TREND IN INTEREST RATES AND OUTSTANDING BOND YIELDS (Percent Per Annum)

Government Securities

	Government Securities			rities								
<u>Year</u>	<u>T-B</u> Canadian	Bills U.S. ¹ /	<u>10 Y</u> Canadian	<u>ear</u> U.S.	<u>Long-</u> Canadian	<u>Term</u> U.S. ^{2/}	Canada Bonds Over 10 Years ^{3/}	Canadian Inflation Indexed Bonds	Canadian A-Rated <u>Utility Bonds ^{4/}</u>	Canadian A-Rated Spread <u>Over Long Canadas</u>	Moody's U.S. Utility Long-Term <u>A-Rated Bonds</u>	Exchange Rates (Canadian dollars <u>in U.S. funds)</u>
A	' <u>'</u>							_				
Annual												
199		7.49	10.76	8.55	10.69	8.61	10.85		12.13	1.44	9.86	0.86
199		5.38	9.42	7.86	9.72	8.14	9.76		11.00	1.28	9.36	0.84
199	2 6.59	3.43	8.05	7.01	8.68	7.67	8.77	4.62	10.01	1.33	8.64	0.82
199	3 4.84	3.02	7.22	5.87	7.86	6.59	7.85	4.28	9.08	1.22	7.59	0.77
199	5.54	4.34	8.43	7.08	8.69	7.39	8.63	4.41	9.81	1.12	8.30	0.73
199	5 6.89	5.44	8.08	6.58	8.41	6.85	8.28	4.68	9.29	0.88	7.89	0.73
199	6 4.21	5.04	7.20	6.44	7.75	6.73	7.50	4.61	8.38	0.63	7.75	0.73
199	7 3.26	5.11	6.11	6.32	6.66	6.58	6.42	4.14	7.19	0.53	7.60	0.72
199	3 4.73	4.79	5.30	5.26	5.59	5.54	5.47	4.02	6.38	0.79	7.04	0.68
199	4.69	4.71	5.55	5.68	5.72	5.91	5.69	4.07	6.92	1.20	7.62	0.67
200	5.45	5.85	5.89	5.98	5.71	5.88	5.89	3.69	7.02	1.31	8.24	0.67
200	1 3.78	3.34	5.49	4.99	5.77	5.50	5.76	3.59	7.25	1.48	7.73	0.65
200	2 2.55	1.63	5.27	4.56	5.67	5.41	5.65	3.49	7.22	1.55	7.35	0.64
200	3 2.86	1.03	4.78	4.02	5.31	5.03	5.26	3.04	6.78	1.46	6.54	0.72
200	4 2.21	1.44	4.55	4.27	5.11	5.08	5.05	2.34	6.28	1.17	6.14	0.77
200	5 2.73	3.29	4.04	4.27	4.38	4.52	4.36	1.81	5.53	1.16	5.62	0.83
200	4.05	4.86	4.21	4.79	4.26	4.87	4.28	1.67	5.47	1.21	6.06	0.89
200	7 4.13	4.42	4.25	4.58	4.30	4.80	4.31	1.95	5.61	1.31	6.06	0.94
200		1.28	3.56	3.61	4.04	4.22	4.03	1.90	6.41	2.37	6.54	0.94
200		0.15	3.27	3.29	3.85	4.10	3.85	1.86	6.24	2.39	5.99	0.88
2010	Q1 0.20	0.12	3.43	3.69	4.01	4.59	3.94	1.54	5.54	1.53	5.80	0.96

^{1/} Rates on new issues.

Source: www.bankofcanada.ca; Globe and Mail; www.ustreas.gov

^{2/2} 30-year maturities through January 2002. Theoretical 30-year yield, February 2002 to January 2006, when no 30-year Treasury bonds were issued. The theoretical 30-year Treasury bond yield represents the yield on all outstanding Treasury bonds with a term to maturity greater than 25 years plus an extrapolation factor published by the U.S. Department of the Treasury to allow the estimation of a 30-year rate; 30-year maturities February 2006 forward.

^{3/} Terms to maturity of I0 years or more.

^{4/} Series is comprised of the CBRS Utilities Index through 1995; CBRS 30-year Utilities Index from 1996- August 2000; a series of liquid long-term utility bonds maintained by Foster Associates from September 2000 forward.

TREND IN INTEREST RATES AND OUTSTANDING BOND YIELDS (Percent Per Annum)

	Government Secu						rities						
		T-BIL	18	10 Y	nar	Long-	Form	Canada Bonds Over 10	Canadian Inflation	Canadian A-Rated	Canadian A-Rated Spread	Moody's U.S. Utility Long-Term	Exchange Rates (Canadian dollars
Year		Canadian	U.S. ^{1/}	Canadian	U.S.	Canadian	U.S. ^{2/}	Years 3/	Indexed Bonds	Utility Bonds 4/	Over Long Canadas	A-Rated Bonds	in U.S. funds)
						= 00							. =-
2004	q1 q2	2.12 1.98	0.94 1.13	4.41 4.74	4.00 4.60	5.09 5.29	4.96 5.35	4.99 5.22	2.50 2.38	6.17 6.48	1.08 1.19	6.06 6.45	0.76 0.74
	q3	2.23	1.58	4.74	4.26	5.29	5.08	5.13	2.29	6.37	1.23	6.11	0.74
	q4	2.53	2.11	4.40	4.22	4.92	4.93	4.87	2.18	6.09	1.17	5.95	0.83
2005	q1	2.47	2.67	4.27	4.33	4.72	4.70	4.69	2.05	5.86	1.13	5.72	0.82
	q2	2.46	3.01	3.93	4.05	4.39	4.36	4.35	1.86	5.59	1.21	5.43	0.81
	q3	2.73	3.50	3.88	4.21	4.20	4.39	4.19	1.75	5.32	1.12	5.49	0.84
	q4	3.25	4.00	4.07	4.49	4.19	4.63	4.21	1.59	5.36	1.17	5.82	0.85
2006	q1	3.70	4.57	4.18	4.65	4.23	4.70	4.25	1.53	5.43	1.20	5.92	0.87
	q2	4.17	4.84	4.51	5.11	4.54	5.19	4.57	1.81	5.75	1.21	6.41	0.90
	q3	4.14	5.00	4.14	4.79	4.21	4.91	4.23	1.67	5.45	1.23	6.09	0.89
2007	q4 q1	4.16 4.17	5.04 5.11	4.00 4.10	4.59 4.68	4.07 4.17	4.70 4.82	4.08 4.18	1.68 1.77	5.27 5.36	1.20 1.19	5.82 5.92	0.87 0.86
2007	q2	4.17	4.82	4.10	4.85	4.17	4.82	4.38	1.94	5.61	1.25	6.08	0.92
	q2 q3	4.17	4.26	4.43	4.64	4.45	4.86	4.46	2.09	5.79	1.34	6.19	0.97
	q4	3.90	3.48	4.09	4.16	4.21	4.53	4.21	2.01	5.68	1.47	6.05	1.02
2008	q1	2.76	1.73	3.65	3.55	4.07	4.35	4.03	1.80	5.75	1.68	6.16	0.99
	q2	2.60	1.74	3.68	3.94	4.10	4.58	4.07	1.60	5.99	1.89	6.30	0.99
	q3	2.23	1.44	3.66	3.89	4.11	4.44	4.13	1.78	6.33	2.21	6.58	0.95
	q4	1.45	0.19	3.26	3.06	3.88	3.50	3.91	2.42	7.56	3.69	7.13	0.82
2009	q1	0.61	0.24	2.99	2.87	3.68	3.62	3.65	2.13	7.28	3.60	6.44	0.80
	q2	0.21	0.16	3.28	3.39	3.90	4.24	3.86	1.97	6.43	2.54	6.35	0.87
	q3	0.22	0.16	3.38	3.41	3.89	4.17	3.94	1.76	5.63	1.73	5.54	0.92
	q4	0.21	0.06	3.42	3.49	3.95	4.35	3.96	1.57	5.62	1.68	5.65	0.94
2007	Jan	4.17	5.12	4.17	4.83	4.22	4.93	4.23	1.79	5.41	1.19	6.01	0.85
	Feb	4.19	5.16	4.03	4.56	4.09	4.68	4.10	1.75	5.28	1.19	5.78	0.85
	Mar	4.16	5.04	4.11	4.65	4.20	4.84	4.21	1.77	5.39	1.19	5.97	0.87
	Apr	4.16	4.91	4.14	4.63	4.19	4.81	4.20	1.76	5.45	1.26	5.90	0.90
	May	4.29	4.73	4.49	4.90	4.38	5.01	4.42	1.99	5.62	1.24	6.10	0.93
	Jun	4.43	4.82	4.55	5.03	4.49	5.12	4.51	2.08	5.75	1.26	6.24	0.94
	Jul	4.56	4.96	4.52	4.78	4.45	4.92	4.48	2.07	5.78	1.33	6.18	0.94
	Aug	3.99	4.01	4.42	4.54	4.46	4.83	4.47	2.14	5.76	1.30	6.17	0.95
	Sep	3.96	3.82	4.34	4.59	4.44	4.83	4.44	2.07	5.83	1.39	6.22	1.01
	Oct	3.96	3.94	4.31	4.48	4.38	4.74	4.39	2.05	5.73	1.35	6.07	1.06
	Nov Dec	3.91 3.82	3.15	3.98	3.97	4.16	4.40 4.45	4.15	2.07	5.69	1.53	6.00	1.00
	Dec	3.02	3.36	3.99	4.04	4.10	4.40	4.10	1.91	5.62	1.52	6.07	1.01
2008	Jan	3.38	1.96	3.88	3.67	4.18	4.35	4.16	1.96	5.81	1.63	6.07	1.00
	Feb	3.04	1.85	3.64	3.53	4.09	4.41	4.04	1.85	5.73	1.64	6.22	1.02
	Mar	1.87	1.38	3.43	3.45	3.94	4.30	3.88	1.60	5.71	1.77	6.20	0.97
	Apr	2.68	1.43	3.58	3.77	4.08	4.49	4.02	1.72	5.97	1.89	6.22	0.99
	May	2.64	1.89	3.71	4.06	4.13	4.72	4.09	1.61	5.98	1.85	6.36	0.99
	Jun	2.48	1.90	3.74	3.99	4.08	4.53	4.10	1.47	6.02	1.94	6.32	0.98
	Jul	2.39	1.68	3.70	3.99	4.10	4.59	4.11	1.54	6.08	1.98	6.44	0.98
	Aug	2.40 1.89	1.72 0.92	3.53 3.75	3.83 3.85	4.01 4.23	4.43 4.31	4.02 4.25	1.57 2.23	6.25 6.65	2.24 2.42	6.32 6.98	0.94 0.94
	Sep Oct	1.85	0.46	3.76	4.01	4.28	4.35	4.23	2.51	7.86	3.58	8.01	0.82
	Nov	1.67	0.01	3.32	2.93	3.90	3.45	3.96	2.65	7.47	3.57	7.18	0.81
	Dec	0.83	0.11	2.69	2.25	3.45	2.69	3.45	2.10	7.36	3.91	6.20	0.82
2009	Jan	0.86	0.24	3.06	2.87	3.77	3.58	3.80	2.27	7.57	3.80	6.52	0.81
	Feb	0.59	0.26	3.12	3.02	3.70	3.71	3.70	2.32	7.26	3.56	6.38	0.79
	Mar	0.39	0.21	2.79	2.71	3.57	3.56	3.46	1.81	7.01	3.44	6.41	0.79
	Apr	0.20	0.14	3.09	3.16	3.84	4.05	3.74	2.05	6.84	3.00	6.55	0.84
	May	0.20	0.14	3.39	3.47	3.99	4.34	3.93	2.00	6.48	2.49	6.53	0.91
	Jun	0.24	0.19	3.36	3.53	3.86	4.32	3.91	1.86	5.98	2.12	5.96	0.86
	Jul Aug	0.24 0.20	0.18 0.15	3.46 3.37	3.52 3.40	3.95 3.89	4.31 4.18	4.01 3.94	1.73 1.81	5.76 5.57	1.81 1.68	5.68 5.54	0.93 0.91
	Sep	0.20	0.15	3.31	3.40	3.84	4.18	3.94	1.74	5.55	1.71	5.41	0.93
	Oct	0.22	0.14	3.42	3.41	3.92	4.03	3.95	1.60	5.59	1.67	5.55	0.93
	Nov	0.22	0.06	3.42	3.21	3.84	4.20	3.83	1.58	5.52	1.68	5.54	0.95
	Dec	0.19	0.06	3.61	3.85	4.08	4.63	4.09	1.53	5.76	1.68	5.86	0.96
2010	Jan	0.16	0.08	3.34	3.63	3.94	4.51	3.90	1.49	5.53	1.59	5.73	0.94
	Feb	0.16	0.13	3.39	3.61	4.02	4.55	3.94	1.58	5.57	1.55	5.77	0.95
	Mar	0.28	0.16	3.56	3.84	4.07	4.72	3.99	1.56	5.51	1.44	5.89	0.98
	Apr	0.39	0.16	3.65	3.69	4.01	4.53	3.94	1.49	5.46	1.45	5.60	0.99

Source: www.bankofcanada.ca; Globe and Mail; www.federalreserve.gov RBC Capital Markets, www.ustreas.gov

Rates on new issues.
 Theoretical 30-year yield, 2004 to January 2006. 30-year maturities February 2006 forward.
 Terms to maturity of I0 years or more.
 Series of liquid long-term utility bonds maintained by Foster Associates.
 Note: Monthly data reflect rate in effect at end of month.

