MARITIME ELECTRIC
A FORTIS COMPANY

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The Island Regulatory and Appeals Commission

February 1, 2019

Ms. Cheryl Mosher
Island Regulatory & Appeals Commission
PO Box 577
Charlottetown PE C1A 7L1

Dear Ms. Mosher:

General Rate Application - Docket UE20944
Response to Interrogatories from Laurence Booth

Please find attached the Company's response to Interrogatories from Laurence Booth with respect to the General Rate Application filed on November 30, 2018.

Yours truly,

MARITIME ELECTRIC

Gloria Crockett

Gloria Crockett, CPA, CA
Manager, Regulatory & Financial Planning

GCC02
Enclosure

IR-1 Please provide the following data for the regulated assets for each year since 2000 consistent with the values used by S&P in their ratings analysis:

a. EBIT
b. EBITDA
c. Net interest expense
d. Net income
e. FFO and explain deviations from EBITDA
f. Total debt
g. Total common equity
h. Debt to EBITDA from b) and f)
i. FFO to Total debt from e) and f)
j. Interest coverage ratio
k. Please explain any significant deviations between the data in a)-j) used by S&P versus the regulated accounts.

Response

Tables reconciling Annual results reported by MECL to the S & P adjusted amounts are provided as IR-1 - Attachment 1 for years 2012 – 2017. Maritime Electric (“MECL”) does not have the information available prior to 2012. S & P only keeps seven years of information in their database.

IR-2 Please provide the regulated ROE and actual ROE for each year since 1990 and explain any material differences between the two outside of a +/- 0.50% band. When MEC was under the terms of the Accord or its equivalent please use the last allowed ROE.

Response

Regulated and actual ROE since 1990 have been provided in IR-2 - Attachment 1. An electronic copy is submitted as well. As shown in the attachment, there were no years where there were differences between the outside of a +/- 0.50% band.

IR-3 MEC discusses its use of deferral accounts in Section 5. Please indicate whether MEC has ever requested and then been denied a deferral or variance account since 2000 and provide a brief synopsis of the reasons why it was denied and reference the decision order.

Response

Relative to other utilities in Canada and the U.S., MECL does not have a significant number of deferral accounts. However, for those deferrals requested, the Commission has recognized the value from a customer rate setting perspective and has granted approval.

Below is a summary and brief description of approved regulatory deferral accounts.

Weather Normalization (UE16-04)
A Weather Normalization Reserve was approved on an interim basis in 2016 pursuant to IRAC Order UE 16-04 that represents the cumulative change in the contribution margin (average selling price less average cost of energy purchased) resulting from variations in Heating Degree Days (HDD) from normal. The weather normalization adjustment reflects the impact on sales caused by variances in HDD.

Costs Recoverable from Customers (UE05-05)
The Company maintains an Energy Cost Adjustment Mechanism account that adjusts for the variability of energy-related costs by deferring costs for future recovery from, or return to, customers above or below an approved base, reducing the impact on customers electricity rates and the Company's earnings that would otherwise result from such fluctuations in energy-related costs.

Point Lepreau (UE05-08)
In 2001, the Company recorded a deferred asset of approximately $5.9 million with respect to the $450 million write-down of Point Lepreau Generating Station (the "Station") in 1998 by New Brunswick Power Corporation, subject to a Unit Participation Agreement between the two Companies. Under the provisions of the Electric Power Act, effective January 1, 2004, the Company is permitted to recover these deferred costs but under such terms, timelines and conditions as IRAC determines. IRAC has issued two Orders permitting the continued amortization of the deferred asset based on the Station's estimated useful life.

Demand Side Management (UE15-02 & UE16-04)
Included in regulator approved customer rates are demand side management and energy efficient program costs. These amounts being collected from customers are deferred and will be used to fund efficiency programs administered by the PEI Energy Corporation or other approved legislative agency as directed by IRAC.

Deferred Post-Employment Benefits (UE14-02)
Pursuant to an Order by IRAC, the recognition of the 2013 transitional impact associated with the adoption of the CPA Canada Handbook Section 3462 – Employee Future Benefits effective January 1, 2014, is to be deferred as a regulatory asset or liability on the Company's balance sheets. Pursuant to the Order, for 2014 and future years, the Company is to continue deferring actuarial gains or losses and use the corridor approach in calculating the annual employee

future benefit expense. Under this approach, deferred actuarial gains or losses are recognized into income if the unamortized balance at the beginning of the year is higher than 10 per cent of the net post-employment benefits liability balance. Any deferred actuarial gain or loss exceeding this threshold and any past service costs are recognized in earnings over the average remaining service period of the relevant group of employees.

Future Site Removal and Restoration Provision (UE16-04)
The provision for site removal and restoration costs represents the amount collected in customer electricity rates for removal and site restoration costs associated with regulated capital assets that are expected to be incurred in the future. Amortization expense includes an amount allowed for regulatory purposes for these future removal and site restoration costs. Actual costs of removal and restoration, net of salvage proceeds, are recorded against this balance when incurred.

Rate of Return Adjustments (UE11-04 & UE16-04)
Rate of Return Adjustments (RORA) represent deferrals with respect to earnings above the allowed regulated rate of return on common equity that is being returned to customers through rates.

There are two deferral accounts. RORA-Pre 2016 represents earnings above the allowed regulated rate of return on average common equity prior to 2016. The balance as at December 31, 2015 is being refunded to customers through rates over the period March 1, 2016 to February 28, 2019.

RORA-Post 2015 represents earnings above the allowed regulated rate of return on average common equity after December 31, 2015. It shall be refunded to ratepayers commencing March 1, 2019, or as directed by IRAC.

Capital Asset Review Reserve (UE12-01)
The Capital Asset Review Reserve relates to a deferral approved by IRAC at the Company's request with respect to the estimated potential income tax benefit associated with amendments to the Company's income tax returns for the years 2007 to 2010. This deferral will remain until the amendments filed in 2012 by the Company are confirmed by the Canada Revenue Agency.

IR-4 MEC provides its latest S&P bond report in Appendix 12. Is MEC aware that unless a subsidiary is ring fenced S&P generally will not rate an operating subsidiary higher than its parent? If so:

a. Please discuss what measures MEC has considered to ring fence MEC from its ultimate parent Fortis.

b. Please indicate why MEC does not have a bond rating from DBRS and whether it is aware that DBRS does not have the same policy toward parent-subsidiary ratings as S&P.

c. Has MEC ever had a DBRS bond rating? If so, please provide the DBRS and equivalent S&P report from the same point in time. If the S&P rating resulted from its takeover of CBRS, please provide the CBRS report instead and indicate whether MEC's rating was changed on S&P's acquisition of CBRS.

Response

S&P's criteria for rating members of a corporate group are detailed in its Group Rating Methodology ("GRM"), published November 19, 2013 and included with this response as IR-4 – Attachment 1. As explained further below, the application of these criteria to Maritime Electric ("MECL") indicates that the Company's rating is not constrained by its membership in the Fortis Group of Companies and the related group credit profile ("GCP").

The S&P GRM follows six steps[1] in determining the issuer credit rating on a member of a corporate group. Following these steps in relation to MECL's most recent Ratings Report[2], S&P have assessed the Fortis GCP as A^- which is one notch above MECL's stand-alone credit profile ("SACP") of BBB^+ as discussed in the Ratings Report. Since the Company's SACP is rated below that of the Fortis GCP as outlined in the Ratings Report, MECL is not constrained by the S&P GRM.

In fact, MECL has historically benefited from its membership in the Fortis group of companies and its status under the GRM as "moderately strategic"[3]. Prior to 2016, MECL's Ratings Reports showed a SACP of BBB but, as a moderately strategic member of the Fortis group, the Company received a one notch upgrade to BBB^+. This upgrade was last assigned by S&P in its March 31, 2015 Ratings Report for MECL which is included with this response as IR-4 - Attachment 2.

In its March 29, 2016 Ratings Report, included with this response as IR-4 – Attachment 3, S&P upgraded the Company's SACP from BBB to BBB^+ and changed its outlook from negative to stable. As noted in the Ratings Report, these improvements in the Company's SACP and outlook mean that a negative rating action on Fortis is unlikely, to impact MECL's rating and, under the GRM, a one notch upgrade associated with the moderately strategic status no longer

1 IR-4 – Attachment 1: S&P Group Rating Methodology, par. 12
2 General Rate Application filing November 30, 2018: Appendix 12
3 IR-4 – Attachment 1: S&P Group Rating Methodology, Table 1 and par. 60

applies[4]. This still does not represent a constraint to MECL's rating as its SACP, at BBB^+ remains less than the A^- Fortis GCP.

This separation or independence of MECL's rating is clearly illustrated in S&P's Ratings Report on Fortis Inc. dated March 21, 2018, included with this response as IR-4 – Attachment 4. In this Ratings Report, S&P changed its outlook on Fortis Inc. and certain subsidiaries from Stable to Negative; however, as a moderately strategic subsidiary with a BBB^+ rating, under the S&P GRM MECL was not impacted by this change.

MECL's most recent S&P Ratings Report, dated April 3, 2018, confirmed the Company's SACP at BBB^+ with a stable outlook which is one notch below the Fortis GCP of A^-. Under the S&P GRM, the Company's rating is therefore not impacted or constrained by the rating of the Fortis Inc. GCP.

a. Ring fencing refers to the extent to which the assets of MECL are segregated and protected from its parent, Fortis Inc. As an indirect wholly owned subsidiary, Fortis is the sole shareholder of MECL. However, Fortis is not a holder of debt securities of MECL, only the common equity of MECL, and as such has no security interest in, or to, the assets of MECL.

   All of the electric and gas utility subsidiaries owned by Fortis are operated and financed on a stand-alone basis. This approach supports the individual utility's independent credit profile and competitive access to capital. It also provides transparency under the regulatory process.

   This stand-alone approach to ownership is accomplished by utilizing a local executive team employed by the utility reporting to its own board of directors that has local representation. The Company is therefore responsible for managing its financial structure and performance, establishing its own access to the capital markets and meeting all regulatory requirements.

   MECL's sole source of long-term debt financing is conducted through the issuance of First Mortgage Bonds under a Deed of Trust and related Supplementary Deeds of Trust for each subsequent First Mortgage Bond series issued. First Mortgage Bonds are secured by a first, fixed and specific charge on property, plant and equipment pledged as part of the issuance and by a floating charge on all other assets.

   Under the Electric Power Act, all First Mortgage Bonds must be approved by IRAC prior to issue. As part of the approval process, the Commission sets out the conditions upon which the issue may be conducted (term, maximum amount, setting of the coupon rate) and these must be complied with and cannot be changed without further approval by IRAC.

   The Electric Power Act also contains a number of provisions governing the issuance of equity, the minimum amount of equity to be retained at all times in MECL and provisions prohibiting the sale, assignment, transfer, lease, mortgage or otherwise disposal of assets of MECL or the franchise right to operate as a public utility without the approval of

[4] IR-4 – Attachment 1: S&P Group Rating Methodology, par. 74

IRAC. These provisions protect the public interest of rate payers ensuring sufficient levels of equity are retained and assets are supported.

For example, the Electric Power Act requires MECL to maintain at least 35% in common equity at all times and a maximum of 40% average common equity for the year. As a result, these provisions of the EPA strongly influence the Company's approach to managing its capital structure through dividend payments. Legislatively, MECL is bound to set dividend payments at levels that ensure the Company's capital structure remains compliant with the Electric Power Act. Fortis is therefore prevented from having a material influence on MECL's dividend policy.

Based upon these factors, the Company is both structurally and legislatively insulated from significant influence from its parent.

b. Since MECL's credit rating is not impacted or constrained by its membership in the Fortis group, it does not consider the incremental cost of a second rating from DBRS to be a prudent expenditure.

c. MECL does not have record of a bond rating from DBRS.

IR-5 Please provide MEC's annual earnings per share and dividend per share for each year since 1990 and indicate any changes in the dividend policy following its acquisition by Fortis and its delisting from the Toronto Stock Exchange.

Response

Annual earnings per share and dividends per share for each year since 1990 have been provided in IR-2 - Attachment 1. An electronic copy is submitted as well. Maritime Electric does not have a formal dividend policy (before or after its acquisition by Fortis). The amount of dividends declared in any given year is a function of maintaining its capital structure within the legislated range as required under the Electric Power Act.

IR-6 Consistent with the data in 5) above, please provide the annual book value per share and calculate the compound growth rate in dividends per share, earnings per share and book value per share since 1990.

Response

Annual book value per share for each year since 1990 have been provided in IR-2 - Attachment 1 as well as the requested compound growth rates on dividends per share, earnings per share and book value per share. An electronic copy is submitted as well. The calculated growth rates are shown below.

CAGR - Regulated Dividends per Share	-0.38%
CAGR - Regulated Earnings per Share	0.64%
CAGR - Regulated Book Value per Share	10.59%

IR-7 In Manitoba the *Affordable Utility Rate Accountability Act* of 2012 requires the following:

> *Report on comparison of utility costs*
> *1 For each fiscal year ending after 2012, the Minister of Finance must engage an independent accounting firm to prepare a report that, for each province of Canada, lists a comparable cost, determined in accordance with the regulations, of a utility bundle consisting of*
> *(a) electricity for home use;*
> *(b) natural gas for home heating; and*
> *(c) automobile insurance.*

Please provide a copy of the last survey (May 1, 2017) and provide equivalent data for a Charlottetown resident to that contained on page 3 of the survey.

Response

The Company contacted the Manitoba Department of Finance and was informed that the Affordable Utility Rate Accountability Act was repealed in 2017 and no survey or report has been prepared since 2015.

The Company has no record of receiving or participating in the requested survey.

IR-8 In its Natural Gas Annual Review for 2018, the Canadian Gas Association (http://www.cga.ca/publication/natural-gas-annual-review-2018/) estimates residential space and water heating costs across Canada for 2017. Please provide an equivalent table for MEC comparing electricity (heat pump or regular service) with the most competitive alternatives.

Response

The following table provides a comparative table for MECL to the Canadian Gas Association estimate of residential and water heating costs across Canada for 2017:

2017 Residential Space and Water Heating Costs							
	Canadian Gas Association for Canada			**Estimate for PEI/MECL**			
			Energy			**Sales Tax**	
	($)	**($/GJ)**	**(GJ)**	**($/litre)**	**($/GJ)**	**(%)**	**($)**
Natural gas	1,148	8.75	131.2	n/a	n/a		n/a
Propane	3,670	27.98	131.2	0.762	30.66	15	4,625
Electric resistance	3,736	33.38	111.9		34.78	15	4,477
Heating oil	3,595	26.32	136.6	0.780	20.42	5	2,929
Heat pump	2,280	33.38	68.3		36.78	15	2,889

An electronic copy is provided as well – see IR-8 – Attachment 1.

Notes:

1. Canadian Gas Association data is from their "Natural Gas Annual Review 2018";
2. Propane and heating oil prices for PEI are average of monthly IRAC posted maximum prices for 2017;
3. Higher heating value of 23,555 Btu/litre used for propane;
4. Electric resistance heating assumed to be 100 % efficient; 111.9 GJ corresponds to 31,086 kWh;
5. Higher heating value of 36,200 Btu/litre used for heating oil (i.e. furnace oil);
6. Btu conversion factor of 3412 Btu per kWh;
7. Sales tax rates used are those in effect in 2017. Effective July 16, 2018, the Province of PEI implemented the Clean Energy Price Incentive which provides eligible year-round Residential class customers with a 10% rebate on the first 2,000 kWh per month of energy consumed. The rebate also applies to propane heating for residents of P.E.I.
8. Electricity $/GJ costs based on Maritime Electric March 1, 2017 Residential Rate energy charges as follows:

   First block: $0.1396/kWh for first 2,000 kWh in month
   Second block: $0.1108/kWh for kWh in excess of 2,000 for the month

   First block/second block split for space heating based on average monthly heating degree days.

   Water heating assumed to be all first block. Overall average $/GJ costs estimated as follows:

Electric resistance:
$0.1396/kWh x 0.50 + $0.1108 x 0.50 = $0.1252/kWh

Heat pump:
$0.1396/kWh x 0.75 + $0.1108 x 0.25 = $0.1324/kWh

				Electric Resistance Space Heating		
	Average HDD	Lights & Appliances (kWh)	Water Heating (kWh)	Space heating (kWh)	First Block (kWh)	Second Block (kWh)
Jan	758	500	500	4,352	1,000	3,352
Feb	689	500	500	3,955	1,000	2,955
Mar	657	500	500	3,773	1,000	2,773
Apr	433	500	500	2,485	1,000	1,485
May	258	500	500	1,479	1,000	479
Jun	119	500	500	681	681	-
Jul	19	500	500	107	107	-
Aug	19	500	500	109	109	0
Sep	102	500	500	585	585	-
Oct	272	500	500	1,560	1,000	560
Nov	427	500	500	2,454	1,000	1,454
Dec	617	500	500	3,546	1,000	2,546
	4,367	6,000	6,000	25,086	9,483	15,603
	Space and water heating:			first block	50%	
				second block	50%	

				Heat Pump Space Heating		
	Average HDD	Lights & Appliances (kWh)	Water Heating (kWh)	Space Heating (kWh)	First Block (kWh)	Second Block (kWh)
Jan	758	500	500	2,251	1,000	1,251
Feb	689	500	500	2,045	1,000	1,045
Mar	657	500	500	1,951	1,000	951
Apr	433	500	500	1,285	1,000	285
May	258	500	500	765	765	0
Jun	119	500	500	352	352	0
Jul	19	500	500	56	56	-
Aug	19	500	500	56	56	0
Sep	102	500	500	303	303	-
Oct	272	500	500	807	807	-
Nov	427	500	500	1,269	1,000	269
Dec	617	500	500	1,834	1,000	834
	4,367	6,000	6,000	12,974	8,339	4,635
	Space and water heating:			first block	76%	
				second block	24%	

IR-9 When MEC raises debt capital, in the judgment of the Company do investors buy the debt based on its corporate credit rating of BBB+ or its issue rating recognising the fact that MEC issues first mortgage bonds?

Response

When MECL raises debt, the Company will provide various types of information including ratings reports as well as financial and operational information to assist potential investors in making their investment decision. The ratings reports provided to potential investors includes both the corporate credit rating and issue rating.

The issue rating assigned to MECL's First Mortgage Bonds ("FMB") is derived by application of S&P's published criteria: "Collateral Coverage and Issue Notching Rules for '1^+' and '1^-' Recovery Ratings on Senior Bonds Secured by Utility Real Property," included with this response as IR-9 - Attachment 1. Under this criteria, a 1^+ recovery rating is assigned to a FMB when the level of collateralization meets or exceeds 150% as is required under the Company's Trust Deed governing the issuance of FMB. As a BBB category utility with a 1^+ recovery rating, the issue rating for MECL receives a two notch increase to A- under the S&P criteria.

Since the issue rating is linked to the Company's corporate credit rating and since other financial and operation information is provided to potential investors during the course of a FMB issue, the Company is unable to comment on the degree of consideration given to any of these components by the potential investors in their decision to invest in MECL FMBs.

IR-10 Please indicate and provide copies of any materials provided to Mr. Trogonoski or Concentric Energy Advisors, Inc. so that he could form his opinion on MEC's fair rate of return and financial structure.

Response

Concentric relied on the following information from Maritime Electric to develop their report:

1. S&P credit reports for Maritime Electric dated in April 2017;

   This is provided as IR-10 – Attachment 1 for this response.

2. S&P credit reports for Maritime Electric dated in April 2018;

   This is provided as IR-10 – Attachment 2 for this response.

3. Final 2017 financial results for MECL;

   This is provided as IR-10 – Attachment 3 for this response.

4. 2017 energy supply data for MECL (Figure 23 of report);

Figure 23 **Maritime Electric Energy Supply in 2017 MWh**	
On Island Oil Fired Generation	1,794
On Island Wind Generation	292,713
Point Lepreau	228,990
System Purchases NB Power	774,991

   The amounts in Figure 23 come from an internal report called the Summary of Generation and Purchase for 2017. A copy of the report will be provided in a confidential basis upon receipt of an executed non-disclosure agreement.

5. Details on planned decommissioning of CTGS;

   The following information was provided to Mr. Trogonoski in April 2018:

   > We are planning on de-commissioning the 55 MW Charlottetown Thermal Generating Station which consists of 5 generators over the next few years. The three combustion turbines totaling 90 MW remains. With the installation of the two 200 MW submarine cables from Cape Tormentine last fall, we don't expect there will be any electricity supply constraints.

6. Estimate provided by MECL Corporate Planning department in April 2018 was a 1% increase in annual load growth over the near term. Note: This estimate was revised to between 1.6% to 2.6% as discussed in Section 7.2 of the evidence.

7. Percentage of customers using electricity for space heating;

   Estimate provided by MECL Corporate Planning department in August 2018 is that 30% of Maritime Electric customers use electricity for heating.

8. Earned ROE data for 2017 in Figure 19 of report; and

   Calculation from December 2017 monthly report is provided as IR-10 – Attachment 4 to this response.

9. Legislated range of 35-40% for MECL's common equity ratio.

   As per Electric Power Act.

Interrogatories to Mr. John Trogonoski and Concentric Energy Advisors, Inc.

IR-11 Mr. James Coyne of Concentric Energy Advisors, Inc. ("Concentric") provided an opinion on Newfoundland Power's fair ROE and common equity ratio in evidence dated June 2018. Please indicate Mr. Coyne's involvement in Mr. Trogonoski's current evidence on behalf of MEC dated November 27, 2018 and any substantive differences in the approach taken by Mr. Trogonoski versus that taken by Mr. Coyne.

Response

The cost of capital report for Maritime Electric was written by Mr. Trogonoski, and the supporting exhibits and analyses were prepared by Mr. Trogonoski or under his direction. Mr. Coyne reviewed the draft report and provided suggested edits and comments; he participated on calls with Maritime Electric to discuss the Company's business and financial risks; and he provided thoughts on the proposed earnings sharing mechanism and guidance on where to find information regarding common deadbands.

There are two substantive differences in the ROE analysis performed by Mr. Trogonoski versus the approach generally taken by Mr. Coyne:

1. Mr. Trogonoski placed less weight on the results of the multi-stage DCF analysis for the reasons discussed in the report; and

2. Mr. Trogonoski did not use Value Line growth rates because they are from an individual analyst rather than a consensus forecast of EPS growth.

IR-12 Please indicate whether Mr. Trogonoski has ever filed joint testimony with Mr. Coyne before a Canadian regulator and if so, please indicate the company and the hearing details.

Response

Yes, Mr. Trogonoski filed joint testimony with Mr. Coyne on behalf of Hydro Quebec Distribution ("HQD") and Hydro Quebec TransEnergie ("HQT") before the Regie de l'energie in Quebec in April 2013. As indicated on page 1 of that report, Mr. Trogonoski sponsored evidence regarding the assessment of business and financial risk, while Mr. Coyne sponsored evidence regarding the just and reasonable cost of equity for HQD and HQT and supported the reasonableness of the capital structures of HQD and HQT.

IR-13 Please indicate Mr. Coyne's assistance, if any, in answering any of the following interrogatories.

Response

The responses to these information requests were drafted by Mr. Trogonoski and are based on his knowledge and experience on cost of capital and regulatory matters. Mr. Coyne reviewed the draft responses and provided suggested edits and comments.

IR-14 On page 2 of Mr. Trogonoski's report he refers to co-authoring a report summarising ROEs and capital structures for Canadian and US utilities over the past five years. Please provide copies of these reports.

Response

Mr. Trogonoski has co-authored these reports with Mr. Coyne since 2013. Copies of the reports are attached as IR-14, Attachments 1-5.

IR-15 When discussing business and financial risk on page 9, can Mr. Trogonoski confirm that as a matter of arithmetic, if a regulated firm has extensive use of deferral accounts and always earns its allowed ROE then the use of debt financing, after the fact, has not increased the risk to the common shareholder? If Mr. Trogonoski does not agree, please explain in detail how the shareholder has been harmed by the use of debt financing.

Response

No, Mr. Trogonoski cannot confirm the statement posed in the question. As a general premise, secured debt holders have priority on a company's earnings, so the greater the debt percentage in the capital structure, the more risk a common equity shareholder is exposed to, requiring a higher return. A company does not have unlimited borrowing capacity and cannot continually increase the percentage of debt financing without having a negative effect on the risk associated with owning common shares. A fundamental principal of finance is that leverage creates risk. Regardless of whether a company has extensive use of deferral accounts, which Maritime Electric does not, and regardless of whether the company has historically earned its allowed ROE, there is no guarantee of earning that return in the future.

IR-16 On pages 10-11 Mr. Trogonoski cites the Bank of Canada's Financial System Review for risks posed for the Canadian economy, two of these are moderate and one elevated, but declining. Can Mr. Trogonoski confirm that this is the lowest risk assessment since the financial crisis in 2008/9 and that moderate is the lowest risk ranking used by the Bank. Please discuss in detail why if Mr. Trogonoski disagrees.

Response

Concentric's cost of capital report for Maritime Electric identifies three vulnerabilities to the Canadian financial system, according to the Bank of Canada's June 2018 Financial System Review. Two of the three vulnerability are characterized as "Elevated".

> Vulnerability #1: Elevated level of Canadian household indebtedness: But even as conditions slowly improve, the sheer size of the outstanding debt means that the vulnerability will likely persist at an elevated level for some time.
>
> Vulnerability #2: Imbalances in the Canadian housing market: Overall, the vulnerability associated with imbalances in the Canadian housing market shows some signs of lessening but remains elevated.
>
> Vulnerability #3: Cyber threats, operational risks and financial interconnections: Attempted cyber attacks are frequent and come from a variety of sources. Financial institutions have made significant investments in capabilities for defending against attacks, as well as for identifying and containing successful breaches. If the breach is not contained, a successful cyber attack could affect the broader financial system through direct or indirect links. A successful attack could also undermine confidence in the financial system.

As shown in the Table on page 18 of the Bank of Canada's Financial System Review for June 2018, the Bank of Canada assesses key risks to the stability of the Canadian financial system. The risk ratings used by the Bank of Canada are Low, Moderate, Elevated, High and Very High.

Mr. Trogonoski does not dispute that the Canadian economy has recovered from the period of the 2008/09 financial crisis. However, as indicated in the June 2018 report from the Bank of Canada, there are always risks and vulnerabilities to the Canadian economy. Further, as discussed on pages 43-45 of Mr. Trogonoski's cost of capital report, the Prince Edward Island economy is expected to be relatively weaker than the Canadian economy overall for the period from 2017-2040.

IR-17 On page 19 Mr. Trogonoski refers to the "integration" between Canadian and US capital markets.

a. Does Mr. Trogonoski agree that if two securities are combined in a portfolio that unless they are perfectly correlated the overall risk of the portfolio decreases?

b. Does Mr. Trogonoski agree that if investors are now able to buy US and Canadian (and global) securities that unless they are all perfectly correlated the risk of a portfolio decreases?

c. Does Mr. Trogonoski agree that if risk decreases so too does the required and fair rate of return?

d. Can Mr. Trogonoski point to areas in his evidence where he has taken into account the reduced risk and lower required returns consistent with increasing market integration between the US and Canada?

e. Mr. Trogonoski points to the correlation between GDP growth rates between the US and Canada, unemployment rates, inflation etc., as indicators of integration between the two countries. Can Mr. Trogonoski provide a similar analysis for Canada and the UK, Japan and Europe. Would Mr. Trogonoski accept evidence from those other countries for the cost of capital if the comparisons are similar to that made between the US and Canada?

f. Mr. Trogonoski notes that yields on 10 year government bonds in the US and Canada have been similar. Can Mr. Trogonoski provide the underlying data on which his judgement on page 21 is based, as well as similar data for 91 day Treasury Bill yields and the long bond (30 year) yield.

g. Does Mr. Trogonoski agree that integration means the "law of one price" holds, that is, the same thing sells for the same price in both countries. If not why not?

h. Does Mr. Trogonoski attribute any relevance to the fact that currently long-term (30 year) US government bond yields are higher than the equivalents in Canada, have been for almost ten years, and are expected to remain so?

Response

a. Mr. Trogonoski does not understand the context of the question in relation to his cost of capital report for Maritime Electric. However, in general terms, Mr. Trogonoski accepts the premise that, by combining different assets whose returns are not perfectly positively correlated, the total variance and, therefore, risk of the portfolio return will decrease.

b. As a general premise, Mr. Trogonoski agrees that diversification reduces the risk of a portfolio.

c. Mr. Trogonoski agrees that if risk is measurably reduced, in general, the required return on that investment will also be reduced. It is unclear what “fair rate of return”, which is a regulatory standard, means in this question.

d. Mr. Trogonoski’s DCF and CAPM analyses are based on market data, which accounts for any importance investors might place on the integrated nature of the Canadian, U.S. and global economies and capital markets.

e. See the response to IR-17, subpart (d)

f. Mr. Trogonoski did not consider the correlation between GDP growth rates for Canada, the U.K., Japan, and Europe in the development of his cost of capital report for Maritime Electric. His proxy group companies are only drawn from Canada and the U.S., so those other countries would not have any meaningful impact on his analysis. Mr. Trogonoski is not aware of any North American utility regulator that relies on companies drawn from overseas samples for determining the cost of capital. However, if there are publicly-traded utility holding companies in other countries that meet Mr. Trogonoski’s stated screening criteria for inclusion in the proxy group (that is, the companies have comparable business, financial and regulatory risk as Maritime Electric), and similar country risk, he does not see any reason why such data could not be considered.

g. The requested data is provided in IR-17, Attachment 1.

h. The “law of one price” is an economic and trade principle based on the assumption that prices for homogeneous goods will be priced equally between locations, absent any transportation, economic barriers, or market information gaps; otherwise arbitrage will reduce any price differentials. Mr. Trogonoski did not assume either perfect integration or homogeneous goods in development of his cost of capital report for Maritime Electric. He did demonstrate on page 21 of his report that:

> On balance, the economic and business environments of Canada and the U.S. are highly-integrated and exhibit strong correlation across a variety of metrics, including GDP growth and government bond yields. From a business risk perspective, including overall business environment and competitiveness, Canada and the U.S. are ranked closely when compared against other developed and developing countries. Based on these macroeconomic indicators, there are no fundamental dissimilarities between Canada and the U.S. (in terms of economic growth, inflation, or government bond yields) that would cause a reasonable investor to have a materially different return expectation for a group of comparable risk utilities in the two countries. My cost of capital analysis is framed by the conclusion that Canada and the U.S. have comparable macroeconomic and investment environments.

i. Mr. Trogonoski specifically accounts for differences in the long-term bond yield forecasts in Canada and the U.S. in his CAPM analysis, as discussed on Pges 32-33 of his report.

IR-18 On page 23 Mr. Trogonoski lists his US electric proxy group:

a. Please indicate why Southern Electric did not make Mr. Trogonoski's sample whereas it made Mr. Coyne's sample in his Newfoundland Power evidence entered shortly before Mr. Trogonoski's evidence on behalf of MEC.

b. Please confirm that all the firms in Mr. Trogonoski's proxy sample are holding companies, rather than operating companies. As holding companies, in Mr. Trogonoski's opinion, is the sample more comparable to another holding company, like Fortis, or an operating company, like MEC?

c. In Mr. Trogonoski's opinion is the debt of a holding company, all else the same, more or less risky than an operating company with the same financial ratios. Please explain in detail why or why not.

d. Please confirm that if no adjustments are made to Mr. Trogonoski's US sample results he is assuming not just that the samples are comparable, but that they are identical. If not why not.

e. Is Mr. Trogonoski aware that a previous US witness appearing on behalf of Canadian utilities (Ms. McShane in an AUC 2012 hearing) answered an interrogatory CAPP-IR-RI(OE 9a) where she stated:

> *Ms. McShane "agrees that the universe of US utilities has higher business risk than the typical Canadian utility, which is a wires and pipes utility, whereas the preponderance of US utilities are integrated electric utilities, which are of inherently higher business risk than distribution utilities."*

Does. Mr. Trogonoski disagree with this general assessment of US versus Canadian electric utilities and if so, please explain in detail why or why not.

Response

a. As shown on Exhibit JPT-2, Southern Company was not included in Mr. Trogonoski's proxy group for Maritime Electric because it did not pass the screen that requires the company not be involved in a merger, acquisition or other transformative transaction during the period of the analysis. At the time of Mr. Coyne's ROE analysis for Newfoundland Power, Southern Company passed this screen. However, when Mr. Trogonoski conducted his ROE analysis, Southern Company had announced the sale of Gulf Power Company to NextEra Energy and the sale of two gas distribution companies (Elizabethtown Gas and Elkton Gas) to South Jersey Industries.

b. Mr. Trogonoski confirms that the companies in his proxy groups are holding companies, not operating companies. As discussed on Pages 52-53 of his cost of capital report, the companies in the U.S. proxy group derive the vast majority of their operating income from regulated electric utility operations, which makes them appropriate comparators for purposes of setting the authorized ROE for Maritime Electric. The companies in the

Canadian proxy group tend to derive a smaller percentage of their operating income from regulated electric utility operations, and are also engaged in non-regulated business activities, thereby making them less comparable to the risk profile of Maritime Electric. That is why Mr. Trogonoski places more weight on the results of his ROE analyses for the North American and U.S. proxy groups.

c. One cannot say whether the debt of an operating company is more or less risky than its holding company without knowing the business risk characteristics (beyond credit metrics) of the respective entities.

d. Mr. Trogonoski does not agree that he is assuming that the U.S. proxy group is not only comparable but identical to Maritime Electric if no adjustment is made to the results of the ROE analysis. It is common practice to use a proxy group of companies to estimate the cost of equity for another company such as Maritime Electric, especially one that is not publicly traded. Mr. Trogonoski has used screening criteria to select a group of companies with similar business and financial risk characteristics as Maritime Electric for purposes of estimating its investor-required cost of equity. Mr. Trogonoski uses the proxy groups to establish the range of reasonable results. From within that range, Maritime Electric has requested to maintain its current authorized ROE of 9.35%.

e. Mr. Trogonoski is not familiar with this particular response by Ms. McShane in Alberta, nor is he aware of the broader context of the question or have the full answer at his disposal. As indicated in Mr. Trogonoski's cost of capital report, Maritime Electric is a vertically integrated electric utility that derives a portion of its energy supply from company-owned generation.

IR-19 At page 24 Mr. Trogonoski suggests that Canadian regulators have accepted the use of US data and cites the NEB, BCUC, OEB, AUC and the Regie. In each case can he provide explicit references to board decisions to the effect that these regulators have accepted such comparisons *without* making any qualifications or adjustments?

a. Is Mr. Trogonoski aware that in 2009 the Regie stated (Gaz Metro decision page 295):

> *The evidence therefore does not make it possible to conclude that the regulatory, institutional, economic and financial contexts of the two countries and their impacts on the resulting opportunities for investors are comparable.*

b. Would he also agree that both the BCUC and Newfoundland PUB, for example, reduced US DCF estimates *downwards* by 0.50-1.0% when applied to Canadian companies. If not, why not and please explain in detail and provide the evidentiary record.

Response

Footnote 34 of Mr. Trogonoski's cost of capital report for Maritime Electric provides specific page and paragraph references for each cited decision where the regulatory commission accepted the use of U.S. data without making an explicit adjustment to the results.

In its 2018 generic cost of capital decision, the Alberta Utilities Commission accepted the use of U.S. data without making an explicit adjustment, stating:

> The Commission retains its view from the 2016 GCOC decision that although returns awarded by U.S. regulators cannot be used directly in determining a fair return for Alberta utilities, it is reasonable to consider the U.S. market returns data given the globalization of the world economy and integration of North American capital markets.[379] Accordingly, the Commission will consider the market-based results from both the Canadian and U.S. proxy groups in this decision, with the exception of the results from Dr. Villadsen's U.S. pipeline proxy group and its subsample group. Even though the Commission agrees that the proxy selection processes resulted in reasonable proxy groups for application in the ROE estimation models, the Commission is mindful of the "dirty window" problem, given that none of the affected utilities raise capital directly in the equity market. Accordingly, a significant amount of judgment by both witnesses and the Commission must be applied when interpreting this data to establish the ROE required by investors in the affected utilities.[5]

In its 2016 generic cost of capital decision, the BCUC accepted the use of U.S. data and made no explicit adjustment stating:

5 Alberta Utilities Commission 2018 Generic Cost of Capital August 2, 2018, at paragraph [275].

> The Panel notes that proxy companies are used in both the CAPM model (to estimate betas) and in the DCF calculation process. In both cases, as set out elsewhere in the decision, estimates are prepared based on the Canadian sample and on the US sample and from this, a figure applicable to FEI is derived. A number of uncertainties are identified in the modelling processes and inputs. The limitations set out in this section, namely that the Canadian proxy group is flawed due to its lack of comparability in business functions to FEI and the use of the US proxy group is hampered by the differences in the regulatory treatment of the US companies. Collectively, these add to the list of uncertainties that the Panel must take into account in determining the ROE and equity ratio for FEI that meets the Fair Return Standard.[6]

In its 2009 generic cost of capital decision, the Ontario Energy Board also accepted the use of U.S. data without making any adjustments, stating:[7]

> Second, there was a general presumption held by participants representing ratepayer groups in the consultation that Canadian and U.S. utilities are not comparators, due to differences in the “time value of money, the risk value of money and the tax value of money.” In other words, because of these differences, Canadian and U.S. utilities cannot be comparators. The Board disagrees and is of the view that they are indeed comparable, and that only an analytical framework in which to apply judgment and a system of weighting are needed. The analyses of Concentric Energy Advisors and Kathy McShane of Foster Associates Inc. are particularly relevant in this regard, and substantially advance the issue of establishing comparability to meet the requirements of the FRS.
>
> The Board notes that Concentric did not rely on the entire universe of U.S. utilities for its comparative analysis. Rather, Concentric carefully selected comparable companies based on a series of transparent financial metrics, and the Board is of the view that this approach has considerable merit.
>
> The use of a principled, analytical, and transparent approach to determine a low risk comparator group from a riskier universe for the purpose of informing the Board’s judgment was supported by various participants in the consultation.
>
> The Board is of the view that the U.S. is a relevant source for comparable data. The Board often looks to the regulatory policies of State and Federal agencies in the United States for guidance on regulatory issues in the province of Ontario. For example, in recent consultations, the Board has been informed by U.S. regulatory policies relating to low income customer concerns, transmission cost connection responsibility for renewable generation, and productivity factors for 3rd generation incentive ratemaking.
>
> Finally, the Board agrees with Enbridge that, while it is possible to conduct DCF and CAPM analyses on publicly-traded Canadian utility holding companies of

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6 BCUC, GCOC for FortisBC Energy Inc, Decision dated August 10, 2016, at 53.
7 OEB, GCOC, EB-2009-0084, Decision dated December 11, 2009, at 21-23.

> comparable risk, there are relatively few of these companies. As a result, the Board concludes that North American gas and electric utilities provide a relevant and objective source of data for comparison.

In its TQM Decision, the National Energy Board ("NEB") found that U.S. market returns are relevant to the cost of capital for Canadian firms, and that the regulatory regimes in Canada and the U.S. are sufficiently similar as to justify comparison. Moreover, the NEB found that Canadian utilities are competing for capital in global financial markets that are increasingly integrated. The NEB recognized that it is no longer possible to view Canada as insulated from the remainder of the investing world, and that doing so would be detrimental to the ability of Canadian utilities to compete for capital.[8] These findings suggest that it is reasonable and appropriate to consider a proxy group of U.S. utility companies as sufficiently comparable to Canadian regulated utilities in terms of their risk profile. Importantly, the NEB also found that the regulatory regimes in the U.S. and Canada were sufficiently similar as to justify comparison between utilities in the two countries, stating:

> The Board is not persuaded that the U.S. regulatory system exposes utilities to notable risks of major losses due either to unusual events or cost disallowances. The Board views the losses and disallowances experienced by U.S. regulated entities as a result of the restructuring that took place to terminate the merchant gas function of pipelines, as well as some other circumstances such as the Duquesne nuclear build, to be, to a large extent, unique events. The Board also finds that such instances are not likely to weigh significantly in investors' perceptions today, and would thus have little or no impact on cost of capital.[9]

a. Yes, Mr. Trogonoski is aware of the passage refenced in the 2009 Gaz Metro decision. However, Mr. Trogonoski does not accept that the cited quote represents the Régie's ultimate position with respect to the usefulness of U.S. data to an ROE analysis. In paragraph 249 of that same 2009 decision, the Régie indicated that it weighted Canadian and U.S. evidence equally:

> [249] With respect to the weighting of Canadian and U.S. data to be used in estimating the market risk premium, the Régie, in decision D-99-150, established a weight of 60% for Canadian data and 40% for U.S. data. Based on the evidence of this case, the Régie bases its estimate of the market risk premium using equal portions of Canadian and U.S. data. It considers that the opening of markets offers investors various investment options that it is necessary to reflect the situation in establishing a reasonable rate of return. It also justifies greater consideration of U.S. data because of the increasing integration of the two economies.[10]

[8] National Energy Board, Reasons for Decision, TQM RH-1-2008 (March 2009), at p. 66-72.
[9] Ibid.
[10] English translation of Régie de l'Energie, Decision 2009-156 (R-3690-2009), Gaz Metro, December 7, 2009, at paragraph [249].

b. Mr. Trogonoski is aware that the Newfoundland PUB has made this statement in previous decisions. The British Columbia Utilities Commission made a downward adjustment to U.S. returns in its 2009 decision for Terasen Gas, but made no such adjustment in its 2016 generic cost of capital decision for the benchmark utility, Fortis BC Energy.

IR-20 In terms of the DCF model highlighted on page 25, can Mr. Trogonoski confirm that in deriving the equation at line 14 from that on line 5 the growth rate is assumed to be a long run average growth rate *in perpetuity*. That is, the DCF model is normally referred to as the constant growth model? If not, please derive the DCF equation from the general formula (1) without assuming constant growth in perpetuity.

Response

Confirmed. The Constant Growth DCF model is one form of the discounted cash flow model; one of the assumptions of the constant growth DCF model is that earnings and dividends grow at the same constant rate in perpetuity.

IR-21 On page 27 Mr. Trogonoski states that "*it is reasonable to assume that dividend increases will be evenly distributed over calendar quarters*." Please provide all justification for this assumption, since in Canada dividends are normally increased once a year after the release of the annual report. In particular, please indicate whether Mr. Trogonoski discussed with MEC whether dividends were paid and increased on a regular quarterly basis to its parent.

Response

The DCF model requires an adjustment to the current dividend yield to reflect the expected dividend to be paid the following year. This adjustment is commonly made by multiplying the current dividend yield by ½ the expected growth rate in the dividend. Since companies increase their dividend payments at different times throughout the year, it is reasonable to assume that the next dividend increase is, on average, six months away. Mr. Trogonoski did not discuss with Maritime Electric when it paid dividends to its parent because the issue in the DCF analysis is when the companies in the Canadian and U.S. proxy groups increase their dividends to investors.

IR-22 Mr. Trogonoski uses growth forecast from Zacks, First Call, and SNL Financial for use in his constant growth model estimates.

a. Please confirm that these growth estimates are *perpetual* or at least very long run growth rate estimates consistent with the DCF model and provide evidentiary support for this statement. If he is not able to do this, please provide the average duration or time-period of the forecast, for example one-year ahead, two-years ahead, etc.

b. Please confirm that these are forecast *earnings* growth rates, whereas the DCF model is based on *dividend* growth rates. If not, please provide all evidentiary support for the assumption that forecast earnings and dividend growth rates are identical and if so, over what time-period.

c. Please indicate why there is no adjustment for the well-known "optimism" bias in analyst earnings forecasts indicating that analyst estimates are consistently biased high estimates of subsequent growth rates.

d. Is it Mr. Trogonoski's opinion that because "*analysts' earnings growth forecasts are widely available*" (page 28) they can be used even if they do not match the DCF model's assumptions?

e. Has Mr. Trogonoski ever appeared before the FERC and is he aware of the FERC's decision not to accept evidence on the constant growth DCF model and that instead rely on a multi-stage DCF model?

Response

a. The growth rates from Zacks, First Call and SNL Financial in Mr. Trogonoski's constant growth DCF model are consensus estimates based on analysts' forecasts of earnings growth for the upcoming 5-year period for the companies in the Canadian, U.S. and North American proxy groups.

b. Mr. Trogonoski confirms that these are earnings growth rates. Investors typically rely on projected earnings growth rates rather than dividend growth rates for the reasons stated on pages 27-28 of the cost of capital report for Maritime Electric. In further support of his reliance on earnings growth rates in the DCF model, Mr. Trogonoski observes that estimates of earnings growth are more indicative of long-term investor expectations than are dividend or book value growth estimates because earnings growth is least influenced by capital allocation decisions that companies may make in response to near-term changes in the business environment. Furthermore, earnings are the fundamental driver of a company's ability to pay dividends. As noted by Brigham and Houston:

> Growth in dividends occurs primarily as a result of growth in earnings per share (EPS). Earnings growth, in turn, results from a number of factors, including (1) inflation, (2) the amount of earnings the company retains and invests, and (3) the rate of return the company earns on its equity (ROE).[11]

Investment analysts report predominant reliance on EPS growth projections. In a survey completed by 297 members of the Association for Investment Management and Research, the majority of respondents ranked earnings as the most important variable in valuing a security (more important than cash flow, dividends, or book value).[12]

Academic research also supports the use of EPS growth estimates. For example, a 2002 study in the *Journal of Accounting Research*, examined “the valuation performance of a comprehensive list of value drivers” and found that “forward earnings explain stock prices remarkably well” and were generally superior to other value drivers analyzed.[13] A 2012 study from the journal *Contemporary Accounting Research*, found that the sell-side analysts with the most accurate stock price targets were those whom the researchers found to have more accurate earnings forecasts and to use DCF valuation.[14]

c. Mr. Trogonoski has not made an adjustment for “optimism bias” because he does not believe it is necessary, especially for companies in a stable, mature industry such as regulated utilities. It is not reasonable to argue, on one hand, that utilities are very predictable, low risk businesses with stable cash flows, while also arguing that analysts are unable to accurately forecast the earnings growth rates for these same companies.

In addition, several changes have been implemented by financial regulators that are designed to provide fair disclosure and to reduce or eliminate the possibility of analysts’ bias. For example, on August 15, 2000, the U.S. Securities and Exchange Commission (“SEC”) adopted Regulation FD to address the selective disclosure of information by publicly-traded companies. Regulation FD provides that when an issuer discloses material nonpublic information, the issuer must publicly disclose that information to all investors at the same time. In this way, the rule aims to promote full and fair disclosure.

Also, in 2002 the SEC, the New York Stock Exchange, the New York Attorney General, and other state regulators introduced guidelines regarding the interaction between analysts and investment banks that became known as the “Global Settlement.” The Global Settlement outlined several structural reforms that limit the interaction between analysts and investment banks, thus removing any incentive for analysts to produce upwardly-biased growth forecasts.

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11 Eugene F. Brigham and Joel F. Houston, *Fundamentals of Financial Management*, at 317 (Concise Fourth Edition, Thomson South-Western).

12 Block, Stanley B., “A Study of Financial Analysts: Practice and Theory”, Financial Analysts Journal (July/August 1999).

13 Liu, Jing, et al., “Equity Valuation Using Multiples,” Journal of Accounting Research, Vol. 40 No. 1, March 2002.

14 Gleason, C.A., et al., “Valuation Model Use and the Price Target Performance of Sell-Side Equity Analysts,” *Contemporary Accounting Research*.

In Canada, regulators took a parallel set of actions, with Policy 11 as the core framework. On April 12, 2001, the Securities Industry Committee on Analyst Standards released a draft report containing recommendations aimed at improving the independence of research and ensuring the professional practice of Canadian securities industry analysts. The Investment Dealers Association ("IDA") published the initial proposed Policy 11 on July 5, 2002, a revised version on April 25, 2003, and a summary of comments on August 8, 2003. Policy 11 requires more disclosures from analysts and independence of research departments. Also, in a letter dated August 15, 2002, the Ontario Securities Commission ("OSC") requested information from financial institutions about current practices to address conflicts of interest relating to equity analysts. Accordingly, in September 2002, most financial institutions had adjusted their practice and replied to OSC.

