.72% based on the two historical periods covering 1974 - 2006 and
14 1979 - 2006. Mr. Moul then adjusted this risk premium down to 5.25% to account for
15 risk differences between his Combination Group and the S&P Public Utilities. Adding
16 the 5.25% risk premium to his expected utility bond yield of 6.0% resulted in a risk
17 premium cost of equity of 11.25%.

18 **Q. Please comment on Mr. Moul's risk premium analysis and recommended result.**

19 A. First, I described the problem with using historical risk premiums earlier in my
20 testimony. This approach naively assumes that earned returns and the resulting risk
21 premiums in an historical period are reflective of current investor expectations. Such

1 assumptions should be viewed with a good deal of skepticism. Given changing investor
2 expectations over time, it is risky to assume that investors base their current required
3 returns on an unchanging and mechanically-derived historical risk premium. Finance
4 literature has shown that historical risk premiums change over time. Although historical
5 risk premiums may provide rough guides to estimating current required returns, I believe
6 that it is preferable to place greater weight on DCF calculations that employ current,
7 rather than historic, data.

8 It should also be noted that the recent change in dividend taxation should reduce
9 the expected risk premium of utility stock returns over bonds going forward, other things
10 being equal. As I stated earlier in my testimony, reduced taxation on dividends should
11 lower the investor's required pre-tax return on equity. Since there was no change in the
12 tax treatment of bond income, the required equity premium over bonds should decline
13 going forward. Thus, historical risk premiums likely overstate the current required risk
14 premiums of utility stocks over bonds.

15 With respect to Mr. Moul's analyses on Schedule 8, it is inappropriate to use the
16 median return in the formulation of a risk premium analysis. This is because using
17 earned returns over a long period of time tends to average out unduly high and low
18 returns and produce a more stable and reliable result. The median return is essentially
19 only one observation in a long time series and may not be representative of investor
20 returns during that time. Indeed, the risk premiums based on the median return on the
21 S&P Utility Index are substantially higher than the geometric and arithmetic mean returns
22 of the entire historical periods. The median return is a very poor measure of central
23 tendency in these data sets and should be rejected.

1 When the risk premiums based on median returns are eliminated from Mr. Moul's
2 analysis and the average risk premiums from the geometric and arithmetic means are
3 used, the following risk premiums are:

4	1928 - 2006	4.38%
5	1952 - 2006	5.44%
6	1974 - 2006	5.06%
7	1979 - 2006	5.22%
8	Average	5.03%
9	Midpoint	4.91%

10 This analysis shows how much using the median return inflated Mr. Moul's
11 results. If we use the average of all his risk premium results, make his 0.50% downward
12 risk adjustment, and add it to his 6.00% utility bond yield, the resulting risk premium
13 return on equity is:

14 $6.00\% + (5.03\% - 0.50\%) = 10.53\%$

15 **Capital Asset Pricing Model**

16 **Q. Briefly summarize Mr. Moul's CAPM analyses.**

17 A. In formulating his CAPM ROE, Mr. Moul employed an unlevered beta, the formula for
18 which may be found on page 37 of his Direct Testimony. Mr. Moul claimed that Value
19 Line betas cannot be used to directly estimate the CAPM when the market value of
20 common stock is greater than its book value. Mr. Moul's leverage adjustment increased
21 his Combination Group beta from 0.90 to 1.06.

1 For the market premium, Mr. Moul used the arithmetic mean of historical market
2 performance and a forecasted return from Value Line, resulting in a market premium of
3 8.30%.

4 Finally, Mr. Moul added a size adjustment of 0.97% to compensate for the smaller
5 size of his combination group. Mr. Moul's recommended CAPM ROE was 14.27%.

6 **Q. Please respond to Mr. Moul's CAPM analyses.**

7 A. Mr. Moul's CAPM result is grossly overstated and should be rejected by the
8 Commission.

9 First, Mr. Moul's recommended market risk premium ("RP") of 8.30% is
10 excessive and inflates the CAPM ROE estimate. This is because of the two sources he
11 used to estimate the market RP. The Value Line market return forecast of 15.44% and
12 the S&P forecasted return of 13.76% provide a market RP estimate that is unreliable on
13 its face. The market RP that falls out from the average of these returns, 10.1%, results in
14 the following CAPM ROE:

15	Value Line MRP	10.00%
16	Proxy Group Beta	.90
17	Beta * MRP	9.09%
18	Risk-free Rate	4.50%
19	CAPM ROE	13.59%

20 I submit for the Commission's consideration that a 13.59% return on equity is
21 unreasonably high, particularly in light of the relatively low interest rate environment that
22 currently exists in our economy.

23 Mr. Moul also failed to include the geometric mean return in estimating his
24 historical market RP. The geometric mean provides important information to the investor

1 about the actual yearly return of the market over a long period of time. In my opinion, this
2 published and widely available information is valuable to investors and should be used in
3 conjunction with the arithmetic mean in estimating a range for the investor expected risk
4 premium going forward. Of course, the concerns I stated in my Direct Testimony regarding
5 the use of historical risk premiums are still valid. And my Schedule 6 of Exhibit
6 ____ (RAB-1) shows that inclusion of the geometric mean return results in a more
7 conservative CAPM ROE result.

