Utilities
2011 Generic Cost of Capital Proceeding
Application No. 1606549
Proceeding ID. 833

Information Response to:
Canadian Association of Petroleum Producers (CAPP) Information Request to Ms. Kathleen C. McShane (McShane)
Received: April 11, 2011

CAPP-McShane (ROE)-21

Reference: Analyst growth estimates, page 63-71 and Schedule 13.

Issue/Sub-Issue: Opinion Capital Structure and Return on Equity for the Alberta Utilities

Request:

(a) On page 63 and in Appendix B Ms. McShane discusses her DCF estimates based on US utilities and indicates that they are based on IBES analyst growth forecasts and a sustainable growth estimate. Please indicate any and all evidence that Ms. McShane is aware of that indicates that analyst growth forecasts are unbiased estimates of future growth rates rather than being optimistic.

(b) Can Ms. McShane confirm that in previous hearings she has confirmed the analyst optimism bias, but claimed instead that, regardless of the optimism, they affect security prices?

(c) Can Ms. McShane confirm that her Schedule 13 indicates that the average forecast growth rate in 2010 for her US utilities is 4.9% which means a DCF estimate of 9.3% and that this DCF estimate is 1.2% less than her 2009 DCF estimate of 10.50%?

(d) Please explain why the AUC should not take the drop in her US DCF estimate in (c) above as indicating that the financial crisis has passed and fair rates of return for low risk US utilities have dropped by 1.2%.

(e) Please run a simple regression of the average dividend yield against the long US treasury yield in Schedule 13 and discuss the result.

(f) Please run a simple regression of the IBES growth rate against the treasury yield in Schedule 13 and discuss the result.

(g) With her three stage growth model Ms. McShane assumes that these utilities will grow at the average growth rate of US GDP. Please indicate what this long run GDP growth rate is and provide all statistical work that supports the assumption that US utilities can grow at this rate.

(h) Further to (f) above, please provide the earnings per share, book value per share, dividend per share and net rate base per share for each of the utilities in her US proxy sample back to 1990 and the annual growth rate in each. Then please estimate a regression of the annual growth rate in each of these variables against the annual growth rate of US GDP and report the size of the coefficients and their significance.

(i) Please provide a table of the average arithmetic and compound growth rates for dividend, earnings and book value per share for each utility in (h) since 1990 and compare this with the same growth rate for US GDP and discuss in detail whether these US utilities have grown their dividend, earnings and book values at the GDP growth rate over the last 20 years.

(j) If the results in (i) above indicate that US utilities have not grown their dividends, earnings or book values at the average GDP growth rate, please discuss in detail why they are expected to perform better in the future than they have done in the past and why this would not be taken as indicative of analyst optimism.

(k) For each Canadian utility holding company in Ms. McShane's Schedule 11 please provide the annual dividend, earnings and book value per share back to 1990 where available and the source of the data.

(l) For each utility in (k) above contrast the average growth rate in dividends, earnings and book value per share with the average growth rate in Canadian GDP each year using arithmetic and compound growth rates.

Response:

(a) With respect to analyst optimism generally, Ms. McShane acknowledges that there are studies which have demonstrated that analysts' forecasts have tended to be optimistic. Analyst optimism became a high profile issue during the irrational exuberance phase of the technology boom during the 1990s, when analysts were accused of fueling the market by exaggerating the prospects of dot.com firms. This behaviour ultimately led in the U.S. to Regulation FD (Fair Disclosure) in 2000 and the Global Analyst Research Settlements of 2002 which removed incentives for sell-side analysts to curry favor with company management by issuing inflated earnings forecasts. One study, Armen Hovakimian and Ekkachai Saenyasiri, "Conflicts of Interest and Analyst Behavior: Evidence from Recent Changes in Regulation", Arizona State University, April 20, 2009, found that after the Global Settlement, the mean forecast bias declined significantly, whereas the median forecast bias essentially disappeared. There are also studies which have shown that analyst optimism is at least in part related to the difference between forecasting earnings for firms who report losses versus firms who report profits. For example, Jeffery Abarbanell and Reuven Lehavy, "Biased Forecasts or Biased Earnings? The Role of Reported Earnings in Explaining Apparent Bias and Over/Underreaction in Analysts' Earnings Forecasts", *Journal of Accounting and Economics 36* (2003), pages 105–146, found that while, on an average basis, there appeared to be a forecast bias, the median forecast error was zero. The same article cited an earlier study, Michael P. Keane and David E. Runkle, "Are Financial Analysts' Forecasts of Corporate Profits Rational?", *Journal of Political Economy 100* (1998), pages 768-805, which, when the authors eliminated observations from their data sample based on the size of negative special items "nearly eliminate evidence of mean optimism in their sample."

