COST OF CAPITAL STUDY

YIELD CAPITALIZATION

2012 ASSESSMENT YEAR

APPENDIX C

Electric Industry

EQUITY RATE							**10.00%**	
CAPITAL ASSET PRICING MODEL								PAGE
CAPM Ex Post			6.43%					5
CAPM Ex Ante			7.40%					6
DIVIDEND GROWTH MODELS								
Value Line, based on Dividends Growth			7.50%					8
Value Line, based on Earnings Growth			10.50%					9
Value Line, based on Return on Equity			8.00%					10
						RANGE	6.43 - 10.50%	
DEBT RATE							**5.00%**	11
MARKET CAPITAL STRUCTURE								
Equity	55%	x	10.00%	=			5.50%	3
Debt	45%	x	5.00%	=	2.25%			3
Marginal Tax Rate	38%	=	(1-.38)	x	2.25%		1.40%	
WEIGHTED AVERAGE COST OF CAPITAL							**6.90%**	

SUPPORT FOR GUIDELINE COMPANIES

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Capital Structure at Book Value

Company	Ticker	Beta	P/E Ratio	Div'd Yield	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity
Avista Corp	ava	0.70	14.5	4.6%	1,179,975,499	49.9%	-	0.0%	1,186,300,000	50.1%	2,366,275,499
Black Hills Corp	bkh	0.85	18.7	4.5%	1,110,265,192	48.4%	-	0.0%	1,183,600,000	51.6%	2,293,865,192
Edison International	eix	0.80	14.2	3.3%	11,028,709,323	44.1%	1,029,000,000	4.1%	12,956,000,000	51.8%	25,013,709,323
El Paso Electric	ee	0.75	12.5	3.0%	855,277,426	50.2%	-	0.0%	849,800,000	49.8%	1,705,077,426
Hawaiian Electric	he	0.70	18.5	5.0%	1,519,665,000	51.8%	34,300,000	1.2%	1,382,500,000	47.1%	2,936,465,000
Idacorp Inc	ida	0.70	12.8	3.0%	1,615,628,235	52.1%	-	0.0%	1,487,300,000	47.9%	3,102,928,235
NV Energy Inc	nve	0.85	19.5	3.4%	3,421,866,035	39.9%	-	0.0%	5,151,600,000	60.1%	8,573,466,035
PG&E Corp	pcg	0.55	14.1	4.3%	11,969,389,388	50.1%	252,000,000	1.1%	11,689,000,000	48.9%	23,910,389,388
PNM Resources	pnm	0.95	16.1	2.8%	1,542,782,497	49.5%	11,500,000	0.4%	1,564,000,000	50.2%	3,118,282,497
Pinnacle West	pnw	0.70	15.7	4.6%	3,764,327,775	57.7%	-	0.0%	2,761,700,000	42.3%	6,526,027,775
Portland General	por	0.75	13.7	4.4%	1,661,276,260	48.0%	-	0.0%	1,798,000,000	52.0%	3,459,276,260
Sempra Energy	sre	0.80	12.6	3.8%	9,833,621,381	50.0%	179,000,000	0.9%	9,648,000,000	49.1%	19,660,621,381
Unisource Energy	uns	0.75	13.9	4.5%	857,890,683	38.5%	-	0.0%	1,370,600,000	61.5%	2,228,490,683
Xcel Energy	xel	0.65	14.2	4.2%	8,479,748,130	47.5%	105,000,000	0.6%	9,263,600,000	51.9%	17,848,348,130
Cent. Vermont P.S.	cv	0.75	nmf	2.6%	283,403,574	54.1%	8,100,000	1.5%	232,300,000	44.3%	523,803,574
CH Energy Group	chg	0.65	18.1	4.0%	528,529,290	53.1%	21,000,000	2.1%	446,500,000	44.8%	996,029,290
Con. Edison	ed	0.60	16.5	4.1%	11,262,183,639	51.6%	213,000,000	1.0%	10,369,000,000	47.5%	21,844,183,639
Constellation Energy	ceg	0.80	19.5	2.4%	7,982,399,180	63.9%	190,000,000	1.5%	4,318,300,000	34.6%	12,490,699,180
Dominion Res	D	0.70	17.9	4.1%	11,904,870,527	40.6%	257,000,000	0.9%	17,153,000,000	58.5%	29,314,870,527
Duke Energy	duk	0.65	15.0	4.9%	22,973,529,128	56.5%	-	0.0%	17,687,000,000	43.5%	40,660,529,128
Exelon Corp	exc	0.85	14.3	4.7%	14,645,498,990	54.5%	87,000,000	0.3%	12,154,000,000	45.2%	26,886,498,990
FirstEnergy	fe	0.80	13.7	4.8%	13,403,836,806	44.8%	-	0.0%	16,491,000,000	55.2%	29,894,836,806
NextEra Energy	nee	0.75	13.2	4.1%	15,338,063,842	43.4%	-	0.0%	20,039,000,000	56.6%	35,377,063,842
Northeast Utilities	nu	0.70	15.5	3.4%	4,006,640,312	46.4%	116,200,000	1.3%	4,503,300,000	52.2%	8,626,140,312
NSTAR	nst	0.65	16.8	3.9%	2,019,941,177	47.4%	43,000,000	1.0%	2,200,800,000	51.6%	4,263,741,177
Pepco Holdings	pom	0.80	16.6	5.6%	4,312,171,562	53.2%	-	0.0%	3,794,000,000	46.8%	8,106,171,562
PPL Corp	ppl	0.65	11.4	4.7%	11,179,448,220	38.6%	250,000,000	0.9%	17,532,000,000	60.5%	28,961,448,220
Progress Energy	pgn	0.60	17.0	4.7%	10,664,443,836	47.5%	92,800,000	0.4%	11,717,000,000	52.1%	22,474,243,836
P.S. Enterpriser Gp	peg	0.80	13.0	4.1%	10,244,570,843	59.2%	-	0.0%	7,063,000,000	40.8%	17,307,570,843
SCANA Corp	scg	0.70	13.9	4.6%	3,941,407,789	47.4%	-	0.0%	4,376,000,000	52.6%	8,317,407,789
Southern Co	so	0.55	16.6	4.5%	17,367,851,275	46.7%	1,082,000,000	2.9%	18,733,000,000	50.4%	37,182,851,275
TECO Energy	te	0.85	13.2	4.8%	2,276,341,164	45.8%	-	0.0%	2,690,000,000	54.2%	4,966,341,164
UIL Holdings	uil	0.70	16.6	5.1%	1,213,025,016	43.9%	-	0.0%	1,551,000,000	56.1%	2,764,025,016
ALLETE Inc	ale	0.70	15.7	4.5%	1,041,710,576	55.2%	-	0.0%	844,400,000	44.8%	1,886,110,576
Alliant Energy	lnt	0.75	15.3	4.3%	3,051,991,553	51.2%	205,100,000	3.4%	2,703,600,000	45.4%	5,960,691,553
Ameren Corp	aee	0.80	12.4	5.0%	7,909,130,776	53.7%	142,000,000	1.0%	6,682,000,000	45.4%	14,733,130,776
American Elec Pwr	aep	0.70	12.0	4.8%	14,680,532,309	49.1%	61,000,000	0.2%	15,183,000,000	50.7%	29,924,532,309
Centerpoint Energy	cnp	0.80	16.7	4.2%	4,216,733,938	33.2%	-	0.0%	8,497,000,000	66.8%	12,713,733,938
Cleco Corp	cnl	0.70	14.7	3.5%	1,434,741,606	51.1%	-	0.0%	1,370,600,000	48.9%	2,805,341,606
CMS Energy Corp	cms	0.75	13.8	4.4%	3,024,000,000	32.6%	44,000,000	0.5%	6,208,000,000	66.9%	9,276,000,000
DTE Energy Co	dte	0.75	13.9	4.7%	6,930,825,747	48.0%	-	0.0%	7,497,000,000	52.0%	14,427,825,747
Empire District	ede	0.70	16.4	4.9%	690,502,206	49.9%	-	0.0%	692,500,000	50.1%	1,383,002,206
Entergy Corp	etr	0.70	10.2	4.7%	8,990,742,373	45.9%	310,700,000	1.6%	10,281,000,000	52.5%	19,582,442,373
Great Plains Energy	gxp	0.75	14.2	4.1%	2,959,899,232	51.5%	39,000,000	0.7%	2,750,100,000	47.8%	5,748,999,232
Integrys Energy Group	teg	0.90	14.9	5.4%	2,959,282,847	58.1%	51,100,000	1.0%	2,080,700,000	40.9%	5,091,082,847
MGE Energy Inc	mgee	0.60	16.4	3.4%	580,152,314	61.6%		0.0%	361,600,000	38.4%	941,752,314

OGE Energy Corp	oge	0.80	15.8	3.0%	2,495,543,575	49.1%		0.0%	2,586,900,000	50.9%	5,082,443,575
Otter Tail Corp	ottr	0.90	27.7	5.6%	632,888,504	58.5%	15,500,000	1.4%	433,500,000	40.1%	1,081,888,504
Vectren Corp	vvc	0.70	14.8	4.9%	1,473,330,672	48.2%		0.0%	1,581,100,000	51.8%	3,054,430,672
Westar Energy	wr	0.75	14.4	4.8%	2,601,412,184	48.5%	21,400,000	0.4%	2,741,600,000	51.1%	5,364,412,184
Wisconsin Energy	wec	0.65	15.0	3.6%	3,966,241,484	46.0%	30,400,000	0.4%	4,618,900,000	53.6%	8,615,541,484
	Mean	**0.73**	**15.3**	**4.2%**	**5,765,259,625**	**49.2%**		**0.6%**	**6,126,582,353**	**50.2%**	
	Weighted Mean				**294,028,240,886**	**48.1%**	**4,891,100,000**	**0.8%**	**312,455,700,000**	**51.1%**	**611,375,040,886**
	Median			**4.4%**		**49.1%**		**0.3%**		**50.4%**	

SUPPORT FOR CAPITAL STRUCTURE

MARKET VALUE

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Capital Structure at Market Value

Company	Ticker	Stock Average	Common Shares	Common Stock	%	Preferred Stock	%	Long Term Debt	%	Total Debt & Equity
Avista Corp	ava	24.895	57,984,054	1,443,513,024	50.4%	-	0.0%	1,421,913,136	49.6%	2,865,426,161
Black Hills Corp	bkh	32.252	39,441,037	1,272,039,178	47.3%	-	0.0%	1,414,690,821	52.7%	2,686,730,000
Edison International	eix	39.317	325,811,206	12,809,810,583	43.1%	1,029,000,000	3.5%	15,913,890,932	53.5%	29,752,701,515
El Paso Electric	ee	32.932	41,822,857	1,377,296,386	57.9%	-	0.0%	1,003,443,840	42.1%	2,380,740,226
Hawaiian Electric	he	25.273	95,877,918	2,423,154,581	59.0%	34,300,000	0.8%	1,652,424,857	40.2%	4,109,879,438
Idacorp Inc	ida	40.273	49,711,638	2,002,053,368	53.3%	-	0.0%	1,752,403,870	46.7%	3,754,457,238
NV Energy Inc	nve	15.085	235,990,761	3,559,920,630	35.8%	-	0.0%	6,392,427,255	64.2%	9,952,347,885
PG&E Corp	pcg	40.497	401,657,362	16,265,784,303	53.0%	252,000,000	0.8%	14,193,600,114	46.2%	30,711,384,417
PNM Resources	pnm	17.810	86,673,174	1,543,649,229	45.8%	11,500,000	0.3%	1,816,429,600	53.9%	3,371,578,829
Pinnacle West	pnw	45.605	109,110,950	4,976,004,875	60.2%	-	0.0%	3,287,056,566	39.8%	8,263,061,441
Portland General	por	24.353	75,341,327	1,834,812,450	41.3%	-	0.0%	2,602,605,000	58.7%	4,437,417,450
Sempra Energy	sre	52.667	239,552,287	12,616,420,449	51.9%	179,000,000	0.7%	11,531,714,299	47.4%	24,327,134,747
Unisource Energy	uns	36.598	36,898,524	1,350,424,481	45.2%	-	0.0%	1,638,201,453	54.8%	2,988,625,934
Xcel Energy	xel	25.727	484,557,036	12,466,037,346	51.0%	105,000,000	0.4%	11,891,683,320	48.6%	24,462,720,666
Cent. Vermont P.S.	cv	35.228	13,431,449	473,167,563	62.3%	8,100,000	1.1%	277,655,186	36.6%	758,922,748
CH Energy Group	chg	55.020	14,888,149	819,145,958	59.8%	21,000,000	1.5%	528,611,350	38.6%	1,368,757,308
Con. Edison	ed	58.568	292,904,646	17,154,936,942	56.7%	213,000,000	0.7%	12,892,235,884	42.6%	30,260,172,826
Constellation Energy	ceg	38.313	201,321,543	7,713,299,384	58.7%	190,000,000	1.4%	5,229,140,910	39.8%	13,132,440,294
Dominion Res	D	50.982	569,611,030	29,039,719,661	59.0%	257,000,000	0.5%	19,904,825,357	40.5%	49,201,545,018
Duke Energy	duk	20.512	1,331,798,790	27,317,412,848	58.9%	-	0.0%	19,078,082,550	41.1%	46,395,495,398
Exelon Corp	exc	43.045	662,692,262	28,525,588,418	68.4%	87,000,000	0.2%	13,088,642,600	31.4%	41,701,231,018
FirstEnergy	fe	43.928	418,216,437	18,371,551,050	49.0%	-	0.0%	19,132,528,380	51.0%	37,504,079,430
NextEra Energy	nee	55.992	422,536,194	23,658,505,729	48.2%	-	0.0%	25,408,580,739	51.8%	49,067,086,468
Northeast Utilities	nu	34.005	176,893,612	6,015,267,276	52.5%	116,200,000	1.0%	5,320,648,950	46.5%	11,452,116,226
NSTAR	nst	44.570	103,586,727	4,616,860,422	63.3%	43,000,000	0.6%	2,630,493,038	36.1%	7,290,353,460
Pepco Holdings	pom	19.390	226,956,398	4,400,684,557	49.7%	-	0.0%	4,457,570,600	50.3%	8,858,255,157
PPL Corp	ppl	28.953	577,749,262	16,727,766,966	44.1%	250,000,000	0.7%	20,955,018,147	55.2%	37,932,785,113
Progress Energy	pgn	52.877	295,005,362	15,598,900,191	50.6%	92,800,000	0.3%	15,127,499,145	49.1%	30,819,199,337
P.S. Enterpriser Gp	peg	32.593	505,904,733	16,489,121,598	64.7%	-	0.0%	8,981,073,432	35.3%	25,470,195,030
SCANA Corp	scg	42.258	129,651,572	5,478,859,347	51.2%	-	0.0%	5,230,387,829	48.8%	10,709,247,175
Southern Co	so	43.577	861,928,103	37,559,953,635	65.3%	1,082,000,000	1.9%	18,909,090,200	32.9%	57,551,043,835
TECO Energy	te	18.163	215,766,935	3,919,046,763	56.9%	-	0.0%	2,971,912,000	43.1%	6,890,958,763
UIL Holdings	uil	33.667	50,542,709	1,701,604,536	47.9%	-	0.0%	1,853,823,474	52.1%	3,555,428,010
ALLETE Inc	ale	39.128	36,809,561	1,440,296,773	58.8%	-	0.0%	1,009,264,050	41.2%	2,449,560,823
Alliant Energy	lnt	41.057	110,981,511	4,556,530,903	57.0%	205,100,000	2.6%	3,231,461,731	40.4%	7,993,092,634
Ameren Corp	aee	31.770	242,239,840	7,695,959,717	49.2%	142,000,000	0.9%	7,812,508,784	49.9%	15,650,468,501
American Elec Pwr	aep	38.845	482,912,247	18,758,726,235	52.9%	61,000,000	0.2%	16,622,348,400	46.9%	35,442,074,635
Centerpoint Energy	cnp	19.892	425,932,721	8,472,511,709	44.9%	-	0.0%	10,407,398,958	55.1%	18,879,910,667
Cleco Corp	cnl	35.747	60,665,607	2,168,593,232	56.4%	-	0.0%	1,675,089,715	43.6%	3,843,682,947
CMS Energy Corp	cms	20.625	252,000,000	5,197,500,000	44.0%	44,000,000	0.4%	6,562,595,048	55.6%	11,804,095,048
DTE Energy Co	dte	51.363	169,250,934	8,693,292,140	51.9%	-	0.0%	8,057,025,900	48.1%	16,750,318,040