8 Second, Mr. Moul's reformulated beta estimate should be rejected by the
9 Commission. The appropriate beta to use in the CAPM is one that investors expect based
10 on a stock's relative price movements with the overall market. Mr. Moul introduced a
11 highly questionable adjustment to published Value Line betas based on differences between
12 market and book value capital structures. His claim that a leveraged beta should be used in
13 the CAPM for ratemaking purposes is erroneous. He provided absolutely no evidence that
14 investors in utility company stocks use the calculation of beta he presented in his testimony.
15 It is more reasonable to assume that, to the extent investors rely on the CAPM model, they
16 also are more likely to rely on widely published beta estimates from Value Line and other
17 sources. Of course, my previously stated concerns relating to Value Line betas still stand.

18 Finally, Mr. Moul's size premium of 0.97% should be rejected as well. I
19 acknowledge that the SBBI 2007 Yearbook discusses the phenomenon of firm size and
20 return extensively in Chapter 7. However, the extent to which there is a firm size effect
21 with respect to regulated electric companies is not evaluated or discussed. The Decile 4
22 and 5 companies that constitute mid-cap market capitalization have aggregate historical
23 betas of 1.12 to 1.16 and obviously include many unregulated companies that carry far

1 greater risk than WPSC. These betas are greatly in excess of Mr. Moul's group beta of
2 0.90 and my comparison group's beta of 0.81. Therefore, a size premium of 0.97% is
3 completely unwarranted and merely serves to inflate Mr. Moul's already overstated
4 CAPM results.

5 **Comparable Earnings**

6 **Q. Briefly comment on Mr. Moul's comparable earnings analysis.**

7 A. Mr. Moul performed a comparable earnings analysis on a group of unregulated
8 companies from Value Line that was selected based on several criteria included in his
9 Appendix I. Forecasted and historical rates of return were obtained from Value Line and
10 then averaged. The cost of equity for the two groups ranged from 14.00% to 14.20%.

11 I recommend that the Commission reject Mr. Moul's comparable earnings
12 analysis. Forecasted earned returns on book equity are not reasonable proxies for
13 investor expectations in the marketplace. Near-term book accounting returns do not
14 necessarily reflect investor requirements and/or expected market returns. Accounting
15 returns are not necessarily tied to current market forces such as interest rates and stock
16 prices. Thus, they are poor indicators of investors' current required returns. A properly
17 specified and estimated DCF model, which uses current stock prices, is a far more
18 reasonable and accurate gauge of investor requirements.

19 Further, expected returns on book equity for unregulated companies have nothing
20 to do with investor expected returns for lower-risk regulated electric utilities such as
21 WPSC. And Mr. Moul's 14.20% comparable earnings ROE result is far greater than any
22 Commission-allowed return in recent memory and fails the test of reasonableness on its

1 face. I recommend that the Commission reject Mr. Moul's comparable earnings
2 analyses.

3 **Q. Does this complete your testimony?**

4 A. Yes.

5

3153494_2

RESUME OF RICHARD A. BAUDINO

EDUCATION

New Mexico State University, M.A.

Major in Economics

Minor in Statistics

New Mexico State University, B.A.

Economics

English

Twenty five years of experience in utility ratemaking. Broad based experience in revenue requirement analysis, cost of capital, utility financing, phase-ins, auditing and rate design. Has designed revenue requirement and rate design analysis programs.

REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Electric and Gas Utility Rate Design

Cost of Capital for Electric, Gas and Water Companies

Ratemaking Treatment of Generating Plant Sale/Leasebacks

Electric and Gas Utility Cost of Service

Revenue Requirements

Gas industry restructuring and competition

Fuel cost auditing

J. KENNEDY AND ASSOCIATES, INC.

RESUME OF RICHARD A. BAUDINO

EXPERIENCE

1989 to

Present: Kennedy and Associates: Consultant - Responsible for consulting assignments in the area of revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, gas industry restructuring and competition.

1982 to

1989: New Mexico Public Service Commission Staff: Utility Economist - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

CLIENTS SERVED

Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

Industrial Groups

Ad Hoc Committee for a Competitive
Electric Supply System
Air Products and Chemicals, Inc.

Arkansas Electric Energy Consumers
Arkansas Gas Consumers
Armco Steel Company, L.P.
Association of Business Advocating
Tariff Equity
CF&I Steel, L.P.
Climax Molybdenum Company
General Electric Company
Industrial Energy Consumers
Kentucky Industrial Utility Consumers
Large Electric Consumers Organization
Newport Steel
Northwest Arkansas Gas Consumers
Maryland Industrial Group

Occidental Chemical
PSI Industrial Group
Taconite Intervenor (Minnesota)
Tyson Foods
West Virginia Energy Users Group