None of the studies have focused on utilities specifically. Given the greater transparency of the business model (e.g., regulatory filing requirements) of utilities relative to some other industries, the more stable operations of utilities, and the value rather than "glamour" nature of utility shares, analyst optimism should be less of an issue with utility earnings forecasts.

The potential upward bias of the I/B/E/S growth rates for the U.S. utilities was assessed in three separate ways. First, as discussed in the testimony, because utilities are quintessentially mature companies, it is reasonable to expect that investors would anticipate that, over the long-term, growth would parallel the long-term nominal rate of growth in the economy. In this context, the I/B/E/S forecasts were compared to the consensus forecasts of long-term growth. (See discussion in Appendix C, pages C-6). Updated to the most recent forecast (March 2011), the average expected long-term nominal rate of growth in the U.S. economy, based on consensus forecasts (Blue Chip *Economic Indicators*, March and October editions, 1995-2011), has been 5.2% over the same period covered by the DCF-based analysis. The similar expected nominal growth in the economy compared to the I/B/E/S forecasts suggests that the I/B/E/S forecasts are not upwardly biased.

Second, the I/B/E/S forecasts were compared to the long-term earnings forecasts for the same companies made by *Value Line*. (See discussion in Appendix C, pages C-6 to C-7) Again, the higher *Value Line* than I/B/E/S forecasts suggests that the I/B/E/S forecasts are not upwardly biased.

Third, allowed returns for U.S. utilities are derived primarily through reference to the results of the DCF model. Regulators in all jurisdictions, however, do not use

the same form of the DCF model. For example, some regulators may rely on the constant growth model, while others prefer to use a multi-stage growth model. In addition, even if different jurisdictions use the same form (e.g., constant growth) of the model, the inputs to the model are not necessarily derived in equivalent ways. For example, two jurisdictions may use the constant growth model but one may favor the use of forecast growth, while another may favor the use of historic growth rates. In the aggregate, however, across all jurisdictions, the differences in approach likely balance out, resulting in the allowed returns reflecting neither an upwardly or downwardly biased measure of the utility cost of equity as a result of the underlying growth assumptions. When the allowed returns for all U.S. utilities published by Regulatory Research Associates (RRA) are compared to the estimated constant growth and three-stage growth DCF costs of equity for the benchmark sample of U.S. utilities (over the same period 1995-2010), the comparison shows that the allowed returns for all U.S. utilities as reported by RRA exceeded the returns estimated using the various DCF models as follows:

Average 1995-2010		**Difference**
RRA Allowed Return	**10.9%**	**from RRA**
DCF Constant Growth	9.7%	-1.2%
DCF Three Stage Growth	9.9%	-1.0%

This comparison lends further support to the conclusion that the I/B/E/S forecasts have not been upwardly biased.

(b) Ms. McShane's response to CAPP McShane (ROE)-21 (a) represents the conclusions that she has reached with respect to the optimism of analysts' forecasts and is consistent with her testimony in previous cases.

(c) It is confirmed that Schedule 13, page 1 of 4 shows that the DCF as measured using the constant growth model with analysts' earnings forecasts in isolation suggests that the cost of equity is 1.2% lower in 2010 than it was in 2009, is similar to the 2008 level, and higher than it was in each year from 2004-2007.

