



Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities Volume IV, May 27, 2016

INTRODUCTION

Concentric Energy Advisors, Inc. (Concentric) is pleased to publish the fourth edition of this newsletter. Each edition summarizes the latest information available on authorized ROEs and common equity ratios for over 40 Canadian electric and gas utilities. For comparison purposes, the newsletter also presents the average and median authorized ROEs and common equity ratios for U.S. gas and electric distributors, as reported by SNL Financial's Regulatory Research Associates.

ROE

Concentric observes that while government bond yields in Canada and the U.S. continued to decline over 2015-2016, allowed ROEs, in general, have held near 2014 levels. We say this with a note of caution however as many important cases for 2016 remain pending. The relatively flat profile of ROEs over the past few years despite very low government bond yields is likely attributable to several factors.

Most jurisdictions in Canada have suspended their use of formulas tied directly to government bond yields. The one notable exception, Ontario, has a formula linked to both government bond yields and utility bond yields. Because the spread between government and utility bond yields has been increasing, this has partially offset the continued decline in government yields. As a result, the OEB's formula which produced a 9.85% ROE in 2010 when the long Canada bond input was 4.46%, produces a 9.19% ROE for 2016, based on a long Canada bond yield input of 2.70%.

Another factor has been the increasing use of the DCF model in Canada, more commonly employed by U.S. regulators. The DCF model is linked to utility dividend yields, and is therefore not directly tied to government bond yields. Where the CAPM is employed, analysts and regulators have recognized that central banks have depressed government bond yields, requiring some form of adjustment to produce reasonable results.

Additionally, our research has shown that the "equity risk premium" allowed by regulators over the government bond yield moves in an inverse relationship to interest rates. When interest rates are high, the risk premium is smaller, and vice versa. Significant changes in interest rates lead to corresponding changes in the equity risk premium. Some regulators also deliberately employ a philosophy of "gradualism" in order to moderate the impacts of volatile capital market conditions.

A notable trend over the past several years has been the closure of the gap that had developed between allowed ROEs for Canadian and U.S. utilities. At its peak in 2007-08, the difference was 141 basis points for gas distributors, and 164 basis points for electric distributors. By 2015, the difference had narrowed to 40 and 85 basis points, respectively. ROEs for Canadian electric transmission companies are 20 basis points lower than those awarded to Canadian electric distributors, and 123 basis points below those allowed U.S. electric distributors. All but AltaLink and ATCO are provincially or municipally owned corporations.

EQUITY RATIOS

The median authorized common equity ratio has declined slightly over the past few years in both Canada and the U.S. The gas distribution ratio is now 39.25% in Canada, vs. 50% in the U.S. The median electric distribution equity ratio is now 40% in Canada, and 50% in the U.S.¹ Electric transmission equity ratios remain at 36% in Canada.

The differences between allowed equity ratios in Canada and the U.S. seem attributable to a few factors. Regulators in both countries rely on peer group analysis, which reinforces prevailing levels of allowed equity ratios. Regulators also look for material differences in risk or financial metrics before changing the allowed equity ratio, so they tend to remain relatively stable. While credit rating agencies notice the greater leverage of Canadian companies, and rank some of these utility companies as "Aggressive" in terms of financial risk, most companies have been able to maintain A or A- level credit ratings, so the regulatory response has been muted.

Date: 6-20-17 Exh # 108
Regulatory Commission of Alaska
U-16-066 By: STW
Northern Lights Realtime & Reporting, Inc.
(907) 337-2221

¹ The median equity ratio for US electric distributors was 50%. There are not a sufficient number of 2016 electric rate case decisions at this time to allow for a valid comparison.



Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities Volume IV, May 27, 2016, p. 2

RECENT AND PENDING DECISIONS

In Ontario, the staff of the OEB reviewed the Board's cost of capital policy, and most notably its revised formula for setting ROE established in 2009. Based on its review, staff concluded "that the methodology adopted in late 2009 has worked as intended. Movement in the parameters have followed macroeconomic trends and activity, and have not resulted in excessive or anomalous volatility."² The Board determined that it would make no changes to its cost of capital policy at this time, although it held open the possibility of further consideration in the broader context of other initiatives.³

In Prince Edward Island, Maritime Electric recently settled on a three-year rate agreement with the Provincial government for a 9.35% ROE and average common equity ratio of 40.9% in 2016, and 40% in 2017 and 2018. The 9.35% represents a decline from its previous allowed average of 9.75%.⁴

There are several important pending cases that will be decided as the year progresses. In B.C., the Commission has heard evidence from FortisBC Energy, Inc. (FEI) and stakeholders on the allowed return and equity ratio for the company. The company's cost of capital was last set in the Commission's generic cost of capital proceeding in 2013. FEI has requested a 9.5% ROE on 40% common equity. A decision is expected in July and will be influential as FEI's ROE serves as the "benchmark" for other BC gas and electric utilities, and is used by the Yukon Utilities Board for similar purposes.