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdict.	Party	Utility	Subject
3/83	1780	NM	New Mexico Public Service Commission	Boles Water Co.	Rate design, rate of return.
10/83	1803, 1817	NM	New Mexico Public Service Commission	Southwestern Electric Coop	Rate design.
11/84	1833	NM	New Mexico Public Service Commission	El Paso Electric Co.	Service contract approval, rate design, performance standards for Palo Verde nuclear generating system
1983	1835	NM	New Mexico Public Service Commission	Public Service Co. of NM	Rate design.
1984	1848	NM	New Mexico Public Service Commission	Sangre de Cristo Water Co.	Rate design.
02/85	1906	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
09/84	1907	NM	New Mexico Public Service Commission	Jornada Water Co.	Rate of return.
11/85	1957	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
04/86	2009	NM	New Mexico Public Service Commission	El Paso Electric Co.	Phase-in plan, treatment of sale/leaseback expense.
06/86	2032	NM	New Mexico Public Service Commission	El Paso Electric Co.	Sale/leaseback approval.
09/86	2033	NM	New Mexico Public Service Commission	El Paso Electric Co.	Order to show cause, PVNGS audit.
02/87	2074	NM	New Mexico Public Service Commission	El Paso Electric Co.	Diversification.
05/87	2089	NM	New Mexico Public Service Commission	El Paso Electric Co.	Fuel factor adjustment.
08/87	2092	NM	New Mexico Public Service Commission	El Paso Electric Co.	Rate design.
10/88	2146	NM	New Mexico Public	Public Service Co.	Financial effects of

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdct.	Party	Utility	Subject
			Service Commission	of New Mexico	restructuring, reorganization.
07/88	2162	NM	New Mexico Public Service Commission	El Paso Electric Co.	Revenue requirements, rate design, rate of return.
01/89	2194	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Economic development.
1/89	2253	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Financing.
08/89	2259	NM	New Mexico Public Service Commission	Homestead Water Co.	Rate of return, rate design.
10/89	2262	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Rate of return.
09/89	2269	NM	New Mexico Public Service Commission	Ruidoso Natural Gas Co.	Rate of return, expense from affiliated interest.
12/89	89-208-TF	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Rider M-33.
01/90	U-17282	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
09/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Cost of equity.
09/90	90-004-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Cost of equity, transportation rate.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
04/91	91-037-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Transportation rates.
12/91	91-410-EL-AIR	OH	Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Cost of equity.
05/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost of equity, rate of return.

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdiction	Party	Utility	Subject
09/92	92-032-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost of equity, rate of return, cost-of-service
09/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost of equity, rate of return.
09/92	92-009-U	AR	Tyson Foods	General Waterworks	Cost allocation, rate design.
01/93	92-346	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Cost allocation.
01/93	39498	IN	PSI Industrial Group	PSI Energy	Refund allocation.
01/93	U-10105	MI	Association of Businesses Advocating Tariff Equality (ABATE)	Michigan Consolidated Gas Co.	Return on equity.
04/93	92-1464-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Return on equity.
09/93	93-189-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Transportation service terms and conditions.
09/93	93-081-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost-of-service, transportation rates, rate supplements; return on equity; revenue requirements.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Historical reviews; evaluation of economic studies.
03/94	10320	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Trimble County CWIP revenue refund.
4/94	E-015/GR-94-001	MN	Large Power Intervenor	Minnesota Power Co.	Evaluation of the cost of equity, capital structure, and rate of return.

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdct.	Party	Utility	Subject
5/94	R-00942993	PA	PG&W Industrial Intervenors	Pennsylvania Gas & Water Co.	Analysis of recovery of transition costs
5/94	R-00943001	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Evaluation of cost allocation, rate design, rate plan, and carrying charge proposals
7/94	R-00942986	PA	Armco, Inc., West Penn Power Industrial Intervenors	West Penn Power Co.	Return on equity and rate of return.
7/94	94-0035- E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Return on equity and rate of return.
8/94	8652	MD	Westvaco Corp.	Potomac Edison Co.	Return on equity and rate of return.
9/94	930357-C	AR	West Central Arkansas Gas Consumers	Arkansas Oklahoma Gas Corp.	Evaluation of transportation service.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Return on equity.
9/94	8629	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Transition costs.
11/94	94-175-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Cost-of-service, rate design, rate of return.
3/95	RP94-343- 000	FERC	Arkansas Gas Consumers	NorAm Gas Transmission	Rate of return.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Return on equity.
6/95	U-10755	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Revenue requirements
7/95	8697	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost allocation and rate design.
8/95	95-254-TF U-2811	AR	Tyson Foods, Inc.	Southwest Arkansas Electric Cooperative	Refund allocation.
10/95	ER95-1042	FERC	Louisiana Public	Systems Energy	Return on Equity.