(d) While Ms. McShane acknowledges that the worst of the financial crisis has passed, she disagrees with the premise of the question. First, the question implies that there was a full recognition in allowed ROEs of the increase in the cost of equity that occurred during the worst of the financial crisis, which was not the case. Moreover, she does not believe that the results of only one test should be used to determine a fair return on equity. Schedule 13, page 1 of 4 presents the results of only one of the tests (three risk premium tests and three different DCF models) used by Ms. McShane in determining the fair return on equity. Specifically, Schedule 13 presents the results of the DCF-Based Equity Risk Premium Test based on the constant growth model for the U.S. utilities. The application of the DCF-based risk premium test based on the three-stage model (Schedule 13, page 3 of 4) indicates a smaller change in the cost of equity from the height of the financial crisis.

As stated in Ex. 0086.01.ATCO UTL-833 McShane Capital Structure and ROE commencing at line 833:

> The key to determining the fair return on equity (i.e., ensuring that all three requirements of the fair return standard are met) is reliance on multiple

tests. There are three different types of tests that have traditionally been used to estimate the fair return on equity: equity risk premium (including, but not limited to, the Capital Asset Pricing Model), discounted cash flow and comparable earnings tests. Each of the tests is based on different premises and brings a different perspective to the fair return on equity. None of the individual tests is, on its own, a sufficient means of ensuring that all three requirements of the fair return standard are met; each of the tests has its own strengths and weaknesses. Individually, each of the tests can be characterized as a relatively inexact instrument; no single test can pinpoint the fair return. (footnote omitted). Moreover, different tests may be more or less reliable depending on prevailing economic and capital market conditions. (footnote omitted). These considerations not only emphasize the importance of reliance on multiple tests, but also of benchmarking, or testing the reasonableness of the test results themselves against other relevant information.

(e) The regression is as follows:

Dividend Yield = 1.67 + 0.59 (Long-Term Treasury Yield)
t-statistic: Long-Term Treasury Yield = 18.37
R^2 = 64%

The regression indicates that the dividend yield, in isolation, has increased and decreased by approximately 60% of the change in long-term Treasury bond yields.

(f) The regression is as follows:

IBES Growth Rate = 6.34 - 0.28 (Long-Term Treasury Yield)
t-statistic: Long-Term Treasury Yield = -7.84
R^2 = 24%

The regression indicates that the expected growth rate has been inversely related to the level of long-term Treasury bond yields.

(g) The growth component of a DCF model is intended to be an estimate of what investors expect the long-term growth to be and thus build into the prices they are willing to pay (and thus is embedded in the dividend yield component of the model). Ms. McShane's use of a 4.9% forecast long-term growth in the economy as a reasonable estimate of investors' expectations for long-term growth in earnings for mature industries is based on the link between corporate profits and GDP growth in the long-term. The two primary determinants of profit growth are growth in nominal GDP and unit labour costs. Nominal GDP measures the current dollar value of the goods and services produced in the economy. Simplistically, GDP less payments to labour, depreciation, plus income from abroad equals corporate profits. As long as labour costs are contained, increases in economic growth will be reflected in growth in profits. To Ms. McShane's knowledge, the conclusion that corporate profit growth will track GDP growth in the long-term is not contested.

However, industries and companies go through life cycles. During the different phases of the cycle, growth would reasonably be expected to differ from the long-term average. The phases of the life cycle include introduction (or initial growth), rapid growth, maturity and decline. In the first two phases, industry growth would be expected to outpace growth in the economy as a whole, and then in maturity stabilize at a level similar to that of the general economy. Decline is

characterized by falling demand for the industry's products and/or services. As noted at page C-6 (Appendix C), utilities are considered to be a quintessential mature industry.

Ms. McShane notes that the FERC adopted direct reliance on expected long-term growth in GDP as an input to its DCF model for gas pipelines. In Order 396-B (Northwest Pipeline Corp., June 11, 1997), the FERC cited the fact that all experts in the proceeding had relied on long-term GDP forecasts as support for, or confirmation of, their pipeline growth forecasts in their own DCF models. The development of their model was in part validated by the valuation practices of Merrill Lynch and Prudential Securities who relied on the growth in the economy as their estimate of long-term growth for all firms, including regulated firms.