In Alberta, the Commission had previously determined generic ROEs and capital structures for 2013, 2014, 2015, and 2016 on an interim basis. In April 2015, the AUC initiated a generic cost of capital proceeding

to establish approved ROE and capital structures for the Alberta utilities for 2016 and 2017. Hearings are scheduled for late May and early June. Based on oral argument and reply over June 28 and June 29, 2016, the expected release date for the decision would be the last week of September, 2016.⁵

In Newfoundland, Newfoundland Power has filed for a 9.5% ROE and 45% equity ratio for the 2016/17 rate years. The company's cost of capital was last determined in 2012 at 8.8% on 45%.⁶ Hearings are complete, and a decision is expected later in 2016.

BOND YIELDS

Government and corporate bond yields are often considered, directly or indirectly, when setting authorized ROEs for utilities. As shown in the chart on page 4, the long-term government bond yields (considered the risk-free rate of return) in both Canada and the U.S. increased from mid-2012 through mid-2013, but have since resumed their prolonged decline. The aforementioned actions of central banks combined with modest economic growth and a low inflationary environment have driven bond yields steadily lower. Regulators and analysts have responded with a combination of adjustments, equilibrium level bond yields, and alternative models to account for these anomalous market conditions. Consensus forecasts call for increasing yields over the next several years, but a complex mix of international and North American factors will determine the actual path. In the interim, government bond yields remain a source of considerable uncertainty in financial markets, and regulatory proceedings.

² OEB Staff Report, EB-2009-0084, Review of the Cost of Capital for Ontario's Regulated Utilities, January 14, 2016, p. 1.

³ The OEB references its 2015-2018 Business Plan and a number of initiatives underway and planned for 2016 and beyond. These initiatives do not pertain directly to cost of capital, but cover various priorities under: Empowering Consumers; Enhancing Utility Performance; Enabling Access to Competitive Energy Choices; and Regulatory Effectiveness. (Enabling Ontario's Energy Future, Ontario Energy Board, 2015-2018 Business Plan). OEB Accompanying Letter, January 14, 2016.

⁴ Maritime Electric filing to the Island Regulatory & Appeals Commission, February 5, 2016, p. 9.

⁵ AUC 2016 Generic Cost of Capital (GCOC) Proceeding 20622, January 20, 2016.

⁶ Newfoundland Power – 2016/2017 General Rate Application, March 2016, pp 1-9.



Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities ¹

Return on Common Equity (%)

Common Equity Ratio (%)

2014 2015 2016 2014 2015 2016

Canadian Gas Distributors ²

AltaGas Utilities Inc. ³	8.30	8.30	8.30 ¹⁰	42.00	42.00	42.00 ¹⁰
ATCO Gas ³	8.30	8.30	8.30 ¹⁰	38.00	38.00	38.00 ¹⁰
Centro Gas Manitoba Inc.	N/A	N/A	N/A	30.00	30.00	30.00
Enbridge Gas Distribution Inc. ⁴	9.36	9.30	9.19	36.00	36.00	36.00
Enbridge Gas New Brunswick	10.90	10.90	10.90	45.00	45.00	45.00
FortisBC Energy Inc.	8.75	8.75	8.75 ¹¹	38.50	38.50	38.50 ¹¹
FortisBC Energy (Vancouver Island) Inc. ⁵	9.25	—	—	41.50	—	—
FortisBC Energy (Whistler) Inc. ⁵	9.50	—	—	41.50	—	—
Gaz Métro Limited Partnership	8.90	8.90	8.90	38.50	38.50	38.50
Gazifère Inc.	9.10	9.10	9.10	40.00	40.00	40.00
Hentage Gas Limited	11.00	11.00	11.00	45.00	45.00	45.00
Pacific Northern Gas Ltd.	9.50	9.50	9.50 ¹²	46.50	46.50	46.50 ¹²
Pacific Northern Gas (N.E.) Ltd. (Fort St. John/Dawson Creek)	9.25	9.25	9.25 ¹²	41.00	41.00	41.00 ¹²
Pacific Northern Gas (N.E.) Ltd. (Tumbler Ridge)	9.50	9.50	9.50 ¹²	46.50	46.50	46.50 ¹²
SaskEnergy Inc.	8.75	8.75	8.30	37.00	37.00	37.00
Union Gas Limited ⁶	8.93	8.93	8.93	36.00	36.00	36.00
Average	9.29	9.27	9.22	40.19	40.00	40.00
Median	9.25	9.10	9.10	40.50	39.25	39.25