EQUITY RETURN AWARDS AND CAPITAL STRUCTURES ADOPTED BY REGULATORY BOARDS FOR CANADIAN UTILITIES (Percentages)

	Decision		Order/ File		Preferred	Common Stock	Equity	Forecast 30-Year	
	Date	Regulator	Number	Debt	Stock	Equity	Return	Bond Yield	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Gas Distributors									
AltaGas Utilities	11/09	EUB	2009-216	57.00	0.00	43.00	9.00	n/a	
ATCO Gas	11/09	EUB	2009-216	54.10	6.90	39.00	9.00	n/a	
Enbridge Gas Distribution Inc	1/04; 7/07; 2/08	OEB	RP-2002-0158; EB-2006-0034; EB-2007-0615	61.33	2.67	36.00	8.39	4.23	
Gazifère	2/99; 12/09	Régie	D-99-09; D-2009-159	60.00	0.00	40.00	8.89	4.22	1/
Gaz Metropolitain	12/09	Régie	D-2009-156	54.00	7.50	38.50	9.20	4.30	
Heritage Gas	2/09	NSUARB	2009 NSUARB 15	55.00	0.00	45.00	13.00	n/a	
Pacific Northern Gas-West	5/10	BCUC	G-84-10	51.15	3.85	45.00	10.15	n/a	
Terasen Gas	12/09	BCUC	G-158-09	60.00	0.00	40.00	9.50	n/a	
Terasen Gas (Vancouver Island)	12/09	BCUC	G-14-06; G-158-09	60.00	0.00	40.00	10.00	n/a	
Terasen Gas(Whistler)	12/09	BCUC	G-35-09; G-158-09	60.00	0.00	40.00	10.00	n/a	
Union Gas	1/04; 5/06; 1/08	OEB	RP-2002-0158; EB-2006-0520; EB-2007-0606	60.60	3.40	36.00	8.54	4.23	
Electric Utilities									
AltaLink	11/09	EUB	2009-216	64.00	0.00	36.00	9.00	n/a	
ATCO Electric									
Transmission	11/09	EUB	2009-216	58.00	6.00	36.00	9.00	n/a	
Distribution	11/09	EUB	2009-216	54.10	6.90	39.00	9.00	n/a	
EPCOR									
Transmission	11/09	EUB	2009-216	63.00	0.00	37.00	9.00	n/a	
Distribution	11/09	EUB	2009-216	59.00	0.00	41.00	9.00	n/a	
FortisAlberta Inc.	11/09	EUB	2009-216	59.00	0.00	41.00	9.00	n/a	
FortisBC Inc.	5/05; 12/09	BCUC	G-52-05; G-158-09	60.00	0.00	40.00	9.90	n/a	
Hydro One Transmission	8/07	OEB	EB-2006-0501	60.00	0.00	40.00	8.35	4.16	2/
Maritime Electric	2/09	IRAC	UE-09-02	59.50	0.00	40.50	9.75	n/a	
Newfoundland Power	12/09	NLPub	P.U.43	54.81	1.05	44.14	9.00	4.50	
Nova Scotia Power	3/06;11/08	NSUARB	2006 NSUARB 23; 2008 NSUARB 140	53.30	9.20	37.50	9.35	n/a	
Ontario Electricity Distributors	12/09; 2/10	OEB	EB-2009-0084; Letter Cost of Capital Parameters	60.00	0.00	40.00	9.85	4.46	
Ontario Power Generation	11/08	OEB	EB-2007-0905	53.00	0.00	47.00	8.65	4.75	
Gas Pipelines									
Foothills Pipe Lines (Yukon) Ltd.	12/05; 12/09	NEB	RH-2-94;TG-08-2005; NEB Letter 12-09	64.00	0.00	36.00	8.52	4.30	
TransCanada PipeLines	5/07; 12/09	NEB	RH-2-94;TG-06-2007; NEB Letter 12-09	60.00	0.00	40.00	8.52	4.30	
Trans Quebec & Maritimes Pipeline	3/09	NEB	RH-1-2008	60.00	0.00	40.00	9.70	n/a	3/
Westcoast Energy	12/06; 11/08	NEB	RH-2-94; TG-05-2006	64.00	0.00	36.00	8.57	4.36	4/

 $^{^{1/}}$ Have applied for an equity return of 11.25% on a common stock equity ratio of 40%.

Source: Regulatory Decisions.

^{2/} Have applied to have OEB's revised cost of capital policy applied under wthich the return on equity was 9.85% as of February 24, 2010.

^{3/}Capital structure and ROE not specified; ROE is the NEB's calculation at TQM's requested common equity ratio of 40%.

^{4/} Multi-pipeline ROE for 2009; 2010 ROE not yet determined.

RATES OF RETURN ON COMMON EQUITY ADOPTED BY REGULATORY BOARDS FOR CANADIAN UTILITIES

	<u>1990</u>	<u>1991</u>	1992	<u>1993</u>	1994	1995	<u>1996</u>	<u>1997</u>	1998	1999	2000	<u>2001</u>	2002	2003	2004	2005	2006	2007	2008	2009	<u>2010</u>
Gas Distributors																					
ATCO Gas	13.25	13.25	12.25	12.25	NA	NA	NA	10.50	9.38	NA	NA	9.75	9.75	9.50	9.50	9.50	8.93	8.51	8.75	9.00	9.00
Enbridge Gas Distribution	13.25	13.13	13.13	12.30	11.60	11.65	11.88	11.50	10.30	9.51	9.73	9.54	9.66	9.69	NA	9.57	8.74	8.39	8.39	8.39	8.39
Gaz Metro	14.25	14.25	14.00	12.50	12.00	12.00	12.00	11.50	10.75	9.64	9.72	9.60	9.67	9.89	9.45	9.69	8.95	8.73	9.05	8.76	9.20
Pacific Northern Gas 1/	15.00	14.00	13.25	NA	11.50	12.75	11.75	11.00	10.75	10.00	10.25	10.00	9.88	10.17	9.80	9.68	9.45	9.02	9.27	9.12	10.15
Terasen Gas 1/	NA	NA	12.25	NA	10.65	12.00	11.00	10.25	10.00	9.25	9.50	9.25	9.13	9.42	9.15	9.03	8.80	8.37	8.62	8.47	9.50
Union Gas	13.75	13.50	13.50	13.00	12.50	11.75	11.75	11.00	10.44	9.61	9.95	9.95	9.95	9.95	9.62	9.62	8.89	8.54	8.54	8.54	na
Mean of Gas Distributors	13.90	13.63	13.06	12.51	11.65	12.03	11.68	10.96	10.27	9.60	9.83	9.68	9.67	9.77	9.50	9.52	8.96	8.59	8.77	8.71	9.25
Electric Utilities																					
AltaLink	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.40	9.60	9.50	8.93	8.51	8.75	9.00	9.00
ATCO Electric	13.50	13.50	13.25	11.88	NA	NA	11.25	2/	2/	2/	2/	2/	2/	9.40	9.60	9.50	8.93	8.51	8.75	9.00	9.00
FortisAlberta Inc.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.50	9.50	9.60	9.50	8.93	8.51	8.75	9.00	9.00
FortisBC Inc. 1/	13.50	NA	11.75	11.50	11.00	12.25	11.25	10.50	10.25	9.50	10.00	9.75	9.53	9.82	9.55	9.43	9.20	8.77	9.02	8.87	9.90
Newfoundland Power	13.95	13.25	NA	NA	NA	NA	11.00	NA	9.25	9.25	9.59	9.59	9.05	9.75	9.75	9.24	9.24	8.60	8.95	8.95	9.00
Nova Scotia Power	NA	NA	NA	11.75	NA	NA	10.75	NA	NA	NA	NA	NA	10.15	NA	NA	9.55	9.55	9.55	na	9.35	na
Ontario Electricity Distributors	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.35	9.88	9.88	9.88	9.88	9.88	9.88	9.00	9.00	8.57	8.01	9.85
TransAlta Utilities	13.50	13.50	13.25	11.88	NA	12.25	11.25	2/	3/	9.25	9.25	NA	9.40	NA	NA	NA	NA	NA	na	na	na
Mean of Electric Utilities	13.61	13.42	12.75	11.75	11.00	12.25	11.10	10.50	9.75	9.34	9.68	9.74	9.59	9.63	9.66	9.51	9.11	8.78	8.80	8.88	9.29
Gas Pipelines (NEB)																					
TransCanada PipeLines	13.25	13.50	13.25	12.25	11.25	12.25	11.25	10.67	10.21	9.58	9.90	9.61	9.53	9.79	9.56	9.46	8.88	8.46	8.72	8.57	8.52
Westcoast Energy	13.25	13.75	12.50	12.25	11.50	12.25	11.25	10.67	10.21	9.58	9.90	9.61	9.53	9.79	9.56	9.46	8.88	8.46	8.72	8.57	8.52
Mean of Gas Pipelines	13.25	13.63	12.88	12.25	11.38	12.25	11.25	10.67	10.21	9.58	9.90	9.61	9.53	9.79	9.56	9.46	8.88	8.46	8.72	8.57	8.52
Mean of All Utilities	13.68	13.56	12.94	12.16	11.50	12.13	11.36	10.84	10.15	9.50	9.79	9.68	9.62	9.71	9.59	9.51	9.02	8.66	8.78	8.77	9.16

^{1/} Allowed ROE for 2009 for first six months

Source: Regulatory Decisions

^{2/} Negotiated settlement, details not available.

^{3/}Negotiated settlement, implicit ROE made public is 10.5%.

COMPARISON BETWEEN ALLOWED RETURNS FOR CANADIAN AND U.S. UTILITIES

[Canadian Utilities				U.S. Utilities				U.S. Gas Utilities		U.S. Electric Utilities			
		Average			Average				Average			Average		
	Allowed	Long Canada	Equity Risk	Allow	ed Long Treasury	Equity Risk		Allowed	Long Treasury	Equity Risk	Allowed	Long Treasury	Equity Risk	
Year	ROE	Yield	Premium	ROE	Yield	Premium		ROE	Yield	Premium	ROE	Yield	Premium	
1990	13.68	10.69	2.99	12.6	8.62	4.07		12.67	8.62	4.05	12.70	8.62	4.08	
1991	13.56	9.72	3.85	12.5	1 8.09	4.43		12.46	8.09	4.38	12.55	8.09	4.47	
1992	12.94	8.68	4.26	12.0	7.68	4.39		12.01	7.68	4.34	12.09	7.68	4.42	
1993	12.16	7.86	4.30	11.3	7 6.58	4.79		11.35	6.58	4.77	11.41	6.58	4.83	
1994	11.50	8.69	2.81	11.3	7.41	3.93		11.35	7.41	3.94	11.34	7.41	3.93	
1995	12.13	8.41	3.72	11.5	1 6.81	4.70		11.43	6.81	4.62	11.55	6.81	4.74	
1996	11.36	7.75	3.62	11.2	9 6.72	4.57		11.19	6.72	4.47	11.39	6.72	4.67	
1997	10.84	6.66	4.18	11.3	4 6.57	4.77		11.29	6.57	4.72	11.40	6.57	4.83	
1998	10.15	5.59	4.56	11.5	5.53	6.06		11.51	5.53	5.98	11.66	5.53	6.13	
1999	9.50	5.72	3.78	10.7	4 5.91	4.83		10.66	5.91	4.75	10.77	5.91	4.86	
2000	9.79	5.71	4.08	11.4	5.88	5.53		11.39	5.88	5.51	11.43	5.88	5.55	
2001	9.68	5.77	3.92	11.0	5 5.47	5.58		10.95	5.47	5.48	11.09	5.47	5.62	
2002	9.62	5.67	3.95	11.1	5.41	5.69		11.03	5.41	5.62	11.16	5.41	5.75	
2003	9.71	5.31	4.40	10.9	5.03	5.95		10.99	5.03	5.96	10.97	5.03	5.94	
2004	9.59	5.11	4.48	10.6	5.09	5.56		10.59	5.09	5.50	10.73	5.09	5.64	
2005	9.51	4.38	5.13	10.5	4.52	5.98		10.46	4.52	5.94	10.54	4.52	6.02	
2006	9.02	4.26	4.76	10.3	9 4.87	5.52		10.44	4.87	5.57	10.36	4.87	5.49	
2007	8.66	4.30	4.37	10.3	4.80	5.51		10.24	4.80	5.44	10.36	4.80	5.56	
2008	8.78	4.04	4.74	10.4	2 4.22	6.20		10.37	4.22	6.15	10.46	4.22	6.24	
2009	8.77	3.85	4.92	10.3	4.10	6.27		10.19	4.48	5.71	10.48	4.48	6.00	
2010 (May)	9.16	3.94	5.22	10.2	2 4.48	5.74		10.04	4.48	5.56	10.36	4.48	5.88	
Means:														
1990-1993	13.08	9.24	3.85	12.1	7.74	4.42		12.12	7.74	4.38	12.19	7.74	4.45	
1994-1997	11.46	7.88	3.58	11.3	7 6.88	4.49		11.32	6.88	4.44	11.42	6.88	4.54	
1998-2010	9.38	4.90	4.48	10.7	5 5.02	5.72		10.68	5.05	5.63	10.80	5.05	5.74	

Sources: Regulatory Research Associates; www.snl.com; various Canadian regulatory decisions; Bank of Canada; Federal Reserve; U.S. Treasury.

