

Research Paper

Rate-regulated Activities

Exploring the decision-usefulness of financial information that reflects the economics of rate-regulated activities

November 2018

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Preface

The Canadian Accounting Standards Board (AcSB) is committed to supporting the International Accounting Standards Board (IASB) in undertaking evidence-based standard setting. For more than 10 years, a topic that has garnered great interest is the accounting for rate-regulated activities under IFRS® Standards. From international discussions on this topic, it is evident that there is a wide variety of rate-regulatory schemes around the world. Such variations make it challenging to appreciate fully what rate regulation means from one jurisdiction to another.

Rate regulation tends to exist in capital-intensive industries that require significant investment in infrastructure assets. Since these industries typically provide public goods or services, it is common that a jurisdiction's government and constituent base influence the regulatory framework in which a rate-regulated entity operates. Understanding the regulatory framework is important for financial statement users in making investment and lending decisions relating to these entities.

This paper is intended to provide insights into how users view the regulatory framework, and its influence when assessing an entity's financial performance and future cash flows. The data presented in the paper has been gathered from multiple jurisdictions to enhance the understanding of different rate-regulatory schemes and the role played by rate-regulated entities in the capital markets. We hope this data will help shape ideas in identifying a global solution that best captures the financial effects of rate regulation in financial statements using IFRS Standards, with the ultimate goal of providing decision-useful information to users.

The AcSB commenced and supervised the development of this paper to contribute to the work of the IASB and national standard setters on a future accounting model for rate-regulated activities. We would like to express our deepest gratitude to all those who assisted us with this research, including national standard setters, users, industry representatives and auditors.



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Executive Summary

1. This paper looks at the topic of rate-regulated activities. It explores the decision-usefulness of financial information that reflects the economics of rate-regulated activities by assessing data taken from the practical experiences of users of the financial statements of entities with such activities (“rate-regulated entities”).
2. The data presented in this paper is intended to assist an understanding of the following:
 - (a) The presence of rate-regulated entities in the capital markets in Canada and other jurisdictions.
 - (b) The regulatory framework that governs the relationship between the rate regulator and the rate-regulated entity.
 - (c) The similarities and differences in the design of regulatory frameworks across jurisdictions.
 - (d) The degree to which the regulatory framework can influence the enforceability, and value, of an entity’s rights and obligations arising from the performance of rate-regulated activities.
 - (e) The information that users such as debt and equity analysts, and credit rating agencies, consider when making investing and lending decisions.
3. We approached our research by consulting with various stakeholders such as users, preparers and auditors to identify data points relevant to the objective of this paper. The data points gathered include capital market information, credit rating methodologies, financial statement note disclosures, regulatory decisions, court rulings, and academic literature. We also looked at stakeholder comment letters submitted to the IASB on its Rate-regulated Activities project and sought input from other national standard setters through a survey to obtain insights into regulatory frameworks around the world.
4. The data collected and presented in the various sections of the paper led us to the observations described in paragraphs [5](#) to [10](#) below.

5. Rate-regulated entities are an important part of the equity and debt markets in Canada and beyond. Projected future global investment requirements in the power sector highlight the need for capital and the importance of useful financial information to help users make informed decisions (see Section I).
6. There are many components to the regulatory framework. The main components are: the legislation underlying the framework; the rules and procedures established by the rate regulator (i.e., form of rate regulation); and the decisions that interpret the legislation and rules. Understanding the regulatory framework is important to users because it:
 - (a) defines the environment in which the rate-regulated entity operates;
 - (b) affects whether the entity has rights and obligations resulting from the performance of its rate-regulated activities; and
 - (c) has a significant bearing on the entity's financial performance and future cash flows.
7. Multiple factors can influence the form of rate regulation chosen by the rate regulator to establish the rates charged to customers for the regulated goods or services. More commonly today, the form of rate regulation includes attributes of both cost-of-service and incentive-based mechanisms to balance entity and customer interests. Understanding the details of the form of rate regulation is necessary to account for the economics of the entity's rate-regulated activities (see Section II).
8. Regulatory frameworks vary in design across different jurisdictions but there are similarities that can be identified. The design of the regulatory framework, which is prescribed by the framework's components, affects when an entity's rights and obligations resulting from the performance of rate-regulated activities are enforceable (see Section III).
9. The strength of the regulatory framework affects the recoverability of an entity's economic resources and settlement of claims against it. In addition, the nature and risk profile of recognized balances arising from rate regulation can vary. This affects the degree of uncertainty associated with such balances and, as a result, their subsequent measurement to capture the economics of rate-regulated activities (see Section IV).

10. The regulatory framework in which an entity operates is a key factor considered by debt and equity analysts, as well as credit rating agencies. The various components of the regulatory framework can affect the financial performance and future cash flows of the entity. Prospective purchasers of assets used in rate-regulated activities use financial information that reflects the economics of such activities in determining the purchase price. The data demonstrates that a premium is paid for these assets, typically resulting in goodwill recognition for acquisitions of rate-regulated businesses. Prospective purchasers view assets used in rate-regulated activities as capable of generating stable earnings and cash flows when the regulatory framework is strong. In addition, a rate-regulated entity's rate of return is based on its regulatory asset base. The potential for growth in this regulatory asset base is also a contributing factor for why premiums are paid in such acquisition scenarios. For jurisdictions, such as Canada and the United States (U.S.), that recognize balances arising from rate regulation on the face of the financial statements, the purchase price allocations examined also reveal that purchasers generally consider the carrying value of these balances to approximate their fair value. This valuation reinforces the fact that prospective purchasers ascribe value to balances arising from rate regulation (see Section V).
11. These observations support our overall findings that financial information that reflects the economics of rate-regulated activities is useful. Such financial information has confirmatory and predictive value that is capable of making a difference in the decisions made by users.

Introduction

Objective of research

12. The objective of this paper is to explore the decision-usefulness of financial information that reflects the economics of rate-regulated activities. This is done by assessing data taken from the practical experiences of users of the financial statements of rate-regulated entities.
13. General purpose financial reporting should provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions relating to providing resources to the entity.¹ The decisions of financial statement users depend on the returns they expect, which, in turn, depend on their assessment of the amount, timing and uncertainty of the entity's future cash flows. To make such an assessment, users need information about the entity's resources and claims against the entity.
14. In the case of rate-regulated entities, "balances arising from rate regulation" are the entity's rights and obligations resulting from the performance of activities to provide goods or services subject to rate regulation. In addition, the amount, timing and degree of certainty or uncertainty of the entity's future cash flows is affected by the presence of rate regulation. The IASB's September 2014 Discussion Paper, "[Reporting the Financial Effects of Rate Regulation](#)," notes that users have told standard setters that they need information about the effects of rate regulation when such regulation affects both the price charged to customers, and the management and profitability of the business. The objective of the IASB's Rate-regulated Activities project is to identify what information about the financial effects of rate regulation is most relevant to financial statement users, and determine how best to reflect that information in financial statements using IFRS Standards.
15. In examining the decision-usefulness of financial information that reflects the economics of rate-regulated activities, we consulted with various stakeholders to identify data points that would help answer the following questions:
 - (a) Are entities subject to rate regulation an important part of the capital markets? (Section I)

¹ IFRS Standards, *Conceptual Framework for Financial Reporting*, paragraph 1.2.

- (b) Does understanding the regulatory framework help in determining whether the entity has rights and obligations that may require a particular accounting treatment? (Section II)
 - (c) When could the design of the regulatory framework be viewed as supporting the enforceability of an entity's rights and obligations? (Section III)
 - (d) Does the strength or weakness of the regulatory framework affect the recovery of the entity's economic resources and settlement of claims against it? (Section IV)
 - (e) Do users factor financial information that reflects the economics of rate-regulated activities into their decision-making? (Section V)
16. We considered these questions in our research because users we consulted often referred to the strength of the regulatory framework when explaining why, in their view, including the financial effects of rate regulation on the face of the financial statements provides useful information. From their perspective, balances arising from rate regulation have risk attributes that can affect the amount and timing of their ultimate recovery or settlement. They see these risk attributes similar to those of other financial statement elements when the regulatory framework is strong. In that situation, they regard the presentation of financial information that reflects the economics of rate-regulated activities on the face of the financial statements as both vital and transparent in assessing the entity's future cash flows and the returns they can expect.
17. This research is not intended to be a statistically driven study or to conclude on any particular accounting approach. It is best characterized as an examination of various pieces of data presented together to illustrate directionally, from an evidence-based perspective, whether financial information that reflects the economics of rate-regulated activities is decision-useful to users.

Focus

18. This research paper was developed in two phases. The first phase of research focused mainly on Canadian facts and circumstances and was conducted in mid-2016. When possible, data from other jurisdictions was included as a basis for comparison in a particular area. The second phase of research looked at facts and circumstances on a more global scale, focusing primarily on understanding the regulatory frameworks across various jurisdictions and learning about the

perspectives of financial statement users outside Canada. The second phase of research work was performed mainly during the first quarter of 2017.

19. Although the research was mainly conducted from mid-2016 to early 2017, no new data has since come to light that would significantly change the overall observations drawn from the data points gathered during the period. Therefore, these observations remain valid despite the passage of time, and the research continues to be of value to the consideration of accounting for rate-regulated activities under IFRS Standards.

Research approach

20. The first phase of the research involved consulting with various Canadian stakeholders such as users, preparers and auditors to identify data points relevant to the objective of this paper. In the second phase of the research, we reached out to other national standard setters and a limited number of preparers outside Canada to obtain insights into regulatory frameworks around the world. These interested parties were asked to complete a questionnaire that helped identify data points relevant to the objective of the research (for further explanation, see “[Method](#)” in Section III of this research paper). Exhibit 1 summarizes new data identified in the second phase of research:

Exhibit 1

Section	Second Phase of Research - New Data Identified
Section I: Importance to the Capital Markets of Entities Subject to Rate Regulation	Data providing global perspectives on the following: <ul style="list-style-type: none"> • Significance of a country’s utility sector to its equity market² • Potential entities subject to rate regulation outside the utilities sector • Significance of the utilities sector to Europe’s debt market
Section III: How Are Regulatory Frameworks Similar or Different? [New Section]	Data from entities’ financial statements, user commentary, rate regulator’s website, or comment letters to the IASB that provides insights into the following countries’ regulatory frameworks: <ul style="list-style-type: none"> • Argentina, Belgium, Brazil, China, Germany, Italy, Japan, Portugal, South Africa, Spain, the United Kingdom, and the United States
Section V: Decision-making Effects of Financial Information on Rate-regulated Activities	Data on user perspectives outside Canada: <ul style="list-style-type: none"> • Similar to Canada, users in other jurisdictions need information on the financial effects of rate regulation. This is illustrated by user comment letters to the IASB from Belgium and Brazil, and also

² MSCI and Euro Stoxx are the two indices used to understand the significance of a country’s utility sector. In both indices, the Utilities Sector classification excludes Energy Sector entities (which includes pipeline entities).

Section	Second Phase of Research - New Data Identified
	<p>adjusted measures or supplemental commentary in the notes of financial statements of entities in France, the Netherlands and South Africa</p> <ul style="list-style-type: none"> Academic literature describing users' perceptions of the difference between rate-regulated and non-rate-regulated entities <p>Valuations-related data:</p> <ul style="list-style-type: none"> Academic literature explaining why the carrying value of balances arising from rate regulation approximates their fair value in acquisition scenarios

21. The body of information on rate-regulated activities is large and continuously growing, and includes information submitted to the IASB as part of its current project. For example, some of the data in this paper is derived from stakeholders' comment letters to the IASB. Our research has aimed to include relevant information which, in our judgment, is considered sufficient in scope to address points of fundamental significance to the objective of this paper.
22. We took a neutral approach to collecting the data in both phases of the research. That is, pertinent information was sought and included in the paper, regardless of whether a particular piece of information could be viewed by individual readers as either positive or negative in any sense. In most cases, the data presented in this paper is from publicly available sources such as publications, reports and financial statements. The paper identifies the few instances when published data was not available and anecdotal information was provided instead.

Section I: Importance to the Capital Markets of Entities Subject to Rate Regulation

Key Observations

- ❖ In Canada, rate-regulated entities are mainly in the Utilities and Pipelines sector, one of the 11 sectors in the Toronto Stock Exchange (TSX) and TSX Venture Exchange (TSXV).
- ❖ As of December 31, 2015, approximately \$137.3 billion (6 per cent) of the total \$2.3 trillion market capitalization in Canada comes from rate-regulated entities.³ Rate-regulated entities also attract cross-border investments. For example, for two of the largest Canadian entities with rate-regulated operations (i.e., Enbridge Inc. and TransCanada Corporation), approximately half of the entity's shares is owned by investors outside Canada.
- ❖ Government-owned rate-regulated entities have more than \$100 billion of outstanding debt. Investor-owned rate-regulated entities make up more than \$90 billion of the corporate bond market.
- ❖ From a global perspective, the 10 largest utilities (by market capitalization) are located in the United States and parts of Europe. While the prominence of a country's utilities sector can vary from an equity market capitalization perspective, these entities figure prominently in the debt markets. Furthermore, entities with rate-regulated operations could also exist outside the utilities sector.
- ❖ The International Energy Agency estimates \$16.4 trillion of global investment from 2014-2035 will be needed in the power sector to construct new, and refurbish existing, generation plants and transmission and distribution networks.

³ Market capitalization figures have changed from 2015 to 2018 but the market capitalization percentage remains fairly consistent over the years.

Canadian rate-regulated entities

23. There are two main types of rate-regulated entities in Canada:
- (a) government-owned (i.e., public sector entities that are classified as either “government business enterprises”⁴ or “other government organizations”)
 - (b) investor-owned (i.e., publicly held or privately held entities)
24. Prior to Canada’s adoption of IFRS Standards in 2011, most of these two types of entities applied pre-changeover Canadian generally accepted accounting principles (GAAP). Similar to U.S. GAAP, pre-changeover Canadian GAAP permitted the financial statement recognition of balances arising from rate regulation. However, since 2011, greater diversity has appeared in the accounting frameworks being applied by Canadian rate-regulated entities, due in part to efforts by standard setters and Canadian securities regulators to provide some stability for these entities while the IASB completes its work on this topic. The following paragraph explains this diversity.
25. The AcSB deferred the mandatory adoption date of IFRS Standards by rate-regulated entities from 2011 to 2014 given the various international standard-setting activities underway during that period. For annual periods beginning on or after January 1, 2015, rate-regulated entities that are Canadian publicly accountable enterprises⁵ are required to apply IFRS Standards. Rate-regulated entities that adopted IFRS Standards for the first time after IFRS 14 *Regulatory Deferral Accounts* was issued continue to recognize balances arising from rate regulation. Government business enterprises (which operate to generate a profit or on a break-even basis) that are rate-regulated entities are also directed to apply standards applicable to for-profit entities, and thus apply IFRS Standards. Canadian securities legislation permits dual-listed entities (i.e., Canadian entities also registered with the U.S. Securities and Exchange Commission) to apply U.S. GAAP in the normal course. Temporary exemptive relief is also available from the Canadian Securities Administrators that

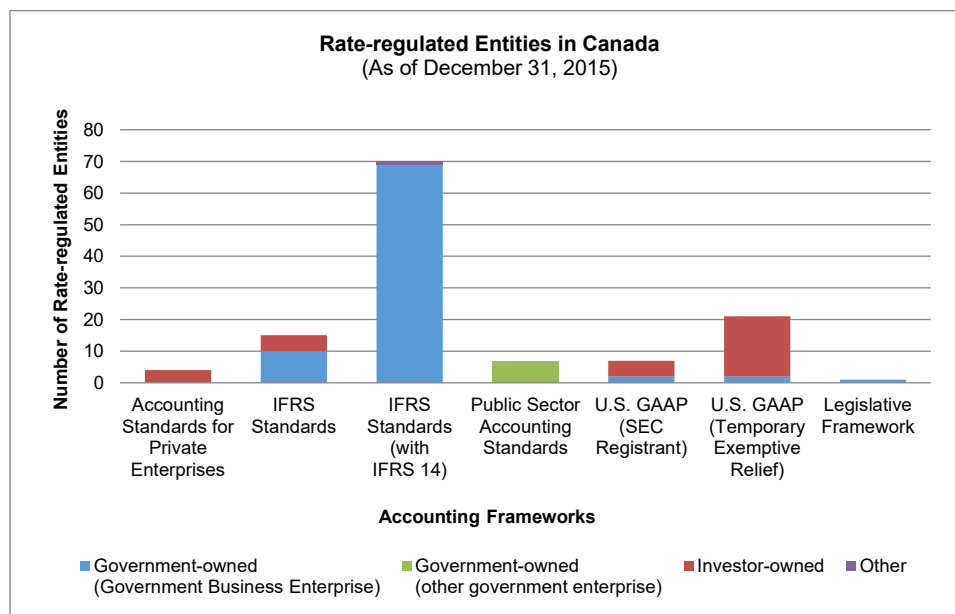
⁴ The CPA Canada Public Sector Accounting Handbook defines a government business enterprise as follows: “(a) It is a separate entity with the power to contract in its own name and that can sue and be sued. (b) It has been delegated the financial and operational authority to carry on a business. (c) It sells goods and services to individuals and organizations outside of the government reporting entity as its principal activity. (d) It can, in the normal course of its operations, maintain its operations and meet its liabilities from revenues received from sources outside of the government reporting entity.”

⁵ The CPA Canada Handbook – Accounting defines a publicly accountable enterprise as “an entity, other than a not-for-profit organization, that (i) has issued, or is in the process of issuing, debt or equity instruments that are, or will be, outstanding and traded in a public market (a domestic or foreign stock exchange or an over-the-counter market, including local and regional markets); or (ii) holds assets in a fiduciary capacity for a broad group of outsiders as one of its primary businesses.”

permits rate-regulated entities that are reporting issuers but are not dual-listed to apply U.S. GAAP in place of IFRS Standards.⁶ If a rate-regulated entity is not a publicly accountable enterprise or a government business enterprise, additional accounting framework options may also include Accounting Standards for Private Enterprises or Public Sector Accounting Standards.⁷ Finally, a non-GAAP reporting framework is used when legislated by the provincial owner of a government-owned rate-regulated entity.

26. With the multiple accounting frameworks in use, the comparison of financial information is difficult for users. Hence, any steps taken toward ensuring common reporting outcomes for rate-regulated operations that are economically similar will assist users in making investing and lending decisions.
27. As of December 31, 2015, there were approximately 125 rate-regulated entities in Canada. These entities mainly range in size from small entities owned by municipal governments to large investor-owned entities or entities owned by provincial governments.

Exhibit 2



Source: Information compiled based on audited financial statements for fiscal year 2015, or information from rate filings that confirmed the accounting framework used by these entities. Due to data collection constraints, the population could be slightly larger. The number of entities under each accounting framework has changed since 2015, but no new data has surfaced that would suggest a significant change to the overall depiction above.

⁶ The exemptive relief is in effect until the earlier of January 1, 2024 or the effective date prescribed by the IASB for mandatory application of an IFRS Standard specific to entities with activities subject to rate regulation.

⁷ Accounting Standards for Private Enterprises are domestic standards written by the AcSB and Public Sector Accounting Standards are domestic standards written by the Public Sector Accounting Board, Canada's other accounting standard setter.

28. Exhibit 2 highlights two key points:

- (a) The majority of investor-owned entities have chosen U.S. GAAP over IFRS Standards. A few entities that are not reporting issuers apply Accounting Standards for Private Enterprises. Both U.S. GAAP and Accounting Standards for Private Enterprises permit the recognition of balances arising from rate regulation. Several entities that apply U.S. GAAP have told us this choice was influenced by the need to provide their users with financial statements that accurately reflect the economics of their business. Further, some entities currently using the temporary exemptive relief described in paragraph 25 have said they are considering incurring the cost and effort necessary to become a registrant of the U.S. Securities and Exchange Commission (SEC) in order to have the permanent ability to apply U.S. GAAP. While such a decision could be for business reasons such as the entity expanding its operations into the United States, it could also be attributed to the eventual expiry of the Canadian securities regulators' exemptive relief and to the continuing uncertainty about the ultimate outcome of the IASB's Rate-regulated Activities project.
- (b) Public sector entities that are government business enterprises tend to apply IFRS Standards. The majority of these entities is made up of several large provincially owned utilities, and many small municipally owned local distribution utilities that do not issue debt or list in the U.S. stock market, and are not subject to Canadian securities legislation. The Public Sector Accounting Board has deemed government business enterprises to be publicly accountable enterprises and has directed them to apply IFRS Standards (as do publicly accountable enterprises in the private sector). As a result, they cannot apply U.S. GAAP, unless they are an SEC registrant or qualify for the temporary exemptive relief provided by the Canadian Securities Administrators. As shown in Exhibit 2, many of these entities adopted IFRS Standards for the first time after the IASB issued IFRS 14, which allowed them to continue their previous accounting practices for rate-regulated activities.

29. Within the pool of government-owned rate-regulated entities, there are entities that do not meet the characteristics of government business enterprises and are required to apply Canadian Public Sector Accounting Standards.

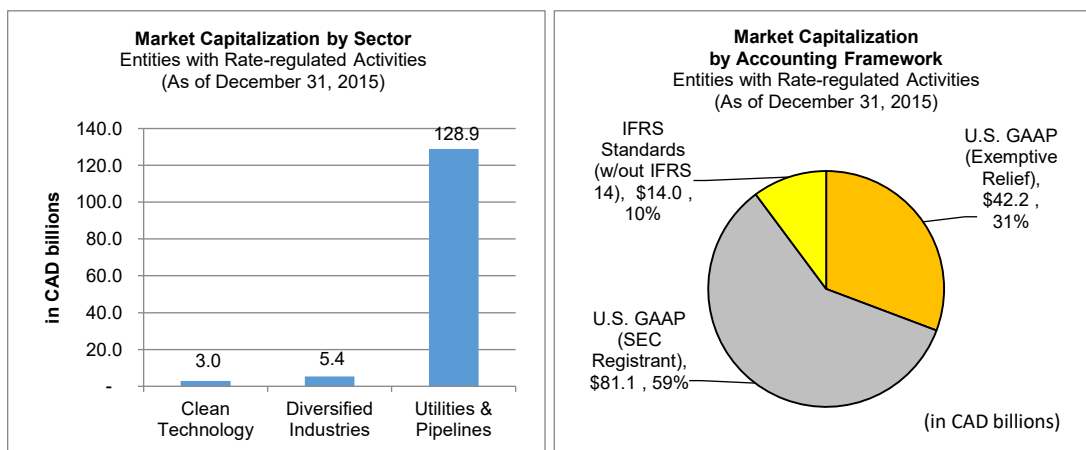
30. The diversity in accounting frameworks being used in Canada is unique. It highlights the point that when an entity has a choice in terms of the accounting framework to apply, this choice may be

influenced in part by the extent to which the entity thinks each framework meets the needs of its users to understand how rate regulation affects its financial performance and financial position.

Equity market

31. Investor-owned rate-regulated entities form an important part of the Canadian equity market.
32. As of December 31, 2015:
 - \$137.3 billion (6 per cent) of the total \$2.3 trillion market capitalization in Canada comes from rate-regulated entities.⁸
 - The majority of entities with rate-regulated activities are in the Utilities & Pipelines sector, one of the 11 sectors in the TSX and TSXV.
 - Entities that represent 90 per cent of the total rate-regulated entities' market capitalization apply U.S. GAAP.

Exhibit 3



Source: Information compiled using data from the entities' financial statements and from the TMX Group⁹.

33. Exhibit 4 shows the amount of equity capital that continues to be raised year over year by the Canadian Utilities and Pipelines sector as a whole.

⁸ Market capitalization figures have changed from 2015 to 2018 but the market capitalization percentage remains fairly consistent over the years.

⁹ TMX Group is an integrated, multi-asset class exchange group. Its businesses operate cash and derivative markets for multiple asset classes including equities, fixed income and energy. The TSX and TSXV are part of the TMX Group.

Exhibit 4

Utilities and Pipelines Sector (includes both rate-regulated and non-rate regulated entities)	2014	2015
	(in CAD billions)	
Market capitalization	\$189.0	\$164.0
Equity capital raised since 2010	\$25.1	\$31.9
Equity capital raised in the year	\$8.0	\$6.8
Average offering size for issuers	\$0.4	\$0.5
Number of financings	20	14

Source: TMX

34. Global investors also view rate-regulated entities in Canada as an investment opportunity. We looked at the two largest entities with rate-regulated operations in Canada (by market capitalization) and noted that, in each case, approximately half of the entity's ownership holdings is outside Canada, primarily in the United States. The extent of U.S. ownership could be one of the reasons why some Canadian rate-regulated entities with operations in the United States have decided to apply U.S. GAAP. Also, Canadian rate-regulated entities compete for capital in the North American markets and want their financial statements to be comparable with their competitors in the United States.

Exhibit 5

Enbridge Inc.

(Market cap approximately \$35 billion)

Top Geographic Ownership as of July 26, 2016 ¹⁰	
United States	45.22%
Canada	44.46%
Germany	3.34%
Britain	1.53%
Switzerland	1.16%
Australia	0.96%
Norway	0.82%
Netherlands	0.68%
Japan	0.54%

Source: Bloomberg

Exhibit 6

TransCanada Corporation

(Market cap approximately \$47 billion)

Top Geographic Ownership as of July 24, 2016 ¹⁰	
Canada	58.29%
United States	27.09%
Germany	5.51%
Britain	2.28%
Switzerland	2.05%
Norway	1.10%
Australia	0.72%
Japan	0.71%
Ireland	0.46%

Source: Bloomberg

¹⁰ The geographic ownership percentages have changed for these two companies since 2015 because of new business transactions (for example, Enbridge completed the acquisition of a U.S. utility in 2017). However, the observation remains the same that global investors view rate-regulated entities in Canada as an investment opportunity because of the ownership holdings outside Canada.