Empire District	ede	20.177	41,975,818	846,932,088	52.6%	-	0.0%	763,341,185	47.4%	1,610,273,273
Entergy Corp	etr	68.823	176,116,403	12,120,917,909	53.3%	310,700,000	1.4%	10,304,051,282	45.3%	22,735,669,192
Great Plains Energy	gxp	20.573	136,087,321	2,799,769,817	46.6%	39,000,000	0.6%	3,164,402,565	52.7%	6,003,172,382
Integrys Energy Group	teg	51.103	78,287,906	4,000,772,956	61.2%	51,100,000	0.8%	2,486,944,231	38.0%	6,538,817,187
MGE Energy Inc	mgee	43.862	23,113,638	1,013,802,685	70.0%	-	0.0%	433,847,680	30.0%	1,447,650,365
OGE Energy Corp	oge	51.707	98,056,722	5,070,186,239	62.4%	-	0.0%	3,053,713,291	37.6%	8,123,899,530
Otter Tail Corp	ottr	20.292	36,062,023	731,758,550	57.8%	15,500,000	1.2%	518,138,282	40.9%	1,265,396,832
Vectren Corp	vvc	28.305	81,851,704	2,316,812,482	55.8%	-	0.0%	1,834,787,495	44.2%	4,151,599,977
Westar Energy	wr	27.010	117,180,729	3,165,051,490	50.5%	21,400,000	0.3%	3,082,406,990	49.2%	6,268,858,481
Wisconsin Energy	wec	32.627	231,267,725	7,545,494,974	61.9%	30,400,000	0.2%	4,621,209,450	37.9%	12,197,104,424
			Mean		**53.9%**		**0.5%**		**45.6%**	
			Weighted Mean	**438,117,223,624**	**54.3%**	**4,891,100,000**	**0.6%**	**364,130,839,874**	**45.1%**	**807,139,163,499**
			Median		**53.0%**		**0.2%**		**46.5%**	
			Max		**70.0%**		**3.5%**		**64.2%**	
			Min		**35.8%**		**0.0%**		**30.0%**	
			Target		**55%**		**0%**		**45%**	**100%**

Source:
Stock Price: Yahoo
Market Value Debt: Bond Analysis

SUPPORT FOR MARKET MULTIPLES

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Company	Ticker	Stock Avg	Revenues	Multiple	Cash Flow	Multiple	Earnings	Multiple	Book Value	Multiple
Avista Corp	ava	24.895	27.800	0.9	3.75	6.6	1.80	13.8	20.35	1.2
Black Hills Corp	bkh	32.252	29.200	1.1	4.85	6.6	1.75	18.4	28.15	1.1
Edison International	eix	39.317	37.450	1.0	7.85	5.0	2.75	14.3	33.85	1.2
El Paso Electric	ee	32.932	22.200	1.5	5.50	6.0	2.50	13.2	20.45	1.6
Hawaiian Electric	he	25.273	32.300	0.8	3.05	8.3	1.30	19.4	15.85	1.6
Idacorp Inc	ida	40.273	22.000	1.8	5.55	7.3	3.10	13.0	32.50	1.2
NV Energy Inc	nve	15.085	12.900	1.2	3.10	4.9	0.75	20.1	14.50	1.0
PG&E Corp	pcg	40.497	36.300	1.1	8.45	4.8	2.75	14.7	29.80	1.4
PNM Resources	pnm	17.810	19.550	0.9	2.75	6.5	1.00	17.8	17.80	1.0
Pinnacle West	pnw	45.605	29.750	1.5	6.80	6.7	2.75	16.6	34.50	1.3
Portland General	por	24.353	24.150	1.0	5.00	4.9	2.00	12.2	22.05	1.1
Sempra Energy	sre	52.667	41.250	1.3	8.40	6.3	4.20	12.5	41.05	1.3
Unisource Energy	uns	36.598	39.750	0.9	6.90	5.3	2.75	13.3	23.25	1.6
Xcel Energy	xel	25.727	22.350	1.2	3.85	6.7	1.75	14.7	17.50	1.5
Cent. Vermont P.S.	cv	35.228	27.250	1.3	1.70	20.7	0.35	100.7	21.10	1.7
CH Energy Group	chg	55.020	66.650	0.8	5.50	10.0	3.00	18.3	35.50	1.5
Con. Edison	ed	58.568	45.900	1.3	6.50	9.0	3.55	16.5	38.45	1.5
Constellation Energy	ceg	38.313	68.300	0.6	5.95	6.4	1.70	22.5	39.65	1.0
Dominion Res	D	50.982	26.050	2.0	5.05	10.1	2.80	18.2	20.90	2.4
Duke Energy	duk	20.512	10.950	1.9	2.95	7.0	1.40	14.7	17.25	1.2
Exelon Corp	exc	43.045	30.000	1.4	7.95	5.4	3.65	11.8	22.10	1.9
FirstEnergy	fe	43.928	39.450	1.1	6.40	6.9	2.50	17.6	32.05	1.4
NextEra Energy	nee	55.992	35.000	1.6	8.90	6.3	4.15	13.5	36.30	1.5
Northeast Utilities	nu	34.005	25.400	1.3	5.60	6.1	2.15	15.8	22.65	1.5
NSTAR	nst	44.570	28.500	1.6	5.65	7.9	2.55	17.5	19.50	2.3
Pepco Holdings	pom	19.390	25.550	0.8	3.00	6.5	1.25	15.5	19.00	1.0
PPL Corp	ppl	28.953	19.400	1.5	4.50	6.4	2.55	11.4	19.35	1.5
Progress Energy	pgn	52.877	32.450	1.6	6.30	8.4	3.10	17.1	36.15	1.5
P.S. Enterpriser Gp	peg	32.593	21.750	1.5	5.10	6.4	2.75	11.9	20.25	1.6
SCANA Corp	scg	42.258	34.750	1.2	6.00	7.0	3.05	13.9	30.40	1.4
Southern Co	so	43.577	20.850	2.1	4.90	8.9	2.55	17.1	20.15	2.2
TECO Energy	te	18.163	15.750	1.2	2.80	6.5	1.30	14.0	10.55	1.7
UIL Holdings	uil	33.667	32.200	1.0	4.95	6.8	1.95	17.3	24.00	1.4
ALLETE Inc	ale	39.128	25.250	1.5	4.95	7.9	2.65	14.8	28.30	1.4
Alliant Energy	lnt	41.057	32.350	1.3	5.70	7.2	2.75	14.9	27.50	1.5
Ameren Corp	aee	31.770	31.700	1.0	6.10	5.2	2.45	13.0	32.65	1.0
American Elec Pwr	aep	38.845	31.600	1.2	6.75	5.8	3.15	12.3	30.40	1.3
Centerpoint Energy	cnp	19.892	19.500	1.0	3.45	5.8	1.20	16.6	9.90	2.0
Cleco Corp	cnl	35.747	18.950	1.9	5.70	6.3	2.45	14.6	23.65	1.5
CMS Energy Corp	cms	20.625	26.200	0.8	3.70	5.6	1.45	14.2	12.00	1.7
DTE Energy Co	dte	51.363	52.650	1.0	9.55	5.4	3.60	14.3	40.95	1.3
Empire District	ede	20.177	13.700	1.5	2.90	7.0	1.30	15.5	16.45	1.2

Entergy Corp	etr	68.823	64.200	1.1	17.45	3.9	7.40	9.3	51.05	1.3
Great Plains Energy	gxp	20.573	17.250	1.2	3.55	5.8	1.30	15.8	21.75	0.9
Integrys Energy Group	teg	51.103	61.950	0.8	6.50	7.9	3.30	15.5	37.80	1.4
MGE Energy Inc	mgee	43.862	23.900	1.8	4.30	10.2	2.80	15.7	25.10	1.7
OGE Energy Corp	oge	51.707	39.750	1.3	6.55	7.9	3.40	15.2	25.45	2.0
Otter Tail Corp	ottr	20.292	33.300	0.6	2.90	7.0	0.68	29.8	17.55	1.2
Vectren Corp	vvc	28.305	28.350	1.0	4.75	6.0	1.80	15.7	18.00	1.6
Westar Energy	wr	27.010	18.350	1.5	4.15	6.5	1.75	15.4	22.20	1.2
Wisconsin Energy	wec	32.627	19.800	1.6	3.65	8.9	2.15	15.2	17.15	1.9
		Mean		**1.3**		**7.0**		**17.2**		**1.5**
		Median		**1.2**		**6.5**		**15.2**		**1.4**
		Max		**2.1**		**20.7**		**100.7**		**2.4**
		Min		**0.6**		**3.9**		**9.3**		**0.9**
		Std Dev		**0.4**		**2.4**		**12.3**		**0.3**
		Coefficient of Variation		**0.3**		**0.3**		**0.7**		**0.2**
		Say		**1.2**		**6.5**		**15.2**		**1.4**

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

CAPITAL ASSET PRICING MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Ex Post

Ke = Rf + B (Rm-Rf)

Ke = Cost of Equity				**6.43%**
				to page 1
	Rf =	risk free rate	2.90%	
	Rp =	risk premium	4.70%	
	B =	Beta	0.75	page 7

Rp = Risk Premium	(Rm-Rf)			**4.70%**
				to above

2012 Ibbotson Risk Premia Over Time Report, Page 6

	9.80%	Large Company Geometric Rm
less	5.10%	Average Historical Rf Income Return

Rf = Risk Free Rate				**2.90%**
				to above

2011 Ibbotson Risk Premia Over Time Report, Page 7

Long Term (20 years) US Treasury Bond Yield	2.48%

Value Line Investment Survey, Selected Yields January 6, 2012, page 1821

US Treasury Securities year end data

30 year	2.92%
30 year Zero	3.02%

Federal Reserve Statistical Release (http://www.federalreserve.gov/Releases/H15/Current/)

Treasury Constant Maturities

20 year	2.57%	
30 year	2.89%	
20 year TIPS	0.53%	
	2.04%	Inflation Indication
		2.20%

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

CAPITAL ASSET PRICING MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Ex Ante

Ke = Rf + B (Rp)

Ke =	**Cost of Equity**			**7.40%**
				to page 1
	Rm =	rate of return	8.90%	
	Rf =	risk free rate	2.90%	
	Rp =	risk premium	6.00%	
	B =	Beta	0.75	page 7

Rp =	**Risk Premium**			**6.00%**
				to above
	Shannon Pratt and Roger Grabowski		3.50 - 6.00%	
		Cost of Capital, Applications and Examples, Third Edition, 2008, Page 113		
	Dr. Aswath Damodaran		6.04%	
		http://pages.stern.nyu.edu/~adamodar/ 2012 Implied Premium		
	Ibbotson		6.14%	
		2012 Risk Premia Over Time Report, Page 7 Long-horizon expected ERP (supply side)		
	John Graham & Campbell Harvey		3.85%	December 2011
		Duke CFO Outlook Survey	3.30%	10 year average
			2.39 - 4.74%	10 year average range

Rf =	**Risk Free Rate**			**2.90%**
				to above
	2012 Ibbotson Risk Premia Over Time Report, Page 7			
		Long Term (20 years) US Treasury Bond Yield	2.48%	
	Value Line Investment Survey, Selected Yields January 6, 2012, page 1821			
		US Treasury Securities year end data		
		30 year	2.92%	
		30 year Zero	3.02%	
	Federal Reserve Statistical Release (http://www.federalreserve.gov/Releases/H15/Current/)			
		Treasury Constant Maturities		
		20 year	2.57%	
		30 year	2.89%	
		20 year TIPS	0.53%	
			2.04%	Inflation Indication
				2.20%

BETA CALCULATION FOR CAPM

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Company	Ticker	Value Line
Avista Corp	ava	0.70
Black Hills Corp	bkh	0.85
Edison International	eix	0.80
El Paso Electric	ee	0.75
Hawaiian Electric	he	0.70
Idacorp Inc	ida	0.70
NV Energy Inc	nve	0.85
PG&E Corp	pcg	0.55
PNM Resources	pnm	0.95
Pinnacle West	pnw	0.70
Portland General	por	0.75
Sempra Energy	sre	0.80
Unisource Energy	uns	0.75
Xcel Energy	xel	0.65
Cent. Vermont P.S.	cv	0.75
CH Energy Group	chg	0.65
Con. Edison	ed	0.60
Constellation Energy	ceg	0.80
Dominion Res	D	0.70
Duke Energy	duk	0.65
Exelon Corp	exc	0.85
FirstEnergy	fe	0.80
NextEra Energy	nee	0.75
Northeast Utilities	nu	0.70
NSTAR	nst	0.65
Pepco Holdings	pom	0.80
PPL Corp	ppl	0.65
Progress Energy	pgn	0.60
P.S. Enterpriser Gp	peg	0.80
SCANA Corp	scg	0.70
Southern Co	so	0.55
TECO Energy	te	0.85
UIL Holdings	uil	0.70
ALLETE Inc	ale	0.70
Alliant Energy	lnt	0.75
Ameren Corp	aee	0.80
American Elec Pwr	aep	0.70
Centerpoint Energy	cnp	0.80
Cleco Corp	cnl	0.70
CMS Energy Corp	cms	0.75
DTE Energy Co	dte	0.75
Empire District	ede	0.70
Entergy Corp	etr	0.70
Great Plains Energy	gxp	0.75
Integrys Energy Group	teg	0.90
MGE Energy Inc	mgee	0.60
OGE Energy Corp	oge	0.80
Otter Tail Corp	ottr	0.90
Vectren Corp	vvc	0.70
Westar Energy	wr	0.75
Wisconsin Energy	wec	0.65
	Mean	**0.73**
	Median	**0.75**
	Max	**0.95**
	Min	**0.55**
	Say	**0.75**

Source: Value Line-five year, weekly

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

DIVIDEND GROWTH MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Based on Dividend Growth

Ke = (D1 / Po) + G

Ke = Cost of Equity
D1 = Expected Dividends
Po = Current Price
G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Dividend Growth (G)	Ke
Avista Corp	ava	24.895	1.18	4.74%	9.00%	13.74%
Black Hills Corp	bkh	32.252	1.48	4.59%	1.50%	6.09%
Edison International	eix	39.317	1.31	3.33%	2.00%	5.33%
El Paso Electric	ee	32.932	0.96	2.92%	nmf	nmf
Hawaiian Electric	he	25.273	1.24	4.91%	1.00%	5.91%
Idacorp Inc	ida	40.273	1.20	2.98%	4.00%	6.98%
NV Energy Inc	nve	15.085	0.54	3.58%	11.00%	14.58%
PG&E Corp	pcg	40.497	1.82	4.49%	4.50%	8.99%
PNM Resources	pnm	17.810	0.60	3.37%	7.00%	10.37%
Pinnacle West	pnw	45.605	2.10	4.60%	1.50%	6.10%
Portland General	por	24.353	1.08	4.43%	3.00%	7.43%
Sempra Energy	sre	52.667	2.08	3.95%	9.00%	12.95%
Unisource Energy	uns	36.598	1.76	4.81%	9.00%	13.81%
Xcel Energy	xel	25.727	1.06	4.12%	3.00%	7.12%
Cent. Vermont P.S.	cv	35.228	0.92	2.61%	1.50%	4.11%
CH Energy Group	chg	55.020	2.22	4.03%	1.00%	5.03%
Con. Edison	ed	58.568	2.42	4.13%	1.00%	5.13%
Constellation Energy	ceg	38.313	0.96	2.51%	-4.00%	nmf
Dominion Res	D	50.982	2.11	4.14%	6.00%	10.14%
Duke Energy	duk	20.512	1.01	4.92%	2.00%	6.92%
Exelon Corp	exc	43.045	2.10	4.88%	nil	nmf
FirstEnergy	fe	43.928	2.20	5.01%	0.50%	5.51%
NextEra Energy	nee	55.992	2.30	4.11%	5.50%	9.61%
Northeast Utilities	nu	34.005	1.18	3.47%	7.00%	10.47%
NSTAR	nst	44.570	1.83	4.11%	6.00%	10.11%
Pepco Holdings	pom	19.390	1.08	5.57%	1.00%	6.57%
PPL Corp	ppl	28.953	1.40	4.84%	3.50%	8.34%
Progress Energy	pgn	52.877	2.52	4.77%	1.00%	5.77%
P.S. Enterpriser Gp	peg	32.593	1.37	4.20%	1.50%	5.70%
SCANA Corp	scg	42.258	1.98	4.69%	2.00%	6.69%
Southern Co	so	43.577	1.94	4.45%	4.00%	8.45%
TECO Energy	te	18.163	0.89	4.90%	4.50%	9.40%
UIL Holdings	uil	33.667	1.73	5.14%	nil	nmf
ALLETE Inc	ale	39.128	1.80	4.60%	2.00%	6.60%
Alliant Energy	lnt	41.057	1.80	4.38%	6.00%	10.38%
Ameren Corp	aee	31.770	1.62	5.10%	-1.00%	nmf
American Elec Pwr	aep	38.845	1.90	4.89%	4.00%	8.89%
Centerpoint Energy	cnp	19.892	0.80	4.02%	3.00%	7.02%
Cleco Corp	cnl	35.747	1.25	3.50%	9.50%	13.00%
CMS Energy Corp	cms	20.625	0.92	4.46%	14.00%	18.46%
DTE Energy Co	dte	51.363	2.42	4.71%	4.00%	8.71%
Empire District	ede	20.177	1.00	4.96%	-1.00%	nmf
Entergy Corp	etr	68.823	3.32	4.82%	2.00%	6.82%
Great Plains Energy	gxp	20.573	0.86	4.18%	nil	nmf
Integrys Energy Group	teg	51.103	2.72	5.32%	nil	nmf
MGE Energy Inc	mgee	43.862	1.55	3.53%	2.00%	5.53%
OGE Energy Corp	oge	51.707	1.59	3.08%	4.00%	7.08%
Otter Tail Corp	ottr	20.292	1.19	5.86%	1.50%	7.36%