A 2010 article in Financial Analyst Journal found that analyst forecast bias had declined significantly or disappeared entirely since the Global Settlement:

> Introduced in 2002, the Global Settlement and related regulations had an even bigger impact than Reg FD on analyst behavior. After the Global Settlement, the mean forecast bias declined significantly, whereas the median forecast bias essentially disappeared. Although disentangling the impact of the Global Settlement from that or related rules and regulations aimed at mitigating analysts' conflicts of interest is impossible, forecast bias clearly declined around the time the Global Settlement was announced. These results suggest that the recent efforts of regulators have helped neutralize analysts' conflicts of interest.[15]

d. It is Mr. Trogonoski's view that analyst's earnings growth forecasts are the most reliable indicator of future dividend growth for public utilities. Further, investors rely on these earnings growth rates in setting their expectations and return requirements for public utilities. Finally, as discussed in subpart (b) above, academic research has demonstrated that earnings growth rates are more highly correlated to changes in stock prices than are dividend or book value growth rates.

e. No, Mr. Trogonoski has not appeared before the FERC. However, he is aware that the FERC has traditionally relied on a two-stage DCF model that gives 2/3 weight to near-term earnings growth rates and 1/3 weight to GDP growth. In October 2018, the FERC issued an Order in response to the remand from the U.S. Court of Appeals for the District of Columbia indicating plans to establish ROEs based on an equal weighting of the results of four financial models: the DCF, CAPM, Expected Earnings and Risk Premium. FERC explained as follows:

> Our decision to rely on multiple methodologies in these four complaint proceedings is based on our conclusion that the DCF methodology may no longer singularly reflect how investors make their decisions. We believe that, since we adopted the DCF methodology as our sole method

[15] Armen Hovakimian and Ekkachai Saenyasiri, *Conflicts of Interest and Analyst Behavior: Evidence from Recent Changes in Regulation*, Financial Analysts Journal, Volume 66, Number 4, July/August 2010, at 105.

for determining utility ROEs in the 1980s, investors have increasingly used a diverse set of data sources and models to inform their investment decisions. Investors appear to base their decisions on numerous data points and models, including the DCF, CAPM, Risk Premium, and Expected Earnings methodologies.[16]

[16] Federal Energy Regulatory Commission, Docket No. EL 11-66-001, et al., Order Directing Briefs, issued October 16, 2018, at para. 40.

IR-23 Referring to Mr. Trogonoski's multi-stage DCF estimates on which he places "less weight," while preferring the constant growth model estimates:

a. At page 30 Mr. Trogonoski has GDP growth rate estimates for the US and Canada at no more than 4.35%. Does Mr. Trogonoski agree that no utility can grow forever (in perpetuity) at a rate faster than GDP, otherwise it will eventually become GDP. If not, why not and explain in detail.

b. Can Mr. Trogonoski confirm that in his multi-stage DCF estimates he uses the average of the short term growth estimates used in his constant growth DCF estimates for a five year period, that is, column 3 in the multi-stage estimates is simply column 8 in his constant growth estimates? If not why not.

c. Does Mr. Trogonoski agree that if these analyst growth estimates are regarded as too high, for whatever reason for use in the constant growth model, they will still be too high when embedded in a multi-stage growth model? If not please explain why not.

d. Does Mr. Trogonoski agree that as a matter of arithmetic the average growth rate in both the constant and multi-stage US DCF estimates exceeds that of GDP? If not please explain why not.

e. Please provide all evidence that Mr. Trogonoski is aware of that dividends paid by this sample of US utilities has exceeded the growth rate of US GDP over the last 20 years. If he asserts that it has, please provide the annual dividend per share for each firm in the US proxy sample back to 1990 and calculate the compound annual dividend per share growth rate for each and compare to that for US GDP.

Response

a. Mr. Trogonoski does not believe that the growth rate for any company, including utilities, is capped by GDP growth. Mr. Trogonoski agrees that all models used to estimate the cost of equity have certain limiting assumptions, which is why Mr. Trogonoski believes it is important to consider the results of multiple methodologies. As stated on page 29 of Mr. Trogonoski's report, he presents the results of a multi-stage DCF analysis. However, Mr. Trogonoski places less weight on these results because his view is that the underlying assumptions of the constant growth DCF model are reasonable and appropriate for companies in a mature industry that have steady state growth rates, such as regulated electric utilities. The multi-stage DCF model is more appropriate in circumstances where a company is in a rapid growth stage that cannot be sustained at that same high rate over an extended period of time. Such is not the case with the companies in the Canadian, U.S. and North American proxy groups used by Mr. Trogonoski to estimate the cost of equity for Maritime Electric.

IR-23, Attachment 1 provides further support for Mr. Trogonoski's view regarding the relationship between earnings growth and GDP growth. This attachment is an August 2012 white paper written by Ben Inker, Head of Asset Allocation for GMO LLC, titled:

"Reports of the Death of Equities Have Been Greatly Exaggerated: Explaining Equity Returns"

As stated on page 1 of the attachment:

> The first point to understand about stock returns is their relationship with GDP growth. In short, there isn't one. Stock returns do not require a particular level of GDP growth, nor does a particular level of GDP growth imply anything about stock market returns. This has been true empirically, as the Dimson-Marsh-Staunton data from 1900-2000 shows. Many investors are utterly convinced that strong GDP growth is the primary reason why one country's stock market will outperform another. As we can see in Exhibit 1, this was certainly not the case in the 20th century

b. Confirmed.

c. First, Mr. Trogonoski does not agree with the underlying premise that these earnings growth rates are too high for use in the Constant Growth DCF model. Further, if the five-year growth rate forecasts were found to be unsustainable in perpetuity, then the multi-stage DCF model would serve to temper the assumption of constant growth in perpetuity with a three-stage approach based on near-term, transitional, and long-term growth rates. Therefore, those higher short-term growth rates would be tempered by a lower long-term growth rate. As stated in Mr. Trogonoski's report, he places less weight on the results of the multi-stage DCF model because the average growth rates for the companies in the Canadian, U.S. and North American proxy groups are generally consistent with long-term earnings growth rates for companies in the utility industry.

d. Mr. Trogonoski agrees that the average forecast short-term growth rate for the U.S. utilities in the constant growth DCF model exceeds projected GDP growth in the U.S. by approximately 80 basis points (i.e., 5.15% vs. 4.35%). With regard to the Multi-Stage DCF model, the average near-term growth rate for the U.S. utilities exceeds projected GDP growth in the U.S. by this same amount, while the long-term or terminal growth rate is based on projected GDP growth.

e. Please see IR-23, Attachment 2. As shown in the attachment, the average compound annual growth rate in dividends for the companies in Mr. Trogonoski's U.S. Electric proxy group from 2005-2017 has been 4.97% while the compound annual growth rate in U.S. nominal GDP over this same period has been 3.68%. Mr. Trogonoski does not have Value Line prior to 2005.

IR-24 Referring to Mr. Trogonoski's CAPM estimates:

a. On page 32, he uses a 3.07% forecast 30-year government bond rate for Canada and 3.40% for the US. Please explain in detail how this is consistent with his assumption about market integration so that financial markets in the US and Canada are integrated and data can be used interchangeably between the two without any adjustment.

b. Please indicate the cost of a Value Line subscription and whether it is widely available and used in Canada.

c. Please indicate whether Mr. Trogonoski is aware of the academic literature that indicates that weekly betas are biased high estimates of the true betas for "fat" stocks and vice versa for "thinly" traded stocks. If so, please indicate why he has not made any adjustments for this empirical fact.

d. Mr. Trogonoski refers to "numerous" studies (page 33) to justify "adjusting" betas:

   i. Please provide references and copies of any such research conducted in the last 20 years.

   ii. Please provide any empirical research on Canadian or US utilities that justify the beta adjustment model on which Mr. Trogonoski's estimates are based.

   iii. Please confirm that if a security's beta coefficient is correctly estimated without any error at 0.33, then the effect of the Blume adjustment is to increase the beta. If Mr. Trogonoski disagrees please indicate the reasons why.

   iv. Please confirm that the Brattle report referred to on page 34 was prepared by a consulting firm that ordinarily intervenes in utility hearings on behalf of utilities.

e. In terms of the market risk premium:

   i. Mr. Trogonoski refers to a 1998 study. Is he aware of any more recent work on the impact of interest rates on the market risk premium? If so, can Mr. Trogonoski file a more recent study looking at the relationship between the market risk premium and interest rates published at any time over the last 10 years.

   ii. Is Mr. Trogonoski aware of current survey work that asks market participants about the market risk premium they actually use in their work and if so, can he file summaries of such work.

   iii. On page 35, Mr. Trogonoski refers to the Duff and Phelps data on which historic US estimates of the market risk premium are based. Is he aware that Duff and Phelps produce current estimates of the US market risk premium? If so, can he file their latest forward-looking estimates?

Response

a. The difference in the forecast 30-year government bond yields between Canada and the U.S. does not imply that the financial markets of the two countries are not integrated. As shown on Exhibit JPT-1, there has been a high degree of correlation between the yields on 10-year and 30-year government bonds in Canada and the U.S. since 1993. The level of interest rates on government bonds is affected by many factors including monetary policy, inflation, GDP growth, and unemployment. Over the last five years, consumer inflation has been slightly higher in Canada than in the U.S., real GDP growth has been slightly higher in the U.S. than in Canada, and the unemployment rate has been more than one percent higher in Canada than in the U.S. This higher unemployment rate suggests that there is more slack in the Canadian economy, which would partly explain the lower forecast yields on government bonds in Canada.

b. The cost of a Value Line subscription is approximately $600 per year for either the print or digital version. Mr. Trogonoski has no knowledge regarding whether Value Line is widely available and used in Canada. He is aware that many Canadian companies are not covered by Value Line unless the company is also listed on the New York Stock Exchange or NASDAQ, making the subscription of limited use in Canada except for those investors interested in U.S. companies.

c. Mr. Trogonoski is not aware of this particular study. However, he is aware that the beta coefficients of lower risk companies such as utilities tend to be understated, while the beta coefficients of higher risk stocks tend to be overstated. As a result, Professor Marshall Blume developed the Blume adjustment to reflect the tendency of beta to revert to the market mean of 1.0 over time. Further, beta is a measure of the systematic or non-diversifiable risk of an individual security relative to the market. The calculation of beta is shown on Page 31 of Concentric's cost of capital report for Maritime Electric. Lastly, Mr. Trogonoski believes that the use of weekly returns to calculate beta is superior to the use of monthly returns because weekly returns capture more of the relative volatility of the individual security, and the regression equation is based on more observations, thereby improving the accuracy of the beta estimate.

d. i. Mr. Trogonoski is not aware of more recent research. Please see the response to subpart (d)(ii) below for the reasons why raw betas must be adjusted.

ii. There are two primary reasons to adjust raw betas. First, numerous empirical studies have provided evidence that an individual company Beta is more likely than not to move toward the market average of 1.0 over time. Second, adjusting Beta serves a statistical purpose. Because Betas are statistically estimated and have associated error terms, Betas greater than 1.0 tend to have positive estimated errors and thus tend to overestimate future returns. Betas below the market average of 1.0 tend to have negative error terms and underestimate future returns. Consequently, it is necessary to adjust forecasted Betas toward

1.0 in an effort to improve forecasts.[17] Because current stock prices reflect expected risk, one must use an expected Beta to appropriately reflect investors' expectations. A raw Beta reflects only where the stock price has been relative to the market historically and is an inferior proxy for the expected returns when compared to the adjusted Beta.

Professor Marshall Blume specifically studied four groups of betas, ranging from a very low beta group (averaging 0.50, and similar to the utility industry) to a very high beta group. Dr. Blume found that his adjustment best predicted future betas for each of the four risk groups over the next seven years. Dr. Blume found that a low beta portfolio that averaged 0.50, migrated towards the grand mean of all betas of 1.0 approximately in accordance with the Blume formula. The study makes obvious that betas migrate towards 1.0 and do indeed exceed their long-term unadjusted averages. Given that the purpose of estimating the CAPM relying on these beta coefficients is to estimate the forward-looking cost of capital, it is important to reflect a forward view of beta and its tendency to migrate towards the market mean over time, which is not limited to the long term historic average of the industry beta.

iii. Confirmed.

iv. The report referenced in the IR was prepared by the Brattle Group for the British Columbia Utilities Commission ("BCUC"), as the result of an RFP. Mr. Trogonoski assumes that the Brattle Group met the qualifications outlined in the RFP. He is not aware of the Brattle Group's specific mix of engagements.

e. i. The 1998 article by Dr. Berry is particularly relevant because his study examined the relationship between changes in interest rates of both government and utility bonds and the equity risk premium for public utilities. The study concluded that there is an inverse relationship between interest rates and the equity risk premium. That is, as interest rates increase (decrease), the equity risk premium decreases (increases).

ii. Yes, Mr. Trogonoski is aware that investor surveys are published regarding expected equity returns and expected government bond yields which can be used to compute the implied market risk premium. For example, Mr. Trogonoski is aware of one such survey by Dr. Pablo Fernandez and another from Duke University and CFO magazine. Finance Professor Aswath Damodoran at New York University's Stern School of Business, who has published extensively on the question of how to estimate the equity risk premium, wrote in March 2013[18] about his concerns with using investor surveys to estimate the equity risk premium as follows:

> While survey premiums have become more accessible, very few practitioners seem to be inclined to use the numbers from these

[17] Roger A. Morin, *New Regulatory Finance*, at 74.
[18] Aswath Damodoran, *Equity Risk Premiums (ERP): Determinants, Estimation, and Implications – The 2013 Edition*, Updated March 2013, at 19-20.

surveys in computations and there are several reasons for this reluctance:

1. Survey risk premiums are responsive to recent stock price movements, with survey numbers generally increasing after bullish periods and decreasing after market declines…;

2. Surveys premiums are sensitive not only to whom the question is directed at but how the question is asked. For example, asking the question, "What do you think stocks will do next year?" generates different numbers than asking, "What should the risk premium be for investing in stocks?";

3. In keeping with other surveys that show differences across sub-groups, the premium seems to vary depending on who gets surveyed…; and

4. Studies that have looked at the efficacy of survey premiums indicate that if they have any predictive power, it is in the wrong direction…

Dr. Damodoran ultimately concludes that "it is also likely that these survey premiums will be more reflections of the recent past than good forecasts of the future."[19]

iii. Please see IR-24, Attachment 1 for the most recent Duff & Phelps estimate of the risk- free rate and equity risk premium as of September 2017.

Mr. Trogonoski does not believe this estimate of 5.0% is reasonable because the historical average market risk premium in the U.S. is approximately 7.0%. The historical average MRP is based on average interest rates on U.S. Treasury bonds of 5.1%. Given the current yield on Treasury bonds of approximately 3.0%, and the inverse relationship between interest rates and the equity risk premium, it is not reasonable to expect that the forward-looking MRP is 200 basis points below the historical average, as projected by Duff & Phelps.

[19] *Ibid*., at 20.

IR-25 Mr. Trogonoski reports a forward looking market risk premium estimate based on subtracting the risk free rate from the overall market return estimated by using the constant growth DCF model:

a. Can Mr. Trogonoski confirm that the basis for the growth rate forecast in column 3 of both JPT-5 and 6 is a short run analyst forecast? If Mr. Trogonoski does not agree, please indicate the source of these growth estimates and the average duration (term) of them.

b. Does Mr. Trogonoski agree that if the constant growth rate model is not acceptable for whatever reason in direct DCF estimates, then it is equally unacceptable when used to derive this forward-looking market risk premium estimate? If not why not.

c. Can Mr. Trogonoski confirm that his Canadian growth rate estimate averages 11.21% (JPT-5) and his US growth rate 11.45% (JPT-6) and that both vastly exceed his long run GDP growth estimates? Please explain how this can go on in perpetuity as assumed by the constant growth DCF model.

d. In 2016 before the BCUC, Mr. Coyne as an undertaking provided his market risk premium estimates using the equity cost from his multi-stage model, rather than the constant growth DCF model. Can Mr. Trogonoski provide similar estimates of the market risk premium for both the US and Canada similar to those on JPT-5 and JPT-6 only using the multi-stage DCF model?

Response

a. Mr. Trogonoski can confirm that the growth rates shown in Column 3 of Exhibits JPT-5 and JPT-6 are based on five-year analyst consensus earnings forecasts as reported by Bloomberg Professional.

b. Mr. Trogonoski's view is that the constant growth DCF model is a generally acceptable methodology for estimating the cost of equity, assuming that the underlying assumptions of the model are not violated. Under current market conditions, the share prices of utility stocks have been inflated by accommodative monetary policy of central banks in recent years. As a result, the dividend yields of those utilities have been artificially suppressed because investors who would typically purchase government bonds have shifted a portion of their assets into dividend-paying stocks such as utilities. Therefore, the dividend yield component of the constant growth DCF model is very low by comparison to the historical average. The growth rates for these companies, however, are generally in line with historical levels.

This low interest rate environment, and the resulting effect on dividend yields, has not impacted the results of the constant growth DCF model to the same extent when applied to the broader market, as measured by the TSX Index and the S&P 500 Index. Therefore, Mr. Trogonoski believes that it is reasonable to use the constant growth DCF model to estimate the total return on the companies in those Canadian and U.S. indexes.

c. Yes, Mr. Trogonoski can confirm that the estimated earnings growth rates for the TSX Index and the S&P 500 Index are higher than the forecast GDP growth estimates. Mr. Trogonoski does not agree that GDP growth places an upper limit on the growth rates of companies in the broader market indexes. In the U.S., the Federal Energy Regulatory Commission ("FERC") has determined that it is appropriate to use the constant growth DCF model to estimate the market return in the calculation of the market risk premium used in the CAPM analysis. In Opinion 531-B, the FERC specifically rejects intervenor concerns that the growth rate of the S&P 500 is not sustainable, stating:

> While an individual company cannot be expected to sustain high short-term growth rates in perpetuity, the same cannot be said for a stock index like the S&P 500 that is regularly updated to contain only companies with high market capitalization and the record in this proceeding does not indicate that the growth rate of the S&P 500 stock index is unsustainable.[20]

In that same decision, the FERC addressed the growth rate assumptions used in a projected CAPM analysis, stating:

> …As an initial matter, we reject EMCOS's argument that the NETOs' CAPM analysis is flawed because it used a DCF study to determine the market risk premium. As explained above, using a DCF study is the standard method of calculating the market risk premium in a forward-looking CAPM analysis. We are, therefore, unpersuaded that the use of a DCF study renders the NETOs' CAPM analysis deficient.
>
> We also disagree with Petitioners' argument that the NETOs' CAPM analysis relied on an overly optimistic growth rate input in determining the market risk premium. The growth rate in the NETOs' CAPM analysis is based on IBES data, which the Commission has long relied upon as a reliable source of growth rate data.[21]

The methodology and assumptions used in my CAPM analyses are generally consistent with those adopted by the FERC for estimating the total market return and the market risk premium.

d. Mr. Trogonoski's constant growth DCF approach is consistent with the method used by the FERC to derive the forward-looking market risk premium. The purpose of this analysis is to derive the market's expectation of total returns for the Canadian and U.S. stock markets based on observed stock prices, dividend yields and analyst growth rates. Mr. Trogonoski presented a multi-stage DCF analysis for all three of his utility proxy groups; those results are summarized on Page 4, Figure 1 of the Report. The multi-stage DCF results range from 9.03% to 10.13%, with an average of 9.34%, and are factored into Mr. Trogonoski's recommended ROE range of 9.2% to 9.9%.

[20] Opinion No. 531-B, 147 FERC ¶ 61,234 Order on Rehearing (March 3, 2015) at para 113.
[21] Ibid, at para 110.

IR-26 In terms of MEC's business risk:

a. Is Mr. Trogonoski aware of any requests by MEC for a deferral account that have been denied (page 48)?

b. In terms of inter-fuel competition, can Mr. Trogonoski provide the relative cost of using electricity versus competitive fuels for residential space and water heating as of 2011, 2014 and currently?

c. In terms of the comparisons with other Canadian electric and gas utilities (page 50), can Mr. Trogonoski confirm that the comparators are holding and not operating companies? If not please explain why not.

d. In terms of each of the US holding companies in Mr. Trogonoski's US proxy sample, please provide the following annual data from 1990 to the current period:

i. Earnings per share;
ii. Dividend per share; and
iii. Book value per share.

e. In terms of the US proxy sample, can Concentric provide the sample used by them for each hearing they have provided evidence since they first testified in Canada. For each company in the sample, please explain why they are no longer in the current sample and conversely why some of the current set of firms were not in previous samples.

f. Please indicate whether Mr. Trogonoski is aware of the bankruptcy or serious reorganisation of any US utility since 2000 and provide full details.

Response

a. No, Mr. Trogonoski is not aware of any requests for a deferral account by Maritime Electric that have been denied. In Order UE16-04 (para. 8), the Company's proposed Weather Normalization Reserve was approved an interim basis by the Commission for the period from January 1, 2016 through February 28, 2019. The Order stated: "The Commission shall determine the appropriateness of continuing a permanent Weather Normalization and Reserve account." Nevertheless, Maritime Electric has relatively fewer deferral/variance accounts and cost recovery mechanisms than the companies in the Canadian and U.S. proxy groups.

b. Mr. Trogonoski does not have this information and did not consider it in his risk assessment.

c. The information provided on Pages 50-51 of the cost of capital report pertains to the companies in the Canadian proxy group. The profiles provided in that section include an overview of the regulated and non-regulated business activities for each company, as well as the percentage of operating income the company derives from regulated electric and/or regulated gas distribution service. Mr. Trogonoski confirms that these are holding companies, not operating companies. Only the holding companies are publicly-traded and have market data that can be used in a cost of capital analysis.

d. Please see IR-26, Attachment 1.

e. Please see IR-26, Attachment 2. This attachment provides the proxy groups used by Concentric in a sample of ROE testimony involving electric utilities since 2008.

Concentric has consistently developed the proxy groups for cost of capital estimation purposes based on stated screening criteria that are designed to select companies with comparable business and financial risk as the company for which the return is being analyzed. As discussed on pages 22-23 of Mr. Trogonoski's cost of capital report for Maritime Electric, those screening criteria include:

1. Credit ratings of at least BBB+ from S&P or Baa1 from Moody's;
2. Consistently pay quarterly cash dividends, with no recent reductions or omissions of the dividend payment;
3. Positive earnings growth rate forecasts from at least two sources;
4. At least 70 percent of operating income derived from regulated operations in the period from 2015-2017;
5. At least 90 percent of regulated operating income derived from electric utility service in the period from 2015-2017; and
6. Not involved in a merger or other significant transformative transaction during the evaluation period.

Any changes to the proxy groups developed by Concentric over the past 10 years are due entirely to companies failing to meet one or more of these stated screening criteria. For example, a company involved in a merger or acquisition would not be included in the proxy group during the period in which that merger/acquisition was pending.

f. The only bankruptcy filing by a U.S. utility since 2000 that Mr. Trogonoski is aware of involved Pacific Gas and Electric Company in 2001. This occurred as the result of the deregulation of the electricity markets in California, after which the cost of power exceeded the amount that PG&E was allowed to recover through retail rates. Pacific Gas and Electric Company (and its parent, PG&E Corp) are considering filing for Chapter 11 bankruptcy protection due to the potential liability the companies face (up to $30 billion) after the recent wildfires in California.

Reconciliation Of Maritime Electric Co. Ltd. Reported Amounts With Standard & Poor's Adjusted Amounts (Mil. C$)

--Fiscal year ended Dec. 31, 2017--

Maritime Electric Co. Ltd. reported amounts

		Debt	**EBITDA**	**Operating income**	**Interest expense**	**EBITDA**	**Cash flow from operations**	**Capital expenditures**
Reported	Note	223.2	53.3	31.1	12.4	53.3	32.1	36.0
Standard & Poor's adjustments								
Interest expense (reported)	1	--	--	--	--	(12.4)	--	--
Interest income (reported)	2	--	--	--	--	0.2	--	--
Current tax expense (reported)	3	--	--	--	--	(2.2)	--	--
Operating leases		0.2	0.1	0.0	0.0	0.1	0.1	--
Postretirement benefit obligations/deferred compensation	6	5.6	(1.3)	(1.3)	0.3	(1.8)	0.4	--
Capitalized interest	4	--	--	--	0.5	(0.5)	(0.5)	(0.5)
Power purchase agreements	5	19.1	15.9	1.3	1.3	14.6	14.6	14.6
Non-operating income (expense)	2	--	--	0.2	--	--	--	--
Total adjustments		**24.9**	**14.7**	**0.2**	**2.1**	**(2.1)**	**14.7**	**14.1**

Standard & Poor's adjusted amounts

	Debt	**EBITDA**	**EBIT**	**Interest expense**	**Funds from operations**	**Cash flow from operations**	**Capital expenditures**
Adjusted	248.2	68.0	31.3	14.5	51.2	46.8	50.1
FFO-to-Debt							20.64%
Debt-to-EBITDA					3.6		
Interest Coverage				2.2			

<u>Note: Desciptions of significant adjustments by S & P from regulated financial statements:</u>

1. Total interest expense less allowance for funds used during construction (excludes interest income) - see note 12 to annual financial statements
2. Total Interest Income per note 12 to financial statements
3. Current income tax expense per note 13 of annual financial statements
4. Allowance for funds used during construction per Note 12 to annual financial statements
5. S & P views long-term power purchase agreements(PPAs) as creating fixed, debt-like financial obligations that represent replacements for debt-financed capital investments in generation capacity. PPAs do benefit utilities by shifting various risks to the generators, while the primary risk borne by the utility is recovering the costs of recovering this financial obligation in rates.
6. Adjustment to reclassify after tax employee future benefit obligations as debt.

Reconciliation of MECL Reported Amounts with S&P's Adjusted Amounts

	Note	Debt	S/H Equity	Revenue	EBITDA	Operating Income	Interest Expense	EBITDA	CF From Operations	Dividends Paid	CapEx
						2016					
Reported by MECL		211.1	140.6	186.3	51.7	30.6	12.6	51.7	17.8	8.3	31.6
S&P Adjustments											
Interest Expense (reported)	1							(12.6)			
Interest Income (reported)	2							0.2			
Current tax expense (reported)	3							(3.1)			
Operating leases		0.1			0.0	0.0					
Post retiremnt benefit oblig/deferred comp	5	5.1			1.3	1.3	-	1.4	0.5		
Capitalized interest	4						0.4	(0.4)	(0.4)		(0.4)
Non-operating income(expense)	2					0.2					
Total adjustments		5.2	-	-	1.4	1.6	0.4	(14.5)	0.1	-	(0.4)
		Debt	**Equity**	**Revenue**	**EBITDA**	**EBIT**	**Interest Expense**	**FFO**	**CF From Operations**	**Dividends Paid**	**CapEx**
S&P's Adjusted Amounts		216.3	140.6	186.3	53.0	32.2	13.0	37.2	17.9	8.3	31.2
FFO-to-Debt								17.20%			
Debt-to-EBITDA					4.1						
Interest Coverage							2.5				

Note: Desciptions of significant adjustments by S & P from regulated financial statements:

1. Total interest expense less allowance for funds used during construction (excludes interest income) - see note 12 to annual financial statements
2. Total Interest Income per note 12 to financial statements
3. Current income tax expense per note 13 of annual financial statements
4. Allowance for funds used during construction per Note 12 to annual financial statements
5. Adjustment to reclassify after tax employee future benefit obligations as debt.

Reconciliation of MECL Reported Amounts with S&P's Adjusted Amounts

	2015									
	Debt	**S/H Equity**	**Revenue**	**EBITDA**	**Operating Income**	**Interest Expense**	**EBITDA**	**CF From Operations**	**Dividends Paid**	**CapEx**
Reported by MECL	188.6	136.1	185.2	46.9	30.8	12.4	46.9	22.0	11.2	30.0
S&P Adjustments										
Interest Expense (reported)							(12.4)			
Interest Income (reported)							0.1			
Current tax expense (reported)							(1.8)			
Operating leases	0.1									
Post retiremnt benefit oblig/deferred comp	5.1	-		(0.3)	(0.3)	-	(0.1)	0.2		
Capitalized interest						0.4	(0.4)	(0.4)		(0.4)
Non-operating income(expense)					0.1					
Total adjustments	5.2	-	-	(0.3)	(0.2)	0.4	(14.6)	(0.2)	-	(0.4)
	Debt	**Equity**	**Revenue**	**EBITDA**	**EBIT**	**Interest Expense**	**FFO**	**CF From Operations**	**Dividends Paid**	**CapEx**
S&P's Adjusted Amounts	193.8	136.1	185.2	46.6	30.6	12.8	32.4	21.9	11.2	29.6
FFO-to-Debt							16.69%			
Debt-to-EBITDA				4.2						
Interest Coverage						2.4				

Note: Desciptions of significant adjustments by S & P from regulated financial statements:

1. Total interest expense less allowance for funds used during construction (excludes interest income) - see note 12 to annual financial statements
2. Total Interest Income per note 12 to financial statements
3. Current income tax expense per note 13 of annual financial statements
4. Allowance for funds used during construction per Note 12 to annual financial statements
5. Adjustment to reclassify after tax employee future benefit obligations as debt.

Reconciliation of MECL Reported Amounts with S&P's Adjusted Amounts

		2014									
		Debt	**S/H Equity**	**Revenue**	**EBITDA**	**Operating Income**	**Interest Expense**	**EBITDA**	**CF From Operations**	**Dividends Paid**	**CapEx**
Reported by MECL	Note	170.6	133.9	189.2	45.5	30.0	12.3	45.5	30.2	8.0	29.1
S&P Adjustments											
Interest Expense (reported)	1							(12.3)			
Interest Income (reported)	2							0.1			
Current tax expense (reported)	3							(1.7)			
Operating leases		0.1									
Post retiremnt benefit oblig/deferred comp	5	11.4	-		0.6	0.6	0.4	0.3	(0.3)		
Capitalized interest	4						0.4	(0.4)	(0.4)		(0.4)
Non-operating income(expense)	2					0.1					
Total adjustments		11.4	-	-	0.6	0.8	0.8	(13.8)	(0.7)	-	(0.4)
		Debt	**Equity**	**Revenue**	**EBITDA**	**EBIT**	**Interest Expense**	**FFO**	**CF From Operations**	**Dividends Paid**	**CapEx**
S&P's Adjusted Amounts		182.0	133.9	189.2	46.1	30.8	13.1	31.7	29.6	8.0	28.8
FFO-to-Debt								17.42%			
Debt-to-EBITDA					4.0						
Interest Coverage							2.4				

Note: Desciptions of significant adjustments by S & P from regulated financial statements:

1. Total interest expense less allowance for funds used during construction (excludes interest income) - see note 12 to annual financial statements
2. Total Interest Income per note 12 to financial statements
3. Current income tax expense per note 13 of annual financial statements
4. Allowance for funds used during construction per Note 12 to annual financial statements
5. Adjustment to reclassify after tax employee future benefit obligations as debt.

Reconciliation of MECL Reported Amounts with S&P's Adjusted Amounts

	Note	2013									
		Debt	**S/H Equity**	**Revenue**	**EBITDA**	**Operating Income**	**Interest Expense**	**EBITDA**	**CF From Operations**	**Dividends Paid**	**CapEx**
Reported by MECL		166.6	129.3	186.1	45.1	30.3	12.3	45.1	63.5	20.0	23.9
S&P Adjustments											
Interest Expense (reported)	1							(12.3)			
Interest Income (reported)	2							0.3			
Current tax expense (reported)	3							(9.2)			
Operating leases		-			-	-	-	-	-		
Post retiremnt benefit oblig/deferred comp	5	7.7	0.7		0.4	0.4	0.4	0.2	(0.4)		
Capitalized interest	4						0.3	(0.3)	(0.3)		(0.3)
Non-operating income(expense)	2					0.3					
Total adjustments		7.7	0.7	-	0.4	0.7	0.7	(21.3)	(0.7)	-	(0.3)
		Debt	**Equity**	**Revenue**	**EBITDA**	**EBIT**	**Interest Expense**	**FFO**	**CF From Operations**	**Dividends Paid**	**CapEx**
S&P's Adjusted Amounts		174.3	130.0	186.1	45.5	31.0	13.0	23.8	62.8	20.0	23.6
FFO-to-Debt								13.65%			
Debt-to-EBITDA					3.8						
Interest Coverage							2.4				

Note: Desciptions of significant adjustments by S & P from regulated financial statements:

1. Total interest expense less allowance for funds used during construction (excludes interest income) - see note 12 to annual financial statements
2. Total Interest Income per note 12 to financial statements
3. Current income tax expense per note 13 of annual financial statements
4. Allowance for funds used during construction per Note 12 to annual financial statements
5. Adjustment to reclassify after tax employee future benefit obligations as debt.

Reconciliation of MECL Reported Amounts with S&P's Adjusted Amounts

		2012									
		Debt	**S/H Equity**	**Revenue**	**EBITDA**	**Operating Income**	**Interest Expense**	**EBITDA**	**CF From Operations**	**Dividends Paid**	**CapEx**
Reported by MECL	Note	181.4	136.1	171.0	45.5	31.1	12.8	45.5	5.7	8.0	24.6
S&P Adjustments											
Interest Expense (reported)	1							(12.8)			
Interest Income (reported)	2							0.1			
Current tax expense (reported)	3							3.3			
Operating leases		0.1			0.1	-	-	0.1	0.1		
Post retiremnt benefit oblig/deferred	5	8.7	(0.6)		0.5	0.5	0.5	0.2	(0.4)		
Capitalized interest	4						0.3	(0.3)	(0.3)		(0.3)
Non-operating income(expense)	2					0.1					
Total adjustments		8.7	(0.6)	-	0.5	0.6	0.8	(9.4)	(0.6)	-	(0.3)
		Debt	**Equity**	**Revenue**	**EBITDA**	**EBIT**	**Interest Expense**	**FFO**	**CF From Operations**	**Dividends Paid**	**CapEx**
S&P's Adjusted Amounts		190.1	135.5	171.0	46.0	31.7	13.5	36.0	5.0	8.0	24.3
FFO-to-Debt								18.94%			
Debt-to-EBITDA					4.1						
Interest Coverage							2.3				

Note: Desciptions of significant adjustments by S & P from regulated financial statements:

1. Total interest expense less allowance for funds used during construction (excludes interest income) - see note 12 to annual financial statements
2. Total Interest Income per note 12 to financial statements
3. Current income tax expense per note 13 of annual financial statements
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Responses to IR-2, IR-5 and IR-6

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Regulated ROE	9.35%	9.35%	9.35%	9.75%	9.75%	9.75%	9.75%	9.75%	9.75%	9.73%	9.99%	10.20%	10.41%	9.63%	8.49%
Actual ROE	9.07%	9.02%	9.02%	9.41%	9.31%	9.41%	9.44%	9.79%	9.54%	9.58%	9.99%	10.20%	10.41%	9.63%	8.49%
Regulated Earnings	13,792,864	13,350,423	12,941,456	13,035,429	12,603,976	12,757,895	12,905,871	12,477,617	11,995,790	11,391,050	11,009,758	10,472,297	9,766,620	9,081,637	8,179,399
Total Earnings	13,424,404	12,928,143	12,485,366	12,700,779	12,246,244	12,494,315	12,578,804	12,544,363	11,743,767	11,219,480	11,009,760	10,472,297	9,766,620	9,081,637	8,179,399
Regulated Dividends	8,500,000	8,500,000	8,000,000	8,000,000	8,000,000	20,000,000	8,000,000	8,000,000	6,000,000	5,000,000	3,500,000	3,000,000	3,500,000	13,838,000	1,000,000
Total Dividends	9,747,120	8,797,500	8,297,500	11,184,271	8,000,000	20,000,000	8,000,000	8,000,000	6,000,000	5,000,000	3,500,000	3,000,000	3,500,000	13,838,000	1,000,000
Regulated Equity	149,937,329	145,012,926	140,584,782	136,099,416	131,398,637	127,152,394	134,658,079	130,079,275	125,914,183	120,170,415	113,950,935	106,441,177	98,968,880	88,661,441	99,916,645
Total Equity	149,937,329	145,962,546	140,584,782	136,099,416	133,860,408	129,316,665	136,099,850	130,458,546	125,914,183	120,170,416	113,950,936	106,441,177	98,968,880	88,661,441	99,916,645
# Common Shares	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219	4,893,219
Regulated EPS	2.82	2.73	2.64	2.66	2.58	2.61	2.64	2.55	2.45	2.33	2.25	2.14	2.00	1.86	1.67
Total EPS	2.74	2.64	2.55	2.60	2.50	2.55	2.57	2.56	2.40	2.29	2.25	2.14	2.00	1.86	1.67
Regulated Dividends per Share	1.74	1.74	1.63	1.63	1.63	4.09	1.63	1.63	1.23	1.02	0.72	0.61	0.72	2.83	0.20
Total Dividends per Share	1.99	1.80	1.70	2.29	1.63	4.09	1.63	1.63	1.23	1.02	0.72	0.61	0.72	2.83	0.20
Regulated NBV per Share	30.64	29.64	28.73	27.81	26.85	25.99	27.52	26.58	25.73	24.56	23.29	21.75	20.23	18.12	20.42
Total NBV per Share	30.64	29.83	28.73	27.81	27.36	26.43	27.81	26.66	25.73	24.56	23.29	21.75	20.23	18.12	20.42
Difference Between Actual and Regulated ROE	**-0.28%**	**-0.33%**	**-0.33%**	**-0.34%**	**-0.44%**	**-0.33%**	**-0.31%**	**0.04%**	**-0.20%**	**-0.15%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

	Note 1													
	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
Regulated ROE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12.97%	13.75%	13.75%	13.75%
Actual ROE	8.05%	7.69%	7.83%	1.50%	8.77%	8.62%	13.37%	14.43%	13.62%	11.21%	12.97%	13.75%	13.75%	13.75%
Regulated Earnings	7,177,567	6,334,773	5,969,156	998,904	5,298,630	5,240,358	7,851,198	7,991,868	7,884,394	6,580,073	6,859,913	6,641,439	5,887,468	5,223,176
Total Earnings	7,177,567	6,334,773	5,969,156	998,904	5,298,630	5,240,358	7,851,198	7,991,868	7,884,394	6,580,073	6,859,913	6,641,439	5,887,468	5,223,176
Regulated Dividends	-	-	-	1,159,150	4,636,601	5,646,183	3,253,099	4,225,289	16,078,534	3,794,574	3,541,252	3,304,615	3,006,966	2,720,389
Total Dividends	-	-	-	1,159,150	4,636,601	5,646,183	3,253,099	4,225,289	16,078,534	3,794,574	3,541,252	3,304,615	3,006,966	2,720,389
Regulated Equity	92,737,246	85,559,679	79,224,904	73,255,749	59,679,626	61,163,378	60,447,434	56,971,093	53,784,264	61,978,405	55,371,490	50,390,467	46,212,627	39,424,876
Total Equity	92,737,246	85,559,679	79,224,904	73,255,749	59,679,626	61,163,378	60,447,434	56,971,093	53,784,264	61,978,405	55,371,490	50,390,467	46,212,627	39,424,876
# Common Shares	4,893,219	4,893,219	4,893,219	4,893,219	3,739,194	3,739,194	3,739,194	3,739,194	3,739,194	3,739,194	3,639,207	3,613,151	3,559,810	3,250,184
Regulated EPS	1.47	1.29	1.22	0.20	1.42	1.40	2.10	2.14	2.11	1.78	1.89	1.85	1.73	1.61
Total EPS	1.47	1.29	1.22	0.20	1.42	1.40	2.10	2.14	2.11	1.78	1.89	1.85	1.73	1.61
Regulated Dividends per Share	-	-	-	0.24	1.24	1.51	0.87	1.13	4.30	1.03	0.98	0.92	0.88	0.84
Total Dividends per Share	-	-	-	0.24	1.24	1.51	0.87	1.13	4.30	1.03	0.98	0.92	0.88	0.84
Regulated NBV per Share	18.95	17.49	16.19	14.97	15.96	16.36	16.17	15.24	14.38	16.58	15.22	13.95	12.98	12.13
Total NBV per Share	18.95	17.49	16.19	14.97	15.96	16.36	16.17	15.24	14.38	16.58	15.22	13.95	12.98	12.13
Difference Between Actual and Regulated ROE	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**0.00%**	**0.00%**	**0.00%**	**0.00%**

CAGR - Regulated Dividends per Share	**-0.38%**
CAGR - Regulated Earnings per Share	**0.64%**
CAGR -Regulated Book Value per Share	**10.59%**

CAGR = $(EV / BV)^{1/n} - 1$
where:
EV = Ending value
BV = Beginning value
n = Number of periods (months, years, etc.)

Note 1: For the years 1994 - 2003 MECL was regulated under the Maritime Electric Regulation Act which was a form of price cap regulation and no ROE was set by the Regulator.

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General Criteria:

Group Rating Methodology

***(Editor's Note:** On Dec. 13, 2013, we republished this article to clarify our description in the third bullet point under paragraph 167 of how we arrive at the rating of a subsidiary that's strategically important, moderately strategic, or nonstrategic to a group when considering rating corporate group entities above the sovereign.)*

1. Standard & Poor's Ratings Services is updating its methodology for rating members of corporate groups to align it with the criteria for members of financial institutions and insurance groups, and therefore is adding to this article section IX, titled "Methodology: Corporate Groups." This update follows our request for comment (RFC) titled "Request For Comment: Group Rating Methodology: Corporate Entities," published Aug. 12, 2013. We have also added section VIII to this article to clarify the application of these criteria to members of U.S. public finance (USPF) groups.

2. This criteria article supersedes "General Criteria: Group Rating Methodology," published May 7, 2013, and incorporates the contents of that article into this update. For issuers within the scope of these criteria, this article also supersedes "Corporate Criteria--Parent/Subsidiary Links; General Principles; Subsidiaries/Joint Ventures/Nonrecourse Projects; Finance Subsidiaries; Rating Link to Parent," published Oct. 28, 2004; "Criteria | Corporates | Utilities: Methodology: Differentiating The Issuer Credit Ratings Of A Regulated Utility Subsidiary And Its Parent," published March 11, 2010; "Criteria | Corporates | Utilities: U.K. Regulatory Ring-Fencing Risk For Utility Holding Companies: Standard & Poor's Approach," published July 8, 2003; and "Criteria | Insurance | Specialty: Property/Casualty Insurance Criteria: Rating Captive Insurers," published April, 13, 2004. (See Appendix C for the complete list of superseded articles.)

3. The changes aim to enhance the transparency of the rating methodology for members of corporate, USPF, and financial services groups, including how group support interacts with extraordinary government support for government-related entities and systemically important financial institutions.

4. The criteria articulate the steps in determining an issuer credit rating (ICR) or financial strength rating (FSR) on a member of a corporate or financial services group. This involves assessing the group's overall creditworthiness, the stand-alone credit profile of group members, and the status of an entity relative to other group members and the parent company.

5. One of the main rating considerations is the potential for support (or negative intervention) from the parent company or group.

6. These criteria therefore address a key area of "external support" as described in paragraphs 31 to 35 of "General Criteria: Principles Of Credit Ratings," published Feb. 16, 2011.

I. SCOPE OF THE CRITERIA

7. These criteria apply to all regulated and nonregulated members of a corporate or financial services group, including holding companies, and to U.S. public finance entities that utilize obligated group/credit group structures to secure

debt.

8. A corporate group for the purpose of these criteria includes industrial entities and utilities. Corporate groups excluded at this time from these criteria are: project finance entities, project developers, transportation equipment leasing, auto rentals, commodities trading, investment holding companies, companies that maximize their returns by buying and selling equity holdings over time, Japanese general trading companies, corporate securitizations, nonprofit and cooperative organizations, master limited partnerships, general partnerships of master limited partnerships, and other entities whose cash flows are primarily derived from partially owned equity holdings. A financial services group is predominantly (1) a financial institutions group or (2) an insurance group (see the Glossary in Appendix A for definitions of both).

9. The group rating methodology also sets out our approach for rating nonoperating and operating holding companies at the top of a group structure, as well as intermediate holding companies. It also applies to mutual or cooperative groups, even though group members may not be linked by ownership but by a variety of ties, including mutual-support mechanisms. The methodology also applies to U.S. public finance obligated groups and credit groups ("obligated groups"), which are a collection of an organization's subsidiaries that are cross-obligated to pay specific debt issues.

10. The criteria assess the group status of a group member to determine a potential long-term ICR or FSR on the entity. For criteria on incorporating government support, see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011. For criteria on credit-substitution debt guarantees, see "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006, and "Guarantee Criteria--Structured Finance," published May 7, 2013. For constraints posed by the sovereign rating and/or transfer and convertibility risk assessments, see "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions", published Nov. 19, 2013.

II. SUMMARY OF THE CRITERIA

11. The group rating methodology explains how our assessment of likely extraordinary group support (or conversely, negative group intervention) factors into the ICR on an entity that is a member of a group.

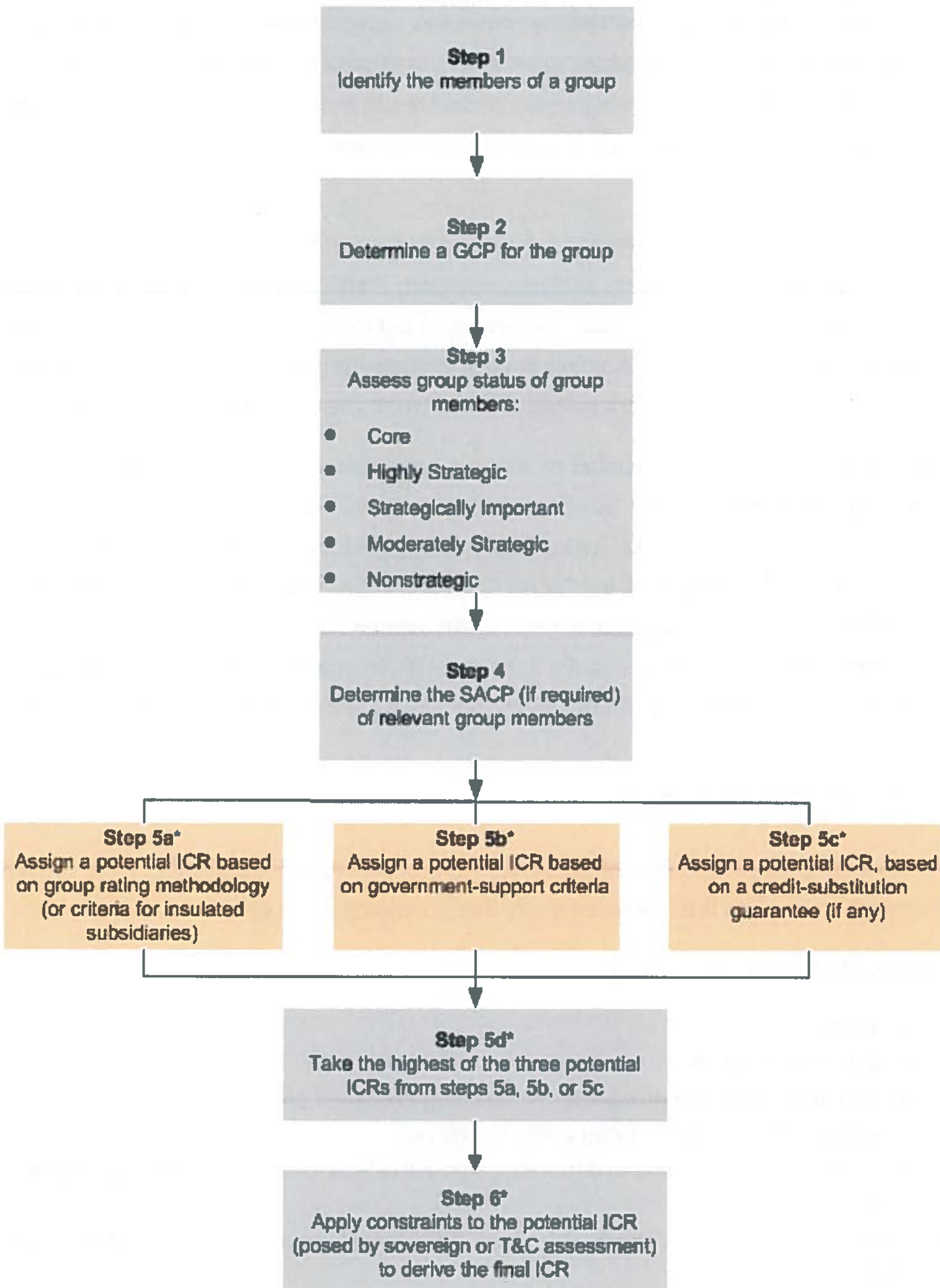
12. The methodology consists of six steps (see chart 1):

- Identifying the group's members;
- Determining a group credit profile (GCP);
- Assessing the status of an entity within the group and the resulting likelihood of group support;
- Assessing a stand-alone credit profile (SACP) for an entity if required;
- Combining the SACP and support conclusions to determine a potential ICR for a group entity, by notching up or down from the SACP or GCP; and
- Applying constraints if any to the potential ICR, depending on the relevant sovereign rating and/or transfer and convertibility (T&C) risk assessments.

13. The criteria define five categories of group status: "core," "highly strategic," "strategically important," "moderately strategic," and "nonstrategic." These categories indicate our view of the likelihood that an entity will receive support

from the group and determine the potential long-term ICR, with reference to the GCP and SACP (see table 1).
Chart 1

Building Blocks For Determining A Rating After Considering The Group Rating Methodology



*An insurance company can receive an ICR or an FSR. GCP--Group credit profile. ICR--Issuer credit rating. FSR--Financial strength rating. SACP--Stand-alone credit profile. T&C--Transfer & convertibility.