Debt market

35. Government business enterprises are not prominent in the equity market.¹¹ However, they form an important part of the debt market, as they raise capital by issuing bonds or debentures, and through loan borrowings, to carry out their operations and fund their capital infrastructure projects.
36. Exhibit 7 shows the debt outstanding for some of the larger government-owned rate-regulated utilities, and the accounting framework they apply:

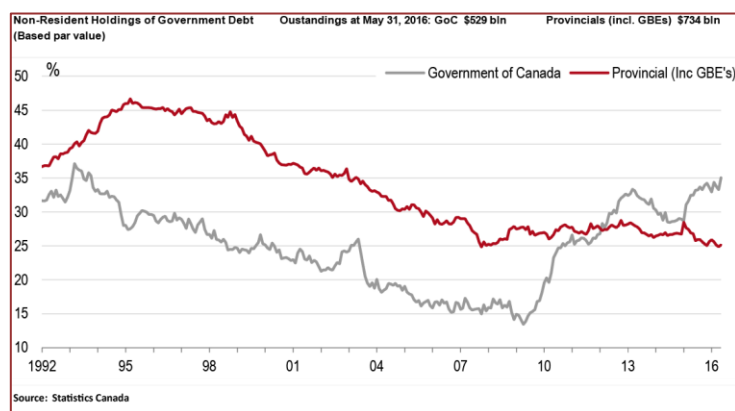
Exhibit 7

Government-owned Rate-regulated Utility	Accounting Framework	Debt (in CAD billions)
Hydro-Québec	U.S. GAAP	\$46
BC Hydro	Legislative GAAP	18
Manitoba Hydro	IFRS Standards with IFRS 14	15
Hydro One	U.S. GAAP	9
Nalcor Energy	IFRS Standards with IFRS 14	6
Ontario Power Generation	U.S. GAAP	5
New Brunswick Power	IFRS Standards with IFRS 14	5
Toronto Hydro	IFRS Standards with IFRS 14	2
Total of Sampled Entities		\$106

Source: Information compiled based on the entity's financial statements as of December 31, 2015 (except for BC Hydro, Manitoba Hydro and New Brunswick Power, which are as of March 31, 2016)

37. Although we have not been able to gather data indicating how much of the government-owned utilities' debt is held by foreign investors, the Statistics Canada data shown in Exhibit 8 shows that the non-resident holdings (i.e., holdings of owners residing outside Canada) of provincial debt that includes government business enterprises was almost 30 per cent in 2015. Exhibit 8 provides a sense of the percentage of non-resident holdings of government debt from 1992 to 2016.

Exhibit 8



¹¹ Due to the implementation of the Province of Ontario's privatization plan for Hydro One in 2015, this entity currently has shares traded on the TSX.

38. The corporate bond market is equally important for publicly held investor-owned rate-regulated entities in raising capital to fund their capital infrastructure projects and ongoing business operations. Exhibit 9 roughly illustrates the portion of the corporate bond market index made up of sub-industry groups containing most of the publicly held investor-owned rate-regulated entities. (Note: The sub-industry groups could also include entities that are not subject to rate regulation.)

Exhibit 9

Canadian Corporate Bonds (as of July 27, 2016)	Market Value (in CAD billions)	Percentage of Total (%)
Total Corporate Bonds from Canadian FTSE TMX Universe Bond Index¹²	\$417.4	100
Industry Group: Energy		
Distribution	19.5	4.7
Generation	9.1	2.2
Pipelines	30.5	7.3
Industry Group: Infrastructure		
Utility	<u>33.2</u>	<u>7.9</u>
Total Corporate Bonds related to Sub-industry Groups with Rate-regulated Entities	\$92.3	22.1

Source: Information compiled based on data from PC Bond.

Global perspective

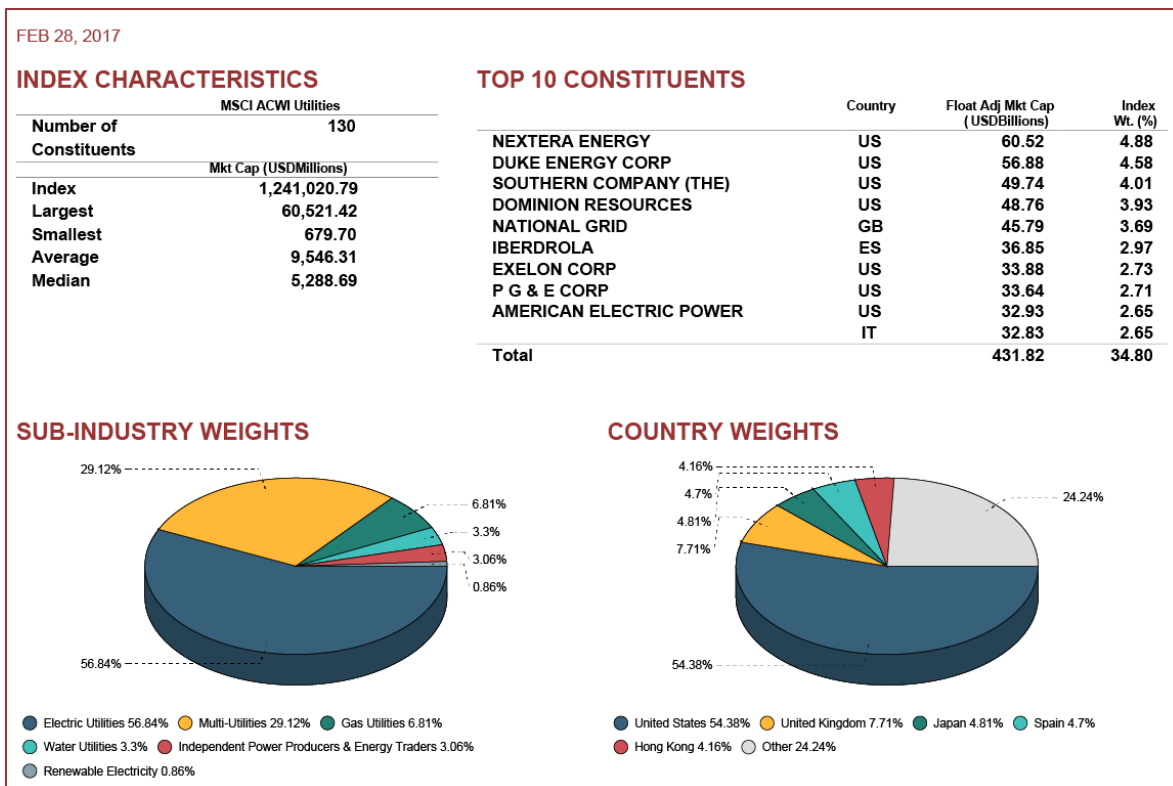
Market capitalization by geography and sector: Utilities and others

39. We also wanted to understand which jurisdictions make up a large part of the global market capitalization for utilities. Research efforts identified a utilities index that captures large- and mid-cap representation across 23 “developed markets” and 23 “emerging markets”.¹³ This index has some limitations because certain utilities could be government-owned or privatized and, thus, would not be captured. Furthermore, the index could include both rate-regulated and non-rate-regulated entities. However, the information provides a general sense of the geographic distribution of utilities in the equity market. It appears that many of the large utilities are in the United States, with several in Europe (e.g., Italy, Spain and the United Kingdom).

¹² The Universe Bond Index is the broadest and most widely used measure of performance of marketable government and corporate bonds outstanding in the Canadian market. Exhibit 9 only shows figures relating to Canadian corporate bonds.

¹³ For an understanding of the countries in the developed and emerging markets, refer to www.msci.com/acwi.

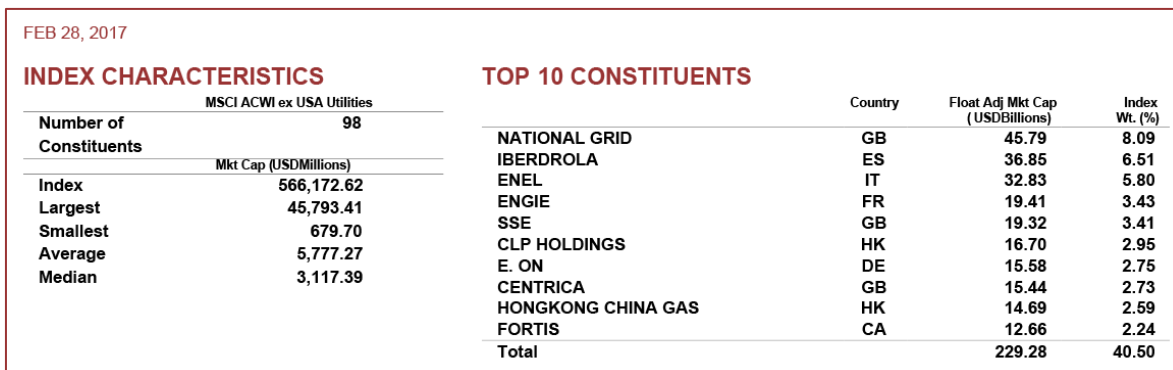
Exhibit 10



Source: MSCI (The MSCI ACWI Utilities Index – All securities in the index are classified in the Utilities sector as per the Global Industry Classification Standard)

40. U.S. utilities aside, the data below shows other large utilities in Europe, Hong Kong and Canada.

Exhibit 11



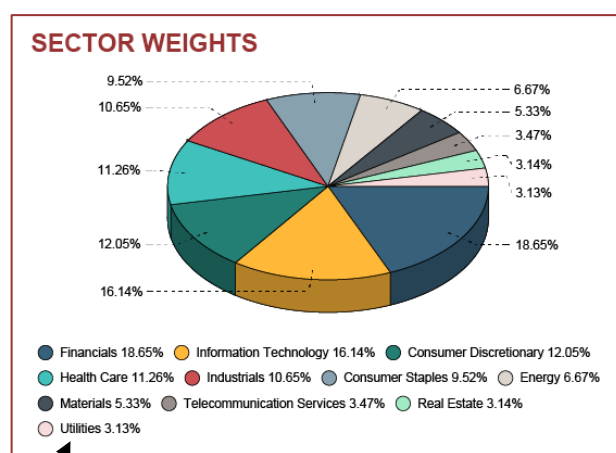
Source: MSCI (The MSCI ACWI Utilities Index excluding U.S. Utilities – All securities in the index are classified in the Utilities sector as per the Global Industry Classification Standard)

41. Exhibit 12 shows the size of the utilities sector in relation to a jurisdiction's total market capitalization, based on data extracted from MSCI Indices* for a sample of 15 countries. The data suggests that the prominence of this sector can vary from country to country. Exhibit 13 shows the sector weightings of the MSCI ACWI, Index which captures the 23 developed markets and 23 emerging markets, covering approximately 85 per cent of the global investable equity opportunity set. The data shows that based on this particular index, the global utilities sector represents approximately 3.13 per cent of the total global sectors.

Exhibit 12

MSCI Country Index* - As of February 28, 2017	
Country	Utilities Percentage Weighting of Index
Portugal	38.53%
Italy	15.45%
Spain	14.75%
Hong Kong	11.89%
Brazil	5.80%
United Kingdom	4.18%
United States of America	3.17%
France	2.78%
Australia	2.79%
China	2.67%
Germany	2.35%
Japan	1.93%
Canada	1.89%
South Korea	1.76%
South Africa	0.00%
MSCI ACWI Index	3.13%

Exhibit 13



Source: MSCI ACWI Index as of February 28, 2017

*Source: The percentages above are extracted from the country's MSCI Index. The index is designed to measure the large- and mid-cap segments of the market. The index typically covers about 85 per cent of the equity universe or free float-adjusted market capitalization of the country.

42. There could also be entities with rate-regulated operations in other sectors such as energy (e.g., the MSCI Index for Canada classifies TransCanada and Enbridge as part of the Energy sector based on their principal activities, whereas the TSX and TSXV in Canada classifies these two entities as part of the Utilities and Pipelines sector).

43. The utilities sector in South Africa is shown to have an equity market capitalization of 0.00 per cent, which our research has indicated is likely because the entity responsible for generating, transmitting and distributing electricity is a state-owned company. However, similar to Canada, there could be other countries with state-owned utilities that figure prominently in the debt markets. For example, a South African state-owned utility disclosed on its website that it has issued approximately US \$4 billion of bonds in international markets, including US \$2.25 billion that is registered on the Luxembourg Stock Exchange.¹⁴
44. In addition, as noted in the IASB's September 2014 Discussion Paper, "[Reporting the Financial Effects of Rate Regulation](#)," rate-regulated activities could also exist in other industries.¹⁵ Exhibit 14 shows that seven respondents to that discussion paper are outside the utilities sector.

Exhibit 14

Entity Name	Type	Country
Aeroporti Di Roma	Transportation - Air	Italy
Autostrade Per L'Italia Group	Transportation - Road	Italy
Ferrovial SA	Transportation - Road	Spain
NATS	Transportation - Air	UK
HungaroControl	Transportation - Air	Hungary
Aurizon Holdings	Transportation - Rail and Freight Haulage	Australia
NAV Canada	Transportation - Air	Canada

45. If entities in paragraph 44 are publicly-traded, they are found in other non-utilities sectors such as industrials (e.g., transportation, railroads, aerospace). This data reiterates the point that although rate-regulated activities are more commonly found in the utilities sector, other sectors may also have entities that carry out such activities depending on the regulatory framework in place. Similarly, and also dependent on the regulatory framework in place, not all entities in the utilities sector are subject to rate regulation.

¹⁴ Eskom website – International Bonds

(www.eskom.co.za/OurCompany/Investors/EskomBonds/IntrnlBnds/Pages/default.aspx)

¹⁵ As noted in paragraph 4.31 of the IASB's September 2014 Discussion Paper, "Reporting the Financial Effects of Rate Regulation" these industries include public transport, telecommunications, postal services and others.

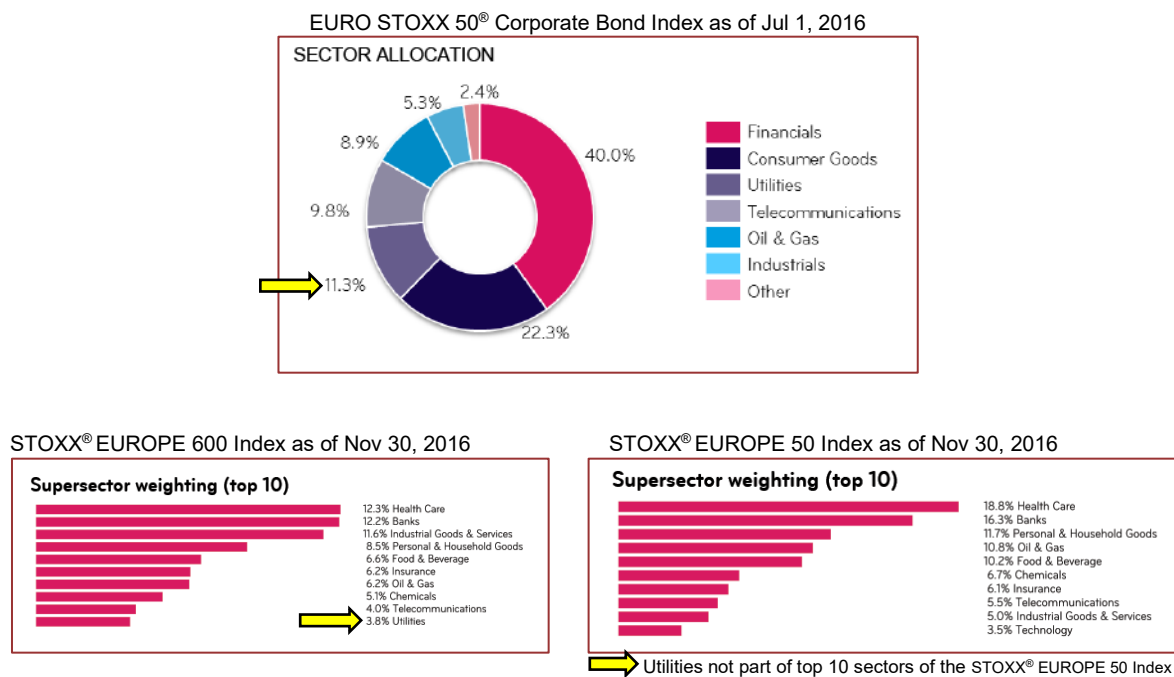
European debt market: Utilities

46. We were also interested in understanding how prominent utilities are in the debt market compared to the equity market. The data presented below focuses on the European market given the information was publicly available. The information is derived from the following three indices:

- The EURO STOXX 50[®] Corporate Bond Index, which tracks the performance of the Euro-denominated, investment grade corporate bonds of the EURO STOXX 50[®] constituents;
- The STOXX[®] EUROPE 50 Index, which gauges the Eurozone equity market; and
- The STOXX[®] EUROPE 600 Index, which captures large-, mid- and small-capitalization companies across 17 countries of the European region.

47. Similar to Canada, market data from Europe appears to illustrate that the Utilities sector is more prominent in the corporate bond market than in the equity market.

Exhibit 15



Future trends and investment requirements

48. Through our research, we learned that various jurisdictions are undergoing energy reforms. For example:
- (a) The regulatory environments in Europe, the Middle East, India and Africa are dynamic, with many countries focusing on opening their power sectors to competition and private investments.
 - (b) Reforms are occurring to break up monopolies in China. In 2014, China's National Energy Administration submitted plans to the State Council, advising the breakup of grid operators' monopoly in the distribution and retail sale of electricity to the end customer. These reforms will potentially open the power market to private capital and other investments.
 - (c) In Japan, it is expected that deregulation and the entrance of new players will transform the country's power market because there is a move towards breaking up vertically-integrated utilities and introducing full retail competition. There are plans to unbundle the 10 integrated utilities into separate power generation, transmission, distribution and supply entities over the next few years. In June 2014, Japanese lawmakers voted to open up the residential electricity market to full competition.
49. Based on statistics from the International Energy Agency, the projected global investment requirements in the power sector are in the area of \$16.4 trillion over the period 2014-2035. The International Energy Agency's projections indicate (emphasis added):

"...by far the greater part of the investment will be needed in markets that are mostly regulated. Over 2014-2035, with current market designs, less than \$1 trillion will be required in the competitive parts of electricity markets out of the cumulative \$9.6 trillion invested in power plants, with an additional \$6.8 trillion needed for T&D [transmission and distribution] grids, for cumulative power sector investment of \$16.4 trillion."¹⁶

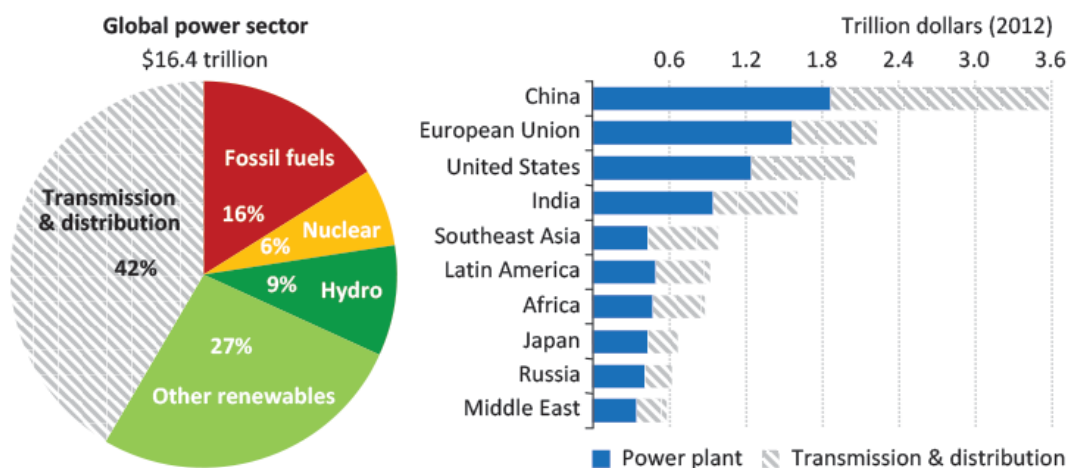
¹⁶ International Energy Agency, *Special Report World Energy Investment Outlook 2014*, (Paris, International Energy Agency, 2014), 107.

Exhibit 16

Investment requirements

Global investment in the power sector amounts to \$16.4 trillion over 2014-2035 in the New Policies Scenario, an annual average of about \$740 billion per year. This represents some 40% of investment in energy supply infrastructure during that period. About 58% of power sector investment is allocated to the construction of new power plants and refurbishment of existing ones; the remainder is used to build and refurbish T&D networks. At the regional level, cumulative investment needs are largest in China (\$3.6 trillion), followed by the European Union (\$2.2 trillion), United States (\$2.1 trillion), India (\$1.6 trillion) and Southeast Asia (\$1.0 trillion) (Figure 3.7).

Figure 3.7 ▶ Cumulative global power sector investment by type and selected region in the New Policies Scenario, 2014-2035



Source: Special Report World Energy Investment Outlook 2014

50. With aging infrastructure, government-imposed environmental targets and changing power demand, energy reforms will continue, and the form of rate regulation will evolve to balance the needs of the customers and the financial viability of the entity for attracting capital. Providing information about the economics of rate-regulated activities will help investors and lenders to identify the opportunities and risks created by the regulatory framework in which the entity operates and assist them in making more informed decisions.

What this section demonstrates

51. Rate-regulated entities are important to the capital markets, and thus, to users making investment and lending decisions. The prominence of the utilities sector in the overall equity market can vary from country to country. However, given that entities in this sector tend to be capital-intensive and require significant investment in long-life infrastructure assets, the data indicates they are more consistently prominent in the debt markets.

Section II: Importance of Understanding the Regulatory Framework

Key Observations

- ❖ The regulatory framework governs the relationship between the rate-regulated entity and the rate regulator. The regulatory framework has many components. Understanding those components is important in determining whether there are rights and obligations requiring a particular accounting treatment.
- ❖ Legislation forms the basis of the regulatory framework.
- ❖ The form of rate regulation can vary, and it is becoming more common that the rate-setting mechanism can include both cost-of-service and incentive-based attributes.
- ❖ Regulatory decisions, and subsequent court decisions, provide confirmatory and predictive value of the economic resources of, and claims against, the rate-regulated entity.

Identifying “rate” regulation

52. The term “regulation” can cover a broad range of activities. *The Oxford Dictionary*¹⁷ defines regulation as “a rule or directive made and maintained by an authority.” Many sectors (e.g., the financial, communications and media sectors) are regulated in some manner. The IASB’s Rate-regulated Activities project, and this paper, focus only on rate regulation.
53. Rate regulation, as defined in the IASB’s March 2013 Request for Information, is “the mechanism by which a rate regulator imposes a control over the setting of prices that can be charged to customers for services or products.” Generally, rate regulation is imposed when an entity has a monopoly or dominant market position that gives it excessive market power. Without rate regulation, the price that the entity can charge would not be constrained since effective market competition is lacking.
54. This paper does not reproduce or expand upon the complete description of rate regulation included in the IASB’s September 2014 Discussion Paper, “[Reporting the Financial Effects of Rate Regulation](#).” It simply reminds readers of the importance of ascertaining whether all or part of an entity’s activities are subject to *rate* regulation, as opposed to some other form of regulation.

Regulatory framework

55. Users in Canada have said that the regulatory framework, of which the rate-setting mechanism is a part, has a significant bearing on the entity’s financial performance and future cash flows. The regulatory framework governs the relationship between the rate regulator and the rate-regulated entity and has many components. The main components include:
- the legislation underlying the framework;
 - the rules and procedures established by the rate regulator through the design of the rate-setting mechanism (i.e., the form of rate regulation); and
 - the regulatory decisions, and subsequent court rulings on those decisions, that interpret the legislation and rules.

¹⁷ Oxford Dictionary, www.oxforddictionaries.com/us/definition/american_english/regulation

56. Understanding the regulatory framework is important because it can affect the determination of whether the entity has rights and obligations that arise from the performance of its rate-regulated activities. The manner in which the rate-setting mechanism operates affects the type of rights and obligations that are created, as well as when the entity's right or obligation is recovered or settled, respectively. Rights and obligations that are enforceable as a result of the form of rate regulation provide decision-useful information to users because of the effects they will have on the entity's financial performance and position, and future cash flows.
57. The remainder of this section uses primarily Canadian data to illustrate what effects the components of the regulatory framework can have on an entity. The components themselves (as listed in paragraph 55 above) are common to other regulatory frameworks in the world. However, what is prescribed by these components can affect the design of the regulatory framework and result in global variations. This point is illustrated in Section III, which presents data from outside Canada to identify similarities and differences in the design of regulatory frameworks.

Regulatory framework component: Legislation

58. An overall objective of rate regulation in Canada is to balance the fair return earned by an entity, with reasonable rates charged to customers based upon prudently incurred costs. In addition, rate regulators attempt to ensure that customers of varying types pay their fair share of the costs incurred to service the entire customer base. The powers and mandates of rate regulators in Canada come from governing federal and provincial legislation. This legislation typically requires that the rate regulator approve tariffs or rates that are just and reasonable.
59. Although the relationship between the rate regulator and the entity is generally not contractual, legislation gives the rate regulator the ability to affect the entity's financial performance and future cash flows through its regulatory decisions. In light of this ability, the strength of the jurisdiction's regulatory framework becomes very important (as discussed in Section IV).
60. In Canada, the legislation relating to rate regulation contributes to the strength of the regulatory framework because it provides a basis for either challenging or upholding a rate regulator's decisions ("rulings") and the rates those decisions produce. If a rate regulator establishes rates that are contrary to the principles of the legislation, a rate-regulated entity can challenge the decision by a motion to the regulator, or in a court. Similarly, a rate regulator that disallows costs that are not

reasonable or prudently incurred illustrates rigour in the system to establish reasonable rates for customers.