Vectren Corp	vvc	28.305	1.41	4.98%	3.00%	7.98%
Westar Energy	wr	27.010	1.32	4.89%	3.00%	7.89%
Wisconsin Energy	wec	32.627	1.20	3.68%	16.00%	19.68%
					Mean	**8.67%**
					Median	**7.43%**
					Max	**19.68%**
					Min	**4.11%**
Source: Value Line Projections to 13-15					**Say**	**7.50%**

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

DIVIDEND GROWTH MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Based on Earnings Growth

Ke = (D1 / Po) + G

Ke = Cost of Equity
D1 = Expected Dividends
Po = Current Price
G = Sustainable Growth

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	Earnings Growth (G)	Ke
Avista Corp	ava	24.895	1.18	4.74%	4.50%	9.24%
Black Hills Corp	bkh	32.252	1.48	4.59%	8.50%	13.09%
Edison International	eix	39.317	1.31	3.33%	-1.00%	nmf
El Paso Electric	ee	32.932	0.96	2.92%	7.50%	10.42%
Hawaiian Electric	he	25.273	1.24	4.91%	11.00%	15.91%
Idacorp Inc	ida	40.273	1.20	2.98%	4.00%	6.98%
NV Energy Inc	nve	15.085	0.54	3.58%	9.50%	13.08%
PG&E Corp	pcg	40.497	1.82	4.49%	6.00%	10.49%
PNM Resources	pnm	17.810	0.60	3.37%	19.50%	22.87%
Pinnacle West	pnw	45.605	2.10	4.60%	6.00%	10.60%
Portland General	por	24.353	1.08	4.43%	7.50%	11.93%
Sempra Energy	sre	52.667	2.08	3.95%	3.50%	7.45%
Unisource Energy	uns	36.598	1.76	4.81%	9.50%	14.31%
Xcel Energy	xel	25.727	1.06	4.12%	5.00%	9.12%
Cent. Vermont P.S.	cv	35.228	0.92	2.61%	2.00%	4.61%
CH Energy Group	chg	55.020	2.22	4.03%	4.00%	8.03%
Con. Edison	ed	58.568	2.42	4.13%	3.00%	7.13%
Constellation Energy	ceg	38.313	0.96	2.51%	16.50%	19.01%
Dominion Res	D	50.982	2.11	4.14%	4.50%	8.64%
Duke Energy	duk	20.512	1.01	4.92%	6.00%	10.92%
Exelon Corp	exc	43.045	2.10	4.88%	-1.50%	nmf
FirstEnergy	fe	43.928	2.20	5.01%	0.50%	5.51%
NextEra Energy	nee	55.992	2.30	4.11%	4.50%	8.61%
Northeast Utilities	nu	34.005	1.18	3.47%	7.50%	10.97%
NSTAR	nst	44.570	1.83	4.11%	7.00%	11.11%
Pepco Holdings	pom	19.390	1.08	5.57%	2.50%	8.07%
PPL Corp	ppl	28.953	1.40	4.84%	7.00%	11.84%
Progress Energy	pgn	52.877	2.52	4.77%	3.50%	8.27%
P.S. Enterpriser Gp	peg	32.593	1.37	4.20%	1.00%	5.20%
SCANA Corp	scg	42.258	1.98	4.69%	3.00%	7.69%
Southern Co	so	43.577	1.94	4.45%	6.00%	10.45%
TECO Energy	te	18.163	0.89	4.90%	10.50%	15.40%
UIL Holdings	uil	33.667	1.73	5.14%	3.00%	8.14%
ALLETE Inc	ale	39.128	1.80	4.60%	6.00%	10.60%
Alliant Energy	lnt	41.057	1.80	4.38%	6.50%	10.88%
Ameren Corp	aee	31.770	1.62	5.10%	-2.00%	nmf
American Elec Pwr	aep	38.845	1.90	4.89%	4.50%	9.39%
Centerpoint Energy	cnp	19.892	0.80	4.02%	3.00%	7.02%
Cleco Corp	cnl	35.747	1.25	3.50%	6.00%	9.50%
CMS Energy Corp	cms	20.625	0.92	4.46%	7.00%	11.46%
DTE Energy Co	dte	51.363	2.42	4.71%	4.50%	9.21%
Empire District	ede	20.177	1.00	4.96%	7.00%	11.96%
Entergy Corp	etr	68.823	3.32	4.82%	0.50%	5.32%
Great Plains Energy	gxp	20.573	0.86	4.18%	6.00%	10.18%
Integrys Energy Group	teg	51.103	2.72	5.32%	9.00%	14.32%
MGE Energy Inc	mgee	43.862	1.55	3.53%	4.00%	7.53%
OGE Energy Corp	oge	51.707	1.59	3.08%	6.50%	9.58%

Otter Tail Corp	ottr	20.292	1.19	5.86%	13.00%	18.86%
Vectren Corp	vvc	28.305	1.41	4.98%	5.50%	10.48%
Westar Energy	wr	27.010	1.32	4.89%	8.50%	13.39%
Wisconsin Energy	wec	32.627	1.20	3.68%	8.50%	12.18%
					Mean	**10.56%**
					Median	**10.43%**
					Max	**22.87%**
					Min	**4.61%**
Source: Value Line Projections to 13-15					**Say**	**10.50%**

SUPPORT FOR YIELD CAPITALIZATION EQUITY COMPONENT

DIVIDEND GROWTH MODEL

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Based on Return on Equity

Ke = (D1 / Po) + G

Ke = Cost of Equity
D1 = Expected Dividends
Po = Current Price
G = Sustainable Growth
b = Retained Earnings (plowback)
ROE = Return on Equity

Value Line

Company	Ticker	Stock Price (Po)	Expected Dividend (D1)	Dividend Yield (D1/Po)	b (1-payout ratio)	ROE	Growth (b*ROE)	Ke
Avista Corp	ava	24.895	1.18	4.74%	40.0%	9.00%	3.60%	8.34%
Black Hills Corp	bkh	32.252	1.48	4.59%	18.0%	6.00%	1.08%	5.67%
Edison International	eix	39.317	1.31	3.33%	50.0%	8.00%	4.00%	7.33%
El Paso Electric	ee	32.932	0.96	2.92%	74.0%	12.50%	9.25%	12.17%
Hawaiian Electric	he	25.273	1.24	4.91%	5.0%	8.00%	0.40%	5.31%
Idacorp Inc	ida	40.273	1.20	2.98%	61.0%	9.50%	5.80%	8.77%
NV Energy Inc	nve	15.085	0.54	3.58%	37.0%	5.50%	2.04%	5.61%
PG&E Corp	pcg	40.497	1.82	4.49%	34.0%	9.00%	3.06%	7.55%
PNM Resources	pnm	17.810	0.60	3.37%	49.0%	5.50%	2.70%	6.06%
Pinnacle West	pnw	45.605	2.10	4.60%	24.0%	8.00%	1.92%	6.52%
Portland General	por	24.353	1.08	4.43%	47.0%	9.00%	4.23%	8.66%
Sempra Energy	sre	52.667	2.08	3.95%	55.0%	10.50%	5.78%	9.72%
Unisource Energy	uns	36.598	1.76	4.81%	38.0%	11.50%	4.37%	9.18%
Xcel Energy	xel	25.727	1.06	4.12%	41.0%	10.00%	4.10%	8.22%
Cent. Vermont P.S.	cv	35.228	0.92	2.61%	nmf	nmf	nmf	nmf
CH Energy Group	chg	55.020	2.22	4.03%	26.0%	8.50%	2.21%	6.24%
Con. Edison	ed	58.568	2.42	4.13%	32.0%	9.50%	3.04%	7.17%
Constellation Energy	ceg	38.313	0.96	2.51%	43.0%	4.50%	1.94%	4.44%
Dominion Res	D	50.982	2.11	4.14%	29.0%	13.50%	3.92%	8.05%
Duke Energy	duk	20.512	1.01	4.92%	30.0%	8.00%	2.40%	7.32%
Exelon Corp	exc	43.045	2.10	4.88%	43.0%	16.50%	7.10%	11.97%
FirstEnergy	fe	43.928	2.20	5.01%	10.0%	7.50%	0.75%	5.76%
NextEra Energy	nee	55.992	2.30	4.11%	47.0%	11.50%	5.41%	9.51%
Northeast Utilities	nu	34.005	1.18	3.47%	49.0%	9.50%	4.66%	8.13%
NSTAR	nst	44.570	1.83	4.11%	32.0%	13.00%	4.16%	8.27%
Pepco Holdings	pom	19.390	1.08	5.57%	15.0%	6.50%	0.98%	6.54%
PPL Corp	ppl	28.953	1.40	4.84%	47.0%	12.50%	5.88%	10.71%
Progress Energy	pgn	52.877	2.52	4.77%	20.0%	8.50%	1.70%	6.47%
P.S. Enterpriser Gp	peg	32.593	1.37	4.20%	51.0%	13.50%	6.89%	11.09%
SCANA Corp	scg	42.258	1.98	4.69%	36.0%	10.00%	3.60%	8.29%
Southern Co	so	43.577	1.94	4.45%	27.0%	12.50%	3.38%	7.83%
TECO Energy	te	18.163	0.89	4.90%	35.0%	12.50%	4.38%	9.27%
UIL Holdings	uil	33.667	1.73	5.14%	13.0%	8.50%	1.11%	6.24%
ALLETE Inc	ale	39.128	1.80	4.60%	33.0%	9.00%	2.97%	7.57%
Alliant Energy	lnt	41.057	1.80	4.38%	34.0%	9.50%	3.23%	7.61%
Ameren Corp	aee	31.770	1.62	5.10%	37.0%	7.50%	2.78%	7.87%
American Elec Pwr	aep	38.845	1.90	4.89%	41.0%	10.50%	4.31%	9.20%
Centerpoint Energy	cnp	19.892	0.80	4.02%	35.0%	12.50%	4.38%	8.40%
Cleco Corp	cnl	35.747	1.25	3.50%	54.0%	10.50%	5.67%	9.17%
CMS Energy Corp	cms	20.625	0.92	4.46%	45.0%	12.50%	5.63%	10.09%
DTE Energy Co	dte	51.363	2.42	4.71%	37.0%	9.00%	3.33%	8.04%
Empire District	ede	20.177	1.00	4.96%	51.0%	8.00%	4.08%	9.04%
Entergy Corp	etr	68.823	3.32	4.82%	54.0%	14.50%	7.83%	12.65%
Great Plains Energy	gxp	20.573	0.86	4.18%	37.0%	6.00%	2.22%	6.40%
Integrys Energy Group	teg	51.103	2.72	5.32%	18.0%	8.50%	1.53%	6.85%
MGE Energy Inc	mgee	43.862	1.55	3.53%	39.0%	10.50%	4.10%	7.63%
OGE Energy Corp	oge	51.707	1.59	3.08%	58.0%	13.50%	7.83%	10.91%

Otter Tail Corp	ottr	20.292	1.19	5.86%	nmf	4.00%	nmf	nmf
Vectren Corp	vvc	28.305	1.41	4.98%	24.0%	10.00%	2.40%	7.38%
Westar Energy	wr	27.010	1.32	4.89%	28.0%	8.00%	2.24%	7.13%
Wisconsin Energy	wec	32.627	1.20	3.68%	52.0%	12.50%	6.50%	10.18%
							Mean	**8.13%**
							Median	**8.04%**
							Max	**12.65%**
							Min	**4.44%**
							Say	**8.00%**

SUPPORT FOR DEBT RATING AND DEBT YIELD RATE

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Company	Ticker	Mergent's Ratings	S&P Ratings	WAYTM
Avista Corp	ava	A3	BBB	3.95%
Black Hills Corp	bkh		BBB-	
Edison International	eix		BBB-	3.56%
El Paso Electric	ee		BBB	4.68%
Hawaiian Electric	he		BBB-	
Idacorp Inc	ida		BBB	4.34%
NV Energy Inc	nve	Ba2	BB+	2.75%
PG&E Corp	pcg		BBB	4.07%
PNM Resources	pnm	Ba1	BB	4.16%
Pinnacle West	pnw		BBB	3.17%
Portland General	por		BBB	3.21%
Sempra Energy	sre	Baa1	BBB+	
Unisource Energy	uns			
Xcel Energy	xel	Baa1	A-	4.52%
Cent. Vermont P.S.	cv			
CH Energy Group	chg			4.30%
Con. Edison	ed		A-	3.36%
Constellation Energy	ceg		BBB-	4.44%
Dominion Res	D	Baa2		3.34%
Duke Energy	duk	Baa2	A-	3.00%
Exelon Corp	exc	Baa1	BBB	3.38%
FirstEnergy	fe		BBB-	3.30%
NextEra Energy	nee	Aa3	A-	3.99%
Northeast Utilities	nu		BBB	4.32%
NSTAR	nst		A+	
Pepco Holdings	pom		BBB+	4.41%
PPL Corp	ppl	A3	BBB	
Progress Energy	pgn	Baa2	BBB+	3.84%
P.S. Enterpriser Gp	peg		BBB	3.36%
SCANA Corp	scg	Ba1	BBB+	
Southern Co	so	Baa1	A	1.67%
TECO Energy	te		BBB+	2.38%
UIL Holdings	uil		BBB	
ALLETE Inc	ale		BBB+	
Alliant Energy	lnt		BBB+	
Ameren Corp	aee		BBB-	2.69%
American Elec Pwr	aep		BBB	1.37%
Centerpoint Energy	cnp	Baa2	BBB+	3.05%
Cleco Corp	cnl		BBB	4.26%
CMS Energy Corp	cms	Ba1	BBB-	3.81%
DTE Energy Co	dte	Baa2	BBB+	2.22%
Empire District	ede		BBB-	5.22%
Entergy Corp	etr		BBB	6.03%
Great Plains Energy	gxp	Baa3	BBB	3.67%
Integrys Energy Group	teg		A-	
MGE Energy Inc	mgee		AA-	5.84%
OGE Energy Corp	oge	A2	BBB+	3.70%
Otter Tail Corp	ottr		BBB-	
Vectren Corp	vvc		A-	2.57%
Westar Energy	wr		BBB	3.74%
Wisconsin Energy	wec		A-	6.25%
Overall Average Debt Rating		**Baa2**	**BBB**	**3.73%**

bond analysis, A-BBB bonds

	All issues	20+ year maturities
Guideline Companies, All Ratings	**3.62%**	**4.65%**

bond analysis page 12

Mergent's Bond Record January 2012, page 140

Corporate	**Aaa**	**Aa**	**A**	**Baa**
October	3.98%	4.16%	4.54%	5.37%
November	3.87%	3.97%	4.34%	5.14%
December	3.93%	4.03%	4.40%	5.25%
4th Qtr Average	**3.93%**	**4.05%**	**4.43%**	**5.25%**
Public Utilities	**Aaa**	**Aa**	**A**	**Baa**
October		4.21%	4.52%	5.24%
November		3.92%	4.25%	4.93%
December		4.00%	4.33%	5.07%
4th Qtr Average		**4.04%**	**4.37%**	**5.08%**
Industrials	**Aaa**	**Aa**	**A**	**Baa**
October	3.98%	4.11%	4.56%	5.50%
November	3.87%	4.01%	4.43%	5.34%
December	3.93%	4.06%	4.46%	5.43%
4th Qtr Average	**3.93%**	**4.06%**	**4.48%**	**5.42%**