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdict.	Party	Utility	Subject
	-000		Service Commission	Resources, Inc.	
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Investigation into Electric Power Competition.
5/96	96-030-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Revenue requirements, rate of return and cost of service.
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Electric Co., Potomac Electric Power Co. and Constellation Energy Corp.	Return on Equity.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Return on equity, rate of return.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
1/97	RP96-199-000	FERC	The Industrial Gas Users Conference	Mississippi River Transmission Corp.	Revenue requirements, rate of return and cost of service.
3/97	96-420-U	AR	West Central Arkansas Gas Corp.	Arkansas Oklahoma Gas Corp.	Revenue requirements, rate of return, cost of service and rate design.
7/97	U-11220	MI	Association of Business Advocating Tariff Equity	Michigan Gas Co. and Southeastern Michigan Gas Co.	Transportation Balancing Provisions
7/97	R-00973944	PA	Pennsylvania American Water Large Users Group	Pennsylvania-American Water Co.	Rate of return, cost of service, revenue requirements.
3/98	8390-U	GA	Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc.	Atlanta Gas Light	Rate of return, restructuring issues, unbundling, rate design issues.
7/98	R-00984280	PA	PG Energy, Inc.	PGE Industrial Intervenor	Cost allocation.
8/98	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdict.	Party	Utility	Subject
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Return on equity, rate of return.
10/98	U-23327	LA	Louisiana Public Service Commission	SWEPCO, CSW and AEP	Analysis of proposed merger.
12/98	98-577	ME	Maine Office of the Public Advocate	Maine Public Service Co.	Return on equity, rate of return.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity, rate of return.
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co.	Return on equity.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Return on equity.
4/99	R-984554	PA	T. W. Phillips Users Group	T. W. Phillips Gas and Oil Co.	Allocation of purchased gas costs.
6/99	R-0099462	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Balancing charges.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Cost of debt.
10/99	R-00994782	PA	Peoples Industrial Intervenors	Peoples Natural Gas Co.	Restructuring issues.
10/99	R-00994781	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Restructuring, balancing charges, rate flexing, alternate fuel.
01/00	R-00994786	PA	UGI Industrial Intervenors	UGI Utilities, Inc.	Universal service costs, balancing, penalty charges, capacity assignment.

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdct.	Party	Utility	Subject
01/00	8829	MD	Maryland Industrial Gr. & United States	Baltimore Gas & Electric Co.	Revenue requirements, cost allocation, rate design.
02/00	R-00994788	PA	Penn Fuel Transportation	PFG Gas, Inc., and	Tariff charges, balancing provisions.
05/00	U-17735	LA	Louisiana Public Service Comm.	Louisiana Electric Cooperative	Rate restructuring
07/00	2000-080	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric Co.	Cost allocation.
07/00	U-21453 (SC), U-20925 (SC), U-22092 (SC) (Subdocket E)	LA	Louisiana Public Service Comm.	Southwestern Electric Power Co.	Stranded cost analysis.
09/00	R-00005654	PA	Philadelphia Industrial And Commercial Gas Users Group.	Philadelphia Gas Works	Interim relief analysis.
10/00	U-21453 (SC), U-20925 (SC), U-22092 (SC) (Subdocket B)	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Restructuring, Business Separation Plan.
11/00	R-00005277 (Rebuttal)	PA	Penn Fuel Transportation Customers	PFG Gas, Inc. and North Penn Gas Co.	Cost allocation issues.
12/00	U-24993	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Return on equity.
03/01	U-22092	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Stranded cost analysis.
04/01	U-21453 (SC), U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues)	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Restructuring issues.
04/01	R-00006042	PA	Philadelphia Industrial and Commercial Gas Users Group	Philadelphia Gas Works	Revenue requirements, cost allocation and tariff issues.
11/01	U-25687	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Return on equity.
03/02	14311-U	GA	Georgia Public	Atlanta Gas Light	Capital structure.

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdct.	Party	Utility	Subject
			Service Commission		
08/02	2002-00145	KY	Kentucky Industrial Utility Customers	Columbia Gas of Kentucky	Revenue requirements.
09/02	M-00021612	PA	Philadelphia Industrial And Commercial Gas Users Group	Philadelphia Gas Works	Transportation rates, terms, and conditions.
01/03	2002-00169	KY	Kentucky Industrial Utility Customers	Kentucky Power	Return on equity.
02/03	02S-594E	CO	Cripple Creek & Victor Gold Mining Company	Aquila Networks – WPC	Return on equity.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity
10/03	CV020495AB	GA	The Landings Assn., Inc.	Utilities Inc. of GA	Revenue requirement & overcharge refund
03/04	2003-00433	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric	Return on equity, Cost allocation & rate design
03/04	2003-00434	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Return on equity
4/04	04S-035E	CO	Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co.	Aquila Networks – WPC	Return on equity.
9/04	U-23327, Subdocket B	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Fuel cost review
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on Equity

J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
 of
 Richard A. Baudino
 As of June 2008**

Date	Case	Jurisdct.	Party	Utility	Subject
06/05	050045-EI	FL	South Florida Hospital and HealthCare Assoc.	Florida Power & Light Co.	Return on equity
08/05	9036	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirement, cost allocation, rate design, Tariff issues.
01/06	2005-0034	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity.
03/06	05-1278-E-PC-PW-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Return on equity.
04/06	U-25116	LA	Louisiana Public Service Commission	Entergy Louisiana, LLC	Transmission Issues
07/06	U-23327	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on equity, Service quality
08/06	ER-2006-0314	MO	Missouri Office of the Public Counsel	Kansas City Power & Light Co.	Return on equity, Weighted cost of capital
08/06	06S-234EG	CO	CF&I Steel, L.P. & Climax Molybdenum	Public Service Company of Colorado	Return on equity, Weighted cost of capital
01/07	06-0960-E-42T	WV	West Virginia Energy Users Group	Monongahela Power & Potomac Edison	Return on Equity
01/07	43112		AK Steel, Inc.	Vectren South, Inc.	Cost allocation, rate design
05/07	2006-661		Maine Office of the Public Advocate	Bangor Hydro-Electric	Return on equity, weighted cost of capital.
09/07	07-07-01		Connecticut Industrial Energy Consumers	Connecticut Light & Power	Return on equity, weighted cost of capital
10/07	05-UR-103		Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Return on equity
11/07	29797		Louisiana Public Service Commission	Cleco Power :LLC & Southwestern Elec. Power	Lignite Pricing, support of settlement
01/08	07-551-EL-AIR		Ohio Energy Group	Ohio Edison, Cleveland Electric, Toledo Edison	Return on equity
03/08	07-0585,	IL	The Commercial Group	Ameren	Cost allocation, rate design