61. The examples of case law in Exhibit 17 illustrate the objective of rate regulation, and how legislation can affect the rights and obligations of the rate-regulated entity, as interpreted by the Canadian courts. As seen through these examples, the expectation is that rate regulators will apply reasonable judgment when working to achieve their regulatory objectives, one of which is noted in paragraph 58.

Exhibit 17

Court Interpretations of Canadian Legislation (emphasis added)
<p>The Supreme Court in <i>Northwestern Utilities Ltd v. Edmonton</i> [1929] S.C.R. 186 (Northwestern) defined the scope of the utilities' right to price their product and their right as a result to a fair return. The Court stated "By a fair return is meant that the company will be allowed as large a return on the capital invested in its enterprise (which will be net to the company) as it would receive if it were investing the same amount in other securities possessing an attractiveness, stability and certainty equal to that of the company's enterprise."¹⁸</p>
<p>A fair rate of return to the corporation is paramount and is all that can be considered in arriving at a fair rate. In the unrealistic situation that a fair return worked a hardship on the consumer, the choices before government to provide relief are unlimited but they should not lower the fair rate of return. Indeed the Federal Court of Appeal (FCA) in <i>TransCanada PipeLines v. Canada National Energy Board</i> 2004 F.C.A. 149 confirmed that a fair return need not be modified out of deference to its impact upon customers.¹⁹</p>
<p>In <i>Ontario (Energy Board) v. Ontario Power Generation Inc.</i>, the Supreme Court reviewed the Ontario Energy Board ("OEB" or the "Board")'s decision to disallow \$145 million in labour compensation costs applied for by Ontario Power Generation ("OPG") in its 2011-2012 rates application. The OEB had disallowed these costs, which were related to OPG's nuclear operations, on the basis that OPG's labour costs were not in line with comparable entities in the nuclear industry. The principal question on appeal was whether the Board should have used the "no-hindsight" prudence test to determine whether the labour compensation costs were reasonable.</p> <p>Applying a standard of review of reasonableness, the Court overturned the decision of the Ontario Court of Appeal and reinstated the decision of the OEB and the Divisional Court, holding that the OEB's decision to disallow the \$145 in labour compensation costs was reasonable. The Court found that the costs in question were "best understood as at least partly committed" (as opposed to entirely "forecast" costs) because they resulted from collective agreements entered into between OPG and two of its unions but were also subject to management discretion because OPG had some flexibility to manage total staffing levels by way of, among other things, attrition of the workforce.²⁰</p>

¹⁸ The Honourable John C. Major and Roland Priddle, *The Fair Return Standard for Return on Investment by Canadian Gas Utilities: Meaning, Application Results and Implications* (Ottawa: Canadian Gas Association, 2008), 4.

¹⁹ Ibid.

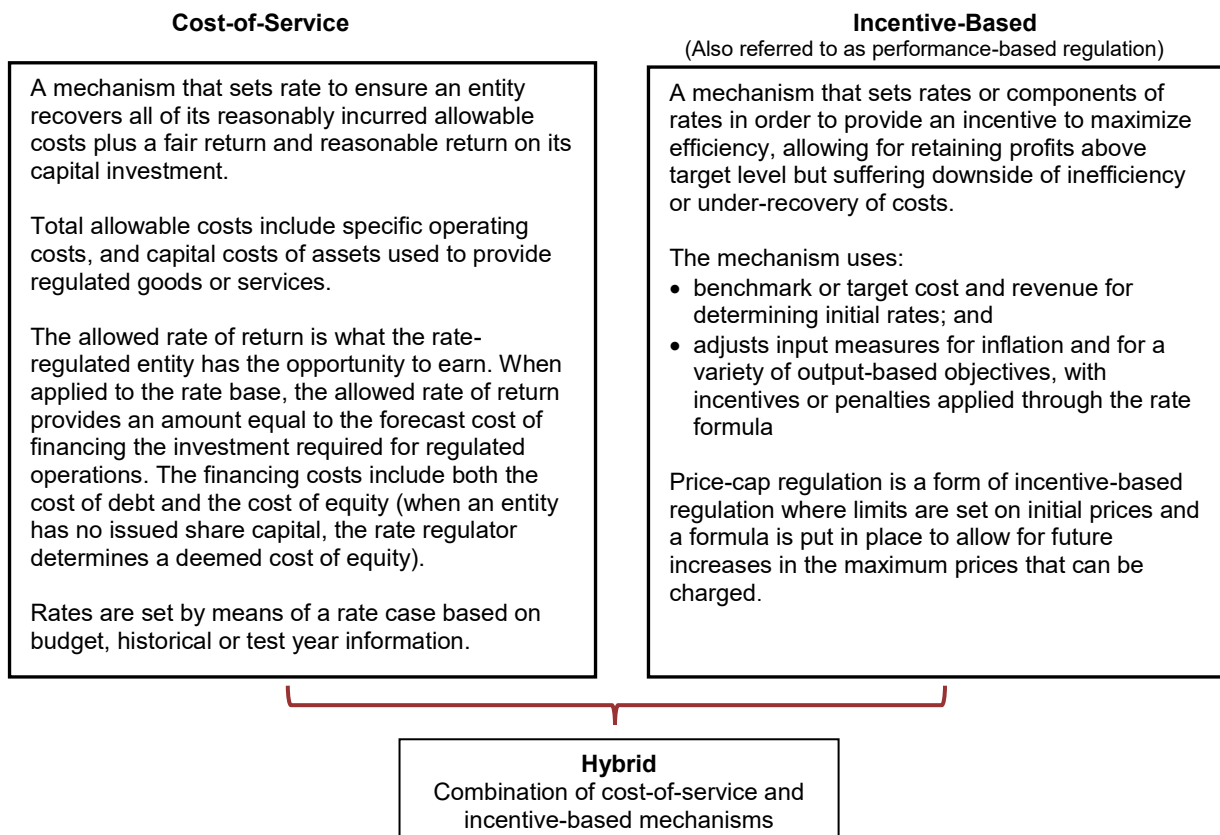
²⁰ McCarthy Tetrault, Extracts, www.mccarthy.ca/en/insights/blogs/canadian-energy-perspectives/supreme-court-clarifies-role-and-nature-prudence-test-canadian-utility-regulation

Regulatory framework component: Form of rate regulation

62. Pre-changeover Canadian GAAP defined rate regulation as existing when all of the following criteria were present:
- (a) The rates for regulated services or products provided to customers are established by or are subject to approval by a regulator or a governing body empowered by statute or contract to establish rates to be charged for services or products.
 - (b) The regulated rates are designed to recover the cost of providing the services or products.
 - (c) It is reasonable to assume that rates set at levels that will recover the cost can be charged to and collected from customers in view of the demand for the services or products and the level of direct and indirect competition.
63. Rate regulators in Canada and around the world choose from a variety of forms of rate regulation to achieve their objectives. The form of rate regulation is generally based on the terms of the governing legislation. For purposes of this paper, two common forms of rate regulation are described below using information from the IASB's September 2014 Discussion Paper, "[Reporting the Financial Effects of Rate Regulation](#)," and other sources.

Based on the **cause-and-effect relationship** between the entity's costs and its rate-based revenue stream

Exhibit 18



64. Rate regulation is designed to ensure that the rate-regulated entity recovers a determinable amount of consideration (the “revenue requirement”) in exchange for the rate-regulated activities that it performs.
65. The rate-setting mechanism is an explicit acknowledgment, by the rate regulator, that some aspects of the original rate determination are subject to adjustments that affect the compensation ultimately received by the entity for providing the regulated goods or services. Such adjustments are captured in the determination of the regulatory rate that is charged in a future period. More specifically, certain aspects of the approved future regulatory rate are adjusted for the difference between the entity’s forecasted, and actual, results for the past regulatory period if the rate regulator has approved the use of variance or deferral accounts. The mechanism works in such a way that the entity has the right to increase or the obligation to decrease the rate to be charged when the rate-regulated goods or services are provided in the future. Part of that increase or decrease is

attributable to the drawdown of the variance or deferral accounts to appropriately compensate the entity for the actual performance of activities carried out in the previous regulatory period.

66. The research shows that the form of rate regulation is constantly evolving as rate regulators try to strike a balance in determining which risks associated with rate-regulated activities:

- are part of the normal cost recovery process and should be assigned to customers; or
- are part of normal business risks that should be borne by an entity's investors or owners as a result of how efficiently the business is managed when providing the rate-regulated goods or services.

This effort to achieve a fair balance between investors and customers is resulting in new forms of rate regulation that are considered hybrid because they encompass attributes of both cost-of-service and incentive-based mechanisms. In some cases, different components of an entity's rates could be subject to differing mechanisms. Therefore, it is important to look at the details underlying the form of rate regulation to identify the entity's rights and obligations, as opposed to only considering the label attached to the rate-regulatory scheme (e.g., cost-of-service or incentive-based) within which the entity operates.

67. In Canada, most rate-regulated entities are regulated through a cost-of-service mechanism. However, we observed that rate regulators are incorporating incentive-based mechanisms to encourage efficiency and productivity among the entities. Typically, the rates set under incentive-based regulation are determined based on the costs of providing the service plus a reasonable return. For subsequent periods, the rates are modified using a formula-based approach that establishes the rates the utility can charge to its customers. There is generally an opportunity to rebase²¹ rates on a cost-plus-return basis periodically and/or if the actual incentive return deviates too far from a fair return.

²¹ In "rebasings", a utility submits a cost estimate to reset the rate based on a more recent reflection of costs than the ones used in the original rate determination.

68. To illustrate how the form of rate regulation used can differ across Canada, we looked at three provinces and the different components of the electricity business:

Exhibit 19

Business Component	Province			
	Ontario	Alberta	Manitoba	
	Generation	Partially deregulated (one dominant player)	Competitive / market-based (oligopoly in which there are two or more players)	Vertically integrated regulated electric (and natural gas) utility that is government-owned
	Transmission	Fully regulated (one dominant player)	Fully regulated (two major players)	
Distribution	Fully regulated (many local distribution companies that are municipally-owned)	Fully regulated (few major distributors)		
Form of Regulation				
	Incentive-regulation mechanism: Combination of cost-based and incentive-based mechanism. Forecasted costs and revenue information are used to determine a base revenue requirement and the “base” rates that are set to recover the revenue requirement. In subsequent years, the base rates are adjusted by a formula that includes components for inflation, efficiency and productivity gains. At the conclusion of the term, the entity can rebase its rates under cost-of-service. ²²	Generation: not regulated Transmission: cost-of-service Distribution: performance-based regulation Rates using formula that adjusts rate changes to inflation minus an enhanced efficiency or industry productivity factor. Except in limited circumstances, rates can only rise less than inflation. ²³	Cost-of-service mechanism	

69. In Alberta, although electricity distribution is regulated using performance-based regulation (PBR), there are elements within the PBR that contain some cost-recovery mechanisms. For example, there are adjustments to rates outside the PBR formula involving accounts that are similar to flow-through items found in cost-of-service regulation. There could also be adjustments for events caused by external factors that are outside the entity’s control and for which there is no other reasonable opportunity to recover the costs within the PBR formula.

²² Based on information from the Ontario Energy Board’s [comment letter](#) on the IASB’s March 2013 Request for Information, “Rate Regulation.”

²³ Alberta Utilities Commission, www.auc.ab.ca/Pages/electric-industry.aspx

70. As for jurisdictions outside Canada, Exhibit 20 shows an example of an Australian entity that we think helps to illustrate the rules of the rate regulator (see Note 2(g)) and how various components of the rate can have cost-of-service- or incentive-based-like attributes (see Note 2(d)).

Exhibit 20

TransGrid (Australia) – Extracts from Audited Financial Statements (Accounting framework: IFRS Standards)
<p>2013-2014 Audited Financial Statements</p> <p>Note 2 – Summary of Significant Accounting Policies (g) Trade and Other Receivables</p> <p>Prescribed Customer Receivables – As at 30 June 2014, TransGrid's total revenue received for prescribed transmission services, including intra-regional settlement residues and inter-regional settlement residue auction proceeds, was less than the revenue entitlement for the financial year. In accordance with the National Electricity Rules (NER), the under-recovered amount and associated interest was entitled to be recovered when setting future transmission service prices. The revenue under-recovery was recognised in Prescribed Customer Receivables.</p> <p>2014-2015 Audited Financial Statements</p> <p>Note 2 – Summary of Significant Accounting Policies, (d) Changes in Accounting Policies</p> <p>Voluntary Change in Accounting Policy – In 2015, TransGrid changed its accounting policy for recognized revenues from the rendering of prescribed services. The rationale for the change reflects the Australian Accounting Standards Board's (AASB) recent clarification of its position on the recognition of rate-regulated assets. Management believes the new accounting policy reflects the AASB view.</p> <p>As a result of the change, TransGrid has recognized prescribed services revenue on the basis of amounts received or receivable with no amounts accrued for future receipts from (or credits to) customers allowed under any regulatory pricing mechanism.</p> <p>Previously TransGrid recognized the Maximum Allowable Revenue (MAR) determined by the AER by recognizing the amount of revenue exceeding the MAR as a payable or the amount of revenue below the MAR as a receivable.</p> <p>Refer below for further details about deferred revenues or credits that have not been recognized in profit or loss.</p> <ul style="list-style-type: none"> i) Transmission Use of System (TUOS) revenue – TransGrid collects its Maximum Allowed Revenue (MAR) based on the transmission prices set in accordance with the pricing methodology approved by the AER and published in May each year for application in the following financial year. In any given year, revenue may exceed or not achieve the MAR due to differences between demand load forecasts and actual loads for TUOS and volatility in settlement residues. As at 30 June 2015, revenue is a total of \$110.6m (2014 - \$38.2m) below the MAR, which will be included in transmission prices in following years. ii) Service Target Performance Incentive Scheme (STPIS) which provides for the AER to adjust TransGrid's Maximum Allowable Revenue (MAR) in a financial year by between -1% to +3% based on the performance in the previous calendar year. As at 30 June 2015, a STPIS adjustment of \$12.1m (2014 - \$8.7m) has been determined by the AER and has been built into 2015-16 transmission price. iii) Network Support – Network support refers to non-network solutions used by transmission network service providers (TNSPs) as a cost effective means of deferring network augmentation. In the prior regulatory period 2009/10 to 2013/14, TransGrid received a network support pass-through allowance which is required to be adjusted for any under-expenditure. As at the reporting date, a total amount of \$8.3m (2014 - \$15.3m) is required to be credited in following years.

71. In addition to the different forms of rate regulation used in Canada, it is common for an entity to have both rate-regulated operations and operations not subject to rate regulation. We observe that some involved in the financial reporting process have traditionally articulated their views on the topic of rate regulation in a way that suggests rate regulation applies to certain industries or sectors. However, in reality, rate regulation affects specific business activities or services of the entity. Following is an example to illustrate this point.
- TELUS Corporation – This entity undertakes activities subject to price cap regulation by the Canadian Radio-television and Telecommunications Commission (CRTC). Despite the implications suggested by the “price cap” label, Telus determined that the deferral account mechanism the regulator put in place (according to its decision on amounts collected related to non-high cost service areas) created an obligation.

Exhibit 21

TELUS (Canada) – Extracts from 2011 Annual Report (Accounting framework: IFRS Standards)
<p>Management's Discussion & Analysis</p> <p>10.3 Regulatory Matters</p> <p>TELUS' telecommunications and broadcasting services are regulated under federal legislation by the Canadian Radio-television and Telecommunications Commission (CRTC), Industry Canada and Heritage Canada. The CRTC has taken steps to forbear from the regulation of prices for services offered in competitive markets, such as local residential and business services in selected exchanges, long distance and some data services, and does not regulate the pricing of wireless services. Local telecommunications services that have not been forborne are regulated by the CRTC using a price cap mechanism.</p>
<p>Audited Financial Statements</p> <p>Note 1 – Summary of Significant Accounting Principles</p> <p>(e) – Revenue recognition</p> <p>Non-high cost service area deferral account – On May 30, 2002, and on July 31, 2002, the CRTC issued Decision 2002-34 and Decision 2002-43, respectively, pronouncements that affected regulated services in the Company's Wireline segment. In an effort to foster competition for residential basic service in non-high cost serving areas, the concept of a deferral account mechanism was introduced by the CRTC, as an alternative to mandating price reductions. The deferral account arises from the CRTC requiring the Company to defer the statement of income recognition of a portion of the monies received in respect of residential basic services provided to non-high cost serving areas. The Company has adopted the liability method of accounting for the deferral account.</p> <p>This resulted in the Company recording incremental liability amounts, subject to reductions for the mitigating activities, during the Decisions' initial four-year periods. The deferral account balance also reflects an interest expense component based on the Company's applicable short-term cost of borrowing, such expense being included in the Consolidated Statements of Income and Other Comprehensive Income as Financing costs.</p> <p>The Company discharges the deferral account liability by undertaking qualifying actions including providing broadband services to rural and remote communities, enhancing the accessibility to telecommunications services for individuals with disabilities and providing customer rebates for the balance. The Company recognizes the drawdown and amortization (over a period no longer than three years) of a proportionate share of the deferral account as qualifying actions are completed; such amortization is included in Other operating income. (emphasis added)</p>

Regulatory framework component: Regulatory decisions

72. The rate-setting process generally involves the negotiation of components to be included in the allowed rate. In a rate proceeding, it is common that the rate-regulated entity will not receive everything asked for in its rate case submission. Rate cases submitted by a rate-regulated entity can contain a significant amount of information to support the rate request put forth to the rate regulator. Similarly, a rate ruling published by a rate regulator is also typically very extensive, to explain the regulator's views and set out the reasons for its decision.
73. Regulatory decisions can have both confirmatory and predictive value, as shown below with two examples from Canada. Financial information has confirmatory value if it provides feedback about (confirms or changes) previous evaluations and predictive value if it can be used as an input to processes employed by users to predict future outcomes.²⁴

Example 1

74. We looked at the impact of a recent regulatory decision issued by the Alberta Utilities Commission on the Generic Cost of Capital on Canadian Utilities Ltd, a rate-regulated entity in that province. The entity's transmission and distribution business activities are subject to cost-of-service and performance-based regulation, respectively. This entity adopted IFRS Standards before the IASB issued IFRS 14, thus the financial effects of rate regulation are not recognized. Exhibit 22 describes the effects of the regulatory decision.

Exhibit 22

Regulatory Decision	Canadian Utilities Ltd. ²⁵ – 2015 Audited Consolidated Financial Statements
<p>In Decisions 2011-474 and 2013-459, the Alberta Utilities Commission approved a placeholder of 8.75% for the 2013 and 2014 return on common equity pending a final decision as part of the 2013 Generic Cost of Capital proceedings.</p> <p>March 23, 2015 2013 Generic Cost of Capital AUC Decision 2191-D01-2015</p>	<p>Note 5 – Segmented Information (Extracts)</p> <p>Adjusted earnings are earnings attributable to equity owners of the Company after adjusting for the timing of revenues and expenses for rate-regulated activities and dividends on equity preferred shares of the Company. Adjusted earnings also exclude one-time gains and losses, significant impairments and items that are not in the normal course of business or a result of day-to-day operations. Adjusted earnings are a key measure of segment earnings used by the CODM to assess segment performance and allocate resources.</p>

²⁴ IFRS Standards, *Conceptual Framework for Financial Reporting*, paragraphs 2.8-2.9.

²⁵ Canadian Utilities Ltd. is a subsidiary of ATCO Ltd. (part of the ATCO Group of companies).

Regulatory Decision	Canadian Utilities Ltd. ²⁵ – 2015 Audited Consolidated Financial Statements
<p>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 Alberta Utilities Commission determined that the allowed ROE for 2013 and 2014 would be modified from the previous interim rate of 8.75% to 8.3%. The Alberta Utilities Commission 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.²⁶</p>	<p>The Canadian and Australian utilities recognize revenues from regulatory decisions when customer rates are changed and amounts are billed to customers. Under rate-regulated accounting, revenues from regulatory decisions that affect current and prior periods are recognized when the decision is received.</p> <p>Generic Cost of Capital Decision The utilities recorded a reduction in adjusted earnings of \$51 million in 2015 for an Alberta Utilities Commission decision which reduced the Return on Equity and deemed common equity ratios for 2013 to 2015. Of the \$51 million recorded in 2015, \$31 million related to 2013 and 2014.</p> <p>Under IFRS, earnings will be adjusted when the [Alberta Utilities Commission] approves revised customer rates and the amount payable to customers is refunded through future billings; \$10 million has been refunded as at the end of the year 2015.</p>

75. Although the interim allowed rate of return of 8.75 per cent had already been billed to customers, through the subsequent regulatory decision, the entity was only permitted to earn an allowed return on equity of 8.3 per cent in 2013 and 2014. This regulatory decision has confirmatory value because it provides feedback about the previous interim rate of return used, and affects the claims against the entity's economic resources. The regulatory decision also has predictive value because it would assist users to understand the effects on the entity's future cash flows, and their assessment of the regulatory framework in Alberta.
76. Exhibit 22 further illustrates that it is possible for a rate regulator to change the rate of return provided to the rate-regulated entity. In this example, the Alberta Utilities Commission communicated that the initial rate of return of 8.75 per cent was a placeholder pending a final decision as part of the 2013 Generic Cost of Capital proceedings. This initial rate of return represents an estimate for the entity based on known information in fiscal 2013 and 2014. After the final decision was issued in 2015 and the rate of return was changed from 8.75 per cent to 8.3 per cent, the entity's estimate of its rate of return changed as a result of this new information. In accounting, a change in estimate as a result of new information is treated as an adjustment to the carrying amount of an asset or a liability in the period of change and future periods, if the change affects both. From this perspective, it would seem that a change of this nature affects the measurement of balances arising from rate regulation, as opposed to their recognition in the first

²⁶ Concentric Energy Advisors, *Authorized Return on Equity for Canadian and U.S. Gas Electric Utilities*, III, May 1, 2015.

place. Reflecting this new information in the entity's financial statements in the period the information becomes available helps users understand how a regulatory decision can affect an entity's financial performance and position, and future cash flows.

Example 2

77. Our understanding is that while a rate regulator's decision can affect an entity's economic reality, sometimes certain parts of the decision do not have an immediate financial statement impact unless the entity's current economic resources or claims against it are affected. Nonetheless, because a regulatory decision illustrates how the rate regulator interprets and applies the legislation and rules, it helps predict an entity's future cash flows.
78. Users such as credit rating agencies, and debt and equity analysts, take into consideration how such regulatory decisions, and other factors, could affect the risk profile of the entity. The results affect the entity's credit rating, or the analyst's buy/sell recommendation (as examined further in Section V regarding what credit rating agencies and debt and equity analysts consider – see paragraphs [152](#) to [163](#)).
79. This example, relating to TransCanada Pipelines (Exhibit 23), also shows how a regulatory decision can have both confirmatory and predictive value. Exhibit 23 includes excerpts from: a bond analyst report, a credit rating report, the entity's annual report, and the rate regulator's rate ruling (as pertaining to its interpretation of legislation). Together, this information highlights how certain components of a regulatory decision can have both a current and a future financial effect, and illustrates the interpretation of legislation. Emphasis has been added to certain parts of the text below to highlight the areas that provide confirmatory and predictive value.

Exhibit 23

The National Energy Board's TransCanada Pipelines Mainline Decision
<p>Corporate Bond Research</p> <p>– Excerpts from Weekly Commentary of Scotiabank Global Views, April 5, 2013 (Pg. 11-14)</p> <p>We think the National Energy Board's TransCanada Pipelines (A/ A-/ A3) Mainline Decision (which was released on Wednesday, March 27), is somewhat credit negative for TransCanada. The NEB granted some of the several changes TransCanada sought in its Restructuring Proposal, but denied some of TransCanada's most significant toll-reducing components, including the key request, the Alberta System Extension. The Decision also granted a key request of some interveners, setting 5-year fixed tolls, rather than TransCanada's application for tolls for 2012 and 2013. The Decision is long and exceptionally complicated, and TransCanada has yet to comment on its meaning for the Mainline's earnings and cash flow for the five-year period. However, this week, TransCanada announced that it will hold a binding open season to obtain firm commitments from shippers for West to East oil</p>

The National Energy Board's TransCanada Pipelines Mainline Decision

transportation service, which we think could materially raise earnings and cash flow, and would very effectively mitigate risks from the Decision.

Two deferral accounts will accumulate a specified cost deferral and annual variances in actual revenues for deferral and recovery in future tolls. The NEB approved an off-ramp, such that, if the Toll Stabilization Adjustment (TSA) deferral account approaches one-ninth of rate base, or if circumstances unfold that make TransCanada expect that the full TSA balance may be unrecoverable, TransCanada could file a new tolls application. The NEB's rationale for the off-ramp is to try to mitigate adverse credit rating actions from deferral of significant cash flows. The NEB also said that if TransCanada "repurposes" (converts to oil service) significant Mainline assets, "this would also likely warrant revisiting Mainline tolls."

The complex Decision includes a range of favourable actions. The NEB approved several elements of the RP, including all proposed changes to cost allocation, and elimination of toll zones and the Risk Alleviation Mechanism.

Regulatory Compact

Throughout the written and oral evidence and argument presented by TransCanada in its RP application, TransCanada played up the importance of the concept widely referred to as "the regulatory compact." TransCanada believed that the regulatory compact would prevent the regulator from setting rates that would prevent TransCanada from having an opportunity to recover its prudently incurred capital costs, including a return on capital.