U.S. Gas Distributors ⁷

Average of all Rate Cases Decided in the Year	9.78	9.60	9.53	51.25	49.93	51.02
Median of all Rate Cases Decided in the Year	9.78	9.68	9.50	51.90	50.48	50.00

Canadian Electric Distributors ²

ATCO Electric Ltd. ³	8.30	8.30	8.30 ¹⁰	38.00	38.00	38.00 ¹⁰
ENMAX Power Corporation ³	8.30	8.30	8.30 ¹⁰	40.00	40.00	40.00 ¹⁰
EPCOR Distribution Inc. ³	8.30	8.30	8.30 ¹⁰	40.00	40.00	40.00 ¹⁰
FortisAlberta Inc. ³	8.30	8.30	8.30 ¹⁰	40.00	40.00	40.00 ¹⁰
FortisBC Inc.	9.15	9.15	9.15	40.00	40.00	40.00
Hydro-Québec Distribution	8.20	8.20	8.20	35.00	35.00	35.00
Manitoba Hydro	N/A	N/A	N/A	25.00	25.00	25.00
Maritime Electric Company Limited	9.75	9.75	9.35	43.10	41.90	40.90
Newfoundland and Labrador Hydro ⁸	Pending	Pending	Pending	Pending	Pending	Pending
Newfoundland Power Inc.	8.80	8.80	8.80 ¹³	45.00	45.00	45.00 ¹³
Nova Scotia Power Inc.	9.00	9.00	9.00	37.50	37.50	37.50
Ontario's Electric Distributors ⁴	9.36	9.30	9.19	40.00	40.00	40.00
Saskatchewan Power Corporation	8.50	8.50	8.50	40.00	40.00	40.00
Average	8.72	8.72	8.67	38.63	38.53	38.45
Median	8.50	8.50	8.50	40.00	40.00	40.00

U.S. Electric Distributors ⁷

Average of all Rate Cases Decided in the Year	9.75	9.58	9.58 ¹⁴	50.57	49.04	49.04 ¹⁴
Median of all Rate Cases Decided in the Year	9.75	9.53	9.53 ¹⁴	50.14	50.00	50.00 ¹⁴



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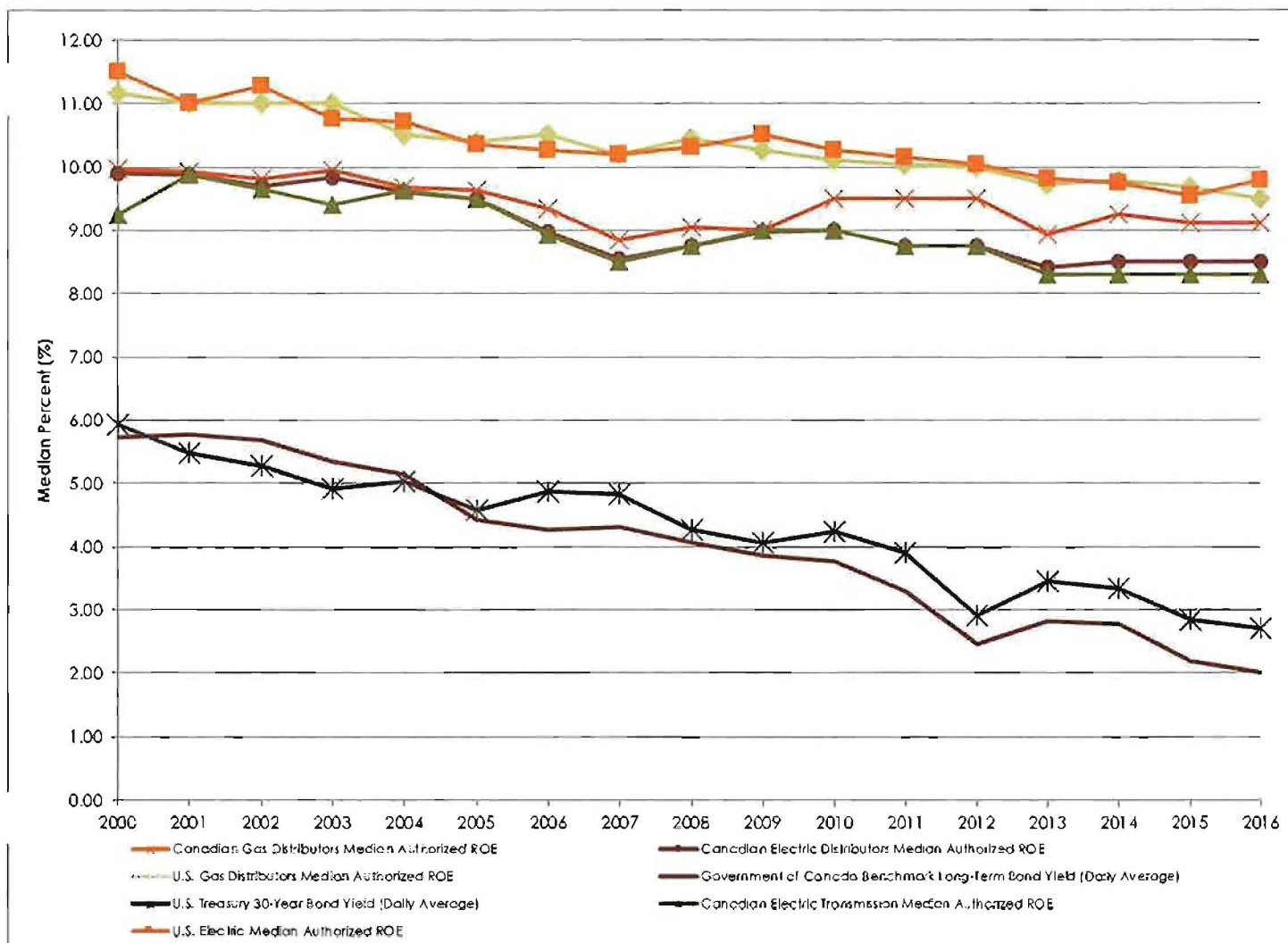
	Return on Common Equity (%)			Common Equity Ratio (%)		
	2014	2015	2016	2014	2015	2016