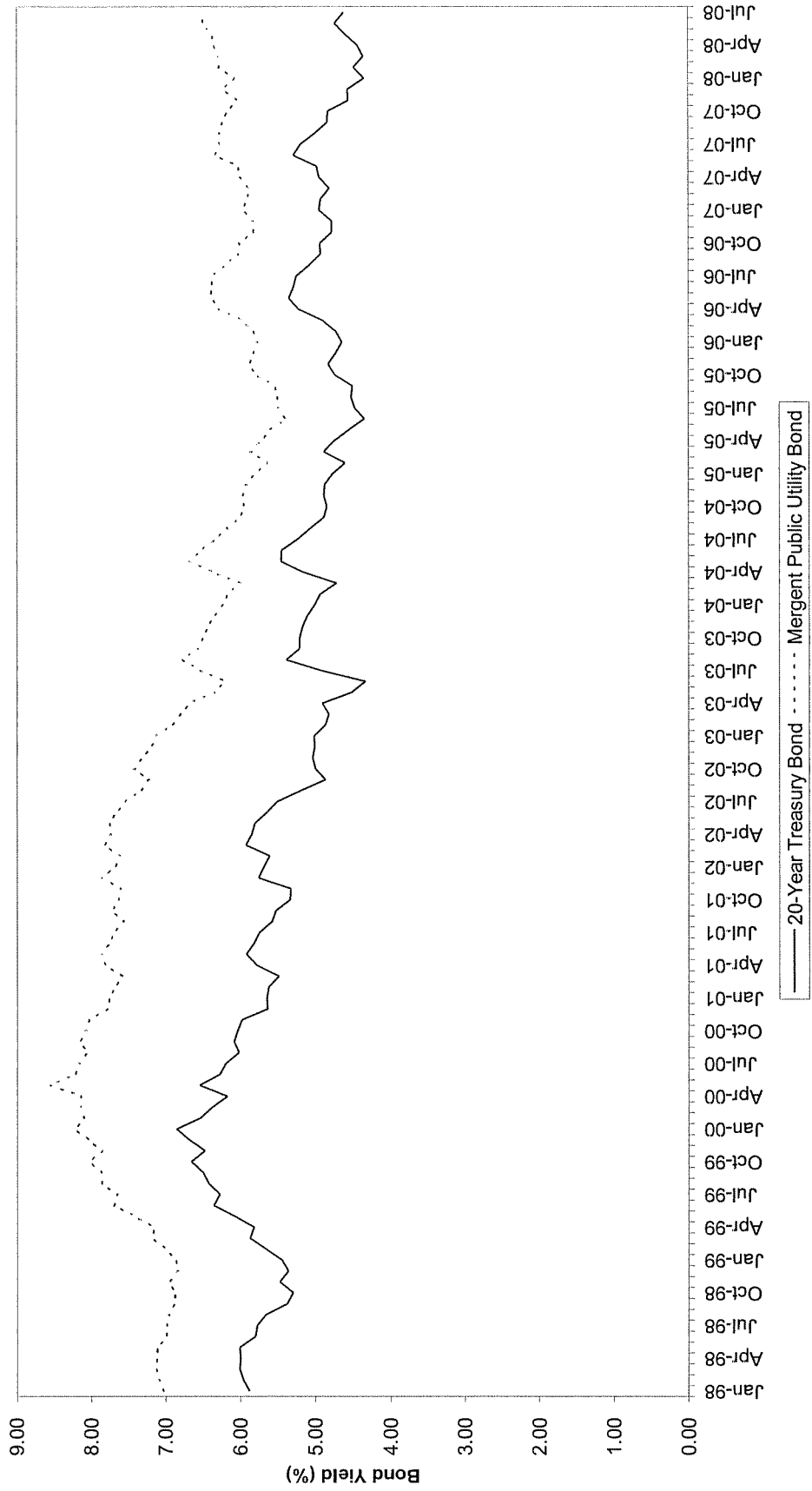
J. KENNEDY AND ASSOCIATES, INC.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2008**

Date	Case	Jurisdct.	Party	Utility	Subject
	07-0585, 07-0587, 07-0588, 07-0589, 07-0590, (consol.)				
04/08	07-0566	IL	The Commercial Group	Commonwealth Edison	Cost allocation, rate design
06/08	R-2008- 2011621	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Cost and revenue allocation, Tariff issues
07/08	R-2008- 2028394	PA	Philadelphia Area Industrial Energy users Group	PECO Energy	Cost and revenue allocation, Tariff issues
07/08	R-2008- 2039634	PA	PPL Gas Large Users Gp.	PPL Gas	Retainage, LUFG Pct.
08/08	6680-UR- 116	WI	Wisconsin Industrial Energy Group	Wisconsin P&L	Cost of Equity