Debt Yield Rate	**5.00%**

to page 1

Electric Bond Analysis

2012.5

Company	type	coupon	maturity	Price 12/11	Issued / Book	current yield	yield to maturity	WAYTM	Rating	Mkt Val	Mkt : Book	Embedded Rate	Debt Service
American Electric Power	Sr Nt	5.250	2015	109.48 $	300,000,000	4.80%	1.37%	0.00%		$ 328,440,000	109.48%		15,750,000
	1 Book Val	**100**	**Sum**	**109.48**	**300,000,000**	**Percent of Book**	**109.48%**	**0.00%**		**328,440,000**	**109.48%**	**5.25%**	**15,750,000**
Arizona Public Svc	Nt	6.875	2036	131.24 $	400,000,000	5.24%	4.66%	0.02%	BBB	$ 524,960,000	131.24%		27,500,000
Arizona Public Svc	Nt	4.650	2015	109.30 $	500,000,000	4.25%	0.87%	0.01%	BBB	$ 546,500,000	109.30%		23,250,000
Arizona Public Svc	Nt	5.500	2035	115.03 $	250,000,000	4.78%	4.43%	0.01%	BBB	$ 287,575,000	115.03%		13,750,000
Arizona Public Svc	Nt	8.750	2019	127.70 $	500,000,000	6.85%	3.85%	0.02%	BBB	$ 638,500,000	127.70%		43,750,000
Arizona Public Svc	Nt	6.250	2016	117.35 $	400,000,000	5.33%	1.16%	0.01%	BBB	$ 469,400,000	117.35%		25,000,000
Arizona Public Svc	Nt	5.625	2033	113.63 $	500,000,000	4.95%	4.59%	0.03%	BBB	$ 568,150,000	113.63%		28,125,000
	6 Book Val	**600**	**Sum**	**714.25**	**2,550,000,000**	**Percent of Book**	**119.04%**	**0.09%**		**3,035,085,000**	**119.02%**	**6.33%**	**161,375,000**
Avista Corp	1st Mtg	5.450	2019	117.72 $	90,000,000	4.63%	2.47%	0.00%	A-	$ 105,948,000	117.72%		4,905,000
Avista Corp	1st Mtg	5.700	2037	118.70 $	150,000,000	4.80%	4.43%	0.01%	A-	$ 178,050,000	118.70%		8,550,000
Avista Corp	1st Mtg	6.250	2035	123.53 $	100,000,000	5.06%	4.56%	0.01%	A-	$ 123,530,000	123.53%		6,250,000
	3 Book Val	**300**	**Sum**	**359.95**	**340,000,000**	**Percent of Book**	**119.98%**	**0.02%**		**407,528,000**	**119.86%**	**5.80%**	**19,705,000**
Centerpoint Energy	Sr Nt	5.950	2017	113.09 $	250,000,000	5.26%	2.81%	0.01%	BBB	$ 282,725,000	113.09%		14,875,000
Centerpoint Energy	Sr Nt	6.850	2015	113.46 $	200,000,000	6.04%	1.34%	0.00%	BBB	$ 226,920,000	113.46%		13,700,000
Centerpoint Energy Houston	Mtg Bd	5.600	2023	122.13 $	500,000,000	4.59%	3.10%	0.02%	A-	$ 610,650,000	122.13%		28,000,000
Centerpoint Energy Houston	Mtg Bd	6.950	2033	136.36 $	312,000,000	5.10%	4.26%	0.02%	A-	$ 425,443,200	136.36%		21,684,000
	4 Book Val	**400**	**Sum**	**485.04 $**	**1,262,000,000**	**Percent of Book**	**121.26%**	**0.04%**		**$ 1,545,738,200**	**122.48%**	**6.20%**	**78,259,000**
Cleco Power	Sr Nt	6.500	2035	124.61 $	295,000,000	5.22%	4.70%	0.02%	BBB	$ 367,599,500	124.61%		19,175,000
Cleco Power	Nt	4.950	2015	108.09 $	50,000,000	4.58%	1.62%	0.00%	BBB	$ 54,045,000	108.09%		2,475,000
	2 Book Val	**200**	**Sum**	**232.70 $**	**345,000,000**	**Percent of Book**	**116.35%**	**0.02%**		**$ 421,644,500**	**122.22%**	**6.28%**	**21,650,000**
Central Hudson G&E	MTN	5.764	2031	118.39 $	27,000,000	4.87%	4.30%	0.00%	A	$ 31,965,300	118.39%		1,556,280
	1 Book Val	**100**	**Sum**	**118.39 $**	**27,000,000**	**Percent of Book**	**118.39%**	**0.00%**		**$ 31,965,300**	**118.39%**	**5.76%**	**1,556,280**
Cleveland Electric	Sr Nt	5.700	2017	110.00 $	250,000,000	5.18%	3.27%	0.01%	BBB-	$ 275,000,000	110.00%		14,250,000
Cleveland Electric	Secd Nt	7.880	2017	125.66 $	450,000,000	6.27%	1.88%	0.01%	BBB	$ 565,470,000	125.66%		35,460,000
Cleveland Electric	Sr Nt	5.950	2036	106.57 $	300,000,000	5.58%	5.45%	0.02%	BBB-	$ 319,710,000	106.57%		17,850,000
	3 Book Val	**300**	**Sum**	**342.23 $**	**1,000,000,000**	**Percent of Book**	**114.08%**	**0.04%**		**$ 1,160,180,000**	**116.02%**	**6.76%**	**67,560,000**
CMS Energy Corp	Sr Nt	1.353	2013	99.00 $	150,000,000	1.37%	3.40%	0.01%	BB+	$ 148,500,000	99.00%		2,029,500
CMS Energy Corp	Sr Nt	6.550	2017	107.47 $	250,000,000	6.09%	4.67%	0.01%	BB	$ 268,675,000	107.47%		16,375,000
CMS Energy Corp	Sr Nt	6.875	2015	110.25 $	125,000,000	6.24%	2.59%	0.00%	BB+	$ 137,812,500	110.25%		8,593,750
	3 Book Val	**300**	**Sum**	**316.72 $**	**525,000,000**	**Percent of Book**	**105.57%**	**0.02%**		**$ 554,987,500**	**105.71%**	**5.14%**	**26,998,250**
Commonwealth Edison	1st Mtg	5.875	2033	117.17 $	700,000,000	5.01%	4.57%	0.04%	A-	$ 820,190,000	117.17%		41,125,000
Commonwealth Edison	1st Mtg	1.625	2014	100.72 $	600,000,000	1.61%	1.14%	0.01%	NR	$ 604,320,000	100.72%		9,750,000
Commonwealth Edison	Nt	4.000	2020	107.72 $	500,000,000	3.71%	2.84%	0.02%	A-	$ 538,600,000	107.72%		20,000,000
Commonwealth Edison	Nt	6.950	2018	119.83 $	225,000,000	5.80%	2.99%	0.01%	BBB	$ 269,617,500	119.83%		15,637,500
Commonwealth Edison	1st Mtg	4.700	2015	109.40 $	395,000,000	4.30%	0.88%	0.00%	A-	$ 432,130,000	109.40%		18,565,000
Commonwealth Edison	1st Mtg	5.800	2018	118.05 $	700,000,000	4.91%	2.27%	0.02%	A-	$ 826,350,000	118.05%		40,600,000
Commonwealth Edison	1st Mtg	5.950	2016	116.66 $	415,000,000	5.10%	1.07%	0.01%	A-	$ 484,139,000	116.66%		24,692,500
Commonwealth Edison	1st Mtg	5.900	2036	122.63 $	625,000,000	4.81%	4.34%	0.03%	A-	$ 766,437,500	122.63%		36,875,000
	8 Book Val	**800**	**Sum**	**912.18 $**	**4,160,000,000**	**Percent of Book**	**114.02%**	**0.13%**		**4,741,784,000**	**113.99%**	**4.98%**	**207,245,000**
Connecticut Light & Power	1st Mtg	5.000	2015	111.40 $	200,000,000	4.49%	0.41%	0.00%	A-	$ 222,800,000	111.40%		10,000,000
Connecticut Light & Power	1st Mtg	5.750	2037	120.16 $	150,000,000	4.79%	4.39%	0.01%	A-	$ 180,240,000	120.16%		8,625,000
Connecticut Light & Power	1st Mtg	6.350	2036	130.53 $	250,000,000	4.86%	4.27%	0.01%	A-	$ 326,325,000	130.53%		15,875,000
Connecticut Light & Power	1st Mtg	5.375	2017	114.15 $	150,000,000	4.71%	2.05%	0.00%	A-	$ 171,225,000	114.15%		8,062,500
Connecticut Light & Power	1st Mtg	7.875	2024	140.56 $	140,000,000	5.60%	3.52%	0.01%	A-	$ 196,784,000	140.56%		11,025,000
Connecticut Light & Power	1st Mtg	5.625	2035	117.48 $	200,000,000	4.79%	4.39%	0.01%	A-	$ 234,960,000	117.48%		11,250,000
	6 Book Val	**600**	**Sum**	**734.28**	**1,090,000,000**	**Percent of Book**	**122.38%**	**0.04%**		**1,332,334,000**	**122.23%**	**5.95%**	**64,837,500**
Consolidated Edison	Deb	6.300	2037	133.44 $	525,000,000	4.72%	4.11%	0.03%	A-	$ 700,560,000	133.44%		33,075,000
Consolidated Edison	Deb	6.750	2038	140.02 $	600,000,000	4.82%	4.17%	0.03%	A-	$ 840,120,000	140.02%		40,500,000
Consolidated Edison	Deb	7.100	2028	103.03 $	105,000,000	6.89%	6.78%	0.01%	NR	$ 108,181,500	103.03%		7,455,000
Consolidated Edison	Deb	5.300	2016	116.68 $	250,000,000	4.54%	0.48%	0.00%	A-	$ 291,700,000	116.68%		13,250,000
Consolidated Edison	Deb	5.850	2018	122.00 $	600,000,000	4.80%	1.63%	0.01%	A-	$ 732,000,000	122.00%		35,100,000
Consolidated Edison	Deb	7.125	2018	128.63 $	600,000,000	5.54%	1.64%	0.01%	A-	$ 771,780,000	128.63%		42,750,000
Consolidated Edison	Deb	5.500	2016	117.63 $	400,000,000	4.68%	0.42%	0.00%	A-	$ 470,520,000	117.63%		22,000,000
Consolidated Edison	Deb	5.500	2039	121.92 $	600,000,000	4.51%	4.12%	0.03%	A-	$ 731,520,000	121.92%		33,000,000
Consolidated Edison	Deb	5.875	2033	120.77 $	175,000,000	4.86%	4.33%	0.01%	A-	$ 211,347,500	120.77%		10,281,250
Consolidated Edison	Deb	5.700	2034	118.80 $	400,000,000	4.80%	4.34%	0.02%	A-	$ 475,200,000	118.80%		22,800,000
Consolidated Edison	Deb	5.250	2035	110.59 $	125,000,000	4.75%	4.49%	0.01%	A-	$ 138,237,500	110.59%		6,562,500
Consolidated Edison	Deb	5.300	2035	116.77 $	350,000,000	4.54%	4.14%	0.02%	A-	$ 408,695,000	116.77%		18,550,000
Consolidated Edison	Deb	6.200	2036	130.12 $	400,000,000	4.76%	4.17%	0.02%	A-	$ 520,480,000	130.12%		24,800,000
Consolidated Edison	Deb	5.700	2036	123.66 $	250,000,000	4.61%	4.11%	0.01%	A-	$ 309,150,000	123.66%		14,250,000
Consolidated Edison	Deb	5.700	2036	119.31 $	500,000,000	4.78%	4.37%	0.03%	A-	$ 596,550,000	119.31%		28,500,000
Consolidated Edison	Deb	5.850	2036	125.54 $	400,000,000	4.66%	4.13%	0.02%	A-	$ 502,160,000	125.54%		23,400,000
	16 Book Val	**1600**	**Sum**	**1948.91 $**	**6,280,000,000**	**Percent of Book**	**121.81%**	**0.25%**		**$ 7,808,201,500**	**124.33%**	**5.99%**	**376,273,750**
Constellation Energy	Nt	5.150	2020	108.36 $	550,000,000	4.75%	3.85%	0.02%	BBB-	$ 595,980,000	108.36%		28,325,000
Constellation Energy	Nt	7.600	2032	128.86 $	2,000,000,000	5.90%	5.21%	0.12%	BBB-	$ 2,577,200,000	128.86%		152,000,000
Constellation Energy	Nt	4.550	2015	105.58 $	550,000,000	4.31%	2.23%	0.01%	BBB-	$ 580,690,000	105.58%		25,025,000
	3 Book Val	**300**	**Sum**	**342.80**	**3,100,000,000**	**Percent of Book**	**114.27%**	**0.16%**		**$ 3,753,870,000**	**121.09%**	**6.62%**	**205,350,000**
Consumers Energy	1st Mtg	6.125	2019	121.36 $	350,000,000	5.05%	2.52%	0.01%	BBB+	$ 424,760,000	121.36%		21,437,500
Consumers Energy	1st Mtg	6.700	2019	126.64 $	500,000,000	5.29%	2.25%	0.01%	BBB+	$ 633,200,000	126.64%		33,500,000
Consumers Energy	1st Mtg	5.500	2016	114.93 $	350,000,000	4.79%	1.13%	0.00%	BBB+	$ 402,255,000	114.93%		19,250,000
Consumers Energy	1st Mtg	5.150	2017	113.47 $	250,000,000	4.54%	1.99%	0.01%	BBB+	$ 283,675,000	113.47%		12,875,000
Consumers Energy	1st Mtg	5.800	2035	117.77 $	175,000,000	4.92%	4.52%	0.01%	BBB+	$ 206,097,500	117.77%		10,150,000
Consumers Energy	Nt	5.650	2035	100.00 $	150,000,000	5.65%	5.65%	0.01%	NR	$ 150,000,000	100.00%		8,475,000
Consumers Energy	1st Mtg	5.650	2020	118.70 $	300,000,000	4.76%	2.85%	0.01%	BBB+	$ 356,100,000	118.70%		16,950,000
Consumers Energy	Sr Nt	6.875	2018	118.10 $	180,000,000	5.82%	3.23%	0.01%	BBB+	$ 212,580,000	118.10%		12,375,000
Consumers Energy	1st Mtg	5.650	2018	118.14 $	250,000,000	4.78%	2.12%	0.01%	BBB+	$ 295,350,000	118.14%		14,125,000
	9 Book Val	**900**	**Sum**	**1049.11 $**	**2,505,000,000**	**Percent of Book**	**116.57%**	**0.08%**		**$ 2,964,017,500**	**118.32%**	**5.95%**	**149,137,500**
Delmarva Power & Light	MTN	6.810	2018	117.53 $	33,000,000	5.79%	3.28%	0.00%	BBB+	$ 38,784,900	117.53%		2,247,300
Delmarva Power & Light	Nt	5.000	2015	108.67 $	100,000,000	4.60%	1.44%	0.00%	BBB+	$ 108,670,000	108.67%		5,000,000
	2 Book Val	**200**	**Sum**	**226.20 $**	**133,000,000**	**Percent of Book**	**113.10%**	**0.00%**		**$ 147,454,900**	**110.87%**	**5.45%**	**7,247,300**
Detroit Edison Co	Sr Nt	6.350	2032	129.37 $	450,000,000	4.91%	4.13%	0.02%	A	$ 582,165,000	129.37%		28,575,000
Detroit Edison Co	Sr Nt	5.700	2037	125.03 $	250,000,000	4.56%	4.07%	0.01%	A	$ 312,575,000	125.03%		14,250,000
Detroit Edison Co	Sr Nt	5.200	2012	103.41 $	450,000,000	5.03%	12.22%	0.06%	A	$ 465,345,000	103.41%		23,400,000
Detroit Edison Co	Sr Nt	6.625	2036	138.44 $	250,000,000	4.79%	4.06%	0.01%	A	$ 346,100,000	138.44%		16,562,500
Detroit Edison Co	Sr Nt	5.450	2035	120.64 $	200,000,000	4.52%	4.04%	0.01%	A	$ 241,280,000	120.64%		10,900,000
Detroit Edison Co	Sr Nt	4.800	2015	110.68 $	200,000,000	4.34%	0.49%	0.00%	A	$ 221,360,000	110.68%		9,600,000
DTE Energy Co	Sr Nt	6.350	2016	115.80 $	300,000,000	5.48%	1.67%	0.01%	BBB	$ 347,400,000	115.80%		19,050,000
	7 Book Val	**700**	**Sum**	**843.37 $**	**2,100,000,000**	**Percent of Book**	**120.48%**	**0.13%**		**$ 2,516,225,000**	**119.82%**	**5.83%**	**122,337,500**
Dominion Res	Sr Nt	6.400	2018	120.68 $	500,000,000	5.30%	2.35%	0.01%	A-	$ 603,400,000	120.68%		32,000,000
Dominion Res	Sr Nt	6.000	2017	117.97 $	350,000,000	5.09%	1.81%	0.01%	A-	$ 412,895,000	117.97%		21,000,000
Dominion Res	Sr Nt	5.950	2035	119.01 $	500,000,000	5.00%	4.58%	0.03%	A-	$ 595,050,000	119.01%		29,750,000
Dominion Res	Sr Nt	6.300	2033	124.98 $	600,000,000	5.04%	4.42%	0.03%	A-	$ 749,880,000	124.98%		37,800,000
Dominion Res	Sr Nt	6.750	2032	130.08 $	600,000,000	5.19%	4.42%	0.03%	A-	$ 780,480,000	130.08%		40,500,000
Dominion Res	Sr Nt	5.600	2016	116.16 $	250,000,000	4.82%	0.89%	0.00%	A-	$ 290,400,000	116.16%		14,000,000
Dominion Res	Sr Nt	8.875	2019	132.70 $	600,000,000	6.69%	3.22%	0.02%	A-	$ 796,200,000	132.70%		53,250,000
Dominion Res	Sr Nt	5.200	2019	115.43 $	500,000,000	4.50%	2.59%	0.02%	A-	$ 577,150,000	115.43%		26,000,000
Dominion Res	Sr Nt	4.900	2041	107.98 $	500,000,000	4.54%	4.40%	0.03%	A-	$ 539,900,000	107.98%		24,500,000
Dominion Res	Jr Sub Nt	7.500	2066	105.00 $	300,000,000	7.14%	7.13%	0.02%	BBB	$ 315,000,000	105.00%		22,500,000
Dominion Res	Jr Sub Nt	2.879	2066	84.03 $	500,000,000	3.43%	3.55%	0.02%	BBB	$ 420,150,000	84.03%		14,395,000
Dominion Res	Nt	5.150	2015	111.45 $	500,000,000	4.62%	0.53%	0.00%	A-	$ 557,250,000	111.45%		25,750,000
Dominion Res	Nt	4.450	2021	111.38 $	500,000,000	4.00%	2.92%	0.02%	A-	$ 556,900,000	111.38%		22,250,000
	13 Book Val	**1300**	**Sum**	**1496.85 $**	**6,200,000,000**	**Percent of Book**	**115.14%**	**0.24%**		**$ 7,194,655,000**	**116.04%**	**5.87%**	**363,695,000**
Duke Energy	Sr Nt	5.050	2019	113.45 $	500,000,000	4.45%	2.76%	0.02%	BBB+	$ 567,250,000	113.45%		25,250,000
Duke Energy	Sr Nt	3.550	2021	102.28 $	500,000,000	3.47%	3.24%	0.02%	BBB+	$ 511,400,000	102.28%		17,750,000
	2 Book Val	**200**	**Sum**	**215.73 $**	**1,000,000,000**	**Percent of Book**	**107.87%**	**0.03%**		**$ 1,078,650,000**	**107.87%**	**4.30%**	**43,000,000**
El Paso Electric (Texas)	Sr Nt	6.000	2035	118.08 $	400,000,000	5.08%	4.68%	0.02%	BBB	$ 472,320,000	118.08%		24,000,000
	1 Book Val	**100**	**Sum**	**118.08 $**	**400,000,000**	**Percent of Book**	**118.08%**	**0.02%**		**$ 472,320,000**	**118.08%**	**6.00%**	**24,000,000**