DEBT RATINGS OF CANADIAN UTILITIES

]	Ratings			
		<u>DBRS</u>		Moody's		<u>S&P</u>	-
Company	Issuer Rating	<u>Debt Rating</u>	Issuer Rating	Debt Rating	Corporate Credit Rating	Debt Rating	S&P Business Risk Profile
Gas Distributors							
Enbridge Gas Distribution		A (Unsecured)			A-	A- (Senior Unsecured)	Excellent
Gaz Metropolitain		A (Senior Secured)			A-	A (Senior Secured)	Excellent
Pacific Northern Gas		BBB(low) (Senior Secured)		10 (0 : 11	•	A (O : 11	- " .
Terasen Gas		A (Senior Unsecured)		A3 (Senior Unsecured)	Α	A (Senior Unsecured)	Excellent
Terasen Gas Vancouver Island		BBB(high) (Debentures)		A1 (Senior Secured) A3 (Senior Unsecured)		AA- (Senior Secured)	
Union Gas Limited		A (Unsecured)		A3 (Seriioi Orisecureu)	BBB+	BBB+ (Senior Unsecured)	Strong
Official Cas Efficient		A (Oliseculeu)			DDD+	BBB+ (Sellioi Offsecured)	Strong
Electric Utilities							
AltaLink L.P.		A (Senior Secured)			A-	A- (Senior Secured)	Excellent
Chatham-Kent Energy Inc.					Α		Excellent
CU Inc.		A(high) (Unsecured)			Α	A (Senior Unsecured)	Excellent
Enersource	Α						_
ENMAX		A(low) (Senior Unsecured)			BBB+	BBB+ (Senior Unsecured)	Strong
EPCOR Utilities Inc FortisAlberta Inc.		A(low) (Senior Unsecured)		Dood (Conjor Unacquired)	BBB+	BBB+ (Senior Unsecured)	Strong Excellent
FortisBC Inc.		A(low) (Senior Unsecured) BBB(high) (Senior Unsecured)		Baa1 (Senior Unsecured) Baa1 (Senior Unsecured)	A-	A- (Senior Unsecured)	Excellent
Hamilton Utilities		BBB(High) (Selliof Offsecured)		baar (Seriioi Orisecureu)	Α	A (Senior Unsecured)	Excellent
Hydro One		A(high) (Senior Unsecured)		Aa3 (Senior Unsecured)	A+	A+ (Senior Unsecured)	Excellent
Hydro Ottawa Holding Inc.		A (Senior Unsecured)		, las (Seriiei Grissarda)	A	A (Senior Unsecured)	Excellent
London Hydro		(,			Α	(=====,	Excellent
Maritime Électric					BBB+	A (Senior Secured)	Satisfactory
Newfoundland Power		A (Senior Secured)					
Nova Scotia Power		A(low) (Unsecured)			BBB+	BBB+ (Senior Unsecured)	Strong
Toronto Hydro		A(high) (Senior Unsecured)			Α	A (Senior Unsecured)	Excellent
Veridian Corp.	Α						
Pipelines							
Enbridge Pipelines		A(high) (Unsecured)			A-	A- (Senior Unsecured)	Excellent
NOVA Gas Transmission		A (Unsecured)		A3 (Senior Unsecured)	A-	A- (Senior Unsecured)	Strong
Trans Quebec & Maritimes		A(low) (Senior Unsecured)		·	BBB+	BBB+ (Senior Unsecured)	Satisfactory
TransCanada PipeLines		A (Senior Unsecured)	A3	A3 (Senior Unsecured)	A-	A- (Senior Unsecured)	Strong
Westcoast Energy		A(low) (Senior Unsecured)			BBB+	BBB+ (Senior Unsecured)	Strong
Medians							
Gas Distributors		Α		A2	A-	Α	Excellent
All Companies		A		A3	A-	A-	Excellent

Source: DBRS Bond Ratings, www.moodys.com, Standard & Poor's.

CAPITAL STRUCTURE RATIOS OF CANADIAN UTILITIES (2009)

			Common
	Total	Preferred	Stock
Company	Debt 1/	Stock 2/	Equity 3/
Gas Distributors 4/			
Enbridge Gas Distribution	55.3%	2.3%	42.4%
Gaz Metropolitain	63.0%	0.0%	37.0%
Pacific Northern Gas	46.2%	3.0%	50.8%
Terasen Gas	64.2%	0.0%	35.8%
Union Gas	59.7%	0.0%	40.3%
Electric Utilities			
AltaLink L.P.	54.1%	0.0%	45.9%
CU Inc.	53.7%	7.7%	38.6%
Enersource	55.7%	0.0%	44.3%
ENMAX Corp.	43.4%	0.0%	56.6%
EPCOR Utilities Inc.	43.7%	0.0%	56.3%
FortisAlberta Inc.	57.3%	0.0%	42.7%
FortisBC Inc.	59.2%	0.0%	40.8%
Hamilton Utilities	36.0%	0.0%	64.0%
Hydro One Inc.	56.2%	2.6%	41.2%
Hydro Ottawa Holding Inc. 5/	44.1%	0.0%	55.9%
London Hydro 5/	36.1%	0.0%	63.9%
Maritime Electric	58.5%	0.0%	41.5%
Newfoundland Power	55.1%	1.0%	43.8%
Nova Scotia Power	58.2%	4.6%	37.2%
Toronto Hydro	54.8%	0.0%	45.2%
Veridian ^{5/}	39.2%	0.0%	60.8%
Pipelines			
Enbridge Pipelines Inc.	57.1%	0.0%	42.9%
Nova Gas Transmission Ltd.	64.3%	0.0%	35.7%
Trans Quebec & Maritimes	62.9%	0.0%	37.1%
TransCanada PipeLines Ltd.	56.3%	1.1%	42.7%
Westcoast Energy Inc.	58.7%	5.4%	35.9%
Medians			
Gas Distributors	59.7%	0.0%	40.3%
All Companies	56.0%	0.0%	42.7%

^{1/} Includes current portion of long-term debt and preferred securities classified as debt.

Note: Financial statements for Terasen Gas Vancouver Island are not publicly available.

Source: Reports to Shareholders

^{2/} Includes minority interest in preferred shares of subsidiary companies and preferred securities.

^{3/} Includes minority interest in common shares of subsidiary companies.

^{4/} The average of the four quarters ending December 2009 was used to better measure the actual sources of funds over the year due to the seasonal pattern of use of short-term debt.

^{5/ 2008} capital structure.

FINANCIAL METRICS FOR CANADIAN UTILITIES 2006-2008

Company	Funds from Operations Interest Coverage	Funds from Operations/ Total Debt
Gas Distributors		
Enbridge Gas Distribution	2.8	11.7
Gaz Metropolitain	4.7	19.3
Pacific Northern Gas	2.2	11.6
Terasen Gas	2.4	9.0
Terasen Gas (Vancouver Island) 1/	4.0	14.4
Union Gas	2.9	12.4
Union Gas	2.9	12.4
Pipelines		
Enbridge Pipelines Inc.	3.1	12.2
Nova Gas Transmission Ltd.	3.2	17.3
Trans Quebec & Maritimes	2.9	11.6
TransCanada PipeLines Ltd.	2.9	16.7
Westcoast Energy Inc.	3.6	16.8
Electric Utilities		
AltaLink L.P.	3.1	13.3
CU Inc.	3.4	17.4
Enersource	3.3	17.7
ENMAX Corp.	3.8	47.3
EPCOR Utilities Inc.	3.4	23.2
FortisAlberta Inc.	4.1	17.4
FortisBC Inc.	2.8	11.3
Hamilton Utilities	5.0	34.3
Hydro One Inc.	3.7	16.5
Hydro Ottawa Holding Inc.	5.9	23.8
London Hydro	4.5	24.5
Maritime Electric	2.9	14.9
Newfoundland Power	2.8	13.6
Nova Scotia Power	3.5	18.0
Toronto Hydro	3.5	17.8
Veridian ^{2/}	3.3	34.4
Medians		
Gas Distributors	2.9	12.1
All Companies	3.3	16.8

 $^{^{1/}2007\}text{-}2009$ (2009 data for 12 months ending September)

Source: DBRS, Standard and Poor's and Moody's.

^{2/} 2008 data for 12 months ending September

FINANCIAL METRICS FOR U.S. GAS DISTRIBUTION UTILITIES 2006-2008

Company	Funds from Operations Interest Coverage	Funds from Operations/ Total Debt
AGL Resources Inc.	4.6	20.4
Alabama Gas Corp.	6.8	38.5
Atmos Energy Corp.	4.1	20.3
Energen Corp.	11.6	70.6
EQT Corp.	7.4	29.9
Indiana Gas Co. Inc.	3.9	17.6
Laclede Gas Co.	2.7	13.1
Laclede Group Inc. (The)	3.3	18.4
Michigan Consolidated Gas Co.	2.5	6.4
National Fuel Gas Co.	6.6	38.1
New Jersey Natural Gas Co.	5.7	24.7
Nicor Gas Co.	5.1	20.6
Nicor Inc.	6.7	29.3
NiSource Inc.	3.1	12.0
North Shore Gas Co.	4.9	18.2
Northwest Natural Gas Co.	4.4	19.7
Piedmont Natural Gas Co. Inc.	4.7	22.8
Public Service Co. of North Carolina Inc.	3.8	16.2
Questar Gas Co.	4.6	23.0
Sempra Energy	4.7	22.7
South Jersey Gas Co.	4.1	17.8
Southern California Gas Co.	5.4	26.3
Southwest Gas Corp.	4.1	19.4
Vectren Corp.	4.4	18.8
Vectren Utility Holdings Inc.	4.4	20.7
Washington Gas Light Co.	5.5	26.4
WGL Holdings Inc.	5.2	24.8
Median	4.6	20.6

Source: Standard and Poor's

INDIVIDUAL COMPANY RISK DATA FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES

			Value Line cast Forecast Return		_		Trailing Four		S & P		Moody's	
	Safety	Forecast Common Equity Ratio 2013-2015	On Average Common Equity 2013-2015	Dividend Payout Forecast 2013-2015	2010 Q1 Beta	Calculated Weekly Betas ^{1/}	Adjusted Weekly Betas	Quarters Common Equity Ratio	2007-2009 Average Earned Returns	Business Risk Profile	Debt Rating	Debt Rating ^{2/}
AGL Resources	2	51.0%	11.6%	56.5%	0.65	0.66	0.77	43.5%	13.0	Excellent	A-	Baa1
Consolidated Edison	1	51.5%	9.5%	63.9%	0.65	0.45	0.63	47.9%	10.8	Excellent	A-	Baa1
New Jersey Resources	1	57.5%	17.2%	47.5%	0.65	0.52	0.68	56.3%	10.3	Excellent	Α	Aa3
Nicor Inc.	3	76.0%	11.6%	56.4%	0.70	0.70	0.80	53.7%	13.6	Excellent	AA	A2
Northwest Nat. Gas	1	50.0%	11.3%	61.7%	0.60	0.46	0.64	48.7%	11.8	Excellent	A+	A3
NSTAR	1	57.0%	13.8%	68.3%	0.65	0.51	0.68	38.2%	13.6	Excellent	A+	A2
Piedmont Natural Gas	2	53.0%	13.6%	65.1%	0.65	0.54	0.69	46.0%	12.6	Excellent	Α	A3
South Jersey Inds.	2	61.5%	15.0%	48.5%	0.60	0.50	0.67	50.2%	13.3	Excellent	BBB+	Baa1
WGL Holdings Inc.	1	64.5%	10.3%	61.9%	0.65	0.54	0.70	57.2%	11.4	Excellent	AA-	A2
Mean	2	58.0%	12.7%	58.9%	0.64	0.54	0.70	49.1%	12.3	Excellent	Α	А3
Median	1	57.0%	11.6%	61.7%	0.65	0.52	0.68	48.7%	12.6	Excellent	Α	A3

^{1/ &}quot;Raw" betas calculated using weekly data against the NYSE Composite (260 weeks ending April 26, 2010).

Source: Value Line (February and March 2010), May 21, 2010 Value Line Index, www.yahoo.com, Standard and Poor's, Issuer Ranking: U.S. Invester-Owned Electric Utilities, Strongest To Weakest (May 6, 2010) and Standard and Poor's, Issuer Ranking: U.S. Natural Gas Distributors And Integrated Gas Companies, Strongest To Weakest (May 5, 2010).

^{2/} Rating for New Jersey Resources is New Jersey Natural Gas. Rating for South Jersey Industries is South Jersey Gas Co. Rating for WGL Holdings is Washington Gas Light. Rating for Nicor Inc. is for Northern Illinois Gas.