The NEB disagreed with TransCanada's views on this important point. "We are not prepared to endorse the concept of the regulatory compact, as a concept that compels the Board to set just and reasonable tolls in a particular manner. In our view, the concept is ill defined. TransCanada's interpretation of the regulatory compact would have the effect of protecting the Mainline from the impact of competition." Further, the NEB said, "In adjudicating the current Application, we are mandated with establishing just and reasonable tolls, that are not unjustly discriminatory, in accordance with the provisions of the NEB Act." And further, "In our view, TransCanada's submission that only prudence determines the opportunity for cost recovery cannot be sustained in the context of NEB regulated pipelines."

We believe that the NEB was more concerned about future shippers' potential exposure than with keeping TransCanada's rate base intact. Although the current Decision does not result in any cost disallowance or writedowns, the Decision clearly opens the door to this happening in future: "If throughput is lower than expected ... we would anticipate that TransCanada's next toll hearing would deal with what costs, if any, should be disallowed from recovery in tolls." We believe that this theme in the Decision differs from the financial market's understanding and assumptions of the regulatory compact.

Credit Rating

– Excerpts from DBRS Rating Report, July 4, 2013

On June 18, 2013, DBRS downgraded the Issuer Rating and Unsecured Debentures & Notes rating of TransCanada PipeLines Limited (TCPL) to A (low) from "A", the Junior Subordinated Notes rating of TCPL to BBB from BBB (high) and the Medium-Term Notes & Unsecured Debentures rating of NOVA Gas Transmission Ltd. (NGTL), a wholly owned subsidiary of TCPL, to A (low) from "A", all with Stable trends.

The rating actions followed DBRS's review of the National Energy Board's (NEB) dismissal (the Recent Decision) of TCC's May 1, 2013, application for review and variance (R&V) of the NEB's March 27, 2013, decision (the Original Decision) relating to TCC's 2012-2013 restructuring proposal for tolls and service on its Canadian Mainline.

2013 Annual Report of TransCanada Corporation

– Excerpts (Accounting framework: U.S. GAAP)

2013 Financial Highlights

In March, Canada's National Energy Board (NEB) released its decision on our proposal for restructuring tolls and services on the Canadian Mainline following an extensive public hearing. The decision fundamentally altered

The National Energy Board's TransCanada Pipelines Mainline Decision

some of the long-standing principles of the Mainline's regulated cost-of-service model. TransCanada successfully implemented the NEB decision and shippers have renewed 2.5 Bcf per day of firm contracts on the system through November 2016. In the fall of 2013 we reached a settlement with local natural gas distribution companies in Ontario and Québec that will allow us to continue expanding the eastern portion of the Mainline system to meet the future needs of this growing market. Settlements were also reached with shippers on the NGTL and Great Lakes systems in 2013.

Management's Discussion & Analysis

Canadian Mainline's comparable earnings this year increased by \$90 million compared to 2012 because of the impact of the NEB decision. Among other items, the NEB decision approved an ROE of 11.50 per cent on 40 per cent deemed common equity for the years 2012 through 2017 compared to the last approved ROE of 8.08 per cent on 40 per cent deemed common equity that was used to record earnings in 2012.

Consolidated Financial Statement Note 9 – Rate-regulated Business

Canadian Mainline

In March 2013, TransCanada received a decision from the NEB on the comprehensive application it filed to change the business structure and the terms and conditions of service for the Canadian Mainline, including addressing tolls for 2012 and 2013 (the NEB Decision). The decision approved the 2011 revenue requirement as filed, approved tolls charged in 2012 as final with any variance between revenues and costs deferred for recovery in future years, and set tolls for 2013 through 2017 at competitive levels, fixing tolls for some services and providing unlimited pricing discretion for others. The decision established an ROE of 11.5 per cent on a deemed common equity of 40 per cent and included mechanisms to achieve the fixed tolls through the use of a Long Term Adjustment Account (LTAA) as well as the establishment of a Tolls Stabilization Account (TSA) to capture the surplus or the shortfall between our revenues and our cost of service for each year over the five-year term of the decision. In addition, the decision provides an opportunity to generate incentive earnings by increasing revenues and reducing costs. The NEB also identified certain circumstances that would require a new tolls application prior to the end of the five-year term. One of those circumstances is if the TSA balance becomes positive, which occurred in 2013. In December 2013, TransCanada filed an application with the NEB that addresses tolls moving forward.

National Energy Board

– Excerpts from Reasons for Decision, TransCanada PipeLines Limited, NOVA Gas Transmission Ltd., and Foothills Pipe Lines Ltd., RH-003-2011, March 2013, (Pg. 39-40)

Section on "Regulatory standards for cost recovery"

A rule that imposes an obligation upon the Board to approve tolls that allow recovery of all costs in all circumstances is inconsistent with Parliament's grant of discretion to the Board and may not result in tolls that are just and reasonable. In this regard, we disagree with TransCanada's submission to the effect that the Board must approve tolls that allow recovery of all prudently incurred costs, even if the Board knew that those tolls could not be charged in the market. This would be an inefficient and non-sensical outcome.

In our view, a regulatory rule that compels the Board to set tolls that allow the return of and on investment, irrespective of whether assets associated with that investment are used and useful for providing service, erodes management's responsibility for its investment decisions and management's responsibility to keep depreciation rates current. This situation, in our view, does not lend itself to creating efficient energy infrastructure and markets. It also provides no incentive for a pipeline company to find better or higher uses for its assets.

Given the foregoing, the prudence standard should not be the only standard that determines the opportunity for cost recovery for NEB-regulated pipelines in all circumstances.

80. As these two examples illustrate, regulatory decisions, which are based on the rate regulators' interpretations of the legislation and the rules, have both predictive and confirmatory value

regarding the economic resources of, and claims against, the entity. Thus, users of rate-regulated entities' financial statements have great interest in the decisions of the rate regulator, and the current and future financial effects of such decisions. As a result, entities find it important to communicate the effect, as well as the measurement of balances arising from rate regulation when they are recognized in the primary financial statements, to their users.

81. Exhibit 24 shows an example of an entity outside Canada that has recognized credit balances arising from rate regulation based on its regulatory framework, given its facts and circumstances.

Exhibit 24

<p>Elia Group (Belgium) – Extracts from 2015 Audited Consolidated Financial Statements (Accounting framework: IFRS Standards, as adopted by the European Union)</p>
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Note 7.17 – Accruals and deferred income

Settlement mechanism

A calculation of the amount is given in Note 9.1.

The Group operates in a regulated context which states that tariffs must make it possible to realise total revenue consisting of:

1. a reasonable return on invested capital,
2. all reasonable costs which are incurred by the Group.

Since the tariffs are based on estimated figures, there is always a difference between the tariffs that are actually charged and the tariffs that should have been charged to cover all reasonable costs of the system operator and to provide shareholders with a reasonable profit margin on their investment.

If the applied tariffs result in a surplus or a deficit at the end of the year, this means that the tariffs charged to consumers/the general public could have been respectively lower or higher (and vice versa). A surplus or deficit arising from the settlement mechanism is therefore not classified as revenue or an expense, or as an item under equity.

On a cumulative basis, it could be argued that the public has made an advance payment (=surplus) for its future use of the network. As such, the surplus (deficit) is not a commission for a future loss (recovery) of income but instead a deferred/accrued revenue to (with regard to) consumers. On the basis of the Regulatory framework, the Group believes that the surplus (deficit) does not represent an item of revenue (cost). Consequently, the Group booked these amounts under section 'Accruals and deferred income'.

What this section demonstrates

82. Financial information is decision-useful when it helps users understand the regulatory framework in which the entity operates. Such an understanding is important in determining whether the entity has certain rights and obligations from performing its rate-regulated activities, which, in turn, affect the assessment of the amount, timing and uncertainty of its future cash flows.

Section III: How Are Regulatory Frameworks Similar or Different?

Key Observations

- ❖ Users consider the transparency and predictability of the regulatory framework to be affected by the underlying legislation, rules and procedures established by the rate regulator, and decisions that interpret the legislation and rules.
- ❖ The data indicates that the objective of rate regulation is relatively consistent around the world. However, the regulatory frameworks of various jurisdictions can be quite complex and different in design as a result of what is prescribed by the respective framework components.
- ❖ A common observation to be made from the data is that the rate-setting mechanism typically creates identifiable adjustments in which some aspects of the current period's regulatory rate are expected to be recovered or settled through adjustments to the future regulatory rate. These adjustments represent timing differences between when the entity fulfils the service requirements established in the regulatory agreement and when it is compensated for doing so via the regulatory rate. The extent to which the rate regulator reviews such adjustments for reasonableness, and the ability to appeal regulatory decisions, can vary.
- ❖ The design of the regulatory framework can affect when an entity's rights and obligations are considered enforceable.

83. Section II highlighted the importance of understanding the components of the regulatory framework as they affect whether an entity has certain rights or obligations from performing its rate-regulated activities. Again, the main components include:

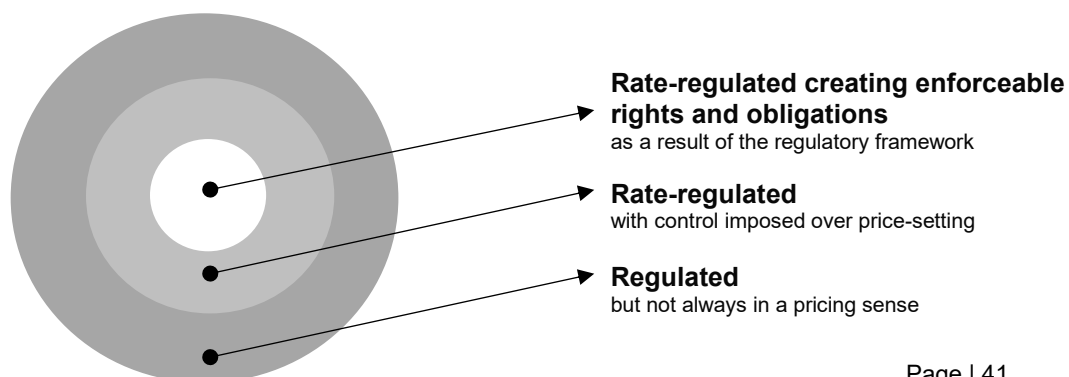
- the legislation underlying the framework;
- the rules and procedures established by the rate regulator through the design of the rate-setting mechanism (i.e., the form of rate regulation); and
- the regulatory decisions, and subsequent court rulings on those decisions, that interpret the legislation and rules.

These components are often specific to the country, state, province, or region in which the entity operates because they affect public goods or services (e.g., electricity or water) provided to the jurisdiction's constituents.

84. On the basis that some type of public good or service is provided in every jurisdiction, it is reasonable to think that rate regulation exists globally. This section uses data from outside Canada to explore the similarities and differences in the design of regulatory frameworks of various jurisdictions.

85. As a reminder, rate regulation as defined in the IASB's March 2013 Request for Information is "the mechanism by which a rate regulator imposes a control over the setting of prices that can be charged to customers for services or products." However, based on the research in Section II, this is not to imply that rate regulation automatically results in enforceable rights and obligations. Exhibit 25 illustrates two points – first, that of the total population of entities that are regulated in some manner, only a subset is rate-regulated; second, that of this smaller population, only a subset is subject to a rate-regulatory scheme creating enforceable rights and obligations.

Exhibit 25



86. Most of the stakeholders that responded to the IASB's various documents for comment on rate-regulated activities suggested that any possible accounting model should focus on enforceable rights and obligations created by the rate regulator. This means looking at the population of entities in the center of the diagram – identifying an entity that is not only regulated, but rate-regulated and operates within a regulatory framework that gives rise to enforceable rights and obligations.

Through the lens of a global user

87. Stakeholder feedback to the IASB on the Rate-regulated Activities project has indicated that there is a wide variety of regulatory frameworks around the world.
88. While such variety can make comparisons difficult because of the numerous factors at play, a number of common characteristics exist as well as shown in this section of the paper.
89. Users recognize that the components of regulatory frameworks could affect the amount, timing and uncertainty of an entity's future cash flows. Thus, regardless of the jurisdiction, users strive to understand how the regulatory framework affects an entity's financial position and performance in order to fully appreciate the entity's business story and make proper investing and lending decisions.
90. To provide a sense for how a global user views the components of a regulatory framework, we present the following excerpts from three Moody's Investors Service announcements commenting on the regulatory framework of various jurisdictions (emphasis added).

Exhibit 26

Legislation underlying the regulatory framework

Excerpts from Moody's Investors Service:

Draft regulation broadly positive for German regulated networks

Global Credit Research - 29 Jun 2016

London, 29 June 2016 -- According to Moody's Investors Service, [changes to the underlying legislation for the country's incentive-based regulatory framework](#) (Anreizregulierungsverordnung, or ARegV) would, if implemented, be credit positive for German energy networks.

"Overall, the proposals allow for a more transparent cost assessment as well as more timely recovery of investment expenditure, particularly for distribution networks", said Stefanie Voelz, Moody's Vice President and Senior Analyst. "This will bring the regulatory approach for cost and investment recovery of these companies more in line with the timely recovery mechanisms already in place for transmission system operators", added Ms Voelz.

The proposals, if implemented would result in (1) more timely investment cost recovery for distribution networks; (2) a stricter approach to efficiency; and (3) [increased transparency to make the regulatory regime more predictable](#).

The regulatory decisions, and subsequent court rulings on those decisions, that interpret legislation and rules

Excerpts from Moody's Investors Service:

Outlook stable for Australian regulated electric and gas networks over the next 12-18 months

Global Credit Research - 10 Jul 2017

Sydney, July 10, 2017 -- Moody's Investors Service says that business conditions in the regulated electric and gas network sector in Australia will remain stable over the next 12-18 months, [supported by a transparent and predictable regulatory framework](#), and the fact that the networks will remain an essential part of the energy supply chain.

"The stability and transparency of the regulatory framework in Australia underpins the credit quality of the country's regulated electric and gas network sector," says Simon Poidevin, a Moody's Analyst."

On the regulatory framework, Moody's report says that its stable outlook for the sector [incorporates the Federal Court ruling of May 2017, which reinforced the stability and predictability of the regulatory framework](#). Moody's also says that the [potential removal of the Limited Merits Review process — although credit negative for the sector — should be manageable within the stable outlook](#).

Form of Rate Regulation

Excerpts from Moody's Investors Service:

China's regulatory proposals on natural gas transmission tariffs are credit positive for natural gas transmission industry over the long run

Global Credit Research - 19 Aug 2016

Moody's Investors Service says China's [proposals on regulated transmission tariffs for inter-provincial natural gas pipelines](#) are credit positive for the midstream transmission industry over the long run because they would -
- if implemented -- [enhance the transparency and predictability of the regulatory framework](#).

On 16 August 2016, China's National Development and Reform Commission (NDRC) released its proposals on regulated transmission tariffs for public consultation. The public consultation period will end on 5 September 2016.

"The enhanced transparency and predictability of the tariff mechanism -- assuming the proposals are implemented -- would promote the development of the natural gas transmission industry over the long run," says Ivy Poon, a Moody's Assistant Vice President and Analyst. "[The proposed tariff setting would also improve the stability of national pipeline operators in terms of cost recovery and reducing volume risk in the future.](#)"

Currently, there is no structured tariff adjustment mechanism for the natural gas midstream transmission in China. Tariff setting is basically driven by the length of pipelines.

The proposed regulations would regulate transmission operators based on a "cost-plus-reasonable return" approach compared with the current tariff settings for each individual transmission pipeline.

91. The above excerpts illustrate how the design of the regulatory framework, which is prescribed by the framework's components, can affect a user's assessment of an entity's ability to recover costs and earn a fair rate of return.

Similarities and differences in the design of regulatory frameworks

Method

92. To gain insight into a jurisdiction's regulatory framework, we developed a questionnaire that was circulated to members of the IASB's Accounting Standards Advisory Forum and its Consultative Group on Rate Regulation ([Appendix B](#)). Members of these two groups also sent the questionnaire to other interested parties, such as rate-regulated preparers, to assist with the research.
93. Some of the responses are confidential, so we have not attributed our observations to individual submissions. Instead, this paper summarizes the responses to the extent possible in order to help readers better understand the similarities and differences in the design of various regulatory frameworks.
94. The completed questionnaires helped identify data points relevant to the objective of this research – whether those data points were included in the responses themselves, or resulted from further research we performed after reading the responses to understand rate regulation on a more global scale. Together, these data points are included in this research paper to the extent the information is publicly accessible on the internet.
95. We received a total of 12 completed questionnaires that provided insight into the regulatory frameworks of the countries listed in Exhibit 27.

Exhibit 27

Country	Sector	Industry
Belgium	Utilities	Electricity
		Gas
Brazil	Utilities	Electricity
Canada	Industrials	Transportation - Air
Germany	Utilities	Electricity
Japan	Utilities	Not specified
Portugal	Utilities	Electricity
		Gas
Spain	Utilities	Electricity
United Kingdom	Industrials	Transportation - Air
	Utilities	Water
United States	Utilities	Electricity
		Gas
		Water
South Africa	Utilities	Electricity
Multiple Countries	Industrials	Transportation - Toll Roads

96. Exhibit 27 confirms the observation in paragraph 44, that although rate-regulated activities are commonly found in the utilities sector, they could exist in other sectors as well.

Findings

97. From a legislative perspective, all respondents to the questionnaire noted that the rate regulator has the power to establish or approve the regulatory rate that the entity can charge to the end customer. Although the wording in the relevant piece of legislation varies, in each case the statutes and acts give power to the rate regulator. Furthermore, the overall objective of rate regulation is fairly consistent with that in Canada; namely, a regulatory rate that is fair and reasonable to both the regulated entity and the customer. In some jurisdictions, the legislation was written more from the rate-regulated entity's perspective.
98. Legislation is an important component of the regulatory framework because it not only affects the assessment of a rate-regulated entity's rights and obligations, but also the type of rights and obligations that arise. Exhibit 28 shows two examples illustrating this point (emphasis added).



Exhibit 28

Iberdrola, S.A and Subsidiaries (Spain) – Extracts from 2015 Audited Financial Statements (Accounting framework: IFRS Standards)
<p>Note 4.w) Settlements relating to regulated activities and receivables due to the financing of revenue shortfall</p> <p>b) Revenue shortfall. The Law 24/2013 of the Electricity Sector establishes that, in the case that an imbalance occurs due to revenue shortfalls in the settlement of the electricity sector, the amount may not exceed 2% of the estimated revenue of the system for that year. In addition, the accumulated debt by imbalances from previous years may not exceed 5% of the estimated revenue of the system. If these limits are exceeded, access fees will be reviewed at least in an amount equivalent to the total excess of those limits. This law additionally states that the part of the imbalance due to revenue shortfall, without exceeding the limits, and that is not compensated by raising tolls and fees, will be covered by the subjects of the settlements system proportionally to their remuneration for the activities they perform.</p> <p>The IBERDROLA Group estimates that the outcome of the settlements of the Spanish electrical system corresponding to 2015 will have a surplus. However, the provisional settlements made until 31 December 2015 presented a revenue shortfall. The amount of the deficit covered by the IBERDROLA Group amounted to EUR 150,473 thousand, which have been recognized under the "Other current financial assets" heading in the Consolidated statement of financial position at 31 December 2015 (Note 13.c).</p>
SNAM (Italy) – Extracts from 2015 Audited Financial Statements (Accounting framework: IFRS Standards)
<p>Note 3 – Measurement criteria: Revenue</p> <p>In the transportation segment*, the difference between the revenue recognised by the regulator (the "revenue cap") and the revenue actually accrued is recognised with a contra-entry in the balance sheet under "Other assets", if positive, or "Other liabilities", if negative. This difference will be reversed in the income statement in future years by way of tariff changes. In the regasification, storage and distribution segments, however, any difference between the revenue recognised by the regulator and the accrued revenue is recognised in the balance sheet item "Trade and other receivables", if positive, and in the item "Trade and other payables", if negative, inasmuch as it will be subject to cash settlement with the Energy and Environmental Services Fund (CSEA)**.</p> <p>*With regard to the capacity portion of revenue, penalties for exceeding committed capacity and balancing fees.</p> <p>**Article 1, paragraph 670 of Law 208 of 28 December 2015 (2016 Financial Stability Law) provides for the transformation of the Electricity Equalisation Fund (CCSE) into a state-controlled company called the Energy and Environmental Services Fund (CSEA) as of 1 January 2016. The transformation of the CCSE into a state-controlled company and the change of name has not altered in any way, or caused any discontinuity in the functional relations of, the CSEA (formerly the CCSE) with regulated entities and suppliers.</p>

99. The research findings in Section II indicated that the form of rate regulation can vary across Canada, resulting in various aspects of an entity's rates being subject to differing mechanisms (e.g., cost-of-service and performance-based mechanisms). These findings also seem common on a global scale, given all respondents to the questionnaire noted that, for the regulatory framework examined, certain aspects of the regulatory rate established or approved by the rate regulator for the current period are provisional to some extent. In other words, the regulatory rate for one or more future periods



will be adjusted to reflect differences between estimated amounts used to calculate the regulatory rate charged in the current period and actual amounts when they are known. The rate regulator establishes the form of rate regulation by prescribing how the rate-setting mechanism will work to recover or settle these differences (i.e., the rate-setting mechanism could be designed to encompass both cost of service or performance-based attributes when looking at different aspects of the regulatory rate).

100. As is commonly the case in hybrid forms of rate regulation, the rate-setting mechanism considers the risks intended to be assigned to customers, and other aspects that represent normal business risks to be borne by an entity's investors or owners. The three examples in Exhibit 29 illustrate this point (emphasis added).

Exhibit 29

Incentive Regulation in Germany (Transmission System Operator [TSO])	Companhia Energética de Minas Gerais (Brazil) Extract from Form 20F - 2015
<p>Extract from Comment Letter²⁷</p> <p>The revenue-cap determines the allowed revenue of the TSO for one regulation period of five years. It consists of imputed cost positions and several positions of cost compensation. Under certain criteria the TSO is allowed to adjust the revenue-cap for specific positions to allow reasonable cost compensation for new or changed elements.</p> <p>The revenue-cap splits into the following major elements:</p> <ul style="list-style-type: none"> • Non-influenceable cost: Certain cost, that cannot be controlled by the TSO are usually declared as non-influenceable cost. • Influenceable cost: Influenceable costs are all remaining cost, the TSO bears. • Changes in regulatory account: All variances between revenue-cap and actual revenues of a calendar year are recorded on a regulatory account. 	<p>Extract from Item 4 – Information on the Company:</p> <p>Rates</p> <p>Electric energy rates in Brazil are set by ANEEL, which has the authority to adjust and review rates in accordance with applicable concession contracts. Each distribution company's concession contract provides for an annual rate. In general, "Parcel A costs" are fully passed through to consumers. "Parcel A costs" are the portion of the rate calculation formula which provides for the recovery of certain costs that are not within the control of the distribution company. "Parcel B costs", which are costs that are under the control of the distributors, are restated for inflation in accordance with the National Consumers Price Index (Índice Nacional de Preços, or IPCA index⁽¹⁾). The average annual rate adjustment includes components such as the inter-year variation of Parcel A costs (CVA) and other financial adjustments, which compensate for changes in the company's costs up or down that could not be previously taken into account in the rate charged in the previous period.</p> <p>(1) - Since the signing of the new concession contract – The former Index was the IGP-M (General Market Price Index).</p>

²⁷ Information from 50Hertz Transmission GmbH's [comment letter](#) to the IASB's March 2013 Request for Information, "Rate Regulation." 4-5.

Eandis (Belgium) - Extract from Consolidated Financial Statements December 31, 2015

Extract from Chapter: Operating in a regulated environment

The costs are divided into three categories that also have another determination of its related income: **The exogenous costs are the costs for which the DSO has no control because they are imposed:** the cost of GEC, cogeneration certificates, premiums for RUE and social public service obligations. The non-exogenous costs include the cost of depreciation, the operational costs and the compensation for the cost of capital. Other costs include the fines.

The allowable income will be determined as follows: The income related to the exogenous costs is tailored to the exogenous costs. The income for the non-exogenous costs follows a stimulating revenue regulation to support efficient operations. **The remaining costs are borne by the distribution system operator.**

The capital remuneration is referred to by the VREG as the total of the average regulated assets at a stipulated cost of capital (4,8 %) and the accepted net operating capital at a determined level (4,1% and legal interest).

The recording of the exogenous costs at their actual value will give rise to differences between the rates and accounting costs. These balances should be booked on specific accounts and are named 'regulatory balance' in contrast to the differences from previous tariff methodologies that are named 'regulatory assets/liabilities'.

There are two regulatory balances allowed: a regulatory balance for **exogenous costs** and a regulatory balance for the **volume differences regarding the revenue for non-exogenous costs.**

101. One respondent to the questionnaire noted that it had made inquiries of entities in its jurisdiction that operate in other industries such as telecommunication, postal services and railway. These entities are regulated by the same rate regulator overseeing the entities in the electric and gas industries but have indicated they are not affected by any form of adjustment mechanism. We think this is an important observation because it illustrates that not all rate-regulated entities have a regulatory rate that is subject to a rate-adjustment mechanism. This observation also highlights how the design of the regulatory framework can be different based on what is prescribed by the framework's components, even in a situation when the rate regulator is potentially the same.
102. In hybrid forms of rate regulation, the rules and procedures established by the rate regulator often provide a basis for assessing what types of potential rate adjustments exist. Such an assessment could lead to identifying certain rights and obligations held by the entity as a result of performing its rate-regulated activities. The two examples in Exhibit 30 show how the rules and procedures can be very specific to differentiate between costs that are subject to a recovery mechanism and costs that intended to be borne instead by the entity and its investors (emphasis added).