Empire District	Shelt		7.200	2016	120.87	$	25,000,000		5.96%	1.09%	0.00%	BBB+	$	30,217,500	120.87%		1,800,000
Empire District	Sr Nt		5.800	2035	105.78	$	40,000,000		5.48%	5.35%	0.00%	BBB-	$	42,312,000	105.78%		2,320,000
Empire District	Sr Nt		6.700	2033	117.06	$	62,000,000		5.72%	5.31%	0.00%	BBB-	$	72,577,200	117.06%		4,154,000
Empire District	Nt		7.050	2022	100.00	$	50,000,000		7.05%	7.05%	0.00%	NR	$	50,000,000	100.00%		3,525,000
	4 Book Val	**400**		**Sum**	**443.71**	**$**	**177,000,000**	**Percent of Book**		**110.93%**	**0.01%**		**$**	**195,106,700**	**110.23%**	**6.67%**	**11,799,000**
Entergy Corp (Arkansas)	1st Mtg		6.380	2034	100.06	$	60,000,000		6.38%	6.37%	0.00%	A-	$	60,036,000	100.06%		3,828,000
Entergy Corp (Arkansas)	1st Mtg		5.660	2025	107.54	$	175,000,000		5.26%	4.84%	0.01%	A-	$	188,195,000	107.54%		9,905,000
Entergy Corp (Gulf States)	1st Mtg		6.180	2035	99.93	$	65,000,000		6.18%	6.19%	0.00%	BBB+	$	64,954,500	99.93%		4,017,000
Entergy Corp (Gulf States)	1st Mtg		5.700	2015	100.00	$	200,000,000		5.70%	5.70%	0.01%	BBB+	$	200,000,000	100.00%		11,400,000
Entergy Corp (Louisiana)	1st Mtg		5.500	2019	94.62	$	100,000,000		5.81%	6.54%	0.01%	A-	$	94,620,000	94.62%		5,500,000
Entergy Corp (Louisiana)	1st Mtg		6.300	2035	99.42	$	200,000,000		6.34%	6.35%	0.01%	A-	$	198,840,000	99.42%		12,600,000
Entergy Corp (Louisiana)	1st Mtg		6.400	2034	100.21	$	70,000,000		6.39%	6.38%	0.01%	A-	$	70,147,000	100.21%		4,480,000
Entergy Corp (Louisiana)	1st Mtg		5.560	2015	96.43	$	200,000,000		5.77%	7.17%	0.02%	A-	$	192,860,000	96.43%		11,120,000
Entergy Corp (Mississippi)	1st Mtg		4.950	2018	100.04	$	95,000,000		4.95%	4.94%	0.01%	A-	$	95,038,000	100.04%		4,702,500
Entergy Corp (Mississippi)	1st Mtg		6.250	2034	103.37	$	100,000,000		6.05%	5.97%	0.01%	A-	$	103,370,000	103.37%		6,250,000
Entergy Corp (Mississippi)	1st Mtg		5.920	2016	100.00	$	100,000,000		5.92%	5.92%	0.01%	NR	$	100,000,000	100.00%		5,920,000
	11 Book Val	**1100**		**Sum**	**1101.62**	**$**	**1,365,000,000**	**Percent of Book**		**100.15%**	**0.10%**		**$**	**1,368,060,500**	**100.22%**	**5.84%**	**79,722,500**
Exelon Corp	Sr Nt		4.900	2015	107.74	$	1,700,000,000		4.55%	1.71%	0.03%	BBB-	$	1,831,580,000	107.74%		83,300,000
Exelon Corp	Sr Nt		5.625	2035	107.64	$	1,700,000,000		5.23%	5.05%	0.10%	BBB-	$	1,829,880,000	107.64%		95,625,000
	2 Book Val	**200**		**Sum**	**215.38**	**$**	**3,400,000,000**	**Percent of Book**		**107.69%**	**0.13%**		**$**	**3,661,460,000**	**107.69%**	**5.26%**	**178,925,000**
Florida Power & Light	1st Mtg		5.950	2038	131.11	$	600,000,000		4.54%	3.98%	0.03%	A	$	786,660,000	131.11%		35,700,000
Florida Power & Light	1st Mtg		5.960	2039	132.05	$	500,000,000		4.51%	3.98%	0.02%	A	$	660,250,000	132.05%		29,800,000
Florida Power & Light	1st Mtg		5.690	2040	128.11	$	500,000,000		4.44%	3.99%	0.02%	A	$	640,550,000	128.11%		28,450,000
Florida Power & Light	1st Mtg		5.850	2037	127.14	$	300,000,000		4.60%	4.08%	0.01%	A	$	381,420,000	127.14%		17,550,000
Florida Power & Light	1st Mtg		5.650	2037	125.70	$	400,000,000		4.49%	3.99%	0.02%	A	$	502,800,000	125.70%		22,600,000
Florida Power & Light	1st Mtg		6.200	2036	132.86	$	300,000,000		4.67%	4.01%	0.01%	A	$	398,580,000	132.86%		18,600,000
Florida Power & Light	1st Mtg		5.400	2035	120.17	$	300,000,000		4.49%	4.02%	0.01%	A	$	360,510,000	120.17%		16,200,000
Florida Power & Light	1st Mtg		4.950	2035	114.94	$	300,000,000		4.31%	3.94%	0.01%	A	$	344,820,000	114.94%		14,850,000
Florida Power & Light	3rd Mtg		5.625	2034	123.54	$	500,000,000		4.55%	3.98%	0.02%	A	$	617,700,000	123.54%		28,125,000
Florida Power & Light	4th Mtg		5.950	2033	127.89	$	300,000,000		4.65%	3.94%	0.01%	A	$	383,670,000	127.89%		17,850,000
Florida Power & Light	5th Mtg		5.850	2033	125.94	$	600,000,000		4.65%	3.98%	0.03%	A	$	755,640,000	125.94%		35,100,000
	11 Book Val	**1100**		**Sum**	**1389.45**	**$**	**4,600,000,000**	**Percent of Book**		**126.31%**	**0.21%**		**$**	**5,832,600,000**	**126.80%**	**5.76%**	**264,825,000**
Idaho Power	MTN		5.500	2033	115.60	$	250,000,000		4.76%	4.34%	0.01%	A-	$	289,000,000	115.60%		13,750,000
Idaho Power	1st Mtg		5.875	2034	121.37	$	250,000,000		4.84%	4.33%	0.01%	A-	$	303,425,000	121.37%		14,687,500
Idaho Power	MTN		5.500	2034	116.10	$	250,000,000		4.74%	4.33%	0.01%	A-	$	290,250,000	116.10%		13,750,000
Idaho Power	MTN		6.000	2032	121.47	$	100,000,000		4.94%	4.35%	0.01%	A-	$	121,470,000	121.47%		6,000,000
Idaho Power	1st Mtg		5.300	2035	113.43	$	60,000,000		4.67%	4.35%	0.00%	A-	$	68,058,000	113.43%		3,180,000
	5 Book Val	**500**		**Sum**	**587.97**		**910,000,000**	**Percent of Book**		**117.59%**	**0.05%**		**$**	**1,072,203,000**	**117.82%**	**5.64%**	**51,367,500**
Interstate Power & Light	Sr Deb		5.500	2025	111.96	$	50,000,000		4.91%	4.25%	0.00%	BBB+	$	55,980,000	111.96%		2,750,000
Interstate Power & Light	Sr Deb		6.450	2033	130.80	$	100,000,000		4.93%	4.18%	0.00%	BBB+	$	130,800,000	130.80%		6,450,000
Interstate Power & Light	Sr Deb		6.300	2034	129.12	$	100,000,000		4.88%	4.21%	0.00%	BBB+	$	129,120,000	129.12%		6,300,000
	3 Book Val	**300**		**Sum**	**371.88**		**250,000,000**	**Percent of Book**		**123.96%**	**0.01%**			**315,900,000**	**126.36%**	**6.20%**	**15,500,000**
Jersey Central Power & Light	Sr Nt		6.400	2036	115.48	$	200,000,000		5.54%	5.24%	0.01%	BBB-	$	230,960,000	115.48%		12,800,000
	1 Book Val	**100**		**Sum**	**115.48**	**$**	**200,000,000**	**Percent of Book**		**115.48%**	**0.01%**		**$**	**230,960,000**	**115.48%**	**6.40%**	**12,800,000**
Kansas City Power & Light	Sr Nt		6.050	2035	115.85	$	250,000,000		5.22%	4.87%	0.01%	BBB	$	289,625,000	115.85%		15,125,000
Kansas City Power & Light	Sr Nt		5.850	2017	114.28	$	250,000,000		5.12%	2.46%	0.01%	BBB	$	285,700,000	114.28%		14,625,000
	2 Book Val	**200**		**Sum**	**230.13**	**$**	**500,000,000**	**Percent of Book**		**115.07%**	**0.02%**		**$**	**575,325,000**	**115.07%**	**5.95%**	**29,750,000**
Madison Gas & Electric	1st Mtg		7.700	2028	102.44	$	25,000,000		7.52%	7.43%	0.00%	AA-	$	25,610,000	102.44%		1,925,000
Madison Gas & Electric	Tranche		7.120	2032	137.52	$	25,000,000		5.18%	4.25%	0.00%	AA-	$	34,380,000	137.52%		1,780,000
	2 Book Val	**200**		**Sum**	**239.96**	**$**	**50,000,000**	**Percent of Book**		**119.98%**	**0.00%**		**$**	**59,990,000**	**119.98%**	**7.41%**	**3,705,000**
Metropolitan Edison	Sr Nt		4.575	2014	106.24	$	250,000,000		4.31%	0.39%	0.00%	BBB-	$	265,600,000	106.24%		11,437,500
	1 Book Val	**100**		**Sum**	**106.24**		**250,000,000**	**Percent of Book**		**106.24%**	**0.00%**			**265,600,000**	**106.24%**	**4.58%**	**11,437,500**
Nevada Power	Gen & Rfdg Mtg		7.125	2019	124.88	$	500,000,000		5.71%	2.87%	0.02%	BBB	$	624,400,000	124.88%		35,625,000
Nevada Power	Gen & Rfdg Mtg		5.875	2015	112.16	$	250,000,000		5.24%	0.93%	0.00%	BBB	$	280,400,000	112.16%		14,687,500
Nevada Power	Gen & Rfdg Mtg		6.500	2018	120.58	$	500,000,000		5.39%	2.45%	0.01%	BBB	$	602,900,000	120.58%		32,500,000
Nevada Power	Gen & Rfdg Mtg		6.750	2037	136.48	$	350,000,000		4.95%	4.31%	0.02%	BBB	$	477,680,000	136.48%		23,625,000
	4 Book Val	**400**		**Sum**	**494.10**		**1,600,000,000**	**Percent of Book**		**123.53%**	**0.05%**		**$**	**1,985,380,000**	**124.09%**	**6.65%**	**106,437,500**
Ohio Edison	Sr Nt		6.875	2036	121.25	$	350,000,000		5.67%	5.28%	0.02%	BBB-	$	424,375,000	121.25%		24,062,500
Ohio Edison	Sr Nt		6.400	2016	115.27	$	250,000,000		5.55%	1.85%	0.01%		$	288,175,000	115.27%		16,000,000
	2 Book Val	**200**		**Sum**	**236.52**	**$**	**600,000,000**	**Percent of Book**		**118.26%**	**0.03%**		**$**	**712,550,000**	**118.76%**	**6.68%**	**40,062,500**
Oklahoma Gas & Electric	Sr Nt		5.150	2016	109.74	$	220,000,000		4.69%	2.23%	0.01%	BBB+	$	241,428,000	109.74%		11,330,000
Oklahoma Gas & Electric	Sr Nt		6.500	2017	119.75	$	125,000,000		5.43%	1.88%	0.00%	BBB+	$	149,687,500	119.75%		8,125,000
Oklahoma Gas & Electric	Sr Nt		5.750	2036	123.93	$	220,000,000		4.64%	4.14%	0.01%	BBB+	$	272,646,000	123.93%		12,650,000
Oklahoma Gas & Electric	Sr Nt		6.500	2028	121.41	$	100,000,000		5.35%	4.55%	0.01%	BBB+	$	121,410,000	121.41%		6,500,000
Oklahoma Gas & Electric	Sr Nt		6.650	2027	130.92	$	125,000,000		5.08%	3.83%	0.01%	BBB+	$	163,650,000	130.92%		8,312,500
Oklahoma Gas & Electric	Sr Nt		7.300	2025	103.26	$	110,000,000		7.07%	6.90%	0.01%	NR	$	113,586,000	103.26%		8,030,000
	6 Book Val	**600**		**Sum**	**709.01**	**$**	**900,000,000**	**Percent of Book**		**118.17%**	**0.04%**		**$**	**1,062,407,500**	**118.05%**	**6.11%**	**54,947,500**
Pacific Gas & Electric	Sr Nt		5.400	2040	116.30	$	800,000,000		4.64%	4.37%	0.04%	BBB	$	930,400,000	116.30%		43,200,000
Pacific Gas & Electric	Sr Nt		6.250	2039	128.87	$	550,000,000		4.85%	4.39%	0.03%	BBB	$	708,785,000	128.87%		34,375,000
Pacific Gas & Electric	Sr Nt		5.800	2037	121.79	$	950,000,000		4.76%	4.34%	0.05%	BBB	$	1,157,005,000	121.79%		55,100,000
Pacific Gas & Electric	Sr Nt		5.800	2037	117.53	$	950,000,000		4.93%	4.59%	0.05%	NR	$	1,116,535,000	117.53%		55,100,000
Pacific Gas & Electric	1st Mtg		6.050	2034	119.78	$	3,000,000,000		5.05%	4.58%	0.16%	BBB	$	3,593,400,000	119.78%		181,500,000
Pacific Gas & Electric	1st Mtg		6.050	2034	123.78	$	6,700,000,000		4.89%	4.33%	0.34%	BBB	$	8,293,260,000	123.78%		405,350,000
Pacific Gas & Electric	Sr Nt		5.625	2017	118.33	$	700,000,000		4.75%	1.39%	0.01%	BBB	$	828,310,000	118.33%		39,375,000
Pacific Gas & Electric	Sr Nt		3.500	2020	104.42	$	800,000,000		3.35%	2.84%	0.03%	BBB	$	835,360,000	104.42%		28,000,000
Pacific Gas & Electric	Sr Nt		8.250	2018	131.82	$	800,000,000		6.26%	2.07%	0.02%	BBB	$	1,054,560,000	131.82%		66,000,000
	9 Book Val	**900**		**Sum**	**1082.62**		**15,250,000,000**	**Percent of Book**		**120.29%**	**0.72%**		**$**	**18,517,615,000**	**121.43%**	**5.95%**	**908,000,000**
PECO Energy	1st Ref Mtg		5.900	2034	126.77	$	75,000,000		4.65%	4.02%	0.00%	A-	$	95,077,500	126.77%		4,425,000
PECO Energy	1st & Rfdg Mtg		5.350	2018	118.09	$	500,000,000		4.53%	1.86%	0.01%	A-	$	590,450,000	118.09%		26,750,000
PECO Energy	1st & Rfdg Mtg		5.700	2037	124.72	$	175,000,000		4.57%	4.08%	0.01%	A-	$	218,260,000	124.72%		9,975,000
PECO Energy	1st & Rfdg Mtg		5.950	2036	128.32	$	300,000,000		4.64%	4.06%	0.01%	A-	$	384,960,000	128.32%		17,850,000
	4 Book Val	**400**		**Sum**	**497.90**	**$**	**1,050,000,000**	**Percent of Book**		**124.48%**	**0.04%**		**$**	**1,288,747,500**	**122.74%**	**5.62%**	**59,000,000**
Pepco Holdings	Nt		7.450	2032	123.66	$	250,000,000		6.02%	5.45%	0.02%	BBB	$	309,150,000	123.66%		18,625,000
Pepco Holdings	Nt		6.125	2017	111.32	$	250,000,000		5.50%	3.37%	0.01%	BBB	$	278,300,000	111.32%		15,312,500
	2 Book Val	**200**		**Sum**	**234.98**	**$**	**500,000,000**	**Percent of Book**		**117.49%**	**0.03%**		**$**	**587,450,000**	**117.49%**	**6.79%**	**33,937,500**
Portland General por	1st Mtg		9.310	2021	144.75	$	20,000,000		6.43%	3.21%	0.00%	NR	$	28,950,000	144.75%		1,862,000
	1 Book Val	**100**		**Sum**	**144.75**	**$**	**20,000,000**	**Percent of Book**		**144.75%**	**0.00%**		**$**	**28,950,000**	**144.75%**	**9.31%**	**1,862,000**
Pontomac Electric Power	Sr Nt		5.750	2034	118.81	$	100,000,000		4.84%	4.38%	0.01%	A	$	118,810,000	118.81%		5,750,000
Pontomac Electric Power	Sr Nt		5.400	2035	114.29	$	175,000,000		4.72%	4.39%	0.01%	A	$	200,007,500	114.29%		9,450,000
	2 Book Val	**200**		**Sum**	**233.10**	**$**	**275,000,000**	**Percent of Book**		**116.55%**	**0.01%**		**$**	**318,817,500**	**115.93%**	**5.53%**	**15,200,000**
Progress Energy	Sr Nt		7.750	2031	142.00	$	400,000,000		5.46%	4.39%	0.02%	BBB	$	568,000,000	142.00%		31,000,000
Progress Energy	Sr Nt		6.000	2039	125.30	$	600,000,000		4.79%	4.37%	0.03%	BBB	$	751,800,000	125.30%		36,000,000
Progress Energy	Sr Nt		7.000	2031	132.96	$	800,000,000		5.26%	4.37%	0.04%	BBB	$	1,063,680,000	132.96%		56,000,000
Progress Energy	Sr Nt		5.625	2016	114.22	$	400,000,000		4.92%	1.43%	0.01%	BBB	$	456,880,000	114.22%		22,500,000
	4 Book Val	**400**		**Sum**	**514.48**	**$**	**2,200,000,000**	**Percent of Book**		**128.62%**	**0.10%**		**$**	**2,840,360,000**	**129.11%**	**6.61%**	**145,500,000**
Public Svc Co New Hamshire	1st Mtg		5.600	2035	118.15	$	50,000,000		4.74%	4.32%	0.00%	A-	$	59,075,000	118.15%		2,800,000
	1 Book Val	**100**		**Sum**	**118.15**		**50,000,000**	**Percent of Book**		**118.15%**	**0.00%**		**$**	**59,075,000**	**118.15%**	**5.60%**	**2,800,000**
Public Svc Elec & Gas	1st & Ref		6.750	2016	118.82	$	200,000,000		5.68%	1.22%	0.00%	A-	$	237,640,000	118.82%		13,500,000
Public Svc Elec & Gas	MTN		5.250	2035	120.40	$	250,000,000		4.36%	3.87%	0.01%	A-	$	301,000,000	120.40%		13,125,000
Public Svc Elec & Gas	1st & Ref		9.250	2021	148.57	$	150,000,000		6.23%	2.76%	0.00%	A-	$	222,855,000	148.57%		13,875,000
Public Svc Elec & Gas	MTN		5.800	2037	128.22	$	350,000,000		4.52%	3.98%	0.02%	A-	$	448,770,000	128.22%		20,300,000
Public Svc Elec & Gas	MTN		5.700	2036	126.39	$	250,000,000		4.51%	3.95%	0.01%	A-	$	315,975,000	126.39%		14,250,000
Public Svc Elec & Gas	1st Mtg		8.000	2037	143.55	$	9,000,000		5.57%	4.91%	0.00%	A-	$	12,919,500	143.55%		720,000
Public Svc Elec & Gas	1st & Ref		5.000	2037	104.21	$	8,000,000		4.80%	4.71%	0.00%	A-	$	8,336,800	104.21%		400,000
	7 Book Val	**700**		**Sum**	**890.16**	**$**	**1,217,000,000**	**Percent of Book**		**127.17%**	**0.05%**		**$**	**1,547,496,300**	**127.16%**	**6.26%**	**76,170,000**
Public Svc, New Mexico	Sr Nt		7.500	2018	116.14	$	135,000,000		6.46%	4.16%	0.01%	BBB-	$	156,789,000	116.14%		10,125,000
	1 Book Val	**100**		**Sum**	**116.14**		**135,000,000**	**Percent of Book**		**116.14%**	**0.01%**		**$**	**156,789,000**	**116.14%**	**7.50%**	**10,125,000**
Sierra Pacific Resources	Sr Nt		6.750	2017	102.25	$	225,000,000		6.60%	6.16%	0.02%	BB+	$	230,062,500	102.25%		15,187,500
	1 Book Val	**100**		**Sum**	**102.25**		**225,000,000**	**Percent of Book**		**102.25%**	**0.02%**		**$**	**230,062,500**	**102.25%**	**6.75%**	**15,187,500**
South Carolina Elec & Gas	1st Mtg		5.250	2035	112.82	$	100,000,000		4.65%	4.35%	0.01%	A	$	112,820,000	112.82%		5,250,000
South Carolina Elec & Gas	1st Mtg		5.300	2033	116.74	$	300,000,000		4.54%	4.08%	0.01%	A	$	350,220,000	116.74%		15,900,000
South Carolina Elec & Gas	1st Mtg		5.250	2018	117.33	$	250,000,000		4.47%	1.90%	0.01%	A	$	293,325,000	117.33%		13,125,000
South Carolina Elec & Gas	1st Mtg		5.800	2033	123.57	$	200,000,000		4.69%	4.08%	0.01%	A	$	247,140,000	123.57%		11,600,000
South Carolina Elec & Gas	1st Mtg		6.625	2032	129.55	$	300,000,000		5.11%	4.35%	0.02%	A	$	388,650,000	129.55%		19,875,000