DCF COST OF EQUITY FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES (BASED ON ANALYSTS' EARNINGS GROWTH FORECASTS)

	Annualized Jan-	Average High/Low		Jan-May 2010 Average I/B/E/S/	
	May 2010 Average	Monthly Close Prices	Expected Dividend	Long-Term	DCF Cost of
<u>Company</u>	<u>Dividend</u>	<u>1/1/2010-5/25/2010</u>	Yield 1/	EPS Forecasts	Equity 2/
	(1)	(2)	(3)	(4)	(5)
AGL Resources	1.75	37.18	4.9	4.8	9.7
Consolidated Edison	2.38	44.17	5.6	3.7	9.2
New Jersey Resources	1.36	36.82	3.9	6.1	10.0
Nicor Inc.	1.86	41.82	4.6	3.7	8.3
Northwest Nat. Gas	1.66	45.32	3.9	5.5	9.3
NSTAR	1.60	35.28	4.8	5.7	10.5
Piedmont Natural Gas	1.10	26.49	4.4	5.7	10.1
South Jersey Inds.	1.32	41.19	3.6	10.8	14.4
WGL Holdings Inc.	1.49	33.85	4.5	2.7	7.2
Mean	1.61	38.01	4.5	5.4	9.9
Median	1.60	37.18	4.5	5.5	9.7

Source: Standard and Poor's Research Insight, www.yahoo.com and I/B/E/S

^{1/} Expected Dividend Yield = (Col (1) / Col (2)) * (1 + Col (4))
^{2/} Expected Dividend Yield (Col (3)) + I/B/E/S Growth Forecast (Col (4))

DCF COSTS OF EQUITY FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES (SUSTAINABLE GROWTH)

<u>Company</u>	Annualized Jan-May 2010 Average <u>Dividend</u> (1)	Average High/Low Monthly Close Prices 1/1/2010-5/25/2010 (2)	Expected Dividend Yield 1/ (3)	Forecast Return on Common Equity (4)	Forecast Earnings Retention Rate (5)	BR Growth ^{2/} (1st Qtr.2010) (6)	SV Growth ^{3/} (1st Qtr. 2010) (7)	Sustainable Growth ^{4/} (1st Qtr. 2010) (8)	DCF Cost of Equity ^{5/} (9)
AGL Resources	1.75	37.18	5.0	11.6	43.5	5.1	0.39	5.5	10.4
Consolidated Edison	2.38	44.17	5.6	9.5	36.1	3.4	0.17	3.6	9.2
New Jersey Resources	1.36	36.82	4.0	17.2	52.5	9.0	-0.57	8.5	12.5
Nicor Inc.	1.86	41.82	4.7	11.6	43.6	5.1	0.07	5.1	9.8
Northwest Nat. Gas	1.66	45.32	3.8	11.3	38.3	4.3	0.52	4.8	8.7
NSTAR	1.60	35.28	4.7	13.8	31.7	4.4	0.00	4.4	9.1
Piedmont Natural Gas	1.10	26.49	4.3	13.6	34.9	4.7	-0.69	4.0	8.4
South Jersey Inds.	1.32	41.19	3.5	15.0	51.5	7.7	1.72	9.4	13.0
WGL Holdings Inc.	1.49	33.85	4.6	10.3	38.1	3.9	0.01	3.9	8.5
Mean	1.61	38.01	4.47	12.65	41.14	5.29	0.18	5.5	9.9
Median	1.60	37.18	4.57	11.64	38.29	4.74	0.07	4.8	9.2

^{1/} Expected Dividend Yield = (Col (1) / Col (2)) * (1 + Col (8))

Source: Standard and Poors Research Insight, Value Line (February and March 2010), www.yahoo.com

^{2/} BR Growth = Col (4) * (Col (5) / 100); Fraction of earnings (B) expected to be retained multiplied by expected return on equity (R)

^{3/} SV Growth = Percent expected growth in number of shares of stock (S) * Percent of funds from new equiting financing that accrues to existing shareholders (V), where V = [1-Book Value/Market Price]

^{4/} Col (6) + Col (7)

^{5/} Expected Dividend Yield Col (3) + Sustainable Growth Col (8)

DCF COSTS OF EQUITY FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES (THREE-STAGE MODEL)

				Growth Rates		
	Annualized Jan-	Average High/Low Monthly	Stage 1:	Stage 2:	Stone 2:	DCF Cost of
	May 2010 Average	Close Prices	I/B/E/S	Average of	Stage 3:	
<u>Company</u>	<u>Dividend</u>	<u>1/1/2010-5/25/2010</u>	EPS Forecasts	Stage 1 & 3	GDP Growth 1/	Equity 2/
	(1)	(2)	(3)	(4)		(5)
AGL Resources	1.75	37.18	4.8	4.9	5.0	9.8
Consolidated Edison	2.38	44.17	3.7	4.3	5.0	10.2
New Jersey Resources	1.36	36.82	6.1	5.5	5.0	9.0
Nicor Inc.	1.86	41.82	3.7	4.4	5.0	9.2
Northwest Nat. Gas	1.66	45.32	5.5	5.2	5.0	8.9
NSTAR	1.60	35.28	5.7	5.4	5.0	9.9
Piedmont Natural Gas	1.10	26.49	5.7	5.4	5.0	9.5
South Jersey Inds.	1.32	41.19	10.8	7.9	5.0	9.7
WGL Holdings Inc.	1.49	33.85	2.7	3.8	5.0	8.9
Mean	1.61	38.01	5.4	5.2	5.0	9.5
Median	1.60	37.18	5.5	5.2	5.0	9.5

^{1/} Forecast nominal rate of GDP growth, 2012-21

Source: Standard & Poor's Research Insight; www.yahoo.com; Blue Chip Economic Indicators (March 2010); I/B/E/S (Jan-May 2010 Average)

^{2/} Internal Rate of Return: Stage 1 growth rate applies for first 5 years; Stage 2 growth rate applies for years 6-10; Stage 3 growth thereafter.

DCF COST OF EQUITY FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES (BASED ON ANALYSTS' EARNINGS GROWTH FORECASTS)

Jul-Dec 1999 Average Average High/Low I/B/E/S/ Annualized Jul-**Expected Dividend** Dec 1999 Average **Monthly Close Prices** Long-Term **DCF Cost of** Equity 2/ 7/1/1999-12/31/1999 Yield 1/ **Dividend EPS Forecasts** Company (1) (2) (3) (4) (5) **AGL** Resources 1.08 18.02 6.3 4.9 11.1 Consolidated Edison 2.14 40.23 5.5 3.5 9.0 **New Jersey Resources** 0.75 17.55 4.5 6.0 10.5 Nicor Inc. 1.56 37.01 4.5 6.3 10.7 Northwest Nat. Gas 1.22 25.14 5.1 4.3 9.4 **NSTAR** 0.97 20.23 5.0 4.1 9.1 Piedmont Natural Gas 0.69 16.02 4.6 6.1 10.7 South Jersey Inds. 0.72 14.21 5.3 3.8 9.1 WGL Holdings Inc. 1.22 27.26 4.7 4.7 9.4 9.9 Mean 1.15 23.96 5.0 4.8 Median 1.08 20.23 5.0 4.7 9.4

Source: Standard and Poor's Research Insight, www.yahoo.com and I/B/E/S

^{1/} Expected Dividend Yield = (Col (1) / Col (2)) * (1 + Col (4))

^{2/} Expected Dividend Yield (Col (3)) + I/B/E/S Growth Forecast (Col (4))

DCF COSTS OF EQUITY FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES (SUSTAINABLE GROWTH)

<u>Company</u>	Annualized Jul-Dec 1999 Average <u>Dividend</u> (1)	Average High/Low Monthly Close Prices 7/1/1999-12/31/1999 (2)	Expected <u>Dividend Yield ^{1/}</u> (3)	Forecast Return on Common Equity (4)	Forecast Earnings Retention Rate (5)	BR Growth ^{2/} (4th Qtr.1999) (6)	SV Growth ^{3/} (4th Qtr. 1999) (7)	Sustainable Growth ^{4/} (4th Qtr. 1999) (8)	DCF Cost of Equity ^{5/} (9)
AGL RESOURCES INC	1.08	18.02	6.3	12.6	32.4	4.1	0.23	4.3	10.6
CONSOLIDATED EDISON	2.14	40.23	5.5	12.0	33.7	4.1	-0.56	3.5	9.0
NEW JERSEY RESOURCES	0.75	17.55	4.6	16.5	43.9	7.2	0.53	7.8	12.4
NICOR INC	1.56	37.01	4.5	17.1	44.1	7.6	-0.63	6.9	11.4
NORTHWEST NATURAL GAS CO	1.22	25.14	5.1	11.1	40.0	4.4	0.41	4.8	9.9
NSTAR	0.97	20.23	5.1	14.7	41.3	6.1	0.75	6.8	12.0
PIEDMONT NATURAL GAS CO	0.69	16.02	4.6	13.6	40.7	5.5	0.70	6.2	10.8
SOUTH JERSEY INDUSTRIES INC	0.72	14.21	5.4	12.0	36.7	4.4	1.19	5.6	11.0
WGL HOLDINGS INC	1.22	27.26	4.8	13.5	41.3	5.6	0.76	6.3	11.1
Mean Median	1.15 1.08	23.96 20.23	5.09 5.09	13.68 13.51	39.36 40.74	5.44 5.53	0.37 0.53	5.8 6.2	10.9 11.0

^{1/} Expected Dividend Yield = (Col (1) / Col (2)) * (1 + Col (8))

Source: Standard and Poors Research Insight, Value Line (December 1999), www.yahoo.com

^{2/} BR Growth = Col (4) * (Col (5) / 100); Fraction of earnings (B) expected to be retained multiplied by expected return on equity (R)

^{3/} SV Growth = Percent expected growth in number of shares of stock (S) * Percent of funds from new equiting financing that accrues to existing shareholders (V), where V = [1-Book Value/Market Price]

^{4/} Col (6) + Col (7)

^{5/} Expected Dividend Yield Col (3) + Sustainable Growth Col (8)

DCF COSTS OF EQUITY FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES (THREE-STAGE MODEL)

				Growth Rates		
	Annualized Jul-	Average High/Low Monthly	Stage 1:	Stage 2:	Stage 3:	DCF Cost of
	Dec 1999 Average	Close Prices	I/B/E/S	Average of	•	
<u>Company</u>	<u>Dividend</u>	<u>7/1/1999-12/31/1999</u>	EPS Forecasts	Stage 1 & 3	GDP Growth 1/	Equity 2/
	(1)	(2)	(3)	(4)		(5)
AGL Resources	1.08	18.02	4.9	4.8	4.8	11.1
Consolidated Edison	2.14	40.23	3.5	4.1	4.8	9.9
New Jersey Resources	0.75	17.55	6.0	5.4	4.8	9.6
Nicor Inc.	1.56	37.01	6.3	5.5	4.8	9.6
Northwest Nat. Gas	1.22	25.14	4.3	4.6	4.8	9.7
NSTAR	0.97	20.23	4.1	4.5	4.8	9.6
Piedmont Natural Gas	0.69	16.02	6.1	5.4	4.8	9.6
South Jersey Inds.	0.72	14.21	3.8	4.3	4.8	9.8
WGL Holdings Inc.	1.22	27.26	4.7	4.7	4.8	9.4
Mean	1.15	23.96	4.8	4.8	4.8	9.8
Median	1.08	20.23	4.7	4.7	4.8	9.6

^{1/} Forecast nominal rate of GDP growth (2001-10), as of NBPUB 299.

Source: Standard & Poor's Research Insight; www.yahoo.com; Blue Chip Financial Forecasts (December 1999); I/B/E/S (Jul-Dec 1999 Average)

^{2/} Internal Rate of Return: Stage 1 growth rate applies for first 5 years; Stage 2 growth rate applies for years 6-10; Stage 3 growth thereafter.

HISTORIC EQUITY MARKET RISK PREMIUMS

(Arithmetic Averages)

Canada (1947-2009)

	(1947-2009)	_
Stock Return	Bond Total Return	Risk Premium
12.0	6.8	5.2
Stock Return	Bond Income Return	Risk Premium
12.0	7.1	4.9
	United States (1947-2009)	
Stock Return	Bond Total Return	Risk Premium
12.4	6.2	6.2
Stock Return	Bond Income Return	Risk Premium
12.4	6.0	6.4

Source: Ibbotson Associates, *Stocks, Bonds, Bills and Inflation: 2010 Yearbook*;
Ibbotson Associates, *Canadian Risk Premia Over Time Report 2010*; Canadian Institute of Actuaries, *Report on Canadian Economic Statistics 1924-2006*; www.standardandpoors.com, *TSX Review* www.federalreserve.gov, www.bankofcanada.gov

HISTORIC EQUITY MARKET RISK PREMIUMS

(Arithmetic Averages)

Canada
(1924-2009

	(1924-2009)	
Stock Return	Bond Total Return	Risk Premium
11.6	6.4	5.2
Stock Return	Bond Income Return	Risk Premium
11.6	6.3	5.3
	United States (1926-2009)	
Stock Return	Bond Total Return	Risk Premium
11.8	5.8	6.0
Stock Return	Bond Income Return	Risk Premium
11.8	5.2	6.6

Source: Ibbotson Associates, Stocks, Bonds, Bills and Inflation: 2010 Yearbook;