(h) The requested information, including the regressions, is found in the attached file "CAPP-McShane ROE 21(h) Attachment 1". Ms. McShane does not have the requested data on net rate base per share.

(i) The requested information is found in the attached file "CAPP-McShane ROE 21(i) Attachment 1".

The annual historical growth rates in earnings per share, book value per share and dividends per share over that period were not significantly correlated with annual GDP growth. With respect to dividends, utilities tend to be conservative in raising them, as they do not want to risk having to reduce them. Thus the relatively low observed growth rates in dividends for the sample of U.S. utilities reflects the companies' conservative approach in raising dividends over time. Similarly, given that utilities will raise dividends only when they are confident the increases are sustainable, the lack of correlation of annual dividend growth rates

with annual growth rates in GDP, which vary widely over a business cycle, is understandable. With respect to earnings growth rates, the low annual correlation between annual earnings and GDP growth rates is not surprising, as the annual earnings of natural gas distribution utilities' (which account for the preponderance of the utilities in the sample) would have tended to fluctuate with weather. Annual rates of growth in earnings would also be impacted by regulatory decisions (e.g., changes in allowed ROEs) that are independent of the business cycle.

Over the period 1990-2010, the sample's annual growth in earnings per share was approximately 4.5%; that of book value per share approximately 4.3%; and dividends per share, approximately 2.7%. The lower growth rates relative to growth in GDP are consistent with a period characterized with generally declining interest rates and declining allowed returns. Allowed returns in the U.S. declined from approximately 12.7% in 1990 to approximately 10.2% in 2010 (Schedule 2, page 3 of 3). Such reductions are not compatible with earnings (and therefore dividends and book value per share) keeping pace with long-term economic growth.

(j) The utilities in the sample have been earning returns on equity of approximately 11.5%, and are expected to continue to earn returns on equity of approximately 11.5%. They are forecast to retain approximately 40% of earnings. With a small increment of growth from external financing, the indicated sustainable growth rate is approximately equal to the forecast long-term growth in GDP of 4.9%.

(k) The requested information is found in the attached file "CAPP-McShane ROE 21(k) Attachment 1". The source of the data is Standard & Poor's Research Insight.

(l) The requested information is found in the attached file "CAPP-McShane ROE 21(l) Attachment 1". The arithmetic average and compound average book value per share growth rates over the full period for the Canadian utility group have been higher than the corresponding growth in GDP, both including and excluding PNG. The average and median arithmetic average (excluding PNG, due to no meaningful calculation) and compound average growth rates in dividends per share (both including and excluding PNG) have been higher than the corresponding growth rates in GDP. The average and median arithmetic average growth rates in earnings per share (both including and excluding PNG) have been higher than the corresponding GDP growth rates. The average and median compound growth rates in earnings per share have been lower, but that is largely due to the sensitivity of the averages to the specific beginning and ending values. If the growth in earnings per share is measured from 1992 rather than from 1991, the average and median arithmetic and compound average growth rates in earnings per share (with and without PNG) exceed the corresponding growth rates in GDP.