South Carolina Elec & Gas	1st Mtg		6.250	2036	130.00	$	125,000,000		4.81%	4.21%	0.01%	A	$	162,500,000	130.00%		7,812,500
	6 Book Val	**600**		**Sum**	**730.01**		**1,275,000,000**	**Percent of Book**		**121.67%**	**0.06%**		**$**	**1,554,655,000**	**121.93%**	**5.77%**	**73,562,500**
Southern CA Edison	1st & Rtdg Mtg		5.500	2040	124.94	$	500,000,000		4.40%	3.99%	0.02%	A	$	624,700,000	124.94%		27,500,000
Southern CA Edison	1st & Rtdg Mtg		4.500	2040	109.12	$	500,000,000		4.12%	3.95%	0.02%	A	$	545,600,000	109.12%		22,500,000
Southern CA Edison	1st & Rtdg Mtg		6.000	2034	128.86	$	975,000,000		4.66%	3.98%	0.05%	A	$	1,256,385,000	128.86%		58,500,000
Southern CA Edison	1st & Rtdg Mtg		3.875	2021	110.37	$	500,000,000		3.51%	2.51%	0.01%	A	$	551,850,000	110.37%		19,375,000
Southern CA Edison	1st & Rtdg Mtg		6.650	2029	131.82	$	300,000,000		5.04%	3.98%	0.01%	BBB+	$	395,460,000	131.82%		19,950,000
Southern CA Edison	1st & Rtdg Mtg		5.550	2036	123.54	$	650,000,000		4.49%	3.99%	0.03%	A	$	803,010,000	123.54%		36,075,000
Southern CA Edison	1st & Rtdg Mtg		6.050	2039	132.50	$	500,000,000		4.57%	4.03%	0.02%	A	$	662,500,000	132.50%		30,250,000
Southern CA Edison	1st & Rtdg Mtg		5.350	2035	120.21	$	350,000,000		4.45%	3.97%	0.02%	A	$	420,735,000	120.21%		18,725,000
Southern CA Edison	1st & Rtdg Mtg		5.950	2038	130.14	$	600,000,000		4.57%	4.04%	0.03%	A	$	780,840,000	130.14%		35,700,000
Southern CA Edison	1st & Rtdg Mtg		5.550	2037	123.20	$	400,000,000		4.50%	4.04%	0.02%	A	$	492,800,000	123.20%		22,200,000
Southern CA Edison	1st & Rtdg Mtg		5.625	2036	123.82	$	350,000,000		4.54%	4.04%	0.02%	A	$	433,370,000	123.82%		19,687,500
Southern CA Edison	1st & Rtdg Mtg		5.000	2016	113.90	$	650,000,000		4.39%	0.94%	0.01%	A	$	740,350,000	113.90%		32,500,000
	12 Book Val	**1200**		**Sum**	**1472.42**	**$**	**6,275,000,000**	**Percent of Book**		**122.70%**	**0.26%**		**$**	**7,707,600,000**	**122.83%**	**5.47%**	**342,962,500**
Southern Co	Sr Nt		1.950	2016	100.94	$	500,000,000		1.93%	1.67%	0.01%	A-	$	504,700,000	100.94%		9,750,000
	1 Book Val	**100**		**Sum**	**100.94**		**500,000,000**	**Percent of Book**		**100.94%**	**0.01%**		**$**	**504,700,000**	**100.94%**	**1.95%**	**9,750,000**
Tampa Electric	Sr Nt		6.150	2037	127.22	$	250,000,000		4.83%	4.33%	0.01%	BBB+	$	318,050,000	127.22%		15,375,000
Tampa Electric	Sr Nt		6.550	2036	132.58	$	250,000,000		4.94%	4.32%	0.01%	BBB+	$	331,450,000	132.58%		16,375,000
Tampa Electric	Sr Nt		6.100	2018	120.25	$	250,000,000		5.07%	2.16%	0.01%	BBB+	$	300,625,000	120.25%		15,250,000
	3 Book Val	**300**		**Sum**	**380.05**	**$**	**750,000,000**	**Percent of Book**		**126.68%**	**0.03%**		**$**	**950,125,000**	**126.68%**	**6.27%**	**47,000,000**
TECO Energy	Nt		6.750	2015	110.48	$	200,000,000		6.11%	2.38%	0.01%	BBB	$	220,960,000	110.48%		13,500,000
	1 Book Val	**100**		**Sum**	**110.48**		**200,000,000**	**Percent of Book**		**110.48%**	**0.01%**		**$**	**220,960,000**	**110.48%**	**6.75%**	**13,500,000**
Toledo Edison	Sr Nt		6.150	2037	120.27	$	300,000,000		5.11%	4.73%	0.02%	BBB	$	360,810,000	120.27%		18,450,000
	1 Book Val	**100**		**Sum**	**120.27**		**300,000,000**	**Percent of Book**		**120.27%**	**0.02%**		**$**	**360,810,000**	**120.27%**	**6.15%**	**18,450,000**
Union Electric Co	Sr Secd Nt		4.750	2015	107.80	$	114,000,000		4.41%	1.55%	0.00%	BBB+	$	122,892,000	107.80%		5,415,000
Union Electric Co	Sr Secd Nt		6.700	2019	121.48	$	450,000,000		5.52%	3.01%	0.02%	BBB+	$	546,660,000	121.48%		30,150,000
Union Electric Co	Sr Secd Nt		7.690	2036	102.69	$	66,000,000		7.49%	7.44%	0.01%	NR	$	67,775,400	102.69%		5,075,400
Union Electric Co	Sr Secd Nt		6.400	2017	119.53	$	425,000,000		5.35%	1.84%	0.01%	BBB+	$	508,002,500	119.53%		27,200,000
Union Electric Co	1st Mtg		5.000	2020	112.92	$	85,000,000		4.43%	3.05%	0.00%	BBB+	$	95,982,000	112.92%		4,250,000
Union Electric Co	Sr Secd Nt		5.500	2014	107.64	$	104,000,000		5.11%	0.38%	0.00%	BBB+	$	111,945,600	107.64%		5,720,000
Union Electric Co	Sr Secd Nt		6.000	2018	118.05	$	250,000,000		5.08%	2.45%	0.01%	BBB+	$	295,125,000	118.05%		15,000,000
Union Electric Co	Sr Secd Nt		5.500	2034	116.04	$	184,000,000		4.74%	4.34%	0.01%	BBB+	$	213,513,600	116.04%		10,120,000
	8 Book Val	**800**		**Sum**	**906.15**	**$**	**1,678,000,000**	**Percent of Book**		**113.27%**	**0.05%**		**$**	**1,961,896,100**	**116.92%**	**6.13%**	**102,930,400**
Vectren (Utility Hldgs)	Sr Nt		5.450	2015	112.35	$	75,000,000		4.85%	0.47%	0.00%	A-	$	84,262,500	112.35%		4,087,500
Vectren (Utility Hldgs)	Sr Nt		6.100	2035	119.74	$	75,000,000		5.09%	4.66%	0.00%	A-	$	89,805,000	119.74%		4,575,000
	2 Book Val	**200**		**Sum**	**232.09**	**$**	**150,000,000**	**Percent of Book**		**116.05%**	**0.00%**		**$**	**174,067,500**	**116.05%**	**5.78%**	**8,662,500**
Virginia Electric & Power	Sr Nt		6.000	2036	126.82	$	1,000,000,000		4.73%	4.19%	0.05%	A-	$	1,268,200,000	126.82%		60,000,000
Virginia Electric & Power	Sr Nt		5.400	2016	115.24	$	1,000,000,000		4.69%	0.95%	0.01%	A-	$	1,152,400,000	115.24%		54,000,000
Virginia Electric & Power	Sr Nt		5.950	2017	120.34	$	600,000,000		4.94%	1.27%	0.01%	A-	$	722,040,000	120.34%		35,700,000
Virginia Electric & Power	Sr Nt		6.000	2037	127.65	$	600,000,000		4.70%	4.18%	0.03%	A-	$	765,900,000	127.65%		36,000,000
Virginia Electric & Power	Sr Nt		6.350	2037	133.47	$	450,000,000		4.76%	4.15%	0.02%	A-	$	600,615,000	133.47%		28,575,000
	5 Book Val	**500**		**Sum**	**623.52**		**3,650,000,000**	**Percent of Book**		**124.70%**	**0.12%**		**$**	**4,509,155,000**	**123.54%**	**5.87%**	**214,275,000**
Westar Energy	1st Mtg		5.950	2035	110.50	$	250,000,000		5.38%	5.15%	0.01%	BBB+	$	276,250,000	110.50%		14,875,000
Westar Energy	1st Mtg		5.100	2020	113.10	$	400,000,000		4.51%	3.11%	0.01%	BBB+	$	452,400,000	113.10%		20,400,000
Westar Energy	1st Mtg		5.150	2017	109.71	$	250,000,000		4.69%	2.82%	0.01%	BBB+	$	274,275,000	109.71%		12,875,000
Westar Energy	1st Mtg		5.875	2036	118.40	$	150,000,000		4.96%	4.58%	0.01%	BBB+	$	177,600,000	118.40%		8,812,500
	4 Book Val	**400**		**Sum**	**451.71**	**$**	**1,050,000,000**	**Percent of Book**		**112.93%**	**0.05%**		**$**	**1,180,525,000**	**112.43%**	**5.43%**	**56,962,500**
Western Mass. Electric	Sr Nt		5.240	2015	109.53	$	50,000,000		4.78%	1.34%	0.00%	BBB+	$	54,765,000	109.53%		2,620,000
	1 Book Val	**100**		**Sum**	**109.53**		**50,000,000**	**Percent of Book**		**109.53%**	**0.00%**		**$**	**54,765,000**	**109.53%**	**5.24%**	**2,620,000**
Wisconsin Energy Corp	Nt		6.250	2067	100.05	$	500,000,000		6.25%	6.25%	0.04%	BBB-	$	500,250,000	100.05%		31,250,000
	1 Book Val	**100**		**Sum**	**100.05**	**$**	**500,000,000**	**Percent of Book**		**100.05%**	**0.04%**		**$**	**500,250,000**	**100.05%**	**6.25%**	**31,250,000**
Wisconsin Public Service	Sr Nt		5.550	2036	120.47	$	125,000,000		4.61%	4.17%	0.01%	A	$	150,587,500	120.47%		6,937,500
Wisconsin Public Service	Sr Nt		7.125	2023	100.86	$	100,000,000		7.06%	7.01%	0.01%	A	$	100,860,000	100.86%		7,125,000
	2 Book Val	**200**		**Sum**	**221.33**	**$**	**225,000,000**	**Percent of Book**		**110.67%**	**0.01%**		**$**	**251,447,500**	**111.75%**	**6.25%**	**14,062,500**
Xcel energy xel	Sr Nt		6.500	2036	128.37	$	300,000,000		5.06%	4.52%	0.02%	BBB+	$	385,110,000	128.37%		19,500,000
	1 Book Val	**100**		**Sum**	**128.37**	**$**	**300,000,000**	**Percent of Book**		**128.37%**	**0.02%**		**$**	**385,110,000**	**128.37%**	**6.50%**	**19,500,000**
Source: Standard & Poor's Bond Guide, January 2012, 2011 Yr End Prices						**$**	**85,944,000,000**			**3.62%**			**$**	**102,724,052,000**	**119.52%**	**5.86%**	**$ 5,040,525,980**