Table 1

Summary Of Associating An Entity's Group Status With A Potential Long-Term ICR

Group status	Brief definition	Potential long-term ICR*
Core	Integral to the group's current identity and future strategy. The rest of the group is likely to support these entities under any foreseeable circumstances. (see ¶¶54-55)	Generally at GCP (see ¶74)§
Highly strategic	Almost integral to the group's current identity and future strategy. The rest of the group is likely to support these subsidiaries under almost all foreseeable circumstances. (see ¶57)	Generally one notch below GCP (but see ¶74)§
Strategically important	Less integral to the group than highly strategic subsidiaries. The rest of the group is likely to provide additional liquidity, capital, or risk transfer in most foreseeable circumstances. However, some factors raise doubts about the extent of group support. (see ¶59)	Generally three notches above SACP (but see ¶74)§
Moderately strategic	Not important enough to warrant additional liquidity, capital, or risk transfer support from the rest of the group in some foreseeable circumstances. Nevertheless, there is potential for some support from the group. (see ¶60)	Generally one notch above SACP (but see ¶74)§
Nonstrategic	No strategic importance to the group. These subsidiaries could be sold in the near to medium term. (see ¶61)	Generally at SACP (but see ¶74)§

*Paragraph 28 prevails when the GCP is 'ccc+' or lower. §The potential issuer credit rating (ICR) is subject to sovereign rating constraints (see ¶77) and the government support criteria (see ¶27). An insurance company may receive an ICR and/or an FSR (financial strength rating). GCP--Group credit profile (see ¶33). SACP--Stand-alone credit profile (see also the Glossary in Appendix A).

14. A modified approach applies when a member is assessed as insulated from the rest of the group (see paragraphs 75 and 76), and when determining the interaction of group and government support.

15. For group members classified as government-related entities (GREs), the criteria for considering government support are found in "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010.

16. For banks not classified as GREs, the criteria for assessing government support are in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011.

III. CHANGES FROM THE CORPORATE RFC AND PREVIOUS METHODOLOGY

17. The main changes from the previous methodology for rating members of financial services groups include clarifications regarding:

- The treatment of subgroups within a larger group,
- The assessment of insulated subsidiaries and the interaction of group and government support for bank subsidiaries in foreign countries,
- The definition of the GCP and the unsupported GCP,
- Situations in which a rating on a group member can be higher than the sovereign rating on that entity's country of domicile,
- The impact that group membership has on the SACP on a group subsidiary, and
- The liquidity assessment of a nonoperating holding company (NOHC) at the head of an insurance group.

18. For members of corporate groups, the main changes from the RFC are:

- To remove the section on family-owned entities,
- To clarify the treatment of captive finance entities,

- To clarify situations in which a rating on a group member can be higher than the sovereign rating on that entity's country of domicile, and
- To clarify situations in which a rating on a group member can be higher than the T&C assessment on that entity's country of domicile.

IV. IMPACT ON OUTSTANDING RATINGS

19. We expect about 5% of corporate industrial companies and utilities ratings within the scope of these criteria and "Corporate Methodology," published Nov. 19, 2013, to change. Of that number, we expect approximately 90% to receive a one-notch change, with the majority of the remainder receiving a two-notch change. We expect the ratio of upgrades to downgrades to be around 3:1. Given that the criteria for members of financial services groups and U.S. public finance have been clarified rather than changed, we do not expect rating changes for such group members on the basis of this article.

V. EFFECTIVE DATE AND TRANSITION

20. The criteria are effective immediately. We expect to update our ratings over a period of six months.

VI. METHODOLOGY

21. The likelihood of financial support from a group to a group member, and vice versa, affects that group member's overall creditworthiness.

22. These criteria enable the ICR to reflect our view that a group member may receive or extend such support in the future, beyond what we already factor into its SACP. Ongoing support from the group forms part of the SACP assessment, as explained in "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010.

23. The potential for extraordinary support is factored into the ICR, even when the need for such support appears remote.

24. The criteria for the SACP assessment are in paragraph 71 and 72.

25. A situation where a group member's potential long-term ICR exceeds its SACP reflects the likelihood of that entity, in a credit-stress scenario, receiving timely and sufficient group support (beyond that already factored into the SACP), thereby lowering the likelihood of its default. For a bank, an indicative ICR is equivalent to a potential ICR.

26. A group member's potential long-term ICR that is lower than its SACP reflects the risk that, if the group were in a credit-stress scenario, the group would draw support from the group member.

27. The criteria set out a six-step process for assessing group members, including the likelihood of either group and government support or negative intervention in a stress scenario (see preceding chart). The steps are:

i. Identify which entities are group members.

ii. Assess the creditworthiness of the group as a whole and assign a GCP. The GCP assessment may factor in potential support from a government if such support would extend to the entire group (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011).

iii. Assess the group status (that is, the strategic importance to the group) of each group member to be rated.

iv. Determine the SACP of group members to be rated, unless an entity is exempt in accordance with paragraph 51.

v. Assign a potential long-term ICR using, where applicable, criteria for GREs or other government support (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010, and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011) and credit-substitution criteria (see the guarantee criteria sections of "Guarantee Criteria--Structured Finance," published May 7, 2013, and "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006, dealing with debt guarantees; see also paragraph 47).

vi. Assign the final ICR after considering any constraints to the potential long-term ICR posed by the relevant sovereign rating and/or T&C risk assessments (see paragraph 77).

28. In all cases, when an ICR is 'CCC+' or lower, the criteria in "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, apply. If a GCP is 'ccc+' or lower, but a subsidiary has an SACP of 'b-' or higher (which incorporates the ongoing effect of being part of the group), the rating on the subsidiary could result from a downward adjustment to the SACP for the possibility of extraordinary negative intervention from the group.

29. The final ICR would be the highest of the three potential long-term ICRs resulting from the group support, government support, or credit-substitution guarantee methodologies. For financial services groups, the final ICR may be subject to the caps described in paragraphs 96-98, under section VII.C, titled "Rating Financial Services Group Entities Above The Sovereign." For corporate groups, the final ICR may be subject to the caps described in paragraphs 166 to 168 under section IX.C, titled "Rating Corporate Group Entities Above The Sovereign." The case of extraordinary government support flowing through the group to a subsidiary or subgroup is addressed in paragraph 48. For financial services groups, the case of a strong subsidiary of a relatively weaker parent group is addressed in paragraphs 99 to 103 ("Insulated Subsidiaries Of A Financial Services Group"). We do not view a foreign bank subsidiary that is highly or moderately systemically important in the country where it is domiciled as an insulated subsidiary, however, given that it still has links with its parent group even when the "host" authorities impose restrictions on intragroup flows. Governments can have strong incentives to maintain financial stability in the local market through a combination of local regulatory intervention and government support. This means that support from a "host" government can sometimes be more likely than the potential for extraordinary support from a parent group. For U.S. public finance issuers, these criteria will be used to determine the ICR. If an issue rating is requested, it may differ from the ICR if the legal pledge supporting the bonds includes other features that strengthen or weaken credit quality from that indicated by the ICR, such as a closed lien or subordination. Barring these considerations, the USPF rating will be at the level indicated by the ICR.

A. Identifying Group Members

30. For the purposes of these criteria, the terms "group" and "group members" refer to the parent or ultimate parent, and all the entities over which a parent or ultimate parent has direct or indirect control. Often, the scope of consolidation is the same as that in the parent's or ultimate parent's consolidated audited accounts, plus proportionate stakes in joint ventures (JVs) exclusively or jointly controlled, but not included in such accounts.

31. "Control" refers to the ability to dictate a group member's strategy and cash flow. Control may be present even if ownership is less than 50% plus one share/unit (for an example see paragraph 83).

B. The Group Credit Profile (GCP)

32. In assessing the overall credit profile of a group, the relevant methodologies for assessing corporates, financial institutions, insurance companies, or other entity types apply. For conglomerates (including their holding companies), the specific rating methodology is the one relevant for the operations that most strongly influence the group's profile. This could be based on the amount of capital (such as when financial services dominate the activities), or earnings and dividends to the holding company (for groups with substantial corporate activities). The GCP assessment does reflect the impact of these other operations on the creditworthiness of the group.

B.1 Defining the GCP

33. The GCP is not a rating, but a component of the ICR on a group member. Consequently, GCPs do not have outlooks. The GCP is Standard & Poor's opinion of a group's or subgroup's creditworthiness as if it were a single legal entity, subject to the potential restrictions discussed in paragraphs 38 and 39 below. A GCP is determined when there is more than one legal entity in a group. The term "unsupported GCP" designates our opinion of a group's or subgroup's creditworthiness excluding the likelihood of extraordinary support or negative intervention from a government or a wider group. Unless prefixed with the term "unsupported," a GCP incorporates the likelihood of such extraordinary support or negative intervention from a government or a wider group. A GCP does not indicate the credit quality of any specific obligation.

34. A complex group can have more than one GCP to reflect subgroups (see paragraphs 65 to 67 for the treatment of subgroups within a group).

35. GCPs range from 'aaa' (the highest level) to 'd', on a scale that parallels the ICR ('AAA' to 'D'). The lowercase letters for GCPs indicate their status as a component of a rating rather than as a rating. Like an ICR, a GCP can carry the modifier "+" or "-". Typically, a GCP is 'd' only in the case of a generalized group default. The ICR on a legal entity within a group is lowered to 'D' or 'SD' only in accordance with "Standard & Poor's Ratings Definitions," published Oct. 24, 2013.

36. The criteria assess the consolidated group as though it were a single legal entity (for an exception see paragraph 38).

a) Noncontrolling interests

37. In general, for the purpose of determining a GCP, equity minority interests (also called "noncontrolling interests") in fully consolidated group members count as shareholders' equity (correspondingly, common dividends to these minority interests are treated as part of common dividends for income-statement, cash-flow statement, and balance-sheet purposes).

b) Insulated subsidiaries

38. We would typically count an insulated subsidiary as an equity affiliate, rather than consolidate it with the group, if we assign it a potential ICR that is two or more notches higher than the GCP. If a higher-rated insulated entity's resources are unavailable to the rest of the group, the GCP could be lower, which may in turn further restrict the potential for a higher rating on a group member. Although such an insulated subsidiary is treated as an equity affiliate in the assessment of the GCP, the GCP takes account of projected income flows from the subsidiary.

39. If the potential ICR on an insulated subsidiary is one notch higher than the GCP, it is consolidated with the group for the purposes of determining the GCP. However, the GCP assessment will take account of potential restrictions on resource flows within the group, as is also the case when considering a foreign bank subsidiary that is rated above the GCP because it is highly or moderately systemically important in the country where it is domiciled. In this case, the subsidiary is not classified as insulated, but the GCP will take account of the impact of any local restrictions on the flow of capital, funding, and liquidity, and any implications for the business and risk positions of the parent (see Appendix B for more details).

c) Entities owned by a financial sponsor

40. If the owner of a group entity is a "financial sponsor" (a company with no long-term or strategic interest in the group entity), the GCP assessment excludes the financial sponsor. This means the potential ICR on that group entity does not factor in the likelihood of support from the financial sponsor, nor is it directly constrained by our view of the sponsor's creditworthiness.

41. However, an entity's ownership by a financial sponsor may lead us to view the entity's financial policy and/or overall management as affected by the financial sponsor's exit strategy, its need for cash, or its policy regarding the upstreaming of cash from its holdings. This different treatment, relative to that for strategic corporate owners, reflects our view that, regardless of the degree of control it exerts, a financial sponsor has a lower incentive to support the entity under stress. Also, financial sponsors typically have diverse interests and may not be willing or able to bail out individual entities. The investment time frame is usually short, and as such the direction and management of the investment will be a function of the financial sponsor's exit strategy.

42. The GCP relevant for an entity owned by a financial sponsor typically includes one or more intermediate holding companies of the group, but excludes the financial sponsor's other holdings (that is, other operating companies it controls, as well as its own intermediate holding companies). The group often uses its intermediate holding companies to control operating companies, even those fully or partly owned by a financial sponsor.

43. The relevance of this GCP reflects the view that the primary influence on an intermediate holding company's creditworthiness is the operating companies it owns. The intermediate holding company's purpose is to acquire, control, fund, or secure financing for its operating companies, and it generally depends on those companies' cash flow

to service its financial obligations.

d) Holding companies

44. For a holding company that heads a group, sections VII.F and VII.G apply for insurance groups and financial institutions groups, respectively. For a holding company of a corporate group that contains insurance or financial institution subsidiaries, section IX applies.

e) Multiple ownership and joint ventures

45. If a group entity is under the joint control of at least two parents--for example, a joint venture--the insolvency or financial difficulty of a particular parent may weigh less on the subsidiary's credit quality than if the subsidiary were fully owned by that particular parent. There are different analytical approaches for a group's affiliated business operations, such as joint ventures and their debt, depending on the perceived relationship between the parents and the affiliated operations:

- Investment holding. This is when the group has little or no control over the operating entity. In this case, the approach is to treat the entity as an equity affiliate, which is not consolidated into the GCP. The value, volatility, and liquidity of the investment in the entity, if material, are analyzed on a case-specific basis.
- Partly controlled subsidiary. This is when the group has partial control over a material operating entity. The GCP assessment would involve a partial consolidation--for example pro rata--of the operating entity and, where appropriate, any forecast additional investment in that entity.
- Integrated subsidiary. This is when the group has dominant control over an operating entity and has effectively integrated it into the group (for a full definition of a fully integrated subsidiary see the glossary in Appendix A). The GCP assessment therefore fully consolidates the operating entity.

f) Extraordinary government support in the GCP

46. In some instances, the potential for extraordinary government support (beyond that already factored into the SACP) is a component of the ICRs on certain group members or the GCPs (see "Rating Government-Related Entities: Methodology And Assumptions," published Dec. 9, 2010 [subsequently referred to as the "GRE criteria"], and "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011), reflecting the GRE status of an entity or the systemic importance of a bank.

47. In this case, the criteria assess whether such government support, driven by GRE status or systemic importance, would likely accrue to all members of the group (for members of a group where the ultimate parent is a GRE see table 2).

48. To determine the ICR for a particular group subsidiary, where the assessment indicates that the government:

- Is likely to extend such extraordinary support directly to that subsidiary (bypassing the group), any rating uplift for such support is added to the SACP of that subsidiary in determining the ICR. If the subsidiary has core or highly strategic group status or "almost certain" GRE status, then the rating outcome is based on the group support or GRE support.
- Is likely to extend such extraordinary support indirectly, via the group, to the subsidiary, the supported GCP (which would include uplift, if any, for such support) is the reference point in determining the ICR for that subsidiary because the group is still responsible for the flow of support. The same approach applies if government support is likely for a subsidiary within a subgroup via the head entity of that subgroup; i.e. the supported GCP for the subgroup is the reference point for determining the ICR for the subsidiary.
- Is unlikely to extend such support, the criteria use the unsupported GCP in determining the ICR for that subsidiary.

Table 2

Rating Government-Related Entities--Likelihood Of Government Support Versus Group Support*			
SACP or GCP levels	**If the subsidiary is likely to benefit directly from extraordinary government support**	**If the subsidiary is likely to get extraordinary government support indirectly through the group**	**If the government is unlikely to support the subsidiary either directly or indirectly**
SACP is lower than an unsupported GCP	ICR = Higher of the SACP + uplift for potential government support, or SACP + uplift for group status uplift (subject to a cap at the level of the GCP unless the subsidiary is insulated).	ICR = SACP + uplift for group status uplift. If the group status is "strategically important" or lower, the ICR is capped at one notch below the GCP.	ICR = SACP + uplift for group status (with reference to the unsupported GCP).
SACP is higher than or equal to an unsupported GCP	ICR = SACP + uplift for potential government support (subject to a cap at the level of the GCP unless the subsidiary is insulated).	ICR = SACP + uplift for group status (with reference to the GCP). If the group status is "strategically important" or lower, the ICR is capped at one notch below the GCP (unless the subsidiary's SACP>= the GCP). If the SACP>= the GCP, the ICR is capped at the level of the GCP (unless the subsidiary is insulated).	ICR = SACP, subject to a cap at the level of the GCP (unless the subsidiary is insulated).

*This table does not apply to a GRE with an "almost certain" or "extremely high" likelihood of government support. See section VI. E.1 for the definition of an insulated subsidiary. Subject to paragraph 77, the rating assigned to a subsidiary that does not have an SACP is at the level of the GCP if the subsidiary is "core," or one notch lower than the GCP if the subsidiary is classified as "highly strategic." SACP--Stand-alone credit profile. ICR--Issuer credit rating (also FSR--Financial strength rating for insurance companies). GRE--Government-related entity.

C. Group Status Of Individual Members

49. The assessment of the strategic importance (or "group status") of group members takes into account the group's organization and degree of cohesiveness.

C.1 Subsidiaries

50. A subsidiary's group status will often reflect the amount and timeliness of credit support it would receive under stress. This section describes the framework that classifies a subsidiary's group status into one of five categories (for insurance holding companies and financial services holding companies, see sections VII.F and VII.G, respectively):

- Core,
- Highly strategic,
- Strategically important,
- Moderately strategic, or
- Nonstrategic.

51. An SACP for a subsidiary categorized as core or highly strategic to a group is not necessary unless otherwise required under other Standard & Poor's criteria. An example of such criteria is listed in paragraph 85.

52. If a group fails to support a group member in financial distress or puts a group member up for sale and that entity was previously assessed as at least strategically important, our approach is to review the group status of all rated group members.

53. A subsidiary's group status indicates differing degrees of enhancement, or uplift, above its stand-alone creditworthiness that contribute to the potential long-term ICR (see subsections a) to e) below). The ICR on a subsidiary could be at the GCP level if its SACP reaches or exceeds the GCP level. For criteria on incorporating the likelihood of government support, see paragraphs 46 to 48; for a credit-substitution debt guarantee, see paragraph 69; and for treatment of

insulated subsidiaries, see paragraphs 75 and 76. As described in paragraph 77, the final ICR is determined after considering any constraints to the potential long-term ICR posed by the sovereign rating and, with respect to the foreign currency ICR and T&C assessments.

a) Core entities

54. A core entity meets all of the following characteristics (see table 1 for a summary) and at least one of those in paragraph 55:

- Is highly unlikely to be sold;
- Operates in lines of business or functions (which may include group risk management and financing) integral to the overall group strategy. The activities it undertakes or the products and services it sells are very closely aligned with the group's mainstream business and customer base. The entity also often operates in the same target market. Captive insurance operations can be an example of a core subsidiary engaged in group risk management activities for a corporate or financial services group. A financing subsidiary set up specifically to raise corporate debt on behalf of a group can be an example of a core subsidiary engaged in financing activities on behalf of a group. A financing subsidiary of an insurance group, by contrast, is typically not as integral to the group's activities and instead we assess such subsidiaries using section VII.F "Insurance Holding Companies";
- Has a strong, long-term commitment of support from senior group management in good times and under stressful conditions, or incentives exist to induce such support (for example, cross-default clauses in financing documents, or the subsidiary plays an integral role in group risk management or financing). A decision to integrate the operations of a subsidiary or affiliate fully into those of the group or, for an insurer, to reinsure at least 90% of the subsidiary's risks within the group, indicates such commitment;
- Is reasonably successful at what it does or does not have ongoing performance problems that could result in underperformance against the group management's specific targets and group earnings norms over the medium- to long-term. In addition, the subsidiary's business risk should not be substantially higher than the group's. A newly acquired subsidiary has heightened potential for unanticipated risks to emerge, particularly during the first two years after the acquisition, and may not yet be deemed reasonably successful;
- Either constitutes a significant proportion of the consolidated group or is fully integrated with the group (see the glossary in Appendix A);
- Is closely linked to the group's reputation, name, brand, or risk management;
- Has been operating for more than five years (unless it meets the conditions for a start-up operation in paragraph 64); and
- If it is a captive (re)insurer, shows all of the previous features, and at least 90% of the subsidiary's business comes from other group companies on behalf of the group. A captive insurer that does not represent a "significant proportion" of the group may still be assessed as core if its third-party business does not exceed 10% of net premium written, and as highly strategic if third-party business does not exceed 30% of net premium written. (This bullet point only applies to captive (re)insurers.)

55. A core entity must also have at least one of the following characteristics:

- Shares the same name or brand with the main group; or
- Is incorporated separately for legal, regulatory, or tax purposes, but operates more as a division or profit center within the group. Its business, customer, and regional orientations are usually similar to those of other principal operations of the group. A core subsidiary often uses the group's distribution networks and shares administrative functions with other major operating units; or
- Demonstrates capitalization or leverage commensurate with the GCP.

56. U.S. public finance obligated groups are core entities if the obligated group meets the conditions of paragraphs 54 and 55 or if it contains the majority of the organization's primary operating facilities, such as its hospitals or senior living facilities.

b) Highly strategic subsidiaries

57. A subsidiary is highly strategic (that is, nearly core) when it meets all of the characteristics listed below (see table 1 for a summary):

- The first three characteristics listed in paragraph 54;
- All but one of the remaining characteristics in paragraph 54 (excluding the last bullet if the entity is not a captive insurer); and
- At least one characteristic listed in paragraph 55.

58. If the subsidiary is a captive insurer that does not represent a "significant proportion" of the group, it may still be assessed as highly strategic if third-party business does not exceed 30% of net premiums written.

c) Strategically important subsidiaries

59. When a subsidiary does not meet the conditions for core or highly strategic, it is categorized as strategically important if it meets all of the following characteristics (see table 1 for a summary):

- Is unlikely to be sold;
- Is important to the group's long-term strategy;
- Has the long-term commitment of senior group management, or incentives exist to induce such commitment (for example, cross-default clauses in financing documents); and
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms (except for a prudentially regulated group, in which case paragraph 90 applies).

d) Moderately strategic subsidiaries

60. When a subsidiary does not meet the conditions for core, highly strategic, or strategically important group status, it is categorized as moderately strategic if it meets all of the following characteristics (see table 1 for a summary):

- Is unlikely to be sold in the near term;
- Meets one of the remaining three characteristics for strategically important in paragraph 59; and
- Is likely to receive support from the group should it fall into financial difficulty.

e) Nonstrategic subsidiaries

61. When a subsidiary does not meet the conditions for core, highly strategic, strategically important, or moderately strategic, it is categorized as nonstrategic (see table 1 for a summary).

C.2 Branches

62. A branch is part of a legal entity that is typically at another location. A branch therefore has the same creditworthiness as the legal entity, unless the branch is in another country and the actions of that sovereign could affect the branch's ability to service its obligations (see paragraphs 97 and 98 for financial services). For more details on the criteria for bank branches, see "Assessing Bank Branch Creditworthiness," published Oct. 14, 2013.

C.3 Start-ups

63. A start-up operation may fit into any of the five group status categories, although it must show all the characteristics in paragraph 54 to be in the core category.

64. A start-up (see the glossary in Appendix A for a definition) subsidiary is generally not regarded as core (see paragraph 54) or highly strategic (see paragraph 57), however, because of the lack of an operating history. For a start-up, the potential for volatile earnings is likely to be higher than for long-standing operations. However, a start-up may be assessed as core to the group if it meets all the other characteristics listed in paragraph 54; or highly strategic to the group in line with paragraph 57. This means it meets all but one of the other characteristics listed in paragraph 54, apart from "has been operating for more than five years," and if it is set up to serve important existing customers, or has been created as a separate legal entity due to regulatory requirements or tax considerations, such that the group otherwise has the requisite operating history.

C.4 Subgroups

65. A subgroup can be headed by a nonoperating holding company or an operating entity of the wider group (for a definition of subgroup, see the glossary in Appendix A). USPF obligated groups may also be part of a subgroup.

66. A subgroup can have a GCP separate from that of the wider group.

67. In instances when the potential for extraordinary government support (beyond that already factored into the SACP) is a component of the ICRs on certain members of a subgroup or the subgroup's GCP, the criteria assess whether such government support would accrue to all members of the subgroup in accordance with paragraph 48.

C.5 Credit-substitution debt guarantee of group entities

68. When a group member's debt carries a credit-substitution guarantee, this means the guarantor will pay that group member's guaranteed obligations if it defaults. The evaluation of creditworthiness is therefore not on that group member (the primary obligor), but on the guarantor.

69. The criteria for credit-substitution guarantees are in the relevant sections of "Guarantee Criteria--Structured Finance," published May 7, 2013, "Approach To Evaluating Letter Of Credit Supported Debt," published July 6, 2009, and "Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria," published Oct. 1, 2006.

70. For insurance group subsidiaries that are beneficiaries of policy guarantees and other support agreements, see paragraphs 104 to 109 below.

D. Determining The SACP Of Group Members

71. The criteria for assessing the SACP of group members are:

- For financial institutions entities, in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011; "Rating Securities Companies," published June 9, 2004; "Rating Finance Companies," published March 18, 2004; "Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds," published Sept. 12, 2006; "Rating Private Equity Companies' Debt And Counterparty Obligations," published March 11, 2008; "Rating Asset Management Companies," published March 18, 2004; "Standard & Poor's Updated Methodology For

Rating Exchanges And Clearinghouses," published July 10, 2006; and "Rating Network Payment Providers," published June 1, 2005;

- For insurance entities, in "Insurers: Rating Methodology," published on May 7, 2013;
- For corporate entities, in "Corporate Methodology," published Nov. 19, 2013; and
- For USPF, in the relevant USPF sector criteria, most commonly "Not-For-Profit Health Care," published June 14, 2007, or "Senior Living," published June 18, 2007.

72. The SACP of a group member can be affected by its membership of that group. As discussed in "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, the determination of an SACP includes ongoing interaction or influence, whether beneficial (positive), neutral, or burdensome (negative). Table 1 of that article lists examples of positive and negative influence that affect the SACP of a group member. These include implications for the financial profile and the business model of the group member. (See Appendix B for more details on subsidiaries of financial institutions [FI] groups.)

E. Assigning The Issuer Credit Rating (ICR)

73. The ICR on a member of a group reflects its SACP, group status, and the potential for external support (or negative intervention) from the government or parent group, in line with relevant criteria (see also chart 1 and table 1).

74. Subject to paragraphs 96 to 98, 166 to 168, and "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013, and unless (a) the subsidiary is assigned a potential ICR higher than the GCP on the basis of the potential for extraordinary government support in accordance with bullet point five of paragraph 27, or (b) the subsidiary is classified as an insulated subsidiary with an ICR above the GCP, the potential long-term ICR for a:

- Core group entity is equal to the GCP.
- Highly strategic subsidiary is one notch lower than the GCP, unless the SACP on that subsidiary is equal to, or higher than, the GCP. In such a case, the potential long-term ICR is at the same level as the GCP.
- Strategically important subsidiary is three notches higher than its SACP. This is subject to a cap of one notch below the GCP, unless the SACP is at least equal to the GCP, in which case, the potential long-term ICR is at the GCP level.
- Moderately strategic subsidiary is one notch higher than that subsidiary's SACP. This is subject to a cap of one notch below the GCP, unless the SACP is at least equal to the GCP, in which case, the potential long-term ICR is at the GCP level.
- Nonstrategic subsidiary is at the level of the subsidiary's SACP, subject to a cap at the GCP level.

E.1 Insulated subsidiaries

75. Financial stress at the parent level will likely affect a subsidiary's SACP, particularly if there are close business or funding ties between the two. Excluding the conditions described in paragraph 29, a subsidiary with an SACP higher than the GCP does not generally receive an ICR that is higher than the GCP. This is notably because:

- The relatively weaker parent could potentially divert assets from the subsidiary or burden it with liabilities during financial stress, and the subsidiary could have much less debt- and capital-raising flexibility; and
- In some jurisdictions, a bankruptcy petition by the parent could include the subsidiary or cause the subsidiary to go

into administration or similar measures.

76. However, in some instances an entity may be partly insulated, segmented, or ring-fenced from its group, from a credit perspective. Such insulation may lead to a rating on a subsidiary being higher than the GCP. For members of a financial services group, this rating approach is explained in paragraphs 99 to 103. For members of a corporate group, the rating approach is explained in paragraphs 141 to 151. For U.S. public finance obligated groups, this approach is explained in "Senior Living," published June 18, 2007.

F. Rating Group Entities Above The Sovereign

77. The general criteria for assigning higher foreign currency ratings to nonsovereign entities than those on the sovereign are in "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013. The specific criteria provisions, which describe how group support can support ratings above the sovereign, are discussed in paragraphs 96 to 98 of this article for members of financial services groups and in paragraphs 166 to 168 of this article for members of corporate groups.

VII. METHODOLOGY: FINANCIAL SERVICES GROUPS

78. The term financial services group covers bank groups, other financial institutions groups, and insurance groups. This part of the article explains factors specific to both types of groups.

79. For the purposes of these criteria, a member of a financial services group need not itself be a bank, financial institution, or insurance entity. For example, a bank or insurance company may have a subsidiary that does not offer financial services. These criteria would apply to such an entity.

80. The criteria for considering government support for banks not classified as GREs are in "Banks: Rating Methodology And Assumptions," published Nov. 9, 2011.

81. The following subparts supplement paragraph 44, which describes the approach for holding companies:

- Nonoperating and operating holding companies (see paragraphs 110 to 121 for insurance holding companies and paragraphs 122 to 129 for financial institution nonoperating holding companies).
- Financial institution operating holding companies. The approach is to treat such companies like any other operating entity.

A. Identifying Members Of A Financial Services Group

82. This section VII supplements the definitions in paragraphs 30 and 31 and the glossary in Appendix A.

83. An example of "control" is when a bank is a shareholder in a 50-50 joint venture financial institution, but the regulator of both the bank and joint venture holds the bank responsible for the joint venture. This indicates that the bank controls the joint venture.

84. Banking and insurance are regarded as prudentially regulated sectors.

B. Group Status Of Members Of A Financial Services Group

1. Subsidiaries

85. Supplementing paragraph 51, an example of criteria that require a core or highly strategic subsidiary to have an SACP assessment are those in "Bank Hybrid Capital Methodology And Assumptions," published Nov. 1, 2011.

86. Supplementing paragraph 55, for core and highly strategic insurance subsidiaries of insurance groups, "commensurate capitalization" refers to capitalization that is:

- In line with group policies and practices for subsidiaries with similar group status, and
- Significantly above the regulatory minima.

a) Core entities

87. In determining whether a member of a financial services group is core, a "significant proportion of the consolidated group" in paragraph 54 means that the entity represents, or shows the ability to reach, the following level of capital, on the basis of projections for the next two to three years:

- At least 5% of consolidated group capital; and
- For a subsidiary of an insurance group, a "significant proportion" of group earnings refers to at least 5% of consolidated operating earnings before internal retrocession. For this analysis, the assessment of "operating earnings" involves evaluating EBIT (see the glossary of "Insurers: Rating Methodology," published May 7, 2013).
- For a complex global group with 20 or more significant operating subsidiaries, an entity may still be core, although its capital and earnings are below those stated above, if it is a bank or insurance company among the leaders in that market.

88. An insurance group's subsidiary is not considered core, highly strategic, or strategically important if there is a significant possibility of it being placed into run-off. However, this does not apply to subsidiaries whose operations could be transferred to other core, highly strategic, or strategically important subsidiaries, as long as there is no measurable credit impact on policyholder and nonpolicyholder financial obligations. In addition, this does not apply to subsidiaries of groups that for reputation reasons will likely support a subsidiary even in run-off, or which continue to consider the subsidiary's line of business as strategic.

b) Highly strategically important subsidiaries

89. This subsection supplements paragraph 57. The following additional consideration applies in order for a regulated subsidiary of a financial services group to be assessed as highly strategically important:

- A subsidiary in another business sector, such as an insurance subsidiary of a bank or a bank subsidiary of an insurer is often assessed as highly strategic instead of core to reflect the different operational characteristics and prudential regulatory frameworks of these businesses, which can limit the degree of integration over time.

c) Strategically important subsidiaries

90. For prudentially regulated groups, subsidiaries may occasionally be regarded as strategically important if the regulator holds the group responsible for supporting the subsidiary, even though the subsidiary does not meet the characteristics

in paragraph 59. However, the following additional conditions apply in order for a regulated subsidiary of a financial services group to be assessed as strategically important:

- A divestment of the subsidiary is only possible with the regulator's prior approval; and
- In periods of distress, the group is likely to provide additional liquidity, capital, or risk transfers in most foreseeable circumstances. The group's track record in supporting such subsidiaries is an indicator.

d) Moderately strategic subsidiaries

91. For prudentially regulated groups, subsidiaries may occasionally be regarded as moderately strategic if the regulator holds the group responsible for supporting the subsidiary, even though the subsidiary does not meet the requirements in paragraph 60. For a regulated subsidiary of a financial services group to be assessed as moderately strategic, the following additional conditions apply:

- A divestment of the subsidiary is only possible with the regulator's prior approval; and
- In periods of distress, there is the potential for some limited support from the group, even if the subsidiary may not be important enough to warrant additional liquidity, capital, or risk transfer from the group in some foreseeable circumstances. The group's track record in supporting such subsidiaries is an indicator. Examples of when there is the potential for limited support are (1) when minority ownership of a subsidiary implies a dilution of the group's responsibility, or (2) when the fragile financial position of the parent or group constrains either's ability to provide support.

2. Subgroups

92. The group status of members of a subgroup can be associated with that subgroup. The approach depends on the subgroup's status within the wider group, subject to the sovereign-related constraints indicated in paragraph 77.

93. If a subgroup is core to the wider group, we use the following approach if the wider group is expected to take the same stance as the subgroup toward supporting the subgroup's members (if not, paragraph 94 applies):

- The ICR on a core subsidiary of the subgroup is at the level of the wider group's GCP.
- The ICR on a highly strategic subsidiary of the subgroup is one notch lower than the wider group's GCP (unless its SACP equals that GCP).
- The ICR on a strategically important subsidiary of the subgroup is three notches higher than its SACP (capped at one notch below the GCP of the wider group, unless its SACP equals that GCP).
- The ICR on a moderately strategic subsidiary of the subgroup is one notch above its SACP (capped at one notch below the GCP of the wider group).
- The ICR on a nonstrategic subsidiary of the subgroup is equal to that entity's SACP.

94. If a subgroup is highly strategic, strategically important, or moderately strategic to the wider group, the assessment of its members reflects the following five factors to the extent they are relevant:

- The subsidiary's importance to the subgroup;
- The subgroup's importance to the wider group;
- The subgroup's GCP, or its unsupported GCP if we do not expect the wider group to contribute to the subgroup's support to the subsidiary;
- The subsidiary's SACP; and
- Our view as to which members of the group would provide support in case of stress.

95. The ICR on a subsidiary of a nonstrategic subgroup is based on that subsidiary's status relative to the subgroup and on the subgroup's GCP. In the rare cases that a nonstrategic subgroup's subsidiary is core or highly strategic to the wider group, and we expect the wider group to support the subsidiary directly, rather than via the subgroup, the ICR on that subsidiary is based on the subsidiary's status relative to the wider group and the wider group's GCP.

C. Rating Financial Services Group Entities Above The Sovereign

96. Implicit group support can lift the ICR on a group member higher than the relevant sovereign rating if the sovereign is rated 'B-' or lower, or in the following situations.

1. Members of financial institutions groups

97. Supplementing paragraph 77, group support does not result in an ICR on a subsidiary being higher than the relevant foreign currency sovereign credit rating, if we do not consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default. If we do:

- And the subsidiary is core to the group, the ICR on that subsidiary is one notch above the sovereign rating applicable in the host jurisdiction (see also paragraph 62 for bank branches).
- Uplift for the potential for group support cannot lift the ICR on a subsidiary, that is not core, higher than the sovereign rating on the host country. This is unless the subsidiary's exposure to that jurisdiction is less than 10%, and risks associated with that jurisdiction (such as a deposit freeze or monetary-union exit) are considered immaterial.

2. Members of insurance groups

98. Supplementing paragraph 77, group support does not result in an ICR on a foreign subsidiary or branch of an insurance group being higher than the local currency sovereign credit rating on the country where the subsidiary is domiciled, if we do not consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default. If we do, and:

- The subsidiary is an insurer benefiting from a policyholder guarantee according to the criteria in paragraph 104, or is a foreign branch of an insurance company, the rating is the lower of: (1) the ICR on the guarantor, (2) the result from adding six notches to the local currency sovereign credit rating if it is 'BBB-' or higher, and (3) the result from adding four notches to a local currency sovereign credit rating that is 'BB+' or lower.
- The subsidiary has less than 10% exposure to the local jurisdiction and faces immaterial risk from a deposit freeze or the sovereign's exit from a monetary union, the sovereign's creditworthiness does not constrain the rating assigned to the subsidiary. For example, such a foreign subsidiary is rated 'A+' if it is a highly strategic member of a group with a GCP of 'aa-', even though the rating on the host sovereign is 'BBB'. The 'A+' rating is one notch lower than the GCP in line with the approach for highly strategic subsidiaries (see paragraph 74).
- The subsidiary is in neither of the two preceding situations, the rating is the lower of: (1) the local currency sovereign credit rating (plus three notches if a core subsidiary), and (2) the potential rating otherwise derived from these criteria. An example is a potential long-term ICR of 'A-' for a strategically important subsidiary of a group in a 'AAA' rated jurisdiction. The subsidiary has an SACP of 'bbb' and all its operations are in a country that has a sovereign local currency rating of 'A-'; the rating would be three notches above the SACP, based on the strategically important status, but limited to 'A-'.

D. Insulated Subsidiaries Of A Financial Services Group

99. Supplementing paragraph 76, a non-prudentially regulated entity of a financial services group is rated higher than the GCP if there is multiple ownership as described in paragraph 45 or, alternatively, two or more of the following restrictions are in place (see "Legal: Ring-Fencing A Subsidiary," published Oct. 19, 1999):

- Limited-purpose entity structure;
- Covenants; or
- Collateral.

100. Although prudentially regulated subsidiaries are generally not rated higher than the GCP, they may receive a rating one notch higher than the GCP as an insulated subsidiary if all of the following conditions are met:

- The subsidiary has an SACP that is at least one notch higher than the GCP, or the SACP plus the uplift for potential government support is one notch higher than the GCP.
- The subsidiary's prospects in terms of financial performance and funding are highly independent from those of the group, so that even if other core entities encounter severe setbacks, the relative strength of the subsidiary would remain nearly intact;
- Regulatory restrictions (such as regarding liquidity, capital, or funding) are of sufficient strength that they would prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness;
- It is unlikely that proceedings that could lead to a default at the group level, under our criteria, would directly lead to a default of the subsidiary; and
- The parent's strategy with respect to the subsidiary is clear and, in particular, the parent has a compelling economic incentive to preserve the subsidiary's credit strength.

101. The potential long-term ICR for an insulated subsidiary is two notches above the GCP if the entity fulfills the characteristics listed in paragraph 100, and its SACP (or its SACP plus the uplift for potential government support) stands at least two notches above the GCP, and one of the following situations applies:

- The holding company or group's weaker credit quality results from its ownership of smaller, nonregulated business activities that are largely unrelated to the business line of the regulated entity's operations, and management has taken affirmative steps to distance the rest of the group from such unrelated subsidiaries, as shown by actual behavior, beyond the usual verbal assurances that management will not imperil the creditworthiness of the rated subsidiary by supporting weaker operations; or
- The subsidiary is a clearinghouse, exchange, or central securities depository that would likely benefit from any necessary protective actions by the host authorities in the interest of financial stability, if the wider group came under stress; or
- The subsidiary is a regulated entity and we expect the host regulator to intervene in an effective manner to protect the position of the subsidiary.

102. The potential long-term ICR on an insulated subsidiary is three notches above the GCP if the entity meets the conditions for assigning ratings that are one and two notches above the SACP in paragraphs 100 and 101, and all the following characteristics apply:

- The subsidiary's SACP (or the SACP plus the uplift for potential government support) stands at least three notches

above the GCP;
- The subsidiary is assessed to be severable from the group and able to stand on its own or subcontract certain functions previously provided by the parent. This includes receiving immaterial funding, if any, from the group;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the insolvency of the parent company;
- The group and subsidiary's public statements on dividend policy are consistent with the independent integrity of the subsidiary;
- There is an independent trustee or equivalent party with the ability to enforce the protection of the rights of third parties; or significant minority interests that have sufficient power to block dividend payments (this will typically correspond to ownership of at least 20%, and such minority shareholders would have independent directors on the board of the subsidiary that can influence decision-making effectively); or the government has the right to change ownership of the subsidiary via existing legislation for the resolution of a troubled entity or other legal powers enabling it to change the ownership of a subsidiary in order to separate it from a troubled parent, and we expect that it could use this right; and
- There is a strong economic basis for the parent, regulator, or government's commitment to maintain the capital to support the higher rating on the subsidiary.

103. The potential long-term ICR for an insulated entity is delinked from the GCP if all the following characteristics are met:

- The GCP relating to that insulated entity has declined precipitously within a short period, for example within approximately 12 months, by three notches or more, either into or passing through the 'b' category; and
- The regulator for that entity is expected to act (or has acted) to prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness.

E. Subsidiaries Of An Insurance Group As Beneficiaries Of Policy Guarantees And Other Support Agreements

104. Where a policy guarantee agreement meets the following conditions, the FSR on the beneficiary is that of the guarantor (unless the beneficiary's SACP is higher). These conditions mirror those for our rating-substitution criteria for debt guarantees (see "Guarantee Default: Assessing The Impact On The Guarantor's Issuer Credit Rating," published May 11, 2012). However, the last two conditions are specific to these criteria, as is the absence of a reference to timeliness (which FSRs do not address). Also, policyholders, not debtholders, are the beneficiaries of policy guarantees. The conditions are:

- The guarantee covers all policyholder obligations and explicitly ranks them as pari passu with the guarantor's own policyholder obligations. (A guarantee that does not cover all the guaranteed entity's policyholder obligations may not enhance the FSR on that entity at all.)
- The guarantee is of payment and not collection.
- The guarantee is unconditional, irrespective of value, genuineness, validity, or enforceability of the supported obligations. The guarantee provides that the guarantor waives any other circumstance or condition that would normally release a support provider from its obligations. The guarantor should also waive the right of set-off and counterclaim.
- The guarantor's right to terminate the agreement is appropriately restricted, that is, the support agreement does not terminate before the supported obligations are paid in full. In cases where the agreement can be terminated before all supported obligations are paid in full, all obligations incurred up to the termination date will remain supported. In

addition, the support agreement must be binding on successors of the support provider or, if it can be revoked, this only applies to policies written after the revocation date.

- The guarantee provides that it reinstates if any supported payment is recaptured as a result of the primary obligor's or the guarantor's bankruptcy or insolvency.
- Policyholders are third-party beneficiaries of the guarantee.
- To strengthen the guarantee's enforceability by policyholders, if the insurance policies do not contain a copy of the guarantee or disclose its existence and key features, the beneficiary insurer or guarantor provides what we view as sufficient public disclosure of its existence and key features.
- In the case of cross-border transactions, the guarantee appropriately addresses the risk of withholding tax with respect to payments by the guarantor, where such a potential tax is relevant.

105. Additionally, with respect to guarantees provided to Lloyd's corporate members:

- The guarantee explicitly specifies a method through which valid claims continue to be paid to policyholders should the central Lloyd's claims payment process be inoperable for any reason, including regulatory action affecting Lloyd's.
- The guarantee is triggered when the corporate member fails to make timely payment of any amount, once determined to be due and payable, from premium trust funds and funds at Lloyd's. There should be no reliance upon payments from the Lloyd's Central Fund.

106. For the purpose of these criteria, for a subsidiary of an insurance group, "support agreements" may include net-worth maintenance agreements or any other agreement intended to provide support to subsidiary policyholders. These can lead to an enhancement (or uplift) of the ICR or FSR assigned to an entity. When an indirect support agreement does not meet all of the conditions for ratings substitution with those of the guarantor, then to qualify for any rating enhancement, the support agreement must meet all of the following conditions. It:

- Gives policyholders, financial creditors, or other third-party interests, such as regulators, the ability to enforce the agreement against the support provider, if the provider fails to perform its obligations;
- Cannot be modified or terminated to the detriment of the existing beneficiary policyholders, or creditors at the time of termination without their agreement, unless the beneficiary subsidiary's creditworthiness becomes at least as strong as the supported rating; or the beneficiary can be sold only to an insurer with the same or higher creditworthiness as the support provider;
- Stipulates that the subsidiary will be prudently capitalized, for example, relative to the regulatory capital requirement; and
- Provides that the support provider will cause the beneficiary entity to have sufficient cash and liquid assets for the timely payment of all of its debt if the agreement is to provide corporate debt support, and policyholder obligations if the agreement is to provide policyholder support.

107. When, in addition to the conditions in the previous paragraph, the beneficiary subsidiary is at least strategically important to the group, and the support agreement meets all of the following four conditions, the rating on the beneficiary (unless it has an SACP at or above the GCP) is one notch below the rating on the support provider:

- The agreement states definitively that the provider will support the beneficiary, and sets no material cap on the support;
- The agreement is provided by a regulated bank or insurer that is a core group or subgroup member;
- The agreement is binding on successors and agents of the support provider; and

- The beneficiary subsidiary does not demonstrate adverse performance and is unlikely to be part of a corporate restructuring.

108. When the conditions in paragraph 106 apply, but a subsidiary is not core, highly strategic, or strategically important, and a net-worth maintenance agreement meets both of the following conditions, the rating on the beneficiary is three notches above its SACP, subject to a cap at one notch below the rating on the support provider:

- The agreement demonstrates an intention to support the beneficiary in the medium- to long-term; and
- The agreement is provided by an affiliated regulated bank or insurer.

109. For an insurance subsidiary with explicit support from a qualifying guarantee, the FSR on a subsidiary insurer would generally be six notches higher than the local currency sovereign credit rating in countries rated 'BBB-' or higher, and four notches higher than the local currency sovereign credit rating in countries rated 'BB+' or lower, limited by the rating on the guarantor.

F. Insurance Holding Companies

110. The criteria do not assign a group status to holding companies at the head of an insurance group. The ratings on holding companies reflect the difference in their creditworthiness relative to the operating entities.

111. Holding companies are NOHCs if they do not carry on insurance business, or operating holding companies (OHCs) if they do. (See the glossary in Appendix A for definitions.) A holding company that carries out an immaterial amount of insurance business is still classified as an NOHC, however. The criteria assign only ICRs to NOHCs, while OHCs may receive both ICRs and FSRs.

112. The ICR on a NOHC reflects (1) the GCP and (2) the number of notches that differentiate the NOHC from the operating entities. The rating differential takes account of the ongoing subordination of the creditors of the holding company to those of the operating insurance subsidiaries (typically their policyholders). A financing subsidiary of an insurance group that does not have core group status is assigned a rating as if it were an NOHC.

113. The difference (in notches) between the ICR on a NOHC and the GCP reflects the degree of structural subordination within insurance groups. Structural subordination is considered very high in jurisdictions such as the U.S., where even strong companies have to obtain prior regulatory approval before transferring significant amounts of solvency capital from an operating company to its holding company. Structural subordination is somewhat less onerous in regions other than the U.S. We define an NOHC as either a U.S. or non-U.S. NOHC, based on the geographic split of estimated dividends that the NOHC could receive, or in the absence of data on dividends, on the geographic split of earnings.

114. Usually, a NOHC receives an ICR that is two notches below that on the core operating companies (three notches below in the case of U.S. NOHCs whose classification is based on the geographic breakdown of the group's premiums). In rare instances, a different notching approach applies as follows; the ICR on an NOHC is:

- One notch lower than that on the core operating companies, if (1) banking operations are expected to contribute at least 25% of the group's operating income on a forward-looking basis based on projections over the next two to three years, and (2) the holding company is domiciled in a jurisdiction with a common regulator for banks and insurers that is supportive of capital fungibility among the holding company and the banking and insurance subsidiaries. If there is an increased likelihood of regulatory intervention detrimental to the NOHC's creditors, however, the notching differential can in such circumstances exceed one notch.

- One notch lower, if a holding company of insurance and noninsurance businesses has nonregulated activities that consistently provide at least one-third of the group's operating income (for example, based on EBITDA as defined in "Corporate Methodology: Ratios And Adjustments," published Nov. 19, 2013), and the noninsurance business is not regulated, and their cash flows to the holding company are not subject to regulatory intervention. This also applies if nonregulated activities provide the majority of the group's operating income.
- The same as the GCP, that is, the notching is zero, if nonregulated businesses provide a clear majority of the group's operating income. This assumes that the nonregulated businesses are either (1) not owned by an insurance company or bank, or (2) owned by an insurance company or bank whose transfer of dividends to its owners is prudentially regulated, but any limits on the payment of dividends are unlikely to prevent the pass through of dividends from the noninsurance business to the holding company.
- Two notches below the GCP, for a holding company of a U.S.-based insurance group, instead of the usual three, based on our assessment of the unconsolidated liquidity position of the holding company and specifically: (1) the group's diversity among regulated subsidiaries in different domiciles, (2) the group's fixed-charge coverage, (3) the operating companies' aggregate ordinary dividend capacity relative to the sum of the holding company's ongoing cash requirements and principal maturities over the next 12 months, and (4) the holding company's unencumbered cash and liquid investments relative to the sum of its ongoing cash requirements and principal maturities over the next 12 months.
- One notch lower than the GCP, if an intermediate insurance holding company that (1) is part of a broader bank group, (2) contains at least one operating company that is strategically important, highly strategic, or core to the bank group, and (3) has sufficient access to funding or support from the parent bank group operations and to dividend flows from its insurance operations.
- Assigned in accordance with the situations described in "Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings," published Oct. 1, 2012, if the company is a holding company of an insurance group with a GCP of 'b-' or lower. The same approach applies for a holding company if the notching in this section would otherwise result in a rating of 'CCC+' or lower.