Canadian Electric Transmission Companies ²

AltaLink Management Ltd. ³	8.30	8.30	8.30 ¹⁰	36.00	36.00	36.00 ¹⁰
ATCO Electric Ltd. ³	8.30	8.30	8.30 ¹⁰	36.00	36.00	36.00 ¹⁰
ENMAX Power Corporation ³	8.30	8.30	8.30 ¹⁰	36.00	36.00	36.00 ¹⁰
EPCOR Transmission Inc. ³	8.30	8.30	8.30 ¹⁰	36.00	36.00	36.00 ¹⁰
Hydro One Networks Inc.	9.36	9.30	9.19	40.00	40.00	40.00
Hydro-Québec TransÉnergie	8.20	8.20	8.20	30.00	30.00	30.00
Average	8.46	8.45	8.43	35.67	35.67	35.67
Median	8.30	8.30	8.30	36.00	36.00	36.00

Economic Indicators (% Yields) ¹

	2014	2015	2016
Government of Canada Benchmark Long-Term Bond Yield	2.77	2.19	2.01
U.S. Treasury 30-Year Bond Yield	3.34	2.84	2.70
Bloomberg Fair Value Canada A-rated Utility Bond Yield	4.14	3.82	3.91
Moody's A-rated Utility Bond Index (U.S.)	4.27	4.12	4.13





NOTES

1. Data for an expanded group of Canadian gas transmission companies is contained in the Concentric Energy Advisors Return on Equity Database.
 2. Allowed in rates for the corresponding year; where the year overlaps, the rate/ratio shown prevails for the majority of the year. Sources: Regulatory decisions and documents; annual information forms; annual reports.
 3. The Alberta Utilities Commission's 2015 decision in the Generic Cost of Capital proceeding was retroactive. Returns on common equity and common equity ratios were adjusted for 2013–2015. This also affects the category averages for 2013–2015 as compared to those reported in previous years.
 4. Beginning in 2014, the Ontario Energy Board updates cost of capital parameters for setting rates in cost of service applications only once per year.
 5. FortisBC Energy (Vancouver Island) Inc. and FortisBC Energy (Whistler) Inc. were amalgamated with FortisBC Energy Inc. and are no longer separate entities in 2015.
 6. Union's ROE per settlement agreement in its five-year incentive regulation plan for 2014–2018.
 7. Source: SNL Financial LC's Regulatory Research Associates Division. Data for 2016 includes decisions through April 29, 2016.
 8. Newfoundland and Labrador Hydro (NLH) filed a General Rate Application (GRA) on July 30, 2013. A decision has not yet been issued on that GRA. The Company subsequently filed a request for interim rates that was denied by the Board in Order No. P.U. 39 (2014), issued September 17, 2014. On November 10, 2014, NLH filed an amended 2013 GRA based on changes to the previous 2014 test year and a new forecasted 2015 test year. That amended GRA remains pending before the Board.
 9. Average daily yield. Source: Bloomberg Finance L.P. Data for 2016 through April 29, 2016.
 10. Proceeding ID 20622, hearings scheduled June 2016.
 11. Final arguments filed, decision expected July 2016.
 12. ROE will adjust based on FEI decision.
 13. Final arguments filed on April 29, decision expected summer 2016.
 14. There are not a sufficient number of electric rate case decisions in 2016 to allow for valid comparison. Therefore, we have reported the 2015 average and median ROE and equity ratio.
- * N/A indicates the data are not available.

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