Ibbotson Associates, Canadian Risk Premia Over Time Report 2010; Canadian Institute of Actuaries, Report on Canadian Economic Statistics 1924-2006; www.standardandpoors.com, TSX Review

www.federalreserve.gov

10-YEAR ROLLING AVERAGE CANADIAN MARKET RETURNS

	Canadian Stock Returns	Canadian Bond Total Returns	Canadian Risk Premium (Bond Total Returns)	Canadian Bond Income Returns	Canadian Risk Premium (Bond Income Returns)
1947-1956	18.9%	1.4%	17.5%	3.2%	15.7%
1948-1957	16.8%	1.7%	15.2%	3.4%	13.5%
1949-1958	18.8%	1.3%	17.4%	3.5%	15.3%
1950-1959	17.0%	0.4%	16.5%	3.7%	13.2%
1951-1960	12.3%	1.1%	11.1%	4.0%	8.3%
1952-1961	13.2%	2.4%	10.7%	4.2%	9.0%
1953-1962	12.5%	2.5%	10.0%	4.3%	8.2%
1954-1963	13.8%	2.6%	11.2%	4.5%	9.4%
1955-1964	12.5%	2.3%	10.2%	4.7%	7.8%
1956-1965	10.4%	2.4%	7.9%	4.9%	5.5%
1957-1966	8.3%	2.9%	5.4%	5.1%	3.2%
1958-1967	12.2%	2.1%	10.1%	5.3%	6.9%
1959-1968	11.3%	2.6%	8.7%	5.6%	5.8%
1960-1969	10.8%	2.9%	7.9%	5.8%	4.9%
1961-1970	10.2%	4.4%	5.9%	6.1%	4.1%
1962-1971	7.8%	4.5%	3.2%	6.3%	1.5%
1963-1972	11.2%	4.3%	6.9%	6.5%	4.7%
1964-1973	9.7%	4.1%	5.6%	6.8%	2.9%
1965-1974	4.6%	3.2%	1.3%	7.2%	-2.7%
1966-1975	5.7%	3.4%	2.3%	7.6%	-2.7 % -1.9%
1967-1976	7.5%	5.1%	2.4%	8.0%	-0.4%
1968-1977		6.0%	0.8%		-1.5%
	6.8%			8.3%	
1969-1978	7.5%	6.2%	1.4%	8.6%	-1.0%
1970-1979	12.1%	6.1%	6.0%	8.8%	3.2%
1971-1980	15.5%	4.1%	11.3%	9.3%	6.1%
1972-1981	13.6%	2.7%	11.0%	10.3%	3.4%
1973-1982	11.4%	6.9%	4.6%	11.0%	0.4%
1974-1983	15.0%	7.6%	7.3%	11.5%	3.5%
1975-1984	17.3%	9.3%	8.0%	11.9%	5.4%
1976-1985	18.0%	11.6%	6.4%	12.1%	5.8%
1977-1986	17.8%	11.4%	6.4%	12.2%	5.6%
1978-1987	17.3%	10.9%	6.4%	12.3%	5.0%
1979-1988	15.4%	11.8%	3.6%	12.4%	3.0%
1980-1989	13.1%	13.7%	-0.6%	12.4%	0.7%
1981-1990	8.6%	13.8%	-5.2%	12.2%	-3.6%
1982-1991	10.8%	16.5%	-5.7%	11.6%	-0.8%
1983-1992	10.1%	13.6%	-3.4%	11.0%	-0.9%
1984-1993	9.8%	14.9%	-5.1%	10.5%	-0.7%
1985-1994	10.1%	12.3%	-2.3%	10.1%	0.0%
1986-1995	9.0%	12.4%	-3.4%	9.8%	-0.8%
1987-1996	10.9%	12.1%	-1.2%	9.6%	1.4%
1988-1997	11.8%	13.8%	-2.0%	9.2%	2.7%
1989-1998	10.6%	14.2%	-3.6%	8.7%	1.9%
1990-1999	11.6%	11.8%	-0.2%	8.2%	3.4%
1991-2000	13.8%	12.9%	1.0%	7.7%	6.1%
1992-2001	11.4%	10.8%	0.6%	7.3%	4.1%
1993-2002	10.3%	10.5%	-0.2%	6.9%	3.3%
1994-2003	9.7%	9.0%	0.7%	6.7%	3.0%
1995-2004	11.2%	10.9%	0.2%	6.3%	4.9%
1996-2005	12.1%	9.8%	2.3%	5.9%	6.3%
1997-2006	11.0%	8.7%	2.3%	5.5%	5.5%
1998-2007	10.5%	7.3%	3.2%	5.2%	5.2%
1999-2008	7.3%	7.2%	0.1%	5.1%	2.2%
2000-2009	7.7%	7.5%	0.2%	4.9%	2.8%

Source: Canadian Institute of Actuaries, Report on Canadian Economic Statistics 1924-2006; Ibbotson Associates, Canadian Risk Premia Over Time Report 2010; TSX Review

10-YEAR ROLLING AVERAGE U.S. MARKET RETURNS

		US Bond Total	US Risk Premium (Bond Total	US Bond Income	US Risk Premium (Bond Income
	US Stock Returns	Returns	Returns)	Returns	Returns)
1947-1956	19.4%	0.8%	18.5%	2.5%	16.9%
1948-1957	17.7%	1.9%	15.9%	2.7%	15.1%
1949-1958	21.5%	0.9%	20.6%	2.7%	18.8%
1950-1959	20.8%	0.0%	20.8%	2.9%	17.9%
1951-1960	17.7%	1.4%	16.3%	3.1%	14.6%
1952-1961	18.0%	1.9%	16.1%	3.3%	14.7%
1953-1962	15.3%	2.5%	12.8%	3.4%	11.9%
1954-1963	17.7%	2.2%	15.4%	3.5%	14.1%
1955-1964	14.1%	1.9%	12.2%	3.7%	10.4%
1956-1965	12.1%	2.1%	10.1%	3.8%	8.3%
1957-1966	10.5%	3.0%	7.5%	4.0%	6.5%
1958-1967	14.0%	1.3%	12.6%	4.1%	9.9%
1959-1968	10.7%	1.9%	8.8%	4.3%	6.4%
1960-1969	8.7%	1.6%	7.1%	4.5%	4.2%
1961-1970	9.0%	1.5%	7.6%	4.7%	4.3%
1962-1971	7.8%	2.7%	5.1%	5.0%	2.8%
1963-1972	10.5%	2.6%	8.0%	5.2%	5.4%
1964-1973	6.8%	2.3%	4.5%	5.4%	1.4%
1965-1974	2.5%	2.4%	0.1%	5.7%	-3.2%
1966-1975	5.0%	3.3%	1.7%	6.1%	-1.1%
1967-1976	8.4%	4.6%	3.8%	6.5%	1.9%
1968-1977	5.3%	5.4%	-0.2%	6.7%	-1.5%
1969-1978	4.8%	5.3%	-0.5%	7.0%	-2.1%
1970-1979	7.5%	5.7%	1.8%	7.2%	0.3%
1971-1980	10.3%	4.1%	6.2%	7.6%	2.8%
1971-1980	8.4%	3.0%	5.5%	8.1%	0.3%
1973-1982	8.7%	6.4%	2.2%	8.9%	-0.2%
1974-1983	12.4%	6.6%	5.8%	9.2%	3.1%
1975-1984	15.7%	7.7%	7.9%	9.7%	6.0%
	15.7%	9.9%	7.9% 5.2%		
1976-1985 1977-1986	14.6%	10.7%	3.9%	10.0% 10.1%	5.1% 4.5%
1978-1987	15.9%	10.5%	5.4%	10.2%	5.7%
1979-1988	16.9%	11.6%	5.3%	10.3%	6.6%
1980-1989	18.2%	13.5%	4.7%	10.3%	7.9%
1981-1990	14.6%	14.5%	0.1%	10.1%	4.5%
1982-1991	18.2%	16.3%	1.9%	9.8%	8.4%
1983-1992	16.8%	13.0%	3.8%	9.2%	7.6%
1984-1993	15.5%	14.8%	0.8%	8.9%	6.7%
1985-1994	15.1%	12.5%	2.6%	8.3%	6.7%
1986-1995	15.6%	12.5%	3.1%	8.0%	7.6%
1987-1996	16.0%	10.0%	6.1%	7.7%	8.3%
1988-1997	18.9%	11.8%	7.0%	7.6%	11.3%
1989-1998	20.0%	12.2%	7.9%	7.2%	12.8%
1990-1999	19.0%	9.5%	9.5%	6.9%	12.1%
1991-2000	18.4%	11.0%	7.4%	6.8%	11.6%
1992-2001	14.1%	9.4%	4.7%	6.5%	7.7%
1993-2002	11.2%	10.4%	0.8%	6.3%	4.8%
1994-2003	13.0%	8.7%	4.3%	6.1%	7.0%
1995-2004	14.0%	10.4%	3.6%	5.9%	8.1%
1996-2005	10.7%	8.0%	2.8%	5.6%	5.1%
1997-2006	10.0%	8.2%	1.8%	5.5%	4.5%
1998-2007	7.2%	7.6%	-0.4%	5.3%	1.9%
1999-2008	0.7%	8.9%	-8.2%	5.2%	-4.5%
2000-2009	1.2%	8.3%	-7.1%	5.0%	-3.7%

Source: Ibbotson Associates, Stocks, Bonds, Bills and Inflation: 2010 Yearbook, www.federalreserve.gov, www.standardandpoors.com

FIVE-YEAR STANDARD DEVIATIONS OF MARKET RETURNS FOR 10 SECTOR INDICES OF S&P/TSX COMPOSITE

Five Year Periods Ending:	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	2003	2004	2005	2006	<u>2007</u>	2008	2009	Average
S&P / TSX Composite	(%) 3.57	(%) 4.68	(%) 4.84	(%) 5.40	(%) 5.87	(%) 5.83	(%) 4.97	(%) 4.59	(%) 4.04	(%) 3.24	(%) 2.86	(%) 4.35	(%) 4.88	(%) 4.55
10 Sector Indices														
Consumer Discretionary	3.69	4.36	4.62	4.99	5.38	5.73	5.35	5.00	4.35	3.69	3.08	3.84	4.07	4.47
Consumer Staples	3.57	4.01	3.70	4.04	4.17	4.76	4.45	4.37	4.05	3.88	2.97	3.24	3.36	3.89
Energy	5.60	6.16	7.31	7.97	8.30	8.10	6.98	5.72	5.56	5.46	5.40	7.04	7.37	6.69
Financials	4.27	5.89	5.92	6.22	6.17	6.06	4.58	4.23	3.77	3.36	2.97	3.99	5.38	4.83
Health Care	6.62	7.73	8.19	9.38	9.00	9.39	8.93	8.68	6.98	6.57	5.45	4.92	5.38	7.48
Industrials	4.13	4.93	4.69	5.12	6.50	7.18	6.92	6.87	6.48	5.16	4.08	4.87	5.48	5.57
Information Technology	7.99	9.17	10.35	12.27	15.16	17.12	16.64	17.09	15.81	13.36	10.20	11.82	11.68	12.98
Materials	5.87	6.98	7.22	7.29	7.40	7.25	5.89	5.65	5.67	5.88	5.59	7.96	8.48	6.70
Telecommunication Services	3.66	5.82	7.37	7.87	8.46	8.71	7.54	5.74	4.97	4.64	4.18	5.08	5.07	6.09
Utilities	3.12	3.80	4.00	4.80	5.06	4.88	4.49	4.09	3.36	3.13	3.49	4.04	4.32	4.05
Mean	4.85	5.89	6.34	7.00	7.56	7.92	7.18	6.75	6.10	5.51	4.74	5.68	6.06	6.27
Median	4.20	5.85	6.57	6.76	6.95	7.21	6.41	5.68	5.27	4.90	4.13	4.90	5.38	5.71
					Ratios of St	andard Devi	ations							
S&P/TSX Utilities Index as a Percent	of:													
10 Sector Indices (Mean)	0.64	0.65	0.63	0.69	0.67	0.62	0.63	0.61	0.55	0.57	0.74	0.71	0.71	0.65
10 Sector Indices (Median)	0.74	0.65	0.61	0.71	0.73	0.68	0.70	0.72	0.64	0.64	0.85	0.82	0.80	0.71

5-YEAR PRICE BETAS FOR S&P/TSX SECTOR INDICES

	Consumer	Consumer					<u>Information</u>		<u>Telecommunication</u>	
	Discretionary	<u>Staples</u>	Energy	<u>Financials</u>	Health Care	<u>Industrials</u>	<u>Technology</u>	<u>Materials</u>	<u>Services</u>	<u>Utilities</u>
1997	0.82	0.62	0.97	0.94	0.60	0.97	1.57	1.32	0.64	0.53
1998	0.80	0.60	0.85	1.12	1.01	0.93	1.41	1.12	0.92	0.55
1999	0.73	0.44	0.90	1.00	1.00	0.78	1.55	1.04	1.11	0.30
2000	0.69	0.23	0.66	0.78	1.09	0.72	1.78	0.74	0.92	0.14
2001	0.68	0.10	0.49	0.66	0.98	0.82	2.13	0.60	0.94	-0.03
2002	0.73	0.08	0.43	0.66	0.99	0.86	2.28	0.57	0.93	-0.06
2003	0.74	-0.08	0.26	0.38	0.85	0.91	2.74	0.43	0.83	-0.25
2004	0.80	-0.07	0.17	0.39	0.82	1.05	2.87	0.41	0.58	-0.13
2005	0.83	0.07	0.48	0.56	0.72	1.13	2.68	0.77	0.74	0.00
2006	0.86	0.37	1.03	0.68	0.85	1.06	2.07	1.32	0.52	0.25
2007	0.73	0.54	1.44	0.51	0.54	0.96	1.12	1.45	0.62	0.46
2008	0.59	0.32	1.43	0.61	0.48	0.81	1.43	1.30	0.55	0.49
2009	0.56	0.28	1.35	0.80	0.41	0.83	1.22	1.24	0.47	0.41

TSE 300 SUB-INDEX COMPOUND RETURNS AND BETAS (1956-2003)