115. The notching from the GCP to derive the ICR on a NOHC is also increased in the following situations:

- If the holding company's liquidity is assessed as "less than adequate" or "weak," the ratings are capped at 'BB+' or 'B-', respectively; or
- When the holding company itself carries very significant asset or liability risks that are otherwise diluted within the overall GCP.

116. The liquidity assessment for a NOHC is a function of the first three subfactors defined in section D.2 of "Insurers: Rating Methodology," published May 7, 2013, and of the two ratios described in paragraph 119 below (which together create the "ratio subfactor"). All items are analyzed at the level of the unconsolidated holding company, which, in most cases, carries most of the group's financial obligations.

117. A NOHC's liquidity is assessed as "adequate," "less than adequate," or "weak." The criteria never assess an NOHC's liquidity as "exceptional" or "strong."

118. Liquidity is assessed as less than adequate when one or two of the following four subfactors are negative, and weak when three or more of the subfactors are negative (in all other cases, liquidity is assessed as adequate):

- The first three subfactors defined in section D2 of "Insurers: Rating Methodology," published May 7, 2013; and
- The ratio subfactor in paragraph 119.

119. The ratio subfactor is positive when both of the following ratios (calculated at the level of the unconsolidated holding company) exceed 1.5x, negative if the first one is less than 1.2x and the second one less than 1.0x, and neutral otherwise. The two ratios are:

- Liquid assets to noncontingent short-term financial liabilities, where the numerator excludes stakes in subsidiaries but includes undrawn committed backup facilities (see paragraph 181 of "Insurers: Rating Methodology," published May 7, 2013), and the denominator includes liabilities with structured settlements, with no optional features;
- The holding company's ability to pay its total liquidity requirements (excluding principal servicing) out of its cash inflows: [Dividends from operating entities + net investment revenues from holding assets] / [overhead expenses + interest charges + other ongoing financial charges + shareholder distributions, if any].

120. The FSR and ICR for an operating holding company result from notching down from the GCP by up to two notches (or by up to three notches in the case of U.S. OHCs, where the classification is based on the group's geographic breakdown of premiums) to reflect the ongoing cash flow subordination consistent with our approach for NOHCs. The number of notches from the GCP predominantly is a function of:

- The group's financial leverage and the holding company's role as a debt financing vehicle;
- The holding company's dependence on income streams from operating subsidiaries versus the diversity of such income streams and the holding company's ability to generate revenues from own activities to service its debt obligations; and
- The availability of excess capital held at the holding company.

121. The following are examples of how ratings on OHCs are derived with respect to the GCP:

- If the group's financial leverage is immaterial and an OHC's activities are integral to those of the group, the rating on the OHC is typically equal to the GCP.
- For OHCs that operate with financial leverage of less than 30%, the ICR is typically equal to the GCP if a combination of diverse income streams from operating subsidiaries, revenues from own activities, and/or sizable excess capital, in our view, enables the OHC to meet its ongoing payment obligations under essentially all foreseeable circumstances. Again, this applies if the OHC's activities are integral to those of the group.
- For OHCs that operate with financial leverage of less than 30%, the ICR is typically one notch lower than the GCP if a combination of offsetting factors (related to the factors in the second and third bullet points of paragraph 120), in our view, enables the OHC to meet its ongoing payment obligations under most foreseeable circumstances.
- For OHCs that operate with financial leverage of more than 30%, the ICR is typically two notches lower than the GCP. This differential typically also applies if an OHC operates with financial leverage lower than 30%, but is dependent on income streams from a few operating subsidiaries, has limited capacity to generate revenues from own activities, and/or does not hold sizable excess capital.

G. Financial Institution Nonoperating Holding Companies

122. For NOHCs at the head of financial institutions groups:

- The ICR is generally one notch lower than the GCP.

- The rating differential between a NOHC and the core operating entities is mainly due to the NOHC's reliance on dividends and other distributions from operating companies to meet obligations.
- Certain factors lead to higher relative credit risk at an NOHC and result in wider notching from the GCP (see paragraphs 126 and 127 for examples).
- In certain circumstances, a weak financial profile at the NOHC, as shown by high double leverage (see sidebar below) and/or weak liquidity, reflects poorly on the group's financial profile and the creditworthiness of the consolidated financial entity.

123. The creditworthiness of an NOHC is closely tied to that of the consolidated group, but is marginally weaker than the core operating entities'.

124. The ICR on a NOHC is usually one notch lower than those on the group's core operating entities. The differential reflects our perception of marginally greater credit risk at the NOHC relative to the group operating entities. This risk arises from the NOHC's reliance on distributions from the operating companies to meet its obligations, possible supervisory barriers to payments and potentially different treatment in a default situation, and the structural subordination of holding company obligations to those at the operating company level.

125. Factors that may widen the ratings gap between the NOHC and the core operating entities include increasing stress at the holding company or group level, the potential imposition of supervisory barriers to payments from operating companies to the NOHC, and the possibility that a government may rescue the operating company (in most cases, the bank), but not the NOHC, in a default situation. The greater the potential for these actions, the wider the differential between the rating on the NOHC and the core operating entities.

126. We reflect these factors by assigning a credit rating to the NOHC that is usually one notch lower than the credit ratings on the core operating entities of the group. The gap may be wider than one notch when:

- The group is under stress;
- The GCP includes an uplift for potential extraordinary government support, but the same degree of support is not expected to accrue to the NOHC (in certain cases, some support may be expected to accrue to the NOHC);
- The likelihood of regulatory intervention that would be detrimental to the NOHC's creditors increases;
- There are severe liquidity mismatches at the NOHC level, or a ratio of NOHC liquid assets--cash, money market funds, and marketable securities--to short-term debt (debts falling due within 12 months) that indicates the NOHC's weaker capacity to meet maturities of short-term obligations. The ratio indicates the amount of time the entity could survive without access to any debt financing; or
- Double leverage creates heightened sensitivity for an NOHC's creditors that is not offset by greater liquidity at the NOHC level (see sidebar below for more details).

Double Leverage For Financial Institutions Groups

- We define double leverage (DL) as holding company investment in subsidiaries divided by holding company (unconsolidated) shareholders' equity. DL renders the NOHC dependent in part on dividends to meet interest payments on external debt.
- The calculation of DL from public data is often unreliable and complicated by the existence of multiple holding companies in some organizational structures. If DL exists at each holding company level, a single group measure of DL is not meaningful.
- Holding company accounts are often only available annually, and detailed breakdowns of balance-sheet items are rare. In particular, NOHC-only disclosure frequently does not distinguish between equity investments in subsidiaries and advances to subsidiaries. Some groups employ different accounting standards for holding company and consolidated accounts. For all of these reasons, published measures of DL are often not comparable, but DL remains an important analytical tool to measure creditworthiness of financial institutions.
- Regulators often have the authority to prevent dividend payments by a subsidiary to its parent. If interest received from operating companies is insufficient to meet an NOHC's external interest and principal repayment obligations, the NOHC may suffer a strain on liquidity.
- We do not link specific thresholds for double leverage to the rating differential between the ICRs on the NOHC and core operating entities of a regulated financial group. Rather, we take DL into account in our analysis of the creditworthiness of the consolidated group. High DL may strain the liquidity needs of the NOHC and is a sign that the liquidity management of the group may be aggressive. We consider a high DL ratio as an indicator of potential for stress on the NOHC's liquidity and a signal that the group's liquidity could be strained if not offset by compensating factors.
- We would generally view the threshold of 120% double leverage as sufficiently high to expect offsetting liquidity at the NOHC parent to compensate. Similarly, if the absolute amount of double leverage of a financial group with a NOHC exceeds two years' net income of the consolidated group, we would look for offsetting liquidity at the NOHC parent to compensate.
- NOHCs often issue hybrid capital securities that build regulatory capital. They invest the proceeds in operating subsidiaries as equity or as similarly structured hybrid securities. We calculate DL in two ways: (1) with a common equity double-leverage measure that treats hybrid capital as debt, and (2) with a total equity double leverage measure that treats hybrid capital as equity. When a financial institutions group's common equity DL is higher than its total equity DL, the NOHC has issued hybrid capital securities and invested the proceeds as equity in an operating subsidiary.

127. When a regulated financial institutions group with a bank holding company has a GCP lower than 'bbb-', the gap between the ICR on a NOHC and its core operating company (typically a bank) is at least two notches.

128. For nonregulated nonbank financial institutions groups, the ICR assigned to a NOHC may be equalized with the GCP when the core operating entity or entities' activities display dependability or diversity (geographically or by business line) sufficient to support the NOHC's debt servicing. In such groups, we may equalize the rating on the NOHC with that on the nonregulated operating companies if there are no potential material restrictions (such as covenants) on the operating entities' ability to directly support the NOHC's creditworthiness.

129. For an intermediate nonoperating holding company within an FI group, the ICR is notched down from the core operating entity subsidiary of that holding company as if the intermediate holding company were the head of the group. This is unless we expect the wider group to provide support for the subsidiaries of the intermediate holding

company by injecting financial resources into the intermediate holding company. In that case, the ICR of the intermediate holding company is set at the level of its core operating subsidiary.

VIII. METHODOLOGY: U.S. PUBLIC FINANCE OBLIGATED GROUPS

130. U.S. public finance obligated groups typically consist of a group of subsidiaries, or a single subsidiary, that are cross obligated as security for specific debt. Obligated group structures are most commonly used by not-for-profit hospitals, health systems, and senior living organizations.

131. Obligated groups are created for purposes of securing debt, and do not have operating or governance independence from the larger group. While debt covenants may contain some restrictions, for example limitations on the transfer of assets out of the obligated group, covenants are generally not strong enough to insulate the obligated group from the strategic and operating influence of the group. Exceptions are described in paragraph 76.

132. Individual obligated group members may have separate legal incorporation and varying strategic value to the group. However, since the purpose of the obligated group is to secure debt on a joint and several basis, group status will be determined for the obligated group as a whole, not for its individual members. In applying the methodology in these criteria, obligated groups will be considered a single entity.

133. The group status of an obligated group will be core if it meets the conditions in paragraphs 54 and 55, or if it contains the majority of the operating assets of the organization, such as its hospitals or senior living facilities.

134. Most U.S. public finance ratings are issue ratings, although ICRs are assigned upon request. These criteria will be used to determine the ICR in accordance with paragraphs 21 to 29. The issue rating could differ from the ICR based on the specific security package for the bonds. We expect that barring subordination or structural enhancement, the issue rating will be at the level indicated by the ICR.

135. Following is an example of the application of this methodology to a health system that has three obligated groups, all of which have requested ICRs.

Chart 2—Example of Group Rating Methodology Application to U.S. Public Finance—Organization Structure

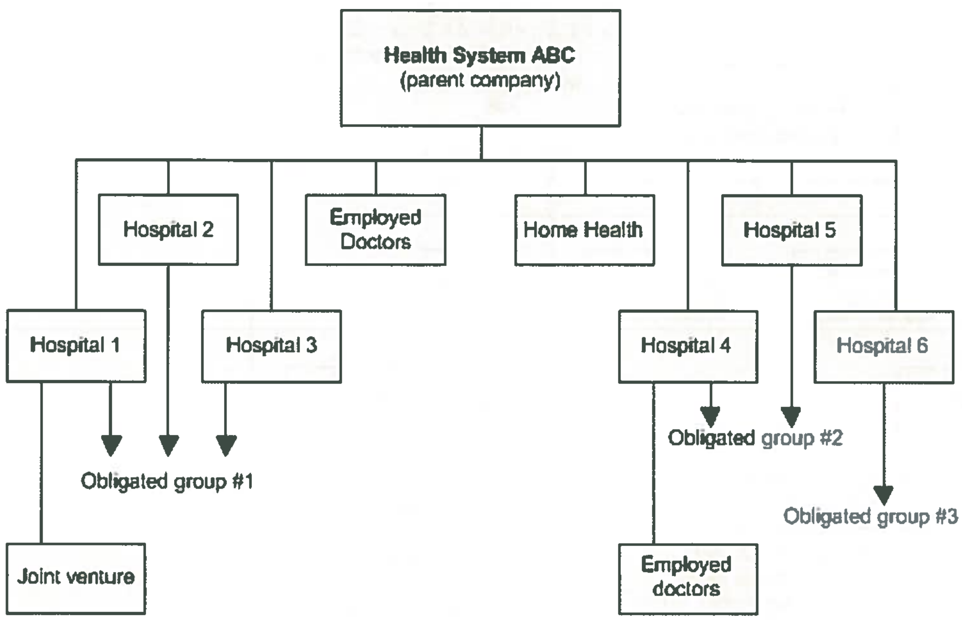
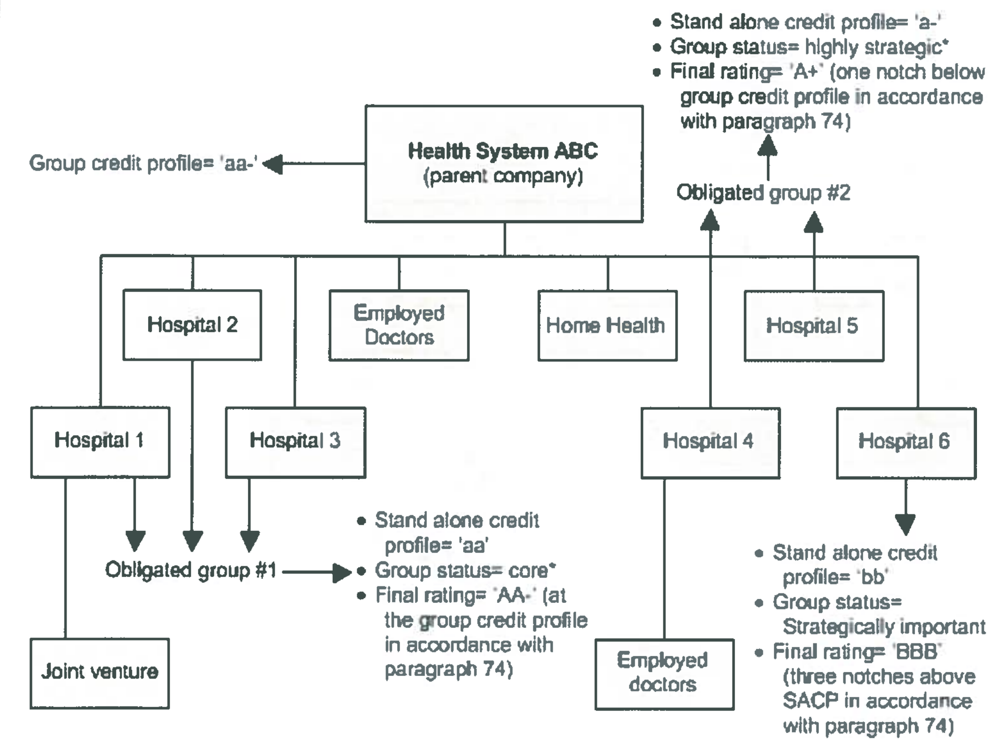


Chart 3—Example of Group Rating Methodology Application to U.S. Public Finance—Rating Profile



*The criteria do not require determination of a stand-alone credit profile (SACP) for obligated groups whose group status is "core" or "highly strategic" (see paragraph 51). The SACP provided here is for illustrative purposes.

IX: METHODOLOGY: CORPORATE GROUPS

A. Identifying Members Of A Corporate Group

136. For the purposes of these criteria, the scope of consolidation for corporate entities is generally the same as that of the group's consolidated audited accounts, plus proportionate stakes in joint ventures exclusively or jointly controlled, when we believe that the group has access to these JVs' cash flows and/or is likely to support them under stress.

137. We may adjust the consolidated statements we use to determine the GCP to include proportionately consolidated stakes in joint ventures that aren't included in the accounts, or adjust to treat as equity affiliates (using the equity method of accounting) subsidiaries that the group doesn't control or whose cash flows it doesn't have full (or unfettered) access to. Similarly, we may adjust consolidated statements to treat proportionately consolidated joint ventures as equity investees, when we believe that the group does not have sufficient control or access to these

entities' cash flows, or is unlikely to provide financial support to them.

138. The ICR of the parent is the same as the GCP. We analyze the GCP on a consolidated basis except where it has an insulated subsidiary to which we've assigned a potential ICR that is two or more notches higher than the GCP, as described in paragraph 38.

139. In line with paragraphs 38 and 39, the existence of an insulated subsidiary could negatively affect the GCP as its cash flows may not be available to the group. In cases where these subsidiaries represent such a material part of the organization's financial strength as to have an impact on the GCP, we generally would adjust the GCP down one to two notches from what it would have been if determined on a fully consolidated basis reflecting the potential for reduced cash flow.

B. Group Status Of Members Of Specific Corporate Groups

140. We're supplementing the definitions in paragraph 30 of "group" and "group members" to include:

- Insulated subsidiaries,
- Captive finance subsidiaries,
- Financing subsidiaries,
- Joint ventures,
- Dedicated suppliers/purchasers, and
- Entities with interlocking business relationships.

i. Insulated subsidiaries

141. Following on from paragraphs 38 and 39, we may rate some subsidiaries of groups higher than the GCP if all the following conditions are met:

- The subsidiary's SACP plus the potential for government support is higher than the GCP;
- The subsidiary's financial performance and funding prospects are highly independent from those of the group, so that even if other core entities encounter severe setbacks, the relative strength of the subsidiary would remain nearly intact;
- The subsidiary is severable from the group, in our opinion, and able to stand on its own or subcontract certain functions previously provided by the parent;
- The parent's strategy with respect to the subsidiary is clear and, in particular, the parent has a compelling economic incentive to preserve the subsidiary's credit strength;
- It is unlikely, in our opinion, that the subsidiary will be drawn into bankruptcy proceedings at the group level that would lead to a default on the subsidiary's obligations;
- For regulated entities, there is evidence that legislative, regulatory, or structural restrictions would inhibit the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness; and

The subsidiary meets the following provisions:

- It holds itself out as a separate entity and maintains arm's-length relationships with its affiliates;
- It doesn't commingle its funds, other assets, and cash flows with those of any other entity;
- It maintains its own records, books of account, financial statements, and other corporate documents separate from

those of any other company; and
- It pays its own liabilities out of its own funds and observes all corporate formalities.

142. In line with paragraph 141, the indicative long-term ICR for an insulated subsidiary is one notch above the GCP if:

- The subsidiary's SACP plus the potential for government support is at least one notch above the GCP, and
- The conditions listed in paragraph 141 are met.

143. The indicative long-term ICR for an insulated subsidiary, as explained in paragraph 141, is two notches above the GCP if:

- The subsidiary's SACP plus the potential for government support is at least two notches above the GCP;
- The conditions listed in paragraph 141 are met;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the parent company's bankruptcy; and

At least one of the following three characteristics are met:

- There are significant minority shareholders with an active economic interest;
- Independent directors on the board have effective influence on decision making;
- There is evidence of strong legislative, regulatory, or structural restrictions, coupled with active regulatory oversight. The latter could include ongoing review of financial statements; approval of debt issuances, dividend distributions, and intercompany transactions; and requirements related to maintaining capital structure metrics. Alternatively, the regulator or appropriate legislative body has a publicly stated policy of protecting the credit quality of the subsidiary that would keep the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness.

144. The indicative long-term ICR for an insulated subsidiary, as defined in paragraph 141, is three notches above the GCP if:

- The subsidiary's SACP plus the potential for government support stands at least three notches above the GCP;
- The conditions listed in paragraph 141 are met;
- Standard & Poor's concludes that it is unlikely that the assets and liabilities of the subsidiary would be substantively consolidated into those of the parent company in the event of the parent company's bankruptcy;
- Strong legislative, regulatory, or structural restrictions exist, coupled with active regulatory oversight. The latter could include ongoing review of financial statements; approval of debt issuances, dividend distributions, and intercompany transactions; and requirements related to maintaining capital structure metrics. Alternatively, the regulator or appropriate legislative body has a publicly stated policy of protecting the credit quality of the subsidiary that would keep the subsidiary from supporting the group to an extent that would in turn unduly impair the subsidiary's stand-alone creditworthiness; and

Either:

- There are significant minority shareholders with an active economic interest; or
- Independent directors on the board have effective influence on decision making; or
- There is a near-term likelihood of regulatory intervention restricting dividends or other payments from the subsidiary to its parent based on the financial condition of the group.

145. The indicative long-term ICR for an insulated subsidiary (as per paragraph 141) that is a regulated entity could be

de-linked from the GCP if either:

- The regulator has taken action to prevent the subsidiary from transferring cash flows to its parent, or
- For a regulated financial institution that is a subsidiary of a corporate group, where that corporate parent is experiencing material and sustained stress, the regulator could, in our opinion, act at some point (or has acted) to prevent the subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness.

146. The indicative long-term ICR for a subsidiary could be de-linked from the GCP even if the parent company owns more than 50% of its equity, but doesn't exert control due to the existence of substantial creditor protections and the provisions set out in paragraphs 147 through 149 below are met. In such cases, we generally expect the minority shareholders to hold at least a 15% equity stake in the subsidiary, to be unaffiliated with the majority shareholder, to take an active role in corporate governance and have rights to ensure the company is adequately capitalized to conduct its business, to maintain fair relationships with the majority shareholder, to have some experience in the industry, and to have veto rights on such matters as material changes to the business, dividend payments, and voluntary bankruptcy filings.

147. In addition to meeting the conditions in the preceding paragraph, to be de-linked from the GCP, a subsidiary must:

- Maintain independent directors or an equivalent anti-filing mechanism (as an example, having a minority parent whose vote is required for major corporate decisions such as voluntary bankruptcy filings);
- Have no cross-default provisions with the parent;
- Meet the separateness provisions described below; and
- Maintain arm's-length relationships with its parent and affiliates.

148. The presence of independent directors on the governing board of an entity may help reduce the likelihood of the subsidiary filing voluntary insolvency proceedings merely for the convenience of its parent, in our opinion. An anti-filing mechanism, sometimes referred to as a "hindrance mechanism," is any sort of contractual mechanism between a debtor and a creditor that creates a disincentive for the debtor to file for bankruptcy. Examples include: 1) the appointment of an independent director to the borrower's board of directors and requiring unanimous board approval to file a petition for bankruptcy; or 2) inclusion of a pre-petition waiver, which is typically a contract between a debtor and a creditor where the debtor voluntarily waives a right guaranteed in bankruptcy in exchange for consideration by a creditor.

149. We assess separateness by reviewing whether the subsidiary meets these conditions:

- Maintains books, records, financial statements, and its accounts separate from any other entity;
- Holds itself out as a separate entity and conducts its own business in its own name;
- Doesn't pledge or commingle its funds, other assets, and cash flows for the benefit of any other entity or to make any loans or advances to any other entity;
- Avoids acquiring obligations or securities of its parent(s) or affiliates;
- Allocates fairly and reasonably any overhead for shared office space;
- Uses separate stationery, invoices, and checks;
- Pays the salaries of its own employees and maintains a sufficient number of employees in light of its contemplated business; and

- Avoids guaranteeing or becoming obliged for the debts of its parent(s) or affiliates.

150. We evaluate the breadth and specific separateness conditions listed in paragraphs 147 through 149 based on the likelihood that the courts might, in a specific jurisdiction, bring the subsidiary or its assets into the insolvency proceeding of another entity (for instance, a parent).

151. In line with paragraphs 38 and 39 and supplementing paragraph 28, we'll not assign an indicative long-term ICR for an insulated entity below 'B-' as a result of the GCP falling into the 'ccc' category. This would apply if the SACP is at least 'b-' and we believe it's unlikely that the subsidiary will be drawn into proceedings at the group level that would lead to a default of the subsidiary.

ii. Captive finance subsidiaries

152. A captive finance subsidiary (as opposed to a financing subsidiary) functions primarily as a means to market a company's products--by providing financing (in the form of loans or leases) to the company's dealers or end customers. When such a captive finance subsidiary generates 70% or more of its receivables from sales of its parent's or group's goods or services, we generally view the captive's default risk as indistinguishable from that of the parent, and we assess these captive finance subsidiaries as core to the group. We may also assess a captive finance subsidiary with less than 70% of its portfolio related to its parent as having core status to the group if facilitating the parent's product sales is the key strategic mission of the finance unit and if the captive-related business is the most important factor in the unit's financial performance.

153. For us to assess a captive finance subsidiary as core or highly strategic to a group, the subsidiary must provide significant benefits to the parent's marketing efforts. We determine significance by evaluating:

- The percent of parent product sold via the subsidiary (penetration rate). For diversified groups, the percent of total sales may be less important than the percent of certain specific product lines. In turn, those products must be important to the overall performance of the company. For example, a manufacturer of both aircraft and widgets may rely on its captive finance unit only for the former.
- The alternatives available to sell the parent's products. For example, at times, there are numerous banks in a given market eager to lend to car buyers.
- The costs and challenges in conducting its own financing. For some entities, the funding costs may outweigh the benefits--or it may become difficult to gain access to capital.

154. If a captive finance entity is an insulated subsidiary according to the insulated subsidiaries portion of this section, then we could rate the subsidiary up to three notches higher than the GCP. We assess a captive finance entity as severable when it is able to operationally stand on its own, by taking over or subcontracting to external companies certain functions that were previously provided by its parent. Given the nature of the business model of a captive finance entity, we would expect that it actually retains commercial ties with its parent.

iii. Financing subsidiaries

155. A financing subsidiary is a separate legal entity created for the sole purpose of carrying out certain financial activities on behalf of its parent company (such as raising debt for the group). When a financing subsidiary is wholly owned, shares the same corporate name, and issues debt on behalf of the group, we treat that finance subsidiary as core.

iv. Joint ventures

156. Supplementing paragraph 45, for JVs, we may attribute support to one of its owners (sponsors), even if the sponsor does not own a controlling stake in the JV and the JV is not part of its group. In these cases, we believe that there would be situations in which the sponsor would support the JV, regardless of the actions of the other JV sponsors. Situations in which one sponsor may be willing to support such a JV arrangement include when the JV operates in the same line of business as the sponsor and the sponsor essentially makes all day-to-day business and operating decisions. Alternatively, the JV may be of critical importance to another asset that is majority owned by the sponsor or to the overall market strategy of the sponsor. An example would be a 50%/50% JV refinery that is deeply integrated into a highly strategic chemical complex of one of the JV sponsors. In this case, the sponsor owning the chemical complex may have a strong incentive to support the JV refinery even if the other sponsor does not. We'd usually consider the JV to be strategically important, moderately strategic, or nonstrategic to one or more of its sponsors if it meets the conditions described in sections VI.C.1.c, C.1.d, or C.1.e, respectively. In rare cases, however, we could consider the JV highly strategic to one or more of its sponsors if it met the conditions in section VI.C.1.b.

v. Dedicated supplier/purchaser relationships

157. Although usually associated with ownership, support can also arise from other relevant circumstances. Even without having any ownership interest, an entity can support another entity based on economic incentives or contractual arrangements.

158. Group members are typically owned or controlled by the parent or ultimate parent. But there can be instances in corporate ratings in which a company has a dedicated supplier/purchaser relationship with an affiliated entity and only a minority ownership interest or none at all. For example, a beverage company (supplier) has numerous strategic relationships with its authorized bottlers allowing these bottlers exclusive right to bottle and sell the beverage company's soft drinks within specified territories. In many instances, the beverage company might not have an economic interest in a specific bottler, but their relationship is tied to the bottling, licensing, and distribution agreements. Alternatively, the beverage company (supplier) may have an ownership interest, yet there is also a second majority or significant owner.

159. A pre-condition to including such entities as part of the group is that the corporate entities have contractual commitments to purchase/supply the primary components of their product from the single supplier/purchaser affiliated entity. In addition, the supplier's/purchaser's product must represent more than 75% of the entity's (including joint ventures) net sales/cost of goods sold and EBITDA. In general, we believe economic incentive is the most important factor on which to base judgments about the degree of linkage between entities with dedicated supplier/purchaser relationships. We define the group in this instance as the supplier and its affiliated entity/purchaser. It does not include other affiliated entities/purchasers/suppliers. When a shareholder other than the supplier/purchaser owns or controls the affiliated entity and the contractual agreement is not perpetual, we believe the insolvency or financial difficulty of the larger investor or significant owner may weigh more on the affiliated entity's credit quality than if it were controlled by the supplier/purchaser. In these cases, we would not include the affiliated entity/purchaser/supplier in the group analysis of the supplier/purchaser.

160. We'll classify an entity as moderately strategic to the supplier/purchaser if at least three of the following five conditions are met:

- The entity represents more than 20% of the cash flow of the supplier/purchaser or more than 10% of the supplier's/purchaser's total volume.
- The term of the supplier/purchaser agreement is either perpetual or long-term (at least two years with automatic renewals).
- The supplier or purchaser has an economic interest in the entity that we assess to be material. We determine this by looking at the absolute value of the supplier's/purchaser's investment.
- There is evidence of the supplier's/purchaser's willingness and ability to provide financial support to the purchaser/supplier. We determine this by looking at prior loans, capital investments, or marketing support given to the purchaser.
- There is a shared name. We believe that a shared name creates an incentive for the supplier to provide support to prevent reputational risk in the capital markets.

vi. Entities with interlocking business relationships

161. Some groups of entities with interlocking business relations could benefit the rating of individual entities belonging to that group even in the absence of control as defined in paragraph 31. Group membership will be based on meeting at least four of the following conditions:

- Name affiliation,
- Common management,
- Board composition or board control,
- Shared corporate history,
- Common business ties,
- Common financing group members,
- Shared corporate support functions, and
- Cross ownership holdings.

162. In such cases, we determine the GCP as the weighted average of the creditworthiness of the material group members.

163. If the GCP, determined as in paragraph 162, is higher than the SACP of a specific group member, that group member could be assigned a strategically important classification or a moderately strategic classification, subject to the conditions in paragraphs 164 and 165, respectively.

164. We classify an entity as strategically important to the group if it meets all of the following:

- Is likely to remain a part of the group;
- Is likely to receive support from the group should it fall into financial difficulty;
- Is important to the group's long-term strategy;
- Has the long-term commitment of senior group management, or incentives exist to induce such commitment; and
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms.

165. We classify an entity as moderately strategic to the group if it meets the first two conditions (below) and at least one of the following last three conditions:

- Is likely to remain a part of the group in the near term;
- Is likely to receive support from the group should it fall into financial difficulty;
- Is important to the group's long-term strategy;

- Has the long-term commitment of senior group management, or incentives exist to induce such commitment;
- Is reasonably successful at what it does or has realistic medium-term prospects of success relative to group management's specific expectations or group earnings norms.

C. Rating Corporate Group Entities Above The Sovereign

166. Implicit group support can result in the ICR on a group member being higher than the relevant sovereign rating if the sovereign is rated 'B-' or lower, or in the following situations.

167. Supplementing paragraph 77, if we consider the parent group able and willing to sufficiently support the subsidiary during stress associated with a sovereign default, the ICR of the subsidiary could be higher than the foreign currency rating of the sovereign:

- If the subsidiary is core to the group, the rating is the lower of: (1) the foreign currency sovereign credit rating plus three notches, and (2) the potential rating otherwise derived from these criteria;
- If subsidiary is highly strategic to the group, the rating is the lower of: (1) the foreign currency sovereign credit rating plus two notches, and (2) the potential rating otherwise derived from these criteria; and,
- If the subsidiary is strategically important, moderately strategic, or nonstrategic to the group, we do not consider parent support as a basis for a rating above the sovereign foreign currency rating. Therefore, in these cases, the rating is the potential rating otherwise derived from these criteria and "Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions," published Nov. 19, 2013.

168. Implicit group support can result in the ICR on a group member being higher than the relevant T&C if the sovereign is rated 'B-' or lower and if we consider the parent group to be able and willing to sufficiently support the subsidiary during transfer and convertibility restrictions. For these cases, the ICR of the subsidiary could be higher than the T&C assessment for the country where that subsidiary operates:

- If the subsidiary is core to the group, the foreign currency rating is the lower of: (1) the T&C assessment for the country plus one notch, and (2) the potential rating otherwise derived from paragraph 167.
- If the subsidiary is highly strategic, strategically important, moderately strategic, or nonstrategic to the group, we do not consider parent support as a basis for a rating above the T&C assessment for the country.

X. APPENDICES

Appendix A: Glossary

169. All financial metrics used to apply these criteria, including geographic or business-line breakdowns of a group's activities, include projections over the next two to three years.

170. Captive insurer: A subsidiary that mainly provides insurance services for group members. Captive insurers typically show a very high degree of integration with group financial and risk management strategy. Captive insurers include captive reinsurance subsidiaries of insurance groups and captive insurance and reinsurance subsidiaries of corporate or FI groups. The captives of corporate or FI groups insure risks of non-insurance subsidiaries either directly as

insurers or indirectly as reinsurers. In turn, they may reinsure some of the aggregated risk with third-party reinsurers, thereby playing a central role in the group's risk retention strategy.

171. Financial institution: The term "financial institution" includes retail banks, commercial banks, corporate and investment banks, large broker-dealers, mortgage lenders, trust banks, credit unions, building societies, custody banks, finance companies, asset managers, exchanges, clearinghouses, regional securities brokers, and similar financial institutions.

172. Financial services sector: Consists of banks, nonbank financial institutions, and insurers.

173. Financial sponsor: This is an entity that does not have a long-term, strategic investment in a company. Rather, the financial sponsor is a financial investment firm, trying to increase the value of its investment by improving management, capital, or both, typically with the ultimate goal of liquidating the investment. Financial sponsors include private-equity firms, hedge funds, venture capital, public and private investment companies, and mutual funds.

174. Financial strength rating (FSR): A Standard & Poor's insurer financial strength rating is a forward-looking opinion about the financial security characteristics of an insurer with respect to its ability to pay under its insurance policies and contracts in accordance with their terms (see "Standard & Poor's Ratings Definitions," published Oct. 24, 2013).

175. Fully integrated: This refers to a subsidiary that depends on the rest of the group for its administrative and operational activities, and infrastructure. These ties render it highly improbable to sever the subsidiary from the group. Examples of such subsidiaries can include booking or cost centers, or captive insurers, captive financing operations, and entities that exist solely to issue debt or carry on treasury operations on behalf of a group.

176. Group credit profile (GCP): The GCP is Standard & Poor's opinion of a group's creditworthiness as if the group were a single legal entity, and is conceptually equivalent to an ICR. A GCP does not address any specific obligation.

177. Insurance company or insurers: Entities that carry insurance risk, excluding for example, insurance brokers and companies servicing an insurance sector. In these criteria, unless otherwise stated, these terms include reinsurance companies and reinsurers.

178. Insurance group: A group of companies that has insurance as its predominant activity.

179. Intermediate holding company of a financial services group: A legal entity that is a subsidiary within a group that does not carry out its own prudentially regulated business activities, but is the legal owner of at least one subsidiary that conducts prudentially regulated business activities.

180. Investment holding company: A corporate entity that invests in, but does not intend to support, other companies (which are usually operating entities).

181. Issuer credit rating (ICR): Also called "counterparty credit rating," a Standard & Poor's issuer credit rating is a forward-looking opinion about an obligor's overall creditworthiness, focusing on its capacity and willingness to meet its financial obligations in full and as they come due (see "Standard & Poor's Ratings Definitions," published Oct. 24, 2013).

182. Local currency issuer credit rating: A nonsovereign entity's local currency ICR reflects Standard & Poor's opinion of that entity's willingness and ability to service its financial obligations, regardless of currency and in the absence of restrictions on its access to foreign exchange needed to service debt.

183. Nonoperating holding company (NOHC) of a financial services group: A legal entity that does not carry out its own prudentially regulated business activities, but is the legal owner of at least one subsidiary that conducts prudentially regulated business activities. An NOHC may also provide services to subsidiaries such as investment and treasury management.

184. Operating holding company (OHC) of a financial services group: A legal entity that conducts prudentially regulated business activities and also is the legal owner of at least one subsidiary that conducts prudentially regulated business activities. If a holding company has a banking license, it is an OHC.

185. Parent: An entity with controlling or joint-control interest in another incorporated entity (a subsidiary) or a joint venture.

186. Prudentially regulated: This refers to the regulation of a financial services entity by one or more regulatory authority by setting standards for capitalization and potential restrictions on distributions. For examples, see paragraph 84.

187. Stand-alone credit profile (SACP): See "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010.

188. Start-up: An entity operating for five years or less.

189. Subgroup: A group of legal entities within a wider group that are either controlled by a single legal entity, or collectively by several entities.

190. Transfer and convertibility (T&C): Defined in "Criteria For Determining Transfer And Convertibility Assessments," published May 18, 2009. A country T&C assessment reflects Standard & Poor's view of the likelihood of a sovereign restricting nonsovereign access to foreign exchange needed to satisfy the nonsovereign's debt service obligations.

191. Ultimate parent: The legal entity at the top of a group structure, in which the control chain may include several successive layers and exclusive controlling or joint-control interest in another incorporated entity ("subsidiary") or joint venture. Under the criteria, a natural person, family firm, foundation, investment holding company, managed fund, or private equity firm would not generally be treated as an ultimate parent. In general, "family firm" refers to one that is family-controlled, and "private equity firm" to a natural person or fund-controlled entity primarily investing in a private capacity in operating entities.

Appendix B: Frequently Asked Questions: Implications Of Membership On An FI Group

192. Q: How do the criteria take into account the impact on a subsidiary's SACP from being part of an FI group?

193. A: Our criteria recognize the actual business and financial links between a subsidiary and its wider group. We also

acknowledge that even absent such interactions, the ownership link itself means that the parent operating entity's credit standing usually influences the financial position of the subsidiary. In our view, this is particularly true for institutions where continued confidence among customers and investors is paramount. As a result, we believe that financial stress at the parent level will likely affect the subsidiary's creditworthiness to at least some extent, particularly if there are close business or funding ties between the two.

194. A subsidiary's creditworthiness can be affected by its existing financial, commercial, and reputational linkages with the wider group. These can affect the assessments that we use to determine the SACP. Factors that we consider include:

- Whether the subsidiary's prospects in terms of financial performance and funding are sufficiently independent from those of the group so that the relative strength of the subsidiary can remain nearly intact even if other group entities encounter severe setbacks.
- Direct financial exposures to the parent or other group, which may include but not be limited to funding links--for example, where the subsidiary is funding the parent or other group companies, or is relying on the continued ability of affiliates to provide it with funding or liquidity.
- Capital mobility--such as when a subsidiary depends on capital injections from the parent or has significant excess capital resources from a regulatory perspective that could be passed to its parent.
- Strong reputational or franchise linkages—for example, through sharing a common brand or identity that becomes contaminated. In the case of a bank, concerns about the position of the parent could undermine the confidence of depositors, existing and potential clients, and the wholesale market, causing the subsidiary to lose business.
- Operational linkages--for example, when the subsidiary has a high dependence on group affiliates to provide critical operational and technological functions.
- Strategic decisions--such as when the parent decides to exit a product or market that provides its subsidiary important revenues or is a good source for future growth.

195. The subsidiary's creditworthiness could also be undermined by a continued ability of the weaker parent to take assets from the subsidiary or burden it with liabilities during financial stress, leaving the subsidiary with less flexibility to raise debt or capital. Furthermore, in some jurisdictions, a bankruptcy petition by the parent would include the subsidiary or cause the subsidiary to go into administration.

196. We consider that factors such as tight regulatory oversight and the legal powers of the relevant authorities can create regulatory restrictions that would prevent or limit a foreign bank subsidiary from supporting the group to an extent that would impair the subsidiary's stand-alone creditworthiness. This influences our view of the extent to which the SACP reflects the potential for negative intervention by the parent. Among the factors that we consider are:

- The potential effectiveness of government support in protecting the credit strength of the subsidiary based on the nature of the regulatory oversight and the degree of legal intervention powers that the host government can exercise, which is also informed by the scores assigned to "banking regulation and supervision" and "regulatory track record" when assessing the institutional framework for the host country in our BICRA assessment (see "Banking Industry Country Risk Assessment Methodology And Assumptions," published Nov. 9, 2011), and our view of the legal infrastructure.
- Whether the regulatory capital requirements of the host regulator are set at a transparent level that is higher than the minimum for a license.
- Whether the host regulator applies meaningful restrictions on funding and liquidity flows from its domestic banks to group entities, such as restricting the repatriation of liquidity and not allowing bond or deposit funding sourced by

the subsidiary to be used by the parent or other parts of the group.

- The degree to which the subsidiary receives funding from group entities.
- Whether the subsidiary would not be drawn into the group's bankruptcy or reorganization proceedings (this could be supported by a nonconsolidation opinion from an independent expert to confirm the separateness of the parent and subsidiary).
- Whether the host country has in place a resolution regime or other legal intervention powers that enable the host government to change the ownership of the firm prior to the bankruptcy of the subsidiary or its parent.
- The nature of any other regulatory restrictions on financial flows, such as intragroup sales.
- Whether the subsidiary is severable from the group and able to stand on its own or subcontract certain functions previously provided by the parent.
- Whether the subsidiary has sufficient capacity to ensure independence of decisions from the group, which could be reinforced by the existence of outside ownership.

197. While some of these factors may be in place even before a parent comes under stress, generally we observe that regulators tend to play an increasingly active and protective role of systemically important banks as the parental situation deteriorates. If we observe inaction on the part of the authorities in the face of a marked deterioration in the group's creditstanding, which could threaten the viability of the systemically important subsidiary, this could lead us to reconsider whether the subsidiary is indeed systemically important.

198. Q: If a foreign bank subsidiary is rated higher than its parent due to the potential for extraordinary government support in its host market, how does this affect Standard & Poor's view of the creditworthiness of the group?

199. A: When the host authorities consider a foreign bank subsidiary to be a systemically important entity in that market, the subsidiary may be subject to actions by various government authorities and regulators that would provide some protection to the subsidiary in the case of parental stress. These actions can restrict the flow of resources from the subsidiary to the parent and can therefore reduce the link between parent and group creditworthiness, and can pull down the GCP determined for the group.

200. We take account of the potential restrictions on intragroup flows on the GCP by:

- Considering the potential negative implications for the business position assessment used when determining the GCP due to the prospective impact on group strategy or franchise.
- Considering the negative impact on the risk position assessment used when determining the GCP due to restricted capital flexibility that is not otherwise captured in the RACF.
- Considering the extent of restrictions other than on capital flows.

201. Items that we consider to assess the degree of the adjustment include:

- Whether the host regulator applies meaningful restrictions on funding and liquidity flows from its domestic banks to group entities, such as restricting the repatriation of liquidity and not allowing bond or deposit funding sourced by the subsidiary to be used by the parent or other parts of the group.
- The nature of any other regulatory restrictions on financial flows, such as intragroup sales.

202. Q: Can a foreign bank subsidiary that is rated higher than the GCP because of host government support still be considered core to the parent bank?

203. A: Yes, because group status reflects the likelihood of potential group support. The potential for the subsidiary to receive host government support does not automatically affect the group incentives to provide support. However, in some circumstances, the group may have a reduced likelihood of supporting the subsidiary if the operations in the foreign jurisdiction could be ring-fenced in the future from the rest of the group.

Appendix C: Superseded And Partly Superseded Criteria

204. For issuers within the scope of these criteria, this article supersedes:

- Criteria | Corporates | Utilities: Methodology: Differentiating The Issuer Credit Ratings Of A Regulated Utility Subsidiary And Its Parent, March 11, 2010
- Regulation Benefits Ratings On European Automakers' Captive Finance Subsidiaries, May 18, 2006
- Corporate Criteria--Parent/Subsidiary Links; General Principles; Subsidiaries/Joint Ventures/Nonrecourse Projects; Finance Subsidiaries; Rating Link to Parent, Oct. 28, 2004
- Criteria | Corporates | Utilities: U.K. Regulatory Ring-Fencing Risk For Utility Holding Companies: Standard & Poor's Approach, July 8, 2003

205. The subpart titled "Rating Group Entities Above The Sovereign" in this article partly supersedes:

- Criteria Update: Factoring Country Risk Into Insurer Financial Strength Ratings, Feb. 11, 2003

206. This article partly supersedes the following article by superseding the references to group support in that article (the sections entitled "Assessing Captive Finance Operations" and "Captive-Specific Aspects" are not superseded):

- Captive Finance Operations, April 17, 2007

207. This article partly supersedes the following article, which now only applies to captive insurers that are subsidiaries of companies excluded from the scope of this article by paragraph 8:

- Rating Captive Insurers, April 13, 2004

Appendix D: A Specific Application Of The Interaction Between GRE And GRM Criteria

208. If subsidiaries classified as GREs are owned by the government via a holding or asset management company but we believe that "control" over a GRE's strategy and cash flow rests ultimately with the relevant government, or a representative thereof, we will typically analyze the GRE using our government-related-entity criteria (see paragraphs 48 and 67).

209. As an example, we are likely to rate a regulated utility that is classified as a GRE and is owned by a holding company, whose sole purpose is acting as the legal owner on behalf of the government and that does not carry out its own business activities, using our criteria for rating government-related entities.

RELATED CRITERIA AND RESEARCH

- Corporate Methodology, Nov. 19, 2013
- Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- Standard & Poor's Ratings Definitions, Oct. 24, 2013
- Assessing Bank Branch Creditworthiness, Oct. 14, 2013
- Insurers: Rating Methodology, May 7, 2013
- Guarantee Criteria--Structured Finance, May 7, 2013
- Criteria For Assigning 'CCC+', 'CCC', 'CCC-', And 'CC' Ratings, Oct. 1, 2012
- Guarantee Default: Assessing The Impact On The Guarantor's Issuer Credit Rating, May 11, 2012
- Banks: Rating Methodology And Assumptions, Nov. 9, 2011
- Bank Hybrid Capital Methodology And Assumptions, Nov. 1, 2011
- Nonsovereign Ratings That Exceed EMU Sovereign Ratings: Methodology And Assumptions, June 14, 2011
- Principles Of Credit Ratings, Feb. 16, 2011
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- Refined Methodology And Assumptions For Analyzing Insurer Capital Adequacy Using The Risk-Based Insurance Capital Model, June 7, 2010
- Criteria For Determining Transfer And Convertibility Assessments, May 18, 2009
- Recovery Ratings For U.S. Finance Companies, June 19, 2008
- Rating Private Equity Companies' Debt And Counterparty Obligations, March 11, 2008
- Legal Criteria For U.S. Structured Finance Transactions: Select Issues Criteria, Oct. 1, 2006
- Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds, Sept. 12, 2006
- Standard & Poor's Updated Methodology For Rating Exchanges And Clearinghouses, July 10, 2006
- Rating Network Payment Providers, June 1, 2005
- Rating Securities Companies, June 9, 2004
- Rating Finance Companies, March 18, 2004
- Rating Asset Management Companies, March 18, 2004
- Ring-Fencing A Subsidiary, Oct. 19, 1999

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

(And watch the related CreditMatters TV segment titled, "How Standard & Poor's Group Rating Methodology Applies To U.S. Public Finance Borrowers," dated Dec. 9, 2013.)

STANDARD & POOR'S RATINGS SERVICES
McGRAW HILL FINANCIAL

Research

Summary:

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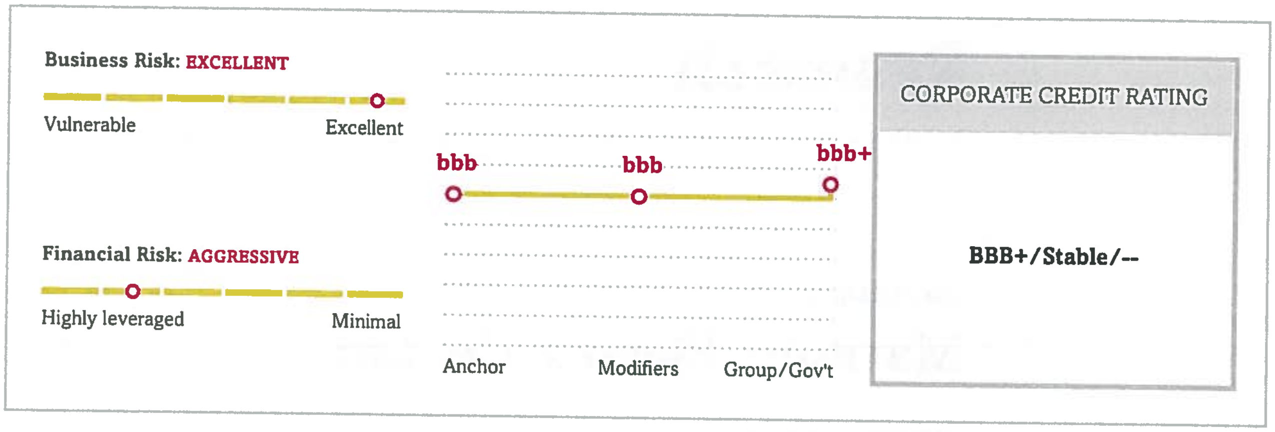
Summary:

Maritime Electric Co. Ltd.