Book Value Per Share

	ConEd	New Jersey Resources	Northwest	Piedmont	South Jersey	Vectren	WGL	Avg. BKVLPS
90	19.72	5.90	12.65	4.58	6.79	7.33	10.17	9.59
91	20.17	5.71	12.27	4.83	6.77	7.47	10.34	9.65
92	20.89	6.29	12.44	5.13	6.95	7.67	10.67	10.01
93	21.63	6.09	13.08	5.45	7.17	8.64	11.04	10.44
94	22.62	6.43	13.63	5.68	7.23	9.02	11.51	10.87
95	23.51	6.47	14.55	6.16	7.34	9.33	11.95	11.33
96	24.37	6.73	15.38	6.53	8.03	9.89	12.79	11.96
97	25.18	6.92	16.02	6.95	8.05	9.72	13.48	12.33
98	25.88	7.26	16.59	7.45	7.85	10.16	13.86	12.72
99	25.31	7.57	17.12	7.86	8.30	10.46	14.72	13.05
00	25.81	8.29	17.93	8.26	8.77	11.91	15.31	13.75
01	26.71	8.80	18.56	8.63	9.29	12.54	16.24	14.39
02	27.60	8.95	18.88	8.91	9.74	12.81	15.78	14.67
03	28.37	10.26	19.52	9.36	11.26	14.18	16.83	15.68
04	29.02	11.25	20.64	11.15	12.41	14.42	17.54	16.63
05	29.74	10.60	21.28	11.53	13.50	15.04	18.36	17.15
06	31.03	15.00	21.97	11.70	15.11	15.43	18.86	18.44
07	33.31	15.50	22.52	11.84	16.25	16.17	19.89	19.35
08	35.37	17.29	23.71	12.11	17.33	16.69	20.99	20.50
09	36.40	16.59	24.88	12.67	18.24	17.23	21.89	21.13
10	37.88	17.62	25.99	13.35	19.08	17.61	22.63	22.02

Growth Rate

Year	GDP	BKVLPS	DVD	EPS
91	3.3%	0.6%	2.8%	-18.5%
92	5.8%	3.7%	2.2%	17.3%
93	5.1%	4.3%	2.3%	21.6%
94	6.3%	4.1%	2.1%	1.3%
95	4.7%	4.2%	1.7%	1.0%
96	5.7%	5.6%	2.2%	14.8%
97	6.3%	3.1%	1.9%	-6.9%
98	5.5%	3.2%	2.0%	-4.3%
99	6.4%	2.6%	2.0%	12.5%
00	6.4%	5.4%	-0.8%	0.5%
01	3.4%	4.7%	5.2%	4.1%
02	3.5%	1.9%	1.9%	-3.7%
03	4.7%	6.9%	2.0%	11.7%
04	6.5%	6.1%	2.7%	0.6%
05	6.5%	3.1%	3.0%	14.6%
06	6.0%	7.5%	3.4%	2.2%
07	4.9%	4.9%	3.4%	8.0%
08	2.2%	5.9%	4.8%	8.2%
09	-1.7%	3.1%	4.7%	-14.2%
10	3.8%	4.2%	4.3%	19.2%
Slope (Beta)		17.8%	-41.3%	208.7%
RSq		4.4%	37.1%	14.8%

Dividends per Share

	ConEd	New Jersey Resources	Northwest	Piedmont	South Jersey	Vectren	WGL	Avg. DPS
90	1.82	0.65	1.10	0.42	0.70	0.66	1.01	0.91
91	1.86	0.67	1.13	0.44	0.70	0.69	1.04	0.93
92	1.90	0.68	1.15	0.46	0.70	0.72	1.07	0.95
93	1.94	0.68	1.17	0.49	0.72	0.75	1.09	0.98
94	2.00	0.68	1.17	0.52	0.72	0.78	1.11	1.00
95	2.04	0.68	1.18	0.55	0.72	0.81	1.12	1.01
96	2.08	0.70	1.20	0.58	0.72	0.84	1.14	1.04
97	2.10	0.72	1.21	0.61	0.72	0.87	1.17	1.06
98	2.12	0.73	1.22	0.65	0.72	0.91	1.20	1.08
99	2.14	0.75	1.23	0.69	0.72	0.95	1.22	1.10
00	2.18	0.77	1.24	0.73	0.73	0.74	1.24	1.09
01	2.20	0.79	1.25	0.77	0.74	1.03	1.26	1.15
02	2.22	0.81	1.26	0.80	0.76	1.07	1.27	1.17
03	2.24	0.84	1.27	0.83	0.78	1.11	1.28	1.19
04	2.26	0.88	1.30	0.86	0.82	1.15	1.30	1.22
05	2.28	0.92	1.32	0.92	0.86	1.19	1.32	1.26
06	2.30	0.97	1.39	0.96	0.92	1.23	1.35	1.30
07	2.32	1.03	1.44	1.00	1.01	1.27	1.37	1.35
08	2.34	1.15	1.52	1.04	1.11	1.31	1.41	1.41
09	2.36	1.27	1.60	1.08	1.22	1.35	1.46	1.48
10	2.38	1.38	1.68	1.12	1.36	1.37	1.50	1.54