J. KENNEDY AND ASSOCIATES, INC.

HISTORICAL BOND YIELDS AVERAGE PUBLIC UTILITY BOND VS 20-YEAR TREASURY BOND



**WISCONSIN PUBLIC SERVICE CORP.
COMPARISON GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD**

		Jul-08	Jun-08	May-08	Apr-08	Mar-08	Feb-08
ALLETE	High Price (\$)	43.340	46.110	45.490	43.000	38.770	39.860
	Low Price (\$)	40.180	41.430	40.120	38.820	34.830	35.920
	Avg. Price (\$)	41.760	43.770	42.805	40.910	36.800	37.890
	Dividend (\$)	0.430	0.430	0.430	0.430	0.430	0.430
	Mo. Avg. Div.	4.12%	3.93%	4.02%	4.20%	4.67%	4.54%
	6 mos. Avg.	4.25%					
Alliant Energy	High Price (\$)	34.540	37.830	38.880	38.460	35.790	38.280
	Low Price (\$)	31.630	33.500	36.370	35.200	34.000	34.680
	Avg. Price (\$)	33.085	35.665	37.625	36.830	34.895	36.480
	Dividend (\$)	0.350	0.350	0.350	0.350	0.350	0.350
	Mo. Avg. Div.	4.23%	3.93%	3.72%	3.80%	4.01%	3.84%
	6 mos. Avg.	3.92%					
Consolidated Edison	High Price (\$)	39.780	41.370	42.730	42.010	42.150	45.100
	Low Price (\$)	37.380	38.360	41.050	39.800	39.300	40.570
	Avg. Price (\$)	38.580	39.865	41.890	40.905	40.725	42.835
	Dividend (\$)	0.585	0.585	0.585	0.585	0.585	0.585
	Mo. Avg. Div.	6.07%	5.87%	5.59%	5.72%	5.75%	5.46%
	6 mos. Avg.	5.74%					
DPL, Inc.	High Price (\$)	27.540	28.400	28.890	28.090	25.830	28.380
	Low Price (\$)	25.080	26.150	27.590	25.830	24.380	25.460
	Avg. Price (\$)	26.310	27.275	28.240	26.960	25.105	26.920
	Dividend (\$)	0.275	0.275	0.275	0.275	0.275	0.275
	Mo. Avg. Div.	4.18%	4.03%	3.90%	4.08%	4.38%	4.09%
	6 mos. Avg.	4.11%					
DTE Energy	High Price (\$)	44.970	44.810	44.820	42.930	41.060	44.240
	Low Price (\$)	40.330	41.450	40.830	38.950	37.870	39.620
	Avg. Price (\$)	42.650	43.130	42.825	40.940	39.465	41.930
	Dividend (\$)	0.530	0.530	0.530	0.530	0.530	0.530
	Mo. Avg. Div.	4.97%	4.92%	4.95%	5.18%	5.37%	5.06%
	6 mos. Avg.	5.07%					
Edison International	High Price (\$)	52.350	53.110	54.170	53.950	51.270	54.600
	Low Price (\$)	47.380	49.680	50.490	49.140	47.650	49.000
	Avg. Price (\$)	49.865	51.395	52.330	51.545	49.460	51.800
	Dividend (\$)	0.305	0.305	0.305	0.305	0.305	0.305
	Mo. Avg. Div.	2.45%	2.37%	2.33%	2.37%	2.47%	2.36%
	6 mos. Avg.	2.39%					
Entergy Corp.	High Price (\$)	122.880	123.140	123.270	117.750	110.330	112.660
	Low Price (\$)	104.270	116.470	110.970	107.940	102.840	101.960
	Avg. Price (\$)	113.575	119.805	117.120	112.845	106.585	107.310
	Dividend (\$)	0.750	0.750	0.750	0.750	0.750	0.750
	Mo. Avg. Div.	2.64%	2.50%	2.56%	2.66%	2.81%	2.80%
	6 mos. Avg.	2.66%					