Rationale

Business Risk: Excellent	Financial Risk: Aggressive
• Low-risk monopoly operations in the Province of Prince Edward Island (PEI) • Electricity input cost that remains a pass-thru to customers via the Energy Cost Adjustment Mechanism (ECAM) • The limited independence of Island Regulatory and Appeals Commission (IRAC), the regulator. There is potential for political intervention despite the broadly supportive regulation	• Stable and predictable cash flows

Outlook: Stable

The stable outlook reflects Standard & Poor's Ratings Services' expectation that Maritime Electric Co. Ltd. (MECL) will continue to generate stable cash flow during our two-year outlook horizon with no adverse regulatory or governmental rulings.

Downside Scenario

We believe MECL will continue to generate stable regulated cash flows during our outlook horizon. Although we don't expect it in that period, a downward revision in the stand-alone credit profile (SACP) could happen if we see the utility's adjusted funds from operations (AFFO)-to-debt ratio fall and stay below 9%. This could happen should there be an adverse change in government policy, material operational difficulties, challenges in recovering deferral accounts, or a significantly adverse regulatory ruling impairing timely recovery of cash flows. A downward revision in the SACP could lead to a downward revision in the corporate credit rating (CCR) given no change in the rating on parent Fortis Inc. and our assessment of MECL as "moderately strategic" to the Fortis group. Alternatively, a negative rating action on Fortis will also have a negative rating impact on MECL.

Upside Scenario

A material change in MECL's financial policy resulting in reduced leverage (adjusted funds from operations [AFFO]-to-debt increases and stay above 13%) could lead to an upward revision in the SACP, but we consider this unlikely during our two-year outlook horizon. Although we do not foresee it in the next two years, an SACP that is equal to or higher than the group credit profile would result in a higher CCR on the company.

Standard & Poor's Base-Case Scenario

Assumptions

- There will be no material changes to the return on equity (ROE) and capital structure of 40% equity and 60% debt in MECL's next rate setting in 2016
- The company will have a new PPA contract in place before the current one expires to ensure adequate electricity supply and stable electricity pricing
- PEI will continue to support the regulatory framework, although there is the potential for political intervention
- The utility will continue to earn a return on net regulatory assets and liabilities, including deferral accounts
- Capital expenditures will be about C$30 million and C$50 million for 2015 and 2016, respectively
- Total depreciation rates will not change significantly

Key Metrics

	2014A	2015E	2016E
FFO-to-debt	17.4%	12%-13%	11%-12%
Debt-to-EBITDA	3.9x	4x-5x	4x-5x

FFO--Funds from operations. A--Actual. E--Estimate.

Business Risk: Excellent

In our view, MECL's business risk profile is "excellent," reflecting our assessment of the regulatory framework that supports a stable and predictable cash flow model, which we view as key credit strength. The IRAC continues to administer a regulatory framework that allows full recovery of prudently incurred operating, capital and commodity costs. Under the current framework, which expires in February 2016, MECL's maximum allowed ROE is 9.75% and is required to maintain a minimum equity base of 40%. This forms the cornerstone of its financial policies and provides a floor on a key cash-flow driver. We expect there will be no material changes to both the ROE and equity base in the company's next rate setting in 2016. In addition, under the existing framework, MECL has a power purchase agreement (PPA) with NB Power, an electricity provider in the province of New Brunswick, which also expires in February 2016. We expect MECL will re-new this agreement in a timely manner to ensure adequate supply of electricity at a reasonable cost so that electricity cost will remain a flow-through to customers.

Further supporting the excellent business risk profile is that MECL is the legislated monopoly provider of electricity to about 77,000 customers on PEI, which we believe provides the company with a stable market position. The province has a mature-but-stable economy that relies primarily on the public sector, fishing, agriculture, and tourism. We believe that the company's limited diversification is an offsetting factor, given the relatively small market, a limited number of sources of generation, and some customer concentration (with the largest customer accounting for 5%-6% of sales).

The provincial government continues to play a significant and active role in energy policy and establishing rates for island customers. We view this as generally less favorable than an independent regulator with a clear, consistent mandate and an established track record of credit-supportive policies. Due to the potential for political interference (which could negatively affect credit quality), the regulator's limited strength, and its independence, we view the

MECL's regulatory environment as less favorable compared with those of regulated utilities operating in other Canadian provinces.

We believe that the company will continue to benefit from the PEI Energy Accord, an agreement between MECL and the province. The accord addressed cost pressures and related rate increases from replacement power needs and operations and maintenance (O&M) costs associated with a prolonged outage at the base load Point Lepreau nuclear power station. Point Lepreau, which is again operational, supplies about 20% of the power the utility requires. The accord reduces the company's risk primarily by transferring the costs of replacement energy and O&M charges to PEI. In turn, the province has financed these costs at its lower cost of capital and plans to recover the costs over Point Lepreau's remaining life.

Financial Risk: Aggressive

MECL's "aggressive" financial risk profile reflects our expectation of low-but-stable cash flows and a legislated minimum equity base of 40%. We use the medial cash flow volatility table to assess the credit metrics. We expect forecast metrics to remain relatively stable. We expect the AFFO-to-debt ratio to be in the 11%-13% range during our outlook horizon. We base this on the assumption that the key components of FFO -- ROE, equity base, and depreciation -- remain highly stable, with FFO fluctuations coming from the difference between current and cash taxes.

Liquidity: Adequate

We have assessed MECL's liquidity as "adequate." We expect that liquidity sources will exceed uses by more than 1.1x in the next 12 months and that sources will exceed uses even in case of a 10% decline in EBITDA. Although the company has sources over uses of greater than 1.5x, which would qualify for strong treatment, qualitative factors such as a limited ability to absorb high-impact and low-probability events in the near term constrain our liquidity assessment. The company continues to have sufficient headroom under its existing covenants.

Principal Liquidity Sources	Principal Liquidity Uses
• Projected cash FFO of about C$25.1 million in 2015 • Available capacity under committed revolving facilities of about C$48 million; the facilities expire in 2019	• Projected capital expenditure of about C$30 million in 2015 • Projected dividend payment of about C$8 million in 2015

Other Modifiers

Modifiers have no impact on the ratings.

Group Influence

MECL is an indirect wholly-owned subsidiary of Fortis. Based on our Group Rating Methodology (GRM), we view MECL as "moderately strategic" to the Fortis group. We believe that although MECL represents a small proportion of the parent's business, it provides a very stable cash flow that is aligned to the parent's overall business strategy. In our view, MECL is unlikely to be sold, has the support of management, and is reasonably successful at what it does. As a result, this provides a one-notch rating uplift to MECL.

Ratings Score Snapshot

Corporate Credit Rating

BBB+/Stable/--

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Strong

Financial risk: Aggressive

- **Cash flow/Leverage:** Aggressive

Anchor: bbb

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Fair (no impact)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : bbb

- **Group credit profile:** a-
- **Entity status within group:** Moderately strategic (+1 notch from SACP)

Recovery Analysis

MECL's first mortgage bonds benefit from a first-priority lien on the majority of the utility's real property owned or subsequently acquired. Based on our criteria, collateral coverage of more than 1.5x supports a recovery rating of '1+' and an issue rating of 'A', two notches above the corporate credit rating for a 'BBB' category company. We base the recovery rating on the maximum amount of secured utility bonds outstanding at the time of the recovery analysis.

Related Criteria And Research

Related Criteria

- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Corporate Methodology, Nov. 19, 2013
- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Group Rating Methodology, Nov. 19, 2013
- Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	Intermediate	Significant	**Aggressive**	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	**bbb**	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

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Research Update:

Maritime Electric Co. Ltd. Outlook To Stable From Negative; Financial Risk Profile To Significant From Aggressive

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Research Update:

Maritime Electric Co. Ltd. Outlook To Stable From Negative; Financial Risk Profile To Significant From Aggressive

Overview

- We are revising our outlook on Maritime Electric Co. Ltd. (MECL) to stable from negative.
- The outlook revision reflects MECL's improved stand-alone credit profile and the application of our group rating methodology.
- The revision also reflects our expectation that the utility will continue to generate stable cash flows during our outlook horizon.
- We are affirming our ratings on MECL, including our 'BBB+' long-term corporate credit rating on the company.
- As well, we are revising our financial risk profile on the company to significant from aggressive based on improved credit metrics during our outlook period.

Rating Action

On March 29, 2016, Standard & Poor's Ratings Services revised its outlook on Prince Edward Island (PEI)-based Maritime Electric Co. Ltd. (MECL) to stable from negative. At the same time, Standard & Poor's affirmed its ratings on MECL, including its 'BBB+' long-term corporate credit rating on the company. Standard & Poor's also revised its financial risk profile on the utility to significant from aggressive based on improved credit metrics during our outlook period. In addition, Standard & Poor's revised its stand-alone credit profile (SACP) on MECL to 'bbb+' from 'bbb'.

Rationale

The outlook revision reflects MECL's improved SACP and the application of our group rating methodology (GRM). A negative rating action on Fortis Inc., the parent, is unlikely to have a cascading impact on MECL, all else being equal. In addition, the outlook revision reflects our expectation that the utility will continue to generate stable cash flows during our outlook horizon.

The financial risk profile revision reflects improvement in credit metrics because of increased depreciation expense recovery and reduced capital spending with the deferral of a new combustion turbine generator, the outcomes of the company's latest general rate agreement (GRA) application with the Island Regulatory and Appeals Commission (IRAC).

Considering these factors, we forecast adjusted funds from operations (AFFO)-to-debt to be 16%-17% during our two-year outlook period, consistent with the significant financial risk profile under the medial volatility table. We use the medial volatility table when assessing MECL's cash flows primarily to reflect our assessment of the regulatory environment that MECL operates in.

Our view of MECL's business risk profile continues to be excellent, which in part reflects our assessment of the regulatory framework that supports a stable and predictable cash flow model. The IRAC continues to administer a regulatory framework that allows full recovery of prudently incurred operating, capital and commodity costs. Under the most recent GRA decision, which expires in February 2019, MECL's maximum allowed return on equity is 9.35% and the company needs to maintain an average equity base of about 40%, which are slightly lower than the previous rate decision but in line with our expectations, given the current low interest rate environment.

The provincial government continues to play a significant and active role in energy policy and establishing rates for island customers. A sign of this is the PEI Energy Accord, which expired in February 2016 and was followed with the latest rate settlement between MECL and the PEI government, although this is subject to regulatory approval. We view the government's active involvement in rate-setting as generally less favorable than an independent regulator with a clear, consistent mandate and an established track record of credit-supportive policies. Due to the track record for political intervention (which could negatively or positively affect credit quality), the regulator's limited strength, and its independence, we view MECL's regulatory environment as less favorable compared with that of regulated utilities operating in other Canadian provinces.

Further supporting the excellent business risk profile is that MECL is the legislated monopoly provider of electricity to about 78,000 customers in PEI, which we believe provides the company with a stable market position. In addition, rates are set on a cost-of-service framework, which allows MECL to fully recover its revenue requirement. The province has a mature-but-stable economy that relies primarily on the public sector, fishing, agriculture, and tourism. We believe that the company's limited scale, scope, and diversity are an offsetting factor, given the relatively small market, a limited number of sources of generation, and some customer concentration (with the largest customer accounting for 5%-6% of sales).

In addition, prudently incurred electricity cost remains a flow-through to ratepayers via the energy cost adjustment mechanism. The utility has successfully renegotiated a power purchase agreement with NB Power, an electricity provider in the Province of New Brunswick, which expires in February 2019. This will ensure adequate supply of electricity at a reasonable cost, reducing regulatory risk of nonrecovery.

The excellent business risk and significant financial risk results in an anchor score of 'a-'. Our modifiers assessments remain unchanged, including the management and governance (M&G) assessment at fair; however, given that the anchor score is now 'a-', the fair M&G assessment has a one-notch negative impact on the ratings in accordance with our corporate criteria framework, resulting in a stand-alone credit profile (SACP) of 'bbb+'. We base the fair assessment on a combination of factors including strategic positioning, risk and financial management, organizational effectiveness, and governance.

MECL is an indirect wholly-owned subsidiary of Fortis. Consistent with our GRM criteria, we view the company as moderately strategic to the Fortis group. We believe that although MECL represents a small proportion of the parent's business, it provides a very stable cash flow that is aligned to the parent's overall business strategy. In our view, MECL is unlikely to be sold, has the support of management, and is reasonably successful at what it does. Based on the 'bbb+' SACP on the company, the 'a-' GCP on Fortis, and the moderately strategic relationship between the two, MECL does not receive any uplift to the ratings from Fortis' ownership.

Our base-case assumptions include the following:
- The PEI government will continue to support the regulatory framework, although there is the potential for political intervention
- MECL will not experience any adverse regulatory decisions and that the IRAC will continue to operate in a transparent, stable, and predictable manner
- The utility will continue to earn a return on net regulatory assets and liabilities, including deferral accounts
- Capital expenditures will be about C$32 million per year for 2016-2018

Based on these assumptions we arrive at AFFO-to-debt of about 16%-17% during our outlook period from 2016-2018.

Liquidity

Our assessment of MECL's liquidity is adequate. We expect liquidity sources to exceed uses by more than 1.1x over the next 12 months. In the event of a 10% drop in the company's EBITDA, we also expect there are sufficient liquidity sources to cover uses. In our view, the utility has sound relationships with banks and generally satisfactory standing in the credit markets.

Principal liquidity sources include:
- Projected cash FFO of about C$20 million in 2016
- Available capacity under committed revolving facilities of about C$44 million as of February 2016, maturing in 2019

Principal liquidity uses include:
- A first-mortgage bond (FMB) maturity of about C$12 million in 2016
- Projected capital expenditures of about C$33 million in 2016
- Projected dividend payment of about C$8.3 million in 2016

Outlook

The stable outlook reflects our view that MECL will continue to generate stable cash flow during our two-year outlook horizon, with no adverse regulatory or governmental rulings.

Downside scenario

Although unlikely during the outlook period, a multiple notch downgrade to Fortis or a nonstrategic relationship between MECL and Fortis along with a downgrade to Fortis would result in a downgrade to MECL. We could lower the SACP on MECL if AFFO-to-debt falls and stays below 15%, toward the lower end of the significant financial risk profile. This could happen should there be an adverse change in government policy, material operational difficulties, or a significantly adverse regulatory ruling impairing timely recovery of cash flows. Given that we link our ratings on MECL to those on Fortis, a change in the SACP alone is unlikely to have an impact on the ratings all else being equal.

Upside scenario

Although unlikely, we could take a positive rating action on MECL if AFFO-to-debt improves to above 22% consistently, at the upper end of the significant financial risk profile, all else being equal.

Ratings Score Snapshot

Corporate Credit Rating: BBB+/Stable/--

Business risk: Excellent
- Country risk: Very low
- Industry risk: Very low
- Competitive position: Excellent

Financial risk: Significant
- Cash flow/leverage: Significant

Anchor: 'a-'

Modifiers
- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Financial policy: Neutral (no impact)
- Management and governance: Fair (-1 notch)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: 'bbb+'

Group credit profile: 'a-'
- Status within group: Moderately strategic (no impact)

Recovery Analysis

MECL's FMBs benefit from a first-priority lien on the majority of the utility's real property owned or subsequently acquired. Based on our criteria, collateral coverage of more than 1.5x supports a recovery rating of '1+' and an issue rating of 'A', two notches above the corporate credit rating for an 'BBB' category company. We base the recovery rating on the maximum amount of secured utility bonds outstanding at the time of the recovery analysis.

Related Criteria And Research

Related Criteria

- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Corporate Methodology, Nov. 19, 2013
- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Group Rating Methodology, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Methodology: Industry Risk, Nov. 19, 2013
- Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012

Ratings List

Ratings Affirmed; Outlook Action

	To	From
Maritime Electric Co. Ltd.		
Corporate credit rating	BBB+/Stable/--	BBB+/Negative/--

Ratings Affirmed

Maritime Electric Co. Ltd.	
Senior secured debt	A
Recovery rating	1+

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of

RatingsDirect at www.globalcreditportal.com and at www.spcapitaliq.com. All ratings affected by this rating action can be found on Standard & Poor's public Web site at www.standardandpoors.com. Use the Ratings search box located in the left column.

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Research Update:

Fortis Inc., Subsidiaries Outlook Revised To Negative From Stable On Weaker Forecast Metrics From U.S. Tax Reform

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Research Update:

Fortis Inc., Subsidiaries Outlook Revised To Negative From Stable On Weaker Forecast Metrics From U.S. Tax Reform

Overview

- We reviewed the impact of the U.S. tax reform on Fortis Inc. (Fortis), and the company's consolidated credit metrics are weaker than expected.
- There are key pending regulatory decisions that add to the downside risk and could further stress credit metrics.
- As a result, we are revising our outlook on Fortis and subsidiaries ITC Holdings Corp., Tucson Electric Power Co., FortisAlberta Inc., and Caribbean Utilities Co. Ltd. to negative from stable.
- We are also affirming our ratings on the companies, including our 'A-' long-term issuer credit ratings.

Rating Action

On March 21, 2018, S&P Global Ratings revised its outlook on St. John's, Nfld.-based utility holding company Fortis Inc. (Fortis) and most of its subsidiaries, including ITC Holdings Corp. (ITC), Tucson Electric Power Co., FortisAlberta Inc., and Caribbean Utilities Co. Ltd. to negative from stable. At the same time, S&P Global Ratings affirmed its ratings, including its 'A-' long-term issuer credit rating (ICR), on the companies.

Rationale

The outlook revision reflects our view of a modest weakening to Fortis' financial measures following the U.S. corporate tax reform, which will reduce utility rates and cash flow at its U.S. subsidiaries.

The ITC acquisition in late 2016 removed much of the cushion in Fortis' credit metrics and leaves little room for operational or event risk; including U.S. tax reform. The reform also pushed back our prior expectations for near-term financial improvement. During the next 12-24 months, we forecast the company's credit metrics to be weak, with funds from operations (FFO)-to-debt at about 9.5% in 2018, before improving to about 10.5% by 2019-2020. We forecast FFO-to-debt to continue improving gradually to over 11% by 2022. Furthermore, the outlook revision also reflects the downside risk associated with Fortis' pending regulatory decisions, because an adverse outcome could further stress credit metrics.

Our view of Fortis' business risk has not changed. The company continues to benefit from its stable, low-risk, and regulated utility portfolio. Regulation typically involves a cost-of-service methodology that provides an authorized regulated rate of return. The utilities have relatively low commodity and volume risk, further reducing cash flow volatility. Fortis' regulated subsidiaries are generally monopoly service providers in their respective service areas. They are exposed to limited commodity input price risk and relatively insulated from typical market forces, which we view as a credit strength for the company.

In our view, another key credit strength is the regulatory, geographic, and market diversification of Fortis' subsidiaries and their cash flows. The company generates about 60% of its regulated cash flow from U.S. operations, about 35% within Canada, and 5% in the Caribbean regions. Furthermore, Fortis operates in 13 different regulatory jurisdictions, most of which have provided a supportive framework that underpins the company's stable cash flow stream.

Also enhancing our view of the business risk is Fortis' customers which are primary residential and commercial, and are less sensitive to economic cycles, further supporting the company's stable cash flow stream.

Our base-case assumptions include the following:

- Fortis will not experience any adverse regulatory decisions from the various regulatory regimes to which it is exposed
- It will continue to focus on regulated utilities in its strategic decisions

Based on these assumptions, we arrive at the following credit measures:

- Consolidated FFO-to-debt of about 9.5% in 2018, rising to about 10.5% in 2019 and 2020
- FFO cash interest coverage of about 3.7x during the outlook period

Liquidity

Our assessment of Fortis' liquidity is adequate. We expect liquidity sources to exceed uses by about 1.4x over the next 12 months. In the event of a 10% drop in the company's EBITDA, we also believe liquidity sources will cover uses. In our view, Fortis has well-established relationships with banks and generally good standing in the credit markets. In the unlikely event of liquidity distress, we expect the company to scale back on its capital spending to preserve credit metrics.

Principal liquidity sources include:

- Cash and cash equivalents of about C$320 million
- Cash FFO of about C$2.6 billion
- Available committed revolving credit facilities of about C$3.9 billion

Principal liquidity uses include:

- Capital expenditures of about C$3.2 billion
- Debt maturities, including short-term debt, of about C$910 million
- Cash distributions on preferred shares and common dividends of about C$540 million

Outlook

The negative outlook reflects S&P Global Ratings' view of Fortis' weak financial metrics over the next 12-24 months and the U.S. tax reform pushing back our expectation for financial improvement. In addition, the outlook reflects the risk that any adverse outcomes from pending regulatory decisions could further depress credit metrics. During our two-year outlook period, we forecast the company's FFO-to-debt at about 9.5% in 2018 before improving to about 10.5% by 2020.

Downside scenario

We could take a negative rating action on Fortis if the company's FFO-to-debt were projected to stay below 10%. This could happen if the company experiences material delays and cost overruns in executing its capital programs, material adverse regulatory decisions, and significant debt-funded acquisitions or operational difficulties that lead to unexpected cost and debt increase. Any deterioration of business risk, including expansion of unregulated operations or acquisitions that increase the compnay's reliance on generation within its integrated utility operations, could also lead to a downgrade.

Upside scenario

We could revise the outlook to stable if Fortis improves its financial position, with FFO-to-debt remaining consistently around 11% or above, without any increase in business risk. This could happen if Fortis were to gradually improve its cash flow metrics with the benefit of favorable regulatory outcomes while maintaining its current business strategy.

Ratings Score Snapshot

Corporate Credit Rating: A-/Negative/--

Business risk: Excellent

- Country risk: Very low
- Industry risk: Very low
- Competitive position: Strong

Financial risk: Significant

- Cash flow/Leverage: Significant

Anchor: a-

Modifiers
- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Satisfactory (no impact)
- Comparable rating analysis: Neutral (no impact)

Stand-alone credit profile: a-

Group credit profile: a-

Issue Ratings--Subordination Risk Analysis

Capital structure

As of Dec. 31, 2017, Fortis has total consolidated long-term debt of about C$21.5 billion, of which about C$3.5 billion is secured and about C$4.7 billion is at the Fortis Inc. holding company level.

Analytical conclusions

Based on the company's current capital structure, secured debt makes up less than 50% of total debt amount. The unsecured debt at operating subsidiaries makes up more than 50% of the total debt, so we rate the structurally subordinated senior unsecured debt at the holding company 'BBB+', one notch lower than the ICR on the utility.

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, Sept. 21, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings , April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013

- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Ratings List

Ratings Affirmed; Outlook Action

	To	From
Fortis Inc.		
Caribbean Utilities Co. Ltd.		
Michigan Electric Transmission Co.		
International Transmission Co.		
ITC Midwest LLC		
ITC Great Plains LLC		
FortisAlberta Inc.		
Tucson Electric Power Co.		
Corporate Credit Rating	A-/Negative/--	A-/Stable/--
ITC Holdings Corp.		
Corporate Credit Rating	A-/Negative/A-2	A-/Stable/A-2

Ratings Affirmed

Maritime Electric Co. Ltd.	
Corporate Credit Rating	BBB+/Stable/--
Caribbean Utilities Co. Ltd.	
Senior Unsecured	A-
Fortis Inc.	
Senior Unsecured	BBB+
Preferred Stock	
Global Scale	P-2
Canada Scale	BBB

FortisAlberta Inc.	
Senior Unsecured	A-
ITC Holdings Corp.	
Senior Unsecured	A-
Commercial Paper	A-2
Tucson Electric Power Co.	
Senior Unsecured	A-
ITC Great Plains LLC	
ITC Midwest LLC	
Senior Secured	A
Recovery Rating	1+
International Transmission Co.	
Maritime Electric Co. Ltd.	
Michigan Electric Transmission Co.	
Senior Secured	A
Recovery Rating	1+

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on the S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

2019 Booth IR8
2019-01-15

RESPONSE TO BOOTH IR-8

2017 Residential space and water heating costs

	Canadian Gas Association for Canada			Estimate for PEI / MECL			
	($)	($ / GJ)	Energy (GJ)	($ / litre)	($ / GJ)	Sales tax (%)	($)
Natural gas	1,148	8.75	131.2	n/a	n/a		n/a
Propane	3,670	27.98	131.2	0.762	30.66	15	4,625
Electric resistance	3,736	33.38	111.9		34.78	15	4,477
Heating oil	3,595	26.32	136.6	0.780	20.42	5	2,929
Heat pump	2,280	33.38	68.3		36.78	15	2,889

Notes: 1. Canadian Gas Association data is from their "Natural Gas Annual Review 2018"

2. Propane and heating oil prices for PEI are average of monthly IRAC posted maximum prices for 2017

3. Higher heating value of 23,555 Btu / litre used for propane

4. Electric resistance heating assumed to be 100 % efficient; 111.9 GJ corresponds to 31,086 kWh

5. Higher heating value of 36,200 Btu / litre used for heating oil (i.e. furnace oil)

6. Btu conversion factor of 3412 Btu per kWh;

7. Sales tax rates used are those in effect in 2017. Effective July 16, 2018, the Province of PEI implemented the Clean Energy Price Incentive which provides eligible year-round Residential class customers with a 10% rebate on the first 2,000 kWh per month of energy consumed. The rebate also applies to propane heating for residents of P.E.I.

8. Electricity $ / GJ costs based on Martime Electric March 1, 2017 Residential Rate energy charges:
First block: $ 0.1396 / kWh for first 2,000 kWh in month
Second block: $ 0.1108 / kWh for kWh in excess of 2,000 for the month

First block / second block split for space heating based on average monthly heating degree days.
Water heating assumed to be all first block. Overall average $ / GJ costs estimated as follows:

Electric resistance: $ 0.1396 / kWh x 0.50 + $ 0.1108 x 0.50 = $ 0.1252 / kWh

Heat pump: $ 0.1396 / kWh x 0.75 + $ 0.1108 x 0.25 = $ 0.1324 / kWh

	Average HDD	Lights & appliances (kWh)	Water heating (kWh)	Electric resistance space heating Total (kWh)	First block (kWh)	Second block (kWh)
Jan	758	500	500	4,352	1,000	3,352
Feb	689	500	500	3,955	1,000	2,955
Mar	657	500	500	3,773	1,000	2,773
Apr	433	500	500	2,485	1,000	1,485
May	258	500	500	1,479	1,000	479
Jun	119	500	500	681	681	-
Jul	19	500	500	107	107	-
Aug	19	500	500	109	109	0
Sep	102	500	500	585	585	-
Oct	272	500	500	1,560	1,000	560
Nov	427	500	500	2,454	1,000	1,454
Dec	617	500	500	3,546	1,000	2,546
	4,367	6,000	6,000	25,086	9,483	15,603

Space and water heating:	first block	50	%
	second block	50	%

	Average HDD	Lights & appliances (kWh)	Water heating (kWh)	Heat pump space heating Total (kWh)	First block (kWh)	Second block (kWh)
Jan	758	500	500	2,251	1,000	1,251
Feb	689	500	500	2,045	1,000	1,045
Mar	657	500	500	1,951	1,000	951
Apr	433	500	500	1,285	1,000	285
May	258	500	500	765	765	0
Jun	119	500	500	352	352	0
Jul	19	500	500	56	56	-
Aug	19	500	500	56	56	0
Sep	102	500	500	303	303	-
Oct	272	500	500	807	807	-
Nov	427	500	500	1,269	1,000	269
Dec	617	500	500	1,834	1,000	834
	4,367	6,000	6,000	12,974	8,339	4,635

Space and water heating:	first block	76	%
	second block	24	%

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Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property

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Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property

*(**Editor's Note:** We originally published this criteria article on Feb. 14, 2013. We're republishing this article following our periodic review completed on Feb. 6, 2014.)*

1. Standard & Poor's Ratings Services is revising its criteria for rating utility first mortgage bonds. These criteria supersede "Criteria: Changes To Collateral Coverage Requirements For '1+' Recovery Ratings On U.S. Utility First Mortgage Bonds", published on Sept. 6, 2007.

2. This article is related to "Principles Of Credit Ratings," published on Feb. 16, 2011.

I. SUMMARY

3. Standard & Poor's Ratings Services is updating its methodology for assigning recovery ratings for corporate utility debt secured by a pledge of real property, called by various terms such as a first mortgage bond (English law), hypothec (Scots law), and hypothèque (French law). Such debt is generically called a secured utility bond (SUB) herein.

4. The criteria represent a change to our approach to assigning recovery ratings to utility SUBs (see "Understanding Standard & Poor's Rating Definitions," published June 3, 2009).

5. Standard & Poor's is revising its criteria for recovery ratings and issue rating notching for SUBs to clarify several areas:

- Specifying the scope of the criteria as global and applicable when the utility operates in the most creditor-friendly type of insolvency regime, listed as a "Group A" regime under our jurisdiction-specific adjustment criteria, (see "Update: Jurisdiction-Specific Adjustments To Recovery And Issue Ratings," published June 20, 2008)and when we determine that the utility's regulator has a mandate to set rates or tariffs high enough for the utility to recover prudently incurred costs, including all debt costs and a fair return of and on its capital, after default;
- Clearly defining "utility," "SUB," and "regulated capital value" (RCV), which is our calculation of the value of the collateral pledged to SUB holders; and,
- Changing the amount of SUBs outstanding at default used in our calculation of nominal recovery expectations. We previously assumed that the maximum amount permitted under the mortgage indenture would be outstanding upon default. We now use the amount outstanding at the time of the recovery analysis.

II. SCOPE OF THE CRITERIA

6. The criteria apply to ratings on SUBs issued by investor-owned or privatized utilities in countries where we have classified the insolvency regime in "Group A" (see "Update: Jurisdiction-Specific Adjustments To Recovery And Issue Ratings," published June 20, 2008).

7. For the purposes of these criteria, a "utility" is a company that offers an essential or near-essential product or service with little or no practical substitute, a stable business model that is legally shielded from competition, and is subject to comprehensive regulation of its rates, service quality, terms of service, and financial condition by an independent regulator with an established history of protecting asset values through various economic and political environments.

8. For the purposes of these criteria, a "SUB" is defined as senior secured debt with a priority right to payment upon default, a first lien on substantially all real property, and restrictions on additional issuances, which in combination with the stable value of utility real property offer a very strong degree of security to bondholders if a default occurs.

III. CHANGES FROM REQUEST FOR COMMENT

9. On Sept. 26, 2012, Standard & Poor's published "Request For Comment: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property." All investors and issuers who provided comments to Standard & Poor's supported the revised approach to assigning recovery ratings to utility SUBs. Based on market feedback, the proposed criteria were changed to clarify that the type of regulatory regime that supports the implementation of recovery ratings for SUBs provides for rates that enable a utility to recover a return of and on all of its investment, not just debt-related costs (paragraph 13).

IV. IMPACT ON OUTSTANDING RATINGS

10. These criteria affect 24 utilities in the U.S. and Canada, with a total of 405 outstanding ratings (see list of issuers in the Appendix below).

V. RECOVERY METHODOLOGY

11. Based on the limited number of utility defaults, we expect a utility default to likely stem from a lack of liquidity connected to a sudden and unpredictable weather, cost, or market event outside the utility's control that is not resolvable through regulatory or legislative processes. We believe a default precipitated by such an event, which develops over a short time horizon, would be strategic in nature, aimed at resolving a regulatory impasse while anticipating the need to preserve some liquid resources to maintain operating capabilities for its essential services. Accordingly, our standardized path to default assumes that the bankruptcy would be resolved through reorganization and not liquidation.

12. We think the value of the utility's assets is likely to be preserved because the default is not tied to a failure of its business model, and because the bankruptcy would be likely resolved through a reorganization that would leave the assets, and their long-term value, intact. In addition, the rapidity of the events in the default scenario suggests that the urgent need for liquidity would be largely met through unsecured bank borrowings and other unsecured short-term sources of liquidity and not through additional SUB issuances.

A. Evaluating a regime's creditor-friendliness

13. To apply these criteria, the utility must operate in a creditor-friendly regime identified by two necessary conditions. First, the utility must operate in a "Group A" insolvency regime, using our jurisdiction-specific adjustment criteria (See "Criteria: Update: Jurisdiction-Specific Adjustments To Recovery And Issue Ratings," June 20, 2008). The classification indicates that the regime offers a strong level of security interest for creditors, sufficient opportunity for creditor participation and influence in insolvency proceedings, a distribution of values in insolvency that generally provides for the certainty of creditor priorities, and timely resolution of insolvency proceedings. The second condition is that the utility operates in a jurisdiction where the regulator has a mandate to set rates high enough for the utility to recover prudently incurred costs, including all debt costs and a fair return of and on its capital.

B. Determining valuation

14. We gauge the recovery prospects by using RCV (formerly called "net utility assets") when it emerges from bankruptcy. Where regulators have a mandate to set rates high enough for the utility to recover prudently incurred costs, including the opportunity to earn a return of and on its invested capital, we expect the post-bankruptcy value of a reorganized utility's real assets to remain largely intact.

15. We use RCV as an estimate of the value of the collateral available to SUB holders to satisfy claims in a bankruptcy proceeding. In most cases, we define RCV as net property plant and equipment. If the utility is regulated based on a different basis than original cost (e.g., fair value or replacement cost), we may use a different figure if appropriate. We may also reduce the RCV if we have evidence that full recoverability through rates is problematic and therefore the value of RCV is likely to be impaired. For instance, if construction cost overruns at a power plant have attracted attention from regulators and could result in a disallowance, we would conservatively use the original cost estimate of the plant in our calculation of the RCV.

C. Identifying and estimating secured debt

16. We project no additional SUBs beyond the currently outstanding amount, because we believe a typical utility bankruptcy will be preceded by an abrupt and urgent need for liquidity that the utility will likely meet through unsecured short-term bank borrowings with no additional SUB issuance. With a standard path to default now recognized, we no longer base our estimate of the outstanding SUBs at default on a calculation of the maximum amount permitted under the mortgage indenture.

D. Assigning recovery ratings and issue ratings

Recovery Rating Scale And Issue Rating Criteria-Utility SUBs

Recovery rating	Recovery description	Nominal recovery expectations	AA category and above ICR	A category ICR	BBB category ICR	Speculative-grade ICR¶
1+	Highest expectation, full recovery	100%*	0 notches	+1 notch	+2 notches	+3 notches
1	Very high recovery	90%-100%¶	0 notches	0 notches	+1 notches	+2 notches

*Highest expectation of full recovery resulting from significant overcollateralization (at least 150%) and strong structural features. ¶Very high confidence of full recovery resulting from significant collateralization (100% - less than 150%) and strong structural features. #The calculation of nominal recovery rates for speculative-grade issuers is after accounting for the impact of priority claims such as administrative bankruptcy expenses and includes an estimate of 6 months of accrued interest at default. ICR--Issuer credit rating.

17. We estimate recovery by dividing the RCV by the current outstanding amount of SUBs. We then map the recovery to the utility-specific recovery rating chart (see table above) to determine the issue and recovery ratings

18. We apply graduated notching enhancement on the SUBs of investment-grade ('BBB-' and above) issuers. We do this because as default risk decreases, the concern over what can be recovered takes on lesser relevance and therefore lesser rating significance. Accordingly, the loss-given-default aspect of ratings is given less weight as one moves up the rating spectrum. Conversely, we apply more notching uplift on the SUBs of speculative-grade ('BB+' and below) issuers, as the likelihood of an actual default is higher and recovery is a more meaningful consideration.

19. For SUBs we require significant overcollateralization and strong structural features to justify a '1+' recovery rating ("highest expectation, full recovery"). We assign a '1+' recovery rating to utility SUBs only when our analysis indicates that collateralization meets or exceeds 150%. We set a level of overcollateralization for SUBs because there is less certainty about collateral values when default is a more remote possibility. The necessary strong structural feature is a limitation on the issuance of additional SUBs.

20. We assign a recovery rating of '1' ("very high recovery") when collateralization is between 100% and less than 150% and the security has a limitation on the issuance of additional SUBs.

VI. APPENDIX: ISSUERS AFFECTED

Ameren Illinois Co.

CenterPoint Energy Houston Electric LLC

Central Maine Power Co.

Cleveland Electric Illuminating Co.

Connecticut Light & Power Co.

Entergy Gulf States Louisiana LLC

Entergy New Orleans Inc.

Entergy Texas Inc.

Indianapolis Power & Light Co.

Kansas City Power & Light Co.

Kansas Gas & Electric Co.

Laclede Gas Co.

Nevada Power Co.

Northwest Natural Gas Co.

Ohio Edison Co.

Oncor Electric Delivery Co. LLC

Peoples Gas Light & Coke Co. (The)

Public Service Co. of New Hampshire

Sierra Pacific Power Co.

Southwestern Public Service Co.

System Energy Resources Inc.

Westar Energy Inc.

Maritime Electric Co. Ltd.

Allegheny Energy Supply Co. LLC

VII. RELATED CRITERIA AND RESEARCH

- Criteria Guidelines For Recovery Ratings On Global Industrials Issuers' Speculative-Grade Debt, Aug. 10, 2009
- Notching of U.S. Investment-Grade Investor-Owned Utility Unsecured Debt Now Better Reflects Anticipated Absolute Recovery, Nov. 10, 2008
- Criteria: Update: Jurisdiction-Specific Adjustments To Recovery And Issue Ratings, June 20, 2008
- 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

Temporary contact number: Todd Shipman, (1) 973-796-4217

These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as Standard & Poor's Ratings Services' assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.

S&P Global Ratings

Research

Summary:

Maritime Electric Co. Ltd.

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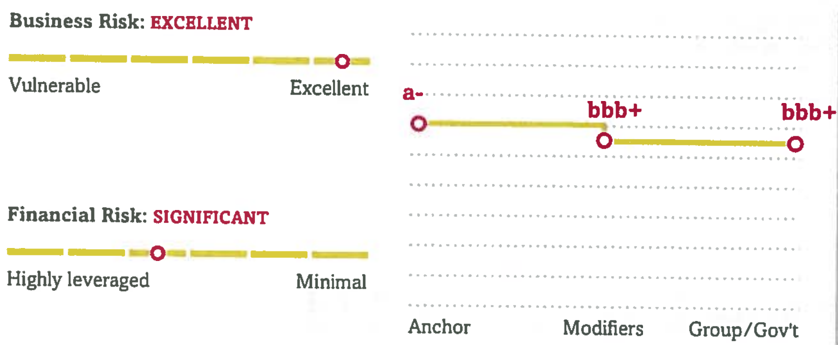
Summary:

Maritime Electric Co. Ltd.



CORPORATE CREDIT RATING

BBB+/Stable/--

Rationale

Business Risk: Excellent	Financial Risk: Significant
• Low-risk monopoly operations in the Province of Prince Edward Island (PEI) • Electricity input cost that remains a pass-thru to customers via the Energy Cost Adjustment Mechanism (ECAM) • The limited independence of Island Regulatory and Appeals Commission (IRAC), the regulator. There is potential for political intervention despite the broadly supportive regulation	• Stable and predictable cash flows

Outlook: Stable

The stable outlook reflects S&P Global Ratings' view that Maritime Electric Co. Ltd. (MECL) will continue generating stable cash flow during the two-year outlook horizon, with no adverse regulatory or governmental rulings and we expect adjusted funds from operations (AFFO)-to-debt in the range of 16%-18%.

Downside scenario

We believe MECL will continue to generate stable regulated cash flows during our outlook horizon. Although we don't expect it in that period, we could lower the SACP of MECL if AFFO-to-debt ratio falls and stay below 15%, towards the lower end of the significant financial risk profile. This could happen should there be an adverse change in government policy, material operational difficulties, or a significantly adverse regulatory ruling impairing timely recovery of cash flows. Given that we link our ratings on MECL to those on Fortis Inc. a change in MECL's SACP alone is unlikely to have an impact on its ratings all else being equal.

Upside scenario

Although unlikely, we could take a positive rating action on MECL if AFFO-to-debt improves to above 22% consistently, at the upper end of the significant financial risk profile, all else being equal.

Our Base-Case Scenario Assumptions

Assumptions

- The PEI government will continue to support the regulatory framework, although there is the potential for political intervention
- MECL will not experience any adverse regulatory decisions and the IRAC will continue to operate in a transparent, stable, and predictable manner
- The utility will continue to earn its allowed return on equity of 9.35% on an average equity layer of 40%
- Capital expenditures will be about C$32 million per year for each of 2017 and 2018
- The company will not make any material, debt-financed unregulated investments
- Common stock dividends will be C$8 million-C$9 million in 2017

Key Metrics

	2016A	2017E	2018E
FFO-to-debt	17.2%	16%-18%	16%-18%
Debt-to-EBITDA	4.1x	4x-4.5x	4x-4.5x

FFO--Funds from operations. A-Actual. E--Estimate.

Business Risk: Excellent

Our view of MECL's business risk profile continues to be excellent, which in part reflects our assessment of the regulatory framework that supports a stable and predictable cash flow model. The IRAC continues to administer a regulatory framework that allows full recovery of prudently incurred operating, capital and commodity costs. Under the most recent GRA [General Rate Agreement] decision, which expires in February 2019, MECL's maximum allowed return on equity is 9.35% and the company needs to maintain an average equity base of about 40%. These are slightly lower than those of the previous rate decision but in line with our expectations, given the current low interest rates.

The provincial government continues to play a significant and active role in energy policy and establishing rates for island customers. [We view the government's active involvement in rate-setting as generally less favorable than an independent regulator with a clear, consistent mandate and an established track record of credit-supportive policies. Due to the track record for political intervention (which could negatively or positively affect credit quality), the regulator's limited strength, and its independence, we view MECL's regulatory environment as less favorable compared with that of regulated utilities operating in other Canadian provinces.

Further supporting the excellent business risk profile is that MECL is the legislated monopoly provider of electricity to about 79,000 customers in PEI, which we believe provides the company with a stable market position. In addition, rates are set in a cost-of-service framework, which allows MECL to fully recover its revenue requirement. The province has a mature-but-stable economy that relies primarily on the public sector, fishing, agriculture, and tourism. We believe that the company's limited scale, scope, and diversity are an offsetting credit factor, given the relatively small market, a limited number of sources of generation, and some customer concentration (with the largest customer accounting for 5%-6% of sales).

In addition, prudently incurred electricity costs remain a flow-through to ratepayers via the energy cost adjustment mechanism. The utility has successfully renegotiated a power purchase agreement with NB Power, an electricity provider in the Province of New Brunswick, which expires in February 2019. This will ensure adequate supply of electricity at a reasonable cost, reducing regulatory risk of non-recovery

Financial Risk : Significant

We assess MECL's financial risk profile as significant.

For the company, we use the medial volatility table when assessing MECL's cash flows primarily to reflect our assessment of the regulatory environment that MECL operates in. We forecast adjusted funds from operations (AFFO)-to-debt to be 16%-18% during our two-year outlook period, consistent with the significant financial risk profile. Although we have assumed that the company will continue to invest in rate-base growth that exceeds depreciation, we expect majority of that growth will be funded through internally generated cash flow.

Liquidity: Adequate

We consider MECL's liquidity adequate to cover its needs over the next 12 months. We expect liquidity sources to exceed uses by more than 1.1x over the next 12 months. In the event of a 10% drop in the company's EBITDA, we also expect there are sufficient liquidity sources to cover uses. In our view, MECL has sound bank relationships, the ability to absorb high impact event, a satisfactory standing in credit market and generally prudent risk management.

Principal Liquidity Sources	Principal Liquidity Uses
Projected cash FFO of C$35 million-C$40 million in 2017 Available capacity under committed revolving facilities of about C$40-C$45 million as of February 2017. The facility matures in 2019	Debt maturities of about C$16.7 million in 2017 Working capital outflows of C$2 million-C$3 million the year Capital expenditure of C$30 million-C$32 million in 2017 Common stock dividend payment of C$8 million-C$9 million the year

Other Modifiers

Our modifiers assessments is unchanged, including the management and governance (M&G) assessment at fair. However, given that our anchor score is 'a-', the fair M&G assessment has a one-notch negative impact on the ratings in accordance with our corporate criteria framework, resulting in a stand-alone credit profile (SACP) of 'bbb+'. We base the fair assessment on a combination of factors including strategic positioning, risk and financial management, organizational effectiveness, and governance.

Group Influence

MECL is an indirect wholly owned subsidiary of Fortis. Consistent with our GRM criteria, we view the company as moderately strategic to the Fortis group. We believe that, although MECL represents a small proportion of the parent's business, it provides a very stable cash flow that is aligned to the parent's overall business strategy. In our view, MECL is unlikely to be sold, has the support of management, and is reasonably successful at what it does. Based on the 'bbb+' SACP on the company, the 'a-' group credit profile assessment on Fortis, and the moderately strategic relationship between the two, MECL does not receive any uplift to the ratings from Fortis' ownership.

Ratings Score Snapshot

Corporate Credit Rating

BBB+/Stable/--

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Strong

Financial risk: Significant

- **Cash flow/Leverage:** Significant

Anchor: a-

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Fair (-1 notch)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : bbb+

- **Group credit profile:** a-
- **Entity status within group:** Moderately strategic (no impact)

Recovery Analysis

MECL's FMBs benefit from a first-priority lien on the majority of the utility's real property owned or subsequently acquired. Based on our criteria, collateral coverage of more than 1.5x supports a recovery rating of '1+' and an issue rating of 'A', two notches above the corporate credit rating for a 'BBB' category company. We base the recovery rating on the maximum amount of secured utility bonds outstanding at the time of the recovery analysis.

Related Criteria And Research

Related Criteria

- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Corporate Methodology, Nov. 19, 2013
- Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Group Rating Methodology, Nov. 19, 2013
- Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Methodology: Industry Risk, Nov. 19, 2013
- Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 7, 2013
- Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

Business And Financial Risk Matrix

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	**Significant**	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

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S&P Global
Ratings

RatingsDirect®

Summary:
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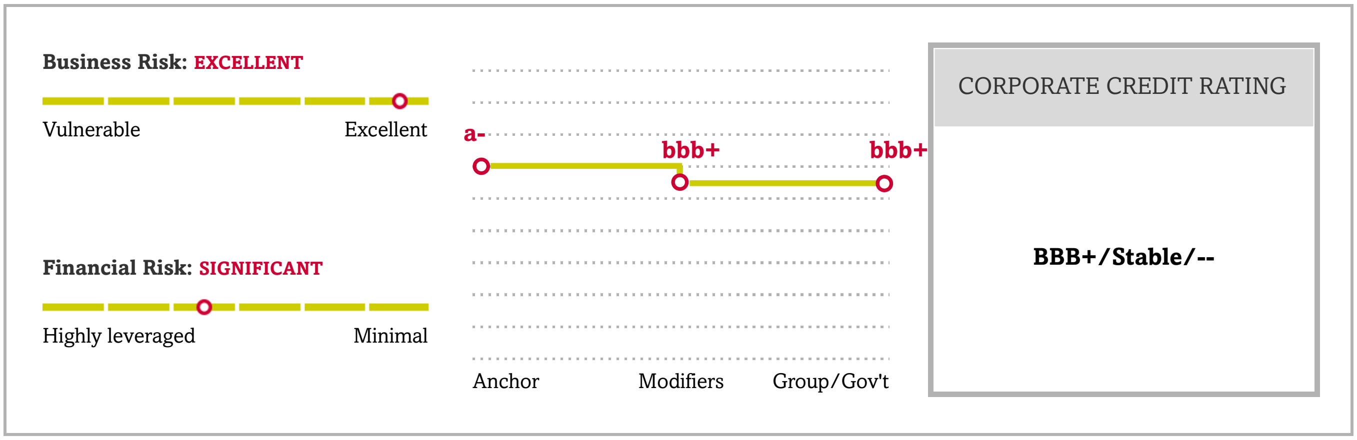
Summary:
Maritime Electric Co. Ltd.



Rationale

Business Risk: Excellent	Financial Risk: Significant
• Maritime Electric Co. Ltd. (MECL) operates a low-risk integrated electricity generation, transmission, and distribution utility operations • The company's operations are in the province of Prince Edward Island (PEI) under the regulatory framework of the Island Regulatory and Appeals Commission (IRAC) • Regulation is generally supportive, where MECL benefits from various regulatory mechanisms like the energy cost adjustment mechanism, which allows for full recovery of prudently incurred costs • Weather normalization supports financial stability • There is a lack of regulatory and geographical diversity, although partially offsetting this is the majority of the customers being residential and small business segments that limit the impact from economic cycles	• Stable and predictable cash flows

Outlook: Stable

The stable outlook reflects S&P Global Ratings' view that MECL will continue generating stable cash flows during the two-year outlook horizon, with no adverse regulatory or governmental rulings. We expect adjusted funds from operations (AFFO)-to-debt in the 15%-18% range.

Downside scenario

Although we don't expect it in the outlook period, we could lower MECL's SACP if AFFO-to-debt ratio falls and stay below 15%, toward the lower end of the significant financial risk profile. This could happen should there be an adverse change in government policy, material operational difficulties, or a significantly adverse regulatory ruling impairing timely recovery of cash flows. Given that we link our ratings on MECL to those on Fortis Inc., a change in MECL's SACP alone is unlikely to affect the ratings, all else being equal.

Upside scenario

Although unlikely, we could take a positive rating action on MECL if AFFO-to-debt improves to above 22% consistently, at the upper end of the significant financial risk profile, all else being equal.