Earnings Per Share Bef. Extraordinary 12 month moving average

	ConEd	New Jersey Resources	Northwest	Piedmont	South Jersey	Vectren	WGL	Avg. EPS
90	2.34	0.43	1.62	0.61	0.67	0.95	1.26	1.12
91	2.32	0.37	0.67	0.44	0.64	0.84	1.14	0.92
92	2.46	0.69	0.74	0.70	0.80	0.87	1.27	1.08
93	2.66	0.73	1.74	0.73	0.78	1.22	1.31	1.31
94	2.98	0.83	1.63	0.68	0.61	1.15	1.42	1.33
95	2.93	0.86	1.61	0.73	0.70	1.10	1.45	1.34
96	2.93	0.92	1.97	0.84	0.85	1.40	1.85	1.54
97	2.95	0.99	1.78	0.91	0.86	0.68	1.85	1.43
98	3.04	1.04	1.01	0.99	0.63	1.33	1.54	1.37
99	3.14	1.12	1.70	0.94	1.01	1.40	1.47	1.54
00	2.75	1.20	1.80	1.02	1.09	1.18	1.79	1.55
01	3.22	1.35	1.90	1.02	1.15	0.89	1.75	1.61
02	3.14	1.41	1.63	0.95	1.22	1.69	0.81	1.55
03	2.37	1.61	1.77	1.12	1.38	1.58	2.31	1.73
04	2.33	1.73	1.87	1.28	1.57	1.43	1.99	1.74
05	3.00	1.85	2.11	1.32	1.72	1.81	2.18	2.00
06	2.97	1.88	2.30	1.28	2.48	1.44	1.94	2.04
07	3.48	1.56	2.78	1.41	2.13	1.89	2.19	2.21
08	3.37	2.61	2.63	1.50	2.60	1.65	2.35	2.39
09	3.16	0.65	2.83	1.68	1.97	1.65	2.40	2.05
10	3.49	2.84	2.73	1.96	2.25	1.65	2.17	2.44

	Book Value Per Share		Dividends Per Share		Earnings Per Share	
1990-2010	Arithmetic Average Growth	Compound Growth	Arithmetic Average Growth	Compound Growth	Arithmetic Average Growth	Compound Growth
Consolidated Edison	3.3%	3.3%	1.4%	1.4%	2.6%	2.0%
New Jersey Resources	6.0%	5.6%	3.9%	3.9%	24.5%	9.9%
Northwest Natural Gas	3.7%	3.7%	2.2%	2.1%	8.5%	2.6%
Piedmont Natural Gas	5.6%	5.5%	5.0%	5.0%	7.1%	6.0%
South Jersey Industries	5.4%	5.3%	3.4%	3.4%	8.3%	6.3%
Vectren Corp	4.5%	4.5%	4.1%	3.7%	7.8%	2.8%
WGL Holdings	4.1%	4.1%	2.0%	2.0%	8.5%	2.8%
Sample Average	4.3%	4.2%	2.7%	2.7%	4.5%	4.0%