This includes short term. For 20+ year maturities see below

Company	**type**	**Call**	**coupon**	**maturity**	**Price 12/11**		**Issued / Book**	**current yield**	**yield to maturity**	**WAYTM**	**Rating**		**Mkt Val**	**Mkt : Book**	**Embedded Rate**	**Debt Service**
Arizona Public Svc	Nt		6.875	2036	131.24	$	400,000,000	5.24%	4.66%	0.08%	BBB	$	524,960,000	131.24%		27,500,000
Arizona Public Svc	Nt		5.500	2035	115.03	$	250,000,000	4.78%	4.43%	0.05%	BBB	$	287,575,000	115.03%		13,750,000
Arizona Public Svc	Nt		5.625	2033	113.63	$	500,000,000	4.95%	4.59%	0.10%	BBB	$	568,150,000	113.63%		28,125,000
Cleco Power	Sr Nt		6.500	2035	124.61	$	295,000,000	5.22%	4.70%	0.06%	BBB	$	367,599,500	124.61%		19,175,000
Cleveland Electric	Sr Nt		5.950	2036	106.57	$	300,000,000	5.58%	5.45%	0.07%	BBB-	$	319,710,000	106.57%		17,850,000
Constellation Energy	Nt		7.600	2032	128.86	$	2,000,000,000	5.90%	5.21%	0.44%	BBB-	$	2,577,200,000	128.86%		152,000,000
Consumers Energy	1st Mtg		5.800	2035	117.77	$	175,000,000	4.92%	4.52%	0.03%	BBB+	$	206,097,500	117.77%		10,150,000
Dominion Res	Jr Sub Nt		7.500	2066	105.00	$	300,000,000	7.14%	7.13%	0.09%	BBB	$	315,000,000	105.00%		22,500,000
Dominion Res	Jr Sub Nt		2.879	2066	84.03	$	500,000,000	3.43%	3.55%	0.08%	BBB	$	420,150,000	84.03%		14,395,000

DATA INPUT

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

Instructions: Data entered on this page will flow to the applicable worksheets.

Guideline Companies		Stock Price	Revenues	Cash Flow	Earnings	Dividends	Bk Value	Common	Calculated Debt	Wtd Avg YTM	div to earnings Payout Ratio	Payout Ratio	ROE
Name	Ticker	(4th Qtr Avg)	Per Share	Per Share	Per Share	Per Share	Stock	Shares	mk to bk		calculated	V L	V L
Avista Corp	ava	24.895	27.80	3.75	1.80	1.10	20.35	57,984,054	119.86%	3.95%	61%	60%	9.0%
Black Hills Corp	bkh	32.252	29.20	4.85	1.75	1.46	28.15	39,441,037	119.52%		83%	82%	6.0%
Edison International	eix	39.317	37.45	7.85	2.75	1.29	33.85	325,811,206	122.83%	3.56%	47%	50%	8.0%
El Paso Electric	ee	32.932	22.20	5.50	2.50	0.66	20.45	41,822,857	118.08%	4.68%	nil	26%	12.5%
Hawaiian Electric	he	25.273	32.30	3.05	1.30	1.24	15.85	95,877,918	119.52%		95%	95%	8.0%
Idacorp Inc	ida	40.273	22.00	5.55	3.10	1.20	32.50	49,711,638	117.82%	4.34%	39%	39%	9.5%
NV Energy Inc	nve	15.085	12.90	3.10	0.75	0.48	14.50	235,990,761	124.09%	2.75%	64%	63%	5.5%
PG&E Corp	pcg	40.497	36.30	8.45	2.75	1.82	29.80	401,657,362	121.43%	4.07%	66%	66%	9.0%
PNM Resources	pnm	17.810	19.55	2.75	1.00	0.50	17.80	86,673,174	116.14%	4.16%	50%	51%	5.5%
Pinnacle West	pnw	45.605	29.75	6.80	2.75	2.10	34.50	109,110,950	119.02%	3.17%	76%	76%	8.0%
Portland General	por	24.353	24.15	5.00	2.00	1.06	22.05	75,341,327	144.75%	3.21%	53%	53%	9.0%
Sempra Energy	sre	52.667	41.25	8.40	4.20	1.92	41.05	239,552,287	119.52%		46%	45%	10.5%
Unisource Energy	uns	36.598	39.75	6.90	2.75	1.68	23.25	36,898,524	119.52%		61%	62%	11.5%
Xcel Energy	xel	25.727	22.35	3.85	1.75	1.03	17.50	484,557,036	128.37%	4.52%	59%	59%	10.0%
Cent. Vermont P.S.	cv	35.228	27.25	1.70	0.35	0.92	21.10	13,431,449	119.52%		263%	nmf	nmf
CH Energy Group	chg	55.020	66.65	5.50	3.00	2.22	35.50	14,888,149	118.39%	4.30%	74%	74%	8.5%
Con. Edison	ed	58.568	45.90	6.50	3.55	2.40	38.45	292,904,646	124.33%	3.36%	68%	68%	9.5%
Constellation Energy	ceg	38.313	68.30	5.95	1.70	0.96	39.65	201,321,543	121.09%	4.44%	56%	57%	4.5%
Dominion Res	D	50.982	26.05	5.05	2.80	1.97	20.90	569,611,030	116.04%	3.34%	70%	71%	13.5%
Duke Energy	duk	20.512	10.95	2.95	1.40	0.99	17.25	1,331,798,790	107.87%	3.00%	71%	70%	8.0%
Exelon Corp	exc	43.045	30.00	7.95	3.65	2.10	22.10	662,692,262	107.69%	3.38%	58%	57%	16.5%
FirstEnergy	fe	43.928	39.45	6.40	2.50	2.20	32.05	418,216,437	116.02%	3.30%	88%	90%	7.5%
NextEra Energy	nee	55.992	35.00	8.90	4.15	2.20	36.30	422,536,194	126.80%	3.99%	53%	53%	11.5%
Northeast Utilities	nu	34.005	25.40	5.60	2.15	1.10	22.65	176,893,612	118.15%	4.32%	51%	51%	9.5%
NSTAR	nst	44.570	28.50	5.65	2.55	1.73	19.50	103,586,727	119.52%		68%	68%	13.0%
Pepco Holdings	pom	19.390	25.55	3.00	1.25	1.08	19.00	226,956,398	117.49%	4.41%	86%	85%	6.5%
PPL Corp	ppl	28.953	19.40	4.50	2.55	1.40	19.35	577,749,262	119.52%		55%	53%	12.5%
Progress Energy	pgn	52.877	32.45	6.30	3.10	2.48	36.15	295,005,362	129.11%	3.84%	80%	80%	8.5%
P.S. Enterpriser Gp	peg	32.593	21.75	5.10	2.75	1.37	20.25	505,904,733	127.16%	3.36%	50%	49%	13.5%
SCANA Corp	scg	42.258	34.75	6.00	3.05	1.94	30.40	129,651,572	119.52%		64%	64%	10.0%
Southern Co	so	43.577	20.85	4.90	2.55	1.87	20.15	861,928,103	100.94%	1.67%	73%	73%	12.5%
TECO Energy	te	18.163	15.75	2.80	1.30	0.85	10.55	215,766,935	110.48%	2.38%	65%	65%	12.5%
UIL Holdings	uil	33.667	32.20	4.95	1.95	1.73	24.00	50,542,709	119.52%		89%	87%	8.5%
ALLETE Inc	ale	39.128	25.25	4.95	2.65	1.78	28.30	36,809,561	119.52%		67%	67%	9.0%
Alliant Energy	lnt	41.057	32.35	5.70	2.75	1.70	27.50	110,981,511	119.52%		62%	66%	9.5%
Ameren Corp	aee	31.770	31.70	6.10	2.45	1.56	32.65	242,239,840	116.92%	2.69%	64%	63%	7.5%
American Elec Pwr	aep	38.845	31.60	6.75	3.15	1.85	30.40	482,912,247	109.48%	1.37%	59%	59%	10.5%
Centerpoint Energy	cnp	19.892	19.50	3.45	1.20	0.79	9.90	425,932,721	122.48%	3.05%	66%	65%	12.5%
Cleco Corp	cnl	35.747	18.95	5.70	2.45	1.12	23.65	60,665,607	122.22%	4.26%	46%	46%	10.5%

CMS Energy Corp	cms	20.625	26.20	3.70	1.45	0.84	12.00	252,000,000	105.71%	3.81%	58%	55%	12.5%
DTE Energy Co	dte	51.363	52.65	9.55	3.60	2.32	40.95	169,250,934	107.47%	2.22%	64%	63%	9.0%
Empire District	ede	20.177	13.70	2.90	1.30	0.64	16.45	41,975,818	110.23%	5.22%	49%	49%	8.0%
Entergy Corp	etr	68.823	64.20	17.45	7.40	3.32	51.05	176,116,403	100.22%	6.03%	45%	46%	14.5%
Great Plains Energy	gxp	20.573	17.25	3.55	1.30	0.84	21.75	136,087,321	115.07%	3.67%	65%	63%	6.0%
Integrys Energy Group	teg	51.103	61.95	6.50	3.30	2.72	37.80	78,287,906	119.52%		82%	82%	8.5%
MGE Energy Inc	mgee	43.862	23.90	4.30	2.80	1.52	25.10	23,113,638	119.98%	5.84%	54%	61%	10.5%
OGE Energy Corp	oge	51.707	39.75	6.55	3.40	1.52	25.45	98,056,722	118.05%	3.70%	45%	42%	13.5%
Otter Tail Corp	ottr	20.292	33.30	2.90	0.68	1.19	17.55	36,062,023	119.52%		175%	nmf	4.0%
Vectren Corp	vvc	28.305	28.35	4.75	1.80	1.39	18.00	81,851,704	116.05%	2.57%	77%	76%	10.0%
Westar Energy	wr	27.010	18.35	4.15	1.75	1.28	22.20	117,180,729	112.43%	3.74%	73%	72%	8.0%
Wisconsin Energy	wec	32.627	19.80	3.65	2.15	1.04	17.15	231,267,725	100.05%	6.25%	48%	48%	12.5%

Value Line West Nov 4, 2011	Yahoo	Value Line	Value Line	Value Line	Value Line	Value Line	Value Line	Bond analysis	Bond analysis	calculated	Value Line	Value Line
Value Line East Nov 25, 2011								122.18%				
Value Line Central Dec 23, 2011								117.85%				
								114.14%				

SUPPORT FOR DIRECT CAPITALIZATION EQUITY COMPONENT

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

			2011		2012		2011		2012	
Company	**Ticker**	**Stock Average**	**Actual Earnings Ratio (EPS/P)**		**Projected Earnings Ratio (PEPS/P)**		**Cash Flow Ratio (CF/P)**		**Projected Cash Flow Ratio**	
Avista Corp	ava	24.895	1.80	7.2%	1.80	7.2%	3.75	15.1%	3.85	15.5%
Black Hills Corp	bkh	32.252	1.75	5.4%	1.95	6.0%	4.85	15.0%	5.50	17.1%
Edison International	eix	39.317	2.75	7.0%	2.80	7.1%	7.85	20.0%	8.10	20.6%
El Paso Electric	ee	32.932	2.50	7.6%	2.40	7.3%	5.50	16.7%	5.55	16.9%
Hawaiian Electric	he	25.273	1.30	5.1%	1.45	5.7%	3.05	12.1%	3.30	13.1%
Idacorp Inc	ida	40.273	3.10	7.7%	3.05	7.6%	5.55	13.8%	5.55	13.8%
NV Energy Inc	nve	15.085	0.75	5.0%	1.10	7.3%	3.10	20.6%	3.35	22.2%
PG&E Corp	pcg	40.497	2.75	6.8%	3.55	8.8%	8.45	20.9%	9.25	22.8%
PNM Resources	pnm	17.810	1.00	5.6%	1.20	6.7%	2.75	15.4%	3.00	16.8%
Pinnacle West	pnw	45.605	2.75	6.0%	3.25	7.1%	6.80	14.9%	7.55	16.6%
Portland General	por	24.353	2.00	8.2%	2.05	8.4%	5.00	20.5%	5.25	21.6%
Sempra Energy	sre	52.667	4.20	8.0%	4.50	8.5%	8.40	15.9%	9.10	17.3%
Unisource Energy	uns	36.598	2.75	7.5%	2.70	7.4%	6.90	18.9%	6.95	19.0%
Xcel Energy	xel	25.727	1.75	6.8%	1.85	7.2%	3.85	15.0%	4.10	15.9%
Cent. Vermont P.S.	cv	35.228	0.35	1.0%	1.75	5.0%	1.70	4.8%	3.15	8.9%
CH Energy Group	chg	55.020	3.00	5.5%	3.10	5.6%	5.50	10.0%	5.55	10.1%
Con. Edison	ed	58.568	3.55	6.1%	3.65	6.2%	6.50	11.1%	6.65	11.4%
Constellation Energy	ceg	38.313	1.70	4.4%	2.30	6.0%	5.95	15.5%	5.40	14.1%
Dominion Res	D	50.982	2.80	5.5%	3.25	6.4%	5.05	9.9%	5.65	11.1%
Duke Energy	duk	20.512	1.40	6.8%	1.45	7.1%	2.95	14.4%	3.10	15.1%
Exelon Corp	exc	43.045	3.65	8.5%	2.90	6.7%	7.95	18.5%	7.30	17.0%
FirstEnergy	fe	43.928	2.50	5.7%	3.40	7.7%	6.40	14.6%	7.35	16.7%
NextEra Energy	nee	55.992	4.15	7.4%	4.50	8.0%	8.90	15.9%	9.10	16.3%
Northeast Utilities	nu	34.005	2.15	6.3%	2.50	7.4%	5.60	16.5%	5.90	17.4%
NSTAR	nst	44.570	2.55	5.7%	2.75	6.2%	5.65	12.7%	6.00	13.5%
Pepco Holdings	pom	19.390	1.25	6.4%	1.20	6.2%	3.00	15.5%	2.95	15.2%
PPL Corp	ppl	28.953	2.55	8.8%	2.70	9.3%	4.50	15.5%	4.85	16.8%
Progress Energy	pgn	52.877	3.10	5.9%	3.15	6.0%	6.30	11.9%	6.40	12.1%
P.S. Enterpriser Gp	peg	32.593	2.75	8.4%	2.55	7.8%	5.10	15.6%	5.00	15.3%
SCANA Corp	scg	42.258	3.05	7.2%	3.15	7.5%	6.00	14.2%	6.00	14.2%
Southern Co	so	43.577	2.55	5.9%	2.70	6.2%	4.90	11.2%	5.10	11.7%
TECO Energy	te	18.163	1.30	7.2%	1.45	8.0%	2.80	15.4%	3.00	16.5%
UIL Holdings	uil	33.667	1.95	5.8%	2.20	6.5%	4.95	14.7%	5.30	15.7%
ALLETE Inc	ale	39.128	2.65	6.8%	2.65	6.8%	4.95	12.7%	5.05	12.9%
Alliant Energy	lnt	41.057	2.75	6.7%	2.95	7.2%	5.70	13.9%	6.00	14.6%
Ameren Corp	aee	31.770	2.45	7.7%	2.40	7.6%	6.10	19.2%	6.15	19.4%
American Elec Pwr	aep	38.845	3.15	8.1%	3.25	8.4%	6.75	17.4%	6.95	17.9%
Centerpoint Energy	cnp	19.892	1.20	6.0%	1.20	6.0%	3.45	17.3%	3.55	17.8%
Cleco Corp	cnl	35.747	2.45	6.9%	2.40	6.7%	5.70	15.9%	5.75	16.1%
CMS Energy Corp	cms	20.625	1.45	7.0%	1.55	7.5%	3.70	17.9%	3.90	18.9%
DTE Energy Co	dte	51.363	3.60	7.0%	3.75	7.3%	9.55	18.6%	9.90	19.3%
Empire District	ede	20.177	1.30	6.4%	1.25	6.2%	2.90	14.4%	2.65	13.1%
Entergy Corp	etr	68.823	7.40	10.8%	6.00	8.7%	17.45	25.4%	16.25	23.6%
Great Plains Energy	gxp	20.573	1.30	6.3%	1.45	7.0%	3.55	17.3%	3.45	16.8%
Integrys Energy Group	teg	51.103	3.30	6.5%	3.50	6.8%	6.50	12.7%	6.80	13.3%
MGE Energy Inc	mgee	43.862	2.80	6.4%	2.65	6.0%	4.30	9.8%	4.20	9.6%
OGE Energy Corp	oge	51.707	3.40	6.6%	3.45	6.7%	6.55	12.7%	6.90	13.3%
Otter Tail Corp	ottr	20.292	0.68	3.4%	1.00	4.9%	2.90	14.3%	3.35	16.5%
Vectren Corp	vvc	28.305	1.80	6.4%	1.90	6.7%	4.75	16.8%	5.05	17.8%
Westar Energy	wr	27.010	1.75	6.5%	1.90	7.0%	4.15	15.4%	4.30	15.9%
Wisconsin Energy	wec	32.627	2.15	6.6%	2.25	6.9%	3.65	11.2%	3.30	10.1%
		Mean		**6.6%**		**7.0%**		**15.2%**		**15.8%**
		Median		**6.6%**		**7.0%**		**15.4%**		**16.1%**
		Max		**10.8%**		**9.3%**		**25.4%**		**23.6%**
		Min		**1.0%**		**4.9%**		**4.8%**		**8.9%**
Source:		**Say**		**6.6%**		**7.0%**		**15.3%**		**16.0%**