Exhibit 30

Rate Regulator – National Energy Regulator of South Africa (NERSA)
<p>Excerpts from the Multi-Year Price Determination (MYPD) Methodology²⁸</p> <p>Section 6.1 – Treatment of Primary Energy</p> <p>The rules for Eskom to purchase electricity from IPPs [independent power producers] are as follows:</p> <ol style="list-style-type: none"> 1. Efficient purchases from IPPs will be allowed as a full pass-through, however; 2. to mitigate the risk of inefficient procurement, the Energy Regulator will review power purchase agreements (PPAs) between Eskom and IPPs before they may be signed; 3. the pass-through will be reviewed by NERSA to determine the efficiency and prudence with which pass-through costs have been incurred above the MYPD allowance; 4. the variances (difference between MYPD allowed costs and actual costs), together with reasons thereof, will be presented to NERSA 2 months prior to year-end based on actual costs for 9 months and projections for 3 months to year-end; and 5. This variance after review by NERSA will be debited / credited into the IPP Regulatory Clearing Account. <p>The rules for pass-through of other primary energy costs</p> <p>The other primary energy costs (nuclear, hydro, other costs) are considered to be stable and less risky and are therefore not allowed as pass-through. It is considered that Eskom must be able to reasonably accurately forecast these costs.</p>
Heathrow Airport Limited (UK) - Extract from 2015 Annual Report
<p>Excerpts from Strategic Report – Business Overview</p> <p>Heathrow is regulated by means of a per passenger price cap mechanism known as RPI +/- X, which incorporates an allowed return on the Regulatory Asset Base („RAB”).</p> <p>This form of economic regulation is also sometimes referred to as incentive regulation, in that Heathrow has an incentive to outperform the price control by means of attracting more passengers, reducing operating costs or delivering higher commercial revenues than forecast. If the opposite is the case, then Heathrow has to absorb the cost or lower revenue. There is no adjustment for shortfalls in passenger numbers or additional costs (except where Heathrow incurs additional security costs, above an established threshold, when implementing new security directives imposed by the EU or the UK Government).</p> <p>The price cap takes certain elements into account in the maximum allowable yield. These include an adjustment for additional or reduced security costs as a result of new UK or European security directives; reductions where capital expenditure project milestones are not delivered; a 2017 business rates revaluation factor and a service quality rebate scheme. In addition there is a mechanism known as the “K factor” which is designed to correct for any under recovery (dilution) or over recovery (concentration) in airport charges compared to the annual maximum allowable yield per passenger. Under or over recoveries generally arise due to changes in traffic mix or average loads compared to those forecast at the time prices were prospectively set for the relevant year.</p>

103. Responses to the questionnaire, and the data points in Exhibit 30 and in paragraph 99, collectively indicate that it is common for differences between forecasted and actual amounts to be tracked in some sort of regulatory account prescribed by the rate regulator. However, for various reasons, there could be situations in which these differences are not tracked, possibly because this is not required if there is no adjustment to the future regulatory rate.

²⁸ National Energy Regulator of South Africa, *Multi-Year Price Determination (MYPD) Methodology*, 19.

104. The research findings in Section II identified that regulatory decisions, and the subsequent court rulings on those decisions, can have both predictive and confirmatory value regarding the economic resources of, and claims against, the entity. However, the uncertainty about the recovery or settlement of the balances arising from rate regulation raises questions about the usefulness of such information.



105. Rather than examining actual rate decisions from other jurisdictions, we wanted to understand the process followed to arrive at such decisions. We did so by looking at data illustrating whether:

- the rate regulator undertakes procedures to ensure the reasonableness of the rate adjustments;
- there are indications that a rate regulator's decision on the rates to be charged to customers can be influenced by political pressures; and
- there exists within the regulatory framework an appeals process that would enable an entity to challenge decisions affecting its rights and obligations.

106. The reason we focused on process rather than decision outcomes is that the components of the regulatory framework help in assessing whether the entity has certain rights and obligations. However, in addition to legislation and rules, the extent to which rate regulators perform reasonableness checks on rate adjustments, the degree to which a jurisdiction is subject to political influence, and whether an appeals process exists, all contribute to when an entity's rights and obligations are enforceable.

107. All but one respondent to the questionnaire indicated that the rate regulator would undertake procedures of some sort to ensure the reasonableness of the amounts being tracked. These procedures can differ from one rate regulator to another. For example, the entity's books and accounts could be subject to regular inspections or audits. Others rate regulators may review regulatory accounts as part of the entity's periodic reporting for rate-setting purposes, or require additional reporting documents. The example in Exhibit 31 shows a rate regulator's reporting requirements.

Exhibit 31

Rate Regulator – Office of Water Services (United Kingdom)											
Excerpt from the website of the economic regulatory of the water sector in England and Wales: www.ofwat.gov.uk/regulated-companies/company-obligations/annual-performance-report/											
Annual performance report All companies (including small water companies) will need to submit a single, annual performance report for 2015-16 onwards to demonstrate compliance with their separate price controls. The annual performance report will include a baseline level of information. It will use audited information that can be reconciled back to statutory accounts where appropriate.	<p>The annual performance report should include the following information.</p> <table> <tr> <th>Section</th><th>Content</th></tr> <tr> <td>1. Regulatory financial reporting</td><td>A baseline level of historical cost financial information aligned to the way in which price controls (and associated regulatory performance commitments and incentives) have been set.</td></tr> <tr> <td>2. Price control and additional segmental reporting</td><td>Further disaggregation of revenue and costs, to allow stakeholders to review companies' performance against final determinations.</td></tr> <tr> <td>3. Performance summary</td><td>A high-level report of the performance of the appointed business, including outcome delivery and the regulatory financial results of the regulated business. As a minimum it will include reporting on outcomes and delivery service levels and cost performance.</td></tr> <tr> <td>4. Additional regulatory information</td><td>Additional financial and non-financial information, including (but not limited to), additional accounting policies, financeability statement, current cost reporting, totex analysis.</td></tr> </table>	Section	Content	1. Regulatory financial reporting	A baseline level of historical cost financial information aligned to the way in which price controls (and associated regulatory performance commitments and incentives) have been set.	2. Price control and additional segmental reporting	Further disaggregation of revenue and costs, to allow stakeholders to review companies' performance against final determinations.	3. Performance summary	A high-level report of the performance of the appointed business, including outcome delivery and the regulatory financial results of the regulated business. As a minimum it will include reporting on outcomes and delivery service levels and cost performance.	4. Additional regulatory information	Additional financial and non-financial information, including (but not limited to), additional accounting policies, financeability statement, current cost reporting, totex analysis.
Section	Content										
1. Regulatory financial reporting	A baseline level of historical cost financial information aligned to the way in which price controls (and associated regulatory performance commitments and incentives) have been set.										
2. Price control and additional segmental reporting	Further disaggregation of revenue and costs, to allow stakeholders to review companies' performance against final determinations.										
3. Performance summary	A high-level report of the performance of the appointed business, including outcome delivery and the regulatory financial results of the regulated business. As a minimum it will include reporting on outcomes and delivery service levels and cost performance.										
4. Additional regulatory information	Additional financial and non-financial information, including (but not limited to), additional accounting policies, financeability statement, current cost reporting, totex analysis.										

108. We think there is a correlation between a rate regulator's review of the rate adjustments and whether certain rights and obligations are enforceable. This is because a rate regulator's review adds a level of rigour to the entity's process for setting up, revising or reversing balances arising from rate regulation in a given reporting period.
109. We observe that some hold the view that the ability of rate-regulated entities to recognize balances arising from rate regulation may allow for the smoothing of financial results through the timing of when revenue or cost is recognized. In their paper, "Rate regulation of U.S. electric utilities: Does it deter earnings management?," K.E. Hughes, et al., address this point, explaining why it is important that rate-regulated entities recognize these balances and also how the rate regulator's review serves as a deterrent for the potential of earnings management.

"In recognizing the economic dynamics of rate regulation, GAAP allows "regulatory" assets and liabilities to be recognized on the balance sheet, accommodating deferred costs and revenues earned in advance, respectively. Regulatory assets are considered critical by regulators because they tend to act as "shock absorbers," as without this accounting treatment, electricity rates (based on passed-through costs) would tend to fluctuate significantly, to the detriment of "captured" utility consumers. ^[1] Therefore, GAAP provides more discretion to rate-regulated companies to defer or accrue costs and to accelerate revenues." ^[2]

"This accounting authoritative guidance provides rate-regulated electric utilities more discretion than other companies in making accrual decisions. For instance, an electric utility may depreciate certain capitalized costs (e.g. those resulting from natural disasters) over a nominally lengthy period of time in order to recover the costs through a temporary surcharge. The opportunity to affect accruals through the

application of FASB Codification Topic 980 suggests that electric utilities may have more latitude than other firms to manage earnings.

However, the counterpoint to the above argument is that electric utilities may, in fact, have less discretion. This argument stems from the fact that unlike other companies, the earnings of rate-regulated electric utilities are not only closely monitored by conventional financial statement users (e.g. investors, creditors, and financial analysts), but also are scrutinized in detail by regulators. Managers of electric utilities who decide to manage earnings face an increased risk of having their actions discovered and may, therefore, be more conservative in making accrual decisions than managers of non-regulated companies.” (emphasis added)

* – Since electric power is viewed as a public necessity, it is essential that rates be designed to ensure that the affordability of this necessity be maintained, and that abrupt rate increases, or “rate shocks” be minimized (Hughes & Matheny, 2009).

** – Note that current International Financial Accounting Standards (IFRS) make no accommodation to recognize regulatory assets or liabilities. Because of this situation, the Canadian investor-owned electric utility Fortis is preparing to adopt U.S. GAAP rather than IFRS beginning in 2012. Most Canadian publicly traded firms were required to adopt IFRS commencing January 2011 (Fortis, 2010).²⁹

110. As Hughes, et al., discuss, rate regulators consider the recognition of regulatory assets for rate-setting purposes necessary to avoid customer rate shocks. The recognition of these regulatory assets in an entity’s primary financial statements as well, reflects the entity’s rights and obligations for operating in this rate-regulated environment as a result of the presence of a rate regulator.
111. Given one of the rate regulator’s objective is to provide stable and affordable rates and ensure the financial viability of the entity, volatility in the financial statements as a result of not recognizing regulatory assets does not fully capture the economics of rate regulation. Thus, transparency of these balances is important to rate regulators, and also important to conventional financial statements users in understanding the entity’s economic reality when operating in a rate-regulated environment. Furthermore, the academic research paper points out that the additional level of scrutiny by the rate regulators deters entities from making aggressive decisions when it comes to recognizing balances arising from rate regulation.
112. Another factor to consider in a rate-regulatory environment is when the rate regulator completes its review of a rate case submitted by the entity. Regulatory lag, which is the time between when an entity requests a new rate and when the rate is adjusted, affects the degree to which its rights and obligations arising from the regulatory framework are enforceable. Regulatory lag increases the risk that balances arising from rate regulation previously determined to be appropriate for recognition

²⁹ K.E. Hughes, Joseph A. Johnston, Joseph B. Omonuk, and Michael T. Dugan, “Rate regulation of U.S. electric utilities: Does it deter earnings management?” *Advances in Accounting*, June 2012. 50-51. doi.org/10.1016/j.adiaac.2012.02.003.

may need to be subsequently remeasured. In his book, *Regulatory Risk and the Cost of Capital: Determinants and Implications for Rate Regulation*, B. Pedell addresses this point.

Chapter 4.1.2 Regulatory Review Period and Regulatory Lag

“The frequency of regulatory reviews affects the risk sharing between the regulated firm and the rate payers. In the hypothetical case of a continuous and instantaneous adjustment of rates to exogenous cost (and demand) changes, the risks associated with these changes are completely borne by rate payers. On the one hand, if rates are never adjusted, all the risks remain with the regulated firm.^[1] **In principle, the longer the regulatory lag after a cost change or the longer the scheduled regulatory review period, the higher is the portion of risk that has to be borne by the regulated firm.**” ^[**]³⁰(emphasis added)

* – Instead of a fixed review period boundaries within that the actual rate of return can vary without regulatory adjustments can be used. A review is triggered if the actual rate of return hits the lower or upper boundary. This results in a flexible review period. See section 4.1.4.

** – Cf. also Thompson (1991, 204).

113. In some types of regulatory frameworks, the rate regulator may not undertake any reasonableness checks. For example, two responses indicated the existence of a service concession arrangement between the rate regulator and the entity. One of these respondents indicated that the rate regulator does not undertake any reasonableness procedures. We think this has to do with whether the type of right conferred to the entity is unconditional to a certain degree because of legislation. In Exhibits 32 and 33, the excerpts from the financial statements of two entities describing service concession arrangements in Portugal, Brazil and Argentina illustrate this point (emphasis added).

Exhibit 32

EDP - Energias de Portugal, S.A. (Portugal) - Extract from December 31, 2015 Financial Statements (Accounting framework: IFRS Standards)	
<p>Note 2 – Accounting Policies</p> <p>aa) Group concession activities</p> <p>According to IFRIC 12, the infrastructures allocated to concessions are not recognised by the operator as tangible fixed assets or as financial leases, as the operator does not control the assets. These infrastructures are recognised according to one of the following accounting models, depending on the type of remuneration commitment of the</p>	<p>Note 3 – Critical Accounting Estimates and Judgements in Preparing Financial Statements</p> <p>Tariff adjustments (excerpts)</p> <p><i>Portugal</i></p> <p>Tariff adjustments in Portugal represent the difference between costs and income of the National Electricity and Gas System, estimated at the beginning of each period for purposes of calculating the tariff, and the actual costs and income of the System established at the end of each period. The tariff adjustments assets or liabilities are recovered or returned through electricity tariffs to customers in subsequent periods.</p>

³⁰ Pedell, Dr. Burkhard. *Regulatory Risk and the Cost of Capital: Determinants and Implications for Rate Regulation*. Berlin: Springer, 2006. 60

EDP - Energias de Portugal, S.A. (Portugal) - Extract from December 31, 2015 Financial Statements (Accounting framework: IFRS Standards)	
operator assumed by the grantor within the terms of the contract:	Decree-Law 237-B/2006 of 19 December, and Decree-Law 165/2008 of 21 August, recognised an unconditional right of the operators of the electricity sector to recover the tariff adjustments and related interest expenses, notwithstanding the form of the future payment or situations of insolvency and cessation of operations. Additionally, the legislation allows the transfer to third parties of the right to receive tariff adjustments. Therefore, under this legislation, regulated companies may provide to third parties, in whole or in part, the right to receive the tariff adjustments through the electricity and gas tariffs. In accordance with the accounting policy in force, the EDP Group books under the caption Revenues from energy sales and services and other - Electricity and network access, the effects of the recognition of tariff adjustments in the electricity sector, against Debtors and other assets from commercial activities and Trade and other payables from commercial activities.
<i>Financial Asset Model</i>	
This model is applicable when the operator has an unconditional right to receive certain monetary amounts regardless the level of use of the infrastructure within the concession and results in a financial asset recognition, booked at amortised cost.	
<i>Intangible Asset Model</i>	
This model is applicable when the operator, within the concession, is remunerated on the basis of the level of use of the infrastructure (demand risk) and results in an intangible asset recognition.	Decree-Law 87/2011 of 18 July also establishes the unconditional right of regulated operators in the natural gas sector to recover tariff adjustments and related interest expenses , notwithstanding the form of the future payment or situations of insolvency and cessation of operations, and allows the transfer to third parties of the right to receive tariff adjustments. EDP Group books under the caption Revenues from energy sales and services and other - Gas and network access, the effects of the recognition of tariff adjustments of Natural Gas, against Debtors and other assets from commercial activities and Trade and other payables from commercial activities.
<i>Mixed Model</i>	
This model is applicable when the concession includes simultaneously guaranteed remuneration and remuneration based on the level of use of the infrastructure within the concession.	<i>Brazil</i>
The concession contracts that exist currently in EDP Group are based in the mixed model, namely in the electricity and gas distribution concessions in Portugal and electricity distribution in Brazil.	On 25 November 2014, ANEEL made addendums to the concession contracts with brazilian electric distribution companies to reduce significant uncertainties regarding the recognition and realization of regulatory assets/liabilities that existed since 2010, when the IFRS were adopted in Brazil. As a consequence, the CPC issued on 28 November 2014, the OCPC 08 (Recognition of Certain Assets and Liabilities in Accounting and Financial Reports of Electric Distribution) which determines how to treat these regulatory assets/liabilities in the financial statements.
	Therefore, on 10 December 2014, EDP Brasil signed the Fourth and Fifth Addendum to the Concession Agreement, where it was established that, in the case of concession termination, the outstanding balances of any failure of payment or reimbursement by the tariff (assets and liabilities), will be considered on the indemnity calculation, based on the regulator pre-established regulations. As a consequence, in 2014, Bandeirante and Escelsa booked in its financial statements a net profit of 112,433 thousands of Euros and 79,587 thousands of Euros, respectively.

Exhibit 33

Autopista del Sol (Argentina)

Extract from December 31, 2015 Financial Statements (Accounting framework: IFRS Standards)

Note 2 - Summary of Significant Accounting Policies

2.5 Intangible Assets

Based on this Interpretation, the operator's right to charge a toll rate to the users of the highway is recognized as an intangible asset, which must be amortized over the concession period, using the method that best reflects the expected pattern of consumption of the expected future economic benefits embodied in the asset. Additionally, if the operator has an unconditional contractual right to receive cash or another financial asset from the Grantor **regardless the use given to the infrastructure**, the operator **should recognize a financial asset to reflect such right** in the operator's financial statements.

Whereas the contract entered into by the Company comprise a free public works contract and the grant to operate the toll highway, **with no unconditional right to receive any specific amount of cash or another financial asset during the contract period for the construction or improvements made to infrastructure, no financial assets related to the Concession Contract exist**. The right of the Company, under the Concession Contract, is to receive — as the only compensation for the work performed and/or to be performed and for the operation and maintenance of said infrastructure — from the highway's users a toll for its use or a rental for the location of service areas for commercial exploitation.

114. In the description of the service concession arrangements in Portugal and Brazil, the entity's assessment of whether there is an unconditional right involved looking at the legislative component of the regulatory framework. The responses to the questionnaire also suggest that service concession arrangements may be more common in some countries than in others depending on the form of rate regulation the rate regulator adopts. Thus, the interaction with IFRIC 12 *Service Concession Arrangements* and rate regulation will need to be further examined as the IASB's project progresses to minimize the overlap in accounting for economically similar arrangements.
115. With respect to understanding the degree to which political influence exists in rate regulation, the responses to the questionnaire varied (with one respondent unable to speak to this point). Political influence, and the degree to which it occurs, is a sensitive and judgmental area to assess. However, it seems reasonable that the existence of political influence is not uncommon given the role of the rate regulator vis-à-vis the government, the constituents affected by the public good or service, and the entity. The two examples in Exhibits 34 and 35 illustrate the kind of political influence that could exist in a jurisdiction (emphasis added).

Exhibit 34

Engie (France) Extract from December 31, 2015 Financial Statements (Accounting framework: IFRS Standards)
<p>Note 27 – Legal and Anti-Trust Proceedings</p> <p>27.1.4 Freeze of regulated natural gas tariffs in France</p> <p>In July 2013, ANODE, the French national energy retailers association (Association nationale des opérateurs détaillants en énergie) launched an appeal with the Conseil d'État requesting the annulment of Decree No. 2013-400 of May 16, 2013 amending Decree No. 2009-1603 of December 18, 2009 relating to regulated natural gas tariffs.</p> <p>ANODE contends that the regulated natural gas tariff framework is inconsistent with the objectives of Directive 2009/73/EC concerning common rules for the natural gas internal market, and Article 106.1 of the Treaty on the Functioning of the European Union.</p> <p>On December 15, 2014, the Conseil d'État ordered a stay of proceedings pending the Court of Justice of the European Union's preliminary ruling on these matters.</p>

Exhibit 35

California (United States) Extract from a U.S. News Article – May 10, 2013
<p>E&E News – Utility winds rate increase as costs of climate policies rise</p> <p>A San Diego utility yesterday won the right to hike power bills an average 12.2 percent, funding that in part will go toward costs connected with California's climate and energy policies. The California Public Utilities Commission authorized San Diego Gas & Electric Co. (SDG&E) to collect \$1.73 billion for three years. The average customer will pay an additional \$9.95 per month.</p> <p>The CPUC said additional cash would, among other things, allow SDG&E "to install smart grid technologies to better monitor the electric grid, to improve reliability as a result of the growth in renewable power in SDG&E's service territory, and to respond more quickly to outages."</p> <p>The money also is intended to provide "the necessary monies to maintain and replace aging electric and gas delivery infrastructure so as to ensure the safe and reliable delivery of electricity and natural gas to customers."</p> <p>The funding also will cover the costs of complying with state and federal environmental regulations, the CPUC said.</p> <p>Residents who consume the most electricity will bear the brunt of the costs, SDG&E said. Most utilities in California use tiered rates, which charge more per kilowatt-hour as usage climbs. That's intended to drive conservation and help lower-income people. Under current state law, rates for customers in the lower two tiers can rise only 3 to 5 percent per year, SDG&E said.</p> <p>[CPUC Commissioner Mark] Ferron said the increase appears larger than it actually is because the case was delayed 20 months. The funding covers the period of 2012 through 2015, so ratepayers must make up the difference of money that was not collected.</p>

116. Exhibits 34 and 35 show how political and legal aspects can be intertwined. Referring back to paragraph 90, the extract from Moody's showed how court rulings are a factor that can affect the transparency and predictability of the regulatory framework. When an entity has the ability to seek relief from political influences through the rate regulator, or through a court or tribunal, that ability contributes to the assessment of whether the entity's rights and obligations are enforceable.
117. Nine of the 12 responses to the questionnaire indicated that the entity had such an ability to challenge or appeal the results of the rate-regulatory decisions in a court or tribunal whose decision is binding on both the rate regulator and the entity. The example in Exhibit 36 shows how legislation can give an entity the ability to challenge a rate regulator's decision (emphasis added).

Exhibit 36

California (United States of America)
<p>Legislation extracted from California's Public Utilities Code – Division 1, Part 1, Chapter 9. Hearings and Judicial Review</p> <p>Article 2. Rehearings [1731 - 1736]</p> <p>1731. (a) The commission shall set an effective date when issuing an order or decision. The commission may set the effective date of an order or decision before the date of issuance of the order or decision.</p> <p>(b) (1) After an order or decision has been made by the commission, a party to the action or proceeding, or a stockholder, bondholder, or other party pecuniarily interested in the public utility affected may apply for a rehearing in respect to matters determined in the action or proceeding and specified in the application for rehearing.</p>

118. One of the respondents that indicated an inability to mount a challenge or appeal in a court or tribunal was an entity whose Board of Directors acts as the rate regulator. However, the legislation allows for an appeal process where the customer can appeal the rate decision made by the Board of Directors to the federal government agency. In Exhibit 37, the extract from the financial statements of a Canadian entity describes such an arrangement (emphasis added).

Exhibit 37

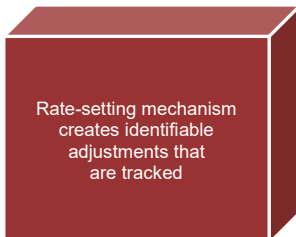
NAV Canada Extract from Audited Financial Statements August 31, 2016 (Accounting framework: IFRS Standards)
<p>Note 1 – Reporting entity</p> <p>The charges for civil air navigation services provided by the Company are subject to the economic regulatory framework set out in the ANS Act. The ANS Act provides that the Company may establish new charges and amend existing charges for its services. In establishing new charges or revising existing charges, the Company must follow the charging principles set out in the ANS Act. These principles prescribe that, among other things, charges must not be set at levels which, based on reasonable and prudent projections, would generate revenue exceeding the Company's current and future financial requirements in relation to the provision of civil air navigation services. Pursuant to these principles, the Board of Directors of the Company (the Board), acting as rate regulator, approves the amount and timing of changes to customer service charges. The impacts of rate regulation on the Company's consolidated financial statements are described in note 9.</p> <p>The ANS Act requires that the Company communicate proposed new or revised charges to customers in advance of their introduction and to consult thereon. Customers may make representations to the Company as well as appeal revised charges to the Canadian Transportation Agency on the grounds that the Company either breached the charging principles in the ANS Act or failed to provide statutory notice.</p>

119. The data in this section indicates that regulatory frameworks of various jurisdictions can be quite complex and different in design. At the same time, the data suggests that similarities exist, as described in Exhibit 38.

Exhibit 38

Similarities in Design of Regulatory Frameworks

Description



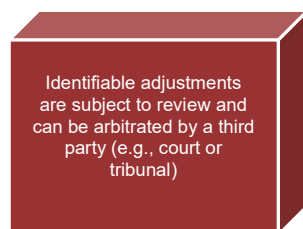
(See paragraph [99](#), [100](#) and [102](#) for data points illustrating this similarity)

- Identifiable adjustments are the differences between what the rate regulator has determined as the provisional aspects of the current period's regulatory rate, and the actual results when the entity provides the regulated goods or services at that rate. Such provisional aspects can be viewed as the risks the rate regulator intends to be borne by the customer. The data indicates that while such identifiable adjustments are commonly found in regulatory frameworks, variations exist in terms of what the rate regulator has decided should be the provisional aspects of the regulatory rate.



(See paragraphs [97](#)-[103](#) for data points illustrating this similarity)

- Expectations about the recovery or settlement of balances arising from rate regulation through the adjustment of future rates are formed through the examination of legislation, the rules and procedures established by the rate regulator, and to some degree, the precedence set in regulatory decisions and subsequent court decisions. However, if the rate regulator requires such recovery or settlement in a manner other than adjusting rates, an assessment of whether this changes the type or right or obligation arising from the regulatory framework is needed.



(See paragraphs [104](#)-[112](#) and paragraphs [117](#)-[118](#) for data points illustrating this similarity)

- The rate regulator's review of identifiable adjustments (if tracked) and the entity's ability to challenge decisions it views as inconsistent with existing legislation and rules, contribute to the enforceability of the entity's rights and obligations.