Arithmetic GDP Growth	4.8%
Compound GDP Growth	4.7%

Book Value Per Share

	Canadian Utilities	Emera	Enbridge	Fortis	PNG	Terasen	TransCanada	Avg. BKVLPS
90	7.08	NA	6.97	4.71	10.76	5.71	8.30	7.26
91	7.24	NA	2.89	5.01	11.61	6.73	9.68	7.19
92	7.59	NA	2.88	5.28	12.30	6.46	11.13	7.61
93	7.92	9.08	2.90	5.53	12.95	6.76	12.02	8.17
94	8.31	9.43	2.75	5.82	13.84	6.74	12.86	8.54
95	8.71	9.77	4.50	6.05	14.57	6.85	13.66	9.16
96	9.35	10.02	5.17	6.21	15.61	7.64	16.00	10.00
97	9.83	10.31	6.23	6.39	16.76	7.52	16.92	10.57
98	10.53	10.50	6.35	6.52	17.39	7.71	13.64	10.38
99	11.20	10.83	7.58	6.57	18.19	8.18	12.45	10.71
00	12.06	11.19	7.31	6.97	19.44	10.56	13.05	11.51
01	12.98	12.06	7.88	7.49	20.95	10.96	12.81	12.16
02	14.43	12.36	9.35	8.50	19.27	13.21	13.39	12.93
03	15.40	12.13	10.09	8.84	19.96	13.73	12.61	13.25
04	16.70	12.28	11.12	10.47	20.52	14.23	13.54	14.12
05	17.52	12.41	11.88	11.61	21.43	13.30	14.79	14.71
06	18.54	12.69	12.75	12.26	21.91	@NA	15.75	15.65
07	20.13	12.20	13.98	16.72	22.16	@NA	18.13	17.22
08	21.92	13.78	17.41	18.00	22.84	@NA	20.92	19.15
09	24.20	13.31	18.88	18.65	24.03	@NA	22.24	20.22
10	26.01	14.19	19.33	18.95	24.63	@NA	22.27	20.90

Note: Dividends Per Share data excludes special dividends.
Source: Standard & Poor's Research Insight

Dividends per Share

	Canadian Utilities	Emera	Enbridge	Fortis	PNG	Terasen	TransCanada	Avg. DPS
90	0.68	NA	0.50	0.36	0.75	0.41	0.66	0.56
91	0.69	NA	0.50	0.37	0.78	0.45	0.73	0.59
92	0.70	NA	0.50	0.37	0.80	0.45	0.78	0.60
93	0.71	0.75	0.50	0.39	0.88	0.45	0.86	0.65
94	0.72	0.76	0.50	0.41	0.88	0.45	0.94	0.66
95	0.73	0.78	0.50	0.42	0.94	0.45	1.02	0.69
96	0.74	0.80	0.51	0.43	0.96	0.45	1.10	0.71
97	0.78	0.81	0.53	0.44	1.00	0.49	1.18	0.75
98	0.82	0.82	0.57	0.45	1.10	0.55	1.18	0.78
99	0.86	0.83	0.60	0.45	1.12	0.58	1.12	0.79
00	0.90	0.84	0.63	0.46	0.56	0.61	0.80	0.69
01	0.94	0.85	0.70	0.47	0.00	0.65	0.90	0.64
02	0.98	0.86	0.76	0.49	0.00	0.71	1.00	0.68
03	1.02	0.86	0.83	0.52	0.80	0.77	1.08	0.84
04	1.06	0.88	0.92	0.54	0.80	0.83	1.16	0.88
05	1.10	0.89	1.04	0.59	0.80	0.90	1.22	0.93
06	1.15	0.89	1.15	0.67	0.80	@NA	1.28	0.99
07	1.25	0.90	1.23	0.82	0.80	@NA	1.36	1.06
08	1.33	0.96	1.32	1.00	0.88	@NA	1.44	1.16
09	1.41	1.03	1.48	1.04	0.96	@NA	1.52	1.24
10	1.51	1.16	1.70	1.12	1.14	@NA	1.60	1.37