Actual earnings: Value Line / Q4 average stock price

Estimated Earnings: Value Line / Q4 average stock price

Actual Cash Flow: Value Line / Q4 average stock price

Estimated Cash Flow: Value Line / Q4 average stock price

AVERAGE FOURTH QUARTER STOCK PRICE

WASHINGTON STATE DEPARTMENT OF REVENUE

2012 ASSESSMENT YEAR

Electric Industry

								36.232
Avista	ava							**Q4 Averag**
Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	24.91	26.31	24.74	25.75	991900		25.75	
11/1/2011	24.79	25.26	23.57	25.00	421700		25.00	
10/3/2011	24.03	26.35	23.14	25.45	362000		25.16	**24.895**
Black Hills	bkh							
Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	32.76	34.41	31.75	33.58	318800		33.58	
11/1/2011	32.76	33.77	30.01	32.75	309100		32.75	
10/3/2011	30.58	34.47	29.10	33.71	306000		33.34	**32.252**
Edison	eix							
Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	39.18	41.57	38.38	41.40	1719600		41.40	
11/1/2011	39.63	41.24	37.51	39.31	2206200		39.00	
10/3/2011	38.11	41.57	35.63	40.60	2576000		40.28	**39.317**
El Paso	ee							
Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	34.55	35.71	32.48	34.64	298200		34.64	
11/1/2011	31.06	34.85	31.06	34.52	333700		34.29	
10/3/2011	32.02	33.20	30.29	32.03	424800		31.82	**32.932**
Hawaiian Electric	he							
Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	25.92	26.73	25.27	26.48	485500		26.48	
11/1/2011	24.89	26.79	24.03	25.91	643700		25.91	
10/3/2011	24.22	25.91	22.91	25.33	483200		25.03	**25.273**
Idacorp	ida							
Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	41.07	42.66	39.83	42.41	278300		42.41	
11/1/2011	39.25	41.67	38.25	40.99	292300		40.99	
10/3/2011	38.40	41.97	37.26	40.38	373700		40.08	**40.273**

NV Energy Inc nve

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	15.31	16.61	14.89	16.35	2106900		16.35	
11/1/2011	15.78	16.11	14.33	15.34	2356100		15.21	
10/3/2011	14.63	16.25	13.65	16.04	2624700		15.90	**15.085**

PG&E pcg

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	38.73	41.80	37.83	41.22	4271900		41.22	
11/1/2011	42.13	42.63	36.84	38.84	3690700		38.42	
10/3/2011	42.16	43.56	40.32	42.90	3267200		42.43	**40.497**

PNM Resources pnm

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	18.59	19.09	16.99	18.23	879700		18.23	
11/1/2011	17.37	19.17	17.10	19.11	1006400		19.11	
10/3/2011	16.31	18.70	15.81	17.98	1056000		17.98	**17.810**

Pinnacle pnw

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	47.42	48.87	45.11	48.18	1038900		48.18	
11/1/2011	44.05	47.45	43.97	47.41	962000		47.41	
10/3/2011	42.90	47.36	40.87	45.58	1196600		45.58	**45.605**

Portland General por

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	25.00	25.54	24.26	25.29	591600		25.29	
11/1/2011	24.11	25.39	23.48	25.05	779700		24.79	
10/3/2011	23.62	25.18	22.27	24.54	846800		24.28	**24.353**

Sempra sre

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	53.24	55.61	51.53	55.00	1165000		55.00	
11/1/2011	52.51	54.37	50.53	53.19	1213500		52.70	
10/3/2011	51.43	55.58	48.38	53.73	1318400		53.23	**52.667**

Unisource uns

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	36.89	38.00	35.95	36.92	410700		36.92	
11/1/2011	36.46	37.49	34.62	36.88	396100		36.46	
10/3/2011	36.08	39.25	34.28	37.28	414400		36.86	**36.598**

Xcel energy xel

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	26.34	27.78	25.59	27.64	2674400		27.64	
11/1/2011	25.37	26.36	24.82	26.29	2393200		26.04	
10/3/2011	24.64	26.33	23.48	25.85	2961700		25.61	**25.727**

Cent Vermont PS cv

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	35.13	35.24	35.07	35.10	53300		35.10	
11/1/2011	35.10	35.35	35.01	35.19	56500		35.19	
10/3/2011	35.14	35.60	35.10	35.37	124500		35.14	**35.228**

CH Energy Group chg

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	56.29	59.67	54.83	58.38	51900		57.82	
11/1/2011	54.03	56.67	52.17	56.35	51700		55.81	
10/3/2011	51.95	56.23	50.55	55.21	58400		54.68	**55.020**

Consolidated Edison ed

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	59.31	62.74	58.26	62.03	1663300		62.03	
11/1/2011	57.15	59.73	56.07	59.42	1826000		59.42	
10/3/2011	56.75	59.89	54.72	57.87	2425200		57.29	**58.568**

Constellation Energy ceg

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	40.03	40.38	35.03	39.67	2488000		39.67	
11/1/2011	39.18	40.97	37.80	40.16	1987100		39.92	
10/3/2011	37.85	40.20	35.50	39.70	2732300		39.46	**38.313**

Dominion Res d

Date	Open	High	Low	Close	Volume	Adj Close		
12/1/2011	51.43	53.59	50.00	53.08	2528500		53.08	
11/1/2011	50.50	52.68	49.06	51.62	2896300		51.62	
10/3/2011	50.58	52.35	48.21	51.59	2961100		51.09	**50.982**

Duke Energy duk

Date	Open	High	Low	Close	Volume	Adj Close

12/1/2011	20.76	22.12	20.45	22.00	10838300	22.00	
11/1/2011	20.18	21.02	19.58	20.85	17451700	20.85	
10/3/2011	20.09	20.73	19.17	20.42	13129500	20.17	**20.512**

IMPLIED PREMIUMS FOR US MARKET

Last updated January 2012

These implied premiums are calculated using the S&P 500.

Year	*Earnings Yield*	*Dividend Yield*	*S&P 500*	*Earnings*	*Dividends*	*Change in Earnings*	*Change in Dividends*	*T.Bill Rate*	*T.Bond Rate*	*Bond-Bill*	*Smoothed Growth*	*Implied Premium (DDM)*	*Analyst Growth Estimate*	*Implied Premium (FCFE)*	*ERP/Riskfree Rate*
1960	5.34%	3.41%	58.11	3.1	1.98			0.0266	2.76%	0.10%	2.45%				
1961	4.71%	2.85%	71.55	3.37	2.04	8.60%	2.91%	2.13%	2.35%	0.22%	2.41%	2.92%		2.92%	1.24
1962	5.81%	3.40%	63.1	3.67	2.15	8.79%	5.21%	2.73%	3.85%	1.12%	4.05%	3.56%		3.56%	0.92
1963	5.51%	3.13%	75.02	4.13	2.35	12.75%	9.45%	3.12%	4.14%	1.02%	4.96%	3.38%		3.38%	0.82
1964	5.62%	3.05%	84.75	4.76	2.58	15.23%	10.08%	3.54%	4.21%	0.67%	5.13%	3.31%		3.31%	0.79
1965	5.73%	3.06%	92.43	5.3	2.83	11.20%	9.42%	3.93%	4.65%	0.72%	5.46%	3.32%		3.32%	0.71
1966	6.74%	3.59%	80.33	5.41	2.88	2.23%	1.96%	4.76%	4.64%	-0.12%	4.19%	3.68%		3.68%	0.79
1967	5.66%	3.09%	96.47	5.46	2.98	0.85%	3.37%	4.21%	5.70%	1.49%	5.25%	3.20%		3.20%	0.56
1968	5.51%	2.93%	103.86	5.72	3.04	4.81%	2.09%	5.21%	6.16%	0.95%	5.32%	3.00%		3.00%	0.49
1969	6.63%	3.52%	92.06	6.1	3.24	6.66%	6.49%	6.58%	7.88%	1.30%	7.55%	3.74%		3.74%	0.47
1970	5.98%	3.46%	92.15	5.51	3.19	-9.72%	-1.61%	6.53%	6.50%	-0.03%	4.78%	3.41%		3.41%	0.52
1971	5.46%	3.10%	102.09	5.57	3.16	1.15%	-0.74%	4.39%	5.89%	1.50%	4.57%	3.09%		3.09%	0.52
1972	5.23%	2.70%	118.05	6.17	3.19	10.76%	0.71%	3.84%	6.41%	2.57%	5.21%	2.72%		2.72%	0.42
1973	8.16%	3.70%	97.55	7.96	3.61	28.93%	13.24%	6.93%	6.90%	-0.03%	8.30%	4.30%		4.30%	0.62
1974	13.64%	5.43%	68.56	9.35	3.72	17.48%	3.14%	8.00%	7.40%	-0.60%	6.42%	5.59%		5.59%	0.76
1975	8.55%	4.14%	90.19	7.71	3.73	-17.54%	0.30%	5.80%	7.76%	1.96%	5.99%	4.13%		4.13%	0.53
1976	9.07%	3.93%	107.46	9.75	4.22	26.39%	13.10%	5.08%	6.81%	1.73%	8.19%	4.55%		4.55%	0.67
1977	11.43%	5.11%	95.1	10.87	4.86	11.53%	15.07%	5.12%	7.78%	2.66%	9.52%	5.92%		5.92%	0.76
1978	12.11%	5.39%	96.11	11.64	5.18	7.07%	6.60%	7.18%	9.15%	1.97%	8.48%	5.72%		5.72%	0.63
1979	13.48%	5.53%	107.94	14.55	5.97	25.01%	15.23%	10.38%	10.33%	-0.05%	11.70%	6.45%		6.45%	0.62
1980	11.04%	4.74%	135.76	14.99	6.44	3.01%	7.81%	11.24%	12.43%	1.19%	11.01%	5.03%		5.03%	0.4
1981	12.39%	5.57%	122.55	15.18	6.83	1.31%	6.08%	14.71%	13.98%	-0.73%	11.42%	5.73%		5.73%	0.41
1982	9.83%	4.93%	140.64	13.82	6.93	-8.95%	1.58%	10.54%	10.47%	-0.07%	7.96%	4.90%		4.90%	0.47
1983	8.06%	4.32%	164.93	13.29	7.12	-3.84%	2.76%	8.80%	11.80%	3.00%	9.09%	4.31%		4.31%	0.37
1984	10.07%	4.68%	167.24	16.84	7.83	26.69%	9.85%	9.85%	11.51%	1.66%	11.02%	5.11%		5.11%	0.44
1985	7.42%	3.88%	211.28	15.68	8.2	-6.91%	4.74%	7.72%	8.99%	1.27%	7.89%	4.03%	6.75%	3.84%	0.43
1986	5.96%	3.38%	242.17	14.43	8.19	-7.93%	-0.15%	6.16%	7.22%	1.06%	5.54%	3.36%	6.96%	3.58%	0.5
1987	6.49%	3.71%	247.08	16.04	9.17	11.10%	11.99%	5.47%	8.86%	3.39%	9.66%	4.18%	8.58%	3.99%	0.45
1988	8.20%	3.68%	277.72	24.12	10.22	50.42%	11.49%	6.35%	9.14%	2.79%	9.76%	4.12%	7.67%	3.77%	0.41
1989	6.80%	3.32%	353.4	24.32	11.73	0.83%	14.80%	8.37%	7.93%	-0.44%	9.58%	3.85%	7.46%	3.51%	0.44
1990	6.58%	3.74%	330.22	22.65	12.35	-6.87%	5.26%	7.81%	8.07%	0.26%	7.39%	3.92%	7.19%	3.89%	0.48
1991	4.58%	3.11%	417.09	19.3	12.97	-14.79%	5.03%	7.00%	6.70%	-0.30%	6.34%	3.27%	7.81%	3.48%	0.52
1992	4.16%	2.90%	435.71	20.87	12.64	8.13%	-2.59%	5.30%	6.68%	1.38%	4.67%	2.83%	9.83%	3.55%	0.53
1993	4.25%	2.72%	466.45	26.9	12.69	28.89%	0.41%	3.50%	5.79%	2.29%	4.73%	2.74%	8.00%	3.17%	0.55
1994	5.89%	2.91%	459.27	31.75	13.36	18.03%	5.34%	5.00%	7.82%	2.82%	7.23%	3.06%	7.17%	3.55%	0.45
1995	5.74%	2.30%	615.93	37.7	14.17	18.74%	6.00%	3.50%	5.57%	2.07%	5.65%	2.44%	6.50%	3.29%	0.59
1996	4.83%	2.01%	740.74	40.63	14.89	7.77%	5.10%	5.00%	6.41%	1.41%	6.13%	2.11%	7.92%	3.20%	0.5
1997	4.08%	1.60%	970.43	44.09	15.52	8.52%	4.25%	5.35%	5.74%	0.39%	5.45%	1.67%	8.00%	2.73%	0.48
1998	3.11%	1.32%	1229.23	44.27	16.2	0.41%	4.37%	4.33%	4.65%	0.32%	4.60%	1.38%	7.20%	2.26%	0.49
1999	3.07%	1.14%	1469.25	51.68	16.71	16.74%	3.16%	5.37%	6.44%	1.07%	5.75%	1.20%	12.50%	2.05%	0.32
2000	3.94%	1.23%	1320.28	56.13	16.27	8.61%	-2.65%	5.73%	5.11%	-0.62%	3.71%	1.65%	12.00%	2.87%	0.56
2001	3.85%	1.37%	1148.09	38.85	15.74	-30.79%	-3.24%	1.80%	5.05%	3.25%	3.56%	1.73%	10.30%	3.62%	0.72
2002	5.23%	1.83%	879.82	46.04	16.08	18.51%	2.15%	1.20%	3.81%	2.61%	3.57%	2.29%	8.00%	4.10%	1.08
2003	4.87%	1.61%	1111.91	54.69	17.88	18.79%	11.19%	1.00%	4.25%	3.25%	5.35%	2.12%	11.00%	3.69%	0.87
2004	5.58%	1.60%	1211.92	67.68	19.407	23.75%	8.54%	2.18%	4.22%	2.04%	4.90%	2.02%	8.50%	3.65%	0.86
2005	5.47%	1.79%	1248.29	76.45	22.38	12.96%	15.32%	4.31%	4.39%	0.08%	6.16%	2.20%	8.00%	4.08%	0.93
2006	6.18%	1.77%	1418.3	87.72	25.05	14.74%	11.93%	4.88%	4.70%	-0.18%	5.93%	1.97%	12.50%	4.16%	0.89
2007	5.62%	1.89%	1468.36	82.54	27.73	-5.91%	10.70%	3.31%	4.02%	0.71%	5.03%	2.06%	5.00%	4.37%	1.09
2008	7.24%	3.11%	903.25	65.39	28.05	-20.78%	1.15%	1.59%	2.21%	0.62%	2.11%	2.06%	4.00%	6.43%	2.91
2009	5.35%	2.00%	1115.1	59.65	22.31	-8.78%	-20.46%	0.14%	3.84%	3.70%	0.28%	2.60%	7.20%	4.36%	1.14
2010	6.65%	1.84%	1257.64	83.66	23.12	40.25%	3.63%	0.13%	3.29%	3.16%	3.33%	2.24%	6.95%	5.20%	1.58