		Sub-Index Compound Returns 1/						Sub-Index Betas				
	<u>56-03</u>	<u>56-97</u>	64-73	<u>74-83</u>	<u>84-93</u>	94-03	<u>56-03</u>	<u>56-97</u>	64-73	74-83	<u>84-93</u>	94-03
Metals/Minerals	7.8	7.6	7.5	11.2	6.8	7.2	1.15	1.23	1.14	1.22	1.37	0.87
Gold/Precious Metals	9.5	10.4	16.2	16.0	11.0	-2.7	0.85	0.96	0.36	1.31	1.24	0.64
Oil and Gas	9.5	8.4	14.6	11.9	4.5	15.3	1.06	1.20	1.25	1.40	0.98	0.52
Paper/Forest Products	7.1	7.4	4.8	11.8	10.3	2.6	1.02	1.07	1.15	1.00	1.27	0.85
Consumer Products	11.3	11.9	10.2	13.8	11.2	9.6	0.83	0.86	0.84	0.90	0.89	0.73
Industrial Products	7.2	9.6	8.3	10.9	6.0	1.1	1.17	1.02	1.11	0.87	1.08	1.69
Real Estate 2/	5.3	5.5	0.7	16.7	-2.3	1.3	1.00	1.18	1.21	1.28	1.06	0.46
Transportation/Environmental	10.1	11.4	12.7	18.4	3.0	8.8	0.94	1.04	0.94	1.08	1.22	0.62
Pipelines .	11.7	12.1	5.2	13.8	13.7	13.1	0.68	0.85	0.80	0.92	0.76	0.02
Utilities	11.0	10.7	3.3	17.8	11.0	16.3	0.54	0.48	0.50	0.47	0.40	0.79
Communications/Media	13.5	15.0	19.1	15.3	12.9	7.5	0.77	0.77	0.96	0.69	0.95	0.80
Merchandising	10.1	10.7	10.6	12.2	8.7	7.2	0.78	0.86	0.93	0.84	0.83	0.46
Finance	12.4	12.8	12.0	11.7	11.6	17.9	0.83	0.85	0.95	0.71	0.93	0.77
Conglomerates	10.8	10.8	12.8	15.2	9.5	13.9	0.94	1.03	1.26	0.97	1.20	0.68
Adjusted R Square 3/							47%	44%	1%	1%	11%	9%
Beta 4/							-0.088	-0.082	-0.020	-0.008	-0.056	-0.053

Annualized rate of return at which capital has compounded over time.
 Data only available starting July 1961
 Represents percentage of variation in sub-index returns explained by the sub-index betas.
 Represents relationship between sub-index returns and sub-index betas.

S&P/TSX COMPOSITE SECTOR COMPOUND RETURNS AND BETAS (1988-2009)

	Sector (Compound R	eturns ^{1/}		Sector Betas		
	88-09	88-97	00-09	88-09	<u>88-97</u>	00-09	
Consumer Discretionary	6.2	10.2	1.8	0.74	0.90	0.67	
Consumer Staples	11.4	12.7	9.4	0.34	0.73	0.12	
Energy	11.1	8.4	17.6	0.79	0.76	0.79	
Financials	13.2	18.3	12.1	0.80	1.04	0.60	
Health Care	2.9	15.5	-8.8	0.76	0.81	0.62	
Industrials	5.9	8.3	5.4	0.94	1.13	0.93	
Information Technology	6.5	21.8	-15.7	1.71	1.21	2.01	
Materials	6.9	3.4	12.0	0.97	1.26	0.86	
Telecommunication Services	12.1	15.4	2.4	0.69	0.58	0.51	
Utilities	10.2	11.5	14.3	0.29	0.62	0.15	
Adjusted R Square 2/				15%	1%	40%	
Beta ^{3/}				-0.034	-0.017	-0.126	

^{1/} Data only available starting December 1987. Annualized rate of return at which capital has compounded over time.

^{2/} Represents percentage of variation in sector returns explained by the sector betas.

^{3/} Represents relationship between sector returns and sector betas.

BETAS FOR REGULATED CANADIAN UTILITIES

"Raw" Monthly Price Betas Five Year Period Ending:

COMPANY	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	2002	2003	2004	<u>2005</u>	2006	<u>2007</u>	2008	2009	2010 ^{3/}
Canadian Utilities	0.46	0.54	0.48	0.55	0.63	0.62	0.54	0.38	0.27	0.19	0.05	0.03	0.20	0.32	0.58	0.19	0.06	0.39
Emera	na	na	na	0.52	0.40	0.55	0.41	0.27	0.20	0.15	-0.05	0.01	0.07	0.12	0.24	0.17	0.16	0.39
Enbridge	0.35	0.53	0.46	0.44	0.43	0.48	0.26	0.07	-0.10	-0.18	-0.37	-0.32	-0.19	0.22	0.54	0.30	0.30	0.51
Fortis	0.35	0.44	0.51	0.37	0.30	0.49	0.33	0.23	0.14	0.13	-0.06	0.01	0.21	0.48	0.65	0.21	0.20	0.48
PNG	0.51	0.56	0.42	0.30	0.39	0.55	0.47	0.44	0.42	0.44	0.37	0.49	0.54	0.54	0.35	0.26	0.44	0.24
Terasen Inc 1/	0.40	0.53	0.59	0.53	0.46	0.48	0.36	0.25	0.18	0.12	0.02	-0.02	0.06	na	na	na	na	na
TransCanada Pipelines	0.40	0.57	0.56	0.52	0.36	0.55	0.21	0.15	-0.08	-0.09	-0.38	-0.16	-0.15	0.34	0.52	0.38	0.39	0.45
Mean	0.41	0.53	0.50	0.46	0.42	0.53	0.37	0.26	0.14	0.11	-0.06	0.01	0.11	0.34	0.48	0.25	0.26	0.41
Median	0.40	0.54	0.50	0.52	0.40	0.55	0.36	0.25	0.18	0.13	-0.05	0.01	0.07	0.33	0.53	0.24	0.25	0.42
TSE Gas/Electric Index	0.42	0.48	0.52	0.52	0.46	0.55	0.38	0.21	0.17	0.14	NA							
S&P/TSX Utilities	0.55	0.63	0.67	0.65	0.53	0.55	0.30	0.14	-0.03	-0.06	-0.25	-0.13	0.00	0.25	0.46	0.49	0.41	0.56
							Adj	justed Beta	as ^{2/}									
							Five Ye	ar Period E	Ending:									
COMPANY	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	2010 ^{3/}
Canadian Utilities	0.64	0.69	0.65	0.70	0.75	0.75	0.69	0.58	0.51	0.46	0.37	0.35	0.47	0.54	0.72	0.45	0.37	0.59
Emera	NA	NA	NA	0.68	0.60	0.70	0.60	0.51	0.46	0.43	0.29	0.33	0.38	0.41	0.49	0.44	0.44	0.59
Enbridge	0.56	0.69	0.64	0.62	0.62	0.65	0.50	0.38	0.26	0.21	0.08	0.12	0.21	0.48	0.69	0.53	0.53	0.67
Fortis PNG	0.57	0.62	0.67	0.58	0.53	0.66	0.55	0.48	0.42	0.41	0.29	0.34	0.47	0.65	0.77	0.47	0.46	0.65
	0.67	0.71	0.61	0.53	0.59	0.70	0.65	0.63	0.61	0.63	0.58	0.66	0.69	0.69	0.56	0.50	0.62	0.49
Terasen Inc 1/	0.60	0.69	0.72 0.71	0.69	0.64	0.65	0.57	0.50	0.45	0.41	0.35	0.32	0.37	na	na	na	na	na
TransCanada Pipelines	0.60	0.71	0.71	0.68	0.57	0.70	0.47	0.43	0.28	0.27	0.08	0.22	0.23	0.56	0.68	0.58	0.59	0.63
Mean	0.61	0.68	0.67	0.64	0.61	0.69	0.58	0.50	0.43	0.40	0.29	0.33	0.40	0.56	0.65	0.50	0.50	0.60
Median	0.60	0.69	0.66	0.68	0.60	0.70	0.57	0.50	0.45	0.41	0.29	0.33	0.38	0.55	0.68	0.49	0.50	0.61
TSE Gas/Electric Index	0.61	0.65	0.68	0.68	0.64	0.70	0.59	0.47	0.44	0.42	NA							
S&P/TSX Utilities	0.70	0.76	0.78	0.77	0.69	0.70	0.53	0.42	0.31	0.29	0.16	0.24	0.33	0.50	0.64	0.66	0.60	0.71

 $^{^{1/}}$ Due to its purchase by Kinder Morgan, Terasen betas are calculated through November 2005. $^{2/}$ Adjusted beta = "raw" beta * 67% + market beta of 1.0 * 33%.

Source: Standard and Poor's Research Insight and TSX Review.

^{3/} Three-year beta based on weekly data calculated through April 2010

DCF-BASED EQUITY RISK PREMIUM STUDY FOR BENCHMARK U.S. DISTRIBUTION UTILITIES (Annual Averages of Monthly Data)

	Expected Dividend	I/B/E/S EPS Growth		Long Treasury	,	Moody's
_	Yield 1/	Forecast	DCF Cost	Yield	Risk Premium	Spread
1995	6.3	4.2	10.6	6.8	3.7	1.1
1996	6.0	4.2	10.2	6.7	3.4	1.0
1997	5.5	4.4	10.0	6.6	3.4	1.0
1998	4.8	4.8	9.5	5.5	4.0	1.5
1999	5.1	4.8	9.9	5.9	4.0	1.7
2000	5.5	5.1	10.6	5.9	4.7	2.4
2001	5.1	5.6	10.7	5.5	5.2	2.3
2002	5.0	5.5	10.4	5.4	5.0	1.9
2003	4.9	4.9	9.8	5.0	4.8	1.5
2004	4.5	4.3	8.7	5.1	3.6	1.0
2005	4.1	4.4	8.4	4.5	3.9	1.1
2006	4.1	4.6	8.7	4.9	3.8	1.2
2007	3.9	4.8	8.7	4.8	3.9	1.3
2008	4.3	5.1	9.5	4.2	5.2	2.3
2009	4.8	5.4	10.1	4.1	6.1	1.9
Mean Values Associ	ated With Long	Treasury Yield Va	alues of:			
Under 5.0	4.4	4.8	9.2	4.5	4.7	1.6
5.0-5.99	4.9	5.0	9.9	5.5	4.4	1.7
6.0-6.99	5.7	4.4	10.2	6.5	3.7	1.3
7.0 and above	6.4	4.3	10.6	7.3	3.3	0.9
Means:						
1995 - 2009	4.9	4.8	9.7	5.4	4.3	1.5
1999 - 2009	4.6	4.9	9.6	5.0	4.6	1.7

^{1/} Dividend Yield is adjusted for forecast I/B/E/S growth

Source: Standard & Poor's Research Insight, I/B/E/S and www.federalreserve.gov

DCF-BASED EQUITY RISK PREMIUM STUDY FOR BENCHMARK U.S. DISTRIBUTION UTILITIES

Regression Analysis Results 1995-2009

Equation 1:

Equity Risk Premium = 7.30 - 0.55 (30-Year Treasury Yield)

t-statistics:

Long-term Bond Yield = -9.62

 $R^2 = 34\%$

Equity Risk Premium at Long-Term Bond

Yield of 5.00%

= 4.6%

ROE at Long-Term Bond Yield of 5.00% = 9.6%

Equation 2:

Equity Risk Premium = 4.75 - 0.34 (30-Year Treasury Yield) + 0.92 (Spread)

Where Spread = Spread between A-rated Utility Bond Yields and 30-year Treasury Yields

t-statistics:

Long-term Bond Yield = -7.93

Utility/government bond yield spread = 13.64

 $R^2 = 68\%$

Equity Risk Premium at Long-term Bond Yield of 5.00% and Spread of 1.45%

= 4.4%

ROE at Long-Term Bond Yield of 5.00% and

Spread of 1.45% = 9.4%

Note: t-statistics measure the statistical significance of an independent variable in explaining the dependent variable. The higher the t-value, the greater the confidence in the coefficient as a predictor. R² is the proportion of the variability in the dependent variable that is explained by the independent variable(s).

DCF-BASED EQUITY RISK PREMIUM STUDY FOR BENCHMARK U.S. DISTRIBUTION UTILITIES

Regression Analysis Results 1999-2009

Equation 1:

Equity Risk Premium = 6.93 - 0.47 (30-Year Treasury Yield)

t-statistics:

Long-term Bond Yield = -4.54

 $R^2 = 14\%$

Equity Risk Premium at Long-Term Bond

Yield of 5.00%

= 4.6%

ROE at Long-Term Bond Yield of 5.00% = 9.6%

Equation 2:

Equity Risk Premium = 5.28 - 0.47 (30-Year Treasury Yield) + 0.98 (Spread)

Where Spread = Spread between A-rated Utility Bond Yields and 30-year Treasury Yields

t-statistics:

Long-term Bond Yield = -6.77 Utility/government bond yield spread = 12.65

 $R^2 = 61\%$

Equity Risk Premium at Long-term Bond Yield of 5.00% and Spread of 1.45%

= 4.3%

ROE at Long-Term Bond Yield of 5.00% and Spread of 1.45%

= 9.3%

HISTORIC UTILITY EQUITY RISK PREMIUMS

(Arithmetic Averages)
Canada
(1956-2009)

(1956-2009)							
Utilities Index Return	Bond Total Return	Risk Premium					
12.1	7.6	4.5					
<u>Utilities Index Return</u>	Bond Income Return	Risk Premium					
12.1	7.8	4.3					
	United States (1947-2009)						
S&P / Moody's Gas		_					
Distribution Index Return	Bond Total Return	Risk Premium					
11.9	6.2	5.7					
S&P / Moody's Gas							
<u>Distribution Index Return</u>	Bond Income Return	Risk Premium					
11.9	6.0	5.9					
S&P/Moody's							
Electric Index Return	Bond Total Return	Risk Premium					
10.9	6.2	4.7					
S&P/Moody's							
Electric Index Return	Bond Income Return	Risk Premium					
10.9	6.0	4.9					

Notes:

The Canadian Utilities Index is based on the Gas/Electric Index of the TSE 300 (from 1956 to 1987) and on the S&P/TSX Utilities Index from 1988-2009.