**WISCONSIN PUBLIC SERVICE CORP.
COMPARISON GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD**

		Jul-08	Jun-08	May-08	Apr-08	Mar-08	Feb-08
FPL Group	High Price (\$)	68.760	68.160	68.980	68.140	63.950	67.340
	Low Price (\$)	62.710	63.000	63.750	62.750	59.020	59.710
	Avg. Price (\$)	65.735	65.580	66.365	65.445	61.485	63.525
	Dividend (\$)	0.445	0.445	0.445	0.445	0.445	0.445
	Mo. Avg. Div.	2.71%	2.71%	2.68%	2.72%	2.90%	2.80%
	6 mos. Avg.	2.75%					
NSTAR	High Price (\$)	34.180	35.360	33.970	32.600	31.230	33.650
	Low Price (\$)	31.170	33.090	31.270	30.410	29.360	30.760
	Avg. Price (\$)	32.675	34.225	32.620	31.505	30.295	32.205
	Dividend (\$)	0.350	0.350	0.350	0.350	0.350	0.350
	Mo. Avg. Div.	4.28%	4.09%	4.29%	4.44%	4.62%	4.35%
	6 mos. Avg.	4.35%					
Progress Energy	High Price (\$)	42.390	43.490	43.130	43.580	43.060	46.450
	Low Price (\$)	40.110	41.500	41.400	41.000	40.540	41.750
	Avg. Price (\$)	41.250	42.495	42.265	42.290	41.800	44.100
	Dividend (\$)	0.615	0.615	0.615	0.615	0.615	0.615
	Mo. Avg. Div.	5.96%	5.79%	5.82%	5.82%	5.89%	5.58%
	6 mos. Avg.	5.81%					
Public Service Enterprise	High Price (\$)	47.330	47.280	45.180	44.840	47.500	48.685
	Low Price (\$)	40.520	42.850	41.480	40.180	39.080	43.850
	Avg. Price (\$)	43.925	45.065	43.330	42.510	43.290	46.268
	Dividend (\$)	0.323	0.323	0.323	0.323	0.323	0.293
	Mo. Avg. Div.	2.94%	2.87%	2.98%	3.04%	2.98%	2.53%
	6 mos. Avg.	2.89%					
Southern Company	High Price (\$)	36.930	36.200	37.230	37.810	36.340	38.030
	Low Price (\$)	34.460	34.280	35.950	35.620	33.710	34.400
	Avg. Price (\$)	35.695	35.240	36.590	36.715	35.025	36.215
	Dividend (\$)	0.420	0.420	0.420	0.403	0.403	0.403
	Mo. Avg. Div.	4.71%	4.77%	4.59%	4.39%	4.60%	4.45%
	6 mos. Avg.	4.58%					
Wisconsin Energy	High Price (\$)	46.610	48.320	48.750	47.860	44.660	47.500
	Low Price (\$)	42.010	44.750	46.650	44.220	42.000	43.100
	Avg. Price (\$)	44.310	46.535	47.700	46.040	43.330	45.300
	Dividend (\$)	0.270	0.270	0.270	0.270	0.270	0.270
	Mo. Avg. Div.	2.44%	2.32%	2.26%	2.35%	2.49%	2.38%
	6 mos. Avg.	2.37%					
Xcel Energy	High Price (\$)	20.620	21.340	21.730	21.250	20.680	21.550
	Low Price (\$)	19.400	19.670	20.810	20.020	19.390	19.700
	Avg. Price (\$)	20.010	20.505	21.270	20.635	20.035	20.625
	Dividend (\$)	0.238	0.238	0.230	0.230	0.230	0.230
	Mo. Avg. Div.	4.76%	4.64%	4.33%	4.46%	4.59%	4.46%
	6 mos. Avg.	4.54%					
Average Dividend Yield		3.96%					

Source: Yahoo! Finance

**WISCONSIN PUBLIC SERVICE CORP.
COMPARISON GROUP
DCF Growth Rate Analysis**

<u>Company</u>	(1) Value Line <u>DPS</u>	(2) Value Line <u>EPS</u>	(3) Value Line <u>B x R</u>	(4) <u>Zacks</u>	(5) First Call/ Thomson
ALLETE	5.50%	2.50%	3.50%	5.00%	5.00%
Alliant Energy	9.00%	6.00%	4.50%	7.00%	5.40%
Consolidated Edison	1.00%	2.00%	3.00%	3.20%	3.00%
DPL, Inc.	5.00%	11.00%	8.00%	10.67%	11.23%
DTE Energy	1.50%	5.00%	3.50%	6.33%	6.00%
Edison International	7.00%	5.00%	7.00%	8.25%	8.45%
Entergy Corp.	13.00%	10.00%	7.00%	12.80%	12.18%
FPL Group	7.50%	9.50%	7.00%	10.14%	9.73%
NSTAR	7.00%	7.50%	5.50%	6.40%	6.00%
Progress Energy	1.00%	5.00%	2.50%	4.71%	6.12%
Public Service Enterprise Group	6.50%	10.00%	7.50%	14.33%	11.50%
Southern Company	4.50%	5.50%	4.50%	4.67%	5.26%
Wisconsin Energy	9.50%	8.00%	7.50%	9.60%	9.39%
Xcel Energy	4.50%	7.50%	4.50%	5.40%	6.12%
Averages	5.89%	6.75%	5.39%	7.75%	7.53%
Median Values	6.00%	6.75%	5.00%	6.70%	6.12%
Averages excl. > or =10% & < or = 1%	6.14%	5.77%	5.39%	6.06%	6.41%

Sources: Zack's and First Call/Thomson Earnings Reports, July 2008
Value Line Investment Survey, May 9, May 30, and June 27, 2008

RETURN ON EQUITY CALCULATION WISCONSIN PUBLIC SERVICE CORP.					
	(1) Value Line <u>Dividend Gr.</u>	(2) Value Line <u>Earnings Gr.</u>	(3) Zack's <u>Earning Gr.</u>	(4) First Call <u>Earning Gr.</u>	(5) Average of <u>All Gr. Rates</u>
<u>Method 1:</u>					
Dividend Yield	3.96%	3.96%	3.96%	3.96%	3.96%
Growth Rate	5.89%	6.75%	7.75%	7.53%	6.98%
Expected Div. Yield	<u>4.08%</u>	<u>4.09%</u>	<u>4.11%</u>	<u>4.11%</u>	<u>4.10%</u>
DCF Return on Equity	9.97%	10.84%	11.86%	11.64%	11.08%
Midpoint of Results					10.92%
<u>Method 2:</u>					
Dividend Yield	3.96%	3.96%	3.96%	3.96%	3.96%
Median Growth Rate	6.00%	6.75%	6.70%	6.12%	6.39%
Expected Div. Yield	<u>4.08%</u>	<u>4.09%</u>	<u>4.09%</u>	<u>4.08%</u>	<u>4.09%</u>
DCF Return on Equity	10.08%	10.84%	10.79%	10.20%	10.48%
Midpoint of Results					10.46%
<u>Method 3:</u>					
Dividend Yield	3.75%	4.16%	4.30%	4.16%	4.09%
Growth Rate Excluding Rates > 10% & <1%	6.14%	5.77%	6.06%	6.41%	6.09%
Expected Div. Yield	<u>3.86%</u>	<u>4.28%</u>	<u>4.43%</u>	<u>4.30%</u>	<u>4.22%</u>
DCF Return on Equity	10.00%	10.05%	10.49%	10.71%	10.31%
Midpoint of Results					10.35%