Earnings Per Share Bef. Extraordinary 12 month moving average

	Canadian Utilities	Emera	Enbridge	Fortis	PNG	Terasen	TransCanada	Avg. EPS
90	NA	NA	NA	NA	NA	NA	NA	NA
91	0.90	NA	2.17	0.60	1.66	0.97	1.34	1.27
92	1.00	NA	0.48	0.64	1.55	0.26	1.56	0.91
93	1.04	1.07	0.51	0.64	1.63	0.72	1.62	1.03
94	1.11	1.10	0.27	0.62	1.80	0.47	1.60	0.99
95	1.19	1.11	0.58	0.63	1.67	0.58	1.75	1.07
96	1.34	1.05	0.73	0.59	2.01	1.27	1.85	1.26
97	1.43	1.07	0.79	0.60	2.16	0.64	1.14	1.12
98	1.50	0.99	0.83	0.46	1.73	0.93	0.85	1.04
99	1.58	1.16	0.96	0.56	1.92	1.06	0.95	1.17
00	1.80	1.20	1.16	0.63	1.83	1.42	1.37	1.34
01	1.87	1.20	1.32	0.89	1.52	1.11	1.44	1.33
02	2.41	0.85	1.05	0.97	1.20	1.23	1.56	1.32
03	2.05	1.20	2.02	1.06	1.49	1.28	1.66	1.54
04	2.44	1.18	1.93	1.07	1.41	@NA	2.02	1.68
05	2.09	1.12	1.65	1.35	1.75	@NA	2.49	1.74
06	2.57	1.14	1.81	1.42	1.27	@NA	2.15	1.73
07	3.08	1.36	1.97	1.40	1.11	@NA	2.31	1.87
08	3.30	1.29	3.67	1.56	1.53	@NA	2.53	2.31
09	3.71	1.56	4.27	1.54	1.72	@NA	2.11	2.49
10	3.46	1.68	2.60	1.65	1.88	@NA	1.78	2.18

	Book Value Per Share		Dividends Per Share		Earnings Per Share [3/]		Earnings Per Share [4/]	
1990-2010	Arithmetic Average Growth	Compound Growth	Arithmetic Average Growth	Compound Growth	Arithmetic Average Growth	Compound Growth	Arithmetic Average Growth	Compound Growth
Canadian Utilities	6.7%	6.7%	4.1%	4.0%	8.0%	7.4%	7.8%	7.1%
Emera Inc [1/]	2.7%	2.7%	2.6%	2.6%	3.7%	2.7%	3.7%	2.7%
Enbridge Inc	7.9%	5.2%	6.4%	6.3%	11.5%	0.9%	16.5%	9.9%
Fortis Inc	7.5%	7.2%	6.0%	5.8%	6.2%	5.4%	6.3%	5.4%
Pacific Northern Gas	4.3%	4.2%	NM	2.1%	2.1%	0.7%	2.6%	1.1%
Terasen Inc [2/]	6.2%	5.8%	5.4%	5.3%	20.6%	2.3%	29.1%	15.6%
TransCanada Corp	5.5%	5.1%	4.9%	4.5%	3.3%	1.5%	2.5%	0.7%
Average	**5.8%**	**5.3%**	**4.9%**	**4.4%**	**7.9%**	**3.0%**	**9.8%**	**6.1%**
Median	**6.2%**	**5.2%**	**5.2%**	**4.5%**	**6.2%**	**2.3%**	**6.3%**	**5.4%**
Average Without PNG	**6.1%**	**5.4%**	**4.9%**	**4.8%**	**8.9%**	**3.4%**	**11.0%**	**6.9%**
Median Without PNG	**6.5%**	**5.5%**	**5.2%**	**4.9%**	**7.1%**	**2.5%**	**7.0%**	**6.3%**

	1990-2010	1991-2010	1992-2010
Arithmetic GDP Growth	4.5%	4.7%	4.8%
Compound GDP Growth	4.4%	4.6%	4.8%

[1/] Growth Rates are from 1994 to 2010

[2/] Growth Rates are from 1990-2005 for Book Value and Dividends, and 1991-2003 for Earnings

[3/] Growth Rates are from 1991-2010

[3/] Growth Rates are from 1992-2010

Note: The compound earnings growth rates are sensitive to the beginning and ending years. For example, Enbridge Inc's compound earnings growth rates from 1992 to 2010 was 9.9%. Terasen Inc's compound earnings growth rate from 1992 to 2003 was 15.6%. TransCanada's compound earnings growth rate from 1998 to 2010 was 6.4%.

Note: Dividends Per Share Growth Rates exclude special dividends.

Note: Pacific Northern Gas eliminated dividends in 2001 and then reinstated them in 2003.