120. The similarities identified in Exhibit 38 are not an exhaustive list of ones that could exist in the design of the regulatory frameworks examined in this section. However, they illustrate the notion that a certain design could result in enforceable rights and obligations.

What this section demonstrates

121. When the design of the regulatory framework (which the framework's components prescribe) supports the enforceability of an entity's rights and obligations, it is important that users are told. Such information provides users with a complete picture of an entity's financial performance and position, and helps with estimating the entity's future cash flows as a result of operating in a rate-regulated environment. It is important for users to be able to assess an entity's ability to transfer risks intended by the regulatory framework to be borne by the customer, and earn a fair rate of return when providing rate-regulated goods and services.

Section IV: Strength of Regulatory Framework and the Effects

Key Observations

- ❖ The strength of the regulatory framework can affect the recovery of the entity's economic resources, and settlement of claims against it.
- ❖ The nature and risk profile of balances arising from rate regulation can vary, resulting in differing degrees of uncertainty associated with those balances.
- ❖ Regulatory decisions that differ from the entity's interpretation of the legislation and rules can affect the subsequent measurement of recognized balances arising from rate regulation, and reduce the assessed strength of the regulatory framework.

122. One of the primary concerns expressed during the IASB's project on rate-regulated activities relates to the uncertainties about the recoverability of debit balances arising from rate regulation. We note that the strength or weakness of the regulatory framework can affect the recovery of the rate-regulated entity's economic resources and settlement of claims against it.

The Canadian experience

123. This section looks at data from a sample of rate-regulated entities demonstrating the Canadian experience with:

- the recovery of previously recognized debit balances arising from rate regulation (i.e., the periods over which balances are recovered, and the extent to which they become impaired or are written off);
- the trending of regulatory balances (i.e., are they growing or shrinking in total; how do debit balances arising from rate regulation compare in total with credit balances arising from rate regulation); and
- the different nature and risk profiles of debit balances arising from rate regulation that could influence recoverability patterns.

Write-offs or impairments of debit balances arising from rate regulation

124. Stakeholders have told us that write-offs or impairments of previously recognized debit balances arising from rate regulation have been minimal. We have heard anecdotally that a few rate-regulated entities have obtained a legal opinion to support their right to recover prudently incurred costs, even in a scenario in which the entity ceases operations.
125. To explore the extent of write-offs or impairments of debit balances arising from rate regulation, we selected a sample of 12 electric utilities and looked at their audited financial statements over a five-year period.³¹

³¹ All the sampled entities have fiscal years ending December 31, except for New Brunswick Power, Manitoba Hydro, and BC Hydro, which have fiscal years ending March 31. For ease of presentation in Exhibits 39 and 41, the data displayed for these three entities under each column heading relates to the previous calendar year.

Exhibit 39

Sample of Canadian Electric Utilities					
(in millions)	Debit Balances Arising from Rate Regulation (Note 2)				
Year	2011	2012	2013	2014	2015
Yukon Energy	\$ 18.7	\$ 21.5	\$ 20.2	\$ 22.9	\$ 21.2
Toronto Hydro	143.0	121.2	241.5	197.1	241.7
Newfoundland Power	366.2	417.2	372.3	357.5	345.4
New Brunswick Power	943.0	1,072.0	1,051.0	1,034.0	1,021.0
Manitoba Hydro	330.0	321.0	371.0	410.0	486.0
Hydro-Québec (Note 1)	39.0	40.0	9.0	4,741.0	4,061.0
BC Hydro	4,314.0	4,741.0	4,928.0	5,714.0	6,324.0
ENMAX	123.0	77.2	83.7	66.6	34.5
Hydro Ottawa	12.0	9.6	12.5	20.6	14.4
Emera	453.8	474.1	616.1	602.7	699.5
Ontario Power Generation	5,017.0	6,478.0	5,400.0	7,191.0	5,907.0
AltaLink	33.0	42.7	66.8	117.3	165.9
	\$ 11,792.6	\$ 13,815.4	\$ 13,172.0	\$ 20,474.8	\$ 19,321.6
Write-offs or Impairments of Debit Balances Arising from Rate Regulation					
Year	2011	2012	2013	2014	2015
Yukon Energy	\$ -	\$ -	\$ -	\$ -	\$ -
Toronto Hydro	3.8	-	-	-	4.4
Newfoundland Power	-	-	-	-	-
New Brunswick Power	-	-	-	-	-
Manitoba Hydro	-	-	-	-	-
Hydro-Québec (Note 1)	-	-	-	-	-
BC Hydro	34.0	-	-	-	-
ENMAX	-	-	-	-	-
Hydro Ottawa	0.3	-	-	-	-
Emera	-	7.2	-	6.0	-
Ontario Power Generation	-	-	7.0	-	-
AltaLink	-	-	-	-	-
	\$ 38.1	\$ 7.2	\$ 7.0	\$ 6.0	\$ 4.4
Write-offs or Impairments as a Percentage of Total Debit Balances Arising from Rate Regulation	0.32%	0.05%	0.05%	0.03%	0.02%

Note 1 - The increase from 2013 to 2014 was primarily due to the rate regulator authorizing changes to certain accounting policies for rate-setting purposes as a result of the entity changing from pre-changeover Canadian GAAP to U.S. GAAP.

Note 2 - Staff notes that there are also debit balances arising from rate regulation related to construction activities, which are capitalized within property, plant and equipment. Those balances are generally not part of the above debit balances (unless the entity applied IFRS 14 which requires regulatory deferral account debit balances to be presented as a separate line item). Regulatory decisions can also affect those non-deferral or non-variance type of accounts.

126. The data illustrates that write-offs or impairments of debit balances arising from rate regulation have been minimal in Canada. The disallowance of costs is generally a result of a regulatory decision after the rate regulator has further reviewed the cost. In other cases, the entity may decide to set up a provision if there is doubt about the recovery of existing balances arising from rate regulation.

127. The examples of note disclosures in Exhibit 40 explain the reason for writing off, or establishing a provision against, a debit balance arising from rate regulation.

Exhibit 40

Extracts from Note Disclosures of Audited Consolidated Financial Statement
<p>Toronto Hydro – 2011 (Accounting framework: IFRS Standards)</p> <p>Note 2 – Regulation, (d) Regulation, Contact Voltage (Note, figures below are in dollars)</p> <p>On December 10, 2009, the OEB issued an initial decision in regard to the costs incurred in 2009 for the remediation of safety issues related to contact voltage relating to LDC's electricity distribution infrastructure. The decision provided for the recovery of allowable actual expenditures incurred above the amount deemed as controllable expenses in LDC's 2009 approved electricity distribution rates. At the time of the decision, the Corporation estimated the allowable recovery of costs at \$9,050,000.</p> <p>On October 29, 2010, the OEB issued a second decision in the matter, following further review of costs incurred by LDC. In this decision, the OEB deemed the balance allowable for recovery at \$5,296,000. The variance from the Corporation's original estimate is mainly due to the OEB's interpretation of the definition of controllable expenses used to determine the final allowable recovery. In connection with this decision from the OEB, the Corporation revised its recovery estimate for contact voltage costs, resulting in an increase in operating expenses of \$3,754,000 in 2010. On November 18, 2010, LDC filed a motion to review the decision with the OEB seeking an amendment to allow for recovery in accordance with the initial decision rendered on December 10, 2009. On March 25, 2011, the OEB issued its decision on the LDC motion, denying the requested additional recovery.</p>
<p>BC Hydro – 2011-2012 (Accounting framework: legislative GAAP)</p> <p>Note 4 – Regulation</p> <p>Other Regulatory Accounts – Under Direction 3, total Taxes Regulatory Account liability balance of \$14 million was closed and fully amortized into rates and the remaining balance of the PEI asset of \$34 million was fully amortized and closed as of March 31, 2012 and will not be included in rates.</p>
<p>Hydro Ottawa – 2011 (Accounting framework: IFRS Standards)</p> <p>Note 7 – Net Regulatory Assets and Liabilities, (d) Provision for doubtful recovery (Note, figures below are in thousands)</p> <p>The Corporation continues to assess the likelihood of recovery of all regulatory assets subject to recovery through a future rate filing. The absence of OEB approval is a consideration in this evaluation. The Corporation has recorded a net provision of \$331 [2010 – \$2,252] against regulatory assets. If future recovery becomes assured, the Corporation will recognize the recovery in the income for the period during which such a decision is made.</p>
<p>Emera – 2014 (Accounting framework: U.S. GAAP)</p> <p>Note 5 – Regulated Fuel Adjustment Mechanism and Fixed Cost Deferrals</p> <p>The regulated fuel adjustment mechanism ("FAM") included in the Consolidated Statements of Income for NSPI includes the effect of prudently incurred fuel for generation and purchased power and fuel-related costs ("Fuel Costs") in both the current and preceding years, and as detailed in the table below:</p> <ul style="list-style-type: none"> • The difference between actual Fuel Costs and amounts recovered from customers in the current year. This amount is deferred to a FAM regulatory asset in "Regulatory assets" or a FAM regulatory liability in "Regulatory liabilities" on the Consolidated Balance Sheets; and • The recovery from (rebate to) customers of under (over) recovered fuel costs from prior years. <p>Pursuant to the FAM Plan of Administration, NSPI's fuel costs are subject to independent audit. On July 2, 2014, the FAM audit findings and recommendations relating to fiscal 2012 and 2013 were publicly released and recommended four disallowances totalling \$7.0 million. On January 20, 2015, the UARB disallowed \$6.0 million of 2012 and 2013 fuel-related costs, which included interest of \$0.9 million. The disallowances resulted in a</p>

Extracts from Note Disclosures of Audited Consolidated Financial Statement
reduction in the amount of FAM deferral at year-end and resulted in an after-tax impact to 2014 net income of \$3.3 million.
Ontario Power Generation – 2013 (Accounting framework: U.S. GAAP)
Note 5 – Regulatory Assets and Regulatory Liabilities
In March 2013, the OEB approved the settlement agreement between OPG and intervenors on all aspects of OPG's September 2012 application requesting approval to recover balances in the authorized variance and deferral accounts as at December 31, 2012 (the Settlement Agreement). This resulted in approval of \$1,234 million recorded in the authorized variance and deferral accounts as at December 31, 2012, deferral for future review of \$34 million recorded in certain accounts as at December 31, 2012, and a write-off of \$7 million of interest recorded in certain accounts as at December 31, 2012.

Trending of balances arising from rate regulation

128. While recoverability of debit balances arising from rate regulation is a primary concern, we also wanted to understand the trend of balances arising from rate regulation in general. We looked at credit balances arising from rate regulation that were recognized by the same 12 electric utilities over the same five-year period.

Exhibit 41

Sample of Canadian Electric Utilities					
(in millions)	Credit Balances Arising from Rate Regulation				
Year	2011	2012	2013	2014	2015
Yukon Energy	\$ 12.2	\$ 15.6	\$ 19.0	\$ 20.3	\$ 21.3
Toronto Hydro	211.2	196.8	183.1	173.0	171.6
Newfoundland Power	133.9	133.7	137.8	138.4	139.8
New Brunswick Power	-	-	-	-	-
Manitoba Hydro	53.0	24.0	22.0	23.0	52.0
Hydro-Québec (Note 1)	-	-	-	350.0	441.0
BC Hydro	279.0	307.0	229.0	281.0	416.0
ENMAX	1.2	3.3	1.9	2.5	13.5
Hydro Ottawa	58.1	67.0	52.8	34.2	40.8
Emera	131.0	110.7	151.2	201.9	370.6
Ontario Power Generation	154.0	41.0	24.0	44.0	60.0
AltaLink	27.0	34.5	33.0	8.1	62.5
	\$ 1,060.5	\$ 933.6	\$ 853.8	\$ 1,276.4	\$ 1,789.1

Note 1 - The increase from 2013 to 2014 was primarily related to the rate regulator's review of useful lives for depreciation purposes of property, plant and equipment related to rate-regulated activities.

Credit Balances as a Percentage of Debit Balances (Arising from Rate Regulation)				
2011	2012	2013	2014	2015
9.0%	6.8%	6.5%	6.2%	9.3%

129. The data in Exhibit 41 shows that credit balances arising from rate regulation are generally far less in magnitude than debit balances arising from rate regulation. This trend could suggest that under-recovery of an entity's revenue requirement (which results in the carry forward of regulator-approved debit balances for inclusion in future rates) is fairly common in Canada.
130. Another contributing factor could be that with aging infrastructure, the cost of replacement or renewal work needs to be spread over time so that customer rates do not fluctuate significantly. Capital infrastructure activities may result in debit balances arising from rate regulation. Rate regulators in Canada usually permit an allowance for funds used during construction to be capitalized as part of property, plant and equipment based on the rate-regulated entity's weighted average cost of capital. This enables the rate-regulated entity to earn a rate of return on these capital infrastructure costs such that the timing of when they are recovered is less significant. The growth in debit balances arising from rate regulation could also relate to temporary timing differences that are reversed when the rate impacts are realized.³²
131. Increasing debit balances arising from rate regulation do not necessarily imply that there are recoverability issues with these amounts. However, significantly prolonged collection periods do increase the risk of recoverability, similar to receivables balances.

Influences on recoverability patterns of debit balances arising from rate regulation

132. Based on the data collected, the period over which a particular debit balance arising from rate regulation is recovered and, indeed, the risks associated with its recovery, are influenced by:
- (a) the nature of the debit balance; and
 - (b) the rate regulator's approach to ensuring that the period over which the balance is recovered neither creates rate shocks (i.e., significant increases in customer rates in a particular year) nor unfairly burdens an entity by delaying cash inflows associated with the debit balance.

³² For example, some rate regulators may require entities to account for pensions or income taxes on a cash basis. In the case of income taxes, entities record a deferred income tax asset or liability for temporary differences, as well as balances arising from rate regulation, to reflect future recoveries from or refunds to ratepayers. These balances are reversed when the temporary differences reverse.

133. The nature of the debit balance has a direct impact on the risks associated with its recovery, and could affect the period over which it is collected. Members of the IASB's Rate-regulated Activities Consultative Group have suggested that categorizing debit balances according to their risk profile would be more helpful to users of financial statements in predicting future revenue and cash flows.
134. Exhibit 42 describes the possible categories of balances (both debit and credit balances) arising from rate regulation identified by the Consultative Group.³³

Exhibit 42

Possible categories of balances arising from rate regulation:

- 'mechanical' adjustment balances that are expected to be recovered/reversed in the short term, such as 'flow-through' commodity price adjustments, which involve little judgment and are relatively easy to measure;
- other adjustment balances that are expected to be recovered/reversed in the short term, but are somewhat subjective, such as bonuses for achieving qualitative performance targets; and
- adjustment balances that may be more readily quantifiable but are only recoverable in the longer term and may be subject to more uncertainty about recovery across multiple regulatory periods.

135. We looked at the recovery period and categories of debit balances arising from rate regulation for five of the 12 Canadian rate-regulated entities sampled to provide a general sense of how the recovery periods can vary. Exhibit 43 presents data on the expected recovery of debit balances arising from rate regulation, broken down by length of recovery period. For each recovery period, Exhibit 44 analyzes the nature of debit balances having that recovery period.

³³ IASB Rate-regulated Activities Consultative Group, [Meeting Summary](#), March 2015, paragraph 28.

Exhibit 43

Recovery Period of Debit Balances Arising from Rate Regulation

Five Sampled Entities as at December 31, 2015

(except for New Brunswick Power and Manitoba Hydro, which is as at March 31, 2016)

(in millions)

Remaining recovery / reversal period (Note 1)	Hydro-Québec	%	New Brunswick Power	%	Manitoba Hydro	%	Newfoundland Power	%	Toronto Hydro	%
1 – 24 months	\$ 361.0	8.9%	\$ -	0.0%	\$ -	0.0%	\$ 7.2	2.1%	\$ 46.6	19.3%
25 – 60 months	17.0	0.4%	-	0.0%	9.0	1.9%	-	0.0%	112.1	46.4%
61 – 120 months	800.0	19.7%	-	0.0%	323.0	66.5%	45.6	13.2%	-	0.0%
121+ months	6.0	0.1%	1,021.0	100.0%	33.0	6.8%	-	0.0%	-	0.0%
Indeterminate*	2,877.0	70.8%	-	0.0%	121.0	24.9%	292.6	84.7%	83.0	34.3%
Total	\$ 4,061.0	100.0%	\$ 1,021.0	100.0%	\$ 486.0	100.0%	\$ 345.4	100.0%	\$ 241.7	100.0%

Note 1 – There is a lack of uniformity in the way the recovery period is disclosed across the sampled entities (i.e., sometimes ranges or exact number of months are disclosed). When ranges were disclosed, the mid-point of the range was used for purposes of this table.

* There can be various reasons why the recovery period is indeterminate:

- Some debit balances are reversed when their rate impacts are realized.
- The recovery period is pending determination by the rate regulator as part of a future regulatory proceeding.

Exhibit 44

Remaining recovery / reversal period	Examples of nature of debit balances arising from rate regulation
1 – 24 months	Commodity cost variances
25 – 60 months	Specific items to be spread over a longer period authorized by the regulator
61 – 120 months	Costs related to long-term projects and infrastructure planning
121+ months	Programs for construction or refurbishment of infrastructure assets
Indeterminate	Policy difference between the accounting specified by the regulator for rate-setting purposes and general purpose financial reporting requirements (e.g., as occurs sometimes with employee future benefits and income taxes)

136. Exhibits 43 and 44 show the diversity in nature of debit balances arising from rate regulation and plans for their recovery, and reaffirm that some balances may be subject to more uncertainty regarding the timeline for recovery than others. Knowledge of the expected recovery pattern for debit balances arising from rate regulation is important to determine whether there could be measurement challenges associated with the balances.

137. Standard & Poor's (S&P) publication, "Analyzing U.S. Rate-Regulated Utilities: The Magic of Regulatory Assets and Liabilities," discusses the importance of timely recovery:

"One of our primary concerns with U.S. regulatory accounting occurs when a company's regulatory assets materially grow with uncertain recovery prospects. The California energy crisis of 2000 and 2001 highlighted this when the regulated utilities could only collect a predetermined amount for electricity but had to purchase electricity at much higher market prices, leading to a material weakening of credit quality. Most companies now have some form of a fuel- or purchased-power adjustment clause that allows for timely recovery of these costs--greatly reducing the risks and enhancing credit quality.

The high credit quality and (mostly) investment grade ratings for the utility industry are predicated on its monopolistic nature, providing an essential service, and credit-supportive rate regulation. Because a utility's ability to effectively manage regulatory risk is an integral component of credit quality, our assessment of a regulatory jurisdiction's credit supportiveness and a utility's ability to manage regulatory risk within its regulatory jurisdiction are major factors for determining a utility's credit risk (see "Utility Regulatory Assessments For U.S. Investor-Owned Utilities," Jan. 7, 2014.)"³⁴

138. The concern S&P pointed out in the excerpt above is shared by those who oppose the recognition of debit balances arising from rate regulation because of the uncertainty associated with their recovery. The concern highlights:

- (a) the importance of a rate regulator deciding on reasonable and achievable recovery periods in order to mitigate the risk associated with prolonged growing balances; and
- (b) the need for adequate evidence from rate regulators demonstrating the enforceability of rights or obligations created through their regulatory decision that will result in an economic inflow or outflow within a reasonable period.

139. From an international perspective, Exhibit 45 shows two examples of entities outside Canada that have recognized debit or credit balances arising from rate regulation. Their note disclosures explain the nature of these balances and the expected period of recovery or settlement (emphasis added below).

³⁴ Myers, Sherman A. *Analyzing U.S. Rate-Regulated Utilities: The Magic of Regulatory Assets and Liabilities*. S&P, August 25, 2014. This material is reproduced with permission of Standard & Poor's Financial Services LLC.

Exhibit 45

Extracts from Financial Statements
<p>Korea Gas Corporation (Korea) – 2015 Audited Consolidated Financial Statements (Accounting framework: Korean IFRS)</p> <p>Recorded in “Other non-financial assets”</p> <p>Note 15 – Non-Financial Assets</p> <p>In accordance with the standard for natural gas supply price and the guidelines for raw material cost passthrough adjustment system for city gas and power generation, the settled income, the difference between actual cost incurred and current year’s revenues, is reflected in following year’s rates upon the approval of the government.</p> <p>The Group recognizes settled income by adjusting cost of sales, and relevant assets and liabilities as other non-financial assets and non-financial liabilities, respectively.</p>
<p>CLP Holdings Ltd. (Hong Kong) – 2015 Audited Consolidated Financial Statements (Accounting framework: Hong Kong Financial Reporting Standards)</p> <p>Recorded in “Non-current liabilities”</p> <p>Note 22 – Fuel Clause Account</p> <p>Cost of fuel consumed by CLP Power Hong Kong is passed on to the customers. The variations between the actual cost of fuel and the fuel cost billed are captured in the fuel clause account. The balance of the account (inclusive of interest) represents amounts over-recovered or under-recovered and is treated as an amount due to or from customers. Interest charged to customers on the amount under-recovered is based on the actual borrowing cost of CLP Power Hong Kong, whilst interest is credited to customers at prime rate on the amount over-recovered.</p> <p>Note 23 – Scheme of Control Reserve Accounts</p> <p>The Tariff Stabilisation Fund, Rate Reduction Reserve and Rent and Rates Interim Refunds of the Group’s major subsidiary, CLP Power Hong Kong, are collectively referred to as SoC reserve accounts.</p> <p>“Scheme of Control” is explained in the following extract from the entity’s Annual Report:</p> <p>Since financial year 1964, the electricity-related operations of CLP Power Hong Kong and CAPCO (the SoC Companies) have been governed by a Scheme of Control Agreement (SoC) with the Hong Kong Government. The SoC specifies the SoC Companies’ obligations to supply adequate and reliable electricity supplies to customers at the lowest reasonable cost and the mechanism for Hong Kong Government to monitor their financial affairs and operating performance. In return, CLP Power Hong Kong is allowed to charge tariffs designed to recover the operating costs (including tax) and allowed net return of the SoC Companies.</p> <p>The current SoC took effect from 1 October 2008. The SoC covers a period of 10 years to 30 September 2018, and provides that the SoC Companies will continue to earn the permitted return until 30 September 2023 on all approved investments.</p> <p>The current SoC includes a provision to give the SoC Companies protection for stranded costs, which may arise as a result of future changes to the market structure which adversely impact on the SoC Companies’ ability to recover and to earn returns on existing investments made in good faith in accordance with the SoC. These costs will include the costs of investments, fuel and power purchase agreements previously approved by the Hong Kong Government. If stranded costs arise after the SoC Companies have implemented mitigation measures reasonably required by the Hong Kong Government, the SoC Companies are entitled to recover them from the market, consistent with international practice. Three years before market changes are introduced, the SoC Companies and the Hong Kong Government will agree on the amount of stranded costs and the mechanism for their recovery by the SoC Companies.</p>

What this section demonstrates

140. In order to assess the amount, timing and uncertainty of a rate-regulated entity's future cash flows, users need financial information that signals changes in the entity's right or obligation to collect or return amounts identified in previous regulatory decisions. The strength or weakness of the entity's regulatory framework can affect the recovery and settlement of amounts arising from those rights and obligations and, thus, their measurement.

Section V: Decision-making Effects of Financial Information on Rate-regulated Activities

Key Observations

- ❖ The regulatory framework is a key factor considered by debt and equity analysts, as well as credit rating agencies, because it can affect the entity's financial performance and future cash flows.
- ❖ Market participants in Canada and the United States have used financial information that reflects the economics of rate-regulated activities to determine the purchase price for acquiring assets used in such activities. The acquisition deals reveal that the acquirer generally pays a premium. Investors view assets used in rate-regulated activities as capable of generating stable earnings and cash flows, taking into consideration the strength of the regulatory framework in which the entity operates.
- ❖ The purchase price allocation in jurisdictions (such as Canada and the United States) that recognize debit and credit balances arising from rate regulation indicate that value is ascribed to these balances, because their carrying value generally approximates fair value. Based on anecdotal information, in jurisdictions that do not recognize balances arising from rate regulation, this value is reflected in goodwill or intangible assets.
- ❖ Academic research suggests that the strength of the regulatory framework can influence market valuation of debit balances arising from rate regulation.

141. This section looks at how users have factored financial information that reflects the economics of rate-regulated activities into their decision-making.

The user perspective

142. Throughout the IASB's projects on rate-regulated activities, users analyzing rate-regulated entities have contributed their views on what makes the financial statements relevant for them. From their perspective, financial information on rate-regulated activities assists in:

- predicting future cash flows;
- estimating the enterprise value;
- distinguishing the variability in performance that is compensated for through the rate-setting mechanism, from the variability in performance for which there is no compensation;
- assessing the entity's financial stability and creditworthiness (e.g., ability to repay debts);
- assessing the strength of rate regulation to determine the entity's track record in recovering costs and earning the allowed rate of return; and
- understanding the drivers that affect the allowed rate of return.

143. Through its September 2014 Discussion Paper, "[Reporting the Financial Effects of Rate Regulation](#)," the IASB has sought input from stakeholders to identify what information about the financial effects of rate regulation is most relevant to financial statements users in making investing and lending decisions. [Appendix A](#) to this paper provides extracts from comment letters and other material to capture the essentials of this input. This information is grouped into the three main geographical regions: the Americas, EMEA (Europe, Middle East and Africa) and Asia-Pacific. The appendix is not meant to be exhaustive, and is intended to capture comments made from both sides of the views debated.

144. One comment made by users in the Americas region (see [Appendix A](#)) relates to how there could be an increased reliance on non-GAAP disclosures if debit and credit balances arising from rate regulation are not recognized under IFRS Standards. Exhibit 46 shows the financial statement note disclosures of three entities that we are aware have applied IFRS Standards and provided an adjusted measure to communicate the financial impact of their rate-regulated activities.