The S&P/Moody's Gas Distribution Index reflects S&P's Natural Gas Distributors Index from 1947 to 1984, when S&P eliminated its gas distribution index. The 1985-2001 data are for Moody's Gas index. The index was terminated in July 2002. The 2002-2009 returns were estimated using simple averages of the prices and dividends for the utilities that were included in Moody's Gas Index as of the end of 2001. These LDCs include AGL Resources, Keyspan Corp., Laclede Group, Northwest Natural, Peoples Energy and WGL Holdings.

The S&P/Moody's Electric Index reflects S&P's Electric Index from 1947 to 1998 and Moody's Electric Index from 1999 to 2001. The 2002 to 2009 data were estimated using simple average of the prices and dividends for the utilities included in Moody's Electric Index as of the end of 2001. These utilities include American Electric Power, Centerpoint Energy, CH Energy, Cinergy, Consolidated Edison, Constellation, Dominion Resources, DPL, DTE Energy, Duke Energy, Energy East, Exelon, FirstEnergy, IDACORP, Nisource, OGE Energy, Pepco Holdings, PPL, Progress Energy, Public Service Enterprise Grp., Southern Co., Teco and Xcel Energy.

Source: Ibbotson Associates, Stocks, Bonds, Bills and Inflation: 2010 Yearbook;
Ibbotson Associates, Canadian Risk Premia Over Time Report 2010; Canadian Institute of Actuaries Report on Canadian Economic Statistics 1924-2006; www.standardandpoors.com, TSX Review Mergent Corporate News Reports, www.federalreserve.com, S&P Research Insight

10-YEAR ROLLING AVERAGE RETURNS FOR CANADIAN UTILITIES AND GOVERNMENT BONDS

	S&P/TSX Utilities Returns	Canadian Bond Total Returns	Canadian Risk Premium (Bond Total Returns)	Canadian Bond Income Returns	Canadian Risk Premium (Bond Income Returns)
1956-1965	14.3%	2.4%	11.9%	4.9%	9.4%
1957-1966	10.1%	2.9%	7.1%	5.1%	5.0%
1958-1967	11.3%	2.1%	9.2%	5.3%	6.0%
1959-1968	10.8%	2.6%	8.2%	5.6%	5.2%
1960-1969	7.9%	2.9%	5.0%	5.8%	2.1%
1961-1970	7.2%	4.4%	2.8%	6.1%	1.0%
1962-1971	6.9%	4.5%	2.4%	6.3%	0.6%
1963-1972	9.2%	4.3%	4.9%	6.5%	2.7%
1964-1973	6.9%	4.1%	2.8%	6.8%	0.1%
1965-1974	6.1%	3.2%	2.8%	7.2%	-1.1%
1966-1975	4.7%	3.4%	1.3%	7.6%	-2.9%
1967-1976	9.3%	5.1%	4.1%	8.0%	1.3%
1968-1977	9.6%	6.0%	3.6%	8.3%	1.3%
1969-1978	9.2%	6.2%	3.1%	8.6%	0.7%
1970-1979	13.6%	6.1%	7.5%	8.8%	4.8%
1971-1980	13.8%	4.1%	9.7%	9.3%	4.5%
1972-1981	12.2%	2.7%	9.5%	10.3%	1.9%
1973-1982	15.4%	6.9%	8.5%	11.0%	4.3%
1974-1983	17.2%	7.6%	9.6%	11.5%	5.7%
1975-1984	19.5%	9.3%	10.2%	11.9%	7.6%
1976-1985	19.7%	11.6%	8.1%	12.1%	7.5%
1977-1986	17.3%	11.4%	5.9%	12.2%	5.2%
1978-1987	15.9%	10.9%	5.1%	12.3%	3.6%
1979-1988	15.4%	11.8%	3.7%	12.4%	3.0%
1980-1989	12.8%	13.7%	-0.9%	12.4%	0.4%
1981-1990	11.1%	13.8%	-2.7%	12.2%	-1.1%
1982-1991	12.1%	16.5%	-4.5%	11.6%	0.5%
1983-1992	8.9%	13.6%	-4.7%	11.0%	-2.1%
1984-1993	10.4%	14.9%	-4.5%	10.5%	-0.1%
1985-1994	9.2%	12.3%	-3.1%	10.1%	-0.9%
1986-1995	7.2%	12.4%	-5.2%	9.8%	-2.6%
1987-1996	8.8%	12.1%	-3.3%	9.6%	-0.7%
1988-1997	12.0%	13.8%	-1.8%	9.2%	2.8%
1989-1998	11.2%	14.2%	-2.9%	8.7%	2.5%
1990-1999	8.2%	11.8%	-3.6%	8.2%	0.0%
1991-2000	12.8%	12.9%	-0.1%	7.7%	5.1%
1992-2001	13.7%	10.8%	2.9%	7.3%	6.4%
1993-2002	13.7%	10.5%	3.1%	6.9%	6.7%
1994-2003	14.0%	9.0%	5.0%	6.7%	7.3%
1995-2004	14.2%	10.9%	3.3%	6.3%	8.0%
1996-2005	17.7%	9.8%	7.9%	5.9%	11.9%
1997-2006	16.0%	8.7%	7.3%	5.5%	10.5%
1998-2007	13.5%	7.3%	6.2%	5.2%	8.3%
1999-2008	11.1%	7.2%	3.9%	5.1%	6.0%
2000-2009	15.7%	7.5%	8.2%	4.9%	10.8%
1956-2009 Average Median	12.1% 11.0%	7.6% 5.9%	4.5% 5.0%	7.8% 7.3%	4.3% 3.6%

Source:
Ibbotson Associates, Canadian Risk Premia Over Time Report 2010; Canadian Institute of Actuaries,
Report on Canadian Economic Statistics 1924-2006; TSX Review

10-YEAR ROLLING AVERAGE RETURNS FOR U.S. UTILITIES AND GOVERNMENT BONDS

	S&P/Moody's Gas Distributors Returns	S&P/Moody's Electric Returns	US Bond Total Returns	US Gas Risk Premium (Bond Total Returns)	US Electric Risk Premium (Bond Total Returns)	US Bond Income Returns	US Gas Risk Premium (Bond Income Returns)	US Electric Risk Premium (Bond Income Returns)
1947-1956	12.4%	10.4%	0.8%	11.5%	9.5%	2.5%	9.8%	7.8%
1948-1957	12.6%	12.6%	1.9%	10.8%	10.8%	2.7%	10.0%	10.0%
1949-1958	15.7%	16.3%	0.9%	14.8%	15.4%	2.7%	12.9%	13.6%
1950-1959	12.6%	14.3%	0.0%	12.6%	14.3%	2.9%	9.7%	11.4%
1951-1960	14.6%	16.0%	1.4%	13.2%	14.6%	3.1%	11.5%	12.9%
1952-1961	15.9%	17.2%	1.9%	14.0%	15.3%	3.3%	12.6%	13.9%
1953-1962	14.3%	15.4%	2.5%	11.9%	12.9%	3.4%	10.9%	11.9%
1954-1963	15.0%	15.5%	2.2%	12.8%	13.2%	3.5%	11.5%	12.0%
1955-1964	13.5%	14.7%	1.9%	11.6%	12.8%	3.7%	9.8%	11.0%
1956-1965	12.4%	13.7%	2.1%	10.4%	11.7%	3.8%	8.6%	9.9%
1957-1966	9.9%	13.0%	3.0%	6.9%	10.0%	4.0%	6.0%	9.1%
1958-1967	10.8%	11.7%	1.3%	9.5%	10.4%	4.1%	6.7%	7.6%
1959-1968	8.6%	8.7%	1.9%	6.7%	6.8%	4.3%	4.3%	4.5%
1960-1969	6.9%	6.9%	1.6%	5.2%	5.3%	4.5%	2.4%	2.4%
1961-1970	7.9%	6.0%	1.5%	6.4%	4.6%	4.7%	3.2%	1.3%
1962-1971	4.7%	3.3%	2.7%	2.1%	0.7%	5.0%	-0.3%	-1.6%
1963-1972	6.5%	3.6%	2.6%	4.0%	1.0%	5.2%	1.4%	-1.6%
1964-1973	3.8%	0.7%	2.3%	1.4%	-1.6%	5.4%	-1.7%	-4.7%
1965-1974	2.7%	-3.4%	2.4%	0.3%	-5.8%	5.7%	-3.0%	-9.1%
1966-1975	5.1%	1.4%	3.3%	1.9%	-1.9%	6.1%	-1.0%	-4.8%
1967-1976	11.4%	4.1%	4.6%	6.8%	-0.4%	6.5%	4.9%	-2.3%
1968-1977	11.4%	5.3%	5.4%	6.0%	-0.1%	6.7%	4.7%	-1.4%
1969-1978	9.4%	4.1%	5.3%	4.1%	-1.2%	7.0%	2.4%	-2.9%
1970-1979	14.6%	5.5%	5.7%	8.9%	-0.2%	7.2%	7.4%	-1.8%
1971-1980	14.7%	4.9%	4.1%	10.6%	0.8%	7.6%	7.1%	-2.7%
1972-1981	13.6%	6.7%	3.0%	10.6%	3.8%	8.1%	5.5%	-1.4%
1973-1982	12.0%	9.9%	6.4%	5.6%	3.4%	8.9%	3.2%	1.0%
1974-1983	17.1%	13.1%	6.6%	10.5%	6.5%	9.2%	7.9%	3.8%
1975-1984	18.7%	18.1%	7.7%	11.0%	10.4%	9.7%	9.0%	8.4%
1976-1985	18.2%	15.6%	9.9%	8.3%	5.7%	10.0%	8.2%	5.6%
1977-1986 1978-1987	15.9% 14.0%	16.0% 14.4%	10.7% 10.5%	5.3%	5.4% 3.9%	10.1% 10.2%	5.8% 3.8%	5.9% 4.2%
1979-1988	16.4%	16.5%	11.6%	3.6% 4.8%	4.9%	10.3%	6.1%	6.2%
1980-1989	17.1%	19.8%	13.5%	3.6%	6.3%	10.3%	6.8%	9.4%
1980-1989	13.9%	19.3%	14.5%	-0.6%	4.8%	10.1%	3.8%	9.4%
1982-1991	17.0%	20.3%	16.3%	0.7%	4.0%	9.8%	7.2%	10.5%
1983-1992	19.0%	17.3%	13.0%	5.9%	4.3%	9.2%	9.8%	8.2%
1984-1993	17.2%	17.3%	14.8%	2.5%	2.5%	8.9%	8.4%	8.4%
1985-1994	14.2%	13.5%	12.5%	1.8%	1.0%	8.3%	5.9%	5.1%
1986-1995	15.3%	14.0%	12.5%	2.8%	1.5%	8.0%	7.3%	6.1%
1987-1996	13.9%	11.2%	10.0%	3.9%	1.2%	7.7%	6.2%	3.5%
1988-1997	16.8%	14.6%	11.8%	5.0%	2.8%	7.6%	9.3%	7.0%
1989-1998	14.5%	15.2%	12.2%	2.3%	3.0%	7.2%	7.2%	8.0%
1990-1999	10.0%	10.2%	9.5%	0.5%	0.7%	6.9%	3.1%	3.2%
1991-2000	12.7%	15.8%	11.0%	1.7%	4.8%	6.8%	5.9%	9.1%
1992-2001	11.0%	12.3%	9.4%	1.6%	2.9%	6.5%	4.6%	5.8%
1993-2002	9.8%	10.6%	10.4%	-0.6%	0.2%	6.3%	3.5%	4.3%
1994-2003	10.1%	11.1%	8.7%	1.3%	2.4%	6.1%	4.0%	5.1%
1995-2004	12.8%	14.0%	10.4%	2.4%	3.7%	5.9%	6.8%	8.1%
1996-2005	9.6%	11.7%	8.0%	1.6%	3.7%	5.6%	3.9%	6.0%
1997-2006	10.7%	13.6%	8.2%	2.5%	5.4%	5.5%	5.2%	8.1%
1998-2007	8.8%	12.3%	7.6%	1.2%	4.7%	5.3%	3.5%	7.0%
1999-2008	9.6%	7.3%	8.9%	0.8%	-1.6%	5.2%	4.5%	2.1%
2000-2009	9.8%	10.4%	8.3%	1.5%	2.1%	5.0%	4.8%	5.4%
1956-2009	14 00/	10.99/	7.00/	A 99/	2 99/	6 F9/	E 20/	4 20/
Average Median	11.8% 12.0%	10.8% 10.3%	7.0% 5.0%	4.8% 7.0%	3.8% 5.3%	6.5% 6.3%	5.3% 5.7%	4.3% 4.0%