**WISCONSIN PUBLIC SERVICE CORP.
 Capital Asset Pricing Model Analysis
 Comparison Group**

20-Year Treasury Bond, Value Line Beta

<u>Line No.</u>		<u>Value Line</u>
1	Market Required Return Estimate	
2	Expected Dividend Yield	1.57%
3	Expected Growth	<u>11.61%</u>
4	Required Return	13.18%
5	Risk-free Rate of Return, 20-Year Treasury Bond	
6	Average of Last Six Months	4.54%
8	Risk Premium	
9	@ 6 Month Average RFR (Line 4 minus Line 6)	8.64%
10	Comparison Group Beta	0.81
11	Comparison Group Beta * Risk Premium	
12	@ 6 Month Average RFR (Line 10 * Line 9)	6.97%
13	CAPM Return on Equity	
14	@ 6 Month Average RFR (Line 12 plus Line 6)	11.51%

5-Year Treasury Bond, Value Line Beta

1	Market Required Return Estimate	
2	Expected Dividend Yield	1.57%
3	Expected Growth	<u>11.61%</u>
4	Required Return	13.18%
5	Risk-free Rate of Return, 5-Year Treasury Bond	
6	Average of Last Six Months	3.01%
8	Risk Premium	
9	@ 6 Month Average RFR (Line 4 minus Line 6)	10.17%
10	Comparison Group Beta	0.81
11	Comparison Group Beta * Risk Premium	
12	@ 6 Month Average RFR (Line 9 * Line 10)	8.21%
13	CAPM Return on Equity	
14	@ 6 Month Average RFR (Line 12 plus Line 6)	11.22%

**WISCONSIN PUBLIC SERVICE CORP.
 Capital Asset Pricing Model Analysis
 Comparison Group**

Supporting Data for CAPM Analyses

20 Year Treasury Bond Data

	<u>Avg. Yield</u>
February-08	4.49%
March-08	4.36%
April-08	4.44%
May-08	4.60%
June-08	4.74%
July-08	<u>4.62%</u>
6 month average	4.54%

5 Year Treasury Bond Data

	<u>Avg. Yield</u>
February-08	2.78%
March-08	2.48%
April-08	2.84%
May-08	3.15%
June-08	3.49%
July-08	<u>3.30%</u>
6 month average	3.01%

Value Line Market Growth Rate Data:

Forecasted Data:	
Earnings	13.41%
Book Value	11.02%
Dividends	<u>10.41%</u>
Average	11.61%
Source: Value Line Investment Survey for Windows, August 1, 2008	

Comparison Group Betas:

ALLETE, inc.	0.90
Alliant Energy	0.80
Consolidated Edison	0.75
DPL, Inc.	0.80
DTE Energy	0.80
Edison International	0.85
Entergy Corp.	0.85
FPL Group, Inc.	0.80
NSTAR	0.80
Progress Energy	0.80
Public Service Enterprise Gp	0.90
Southern Company	0.70
Wisconsin Energy	0.80
Xcel Energy	0.75

0.81

Sources: Value Line reports

WISCONSIN PUBLIC SERVICE CORP.
Capital Asset Pricing Model Analysis
Historic Market Premium

	<u>Geometric Mean</u>	<u>Arithmetic Mean</u>
Long-Term Annual Return on Stocks	10.40%	12.30%
Long-Term Annual Income Return on Long-Term Government Bonds	<u>5.20%</u>	<u>5.20%</u>
Historical Market Risk Premium	5.20%	7.10%
Comparison Group Beta, Value Line	<u>0.81</u>	<u>0.81</u>
Beta * Market Premium	4.20%	5.73%
Current 20-Year Treasury Bond Yield	<u>4.54%</u>	<u>4.54%</u>
CAPM Cost of Equity, Value Line Beta	<u>8.74%</u>	<u>10.27%</u>
<i>Historical Market Risk Premium, Ibbotson/Chen Study</i>	4.30%	6.35%
Comparison Group Beta, Value Line	<u>0.81</u>	<u>0.81</u>
Beta * Market Premium	3.47%	5.13%
Current 20-Year Treasury Bond Yield	<u>4.54%</u>	<u>4.54%</u>
CAPM Cost of Equity, Value Line Beta	<u>8.01%</u>	<u>9.67%</u>

Source: *Ibbotson S&P 500 Valuation Yearbook*, Morningstar