Exhibit 46

Canada	United Kingdom
<p>ATCO Ltd. – Audited Consolidated Financial Statements – December 31, 2015</p> <p>(Entity adopted IFRS Standards for the first time before IFRS 14 was issued. We note that the segment note referenced below essentially provides the same information about the entity's rate-regulated activities as was provided in previous years under pre-changeover Canadian GAAP.)</p> <p>Note 5 – Segmented Information (excerpt)</p> <p>Adjusted earnings are earnings attributable to equity owners of the Company after adjusting for the timing of revenues and expenses for rate-regulated activities and dividends on equity preferred shares of the Company. Adjusted earnings also exclude one-time gains and losses, significant impairments and items that are not in the normal course of business or a result of day-to-day operations. Adjusted earnings are a key measure of segment earnings used by the CODM to assess segment performance and allocate resources. Other accounts in the consolidated financial statements have not been adjusted as they are not used by the CODM for those purposes.</p>	<p>National Grid – Audited Consolidated Financial Statements – March 31, 2015</p> <p>(Entity adopted IFRS Standards for the first time before IFRS 14 was issued)</p> <p>Note 2 – Segment Analysis (excerpt)</p> <p>(Under the title “Unaudited commentary on the results of our principal operations by segment”)</p> <p>As a business, we have three measures of operating profit that are used on a regular basis and disclosed in this Annual Report.</p> <p>Statutory operating profit: This is operating profit as calculated under International Financial Reporting Standards (IFRS). Statutory operating profit by segment is shown in note 2 on page 98.</p> <p>Adjusted operating profit: Adjusted operating profit (business performance) excludes items that if included could distort understanding of our performance for the year and the comparability between periods. Further details of items that are excluded in adjusted operating profit are shown in note 4 on page 103.</p> <p>Regulatory financial performance: This is particularly relevant for our UK operations and is a measure of operating profit that reflects the impact of the businesses' regulatory arrangements when presenting financial performance.</p>
Netherlands and Germany	
<p>TenneT Holdings B.V. – Integrated Annual Report – December 31, 2015</p> <p>(Entity adopted IFRS Standards for the first time before IFRS 14 was issued)</p> <p>Executive Board Report – Financial (excerpt)</p> <p>TenneT measures and manages its financial performance based on ‘underlying’ financial information and not IFRS reported financials. We believe underlying financial information better represents our actual business and financial performance, since it involves the recognition of regulatory receivables and payables, which are settled through future grid tariffs based on the currently enacted regulatory frameworks. Consequently underlying financial information better reflects economic reality in our opinion. Reference is made to the section ‘Segment information’ for further details and reconciliations from the underlying profit measures to IFRS.</p> <p>Note 2 – Segment Information (excerpt)</p> <p>2.1 – Segment Analysis</p> <p>TenneT generates the majority of its business from regulated activities. For management information purposes TenneT's Executive Board considers the performance of its regulated activities in the Netherlands and those in Germany separately. This segmentation based on applicable regulatory frameworks is the key determinant for financial management of the business and for decision-making on budgets, allocation of resources and financing. These regulated activities are performed by two segments: TSO Netherlands and TSO Germany.</p> <p>2.2 Accounting policies applied for ‘underlying’ financial information</p> <p>The key requirement for the recognition of regulatory deferral accounts in underlying financial information is that an existing regulatory framework must be in place that permits the future reimbursement or requires the future settlement of the regulated asset or liability respectively.</p>	

145. Some entities provide commentary in their notes to enable users to better understand their financial performance and make predictions on their future operations. Exhibit 47 shows two examples of the type of commentary provided by an electric utility in France and South Africa.

Exhibit 47

France	South Africa
<p>EDF – Extract from Consolidated Financial Statements December 31, 2015 (Accounting framework: IFRS Standards)</p> <p>Note 7 – Sales</p> <p>Sales of energy and energy-related services for 2014 included the €0.9 billion effects of regularisation of regulated sales tariffs for the period 23 July 2012 to 31 July 2013, and the €1.4 billion effect of consolidation of Dalkia sales from 25 July 2014.</p> <p>After eliminating these effects, sales for 2015 were down slightly, with lower sales in Italy mainly as a result of unfavourable price effects on the energy sold, and higher sales in France due to rises in the integrated tariffs and a slightly more favourable weather effect than in 2014 which more than made up for unfavourable market conditions.</p>	<p>Eskom – Extract from Consolidated Financial Statements December 31, 2015 (Accounting framework: IFRS Standards)</p> <p>Note 3.1(d) – Capital management and going concern: accumulated profit</p> <p>The tariff increases for the electricity business are subject to the process laid down by the National Energy Regulator of South Africa (NERSA). The current regulatory framework applicable to Eskom is the multi-year five year determination ending in 31 March 2018.</p> <p>Eskom did not receive a cost reflective price in the NERSA Multi-Year Price Determination (MYPD) 3 decision which created a revenue shortfall over the MYPD 3 period which has placed strain on the financial and operating sustainability of the group.</p> <p>Eskom submitted the regulatory clearing account (RCA) application for 2014 (year 1 of MYPD 3) to NERSA in 2015. NERSA announced on 1 March 2016 that the average tariff for standard tariff customers would be increased by 9.4% for the 2017 financial year.</p> <p>Eskom will submit the RCA applications for the second (2015) and third years (2016) of the MYPD 3 period by July 2016, in accordance with the prevailing MYPD methodology.</p>

146. The data points in Exhibit 47 illustrate how the extent of information disclosed can vary, thus adding a layer of complexity for users in understanding the entity's business story. In jurisdictions where users have benefited from the knowledge gained through understanding how rate regulation can affect an entity's financial performance and financial position, there is a possibility that if future financial statements do not provide such relevant information, non-GAAP disclosures could be used. This is because users need to understand the economics of rate-regulated activities to make investing and lending decisions. The challenge would be to ensure comparability in the disclosure of such non-GAAP measures across entities with rate-regulated operations.

147. For jurisdictions that do not recognize balances arising from rate regulation, if the regulatory framework in place creates specific rights and obligations that affect the financial performance and future cash flows of the entity, users would need to know this information for their analysis. Below is an excerpt from a user's comment letter in the EMEA region illustrating this point: (emphasis added)

"When the type of regulation creates specific rights and obligations, we need to be informed about it to avoid to over/underestimate the value of the TSO/DSO in our analysis made for investors."

"If every TSO/DSO books the regulatory deferral accounts in their IFRS financial statements, our analysis, valuation and peer group comparisons will be more efficient and would better reflect the right underlying value of the firm. Furthermore, if these regulatory deferral accounts are not booked in the IFRS financial statements of TSO/DSO, we would have to prepare adjustments to the financial accounts in order to include these amounts and evaluate the impacts of these rights and obligations on the equity and net result of the TSO/DSO. We would also have to forecast their future evolution in a manner which would be less objective and qualitative than if it was included in the accounts in a first instance." ³⁵

Note: TSOs are transmission system operators and DSOs are distribution system operators.

148. Rate regulators in some jurisdictions may also require additional regulatory reporting that communicates information on the balances arising from rate regulation. The following is an excerpt from the Brazilian rate regulator's (ANEEL) comment letter:

"We believe the users of our financial statements do consider regulatory balances in their analysis and decisions, based on the following examples:

- (i) Quarterly press releases adjusting regulatory effects;
- (ii) Financial covenants: negotiation with banks or financial institutions to comprise regulatory assets and liabilities in the covenant ratio or index, eg. EBITDA / loans; the institutions agreed to calculate based on adjusted figures;
- (iii) Additional Financial Statement: due to IFRS adoption in 2010 in Brazil, ANEEL (granted authority) has published a Resolution which requires Companies from Power Industry to elaborate another set of Financial Statements. Those financial statements, called "regulatory financial statements" must contemplate regulatory assets and liabilities beyond not apply IFRIC 12.
- (iv) Financial market analysts and credit rating agencies have been considering adjustments of regulatory assets/liabilities in entities' financial statements in order to have a fair view of their financial position and performance.

We also believe that this information is important not only for investors and lenders but also to the Management." ³⁶ (emphasis added)

³⁵ Information from Leonardo & Co's [comment letter](#) to the IASB's September 2014 Discussion Paper. Leonardo & Co is part of Gruppo Banca Leonardo, a privately-held independent European financial institutions with two main business areas: Investment Banking (Leonardo & Co.) and Wealth Management (Banca Leonardo).

³⁶ Information from ANEEL's [comment letter](#) on the IASB's September 2014 Discussion Paper.

149. The Brazilian rate regulator's comment letter also noted the following:

"[D]iscussions about regulatory assets and liabilities were intensified during 2014 among Brazilian players, especially due to the negative scenario of Brazilian Electricity Industry caused by the poor hydrological conditions. In function of this scenario, there was a relevant increase in the balances of regulatory items in Brazil."

150. In one of the financial statements examined (see paragraph [113](#) – Energias de Portugal), the entity indicated that for its Brazilian operations, the rate regulator included addendums in the concession contracts to reduce significant uncertainties regarding the recognition and realization of regulatory assets and liabilities. This example shows that a key component of the regulatory framework, in this case the jurisdiction's legislation, is fundamental in establishing rights and obligations for the entity.

151. We also note that comments shown in [Appendix A](#) expressing concerns about recognizing balances arising from rate regulation are important and will need to be resolved as the project progresses.

Debt and equity analysts, and credit rating agencies: What do they consider?

152. Canadian debt and equity analysts, as well as credit rating agencies, have told us that utilities with regulated operations are viewed differently from those with non-regulated operations. They have also said that even if the financial effects of rate regulation were not recognized in the financial statements, they would continue to analyze and assess rate-regulated entities based on their view of an entity's economic reality. They would do so by making adjustments to the financial statements to compensate for the differences created by accounting standards.

153. In the case of credit rating agencies, different rating methodologies are used based on whether or not the entity is rate-regulated. We looked at the rating methodology for three credit rating agencies: Moody's, S&P, and Dominion Bond Rating Service (DBRS).

Exhibit 48

Extract from Moody's Website – [Rating Methodologies](#)

Moody's – "Our rating methodologies describe the analytical framework rating committees use to assign ratings. As set forth in the methodologies, they are not intended to present an exhaustive treatment of all factors reflected in our ratings. Rather, they describe the key qualitative and quantitative considerations that are usually most important for assessing credit risk in a given sector. Each rating committee applies its own judgment in determining whether or how to emphasize rating factors."

154. We observe that from Moody's list of rating methodologies, there is one for regulated electric and gas utilities that explains its approach for assessing credit risk. The methodology includes a detailed rating grid that contains four key factors – regulatory framework, ability to recover costs and earn returns, diversification and financial strength.³⁷
155. Although the components in determining the credit rating in each of the three rating methodologies examined are somewhat different, the quality of the regulatory framework is consistently identified as one of the most important factors in the credit analysis.

Exhibit 49

Extracts from Credit Rating Agency's Publications

S&P – “The regulatory framework/regime's influence is of critical importance when assessing regulated utilities' credit risk because it defines the environment in which a utility operates and has a significant bearing on a utility's financial performance. We base our assessment of the regulatory framework's relative credit supportiveness on our view of how regulatory stability, efficiency of tariff setting procedures, financial stability, and regulatory independence protect a utility's credit quality and its ability to recover its costs and earn a timely return. Our view of these four pillars is the foundation of a utility's regulatory support. We then assess the utility's business strategy, in particular its regulatory strategy and its ability to manage the tariff-setting process, to arrive at a final regulatory advantage assessment.”³⁸

DBRS – “The quality of the regulatory regime is the main driving factor for regulated utilities as it is the most important [Business Risk Assessment] factor. The regulatory framework also influences a company's [Financial Risk Assessment] as the deemed capital structure and return on equity (ROE) are often set by the regulator.”³⁹

156. Understanding the risks of the regulatory framework is important because credit rating downgrades can result in increased borrowing costs for entities.
157. One similarity between the three rating methodologies is that a strong assessment of the regulatory framework can result in more favourable ranges being used in assessing the financial metrics of the entity. For example, S&P states:

“While our final regulatory advantage assessment has a significant influence on a utility's business risk profile, it can have an even greater impact on its financial risk profile. As regulatory advantage declines, we expect higher cash flow volatility; as such, a utility's regulatory advantage score directly affects which of the three cash-flow volatility tables -- low, medial, or standard -- we'll use as a guideline when assessing the issuer's financial risk. Generally speaking, low cash-flow volatility allows for higher debt levels at the same rating category than medial volatility, and medial volatility allows for more debt than standard volatility.”⁴⁰

³⁷ Refer to www.moodys.com for the latest rating methodology for regulated electric and gas utilities.

³⁸ Shipman, Todd A. *Key Credit Factors For The Regulated Utilities Industry*. S&P, November 20, 2013. This material is reproduced with permission of Standard & Poor's Financial Services LLC.

³⁹ DBRS, *Rating Companies in the Regulated Electric, Natural Gas and Water Utilities Industry* (October 2015), 6

⁴⁰ Goltz, Stephen R. *How Regulatory Advantage Scores Can Affect Ratings on Regulated Utilities*. S&P, April 23, 2015. This material is reproduced with permission of Standard & Poor's Financial Services LLC.

158. A number of factors are taken into consideration when assessing the regulatory framework. Exhibit 50 shows the factors that DBRS considers:

Exhibit 50

	Considerations
Regulation (most important Business Risk Assessment factor) (most important Business Risk Assessment factor)	Deemed Equity - Percentage of equity investment in the rate base on which utility can earn a return.
	Allowed ROE - In supportive regulatory environments, utilities' actual rate of returns are generally in line with, or exceed, the allowed rate of return.
	Energy Cost Recovery - Considers whether fuel and purchased energy costs are fully passed through to customers; how often is utility allowed to adjust retail rates; whether rate adjustments are subject to regulatory review.
	Capital and Operating Cost Recovery - Assesses likelihood of a utility's capital expenditure being added to rate base, whether there is mechanism to deal with cost overruns, etc.
	Cost of Service versus Incentive Regulation Mechanism Views cost of service as lower risk than incentive regulation mechanism.
	Political Interference - Influence on regulator's ability to independently arrive at decision, passing legislation to override a decision, and the regulator elected instead of appointed.
	Retail Rate - Average price for residential customers (not applicable for gas distribution, water and waste-water utilities).
	Stranded Cost Recovery - Represents costs incurred but faces uncertainty around recovery. Rating depends on frequency of write-downs, time it takes to recover the costs, magnitude of stranded costs, etc.
	Rate Freeze - Longer rate-freeze periods or higher frequency of occurrence increases risk assessment.
	Market Structure (Deregulation) - Rating depends on degree of regulation. The strongest utilities will have fully-integrated operations (generation, transmission and distribution).

Source: Information compiled based on DBRS Methodology for Rating Companies in the Regulated Electric, Natural Gas and Water Utilities Industry (October 2015).

159. As shown in Exhibit 50, one of the factors considered is political interference. Below is an excerpt from S&P's rating of Maritime Electric Co. Ltd (MECL) in March 2016, illustrating how political intervention, along with other factors, is taken into consideration when determining this Canadian entity's credit rating (emphasis added below):

“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 [Island Regulatory & Appeals Commission] continues to administer a regulatory framework that allows full recovery of prudently incurred operating, capital and commodity costs. Under the most recent [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%, 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.”⁴¹

160. We understand that Scope, a German-based rating agency, published a rating methodology for European utilities that differentiates between regulated and non-regulated operations. In this methodology, Scope notes that the regulatory framework and exposure to political intervention is important when assessing a utility's credit risk.⁴²
161. Credit rating analysts have said that although the regulatory framework is a key factor in their assessment of an entity, there are many other inputs to their models. One area of focus is certainty of timely recovery of debit balances, or settlement of credit balances, arising from rate regulation, as a predictor of future cash flows. While current period cash flow metrics are not much affected by the recognition of these balances, an accumulation of material debit and credit balances is a “red flag” that communicates risks for the future. Debt and equity analysts have also indicated that

⁴¹ Ng, Andrew. *Maritime Electric Co. Ltd. Outlook To Stable From Negative; Financial Risk Profile To Significant From Aggressive*. S&P, March 30, 2016. This material is reproduced with permission of Standard & Poor's Financial Services LLC.

⁴² Source: Scope, *Rating Methodology: European Utilities*, January 2018, 6.

without the recognition of debit and credit balances arising from rate regulation, earnings volatility would increase and valuation metrics such as the commonly used price/earnings ratio would be affected.

162. Exhibit 51, from B. Pedell's book, *"Regulatory Risk and Cost of Capital: Determinants and Implications for Rate Regulation"* (2006), shows how rate of return and cost of capital are perceived in non-rate-regulated and rate-regulated scenarios, reinforcing some of the points made in the previous paragraph. One additional point to note is that Exhibit 51 also highlights the possible deviations between expected and realized rate of return, because of asymmetric regulatory behaviour. Pedell states that:

Exhibit 51

Criterion	Not rate-regulated	Rate-regulated
Profitability of investments	Profitability is checked	Profitability is assumed
Certainty of the actual rate of return	Expected rate of return that is uncertain	Rate of return more or less determined by rate regulation
Possible deviations between expected and realized rate of return	Upward and downward deviations of the realized rate of return	In some instances only downward deviations of the realized rate of return due to asymmetric regulatory behavior
Relation between (normal) rate of return and cost of capital	Rate of return equals cost of capital in perfect competition; rate of return above cost of capital in the case of competitive advantages	Normal rate of return has to be above cost of capital in some instances
Reference to the market	Market forces bring rate of return to its equilibrium, i.e. in the long-run to the level of cost of capital	Cost of capital assessment aims at simulating competition
Connection between cost of capital and prices / rates	Achievable prices determine rate of return	Cost of capital determines rates
Consequences of cost of capital assessment	Cost of capital assessment only affects realization of marginal investment projects	(Nearly) all rates are affected by the cost of capital assessed and employed by the regulator; more serious consequences of faults

Source: Pedell, Dr. Burkhard, *Regulatory Risk and the Cost of Capital*, Pg. 20

"The actual rate of return of rate-regulated firms is determined more or less by regulation, depending on the design of the regulatory scheme. In the hypothetical benchmark case of a perfect and continuous rate-of-return regulation, the actual rate of return always equals the allowed rate of return. In reality, the actual rate of return is subject to fluctuation even in systems of rate-of-return regulation, taking into account the inevitable adjustment lags for rates alone."⁴³

⁴³

Pedell, Dr. Burkhard. *Regulatory Risk and the Cost of Capital*. Berlin: Springer, 2006. 19.

163. Our understanding is that users seek out other sources of information, such as rate filings and regulatory decisions, to complete their assessment of an entity.⁴⁴ However, consulting these other sources is intended to corroborate or supplement financial information provided in the financial statements, rather than fundamentally adjust it to reflect the economic reality of the entity.

Acquisitions: Does rate regulation affect purchase price?

164. Our understanding is that in Canada and the United States, when prospective purchasers look at the margins and growth of an entity, assets used in rate-regulated activities are viewed as having a greater degree of certainty of generating a defined return in the long term. Lower risk tends to be attached to such assets because of the continuing demand for the essential goods and services being provided by the entity. The rate-setting mechanism provides predictability of the regulated asset's earnings during the regulatory period. In its publication, "Power transactions and trends, 2014 review and 2015 outlook," EY states:

"The reshaping of the US Sector continued as diversified utilities focused on regulated assets and independent power producers (IPPs) grew their presence. The US sector saw 15 billion-dollar-plus transactions – significantly more than in 2013 – **with buyers paying a premium for prized rate-regulated assets.**"⁴⁵ (emphasis added)

And from "Power transactions and trends, 2015 review and 2016 outlook":

"Regulated assets still command premiums: During the year we saw utilities paying above average premiums on regulated assets, which were already trading at the high end of their historical averages — ~37%, higher than last year's average. While low natural gas prices and rising interest rates present a challenge to the sector, strong balance sheets and availability of low-cost debt are enabling utilities to acquire these assets at premium valuations. With predictable cash flows and rates of return, we expect regulated assets to grow more resilient in 2016 and continue to command high valuations."⁴⁶

165. Regulated assets have higher valuation multiples compared with unregulated assets, suggesting market participants factor the effects of the regulatory framework into the purchase price. Exhibits 52 and 53 provide information on global (i.e., Americas, Europe and Asia-Pacific) Power and Utilities transactions over the last several years.

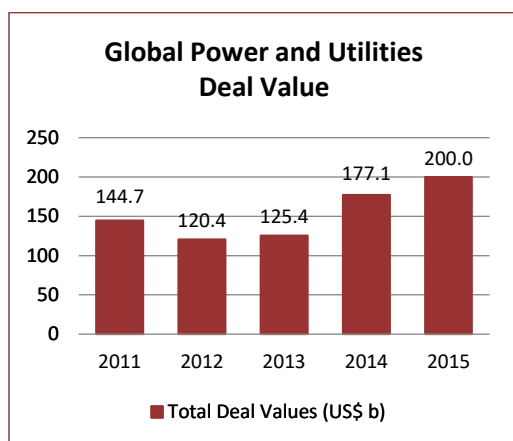
⁴⁴ IASB staff agenda paper 9A, September 2013, paragraph 7.

⁴⁵ EY, *Power transactions and trends, 2014 review and 2015 outlook*, introduction.

⁴⁶ EY, *Power transactions and trends, 2015 review and 2016 outlook*, 23.

166. Exhibit 52 includes the transaction deals of entities in the segments of generation; transmission and distribution; renewables; and integrated, water and others. Exhibit 53 relates only to the transaction deals of entities in the transmission and distribution segment, which is commonly regulated.

Exhibit 52



Source: EY, *Power transactions and trends*,
(2014 review and 2015 outlook, 2015 review and 2016 outlook)

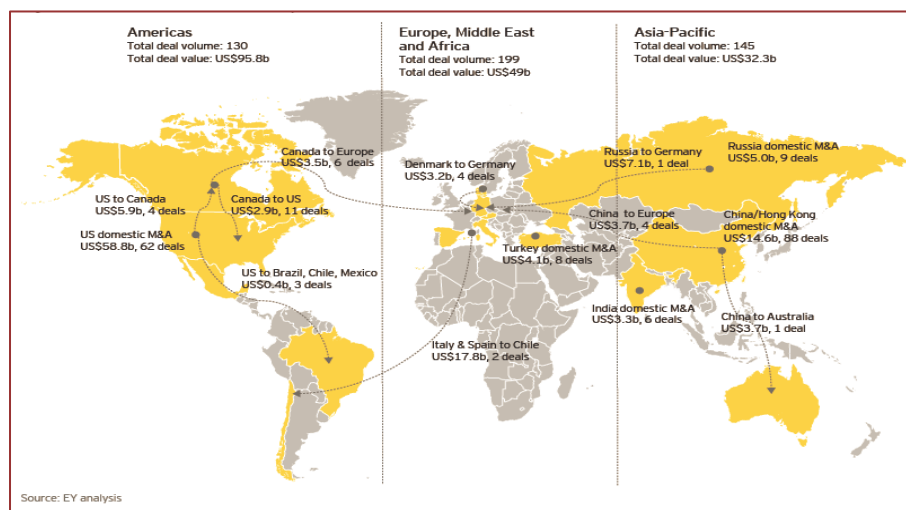
Exhibit 53

Transmission and Distribution (T&D) deal value in Americas, Europe and Asia-Pacific		
Year	US\$ (in billions)	Average premiums paid for regulated T&D entities
2015	67.9	30%
2014	41.9	15-35%

Source: EY, *Power transactions and trends*
(2014 review and 2015 outlook, 2015 review and 2016 outlook) and EY, *Capital outlook: power and utilities*

167. These deals span different jurisdictions, signalling that investors are looking for opportunities around the world. Exhibit 54 is a diagram extracted from “EY Power transactions and trends, 2014 review and 2015 outlook” to show the cross-border and domestic capital flow of the 2014 key investment destinations chosen by utilities and financial investors in this dynamic environment.

Exhibit 54



Canadian and U.S. acquisitions

168. We note that not all the deals involve debit and credit balances arising from rate regulation because it depends on the form of rate regulation in a specific jurisdiction and what is being purchased. Since the predominant accounting practice in Canada and the United States is to recognize debit and credit balances arising from rate regulation, we looked at the purchase price in acquisitions to determine how investors value these balances.⁴⁷ The bidders shown in Exhibit 55 apply U.S. GAAP.