Our Base-Case Scenario

Assumptions

- Stable economy in the service territory with modest increase in the customer base
- Continued use of regulatory cost recovery mechanisms;
- No adverse material regulatory decisions
- The utility will continue to earn its allowed return on equity
- Average annual capital expenditure remaining at about C$37 million
- Average annual dividends of C$10 million in the forecast period

Key Metrics

	2017A	2018E	2019E
FFO/total debt (%)	20.6%	15%-18%	15%-18%
Debt-to-EBITDA	3.6x	4.3-4.5x	4.3-4.5x

Note: Fiscal year-end Dec. 31. FFO--Funds from operations. A--Actual. E--Estimate.

Company Description

MECL is an integrated electricity generation, transmission, and distribution utility with operations throughout PEI. It provides services to more than 80,000 customers and operates under IRAC regulation.

MECL is an indirect wholly owned subsidiary of Fortis.

Business Risk: Excellent

We assess MECL's business risk profile as excellent. This reflects the company's operations in a low-risk country such as Canada, its monopolistic position, and location in a supportive regulatory regime such as PEI, allowing MECL to timely and fully recover prudently incurred operating and capital expenses. These positive credit factors are offsets by the company's involvement in the electricity generation, which we assess to be at the higher end of risk spectrum. Another offsetting factor is the provincial government's involvement and influence in energy policies, specifically establishing rates for island customers, which we assess to be less favorable and exposes MECL to political risks as compared with those of regulated utilities in other Canadian provinces.

MECL is the legislated monopoly provider of electricity to more than 80,000 customers in PEI, which we believe provides the company with a stable market position. In addition, rates are set in a cost-of-service framework, which allows MECL to fully recover its revenue requirement. The province has a mature-but-stable economy that relies primarily on the public sector, fishing, agriculture, and tourism. Although the company's service territory is a small island, the majority of MECL's customers are residential and small business segments, accounting for about 85% of revenue, which limit the impact from economic cycles. Customer concentration is not a credit risk for MECL, with the top two customers accounting for about 6% of revenue while the remaining top 10 customers accounting for less than 1% each.

Financial Risk: Significant

We assess MECL's financial risk profile as significant using the medial volatility financial ratio benchmarks. This assessment reflects the regulatory advantage and low-risk electricity distribution and transmission.

Under our base-case scenario, we expect the company's core credit ratio in the 15%-18% range. Furthermore, we expect annual capital spending for the next few years of about C$37 million.

Although we assume that MECL will continue to invest in rate-base growth that exceeds depreciation. We expect the company will require external funding to fund the capital expenditures and expect credit metrics to weaken slightly but still be higher than our threshold for a downgrade.

Liquidity: Adequate

We assess MECL's liquidity as adequate to cover its needs over the next 12 months. We expect the company's liquidity sources to exceed its uses by 1.1x or more, the minimum threshold for an adequate designation under our criteria, and that the company will meet our other requirements for the designation. MECL's liquidity benefits from stable cash flow generation, ample availability under the revolving credit facilities, and manageable debt maturities over the next few years.

The company's well-established and solid bank relationships; ability to absorb high-impact, low-probability events without the need for refinancing; and a satisfactory standing in credit markets also support our assessment of its liquidity as adequate.

Principal Liquidity Sources	Principal Liquidity Uses
• FFO of C$30 million-C$45 million over the next 12 months • Available credit facility of about C$26 million maturing in 2019	• Debt maturities, both long- and short-term, of about C$15 million over the next 12 months • Capital spending of C$30 million-C$40 million over the next 12 months • Dividend payments of about C$10 million over the next 12 months

Other Credit Considerations

Our modifiers assessments has not changed, including the management & governance (M&G) assessment of fair. We base the fair assessment on factors including strategic positioning, risk and financial management, organizational effectiveness, and governance. The M&G assessment has a one-notch negative impact on the anchor score of 'a-', which results from an excellent business risk profile and significant financial risk profile in accordance with our corporate criteria framework. Factoring in these considerations, the final SACP is 'bbb+'.

Group Influence

MECL is an indirect wholly owned subsidiary of Fortis. Consistent with our group rating methodology criteria, we view the company as moderately strategic to the Fortis group. We believe that, although MECL represents a small proportion of the parent's business, it provides a very stable cash flow that is aligned with the parent's overall business strategy.

In our view, MECL is unlikely to be sold, has the support of management, and is reasonably successful at what it does. Based on the 'bbb+' SACP, the 'a-' group credit profile assessment on Fortis, and the moderately strategic relationship between the two, MECL does not receive any uplift to the ratings from Fortis' ownership.

Ratings Score Snapshot

Corporate Credit Rating

BBB+/Stable/--

Business risk: Excellent

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Strong

Financial risk: Significant

- **Cash flow/Leverage:** Significant

Anchor: a-

Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Fair (-1 notch)
- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : bbb+

- **Group credit profile:** a-
- **Entity status within group:** Moderately strategic (no impact)

Issue Ratings--Recovery Analysis

MECL's first mortgage bonds benefit from a first-priority lien on the majority of the utility's real property owned or subsequently acquired. Based on our criteria, collateral coverage of more than 1.5x supports a recovery rating of '1+' and an issue rating of 'A', two notches above the corporate credit rating for a 'BBB' category company. We base the recovery rating on the maximum amount of secured utility bonds outstanding at the time of the recovery analysis.

Related Criteria

- Criteria - Corporates - General: Reflecting Subordination Risk In Corporate Issue Ratings, Sept. 21, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014

- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- Criteria - Corporates - Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Insurance - General: Hybrid Capital Handbook: September 2008 Edition, Sept. 15, 2008

Business And Financial Risk Matrix

	Financial Risk Profile					
Business Risk Profile	Minimal	Modest	Intermediate	**Significant**	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	**a-**	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

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All the time.

MARITIME ELECTRIC
A FORTIS COMPANY

2017
Financial Results

2017 Financial Results

Since 1918, Maritime Electric has delivered electricity on Prince Edward Island, providing reliable service at the lowest possible cost, while maintaining a high level of customer service. Maritime Electric and its employees are committed to providing this service in a safe and environmentally responsible manner.

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The Common Shares of Fortis Inc. (FTS) are traded on the Toronto Stock Exchange and New York Stock Exchange. Fortis Inc. Investor Information, inquiries for general information, publications or other requests:

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2017 Financial Results

Management Report

The accompanying financial statements of Maritime Electric Company, Limited ("Maritime Electric" or the "Company") are the responsibility of Management and have been prepared in accordance with Canadian accounting standards for private enterprises. Financial and other operating data contained in this report are consistent with the financial statements.

The Company's systems of internal controls are maintained to provide assurance that all transactions are properly authorized, assets are safeguarded, all liabilities are recognized and the financial information is reliable and accurate.

Responsibility for approval of the financial statements rests with the Board of Directors. The Board carries out this responsibility principally through the Audit and Environment Committee (the "Committee"), which is appointed by the Board to review the financial statements in detail with Management and report to the Board prior to their approval of the financial statements. The Committee meets with the external auditors, with and without Management present, to discuss the results of the audit, the adequacy of the internal accounting controls and financial reporting matters. The 2017 financial statements have been audited by Deloitte LLP, who have been provided full and unrestricted access to the Committee to discuss their findings with respect to the integrity of the Company's financial reporting and internal control systems.

John D. Gaudet
President
and Chief Executive Officer

Jason C. Roberts
Vice President, Finance
and Chief Financial Officer

Deloitte.

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Independent Auditor's Report

To the Shareholder of
Maritime Electric Company, Limited

We have audited the accompanying financial statements of Maritime Electric Company, Limited, which comprise the balance sheet as at December 31, 2017, and the statements of earnings, retained earnings and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for private enterprises, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of Maritime Electric Company, Limited as at December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for private enterprises.

Other Matter

The financial statements of Maritime Electric Company, Limited for the year ended December 31, 2016 were audited by another auditor who expressed an unmodified opinion on those financial statements on February 10, 2017.

Deloitte LLP

Chartered Professional Accountants
February 9, 2018
St. John's, Newfoundland and Labrador

Balance Sheets
As at December 31

(in thousands)	Notes	2017	2016
Assets			
Current Assets			
Accounts receivable	11/14	$ 29,407	$ 44,378
Future income taxes	13	1,301	1,500
Income tax receivable		1,196	1,220
Inventory	15	3,669	4,367
Prepaid expenses		611	444
Regulatory assets	5	1,100	1,733
		37,284	53,642
Property, plant and equipment	3	447,042	431,541
Intangible assets	4	3,915	4,039
Income tax receivable	13	13,294	13,162
Regulatory assets	5	5,295	2,468
		469,546	451,210
		$ 506,830	$ 504,852
Liabilities and Shareholder's Equity			
Current Liabilities			
Bank indebtedness	9	$ 1,896	$ 3,230
Short-term borrowings	9	27,000	13,500
Current portion of long-term debt	7	15,000	-
Accounts payable and accrued liabilities	10	24,356	28,238
Regulatory liabilities	5	6,047	7,204
		74,299	52,172
Contributions		24,752	25,239
Employee future benefits	5/8	8,161	7,428
Future income taxes	13	20,028	30,238
Long-term debt	7	179,352	194,344
Regulatory liabilities	5	54,274	54,846
		360,866	364,267
Shareholder's Equity			
Common shares	6	31,101	31,101
Retained earnings		114,863	109,484
		145,964	140,585
		$ 506,830	$ 504,852

Commitments Note 17.
See accompanying Notes to the Financial Statements

Approved on behalf of the Board.

Jacqueline McIntyre, Director **James C. Bradley, Director**

2017 Financial Results

Statements of Earnings

For years ending December 31

(in thousands)	Notes	2017	2016
Revenue		$ 192,535	$ 186,337
Energy costs		116,106	111,185
Operating expenses	14	23,083	23,495
Amortization		22,224	21,039
Operating income		31,122	30,618
Financing expenses	12/14	12,251	12,379
Earnings before income taxes		18,871	18,239
Income taxes	13	5,941	5,754
Net earnings		$ 12,930	$ 12,485

See accompanying Notes to the Financial Statements.

Statements of Retained Earnings

For years ending December 31

(in thousands)	2017	2016
Retained earnings, beginning of year	$ 109,484	$ 104,999
Adjustment - part VI.1 tax	1,247	298
Net earnings	12,930	12,485
Eligible dividends	(8,798)	(8,298)
Retained earnings, end of year	$ 114,863	$ 109,484

See accompanying Notes to the Financial Statements.

Statements of Cash Flows

For years ending December 31

(in thousands)	Notes	2017	2016
Cash flows from (used in) Operations			
Net earnings		$ 12,930	$ 12,485
Add (deduct) non-cash items:			
Amortization - plant and equipment		21,373	20,560
Amortization - other		851	479
Financing costs		9	7
Future income (recovery) taxes		(10,011)	1,957
Employee future benefits		733	88
		25,885	35,576
Change in non-cash working capital	16	12,888	(14,215)
Income taxes receivable		(132)	(131)
Change in regulatory assets and liabilities		(6,497)	(3,426)
		32,144	17,804
Cash flows from (used in) Investing Activities			
Expenditures for property, plant and equipment		(35,952)	(32,892)
Contributions		746	1,263
Intangible assets		(306)	(319)
		(35,512)	(31,948)
Cash flows from (used in) Financing Activities			
Change in bank indebtedness		(1,334)	(1,318)
Change in short-term borrowings		13,500	2,500
Change in short-term borrowings – Fortis		-	(6,500)
Change in long-term debt		-	28,000
Financing costs		-	(240)
Dividends		(8,798)	(8,298)
		3,368	14,144
Change in cash		-	-
Cash, beginning of year		-	-
Cash, end of year		$ -	$ -

See accompanying Notes to the Financial Statements.

NOTE 1 - DESCRIPTION OF BUSINESS

Maritime Electric Company, Limited ("Maritime Electric" or the "Company") owns and operates a fully integrated system providing for the generation, transmission, distribution and sale of electricity throughout Prince Edward Island ("PEI"). The Company purchases the majority of its energy requirements under the terms of energy purchase arrangements from various suppliers.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation
These Financial Statements have been prepared in accordance with the significant accounting policies set out below and conform to Canadian accounting standards for private enterprises including accounting requirements established under the regulatory environment governed by the Electric Power Act (the "Act"). The timing of recognition of certain assets, liabilities, revenues and expenses may differ from that for enterprises not subject to rate regulation. These differences are discussed below and in Note 5.

a. Regulation

Maritime Electric operates under a traditional cost of service regulatory model as prescribed by the Island Regulatory and Appeals Commission ("IRAC" or the "Commission"). Rate orders issued by the Commission establish the Company's revenue requirement, being those revenues required to recover approved costs and provide an approved rate of return. The Company applies for tariff revenue based on estimated costs of service. Once the tariff is approved, it is not adjusted as a result of actual costs of service being different from those which were estimated, other than for certain prescribed costs that are eligible for deferral account treatment. The Company is governed by several Acts including the Electric Power Act and the Renewable Energy Act. The provisions set out in the Electric Power (Energy Accord Continuation) Amendment Act were in effect until February 29, 2016.

Allowance for Funds Used During Construction
The Company provides for the cost of financing construction work in progress by including an Allowance for Funds Used During Construction (AFUDC) as an addition to the cost of property constructed, using a return on average rate base. In the absence of rate regulation, AFUDC is generally capitalized based on interest incurred on related debt. The Company's AFUDC is deducted from financing expenses, as disclosed in Note 12. This allowance will be charged to operations through amortization over the service life of the related assets.

General Expenses Capitalized
General Expenses Capitalized (GEC) are capitalized overhead costs which are not directly attributable to specific capital assets but relate to the Company's overall capital program. In the absence of rate regulation, overhead costs may only be capitalized to the extent that they are directly attributed to construction activity. GEC is allocated to capital assets. This amount will be charged to operations through amortization over the service life of the related assets.

Future Site Removal and Restoration Provision
The provision for site removal and restoration costs represents the amount collected in customer electricity rates for removal and site restoration costs associated with regulated capital assets that are expected to be incurred in the future. Amortization expense includes an amount allowed for regulatory purposes for these future removal and site restoration costs. Actual costs of removal and restoration, net of salvage proceeds, are recorded against this balance when incurred. In the absence of rate regulation, removal and restoration costs would have been recognized as incurred rather than over the life of the asset through amortization expense.

b. Property, Plant and Equipment and Amortization

Property, plant and equipment are recorded at original cost which includes AFUDC and GEC. Expenditures for additions, replacements and improvements which comprise direct labour, material, engineering and related overhead costs are capitalized whereas repairs and maintenance costs are charged to operations. When property, plant and equipment are disposed or retired, the original cost is charged to accumulated amortization. As a result, there is no gain or loss recorded in income. In the absence of rate regulation, gains or losses on disposals would be charged to income, AFUDC is generally capitalized based on interest incurred on related debt and GEC costs may only be capitalized to the extent that they are directly attributed to construction activity.

Generation Assets
Generation assets are those used to generate electricity. These assets include a thermal generating station, combustion turbines and other related equipment.

Transmission Assets
Transmission assets are those used to transmit electricity at higher voltages (generally at 69 kilovolts and above). These assets include poles, towers, high-voltage wires and conductors, substations, support structures and other related equipment.

Distribution Assets
Distribution assets are those used to distribute electricity at lower voltages (generally below 69 kilovolts). These assets include poles and fixtures, low-voltage wires, transformers, overhead and underground conductors, street lighting, meters, metering equipment and other related equipment.

Amortization is determined by the straight-line method based on the estimated remaining service lives of the amortizable assets (net of customer contributions). The estimated average service lives and average amortization rates for each major category of plant in service are summarized as follows:

	Estimated Average Service Life Ranges Remaining (years)	Average Amortization Rate
Generation	4-36	3.7 %
Transmission	26-45	2.3 %
Distribution	7-40	3.3 %
Other buildings and equipment	5-27	6.0 %

c. Intangible Assets

Intangible assets are comprised of internally developed software and costs associated with the purchase of land rights for transmission and distribution lines. Intangible assets are recorded at cost less accumulated amortization. Intangible assets are derecognized on disposal or when no future economic benefits are expected from their use.

Intangible assets are being amortized using the straight-line method based on the estimated service lives of the assets. Amortization rates range from 1.4 per cent for land rights to 13.8 per cent for software.

d. Bank Indebtedness

Cash consists of cash on hand and balances with banks.

e. Financial Instruments

The Company initially records a financial instrument at its fair value except for a related party transaction which is recorded at the carrying or exchange amount depending on the circumstances.

Subsequently, the Company measures financial assets including accounts receivable and financial liabilities including short-term borrowings, accounts payable and accrued liabilities, and long-term debt at amortized cost.

The Company recognizes its transaction costs in net income in the period incurred. However, financial instruments that will not be subsequently measured at fair value are adjusted by the transaction costs that are directly attributable to their origination, issuance or assumption.

At each balance sheet date, the Company assesses whether there are any indications that a financial asset measured at cost or amortized cost may be impaired. If there is an indication of impairment, the Company determines if a significant adverse change has occurred during the period in the expected timing or amount of future cash flows from the asset. If there is a significant adverse change, then the Company reduces the carrying amount of the asset to the highest of the following:

- the present value of the cash flows expected to be generated by holding the asset, discounted using a current market rate of interest appropriate to the asset;
- the amount that could be realized by selling the asset at the balance sheet date; and
- the amount the Company expects to realize by exercising its right to any collateral held to secure repayment of the asset, net of all costs necessary to exercise those rights.

A previously recognized impairment loss is reversed to the extent that the improvement can be related to an event occurring after the impairment was recognized.

f. Inventory

Inventory represents fuel related to generation activities and is valued at the lower of average cost and net realizable value.

g. Employee Future Benefits

The Company provides certain pension and extended health post-employment benefits to employees during retirement. The Company pays 100 per cent of the cost of providing these unfunded benefit plans for employees that have retired prior to June 30, 2016. For employees retiring after June 30, 2016, the Company pays 50 per cent of the cost of providing these unfunded benefit plans.

The cost of post-employment benefits earned by employees is established by actuarial calculations using the projected benefit method prorated on service, management's best estimate of forecasts regarding the increase in salaries and the age of retirement, as well as the discount rate based on market interest rates for high quality obligations with maturities that match the timing and amount of expected benefit payments.

Actuarial gains or losses are deferred as a regulatory asset or liability on the Company's balance sheet as ordered by IRAC. For a given year, deferred actuarial gains or losses are recognized into income if the unamortized balance at the beginning of the year is higher than 10 per cent of the net post-employment benefits liability balance. Any deferred actuarial gain or loss exceeding this threshold and any past service costs are recognized in earnings over the average remaining service period of the relevant group of employees. In the absence of rate regulation, actuarial gains or losses are recognized into income in the year they are incurred.

h. Asset Retirement Obligations

Asset retirement obligations are recorded at the fair value of the future expenditures required to settle legal obligations associated with asset retirements. The Company has determined that there may be asset retirement obligations associated with some parts of its transmission and distribution system. However, as these categories of property, plant and equipment are effectively operated in perpetuity, a reasonable estimate of the timing of the retirements cannot be determined and consequently, the fair value of the legal obligations associated with the retirements of those assets cannot be made at this time. The Company will recognize an asset retirement obligation and offsetting property, plant and equipment when the timing and amount can reasonably be determined and the amount is material.

i. Income Taxes

The Company follows the future income taxes method of accounting for income taxes. Under this method, future income taxes are determined based on the expected future tax consequences of differences between the carrying amount of balance sheet items and their corresponding tax basis, using the substantively enacted income tax rates for the years in which the differences are expected to reverse. Future income tax assets, if any, are recognized only to the extent that, in the opinion of management it is more likely than not that the assets will be realized. Effective July 1, 2012, the allocation from Fortis Inc. to the Company of the Part VI.1 tax associated with preference share dividends is recognized to retained earnings upon signing of the respective agreement.

j. Contributions

Contributions represent the cost of property, plant and equipment contributed by customers. These accounts are amortized by an amount equal to the annual charge for amortization provided on the related assets.

k. Security Deposits

Security deposits are cash collections from customers to guarantee the payment of electric bills. The security deposit liability includes interest at Scotiabank prime rate less one per cent and is credited to the customers' account. The balance is grouped with accounts payable and accrued liabilities.

l. Revenue Recognition

Electricity is metered upon delivery to customers and is recognized as revenue using approved rates. Electricity that is consumed but not yet billed to customers is estimated and accrued as revenue at year-end.

m. Use of Estimates

The preparation of the Company's financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates. Estimates and judgments are based on historical experience, current conditions, and various other assumptions believed to be reasonable under the circumstances. Additionally, certain estimates are necessary since the regulatory environments in which the Company operates often require amounts to be recorded at estimated values until these amounts are finalized pursuant to regulatory decisions or other regulatory proceedings. Due to changes in facts and circumstances and the inherent uncertainty involved in making estimates, actual results may differ significantly from current estimates. Estimates are reviewed periodically and, as adjustments become necessary, are reported in earnings in the period in which they become known. Accounts affected by estimates include unbilled revenue, allowance for doubtful accounts, accounts payable and accrued liabilities, employee future benefits and amortization.

NOTE 3 - PROPERTY, PLANT AND EQUIPMENT

(in thousands)	2017		
Property, Plant and Equipment	**Cost**	**Accumulated Amortization**	**Net Book Value**
Generating plants	$ 110,617	$ 49,119	$ 61,498
Transmission system	117,450	32,289	85,161
Distribution system	361,544	87,062	274,482
Transmission and distribution system - parts and supplies	2,489	-	2,489
Other buildings, land and equipment	31,310	10,331	20,979
Assets under construction	2,433	-	2,433
	$ 625,843	$ 178,801	$ 447,042

(in thousands)	2016		
Property, Plant and Equipment	**Cost**	**Accumulated Amortization**	**Net Book Value**
Generating plants	$ 110,401	$ 44,830	$ 65,571
Transmission system	107,515	30,219	77,296
Distribution system	346,267	82,215	264,052
Transmission and distribution system - parts and supplies	2,885	-	2,885
Other buildings, land and equipment	30,320	10,176	20,144
Assets under construction	1,593	-	1,593
	$ 598,981	$ 167,440	$ 431,541

Included in property, plant and equipment are land costs of $3.7 million (2016 - $3.7 million). GEC totaled $0.5 million for 2017 (2016 - $0.5 million). During the year, fully amortized contributions totaling $0.3 million (2016 - $0.4 million) were removed from the accounts.

NOTE 4 - INTANGIBLE ASSETS

(in thousands)	2017		
Intangible Assets	**Cost**	**Accumulated Amortization**	**Net Book Value**
Software	$ 2,772	$ 2,129	$ 643
Land rights	4,745	1,473	3,272
	$ 7,517	$ 3,602	$ 3,915

(in thousands)	2016		
Intangible Assets	**Cost**	**Accumulated Amortization**	**Net Book Value**
Software	$ 2,474	$ 1,767	$ 707
Land rights	4,737	1,405	3,332
	$ 7,211	$ 3,172	$ 4,039

NOTE 5 - REGULATORY ASSETS AND LIABILITIES

Regulatory assets and liabilities arise as a result of regulatory and legislative requirements as described in Note 2. Regulatory assets and liabilities represent certain costs incurred or revenue received from customers in the current or prior periods which will be recovered from or refunded to customers in future periods through the rate-setting process.

The Company has operated, subject to regulatory and legislative requirements, under an Energy Cost Adjustment Mechanism since 2001. The mechanism adjusts for the variability of energy-related costs by deferring costs for future recovery from, or return to, customers above or below an approved base, reducing the Company's earnings volatility that would otherwise result from such fluctuations in energy-related costs.

(in thousands) **Regulatory Assets**	**December 31, 2017**	**December 31, 2016**
Weather normalization	**$ 178**	$ 126
Costs recoverable from customers	**2,877**	2,158
Point Lepreau	**1,674**	1,773
Demand side management	**167**	144
Deferred post-employment benefits	**1,499**	-
	$ 6,395	$ 4,201
Current portion		
Costs recoverable from customers	**$ 840**	$ 1,640
Point Lepreau	**93**	93
Demand side management	**167**	-
	$ 1,100	$ 1,733
Long-term portion		
Weather normalization	**$ 178**	$ 126
Costs recoverable from customers	**2,037**	518
Point Lepreau	**1,581**	1,680
Demand side management	**- -**	144
Deferred post-employment benefits	**1,499**	-
	$ 5,295	$ 2,468

(in thousands) **Regulatory Liabilities**	**December 31, 2017**	**December 31, 2016**
Future site removal and restoration provision	**$ 44,184**	$ 42,030
Rate of return adjustment – Pre 2016	**6,080**	11,405
Rate of return adjustment – Post 2015	**4,930**	2,100
Capital asset review reserve	**3,580**	3,448
Deferred post-employment benefits	**1,547**	3,067
	$ 60,321	$ 62,050
Current portion		
Rate of return adjustment – Pre 2016	**$ 4,500**	$ 5,560
Deferred post-employment benefits	**1,547**	1,644
	$ 6,047	$ 7,204
Long-term portion		
Future site removal and restoration provision	**$ 44,184**	$ 42,030
Rate of return adjustment – Pre 2016	**1,580**	5,845
Rate of return adjustment – Post 2015	**4,930**	2,100
Capital asset review reserve	**3,580**	3,448
Deferred post-employment benefits	**-**	1,423
	$ 54,274	$ 54,846

Weather Normalization
A Weather Normalization Reserve was established in 2016 pursuant to an IRAC Order that represents the cumulative change in the contribution margin (average selling price less average cost of energy purchased) resulting from variations in Heating Degree Days (HDD) from normal. The weather normalization adjustment reflects the impact on sales caused by variances in HDD.

Costs Recoverable from Customers
Pursuant to several IRAC Orders, the Company is authorized to recover from or return to customers, costs above or below an approved amount of 8.988 cents per kWh under the operation of the Energy Cost Adjustment Mechanism. From March 1, 2016 to February 28, 2017 the approved amount was 8.605 cents per kWh. For January and February 2016, the approved amount was 8.760 cents per kWh.

Point Lepreau
In 2001, the Company recorded a deferred asset of approximately $5.9 million with respect to the $450 million write-down of Point Lepreau Generating Station (the "Station") in 1998 by New Brunswick Power Corporation, subject to an Entitlement Agreement between the two Companies. Under the provisions of the Electric Power Act, effective January 1, 2004, the Company is permitted to recover these deferred costs but under such terms, timelines and conditions as IRAC determines. IRAC has issued two Orders permitting the continued amortization of the deferred asset based on the Station's estimated useful life.

Demand Side Management
Included in regulator approved customer rates are demand side management and energy efficient program costs. These amounts being collected from customers are deferred and will be used to fund efficiency programs administered by the PEI Energy Corporation or other approved legislative agency as directed by IRAC.

Deferred Post-Employment Benefits
Pursuant to an Order by IRAC, the recognition of the 2013 transitional impact associated with the adoption of the CPA Canada Handbook Section 3462 – Employee Future Benefits effective January 1, 2014, is to be deferred as a regulatory asset or liability on the Company's balance sheets. Pursuant to the Order, for 2014 and future years, the Company is to continue deferring actuarial gains or losses and use the corridor approach in calculating the annual employee future benefit expense. Under this approach, deferred actuarial gains or losses are recognized into income if the unamortized balance at the beginning of the year is higher than 10 per cent of the net post-employment benefits liability balance. Any deferred actuarial gain or loss exceeding this threshold and any past service costs are recognized in earnings over the average remaining service period of the relevant group of employees.

Future Site Removal and Restoration Provision
The provision for site removal and restoration costs represents the amount collected in customer electricity rates for removal and site restoration costs associated with regulated capital assets that are expected to be incurred in the future. Amortization expense includes an amount allowed for regulatory purposes for these future removal and site restoration costs. Actual costs of removal and restoration, net of salvage proceeds, are recorded against this balance when incurred.

Rate of Return Adjustments
Rate of Return Adjustments (RORA) represent deferrals with respect to earnings above the allowed regulated rate of return on common equity that is being returned to customers through rates.

There are two deferral accounts. RORA-Pre 2016 represents earnings above the allowed regulated rate of return on common equity prior to 2016. The balance as at December 31, 2015 is being refunded to customers through rates over the period March 1, 2016 to February 28, 2019.

RORA-Post 2015 represents earnings above the allowed regulated rate of return on common equity after December 31, 2015. It shall be refunded to ratepayers commencing March 1, 2019, or as directed by IRAC.

Capital Asset Review Reserve
The Capital Asset Review Reserve relates to a deferral ordered by IRAC with respect to the estimated potential income tax benefit associated with amendments to the Company's income tax returns for the years 2007 to 2010. This deferral will remain until the amendments filed in 2012 by the Company are confirmed by the Canada Revenue Agency.

NOTE 6 - COMMON SHARES

Authorized – an unlimited number of common shares with no par value.

(in thousands)	December 31, 2017	December 31, 2016
4,893,219 issued and outstanding common shares	**$ 31,101**	$ 31,101

Capital Management
The Corporation's principal business of operating a fully integrated electric generation, transmission and distribution system requires ongoing access to capital in order to fund the maintenance and expansion of infrastructure. When needed, the Company raises debt through the private placement of long-term first mortgage bonds. Commencing January 1, 2017 the Company is required by legislation to maintain at all times, not less than 35 per cent of the invested capital in the power system in the form of common equity, and for the year not more than 40 per cent of its capital invested in the power system in the form of common equity. As at the end of the reporting period, the Company was in compliance with its common equity requirement. The capital structure of the Company is as follows:

	December 31, 2017		December 31, 2016	
Capital Structure	**(000's)**	**(%)**	(000's)	(%)
Total debt*	**$ 223,248**	**60.5**	$ 211,074	60.0
Common shareholder's equity	**145,964**	**39.5**	140,585	40.0
Total	**$ 369,212**	**100.0**	$ 351,659	100.0

* Includes long-term debt, bank indebtedness and short-term borrowings.

NOTE 7 - LONG-TERM DEBT

(in thousands) First Mortgage Bonds		December 31, 2017	December 31, 2016
8.55%	Series - due 2018	**$ 15,000**	$ 15,000
7.57%	Series - due 2025	**15,000**	15,000
8.625%	Series - due 2027	**15,000**	15,000
8.92%	Series - due 2031	**20,000**	20,000
6.054%	Series - due 2038	**59,820**	59,816
3.657%	Series - due 2056	**39,764**	39,761
4.915%	Series - due 2061	**29,768**	29,767
		$ 194,352	$ 194,344
Less: Current Portion		**15,000**	-
		$ 179,352	$ 194,344

The Company has mortgaged or pledged, either by way of a first and specific charge or by way of a floating charge, all of its properties and assets, as security for the First Mortgage Bonds. Long-term debt bears fixed interest rates, thereby minimizing cash flow and interest rate exposures.

NOTE 8 - EMPLOYEE FUTURE BENEFITS

The cost of post-employment benefits earned by employees is established by actuarial calculations using the projected benefit method prorated on service, management's best estimate of forecasts regarding the increase in salaries and age of retirement, as well as the discount rate based on market interest rates for high quality obligations with maturities that match the timing and amount of expected benefit payments.

NOTE 9 - SHORT-TERM BORROWINGS

At the end of the reporting periods, the Company's short-term borrowings from financial institutions were $28.9 million, (December 31, 2016 - $16.7 million). The Company has authorized lines of credit totaling $55.0 million (December 31, 2016 - $55.0 million) of which $25.6 million was unused at the end of the period (December 31, 2016 - $37.8 million).

The Company has letters of guarantee totaling $0.475 million with respect to participation in the regional transmission system.

NOTE 10 - CREDIT AND LIQUIDITY RISKS

Credit Risk
The Company's accounts receivable do not represent a significant credit risk because the amounts are owed by a large number of customers at normal credit terms.

Liquidity Risk
The Company's financial position could be adversely affected if it failed to arrange sufficient and cost-effective financing to fund, among other things, capital expenditures and repayment of maturing debt.

The ability to arrange such financing is subject to numerous factors including the results of operations and financial position of the Company, conditions in the capital and bank credit markets, ratings assigned by ratings agencies and general economic conditions. The Company manages short-term liquidity risk primarily by maintaining bank credit facilities. The Company has unsecured facilities of $55 million.

The Company manages long-term liquidity risk primarily by maintaining its investment grade credit ratings. At the end of the reporting period, the Company's S&P credit rating was BBB+ (stable).

Accounts payable and accrued liabilities include Government remittances payable of $0.3 million (December 31, 2016 - $0.3 million).

The Company's sales and contracts are primarily realized in Canadian dollars, and accordingly, the Company is not exposed to foreign currency exchange rate fluctuations.

NOTE 11 – ACCOUNTS RECEIVABLE

(in thousands)	**2017**	2016
Trade accounts receivable*	**$ 29,474**	$ 44,523
Other	**333**	255
Allowance for doubtful accounts	**(400)**	(400)
	$ 29,407	$ 44,378

* *included in trade accounts receivable is $8.9 million in unbilled revenue (2016 - $8.5 million)*

NOTE 12 - FINANCING EXPENSES

(in thousands)	2017	2016
Interest on long-term debt	$ 12,065	$ 11,989
Interest on short-term borrowings	779	995
Interest income	(152)	(206)
Allowance for funds used during construction	(450)	(406)
Amortization of financing costs	9	7
	$ 12,251	$ 12,379

NOTE 13 - INCOME TAXES

The combined Federal and Provincial statutory corporate income tax rate in the Province of PEI is 31.0 per cent (2016 – 31.0 per cent). Taxes on income reported in the financial statements vary from the amounts computed by applying the rate of earnings before income taxes.

(per cent)	2017	2016
Statutory income tax rate	31.00 %	31.00 %
Other differences	0.50 %	0.50 %
Effective income tax rate	31.50 %	31.50 %

The components of the provision for income taxes are as follows:

(in thousands)	2017	2016
Current income taxes	$ 2,240	$ 3,135
Future income taxes	3,701	2,619
Income tax expense	$ 5,941	$ 5,754

Future income taxes are provided for temporary differences. Future income tax (assets) and liabilities are as follows:

(in thousands)	December 31, 2017	December 31, 2016
Property, plant and equipment	$ 57,740	$ 55,226
Energy cost adjustment mechanism	892	669
Other regulatory	(3,912)	(5,573)
Employee future benefits	(2,959)	(2,616)
Losses carried forward	(32,975)	(18,958)
Other	(59)	(10)
Future income tax liability	$ 18,727	$ 28,738
Current future income tax asset	$ (1,301)	$ (1,500)
Long-term future income tax liability	20,028	30,238
Future income tax liability	$ 18,727	$ 28,738

The long-term income tax receivable of $13.3 million (December 31, 2016 - $13.2 million) arises from the amendments to corporate income tax returns filed for the years 2007 to 2010. See also Note 5 – Capital Asset Review Reserve.

NOTE 14 - RELATED PARTY TRANSACTIONS

The Company is an indirect, wholly owned subsidiary of Fortis Inc. During the normal course of business, the Company had transactions with related parties as follows:

(in thousands)	**2017**	2016
Operating expenses - Fortis Inc.	**$ 605**	$ 615
Operating expenses (Revenues) - Other subsidiaries of Fortis Inc.	**$ (750)**	$ 20
Interest on short-term borrowings - Fortis Inc.	**-**	$ 83

These transactions and the balances related thereto are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties. Interest on short-term borrowings from Fortis Inc. in 2016 represent two short-term demand notes of $14.5 million and $6.0 million bearing interest at 1.361 and 1.425 per cent. At the end of the reporting period, the amounts receivable from related parties are as follows:

(in thousands)	**December 31, 2017**	December 31, 2016
Accounts receivable		
Fortis Inc. Subsidiaries	**$ 12**	$ -

NOTE 15 - INVENTORY

(in thousands)	**December 31, 2017**	December 31, 2016
Inventory	**$ 3,669**	$ 4,367

The cost of inventories recognized as expense was $1.8 million (2016 - $1.8 million).

NOTE 16 – CHANGES IN NON-CASH WORKING CAPITAL

The composition of the Company's changes in non-cash working capital are as follows:

(in thousands)	**2017**	2016
Account receivable	**$ 14,970**	$ (21,374)
Materials and supplies	**698**	797
Prepaid expenses	**(168)**	51
Income taxes receivable	**24**	(77)
Accounts payable and accrued charges	**(2,636)**	5,864
Interest payable	**-**	524
	12,888	$ (14,215)

NOTE 17 - COMMITMENTS

Contracts

The Company has two take-or-pay contracts for the purchase of either capacity or energy and an Energy Purchase Agreement with NB Power covering the period March 1, 2011 to February 28, 2019.

The Company has entitlement to approximately 4.55 per cent of the output from the New Brunswick Power Point Lepreau Nuclear Generating Station for the life of the unit. As part of its participation agreement, the Company is required to pay its share of the capital and operating costs.

The Company has a Debt Collection Agreement with the PEI Energy Corporation in respect of the interconnection submarine cables and associated parts of the New Brunswick Transmission system interconnection. The agreement intends to recover the Initial Capital Cost of the Interconnection submarine cables and associated parts of the New Brunswick Transmission system interconnection by February 28, 2056.

(in thousands)	Total	Due within 1 year	Due in 2 years	Due in 3 years	Due in 4 years	Due in 5 years	Due after 5 years
Power purchase	**$ 87,079**	$ 63,727	$ 12,069	$ 873	$ 873	$ 873	$ 8,664
Lepreau capital and operating	**510,972**	21,976	22,077	21,364	21,321	22,139	402,095
Debt collection	**122,803**	3,218	3,218	3,218	3,218	3,218	106,713
Total	**$ 720,854**	$ 88,921	$ 37,364	$ 25,455	$ 25,412	$ 26,230	$ 517,472

Leases

The Company has commitments under various leases for vehicles and equipment. The future annual minimum payments associated with these leases are as follows:

(in thousands)	Total	Due within 1 year	Due in 2 years	Due in 3 years	Due in 4 years	Due in 5 years	Due after 5 years
	$ 109	$ 62	$ 41	$ 6	-	-	-

2017 Financial Results

Five Year Summary (unaudited)

Earnings Data (in thousands $)	**2017**	**2016**	**2015**	**2014**	**2013**
Revenue	**192,535**	186,337	185,227	189,152	186,094
Net operating expenses	**139,189**	134,680	138,305	143,680	140,959
Amortization	**22,224**	21,039	16,094	15,450	14,824
Financing expenses	**12,251**	12,379	12,277	12,119	12,040
Income taxes	**5,941**	5,754	5,851	5,658	5,777
Net earnings	**12,930**	12,485	12,700	12,245	12,494

Balance Sheet Data (in thousands $)	**2017**	**2016**	**2015**	**2014**	**2013**
Property, plant and equipment	**625,843**	598,981	573,123	549,748	524,830
Accumulated amortization	**178,801**	167,440	154,870	147,591	138,466
Net property, plant and equipment	**447,042**	431,541	418,253	402,157	386,364
Total net debt	**223,248**	211,074	188,625	169,244	162,113
Common equity	**145,964**	140,585	136,100	133,861	129,317

Financial Data	**2017**	**2016**	**2015**	**2014**	**2013**
Capital structure (%)					
Total debt	**60**	60	58	56	56
Common equity	**40**	40	42	44	44
Return on average common equity (%)	**9.0**	9.0	9.4	9.3	9.4
Interest coverage (times)	**2.5**	2.4	2.4	2.4	2.4

Operating Data	**2017**	**2016**	**2015**	**2014**	**2013**
Sources of energy (GWh)					
Purchased	**1,296.0**	1,279.6	1,276.3	1,250.9	1,213.0
Generated	**1.9**	0.9	4.4	4.8	1.8
Total	**1,297.9**	1,280.5	1,280.7	1,255.7	1,214.8
Energy sales (GWh)					
Residential	**577.1**	563.5	568.0	541.4	514.3
General service and other	**631.0**	625.0	620.6	626.3	612.7
Total	**1,208.1**	1,188.5	1,188.6	1,167.7	1,127.0

Customer Data	**2017**	**2016**	**2015**	**2014**	**2013**
Number of customers (in thousands)					
Residential	**67.3**	66.5	65.7	65.3	64.5
General service and other	**12.7**	12.5	12.4	12.3	12.3
Total	**80.0**	79.0	78.1	77.6	76.8

Corporate Directory

Directors

James C. Bradley
Chief Executive Officer, General Manager
Amalgamated Dairies Limited
Summerside, PE

Karen A. Creighan
Owner
Pharmasave
Souris, PE

John D. Gaudet
President and Chief Executive Officer
Maritime Electric Company, Limited
Charlottetown, PE

R. Scott Hawkes
President and Chief Executive Officer
FortisOntario Inc.
Fort Erie, ON

D. Blair MacLauchlan
President
Island Coast Services Limited
Charlottetown, PE

Jacqueline McIntyre
Chief Executive Officer, Sea Cross Inc.
Charlottetown, PE

R. Keith O'Neill
General Manager
Parkland Retirement Living
Halifax, NS

Robert L. Sear
President
Richardson Associates (1993) Ltd
Charlottetown, PE

Gary J. Smith
Executive Vice President of Eastern Canadian
and Caribbean Operations of Fortis Inc.
St. John's, NL

Brian L. Thompson
Senior Vice President, Global Engine Services
Vector Aerospace Corporation
Toronto, ON

Officers

John D. Gaudet
President and Chief Executive Officer

Jason C. Roberts
Vice President, Finance and Chief Financial Officer

Angus S. Orford
Vice President, Corporate Planning and Energy Supply

Byron A.Chubbs
Vice President, Customer Service

Other Information

Act of Incorporation
Canada Business Corporations Act

Transfer Agent and Registrar
Computershare Trust
Halifax, NS; Toronto, ON; Montreal, QC

Auditors
Deloitte LLP
St. John's, NL

Bankers
Scotiabank
Charlottetown, PE

Toronto Dominion Bank
Toronto, ON

Counsel
Stewart McKelvey
Charlottetown, PE

McCarthy Tétrault
Montreal, QC

Maritime Electric
Ratio Analysis
For the Twelve Months Ending December 31, 2017
(unaudited)

Confidential

Regulated			
Net Earnings Non Regulated			12,928,143
Non Regulatory Expenses (net)			422,280
Net Earnings Regulated			13,350,423
	Beginning of Year	End of Year	Average
Total Debt	211,073,400	223,248,294	217,160,847
Common Equity - Non Regulated	140,584,782	145,962,546	143,273,664
Part VI.1 Tax	-	(949,620)	(474,810)
Common Equity - Regulated	140,584,782	145,012,926	142,798,854
			359,959,701
Total Debt			60.33%
Common Equity			39.67%
Return on Equity			9.35%

Non-Regulated			
Net Earnings			12,928,143
	Beginning of Year	End of Year	Average
Total Debt	211,073,400	223,248,294	217,160,847
Common Equity	140,584,782	145,962,546	143,273,664
			360,434,511
Total Debt			60.25%
Common Equity			39.75%
Return on Equity			9.02%

Authorized Return on Equity for Canadian Gas and Electric Distributors and Select Comparators

Volume I, October 1, 2013

Concentric Energy Advisors, Inc. (Concentric) is pleased to publish this first edition of a newsletter documenting authorized returns on common equity (ROEs) and common equity ratios for Canadian gas and electric distributors, U.S. gas distributors, and selected bond yields.[1] Up until this point, a common source for this data has not existed. Regulators, stakeholders, and analysts in Canada routinely consider allowed returns in other Canadian jurisdictions, and increasingly consider the comparability of Canadian and U.S. utilities when assessing the cost of capital. This newsletter seeks to assist with these inter-jurisdictional comparisons.

The newsletter and supporting database contain the authorized ROEs and common equity ratios for over 40 Canadian electric and gas utilities. Also presented are seven representative U.S. gas distributors in addition to the average authorized ROE and common equity ratios for all natural gas rate cases decided in a given year as provided by SNL Energy's Regulatory Research Associates.

Concentric observes that the gap between Canadian and U.S. authorized ROEs for gas distributors has narrowed from approximately 100 basis points in 2000 to approximately 50 basis points in 2012. In 2012, the median authorized ROE for Canadian gas distributors was 9.5 percent while the median for U.S. gas distributors was 10 percent. The gap has further narrowed in 2013.

Concentric attributes the closure of the gap between Canadian and U.S. authorized ROEs for gas distributors to the resetting and replacement of formulas widely used in Canada to adjust the authorized ROE on a periodic basis. While the authorized ROEs have converged in the two countries, the authorized common equity ratios have not. For example, in 2012, the average common equity ratio for Canadian gas distributors was approximately 40 percent while the same figure in the U.S. was approximately 51 percent.

Government and corporate bond yields are often considered when setting authorized ROEs and directly incorporated in some formulas, so this newsletter also contrasts government and utility bond yields. The data demonstrate that since 2000, government bond yields (considered risk-free rates of return) in both Canada and the U.S. declined from over 5.5 percent to less than 3 percent in 2012. While government bond yields play an important role in determining the authorized ROE for utilities, changes in government bond yields do not imply a one-for-one change in the cost of equity for utilities. The relationship between government bond yields and the equity risk premium (the spread between government bond yields and the cost of equity) has historically exhibited an inverse relationship.

Moving forward, Concentric anticipates that improving economic conditions and the easing of accommodative monetary policy in both Canada and the U.S. will exert upward pressure on the cost of capital for utilities. The benchmark Canadian Long-Term Bond Yield reached a low of 2.2 percent in July 2012, but pushed past the 3 percent mark in August and September of this year. U.S. long bonds have followed a parallel path, but remain 61 basis points over the Canadian Long-Bond year to date. Corporate debt costs, as reflected in Canadian and U.S. utility bond yields, have also notched higher in 2013, but remain within a tighter band of 26 basis points year to date.

Concentric will publish an update to this newsletter in the first quarter of 2014.

1 Concentric acknowledges the support of the Canadian Gas Association for conducting the research and building the database which serve as the foundation for this newsletter.

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Authorized Return on Equity for Canadian Gas and Electric Distributors [1]

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2013	2012	2011	2013	2012	2011
Canadian Gas Distributors [2]						
AltaGas Utilities Inc. [3]	8.75	8.75	8.75	43.00	43.00	43.00
ATCO Gas [3]	8.75	8.75	8.75	39.00	39.00	39.00
Centra Gas Manitoba Inc.	N/A	N/A	N/A	30.00	30.00	30.00
Enbridge Gas Distribution Inc.	8.93	8.39	8.39	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	9.50	9.50	38.50	40.00	40.00
FortisBC Energy Inc. (Vancouver Island) [4]	10.00	10.00	10.00	40.00	40.00	40.00
FortisBC Energy Inc. (Whistler) [4]	10.00	10.00	10.00	40.00	40.00	40.00
Gaz Métro Limited Partnership	8.90	8.90	9.09	38.50	38.50	38.50
Gazifère Inc.	7.82	8.29	9.10	40.00	40.00	40.00
Heritage Gas Limited	11.00	11.00	13.00	45.00	45.00	45.00
Pacific Northern Gas Ltd. [4]	10.15	10.15	10.15	45.00	45.00	45.00
Pacific Northern Gas (N.E.) Ltd. (Fort St. John/Dawson Creek) [4]	9.90	9.90	9.90	40.00	40.00	40.00
Pacific Northern Gas (N.E.) Ltd. (Tumbler Ridge) [4]	10.15	10.15	10.15	40.00	40.00	40.00
SaskEnergy Inc.	8.75	8.75	8.75	N/A	37.00	37.00
Union Gas Limited	8.93	8.54	8.54	36.00	36.00	36.00
Average	9.45	9.46	9.66	39.73	39.66	39.66
Median	8.93	9.50	9.50	40.00	40.00	40.00
Canadian Electric Distributors [2]						
ATCO Electric Ltd. [3]	8.75	8.75	8.75	39.00	39.00	39.00
ENMAX Power Corporation [3]	8.75	8.75	8.75	41.00	41.00	41.00
EPCOR Distribution Inc. [3]	8.75	8.75	8.75	41.00	41.00	41.00
FortisAlberta Inc. [3]	8.75	8.75	8.75	41.00	41.00	41.00
FortisBC Inc. [4]	9.90	9.90	9.90	40.00	40.00	40.00
Hydro-Québec Distribution	6.19	6.37	7.32	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	9.75	43.50	41.70	42.70
Newfoundland and Labrador Hydro	4.47	4.47	4.47	20.00	20.00	20.00
Newfoundland Power Inc.	8.80	8.80	8.38	45.00	45.00	45.00
Nova Scotia Power Inc.	9.00	9.20	9.35	37.50	37.50	40.00
Ontario's Electric Distributors [5]	8.98	9.12	9.58	40.00	40.00	40.00
Saskatchewan Power Corporation	8.50	7.40	7.40	40.00	40.00	40.00
Average	8.38	8.33	8.43	37.54	37.40	37.67
Median	8.75	8.75	8.75	40.00	40.00	40.00

[1] Data for an expanded group of Canadian gas and electric 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 has opened a Generic Cost of Capital proceeding in 2013 to review the current allowed ROE for regulated gas and electric utilities in Alberta.
[4] The authorized ROE for 2013 is currently under review by the British Columbia Utilities Commission in Stage 2 of the Generic Cost of Capital proceeding. A decision is expected in January 2014. In Stage 1, the BCUC reduced the allowed ROE for the benchmark utility, FortisBC Energy, Inc., by 75 basis points and reduced its deemed equity ratio by 1.50%.
[5] Rates effective May 1.
* N/A indicates the data is not available.