Source: Ibbotson Associates, *Stocks, Bonds, Bills and Inflation: 2010 Yearbook*; www.standardandpoors.com, Mergent Corporate News Reports, www.federalreserve.com

MARKET VALUE CAPITAL STRUCTURES FOR SAMPLE OF CANADIAN UTILITIES

	Debt and Preferred Shares at Par in Millions (December 2009)	Common Share Price Average High/Low Monthly Close 1/1/2010-5/25/2010	Common Shares Outstanding in Millions (December 2009)	Total Market <u>Capitalization</u>	Market Value Common <u>Equity Ratio</u>
Canadian Utilities	3,890	44.83	126	5,633	59.1%
Emera Inc.	2,865	24.08	113	2,709	48.6%
Enbridge Inc.	12,815	48.13	376	18,073	58.5%
Fortis Inc.	6,582	27.85	171	4,753	41.9%
Transcanada Corp.	18,351	35.68	684	24,395	57.1%
Mean				11,113	53.1%
Median				5,633	57.1%

MARKET VALUE CAPITAL STRUCTURES FOR BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES

	Debt and Preferred Shares at Par in Millions <u>\$</u> (December 2009)	Common Share Price Average High/Low Monthly Close 1/1/2010-5/25/2010	Common Shares Outstanding in Millions (December 2009)	Total Market Capitalization in Millions \$	Market Value Common Equity Ratio
AGL Resources	2,576	37.18	78	2,881	52.8%
Consolidated Edison	10,798	44.17	281	12,418	53.5%
New Jersey Resources	666	36.82	42	1,531	69.7%
Nicor Inc.	992	41.82	45	1,892	65.6%
Northwest Nat. Gas	704	45.32	27	1,202	63.1%
NSTAR	3,034	35.28	107	3,769	55.4%
Piedmont Natural Gas	1,099	26.49	73	1,941	63.9%
South Jersey Inds.	545	41.19	30	1,227	69.3%
WGL Holdings Inc.	900	33.85	50	1,697	65.3%
Mean				3,173	62.1%
Median				1,892	63.9%

Source: Annual Reports to Shareholders, Standard & Poor's Research Insight, <u>www.yahoo.com</u>

QUANTIFICATION OF IMPACT ON EQUITY RETURN REQUIREMENT FOR DIFFERENCE BETWEEN MARKET VALUE AND BOOK VALUE CAPITAL STRUCTURES: CANADIAN UTILITIES

Formula for After-Tax Weighted Average Cost of Capital:

WACC_{AT} = (Debt Cost)(1-tax rate)(Debt Ratio) + (Equity Cost)(Equity Ratio)

APPROACH 1:

The after-tax weighted average cost of capital (WACC_{AT}) is invariant to changes in the capital structure. The cost of equity increases as leverage (debt ratio) increases, but the

 $WACC_{AT(LL)} = WACC_{AT(ML)}$

Where LL = less levered (lower debt ratio)

ML = more levered (higher debt ratio)

ASSUMPTIONS:

Debt Cost	=	Market Cost of Long Term Debt for A rated utility
	=	6.45%
Equity Cost	=	CAPM Cost of Equity
	=	9.60%
Tax Rate	=	27.9%
CEQ Ratio	(1)	57.0%
Debt Ratio	(1)	43.0%
CEQ Ratio	(2)	40.0%
Debt Ratio	(2)	60.0%

STEPS:

1.	Estimate WACC _{AT} for the less levered sample	(common equity ratio of 57.0%)
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WACC_{AT} =
$$(6.45\%)(1-.279)(43.0\%) + (9.60\%)(57.0\%)$$

= 7.47%

2. Estimate Cost of Equity for sample at 40.0% common equity ratio with WACC AT unchanged at 7.47%

WACC_{AT} = (Debt Cost)(1-tax rate)(Debt Ratio) + (Equity Cost)(Equity Ratio)

7.47% = (6.45%)(1-.279)(60.0%) + (X)(40.0%)

Cost of Equity at 40.0% Equity Ratio = 11.70%

3. Difference between Equity Return at 57.0% and 40.0% common equity ratios

11.70% - 9.60% = 2.10% (210 basis points)

APPROACH 2:

After-Tax Cost of Capital Falls as Debt Ratio Increases; Cost of Equity Increases

Where LL,ML as before t = tax rate
D = debt ratio

ASSUMPTIONS:

Debt Cost	=	Market Cost of Long Term Debt for A rated utility
	=	6.45%
Equity Cost	=	Cost of Equity
	=	9.60%
Tax Rate	=	27.9%
CEQ Ratio	(1)	57.0%
Debt Ratio	(1)	43.0%
CEQ Ratio	(2)	40.0%
Debt Ratio	(2)	60.0%

STEPS:

1. Estimate WACC_{AT} for less levered sample (common equity ratio of 57.0%)

WACC_{AT} =
$$(6.45\%)(1-.279)(43.0\%) + (9.60\%)(57.0\%)$$

= 7.47%

2. Estimate WACC_{AT} for more levered firm (common equity ratio of 40.0%)

 $WACC_{AT(ML)} = WACC_{AT(LL)} x (1-t x Debt Ratio_{ML})/(1-t x Debt Ratio_{LL})$

WACC_{AT(ML)} =
$$7.47\%$$
 x $(1-.279 \times 60.0\%)$ $(1-.279 \times 43.0\%)$ WACC_{AT(ML)} = 7.07%

3. Estimate Cost of Equity at new WACC_{AT} for more levered firm:

$$WACC_{AT(ML)} = (Debt Cost)(1-tax rate)(Debt Ratio_{ML}) + (Equity Cost)(Equity Ratio_{ML})$$

 $7.07\% = (6.45\%)(1-.279)(60.0\%) + (X)(40.0\%)$

Cost of Equity at 40.0% Equity Ratio = 10.70%

4. Difference between Equity Return at 57.0% and 40.0% common equity ratios: 10.70% - 9.60% = 1.10% (110 basis points)

ESTIMATE OF IMPACT OF CHANGE IN CAPITAL STRUCTURE ON COST OF EQUITY 110-210 Basis Points (Midpoint of 160)

QUANTIFICATION OF IMPACT ON EQUITY RETURN REQUIREMENT FOR DIFFERENCE BETWEEN MARKET VALUE AND BOOK VALUE CAPITAL STRUCTURES: BENCHMARK SAMPLE OF U.S. DISTRIBUTION UTILITIES

Formula for After-Tax Weighted Average Cost of Capital:

 $WACC_{AT}$ (Debt Cost)(1-tax rate)(Debt Ratio) + (Equity Cost)(Equity Ratio)

APPROACH 1:

The after-tax weighted average cost of capital (WACC_{AT}) is invariant to changes in the capital structure. The cost of equity increases as leverage (debt ratio) increases, but the

 $WACC_{AT(LL)}$ WACC_{AT(ML)}

Where LL = less levered (lower debt ratio)

ML = more levered (higher debt ratio)

ASSUMPTIONS:

Debt Cost	=	Market Cost of Long Term Debt for A rated utility
	=	6.45%
Equity Cost	=	Midpoint of DCF-Based Risk Premium and DCF Cost of Equity Test Results
	=	9.55%
Tax Rate	=	27.9%
CEQ Ratio	(1)	64.0%
Debt Ratio	(1)	36.0%
CEQ Ratio	(2)	49.0%
Debt Ratio	(2)	51.0%

STEPS:

1.	Estimate WACC _{AT} for the	less levered sample	(common equity ratio of 64.0%)
	WACC _{AT}	=	(6.45%)(1279)(36.0%) + (9.55%)(64

(6.45%)(1-.279)(36.0%) + (9.55%)(64.0%)7.79%

2. Estimate Cost of Equity for sample at 49.0% common equity ratio with WACC_{AT} unchanged at 7.79%

> WACCAT (Debt Cost)(1-tax rate)(Debt Ratio) + (Equity Cost)(Equity Ratio)

> > 7.79% = (6.45%)(1-.279)(51.0%) + (X)(49.0%)

Cost of Equity at 49.0% Equity Ratio = 11.05%

3. Difference between Equity Return at 64.0% and 49.0% common equity ratios:

11.05% - 09.55% =

1.50% (150 basis points)

APPROACH 2:

Where LL,ML as before t = tax rate D = debt ratio

ASSUMPTIONS:

=	Market Cost of Long Term Debt for A rated utility
=	6.45%
=	Cost of Equity
=	9.55%
=	27.9%
(1)	64.0%
(1)	36.0%
(2)	49.0%
(2)	51.0%
	= = (1) (1) (2)

STEPS:

1. Estimate WACC_{AT} for less levered sample (common equity ratio of 64.0%)

WACC_{AT} =
$$(6.45\%)(1-.279)(36.0\%) + (9.55\%)(64.0\%)$$

= 7.79%

2. Estimate WACC_{AT} for more levered firm (common equity ratio of 49.0%)

$$WACC_{AT(ML)} = WACC_{AT(LL)} x (1-t x Debt Ratio_{ML})/(1-t x Debt Ratio_{LL})$$

WACC_{AT(ML)} =
$$7.79\%$$
 x $(1-.279 \times 51.0\%)$ $(1-.279 \times 36.0\%)$ WACC_{AT(ML)} = 7.42%

3. Estimate Cost of Equity at new WACC_{AT} for more levered firm:

$$WACC_{AT(ML)} = (Debt\ Cost)(1-tax\ rate)(Debt\ Ratio_{ML}) + (Equity\ Cost)(Equity\ Ratio_{ML})$$

$$7.42\% = (6.45\%)(1-.279)(51.0\%) + (X)(49.0\%)$$
 Cost of Equity at 49.0% Equity Ratio = 10.31%

4. Difference between Equity Return at 64.0% and 49.0% common equity ratios:

ESTIMATE OF IMPACT OF CHANGE IN CAPITAL STRUCTURE ON COST OF EQUITY Approximately 75 to 150 basis points (Midpoint of 112.5)

INDIVIDUAL COMPANY RISK DATA FOR SAMPLE OF HIGHER RISK U.S. GAS DISTRIBUTION UTILITIES

		Value Line				S & P ^{2/}		Moody's 2/	
	Safety	Common Equity Ratio 2013-2015	On Average Common Equity 2013-2015	Payout Forecast 2013-2015	2010 Q1 Beta	Calculated Weekly Betas ^{1/}	Business Risk Profile	Debt Rating	Debt Rating
Energen Corp.	2	75.0%	8.9%	16.5%	1.15	1.17	Satisfactory	BBB	Baa3
EQT	3	57.4%	13.0%	33.9%	1.15	1.18	Satisfactory	BBB	Baa1
National Fuel Gas Co.	2	66.7%	13.8%	40.0%	0.95	0.91	Satisfactory	BBB	Baa1
ONEOK	3	38.9%	12.8%	54.7%	0.95	1.05	Satisfactory	BBB	Baa2
Questar Corp	3	60.0%	16.8%	16.0%	1.20	1.39	Satisfactory	BBB+	A3
Mean	3	59.6%	13.1%	32.2%	1.08	1.14	Satisfactory	BBB	Baa1
Median	3	60.0%	13.0%	33.9%	1.15	1.17	Satisfactory	BBB	Baa1

^{1/ &}quot;Raw" betas calculated using weekly data against the NYSE Composite (260 weeks ending April 26, 2010).

Source: Standard and Poor's Research Insight, Value Line (March 2010), www.Moodys.com, www.yahoo.com, Standard and Poor's, Issuer Ranking: Midstream Energy, Strongest To Weakest (April 10, 2010) and

Standard and Poor's, Issuer Ranking: U.S. Natural Gas Distributors And Integrated Gas Companies, Strongest To Weakest (May 5, 2010).

^{2/} Rating information for Questar Corp. reflects ratings and business profile category for Questar Gas.

INVESTMENT, BUSINESS RISK AND RELEVERED BETAS FOR BENCHMARK AND HIGHER RISK U.S. GAS DISTRIBUTION SAMPLES

	BENCHMARK AND HIGHER RISH	Investment	Business Risk	Investment Beta	
	2005-2009 Average	(Adjusted)	(Unlevered)	(Relevered)	
Benchmark Sample	Common Equity Ratio	Beta	Adjusted Beta	at 50% Equity	
AGL Resources	41.3%	0.77	0.38	0.66	
Consolidated Edison	47.9%	0.63	0.36	0.61	
New Jersey Resources	50.3%	0.68	0.40	0.68	
Nicor Inc.	48.0%	0.80	0.45	0.77	
Northwest Nat. Gas	47.0%	0.64	0.35	0.61	
NSTAR	35.8%	0.68	0.30	0.51	
Piedmont Natural Gas	46.6%	0.69	0.38	0.65	
South Jersey Inds.	47.5%	0.67	0.37	0.64	
WGL Holdings Inc.	53.9%	0.70	0.43	0.74	
Average	46.5%	0.70	0.38	0.65	
Median	47.5%	0.68	0.38	0.65	
Higher Risk Gas Distribution Sa	mple				
Energen Corp	66.5%	1.11	0.82	1.40	
EQT Corp	46.2%	1.12	0.61	1.05	
National Fuel Gas Co	57.2%	0.94	0.61	1.05	
ONEOK Inc	30.1%	1.03	0.39	0.66	
Questar Corp	62.1%	1.26	0.87	1.50	
Average	52.4%	1.09	0.66	1.13	
Median	57.2%	1.11	0.61	1.05	
Incremental Beta - Average				0.48	
Incremental Beta - Median				0.40	

Source: Research Insight and www.yahoo.com