CONCENTRIC ENERGY ADVISORS, INC.
CREATIVITY • EXPERTISE • ANALYSIS • INSIGHT

Authorized Return on Equity for Select U.S. Gas Distributors [1]

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2013	2012	2011	2013	2012	2011
U.S. Gas Distributors						
Atlanta Gas Light Company (GA) [2]	10.75	10.75	10.75	51.00	51.00	51.00
New Jersey Natural Gas Company (NJ) [2]	10.30	10.30	10.30	51.20	51.20	51.20
Northern Illinois Gas Company (IL) [2]	10.17	10.17	10.17	51.07	51.07	51.07
Northwest Natural Gas Company (OR) [2]	9.50	10.20	10.20	50.00	49.50	49.50
Piedmont Natural Gas Company, Inc. (NC) [2]	10.60	10.60	10.60	51.00	51.00	51.00
Southwest Gas Corporation (AZ) [2]	9.50	9.50	10.00	52.30	52.30	43.44
Washington Gas Light Company (VA) [2]	9.75	9.75	10.00	59.63	59.63	N/A
Average of all Rate Cases Decided in the Year [3]	9.50	9.94	9.92	50.31	51.13	52.49
Median of all Rate Cases Decided in the Year [3]	9.40	10.00	10.03	49.20	51.47	52.45

Economic Indicators (% Yields) [4]	2013	2012	2011
Government of Canada Benchmark Long-Term Bond Yield	2.70	2.45	3.29
U.S. Treasury 30-Year Bond Yield	3.31	2.92	3.91
Bloomberg Fair Value Canada A-rated Utility Bond Yield	4.10	3.91	4.77
Moody's A-rated Utility Bond Index (U.S.)	4.36	4.13	5.04

Presented by Concentric Energy Advisors, Inc. For more information regarding this data, please contact:

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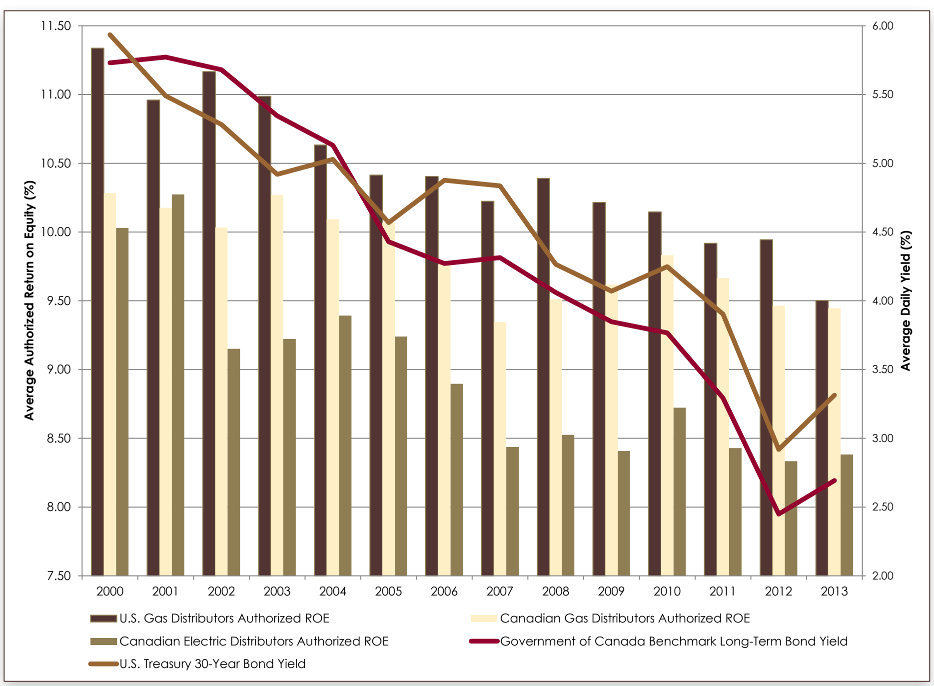

[1] Companies included in this sample are publicly traded, or divisions of publicly traded companies, with investment grade credit ratings, principally focused on the natural gas distribution business. Where more than one state is served, the largest service area is reported.
[2] Allowed in rates for the majority of the corresponding year. Sources: Regulatory decisions and documents; annual reports.
[3] Source: SNL Energy's Regulatory Research Associates Division. Data for 2013 includes decisions through September 13, 2013.
[4] Average daily yield. Source: Bloomberg Finance L.P. Data for 2013 through September 16, 2013.

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

Volume II, May 8, 2014

Concentric Energy Advisors, Inc. (Concentric) is pleased to publish the second edition of this newsletter. It summarizes authorized returns on common equity (ROEs) and common equity ratios for Canadian gas and electric distributors, Canadian electric transmission companies, U.S. gas and electric distributors, and select bond yields. Regulators, stakeholders, and analysts in Canada routinely consider allowed returns in other Canadian jurisdictions, and increasingly consider the comparability of Canadian and U.S. utilities when assessing the cost of capital. This newsletter seeks to assist with these inter-jurisdictional comparisons.

This newsletter and supporting database contain the 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.

Concentric observes that the gap between authorized ROEs for Canadian and U.S. gas distributors continues to narrow, from 100 basis points in 2000 to 77 basis points in 2013 and to 35 basis points through the first three months of 2014. In 2013, the median authorized ROE for Canadian gas distributors was 8.93 percent, while the median for U.S. gas distributors was 9.70 percent. The difference also narrowed for electric distributors, but not to the same extent, where a larger gap between Canadian and U.S. distributors remains, 125 basis points in 2013 and 111 basis points in 2014. Concentric notes that gas ROEs are higher than their electric counterparts in Canada, while the opposite is true in the U.S.

Concentric attributes the closure of the gap between Canadian and U.S. authorized ROEs to the resetting and replacement of automatic formulas widely used in Canada to re-based ROE's and revised formulas or periodically litigated ROEs.

While authorized ROEs have converged in the two countries, the authorized common equity ratios have not. In 2013, the median common equity ratio for Canadian gas distributors was 40.5 percent while the same figure in the U.S. was 50.4 percent, comparable to the difference for electric distributors.

In this update, Concentric has added the allowed returns and equity ratios for Canadian electric transmission companies. Median ROEs are identical to those allowed for Canadian electric distributors, but 111–125 basis points below U.S. electric distributors over the 2013–2014 period. Allowed equity ratios for Canadian electric transmission companies are 3.0 percent lower than their electric distribution counterparts, and 13.0 percent below U.S. distributors.

Canadian utility regulators have issued several important ROE decisions since the first edition of this newsletter in October 2013. For example, in British Columbia, the BCUC set the allowed ROE and deemed equity ratio for the benchmark utility (FortisBC Energy Inc.) in May 2013 and for all other gas and electric utilities in the province in March 2014. The BCUC also decided to return to a formula (subject to government bond yields rising above a specified level). In Québec, the Régie revised the base allowed ROE for Hydro-Québec Distribution and Hydro-Québec TransÉnergie in March 2014 which had previously been set by a formula in place for more than a decade. The Régie further determined that an adjustment formula was not warranted at this time.

In Alberta, the AUC accepted evidence in a generic cost of capital proceeding in January 2014, with hearings scheduled for June and a decision is expected in the fourth quarter of 2014. The AUC will also rule on whether it is appropriate to return to an ROE formula, which was suspended in Alberta in 2009. In Ontario, the Ontario Energy Board's revised ROE formula established in December 1999 remains in effect, but will be subject to its first regular review in 2014. Union Gas recently settled its incentive rate plan, locking in the Board approved 2013 ROE of 8.93 percent for the five-year life of the plan.

Government and corporate bond yields are often considered when setting authorized ROEs for utilities. As shown in the chart on page 3, after declining for many years, the long-term government bond yields (considered the risk-free rate of return) in both Canada and the U.S. have been increasing since July 2012. While government bond yields play an important role in determining the authorized ROE for utilities, changes in government bond yields do not imply a one-for-one change in the cost of equity for utilities. The relationship between government bond yields and the equity risk premium (the spread between government bond yields and the cost of equity) has historically exhibited an inverse relationship.

Going forward, Concentric anticipates that improving economic conditions and the withdrawal of accommodative monetary policy in both Canada and the U.S. will continue to exert upward pressure on the cost of capital for utilities over the next several years.

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CONCENTRIC ENERGY ADVISORS

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

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2012	2013	2014	2012	2013	2014
Canadian Gas Distributors [2]						
AltaGas Utilities Inc. [3]	8.75	8.75	8.75	43.00	43.00	43.00
ATCO Gas [3]	8.75	8.75	8.75	39.00	39.00	39.00
Centra Gas Manitoba Inc.	N/A	N/A	N/A	30.00	30.00	30.00
Enbridge Gas Distribution Inc. [4]	8.39	8.93	9.36	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.	9.50	8.75	8.75	40.00	38.50	38.50
FortisBC Energy (Vancouver Island) Inc.	10.00	9.25	9.25	40.00	41.50	41.50
FortisBC Energy (Whistler) Inc.	10.00	9.50	9.50	40.00	41.50	41.50
Gaz Métro Limited Partnership	8.90	8.90	8.90	38.50	38.50	38.50
Gazifère Inc.	8.29	7.82	9.10	40.00	40.00	40.00
Heritage Gas Limited	11.00	11.00	11.00	45.00	45.00	45.00
Pacific Northern Gas Ltd.	10.15	9.50	9.50	45.00	46.50	46.50
Pacific Northern Gas (N.E.) Ltd. (Fort St. John/Dawson Creek)	9.90	9.25	9.25	40.00	41.00	41.00
Pacific Northern Gas (N.E.) Ltd. (Tumbler Ridge)	10.15	9.50	9.50	40.00	46.50	46.50
SaskEnergy Inc.	8.75	8.75	8.75	37.00	37.00	37.00
Union Gas Limited [4]	8.54	8.93	8.93	36.00	36.00	36.00
Average	9.46	9.23	9.37	39.66	40.31	40.31
Median	9.50	8.93	9.25	40.00	40.50	40.50

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2012	2013	2014	2012	2013	2014
Canadian Electric Distributors [2]						
ATCO Electric Ltd. [3]	8.75	8.75	8.75	39.00	39.00	39.00
ENMAX Power Corporation [3]	8.75	8.75	8.75	41.00	41.00	41.00
EPCOR Distribution Inc. [3]	8.75	8.75	8.75	41.00	41.00	41.00
FortisAlberta Inc. [3]	8.75	8.75	8.75	41.00	41.00	41.00
FortisBC Inc.	9.90	9.15	9.15	40.00	40.00	40.00
Hydro-Québec Distribution	6.37	6.19	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	9.75	41.70	43.50	43.10
Newfoundland and Labrador Hydro	4.47	4.47	Pending	20.00	20.00	Pending
Newfoundland Power Inc.	8.80	8.80	8.80	45.00	45.00	45.00
Nova Scotia Power Inc.	9.20	9.00	9.00	37.50	37.50	37.50
Ontario's Electric Distributors [4]	9.12	8.98	9.36	40.00	40.00	40.00
Saskatchewan Power Corporation	7.40	8.50	8.50	40.00	40.00	40.00
Average	8.33	8.32	8.89	37.40	37.54	38.97
Median	8.75	8.75	8.75	40.00	40.00	40.00

[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 opened a Generic Cost of Capital proceeding in 2013 to review the current allowed ROE for regulated gas and electric utilities in Alberta.

[4] Rates effective May 1 under the Board's formula. The ROE proposed for 2014 by Enbridge in its five-year incentive rate filing, July 3, 2013, EB-2012-0459, is 9.27%. Union's 2014 ROE per settlement agreement in its five-year plan. Beginning in 2014, the Ontario Energy Board intends to update cost of capital parameters for setting rates in cost of service applications only once per year.

* N/A indicates the data is not available.

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2012	2013	2014	2012	2013	2014
Canadian Electric Transmission Companies [1]						
AltaLink Management Ltd.	8.75	8.75	8.75	37.00	37.00	37.00
ATCO Electric Ltd. [2]	8.75	8.75	8.75	37.00	37.00	37.00
ENMAX Power Corporation [2]	8.75	8.75	8.75	37.00	37.00	37.00
EPCOR Transmission Inc. [2]	8.75	8.75	8.75	37.00	37.00	37.00
Hydro One Networks Inc.	9.42	8.93	9.36	40.00	40.00	40.00
Hydro-Québec TransÉnergie	6.39	6.41	8.20	30.00	30.00	30.00
Average	8.47	8.39	8.76	36.33	36.33	36.33
Median	8.75	8.75	8.75	37.00	37.00	37.00

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2012	2013	2014	2012	2013	2014
U.S. Gas Distributors [3]						
Average of all Rate Cases Decided in the Year	9.94	9.68	9.54	51.13	50.60	51.14
Median of all Rate Cases Decided in the Year	10.00	9.70	9.60	51.47	50.38	52.30
U.S. Electric Distributors [3]						
Average of all Rate Cases Decided in the Year	10.17	10.02	10.23	50.59	49.25	51.08
Median of all Rate Cases Decided in the Year	10.08	9.90	9.86	51.72	50.84	50.00

Economic Indicators (% Yields) [4]	2012	2013	2014
Government of Canada Benchmark Long-Term Bond Yield	2.45	2.82	3.02
U.S. Treasury 30-Year Bond Yield	2.92	3.45	3.68
Bloomberg Fair Value Canada A-rated Utility Bond Yield	3.91	4.24	4.36
Moody's A-rated Utility Bond Index (U.S.)	4.13	4.48	4.56

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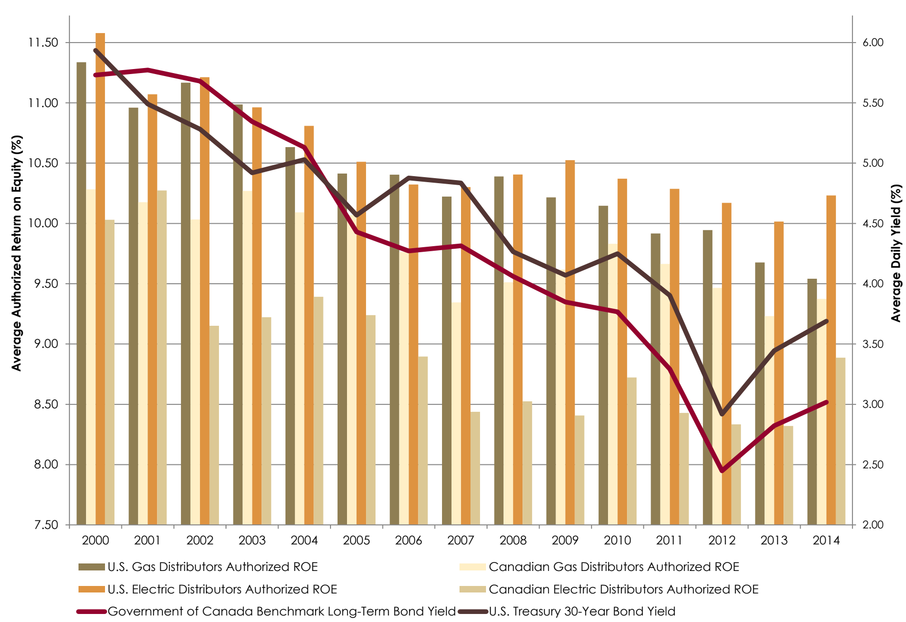


[1] Allowed in rates for the corresponding year; where the year overlaps, the rate/ratio shown prevails for the majority of the year. Sources: Regulatory decisions and documents; annual information forms; annual reports.
[2] The Alberta Utilities Commission opened a Generic Cost of Capital proceeding in 2013 to review the current allowed ROE for regulated gas and electric utilities in Alberta.
[3] Source: SNL Financial LC's Regulatory Research Associates Division. Data for 2014 includes decisions through March 31, 2014.
[4] Average daily yield. Source: Bloomberg Finance L.P. Data for 2014 through March 31, 2014.

Concentric Energy Advisors

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

Volume III, May 1, 2015

INTRODUCTION

Concentric Energy Advisors, Inc. (Concentric) is pleased to publish the third edition of this newsletter summarizing authorized returns on common equity (ROEs) and common equity ratios for Canadian gas and electric distributors, Canadian electric transmission companies, U.S. gas and electric distributors, and select bond yields. Many regulators, stakeholders and analysts in Canada consider allowed returns in other Canadian jurisdictions and U.S. utilities when assessing the cost of capital. This newsletter seeks to assist with these inter-jurisdictional comparisons.

This newsletter and supporting database contain the 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 the differential between the median authorized ROEs for Canadian and U.S. gas distributors continues to narrow, from 100 basis points in 2000 to 53 basis points in 2014 and to only 18 basis points through the first three months of 2015. There is a larger gap between Canadian and U.S. electric distributors, at 125 basis points in 2014 and 122 basis points in 2015. Concentric notes that gas ROEs are higher than their electric counterparts in Canada, while the opposite is generally true in the U.S. Median ROEs for Canadian electric transmission companies are 20 basis points lower than those awarded to Canadian electric distributors, but 142–145 basis points below U.S. electric distributors over the 2014–2015 period.

Concentric attributes the closure of the gap between Canadian and U.S. authorized ROEs over the past decade to the resetting and replacement of automatic formulas widely used in Canada, which has generally increased allowed ROEs from previous formula levels. Simultaneously, U.S. ROEs have followed the decline in interest rates and earnings growth projections that drive ROE estimates.

EQUITY RATIOS

While authorized ROEs have converged between the two countries, the authorized common equity ratios have not. In 2014, the median common equity ratio for Canadian gas distributors was 39.3% while the U.S. median was 51.9%, comparable to the difference for electric distributors which was 40.0% and 50.1%, respectively. Allowed equity ratios for Canadian electric transmission companies are 4.0% lower than their electric distribution counterparts, and 14.0% below U.S. electric distributors.

RECENT DECISIONS

Canadian utility regulators have issued several important cost of capital decisions since the second edition of this newsletter was published in May 2014. Notably, in Alberta, the Alberta Utilities Commission recently issued its decision in the 2013 Generic Cost of Capital proceeding for all gas and electric utilities in the Province. The allowed ROE for Alberta's gas and electric utilities was set at 8.3% for 2015. In addition, the AUC determined that the allowed ROE for 2013 and 2014 would be modified from the previous interim rate of 8.75% to 8.3%. The AUC also reduced the deemed common equity ratio by one percentage point for most Alberta regulated utilities and decided to forego returning to an automatic formula at this time. The Alberta utilities have filed applications to appeal this decision.

In Ontario, the Ontario Energy Board's revised ROE formula established in December 1999 remains in effect but is scheduled to be reviewed in 2015. In Québec, the Régie again decided to allow Gaz Métro to maintain its allowed ROE of 8.9% without a formal proceeding, and similarly for Hydro-Québec Distribution and TransÉnergie, maintaining 8.2% for both divisions.

BOND YIELDS

Government and corporate bond yields are often considered when setting authorized ROEs for utilities. As shown in the chart on page 3, after declining for many years, 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. While government bond yields play an important role in determining the authorized ROE for regulated utilities, changes in government bond yields do not imply a one-for-one change in the cost of equity for utilities. The relationship between government bond yields and the equity risk premium (the spread between government bond yields and the cost of equity) has historically exhibited an inverse relationship.

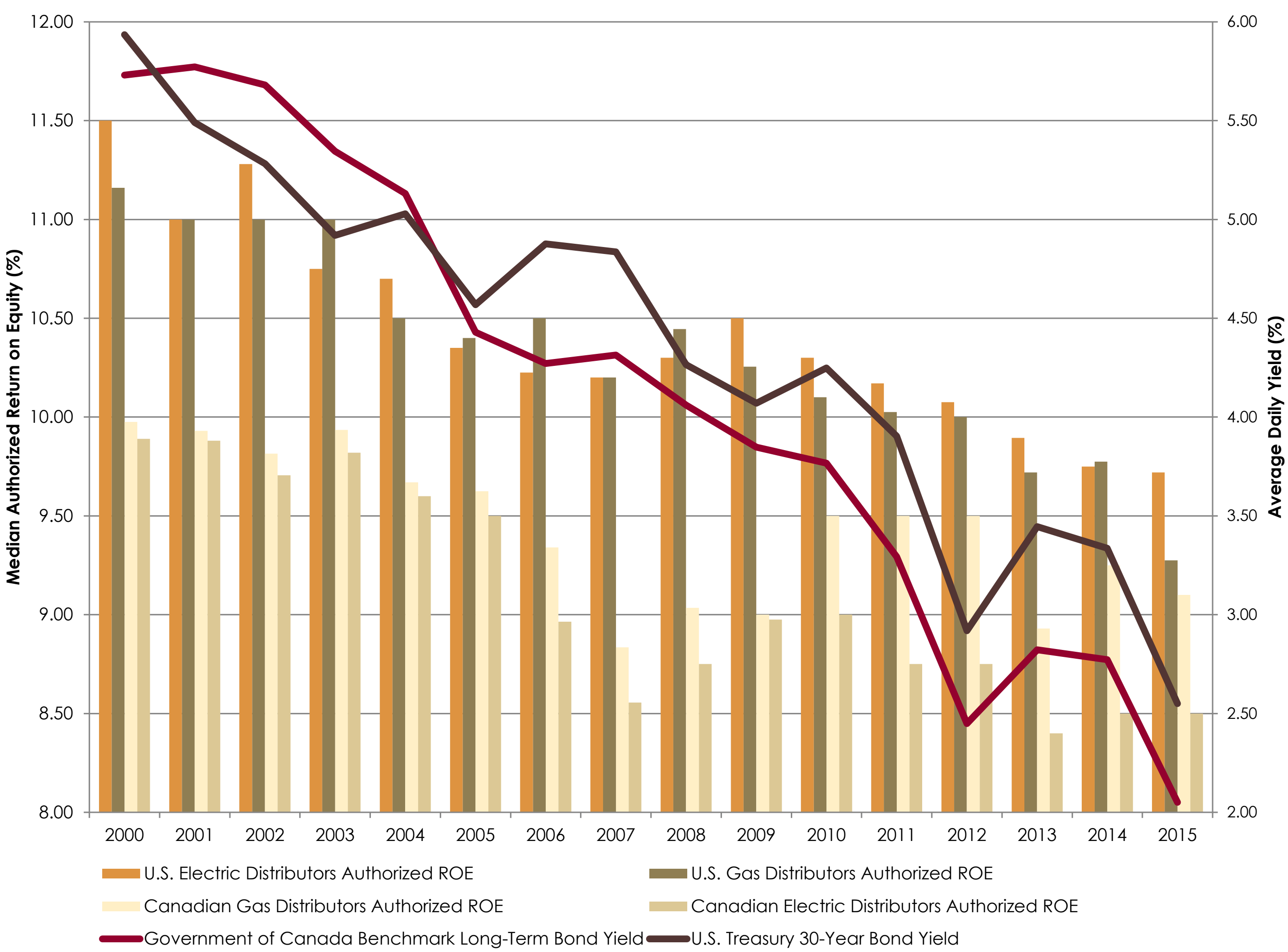
Going forward, Concentric anticipates that improving economic conditions and the withdrawal of accommodative monetary policy in both Canada and the U.S. will begin to exert upward pressure on the cost of capital for utilities over the next several years.

Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities [1]	Return on Common Equity (%)			Common Equity Ratio (%)		
	2013	2014	2015	2013	2014	2015
Canadian Gas Distributors [2]						
AltaGas Utilities Inc. [3]	8.30	8.30	8.30	42.00	42.00	42.00
ATCO Gas [3]	8.30	8.30	8.30	38.00	38.00	38.00
Centra Gas Manitoba Inc.	N/A	N/A	N/A	30.00	30.00	30.00
Enbridge Gas Distribution Inc. [4]	8.93	9.36	9.30	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	38.50	38.50	38.50
FortisBC Energy (Vancouver Island) Inc. [5]	9.25	9.25	—	41.50	41.50	—
FortisBC Energy (Whistler) Inc. [5]	9.50	9.50	—	41.50	41.50	—
Gaz Métro Limited Partnership	8.90	8.90	8.90	38.50	38.50	38.50
Gazifère Inc.	7.82	9.10	9.10	40.00	40.00	40.00
Heritage Gas Limited	11.00	11.00	11.00	45.00	45.00	45.00
Pacific Northern Gas Ltd.	9.50	9.50	9.50	46.50	46.50	46.50
Pacific Northern Gas (N.E.) Ltd. (Fort St. John/Dawson Creek)	9.25	9.25	9.25	41.00	41.00	41.00
Pacific Northern Gas (N.E.) Ltd. (Tumbler Ridge)	9.50	9.50	9.50	46.50	46.50	46.50
SaskEnergy Inc.	8.75	8.75	7.74	37.00	37.00	37.00
Union Gas Limited [6]	8.93	8.93	8.93	36.00	36.00	36.00
Average	9.17	9.29	9.19	40.19	40.19	40.00
Median	8.93	9.25	9.10	40.50	40.50	39.25
U.S. Gas Distributors [7]						
Average of all Rate Cases Decided in the Year	9.68	9.78	9.48	50.60	51.25	50.60
Median of all Rate Cases Decided in the Year	9.72	9.78	9.28	50.38	51.90	50.48
Canadian Electric Distributors [2]						
ATCO Electric Ltd. [3]	8.30	8.30	8.30	38.00	38.00	38.00
ENMAX Power Corporation [3]	8.30	8.30	8.30	40.00	40.00	40.00
EPCOR Distribution Inc. [3]	8.30	8.30	8.30	40.00	40.00	40.00
FortisAlberta Inc. [3]	8.30	8.30	8.30	40.00	40.00	40.00
FortisBC Inc.	9.15	9.15	9.15	40.00	40.00	40.00
Hydro-Québec Distribution	6.19	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	9.75	43.50	43.10	41.90
Newfoundland and Labrador Hydro [8]	4.47	Pending	Pending	20.00	Pending	Pending
Newfoundland Power Inc.	8.80	8.80	8.80	45.00	45.00	45.00
Nova Scotia Power Inc.	9.00	9.00	9.00	37.50	37.50	37.50
Ontario's Electric Distributors [4]	8.98	9.36	9.30	40.00	40.00	40.00
Saskatchewan Power Corporation	8.50	8.50	8.50	40.00	40.00	40.00
Average	8.17	8.72	8.72	37.23	38.63	38.53
Median	8.40	8.50	8.50	40.00	40.00	40.00
U.S. Electric Distributors [7]						
Average of all Rate Cases Decided in the Year	10.02	9.75	9.66	49.25	50.57	51.81
Median of all Rate Cases Decided in the Year	9.90	9.75	9.72	50.84	50.14	51.43

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

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2013	2014	2015	2013	2014	2015
Canadian Electric Transmission Companies [2]						
AltaLink Management Ltd. [3]	8.30	8.30	8.30	36.00	36.00	36.00
ATCO Electric Ltd. [3]	8.30	8.30	8.30	36.00	36.00	36.00
ENMAX Power Corporation [3]	8.30	8.30	8.30	36.00	36.00	36.00
EPCOR Transmission Inc. [3]	8.30	8.30	8.30	36.00	36.00	36.00
Hydro One Networks Inc.	8.93	9.36	9.30	40.00	40.00	40.00
Hydro-Québec TransÉnergie	6.41	8.20	8.20	30.00	30.00	30.00
Average	8.09	8.46	8.45	35.67	35.67	35.67
Median	8.30	8.30	8.30	36.00	36.00	36.00

Economic Indicators (% Yields) [9]	2013	2014	2015
Government of Canada Benchmark Long-Term Bond Yield	2.82	2.77	2.05
U.S. Treasury 30-Year Bond Yield	3.45	3.34	2.55
Bloomberg Fair Value Canada A-rated Utility Bond Yield	4.24	4.14	3.50
Moody's A-rated Utility Bond Index (U.S.)	4.48	4.27	3.67



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 2015 includes decisions through March 31, 2015.
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 2015 through March 31, 2015.

* N/A indicates the data are not available.

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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.

[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.

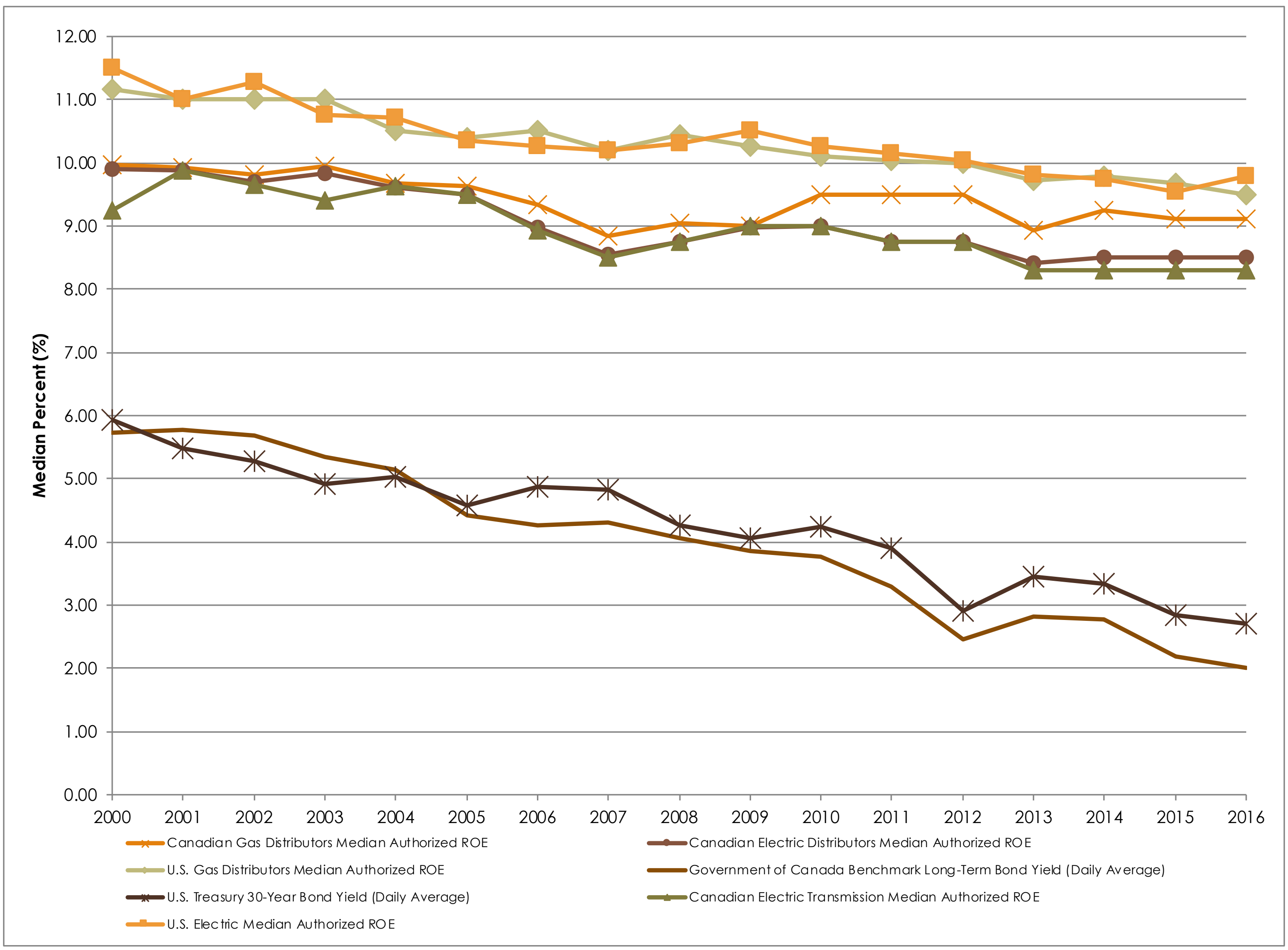
Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities [1]

	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]
Centra 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
Heritage 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]

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

	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) [9]	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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Authorized Return on Equity
for Canadian and U.S. Gas and Electric Utilities

Volume V, May 25, 2017

INTRODUCTION

Concentric Energy Advisors, Inc. (Concentric) is pleased to publish the fifth edition of this newsletter. Each edition summarizes the latest information available on authorized ROEs and common equity ratios for over 40 Canadian gas and electric 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

Average and median allowed ROEs for both Canadian and U.S. utilities in 2017 remain little changed from their 2016 levels. The 2017 median ROE for gas distributors in Canada is 8.93% vs. 9.25% in the U.S. The 2017 median ROE for electric distribution and electric transmission is 8.50% in Canada and 9.60% in the U.S. Factoring into these averages were modest 20 basis point increases in the Alberta allowed ROEs, offset by the reduction in Ontario allowed ROEs as the Board's formula re-set with lower bond yields. Ontario, has a formula linked to both government bond yields and utility bond yields. The OEB's formula produces an 8.78% ROE for 2017, based on a long Canada bond yield input of 2.04%.

The sustained period of very low government bond yields has created challenges for both regulators and analysts as they grapple with the appropriate level of bond yields for cost of capital models. Where the Capital Asset Pricing Model (CAPM) is employed, it is recognized that central banks have depressed government bond yields, requiring some form of adjustment to produce reasonable results. The Discounted Cash Flow (DCF) model is linked to utility dividend yields, and is therefore not directly tied to government bond yields. But low bond yields have driven utility dividend yields lower, and when combined with strong stock valuations, the results of the DCF model are also impacted. In response, regulators and analysts are incorporating adjustments to traditional cost of capital models, or the ranges they produce, to reflect these market circumstances. For example, the British Columbia Utilities Commission, in its 2016 decision for FortisBC Energy, acknowledged that the current risk-free rate has been impacted by the accommodative monetary policy of global central banks, and that an adjustment was necessary to reflect the normalization in interest rate conditions expected in capital markets. In Alberta, the Alberta Utilities Commission recognized in the 2016 generic cost of capital decision that the CAPM results were being distorted by market conditions and therefore placed more weight than usual on the DCF model. The Régie in Québec had reached a similar conclusion in its 2013 Hydro Québec decision, recognizing that an adjustment was necessary to the risk-free rate used in the CAPM to reflect more sustainable long-term bond yields.

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. Regulators have responded in various ways to this relationship so as to moderate the impacts of volatile capital market conditions. For example, in Ontario, gradualism is implicit in the operation of the OEB's adjustment formula where changes in government and corporate bond yields result in a smaller change in the allowed ROE for regulated utilities. The OEB staff issued a report in January 2016 regarding the effectiveness of the ROE formula that was modified in 2009 to consider both changes in government and corporate bond yields. According to the OEB report, the revised formula has worked as intended since 2009, and has generally been well-received by utilities and stakeholders.

A notable trend over the past several years has been the closure of the gap that had developed between median 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. In 2017, the difference has narrowed to 32 and 110 basis points, respectively. ROEs for Canadian electric transmission companies are now equal to those awarded to Canadian electric distributors, and 110 basis points below those allowed U.S. electric distributors. All transmission companies but AltaLink and ATCO are provincially or municipally owned corporations.

Authorized Return on Equity
for Canadian and U.S. Gas and Electric Utilities
Volume V, May 24, 2017, p. 2

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 equity ratio is now 39.25% in Canada, vs. 51% in the U.S. The median electric distribution equity ratio is now 37% in Canada and 49.4% in the U.S. Electric transmission equity ratios have risen to 37% in Canada.

The prevailing differences between allowed equity ratios in Canada and the U.S. remain attributable to a few factors. Regulators in both countries rely on peer group analysis, which reinforces existing levels of allowed equity ratios. Regulators in Canada 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.

RECENT DECISIONS

Several important cases were decided in the second half of 2016 and first quarter of 2017. In British Columbia, the Commission maintained the allowed return of 8.75% and the deemed equity ratio of 38.5% for FortisBC Energy, Inc., the gas distributor which 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 issued its decision in the generic cost of capital proceeding, establishing the approved ROE and capital structures for the Alberta utilities for 2016 and 2017. The generic ROE was set at 8.30% for 2016 and 8.50% for 2017 for regulated utilities in Alberta, and the common equity ratio was deemed at 37.0% for most Alberta transmission and distribution utilities, except AltaGas, which was granted a common equity ratio of 41.0%.

In Newfoundland, the Board maintained Newfoundland Power's deemed equity ratio of 45.0%, while reducing its authorized ROE to 8.50%. A decision was also issued in Newfoundland and Labrador Hydro's long-standing rate case, in which the government-owned utility was granted an allowed ROE of 8.50% and a deemed equity ratio of 25.2%.

The Yukon Utilities Board recently issued a decision re-instating an ROE premium of 25 basis points for ATCO Electric Yukon (AEY), which places the ROE at 9.0%. The Board determined that a risk premium was justified over the authorized ROE for the BC benchmark utility due to the small size of AEY.

The Ontario Energy Board recently conducted a hearing to consider the request of Ontario Power Generation (OPG) to increase its deemed equity ratio from 45% to 49% due to OPG's shift in generation mix from hydro to nuclear. A decision is expected from the OEB later this year.

BOND YIELDS

As shown in the chart on page 4, long-term government bond yields (considered the risk-free rate of return) in both Canada and the U.S. have increased by approximately 50 basis points since reaching a trough in July 2016. The accommodative policy of central banks combined with modest economic growth and a low inflationary environment have driven bond yields steadily lower in recent years. 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 bond yields over the next several years, but a complex mix of international and North American factors will determine the actual path of interest rates. In the interim, government bond yields remain a source of considerable uncertainty in financial markets and regulatory proceedings.

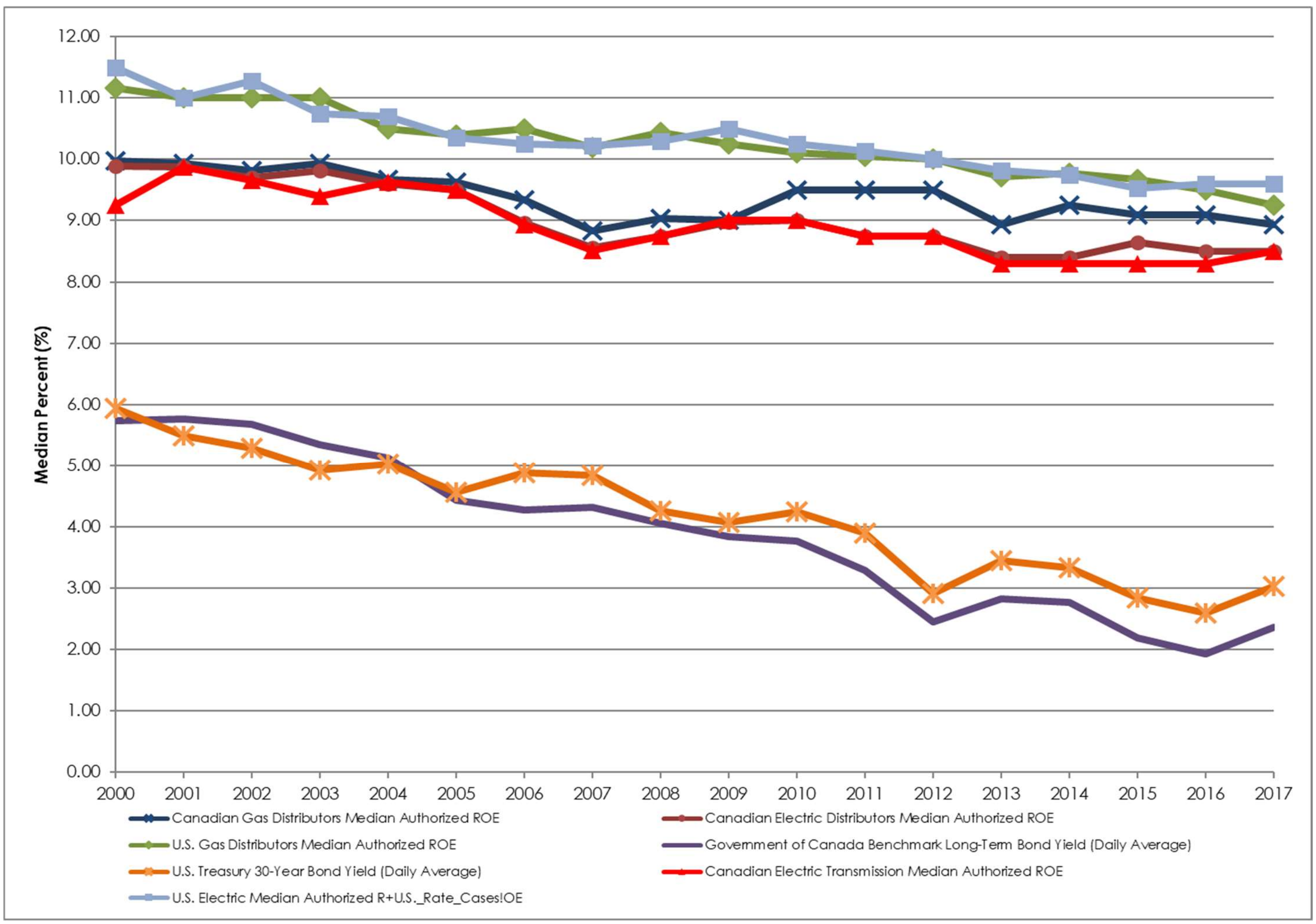
CONCENTRIC ENERGY ADVISORS

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

	Return on Common Equity (%)			Common Equity Ratio (%)		
	2015	2016	2017	2015	2016	2017
Canadian Gas Distributors [2]						
AltaGas Utilities Inc. [3]	8.30	8.30	8.50	42.00	41.00	41.00
ATCO Gas [3]	8.30	8.30	8.50	38.00	37.00	37.00
Centra Gas Manitoba Inc.	N/A	N/A	N/A	30.00	30.00	30.00
Enbridge Gas Distribution Inc. [4]	9.30	9.19	8.78	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	38.50	38.50	38.50
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
Heritage Gas Limited	11.00	11.00	11.00	45.00	45.00	45.00
Pacific Northern Gas Ltd.	9.50	9.50	9.50	46.50	46.50	46.50
Pacific Northern Gas (N.E.) Ltd. (Fort St. John/Dawson Creek)	9.25	9.25	9.25	41.00	41.00	41.00
Pacific Northern Gas (N.E.) Ltd. (Tumbler Ridge)	9.50	9.50	9.50	46.50	46.50	46.50
SaskEnergy Inc.	8.75	8.30	8.30	37.00	37.00	37.00
Union Gas Limited [5]	8.93	8.93	8.93	36.00	36.00	36.00
Average	9.27	9.22	9.22	40.00	39.86	39.86
Median	9.10	9.10	8.93	39.25	39.25	39.25
U.S. Gas Distributors [6]						
Average of all Rate Cases Decided in the Year	9.60	9.49	9.60	49.93	49.69	51.57
Median of all Rate Cases Decided in the Year	9.68	9.50	9.25	50.40	50.00	51.00
Canadian Electric Distributors [2]						
ATCO Electric Ltd. [3]	8.30	8.30	8.50	38.00	37.00	37.00
ENMAX Power Corporation [3]	8.30	8.30	8.50	40.00	37.00	37.00
EPCOR Distribution Inc. [3]	8.30	8.30	8.50	40.00	37.00	37.00
FortisAlberta Inc. [3]	8.30	8.30	8.50	40.00	37.00	37.00
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	9.35	9.35	41.90	40.90	40.00
Newfoundland and Labrador Hydro	8.80	8.50	8.50	25.20	25.20	25.20
Newfoundland Power Inc.	8.80	8.50	8.50	45.00	45.00	45.00
Nova Scotia Power Inc.	9.00	9.00	9.00	37.50	37.50	37.50
Ontario's Electric Distributors [4]	9.30	9.19	8.78	40.00	40.00	40.00
Saskatchewan Power Corporation	8.50	8.50	8.50	40.00	40.00	40.00
Average	8.73	8.63	8.67	37.51	36.66	36.59
Median	8.65	8.50	8.50	40.00	37.00	37.00
U.S. Electric Distributors [6]						
Average of all Rate Cases Decided in the Year	9.60	9.60	9.68	49.26	48.60	47.42
Median of all Rate Cases Decided in the Year	9.53	9.60	9.60	50.00	49.55	49.40

Authorized Return on Equity for Canadian and U.S. Gas and Electric Utilities	Return on Common Equity (%)			Common Equity Ratio (%)		
	2015	2016	2017	2015	2016	2017
Canadian Electric Transmission Companies [2]						
AltaLink Management Ltd. [3]	8.30	8.30	8.50	36.00	37.00	37.00
ATCO Electric Ltd. [3]	8.30	8.30	8.50	36.00	37.00	37.00
ENMAX Power Corporation [3]	8.30	8.30	8.50	36.00	37.00	37.00
EPCOR Transmission Inc. [3]	8.30	8.30	8.50	36.00	37.00	37.00
Hydro One Networks Inc. [4]	9.30	9.19	8.78	40.00	40.00	40.00
Hydro-Québec TransÉnergie	8.20	8.20	8.20	30.00	30.00	30.00
Average	8.45	8.43	8.50	35.67	36.33	36.33
Median	8.30	8.30	8.50	36.00	37.00	37.00

Economic Indicators (% Yields) [7]	2015	2016	2017
Government of Canada Benchmark Long-Term Bond Yield	2.19	1.92	2.36
U.S. Treasury 30-Year Bond Yield	2.84	2.60	3.04
Bloomberg Fair Value Canada A-rated Utility Bond Yield	3.82	3.68	3.82
Moody's A-rated Utility Bond Index (U.S.)	4.12	3.93	4.18



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 2016 decision in the Generic Cost of Capital proceeding was effective for rate years 2016 and 2017. Returns on common equity and common equity ratios were adjusted for 2016. This also affects the category averages for 2016 as compared to those reported last year.
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. Union's ROE per settlement agreement in its five-year incentive regulation plan for 2014–2018.
6. Source: SNL Financial LC's Regulatory Research Associates Division. Data for 2017 includes decisions through April 13, 2017.
7. Average daily yield. Source: Bloomberg Finance L.P. Data for 2017 through April 12, 2017.

* N/A indicates the data are not available. In recent years, the Manitoba Board has not established an authorized ROE for Manitoba Hydro, but has considered whether the company has sufficient income to meet certain interest coverage ratios and capital coverage ratios at its target debt/equity ratio. Similarly, Centra Gas Manitoba previously operated under an ROE adjustment mechanism tied to government bond yields. Centra Gas contended in its 2013/14 GRA filing that the formula was not producing reasonable returns. The Board directed Centra Gas to propose an update to the ROE that is reflective of an appropriate level to be used in the feasibility test.

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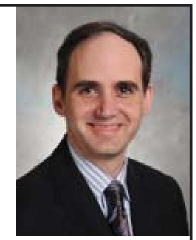
	10-year Gov't Bond		30-year Gov't Bond	
	Canada	U.S.	Canada	U.S.
1990	10.8	8.5	n/a	8.6
1991	9.4	7.8	9.8	8.1
1992	8.1	7.0	8.8	7.7
1993	7.2	5.9	8.0	6.6
1994	8.4	7.1	8.7	7.4
1995	8.1	6.6	8.5	6.9
1996	7.2	6.4	7.8	6.7
1997	6.1	6.3	6.7	6.6
1998	5.3	5.3	5.6	5.6
1999	5.6	5.6	5.7	5.9
2000	5.9	6.0	5.7	5.9
2001	5.5	5.0	5.8	5.5
2002	5.3	4.6	5.7	5.3
2003	4.8	4.0	5.3	4.9
2004	4.6	4.3	5.1	5.0
2005	4.1	4.3	4.4	4.6
2006	4.2	4.8	4.3	4.9
2007	4.3	4.6	4.3	4.8
2008	3.6	3.6	4.1	4.3
2009	3.2	3.2	3.9	4.1
2010	3.2	3.2	3.8	4.2
2011	2.8	2.8	3.3	3.9
2012	1.9	1.8	2.4	2.9
2013	2.3	2.3	2.8	3.4
2014	2.2	2.5	2.8	3.3
2015	1.5	2.1	2.2	2.8
2016	1.3	1.8	1.9	2.6
2017	1.8	2.3	2.3	2.9
25-year Avg.	4.41	4.26	4.84	4.84
10-year Avg.	2.38	2.58	2.94	3.45
5-year Avg.	1.81	2.23	2.40	3.02
Correlation	0.97		0.98	

	3-Month Gov't Bond	
	Canada	U.S.
1990		7.7
1991		5.5
1992		3.5
1993		3.1
1994		4.3
1995		5.6
1996		5.1
1997	3.4	5.2
1998	4.7	4.9
1999	4.7	4.8
2000	5.4	6.0
2001	3.9	3.5
2002	2.5	1.6
2003	2.9	1.0
2004	2.3	1.4
2005	2.7	3.2
2006	4.0	4.8
2007	4.1	4.5
2008	2.4	1.4
2009	0.4	0.1
2010	0.6	0.1
2011	0.9	0.0
2012	0.9	0.1
2013	1.0	0.0
2014	0.9	0.0
2015	0.5	0.0
2016	0.5	0.3
2017	0.7	0.9
25-year Avg.	2.36	2.48
10-year Avg.	0.88	0.31
5-year Avg.	0.72	0.27
Correlation	0.94	

GMO

WHITE PAPER

August 2012



Reports of the Death of Equities Have Been Greatly Exaggerated: Explaining Equity Returns

Ben Inker

Where do equity returns come from? As questions go, it may not be quite as profound as "Why are we here?" or as embarrassingly baffling to most of us as "Why is the sky blue?", but considering the number of people out there who spend their working lives dealing in the financial markets, it is a question asked less often, and usually answered less well, than it should be. This paper will not pretend to tell the whole story, but in a time when investors are questioning what role equities should have in their portfolios, it is worth understanding where the returns to equities come from, and why, after a 12-year period in which U.S. equity returns have been negative, we can still be confident that the returns will, after all, be there in the long run.

We will begin with a summary of our basic points:

1) GDP growth and stock market returns do not have any particularly obvious relationship, either empirically or in theory.
2) Stock market returns can be significantly higher than GDP growth in perpetuity without leading to any economic absurdities.
3) The most plausible reason to expect a substantial equity risk premium going forward is the extremely inconvenient times that equity markets tend to lose investors' money.
4) The only time it is rational to expect that equities will give their long-term risk premium is when the pricing of the stock market gives enough cash flow to shareholders to fund that return.
5) Disappointing returns from equity markets over a period of time should not be viewed as a signal of the "death of equities." Such losses are necessary for overpriced equity markets to revert to sustainable levels, and are therefore a necessary condition for the long-term return to equities to be stable.

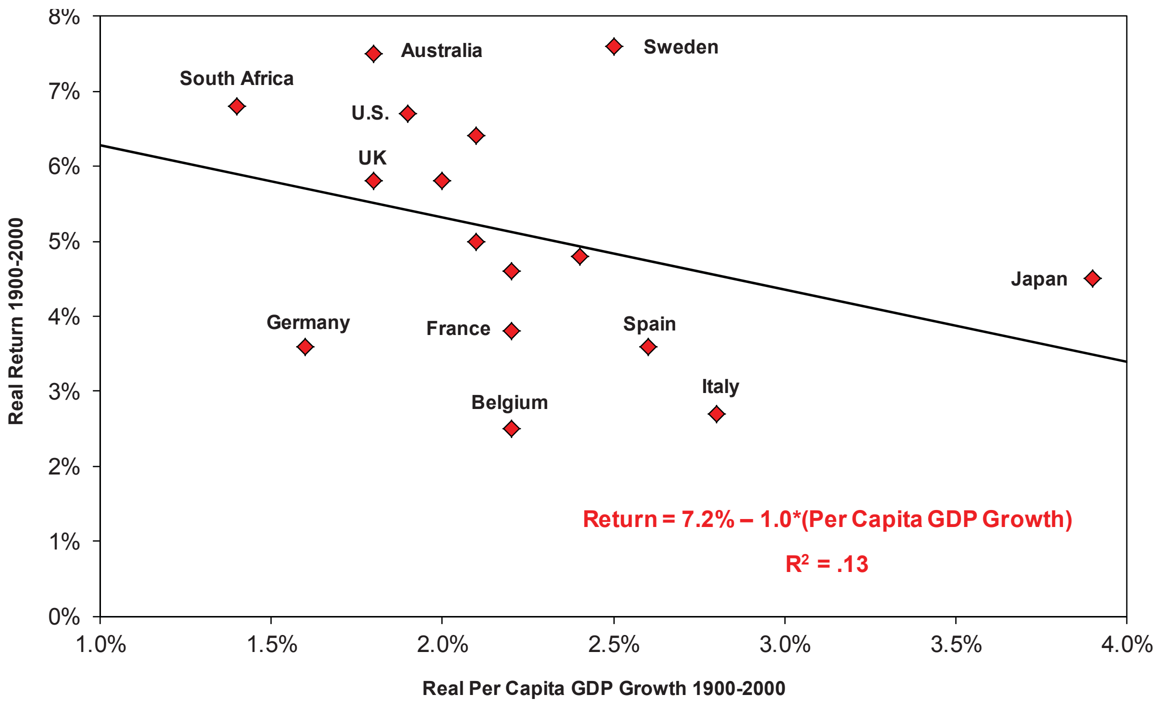
The first point to understand about stock returns is their relationship with GDP growth. In short, there isn't one. Stock returns do not require a particular level of GDP growth, nor does a particular level of GDP growth imply anything about stock market returns. This has been true empirically, as the Dimson-Marsh-Staunton data from 1900-2000 shows. Many investors are utterly convinced that strong GDP growth is the primary reason why one country's stock market will outperform another. As we can see in Exhibit 1, this was certainly not the case in the 20th century.

The trouble with picking stock markets on the basis of expectations of GDP growth is not that GDP growth is hard to predict (although it is harder than many people assume), it's that even if you could predict it with perfect accuracy, it wouldn't do you any good picking stock markets. As Exhibit 2 shows, this has also held true over the more recent time periods (in this case 1980-2010) and as Exhibit 3 shows, it has held true for emerging countries as well as developed ones.

Insofar as there is any relationship here, it's a perverse one. All else equal, higher GDP growth seems to be associated with <u>lower</u> stock markets returns. How could this possibly be? Don't earnings grow with GDP and stock prices with earnings? Aggregate corporate profits should indeed be expected to grow with GDP. And overall market capitalization of the stock market should be expected to grow along with aggregate earnings, as can be seen in the U.S. (Exhibit 4).

Exhibit 1

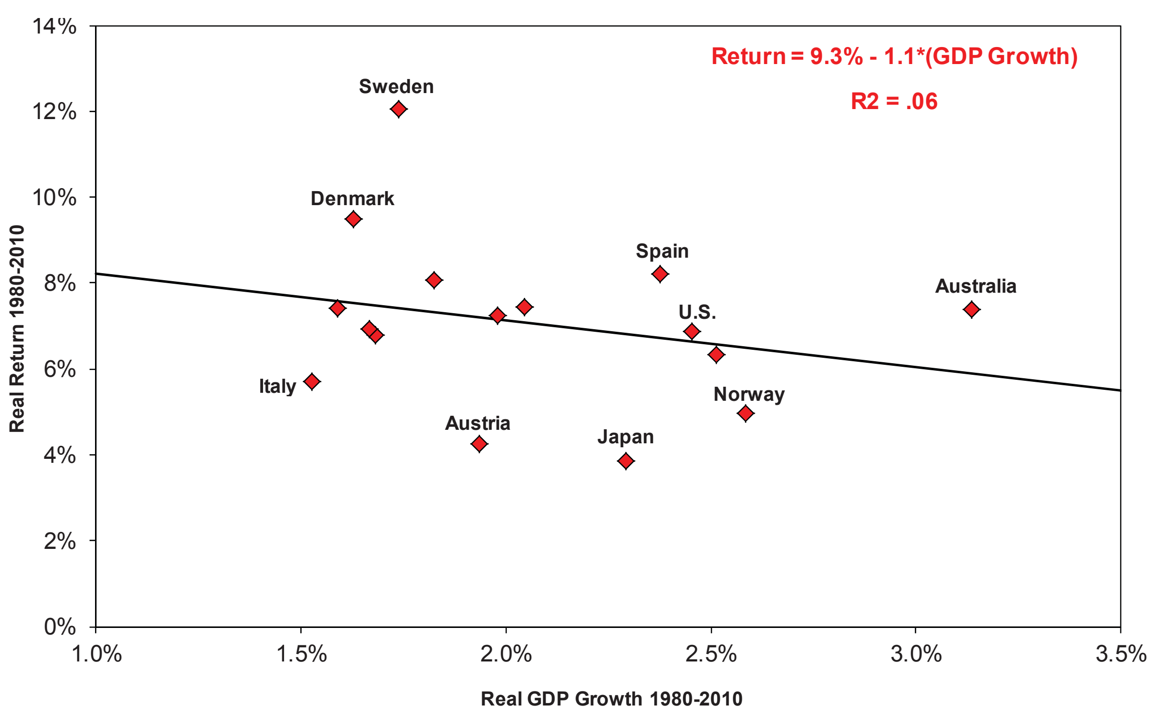
Stock Market Returns and GDP Growth, 1900-2000



Source: Dimson, Marsh, and Staunton, Triumph of the Optimists

Exhibit 2

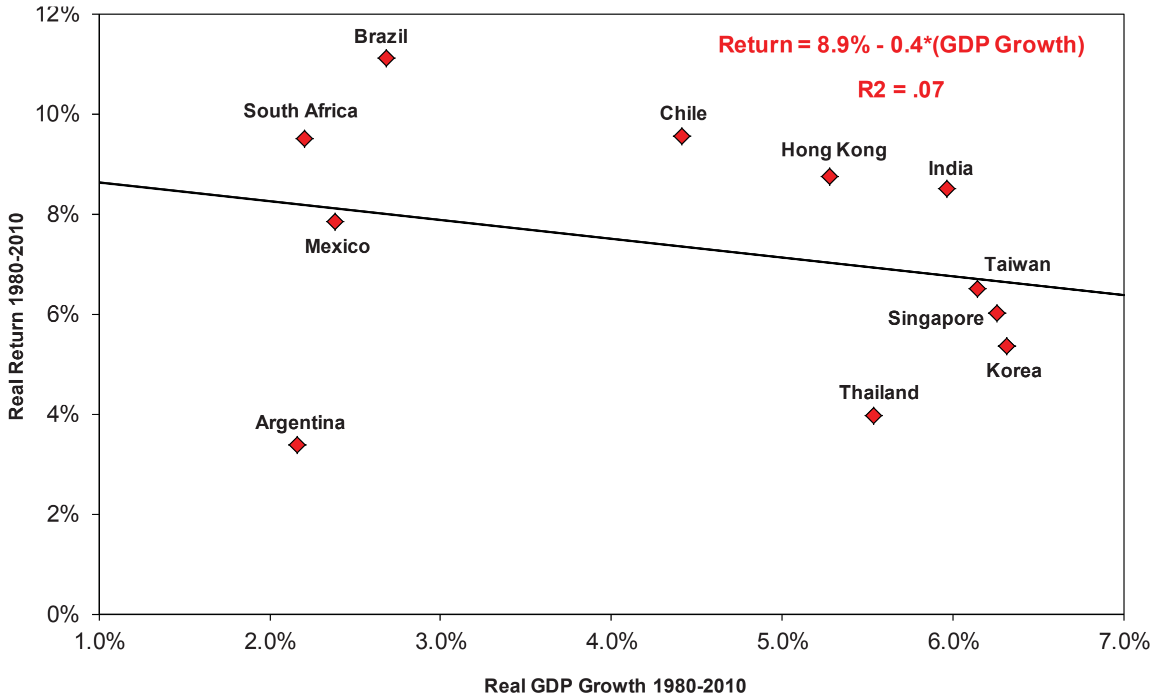
Stock Market Returns and GDP Growth for Developed Markets, 1980-2010



Source: MSCI, S&P, Datastream As of 12/31/10

Exhibit 3

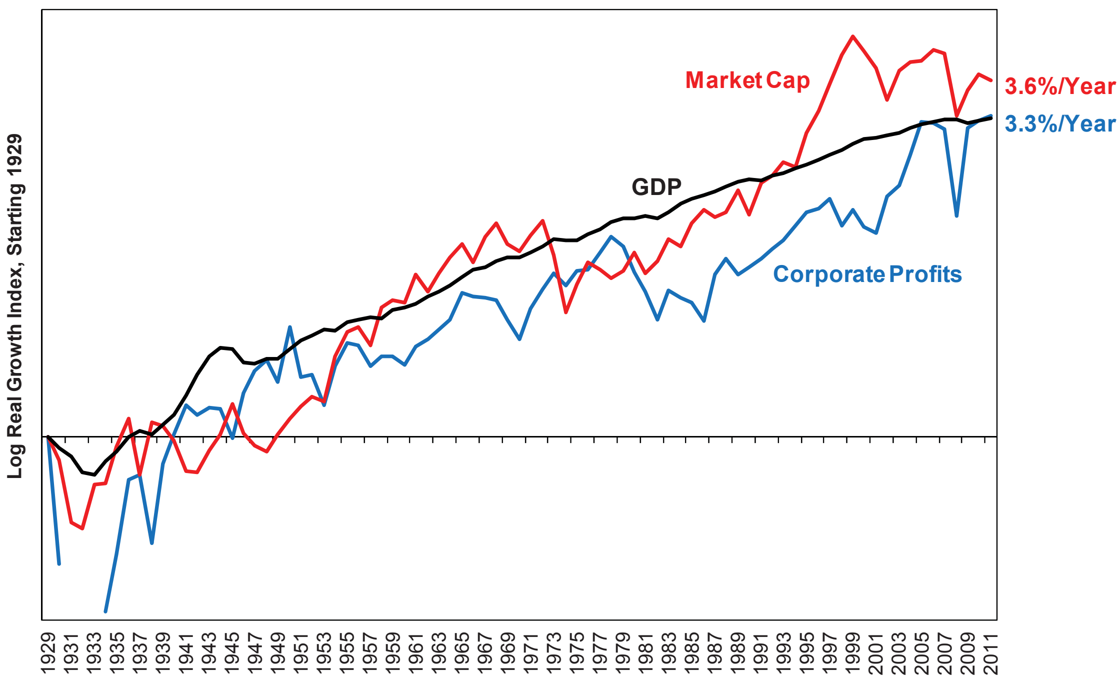
Stock Market Returns and GDP Growth for Emerging Markets, 1980-2010



Source: MSCI, S&P, Datastream As of 12/31/10

Exhibit 4

U.S. Profits and Market Cap vs. GDP



Source: BEA, Global Financial Data, Compustat As of 12/31/11

Since 1929,[1] market capitalization has grown at 3.6% real, while corporate profits and GDP have grown slightly more slowly at 3.3%. The trouble is that none of this tells us much of anything about what the return will be to an actual equity investor.

Total corporate profits and total stock market capitalization have very little to do with earnings per share or the compound return to shareholders because new companies, stock issuance by current companies, stock buybacks, and merger and acquisition activity can all place a wedge between the aggregate numbers and per share numbers.

To see why that wedge is so important, we should look at how GDP growth happens. GDP growth comes from a combination of two factors: population growth and labor productivity growth.

In thinking about the two, let's use a simple example of a factory in which 1 worker with 1 machine can output 1 widget per day. You are the factory owner, currently outputting 10 widgets per day with 10 workers and 10 machines. To achieve a 10% growth, you either need to hire another worker and buy another machine, or you need to improve or replace your machines such that they can output 1.1 widgets per day when manned by one worker. The first method increases output but not output per head, the second increases output as well as output per head. From your perspective as the owner, your choice between the two is going to be driven by the cost of improving or replacing the machines relative to the cost of paying another worker and buying another machine identical to your current ones. Both scenarios involve an investment on your part, though, so while the output of your factory has risen by 10%, we do not have enough information to determine your return on investment. It would only be 10% by the oddest of coincidences. You might have a unique widget creation technology such that your machines were twice as productive as any other, giving you a huge return on the investment. Widget production might be an utterly cutthroat competitive business, such that your return on investment is barely greater than your cost of capital (or, if you've screwed up your analysis, less than your cost of capital). Output is up 10%, and assuming no change to the price of widgets, your aggregate output and gross profits should be up 10% as well, if we don't take into account the cost of capital. But you as the owner had to invest to achieve that higher profit, and to do that, you either forwent a dividend you could have otherwise paid yourself out of profits, or had to raise the capital from someone else. The faster you want to grow, the more you will need to invest, but this investment must either come from retained earnings (forgone dividends) or dilution of shareholders.[2] In practice, companies in fast-growing countries generally exhibit both low dividend payout ratios and high rates of dilution of shareholders, both of which hurt shareholder returns enough to more than counteract the higher aggregate profit growth associated with fast growth.

When we look at stock market returns, dividends have a very large impact on the total, providing the bulk of equity investor returns for most of history. Exhibit 5 shows the compound growth of real returns and real earnings per share against real GDP. Unlike aggregate profits and market capitalization, it is fairly clear that neither returns nor EPS grow in line with GDP.

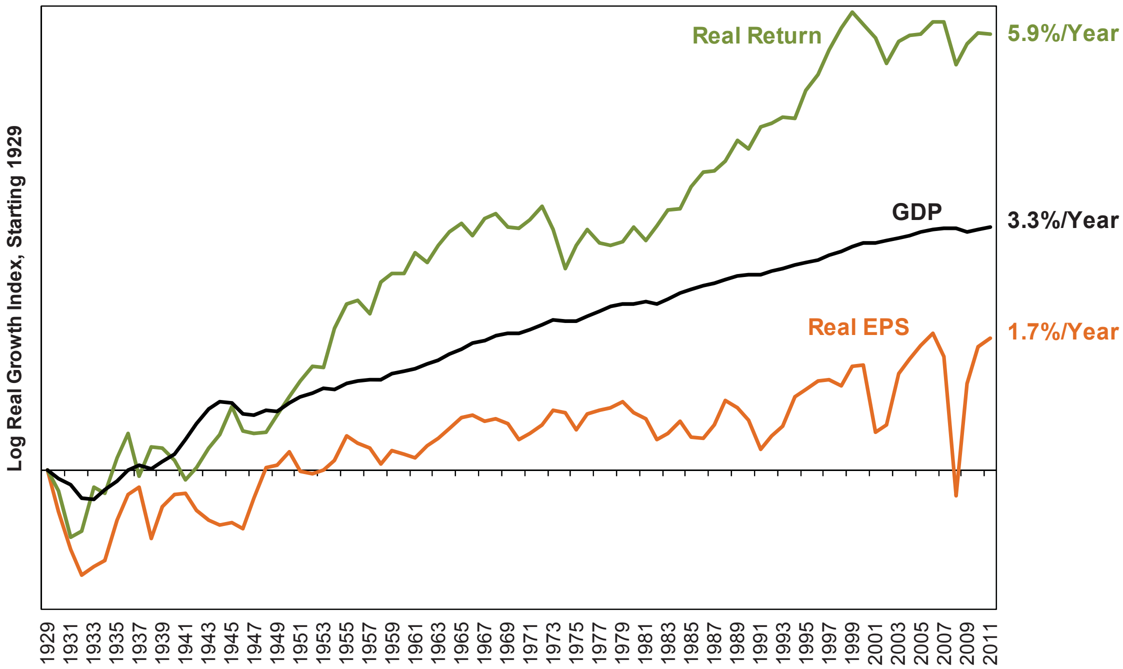
The gap between the 1.7% real earnings growth (about half the rate of GDP growth) and 5.9% real return (almost double the rate of GDP growth) is made up by dividends, which have averaged about 3.9% since 1929, and a bit of valuation shift (the P/E of the market is a couple of points higher today than it was in December of 1929). So if aggregate market capitalization has grown along with GDP and the compound return to equities has been much faster, what gives? Do those original shareholders control 8 times as much of economic output as they did 81 years ago? Of course they don't. Investors don't invest to simply accumulate wealth that is never to be spent. Workers invest to fund their retirements. Pension funds and insurance companies are obligated to service their required payouts. Endowments and foundations pay out 5% or so of their total value every year to fund the causes and organizations

1 1929 is not a brilliant year to start a series on market capitalization or corporate profits, as it was the height of the 1920's economic boom and stock market bubble, but Bureau of Economic Analysis data tends to start there, so it is at least convenient, and over an 82-year period the starting point does not bias things too much.

2 For this purpose, I'm counting borrowing money as well as equity issuance as dilution of shareholders. Lenders may not officially have an ownership stake in the company, but they do have a right to some of its cash flow as well as having contingent rights under certain circumstances, i.e., bankruptcy or covenant breach.

Exhibit 5

S&P Total Return and EPS vs. GDP



Source: BEA, Robert Shiller As of 12/31/11

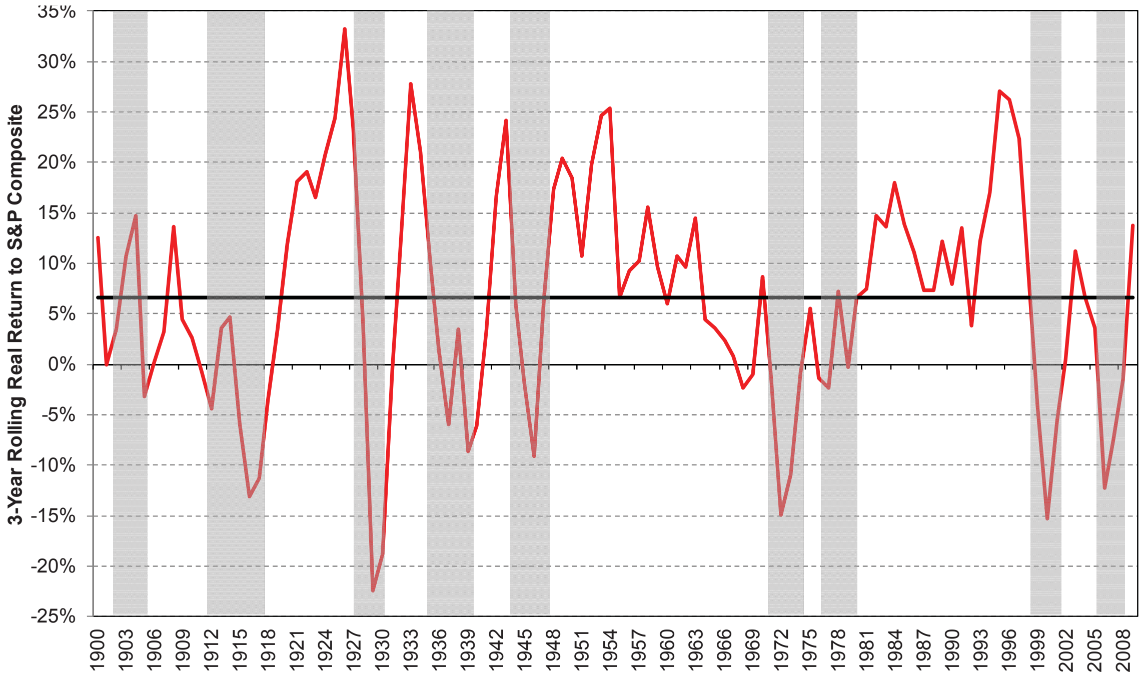
they exist to support. Even the entrepreneurs who seem to be intent on maximizing their wealth splash out on the occasional mega-yacht or scoop up a small tropical island from time to time.

To put it more simply, investors invest to fund future spending of some sort. A return on investment higher than GDP growth leads to no logical impossibility because those returns are not simply hoarded and reinvested in perpetuity. If a slow-growing country invests as if it was fast-growing, it will have a dismal return on equity, as Japan has ably demonstrated for the past couple of decades. But slow-growing countries like South Africa and Australia had very strong stock market returns in the 20th century, having had both the good sense not to lose a major war as well as a decent combination of cheap stock markets and good return on equity. Those returns funded plenty of spending by the holders of those equities, leaving their descendants possibly fairly well off, but not the owners of 140% of local GDP.

So why have returns to equity holders been so good over time? Is it really necessary to give a return of almost 6% real to entice investors to buy stocks? No one seems to have come up with a precise, convincing answer as to what return investors should demand from equities, but common sense suggests it should be a considerable return. This is not simply because equities are volatile – after all, a short position in equities is every bit as volatile as a long position, and they cannot both offer a return above cash – but because equities cost you money at such an inconvenient time. The worst returns to equities come in recessions (bad), financial crises (very bad), depressions (very, very bad), and major wars (not good at all). If you'll forgive me for not filling in the titles of the various bad events, Exhibit 6 shows the rolling 3-year real return to the S&P 500, with shaded areas denoting the losses associated with events from the Panic of 1907 through World War I and its ensuing depression, the Great Depression, World War II, the 1970's Oil Shocks, and on to the Global Financial Crisis. While the average return to the S&P 500 over this period was a reassuring 6.6% real, at those times when you were most at risk of losing your job, your bank account, your house, or your life, you could rely on equities to be piling on the misery.

Exhibit 6

S&P 500 Returns and "Bad Events"



Source: Robert Shiller, GMO   As of 12/31/09

It is only rational for equity holders to demand a decent return for taking that very unfortunate return path. Furthermore, and just as crucially, we believe it is rational for companies to be willing to pay it. For corporations, equity is the safest capital they can raise. Unlike debt, there are no mandated payments associated with it, and no need to periodically refinance it. If a company is looking to finance investments with long durations and significant potential volatility to the cash flows generated, equity is the financing choice that minimizes the risk of the company going out of business. As a business owner, it is entirely rational to be willing to pay a higher expected rate of return to such "safe" capital.

The above statements do not actually specify what the required annual rate of return to equities must be. Here, we have to use some judgment. Our estimate for this return is 5.5-6.0% real, which is in line with the long-term returns to equities in the U.S. and elsewhere, about 3% higher than our estimate for high quality fixed income, and 4% above our long-term estimate for cash returns. We can't be entirely sure we are correct, but it would be decidedly odd if equities didn't offer a significantly higher return than high quality fixed income. It's not simply that equities are more volatile and have greater uncertainty than fixed income, but in recessions, depressions, and financial crises, high quality fixed income tends to go up rather than down.[3] Furthermore, long-duration fixed income is a natural fit for a number of large investors who have long-duration liabilities they are looking to match. An insurer or pension fund may well be interested in owning fixed income at very low expected returns as a hedge, while no one (with the possible exception of bankruptcy lawyers) could view a long position in equities as a hedge.

So while we can't specify the required return to equities with certainty, it makes sense that they should have a significantly higher required return than high quality fixed income. How can we go about forecasting this for the future? The utility functions of equity investors and issuers may be the determinant of long-term required returns to equities, but the only sustainable way to fund that return is out of corporate cash flow. If we stick with a corporate version of Hicksian income, where profit is the maximum amount a company could pay out to shareholders in a given

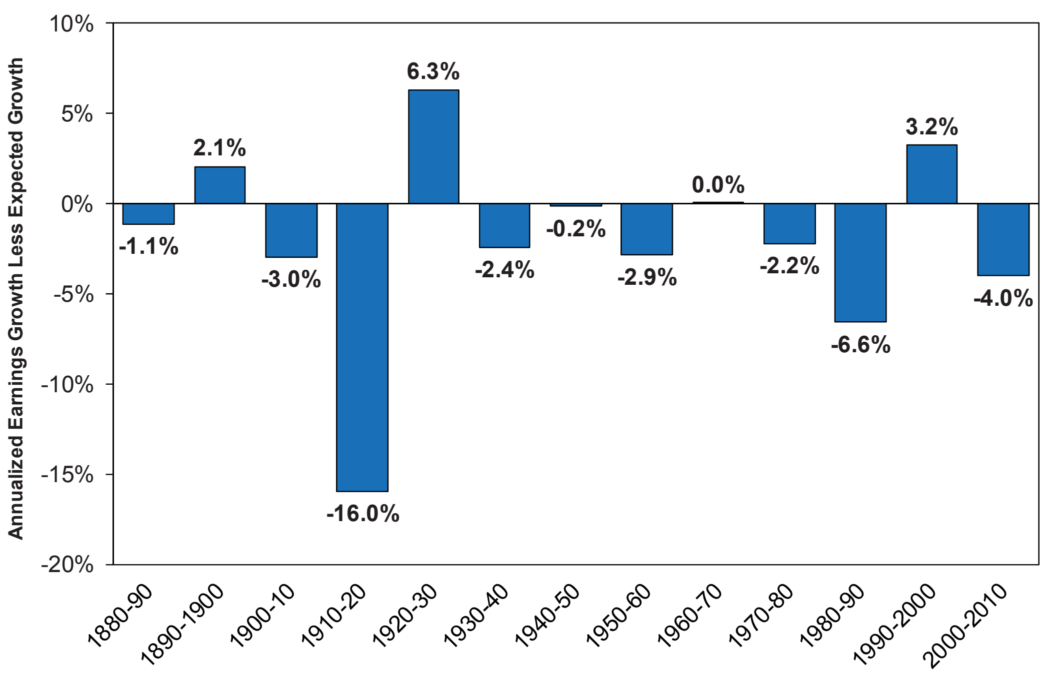
[3] The performance of bonds in the event of war depends a lot on whether your country is on the winning or losing side.

period and maintain the same real earnings power, we might expect that the long-term return to shareholders would be the earnings yield of the market. This is theoretically very simple and appealing. But when we do the math, it is difficult not to be a little disappointed on behalf of shareholders.

Since 1929, the average earnings yield on the S&P 500 has been 7.2%. The P/E of the market has also increased over the period from 13.8 to 15.8 on trailing net earnings. A naïve investor might therefore have expected to get a return of 7.4% above inflation, accounting for both the earnings yield and valuation shift. The actual return to the market since December 1929 has instead been 5.9% real. That's 1.5% worse than one might have expected. What gives? The short answer is that earnings growth has been 1.7% real since 1929, while retained earnings have averaged 3.3% of market cap. That 3.3% could have been paid out as dividends, and if our earnings were truly economic profit that maintained the companies' real earnings power, shareholders would have been able to pocket a dividend yield of 7.2% with flat real earnings. So, are corporations systematically flushing their retained earnings down the toilet? Possibly, but it's also quite possible that earnings are simply overstated. Earnings are calculated not by economists, but accountants, and our guess is that if corporations had indeed paid out 100% of stated earnings, real earnings per share would have fallen significantly over time. Estimating this "slippage" going forward is tricky, since it has not been consistent over time. If we compare earnings growth for the S&P 500 to what we would have expected given the level of retained earnings, we can see large disparities decade to decade, as shown in Exhibit 7.

Exhibit 7

Earnings Growth Slippage in the S&P 500



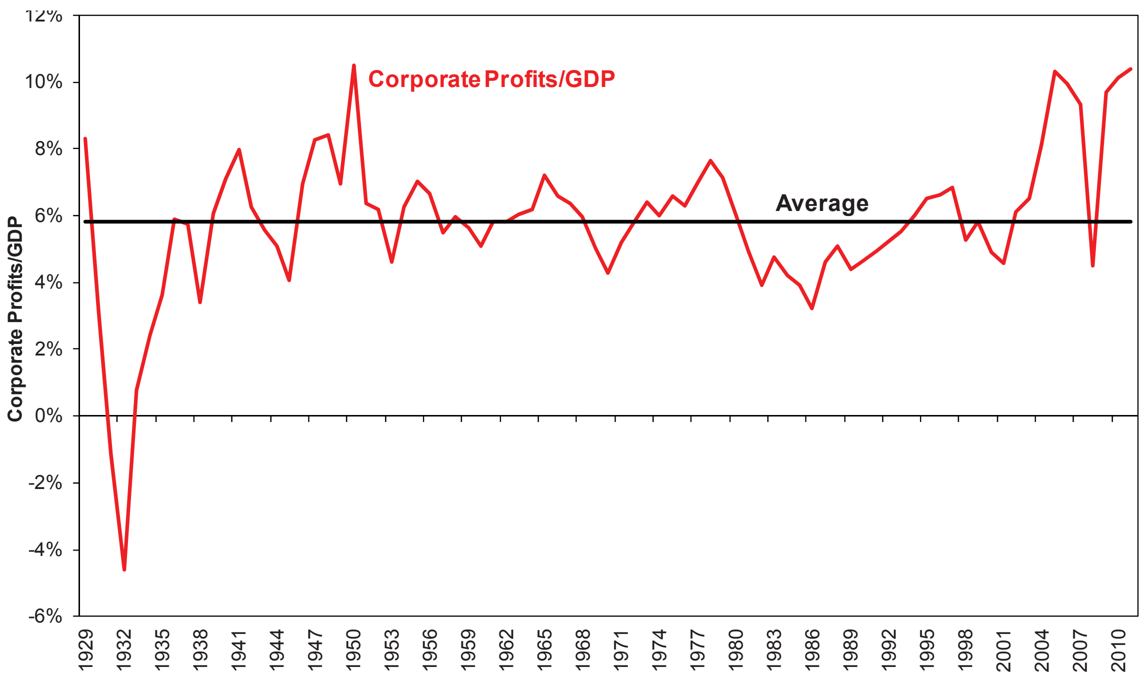
Source: S&P, Robert Shiller, GMO As of 12/31/10

From 2000-2010, for example, the average earnings yield of the market was 5.2%, and the P/E of the market fell from 29 to 19. The P/E loss would have cost you 4.2% per year, but the compounding of that earnings yield should have allowed you to eke out 0.8% of real return over the period. The actual return was -3.2% real, which means to us that equity investors lost 4.0% relative to what they might have expected to achieve. Only in the 1920s and 1990s did investors do better than they should have had a right to expect given the earnings yield and P/E shift, and the average slippage since 1880 has been about 2.0% annually. Much of this loss came in the decade from 1910-1920, which, in addition to containing a world war and a depression, is also long enough ago that the data we have may well be somewhat suspect. If we toss out the data before the 1920s, the average slippage has been 1%.

As a result, we think equity investors should expect a real return less than the earnings yield. We build in a factor of 1% and hope it will be enough. As of June 2012, the earnings yield of the market is 6.3%, a little lower than is consistent with a return of 5.5-6.0% real. But we believe that this understates the expensiveness of equities, since profit margins today are more or less the best in history, at least on government data. Exhibit 8 shows corporate profits/GDP since 1929.

Exhibit 8

U.S. Corporate Profits vs. GDP



Source: BEA As of 12/31/11

We have written[4] and spoken in the past about why we believe recent profit margins are unsustainable, so I will not repeat the arguments in detail here. Our basic view is that corporations have been the perhaps unintentional beneficiaries of the recent large deficits run by the U.S. and other governments. These deficits have allowed aggregate demand to hold up in a period in which corporations have been lowering wages and shedding jobs. The deficits are not sustainable, and we believe the profit margins they enable are not either. If we adjust profit margins down to a more normal level, our estimate is that the S&P 500 is priced to deliver not 5.5-6.0% real, but about 3.5%. This could possibly be the "new normal." The TIPS market shows that investors are prepared to lend money at 0.4% real for the next 30 years, and real cash rates today are around -2%, so it isn't an utterly absurd supposition that 3.5% is fair for equities. But we believe that the current economic environment, characterized by a strong desire for safety, a scramble for duration by pension funds and insurance companies, and, not least, a Federal Reserve actively working to supress long-term fixed income yields in the explicit hopes of pushing up equity prices, will not persist indefinitely. If we're right, equity investors will be in line for some capital loss as required returns wend their way back to 5.5-6.0%.

[4] See "What Goes Up Must Come Down!" by James Montier (March 2012). This white paper is available at www.gmo.com with registration.

From current levels, we believe that this loss would be around 30% – enough to reduce the returns from the S&P 500 to around 0% real if we get back to fair value in 7 years.

The internet bubble of 2000 was the worst point of overvaluation for the S&P 500 in its history. Having averaged 16 times cyclically adjusted earnings since 1881, the market soared to 44 times, well over twice normal levels. The losses and forgone returns since then have caused many investors to question whether the long-term history of equity returns is relevant any more. While this is an understandable reaction, it is the wrong one. The last 12 years have been part of an essential healing process for U.S. equities, and have brought valuations down from 44 times normal earnings to 21 times. As we analyze equity returns, this means the healing process is not yet done, and the U.S. equity market is likely to continue disappointing investors for a few years longer.

But there is a difference between expecting low returns due to reversion to long-term normal valuations and expecting low returns because something has fundamentally changed about the return-generating process for equities. Whether GDP growth in the U.S. and other developed economies is going to be slower in the future is not, in and of itself, a reason to expect a lower return to equities. Likewise, the fact that historic equity returns have been higher than GDP does not mean that the equity market has been some sort of long-term Ponzi scheme. Equities are an ugly asset class – one that is more likely than almost any other to lose investors a significant amount of money at those times when they can least afford it. That is, in a way, their charm. It is why equity is such an appealing form of capital for companies. It is the reason why equities have been priced to deliver good returns historically. And it is the reason why we believe equities are very likely to be priced to deliver strong returns into the indefinite future.

Mr. Inker is the head of asset allocation.

Disclaimer: The views expressed herein are those of Ben Inker as of August 10, 2012 and are subject to change at any time based on market and other conditions. This is not an offer or solicitation for the purchase or sale of any security and should not be construed as such.

Forecast and forward-looking statements are based on the reasonable beliefs of GMO and are not a guarantee of future performance. Actual results may differ materially from forecasts described herein.

		Value Line													
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	CAGR
US Proxy Group	**Ticker**														
ALLETE, Inc.	**ALE**	1.25	1.45	1.64	1.72	1.76	1.76	1.78	1.84	1.90	1.96	2.02	2.08	2.14	4.58%
Alliant Energy Corporation	**LNT**				0.70	0.75	0.79	0.85	0.90	0.94	1.02	1.10	1.18	1.26	6.75%
American Electric Power Company, Inc.	**AEP**	1.42	1.50	1.58	1.64	1.64	1.71	1.85	1.88	1.95	2.03	2.15	2.27	2.39	4.43%
Duke Energy Corporation	**DUK**			2.58	2.70	2.82	2.91	2.97	3.03	3.09	3.15	3.24	3.36	3.49	3.07%
Edison International	**EIX**	1.02	1.10	1.18	1.23	1.25	1.27	1.29	1.31	1.37	1.48	1.73	1.98	2.23	6.74%
Eversource Energy	**ES**	0.68	0.73	0.78	0.83	0.95	1.03	1.10	1.32	1.47	1.57	1.67	1.78	1.90	8.94%
OGE Energy Corporation	**OGE**	0.67	0.67	0.68	0.70	0.71	0.73	0.76	0.80	0.85	0.95	1.05	1.16	1.27	5.47%
Pinnacle West Capital Corporation	**PNW**	1.93	2.03	2.10	2.10	2.10	2.10	2.10	2.67	2.23	2.33	2.44	2.56	2.70	2.84%
PNM Resources, Inc.	**PNM**	0.79	0.86	0.91	0.61	0.50	0.50	0.50	0.58	0.68	0.76	0.82	0.90	0.99	1.90%
US Proxy Group															**4.97%**
U.S. Nominal GDP Growth		**6.7%**	**6.0%**	**4.6%**	**1.8%**	**-1.8%**	**3.8%**	**3.7%**	**4.2%**	**3.6%**	**4.4%**	**4.0%**	**2.7%**	**4.2%**	**3.68%**

	Nominal
	U.S. [1]
2005	6.7
2006	6.0
2007	4.6
2008	1.8
2009	-1.8
2010	3.8
2011	3.7
2012	4.2
2013	3.6
2014	4.4
2015	4.0
2016	2.7
2017	4.2

[1] U.S. Department of Commerce Bureau of Economic Analysis: Gross Domestic Product: Annual percent change from preceding period: based on current dollars

Thu, Nov 9, 2017

Duff & Phelps Recommends Decreasing U.S. Equity Risk Premium from 5.5% to 5.0%

Carla Nunes James Harrington Roger Grabowski

Duff & Phelps Recommends Decreasing U.S. Equity Risk Premium from 5.5% to 5.0%

NEW YORK – Duff & Phelps, the premier global valuation and corporate finance advisor, today announced that, based on current market conditions, it is decreasing its U.S. Equity Risk Premium (ERP) recommendation from 5.5% to 5.0%, effective as of September 5, 2017 and thereafter, until further guidance is issued. ERP, a key input used to calculate the cost of capital within the context of the Capital Asset Pricing Model (CAPM) and other models, changes over time and Duff & Phelps regularly reviews fluctuations in global economic and financial conditions to determine when reassessments of the selected ERP and accompanying risk-free rate are warranted.

As part of this analysis, Duff & Phelps goes beyond historical measures of ERP by examining approaches that are sensitive to the current economic and financial market conditions, including (but not limited to) the current state of U.S. equity markets, implied equity volatility and corporate credit spreads.

Based on trends observed in financial markets, the aggregate risk in U.S. markets appear to have declined since Duff & Phelps' last change in ERP recommendation on January 31, 2016. This started to be apparent towards the end of 2016 after the U.S. presidential election, which marked a change in investor sentiment, accompanied initially by a rise in global interest rates, a sharp narrowing of credit spreads, a strengthening of the U.S. dollar, and a rally in equity markets to record highs. While there has been some disappointment around progress made on the U.S. legislative front, strong earnings growth, still-accommodative monetary policies, and benign macroeconomic trends have buoyed U.S. stocks. Additionally, corporate earnings have experienced solid and better-than-expected growth, fueling investor hopes for even higher dividend payouts and stock buybacks. Most recently, the announcement and subsequent discussions of a wide-ranging plan for U.S. tax reform, which includes a corporate statutory tax rate cut from 35% to 20%, has spurred further stock market records.

About Duff & Phelps

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Value Line - Earnings Per Share

US Proxy Group	Ticker	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ALLETE, Inc.	**ALE**	2.48	2.77	3.08	2.82	1.89	2.19	2.65	2.58	2.63	2.90	3.38	3.14	3.13
Alliant Energy Corporation	**LNT**				1.27	0.95	1.38	1.38	1.53	1.65	1.74	1.69	1.65	1.99
American Electric Power Company, Inc.	**AEP**	2.64	2.86	2.86	2.99	2.97	2.60	3.13	2.98	3.18	3.34	3.59	4.23	3.62
Duke Energy Corporation	**DUK**		2.76	3.60	3.03	3.39	4.02	4.14	3.71	3.98	4.13	4.10	3.71	4.22
Edison International	**EIX**	3.34	3.28	3.32	3.68	3.24	3.35	3.23	4.55	3.78	4.33	4.15	3.94	4.51
Eversource Energy	**ES**	0.98	0.82	1.59	1.86	1.91	2.10	2.22	1.89	2.49	2.58	2.76	2.96	3.11
OGE Energy Corporation	**OGE**	0.92	1.23	1.32	1.25	1.33	1.50	1.73	1.79	1.94	1.98	1.69	1.69	1.92
Pinnacle West Capital Corporation	**PNW**	2.24	3.17	2.96	2.12	2.26	3.08	2.99	3.50	3.66	3.58	3.92	3.95	4.43
PNM Resources, Inc.	**PNM**	1.56	1.72	0.76	0.11	0.58	0.87	1.08	1.31	1.41	1.45	1.48	1.46	1.92

Value Line - Dividends Per Share

US Proxy Group	Ticker	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ALLETE, Inc.	**ALE**	1.25	1.45	1.64	1.72	1.76	1.76	1.78	1.84	1.90	1.96	2.02	2.08	2.14
Alliant Energy Corporation	**LNT**				0.70	0.75	0.79	0.85	0.90	0.94	1.02	1.10	1.18	1.26
American Electric Power Company, Inc.	**AEP**	1.42	1.50	1.58	1.64	1.64	1.71	1.85	1.88	1.95	2.03	2.15	2.27	2.39
Duke Energy Corporation	**DUK**			2.58	2.70	2.82	2.91	2.97	3.03	3.09	3.15	3.24	3.36	3.49
Edison International	**EIX**	1.02	1.10	1.18	1.23	1.25	1.27	1.29	1.31	1.37	1.48	1.73	1.98	2.23
Eversource Energy	**ES**	0.68	0.73	0.78	0.83	0.95	1.03	1.10	1.32	1.47	1.57	1.67	1.78	1.90
OGE Energy Corporation	**OGE**	0.67	0.67	0.68	0.70	0.71	0.73	0.76	0.80	0.85	0.95	1.05	1.16	1.27
Pinnacle West Capital Corporation	**PNW**	1.93	2.03	2.10	2.10	2.10	2.10	2.10	2.67	2.23	2.33	2.44	2.56	2.70
PNM Resources, Inc.	**PNM**	0.79	0.86	0.91	0.61	0.50	0.50	0.50	0.58	0.68	0.76	0.82	0.90	0.99

Value Line - Book Value Per Share

US Proxy Group	Ticker	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ALLETE, Inc.	**ALE**	20.03	21.90	24.11	25.37	26.41	27.26	28.78	30.48	32.44	35.06	37.07	38.17	40.47
Alliant Energy Corporation	**LNT**				12.78	12.54	13.05	13.57	14.12	14.79	15.54	16.41	16.96	18.08
American Electric Power Company, Inc.	**AEP**	23.08	23.73	25.17	26.33	27.49	28.33	30.33	31.37	32.98	34.37	36.44	35.38	37.17
Duke Energy Corporation	**DUK**		62.30	50.40	49.51	49.85	50.84	51.14	58.04	58.54	57.81	57.74	58.62	59.63
Edison International	**EIX**	20.30	23.66	25.92	29.21	30.20	32.44	30.86	28.95	30.50	33.64	34.89	36.82	35.82
Eversource Energy	**ES**	18.46	18.14	18.65	19.38	20.37	21.60	22.65	29.41	30.49	31.47	32.64	33.80	34.99
OGE Energy Corporation	**OGE**	7.59	8.79	9.16	10.14	10.52	11.73	13.06	14.00	15.30	16.27	16.66	17.24	19.28
Pinnacle West Capital Corporation	**PNW**	34.57	34.48	35.15	34.16	32.69	33.86	34.98	36.20	38.07	39.50	41.30	43.15	44.80
PNM Resources, Inc.	**PNM**	18.70	22.09	22.03	18.89	18.90	17.60	19.62	20.05	20.87	22.39	20.78	21.04	21.28

Description	Docket	Year
ATCO Utilities Group	Application No. 1578571 / Proceeeding ID. 85	2008-2009
Hydro-Quebec Dist & HQ TransEnergie	R-3842-2013	2013
Newfoundland Power	2016/2017 GRA	2015-2016
Maritime Electric Co	UE20942	2015
Newfoundland Power	2019/2020 GRA	2017

Electric Utility Proxy Group

1. CH Energy Group
2. Consolidated Edison
3. FPL Group, Inc.
4. NSTAR
5. SCANA Corporation
6. Southern Company

Gas Distribution Proxy Group

1. AGL Resources
2. New Jersey Resources
3. Northwest Natural Gas
4. Piedmont Natural Gas
5. WGL Holdings, Inc.
6. Vectren Corporation

Natural Gas Pipeline Proxy Group

1. National Fuel Gas
2. Questar Corporation
3. Spectra Energy
4. TransCanada Corporation
5. Enbridge

Canadian Proxy Group

1. Canadian Utilities Limited
2. Enbridge, Inc.
3. TransCanada Corporation
4. Emera Inc.
5. Fortis Inc.

Canadian Proxy Group

- Canadian Utilities Limited
- Emera, Inc.
- Enbridge, Inc.
- Fortis, Inc.
- TransCanada Corporation
- Valener, Inc.

US Electric Utility Proxy Group

- Consolidated Edison Inc.
- NextEra Energy, Inc.
- Northeast Utilities
- Southern Company
- Wisconsin Energy Corp.
- Xcel Energy Inc.

Government-owned electric utilities in Canada

- British Columbia Hydro
- ENMAX Corp.
- EPCOR Utilities, Inc.
- Hydro One Networks
- Manitoba Hydro
- Saskatchewan Power

Canadian Utility Proxy Group

Company	**Ticker**
Canadian Utilities Limited	CU
Emera, Inc.	EMA
Enbridge, Inc.	ENB
Valener	VNR

US Electric Utility Proxy Group

Company	**Ticker**
ALLETE, Inc.	ALE
Duke Energy Corporation	DUK
Eversource Energy	ES
Great Plains Energy Inc.	GXP
OGE Energy Corporation	OGE
Pinnacle West Capital Corp.	PNW
Westar Energy, Inc.	WR

North American Electric Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Canadian Utilities Limited	CU
Duke Energy Corporation	DUK
Emera, Inc.	EMA
Eversource Energy	ES
Great Plains Energy Inc.	GXP
OGE Energy Corporation	OGE
Pinnacle West Capital Corp.	PNW
Westar Energy, Inc.	WR

Canadian Utility Proxy Group

Company	Ticker
Canadian Utilities Limited	CU
Emera, Inc.	EMA
Enbridge, Inc.	ENB
Valener	VNR

US Electric Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Duke Energy Corporation	DUK
Eversource	ES
Great Plains Energy Inc.	GXP
OGE Energy Corporation	OGE
Pinnacle West Capital Corp.	PNW
Westar Energy, Inc.	WR

North American Electric Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Canadian Utilities Limited	CU
Duke Energy Corporation	DUK
Emera, Inc.	EMA
Eversource	ES
Great Plains Energy Inc.	GXP
OGE Energy Corporation	OGE
Pinnacle West Capital Corp.	PNW
Westar Energy, Inc.	WR

US Electric Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Alliant Energy Corp.	LNT
American Electric Power Company	AEP
Duke Energy Corporation	DUK
Edison International, Inc.	EIX
Eversource Energy	ES
OGE Energy Corporation	OGE
Pinnacle West Capital Corp.	PNW
PNM Resources, Inc.	PNM
Southern Company	SO

North American Electric Proxy Group

Company	Ticker
ALLETE, Inc.	ALE
Alliant Energy Corp.	LNT
American Electric Power Company	AEP
Canadian Utilities Limited	CU
Duke Energy Corporation	DUK
Edison International, Inc.	EIX
Emera, Inc.	EMA
Eversource Energy	ES
OGE Energy Corporation	OGE
Pinnacle West Capital Corp.	PNW
PNM Resources, Inc.	PNM
Southern Company	SO

Canadian Utility Proxy Group

Company	Ticker
Canadian Utilities Limited	CU
Emera, Inc.	EMA
Enbridge, Inc.	ENB
Valener	VNR