Exhibit 55

in USD millions (unless otherwise specified)

Date of Announcement	Deal Value (USD million)	Segment	Bidder Name & Country	Target Name & Country	Purchase Tender	Debit and Credit Balances Arising from Rate Regulation Recognized in Purchase Equation?	Total Purchase Consideration	Fair Value of Net Assets Acquired	Goodwill	Goodwill as a Percentage of Total Purchase Consideration
11-Dec-13	\$4,303	Integrated	Fortis Inc. (Canada)	UNS Energy Corporation (US)	Fortis acquired all of the outstanding common shares of UNS Energy for US\$60.25 per common share in cash, for an aggregate purchase price of approximately US\$4.5 billion, including the assumption of US\$2.0 billion of debt on closing. Financing of the net cash purchase price of approximately \$2.7 billion (US\$2.5 billion) is substantially complete.	Yes - at carrying value (see note disclosure in Exhibit 56)	\$2,745 CAD	\$1,235 CAD	\$1,510 CAD	55.0%
30-Apr-14	\$12,186	Transmission & Distribution	Exelon Corporation (US)	Pepco Holdings Inc. (US)	The total purchase price consideration of approximately \$7.1 billion for the PHI Merger consisted of cash paid to PHI shareholders, cash paid for PHI preferred securities and cash paid for PHI stock-based compensation equity awards.	Yes - at carrying value (see note disclosure in Exhibit 56)	\$7,142	\$3,118	\$4,024	56.3%

⁴⁷ Exhibit 55 shows a sample of acquisitions that were examined when the research was conducted in mid-2016. Although there have been new acquisitions subsequent to mid-2016 (for example, Enbridge completed the acquisition of a U.S. utility in 2017), the observation that there is value ascribed to balances arising from rate regulation in acquisition scenarios continues to remain valid.

in USD millions (unless otherwise specified)

Date of Announcement	Deal Value (USD million)	Segment	Bidder Name & Country	Target Name & Country	Purchase Tender	Debit and Credit Balances Arising from Rate Regulation Recognized in Purchase Equation?	Total Purchase Consideration	Fair Value of Net Assets Acquired	Goodwill	Goodwill as a Percentage of Total Purchase Consideration
1-May-14	\$5,516	Transmission & Distribution	Berkshire Hathaway Energy Company (US)	AltaLink, L.P. (Canada)	Under the terms of the Share Purchase Agreement, dated May 1, 2014, among BHE and SNC Lavalin Group Inc. ("SNC-Lavalin"), BHE paid C\$3.1 billion (US\$2.7 billion) in cash to SNC-Lavalin for 100% of the equity interests of AltaLink. BHE funded the total purchase price with \$1.5 billion of junior subordinated debentures issued and sold to subsidiaries of Berkshire Hathaway, \$1.0 billion borrowed under its commercial paper program and cash on hand.	Yes - at carrying value (see note disclosure in Exhibit 56)	\$2,728	\$984	\$1,744	63.9%
4-Sep-15	\$10,366	Integrated	Emera, Inc. (Canada)	TECO Energy, Inc. (US)	On July 1, 2016, Emera acquired all of the outstanding common shares of TECO Energy Inc. for \$27.55 USD per common share. The net cash purchase price totaled \$8.4 billion (\$6.5 billion USD), with an aggregate purchase price of \$13.9 billion (\$10.7 billion USD), including the assumption of \$5.5 billion (\$4.2 billion USD) in US debt facilities on closing.	Yes - at carrying value (see note disclosure in Exhibit 56)	\$8,447 CAD	\$2,707 CAD	\$5,740 CAD	68.0%

Source: Information compiled based on data from EY's Power transactions and trends (2013 review and 2014 outlook, 2014 review and 2015 outlook), PwC North American Power & Utilities Deal (Q3 2015) and Financial Statements of the Bidder.

169. The corresponding note disclosures (in Exhibit 56) relating to these acquisitions explain the valuation of the debit and credit balances arising from rate regulation.

Exhibit 56

Extracts from Financial Statement Note Disclosure Relating to Acquisition
<p>Fortis Inc. (Source: December 31, 2014 Consolidated Financial Statements)</p> <p>Note 29 – Business Acquisitions</p> <p>UNS Energy's operations are regulated by the ACC and FERC (Note 2). The determination of revenue and earnings is based on a regulated rate of return that is applied to historic values, which do not change with a change of ownership. No fair value adjustments, other than goodwill, were recorded for the net assets acquired because all of the economic benefits and obligations associated with them beyond regulated rates of return accrue to the customers.</p>
<p>Exelon Corp. (Source: June 30, 2016 Consolidated Financial Statements)</p> <p>Note 4 – Mergers, Acquisitions and Dispositions (Exelon, Generation, PHI and Pepco)</p> <p>Through its wholly-owned rate regulated utility subsidiaries, most of PHI's assets and liabilities are subject to cost-of-service rate regulation. Under such regulation, rates charged to customers are established by a regulator to provide for recovery of costs and a fair return on invested capital, or rate base, generally measured at historical cost. In applying the acquisition method of accounting, for regulated assets and liabilities included in rate base or otherwise earning a return (primarily property, plant and equipment and regulatory assets earning a return), no fair value adjustments were recorded as historical cost is viewed as a reasonable proxy for fair value.</p> <p>Fair value adjustments were applied to the historical cost bases of other assets and liabilities subject to rate regulation but not earning a return (including debt instruments and pension and OPEB obligations). In these instances, a corresponding offsetting regulatory asset or liability was also established, as the underlying utility asset and liability amounts are recoverable from or refundable to customers at historical cost (and not at fair value) through the rate setting process. Similar treatment was applied for fair value adjustments to record intangible assets and liabilities, such as for electricity and gas energy supply contracts as further described below. Regulatory assets and liabilities established to offset fair value adjustments are amortized in amounts and over time frames consistent with the realization or settlement of the fair value adjustments, with no impact on reported net income. See Note 5 — Regulatory Matters for additional information regarding the fair value of regulatory assets and liabilities established by Exelon and PHI.</p>
<p>Berkshire Hathaway Energy Company (Source: December 31, 2015 Consolidated Financial Statements)</p> <p>Note 3 – Business Acquisitions</p> <p>The operations of ALP are subject to the rate-setting authority of the AUC and are accounted for pursuant to GAAP, including the authoritative guidance for regulated operations. The rate-setting and cost recovery provisions establish rates on a cost-of-service basis designed to allow ALP an opportunity to recover its costs of providing service and a return on its investment in rate base. Except for certain assets not currently in rates, the fair value of ALP's assets acquired and liabilities assumed subject to these rate-setting provisions are assumed to approximate their carrying values and, therefore, no fair value adjustments have been reflected related to these amounts.</p>
<p>Emera, Inc. (Source: June 30, 2016 Condensed Consolidated Interim Financial Statements)</p> <p>Note 31 – Acquisition</p> <p>Except for unregulated long-term debt acquired and deferred taxes, preliminary fair values of tangible and intangible assets and liabilities subject to these rate-setting provisions approximate their carrying values.</p> <p>The goodwill reflects the value paid primarily for access to regulated assets, net income and cash flows in growth markets with constructive regulatory environments, opportunities for adjacency growth, long-term potential for enhanced access to capital as a result of increased scale and business diversity, and an improved earnings risk profile. Allocation of goodwill to the reporting units is not complete as at August 8, 2016.</p>

170. Based on the data in Exhibit 56, assets used in rate-regulated activities typically attract a premium in purchase price because of the stable earnings and cash flows they can generate, resulting in goodwill recognition in a business acquisition scenario. The potential for growth of regulated assets also contributes to premiums paid by investors due to the fact that the rate of return earned by rate-regulated entities is dependent on their regulatory asset base.
171. The notes disclosures also indicate that the fair value assigned to the debit and credit balances arising from rate regulation is generally their carrying values, demonstrating there is value ascribed to these balances. We performed further research to understand possible reasons for why the fair value of debit and credit balances arising from rate regulation generally approximates carrying value.
172. In Chapter 12 of *Accounting for Public Utilities*, Hahne, et al., examine the relationship of rate regulation to generally accepted accounting principles (i.e., U.S. GAAP). Although our research does not intend to explore the principles and rules of any particular accounting framework, Hahne, et al., found that the rate regulatory environment creates unique factors that are considered when determining fair value:

"In evaluating the highest and best use of an asset by market participants, utilities should consider the following:

- (1) Whether regulation is an attribute of the entity or whether it is associated with the individual asset.
- (2) The mechanism for recovery and whether the asset or liability is subject to rate recovery.
- (3) The nature of the asset (e.g., transmission and distribution assets vs. generation assets that are currently or potentially used for merchant operation).
- (4) Restrictions imposed by the regulator with respect to rate recovery, operations, and the asset, such as the following:
 - (a) Regulatory Approval is required before the sale or disposition of utility assets.
 - (b) The gain on the sale of a rate-regulated asset must be shared with the regulated customers.
 - (c) Use of the asset is restricted to public purposes.

Although an entity should use judgment in evaluating the above factors, it is generally acceptable to record rate-regulated property assets by using the predecessor's carrying value to estimate the fair value of regulated assets in a business combination. This is because either regulation is associated with the assets or the entity's regulation is so pervasive that it ostensibly extends to the individual assets. Generally, the acquiring entity will only be allowed to recover depreciation of the original cost and earn a regulated rate of return on that property.

In certain cases, an entity does not earn a return on regulatory assets or property. While ASC 980 does not generally permit the acquired entity to discount such assets, the acquirer generally records assets acquired at fair value (discounted cash flows under an income approach), which would be less than the predecessor's carrying amount because of the inability to earn a return on such assets."⁴⁸

⁴⁸

Robert L. Hahne and Gregory E. Aliff, *Accounting for Public Utilities*, (LexisNexis, 2016) chap.12, section 12.07[s].

173. From a principal market perspective, sales of regulatory assets or transfers of regulatory liabilities are not common. While there have been some limited cases involving securitization transactions, this type of transaction involves additional legal and other requirements not characteristics of typical regulatory assets.⁴⁹ The actions of the rate regulator would affect the valuation of these debit or credit balances arising from rate regulation. This seems consistent with the rationale in one of the sampled note disclosures that indicated “the determination of revenue and earnings is based on a regulated rate of return that is applied to historic values, which do not change with a change of ownership.” We also discussed these findings above with an auditor specializing in the utilities sector and note that the observation that rate regulation creates unique factors is still current in today’s market. As a result, it is common for the carrying value of recognized balances arising from rate regulation to approximate fair value.
174. Recent trends, shown in Exhibit 57, also suggest increasing deal activities in the Americas. In Canada, utilities and pipelines are heavily regulated, with just a handful of key players in some geographical areas. Therefore, Canadian entities in this sector are looking for opportunities to expand their regulated asset portfolio. They are seeking higher returns in a larger market by buying assets in the United States. This factor, coupled with the current interest environment, fuels the deal activities in the Americas. In its publication, “Power transactions and trends, Q1 2016,” EY states:

“As hybrid utilities and financial institutions sought stable earnings in the low interest rate environment by adding regulated assets to their portfolios, transactional activity in the regulated transmission and distribution (T&D) segment increased significantly.”⁵⁰

Exhibit 57 shows examples of some major deals that involve Canadian entities and investment funds buying outside the country. The cross-border acquisitions show the need for comparable accounting to help users make investing and lending decisions.

⁴⁹ PwC, *Utilities and Power Companies*, 2016, 20-9, Part of figure 20-2 “Fair value measurement of regulatory assets and liabilities.”

⁵⁰ EY, *Power transactions and trends*, Q1 2016, 4.

Exhibit 57

Announcement		Segment	Bidder Name	Bidder Country	Target Name	Target Country	Rationale for deal
Date	Deal Value (USD million)						
24-Nov-15	\$7,377	Transmission & Distribution (Grid)	Caisse de dépôt et Placement du Québec; Hastings Funds Management Limited; Spark Infrastructure Group; Tawreed Investments Ltd.; Wren House Infrastructure Management Limited	Canada; Australia; United Arab Emirates; Kuwait	TransGrid	Australia	Bidders seeking to add high quality regulated assets with stable cash flows.
9-Feb-16	\$11,305	Transmission & Distribution (Electricity)	Fortis Inc.	Canada	ITC Holdings Corp	US	Aligns with Fortis' strategy to diversify its business with regards to regulatory jurisdiction, business risk and regional economic mix.
9-Feb-16	\$2,361	Integrated	Algonquin Power & Utilities Corp.	Canada	Empire District Electric Company	US	Strengthens APUC's existing businesses and strategically expands its regulated utility footprint in the Midwest US.
17-Mar-16	\$13,076	Integrated	TransCanada Corporation	Canada	Columbia Pipeline Group, Inc.	US	Acquisition represents a rare opportunity to invest in an extensive, competitively-positioned, growing network of regulated natural gas pipeline and storage assets in the Marcellus and Utica shale gas regions.

Source: EY, *Power transactions and trends* (Q1 2016, and 2015 review and 2016 outlook) and PwC, *North American Power & Utilities Deals* (Q1 2016), and Entity's News Release

175. This research indicates that prospective purchasers look closely at an entity's regulatory asset base (also called the "rate base") when considering an acquisition. The rate base is the amount of investment in a rate-regulated operation for which the entity *is allowed to earn a return*. The rate base generally affects two components of the entity's revenue requirement: depreciation that is allowed to be recovered, and return on capital (i.e., rate base multiplied by the allowed rate of return). Prospective purchasers consider the rate base to be a measure of the net value of the assets used by the entity in its rate-regulated operations. The acquisitions that we have seen in Canada are intended to grow the regulatory asset base to earn a higher rate of return.

Acquisitions outside Canada and the United States

176. We wanted to understand how entities that apply IFRS Standards without recognizing debit and credit balances arising from rate regulation (i.e., the predominant practice under IFRS Standards) treat premiums paid for rate-regulated businesses. Accordingly, we made enquiries of a European valuations expert to understand how this difference in accounting possibly affects the purchase price equation.
177. Although anecdotal, the information we obtained was helpful. The expert told us that, consistent with our understanding, investors generally pay a premium to buy into a monopolistic industry. Theoretically, without the recognition of balances arising from rate regulation, their value would be captured in goodwill. A utility's right to charge a higher tariff in the future or obligation to reduce future prices, provides additional information about the value of the acquired business that could also be captured in the fair value of the licence recognized on acquisition. However, in both cases, it would be difficult to identify amounts attaching specifically to the value placed on the acquiree's rate-regulated activities in IFRS financial statements.
178. We corroborated this information by looking at the goodwill note disclosure of an entity in France, as shown in Exhibit 58. This entity applies IFRS Standards. While the note disclosure does not confirm that a portion of the goodwill relates to unrecognized debit and credit balances arising from rate regulation, it suggests that there could be a correlation between goodwill and the cash flows from the regulatory asset base.

Exhibit 58

Engie (France) – Extract from 2015 Annual Consolidated Financial Statements

Note 12.3.1.2 Goodwill allocated to the Distribution CGU

The total amount of goodwill allocated to the Distribution CGU was €4,009 million at December 31, 2015. The Distribution CGU groups together the Group's regulated natural gas distribution activities in France.

The value-in-use of the Distribution CGU was calculated using cash flow projections drawn up on the basis of the 2016 budget and the medium-term 2017-2021 business plan, as approved by the Group Management Committee and Board of Directors. The terminal value calculated at the end of the medium-term business plan corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2021. The RAB is the value assigned by the regulator (CRE) to the assets operated by the distributor. It is the sum of the future pre-tax cash flows, discounted at a rate that equals the pre-tax rate of return guaranteed by the regulator.

Engie (France) – Extract from 2015 Annual Consolidated Financial Statements

The cash flow projections are drawn up based on the tariff for public natural gas distribution networks, known as the “ATRD 4 tariff”, which entered into effect for a period of four years on July 1, 2012, and on the overall level of investments agreed by the French Energy Regulatory Commission (CRE) as part of its decision on the ATRD 4 tariff.

Given the regulated nature of the businesses grouped within the Distribution CGU, a reasonable change in any of the valuation parameters would not result in the recoverable value falling below the carrying amount.

Academic views on market valuation of debit balances arising from rate regulation

179. We also looked at an academic research paper that examined how markets value debit balances arising from rate regulation. Although the research paper is somewhat dated, we think certain observations made are still relevant in today’s environment. In their paper, “Market Valuation of Regulatory Assets in Public Utility Firms” (July 1996), Loudder, et al., noted the following:

“We provide evidence that the market values regulatory assets on average, but discounts the reported accounting values of regulatory assets conditional on the uncertainty inherent in the regulatory environment. [In other words, investors of utilities operating in unfavorable regulatory environments appear to assign a non-zero probability to the possibility that the firm will fail to receive future revenues sufficient to recover the actual incurred costs that have been previously deferred.](#) These findings are consistent both with those of Clinch and Magliolo (1992), who show that investors in oil and gas firms adjust for uncertainty in the pricing of required reserve disclosures, and with those of Khurana and Loudder (1994), who show that the market of utility firms to the exposure draft of SFAS No. 106 is inversely related to the favorableness of the regulatory environment.” (emphasis added)

“[Market participants incur adjustment costs when accounting measures economic events with error, and as accounting measurement error increases, the usefulness of accounting information decreases. Adjustment costs and information quality have important implications for the cost of capital for the individual firm and the economy.](#) Adjustment costs might be reduced and usefulness for utility investors increased by (1) considering the effect on information quality of multiple measurement attributes applied to essentially the same type asset, (2) requiring adequate footnote disclosure about regulatory risk issues, and (3) requiring disclosure of the time periods over which regulatory assets will be recovered.” ⁵¹(emphasis added)

180. Loudder, et al., highlight the concerns that some have with including debit and credit balances arising from rate regulation on the face of the financial statements. This point was already made in connection with the measurement challenges of such debit balances (see paragraph [136](#)).

⁵¹ Martha L. Loudder, Inder K. Khurana, and James R. Boatsman, “Market Valuation of Regulatory Assets in Public Utility Firms,” *The Accounting Review*, 71, no. 3 (1996): 357-373.

What this section demonstrates

181. The decision-usefulness of financial information that reflects the economics of rate-regulated activities and the strength of the regulatory framework is evidenced by the fact that such information is factored into investment, lending and credit rating decisions. In acquisition scenarios, the capital markets appear to attach a premium to assets used in rate-regulated activities because of the stable earnings and cash flows they are capable of generating when the regulatory framework is strong, and the potential growth opportunities for the regulatory asset base.

Conclusions

182. Entities subject to rate regulation have a formidable presence in the capital markets, both in terms of market capitalization and bond issuances. Based on projected future investment requirements in the regulated markets, this presence is likely to only increase. Market participants view the rate-setting mechanism as a unique feature that provides stability in earnings and predictable cash flows.
183. The regulatory framework is a key determinant of a rate-regulated entity's success because it defines the environment in which the entity operates. The regulatory framework governs the relationship between the rate regulator and the rate-regulated entity. The underlying legislation, the form of rate regulation, and the regulatory and court decisions that interpret the legislation and rules, all of which are a part of the regulatory framework, affect the determination of whether the rate-regulated entity has certain rights and obligations.
184. Regulatory frameworks around the world are different and complex. However, a regulatory framework that is designed to provide an entity with the ability to transfer risks intended to be borne by the customer and earn a fair rate of return assists in assessing when the entity's rights and obligations could be enforceable. The strength of the regulatory framework can also affect the recovery and settlement of amounts arising from those rights and obligations, translating into measurement challenges that affect the value of the economic resources of, and claims against, the rate-regulated entity.
185. Users, such as debt and equity analysts, and credit rating agencies, have emphasized the importance of the regulatory framework. In their view, the components of the regulatory framework can affect the rate-regulated entity's ability to recover costs and earn a reasonable return for providing the regulated goods or services to customers.
186. Financial information assists users in making decisions when it helps them assess the amount, timing and uncertainty of future cash flows. In the case of rate-regulated entities, users take into consideration the financial effects of rate regulation when making their assessments. For example, entities contemplating an acquisition factor in financial information on rate-regulated activities when the potential acquiree operates in that sector. In fact, the data shows that assets used in rate-regulated activities command a premium in the purchase price of the rate-regulated business given the stable earnings and predictable cash flows they can offer, and the potential growth opportunities

for the regulatory asset base. For jurisdictions that do not account for debit and credit balances arising from rate regulation, we have heard anecdotally that this premium is captured in goodwill or intangible assets. In jurisdictions, such as Canada and the United States, that permit the recognition of these balances, the acquisitions we examined illustrate that value is ascribed to such balances, as their carrying value generally approximates the fair value they are assigned in the purchase price allocation.

187. The overall findings of this research suggest that financial information reflecting the economics of rate-regulated activities is useful. The data in this paper provides evidence, from existing practice, demonstrating the information that users need to understand the financial effects of rate-regulated activities on an entity's financial performance and position, and its future cash flows. Financial information reflecting the economics of rate-regulated activities has confirmatory and predictive value that is capable of making a difference in the users' decisions. Understanding the regulatory framework is an important step in assessing whether rights and obligations exist and, if so, when they are enforceable, in a particular rate-regulated environment.
188. The manner in which such rights and obligations are reflected in financial statements, both qualitatively and quantitatively, can affect the transparency and comparability of the statements and, therefore, the degree to which they help users to make decisions. As shown by the data in this paper and summarized in Exhibit 59, information on the economics of rate-regulated activities appears differently in an entity's financial statements depending on the jurisdiction in which it operates.

Exhibit 59

Region	Country – based on sampled entities	Sampled entities – methods of communicating the financial effects of balances arising from rate regulation
EMEA (Europe, Middle East and Africa)	Belgium (see paragraphs 81 and 100)	- Recognition in primary financial statements
	Spain (see paragraph 98)	- Recognition in primary financial statements
	France (see paragraph 145)	- Disclosure in financial statement notes
	Italy (see paragraph 98)	- Recognition in primary financial statements

Region	Country – based on sampled entities	Sampled entities – methods of communicating the financial effects of balances arising from rate regulation
	Netherlands and Germany (see paragraph 144)	- Disclosure in financial statement notes - Anecdotally we understand that in Germany, some entities recognize balances arising from rate regulation. Particularly under local GAAP, recognition of credit balances arising from rate regulation is required.
	United Kingdom (see paragraph 144)	- Disclosure in financial statement notes
	Portugal (see paragraph 113)	- Recognition in primary financial statements (service concession arrangement example)
	South Africa (see paragraph 145)	- Disclosure in financial statement notes
Asia-Pacific	Korea (see paragraph 139)	- Recognition in primary financial statements
	Hong Kong (see paragraph 139)	- Recognition in primary financial statements
	Australia (see paragraph 70)	- Disclosure in financial statement notes
Americas	Canada (see paragraphs 24 to 28)	- Recognition in primary financial statements if applying U.S. GAAP (as permitted by Canadian Securities Administrators), IFRS Standards for the first time after IFRS 14 was issued, Accounting Standards for Private Enterprises or if permitted by legislative framework - Disclosure in financial statement notes if applying IFRS Standards before IFRS 14 was issued
	United States	- Recognition in primary financial statements by applying U.S. GAAP
	Brazil and Argentina (see paragraphs 113 and 148)	- Recognition in primary financial statements (service concession arrangement example)

189. From a theoretical perspective, such diversity is only justified when the rights and obligations differ between entities. Therefore, we strongly support the IASB's efforts in developing an accounting model for entities subject to defined rate regulation, a form of regulation established through a formal regulatory framework that binds both the entity and the rate regulator and establishes a basis for setting the rate for specified goods or services that includes a rate-adjustment mechanism. Our research supports that such an accounting model would provide investors and lenders with decision-useful information to assess the financial effects of such rate regulation on an entity's financial performance and position, and future cash flows. An accounting model would also increase the comparability of the financial statements of rate-regulated entities operating in different jurisdictions, and reduce the diversity seen in practice in communicating the financial effects of rate regulation to users.

Appendix A

Selected comments by region

EMEA (Europe, Middle East and Africa)			
Date	Area & Group	Extract of Comments	Source
Aug – Dec 2014	Europe Interviewed 19 equity and credit analysts - 18 from European countries, 1 from U.S.	<p>"IFRS financial statements generally do not provide the information that users regard as relevant to understanding the impact of rate-regulated activities on an entity's revenue and related costs, cash flows and financial position associated with an entity's rate-regulated activities."</p> <p>"Most of the users broadly favour the inclusion of the financial effects of rate-regulated activities in the primary financial statements as this would enhance the usefulness of the information provided. Users believe that recognising the economic effects of rate regulation in the primary statements would:</p> <ul style="list-style-type: none"> a) result in a measure of performance that reflects what an entity is entitled to earn; b) result in useful financial information to assess prospects of future cash flows; and c) portray the economic reality of entities operating rate-regulated activities. <p>They support separate presentation of the effects of rate regulation on rate-regulated activities as they assess different risks profiles when entities also operate activities that are not rate-regulated."</p>	EFRAG Feedback Statement – Interviews with Investors and Analysts
Dec 2014	Joint outreach event EFRAG, EFFAS, ABAF, IASB	<p>"Some users noted that there are drawbacks to the recognition of these effects of rate regulation mainly because most rate-regulated regimes are complex and continually changing. In their view, the recognition of the effects of rate regulation at the at the expense of reliability and relevance would increase complexity and therefore reduce the understandability of financial statements."</p> <p>"Where enforceable rights and obligations exist, users preferred having this information recognised in the primary financial statements where a certain level of reliability is ensured; but they would be concerned about recognition if the definition of elements (e.g. assets and liabilities) in the Conceptual Framework were not met."</p> <p>"Where recognition of regulatory items in the primary statements were considered, sufficient, supplementary and quantitative disclosures should be mandatory to let users understand how management has exercised judgement and what risks are attached to the regulatory items."</p>	Summary Report on User Event in Brussels
Jan 2015	Norway Standard Setter	"We believe that rate regulation schemes create rights and obligations, but think that regulatory assets and liabilities should only be recognized if they meet the definition of assets or liabilities in the framework. We do not believe that they meet the asset or liability definition in the current framework."	Comment Letter (2015)
Jan 2015	South Africa Accounting Body	<p>"We are of the view that the IASB should adopt a conceptual approach by linking the rights and obligations created under rate regulation to the definition of assets and liabilities in the <i>Conceptual Framework for Financial Reporting (Conceptual Framework)</i>. We strongly feel that this should be the basis for any IFRS on rate regulation."</p> <p>"In our <i>Submission on the Request for Information on Rate Regulation</i> dated 29 May 2013, we expressed the view that one of the reasons why debates on this issue struggle to reach consensus, is not so much due to a difference of opinion regarding accounting principles but rather due to a difference in, or inadequate understanding regarding certain concepts and details of rate regulation applied by different rate regulators."</p>	Comment Letter (2015)

EMEA (Europe, Middle East and Africa)			
Date	Area & Group	Extract of Comments	Source
Jan 2015	Israel Accounting Body	<p>"Preparers, regulators, and auditors, in Israel are familiar, for almost two decades, with financial statements that recognize regulatory deferral account balances according to the guidelines of ASC 980 (previously "RE-6") in US GAAP. Such accounting is implemented mainly in the financial statements of entities providing utilities such as electricity and water. These entities, although operating as business entities, are owned and controlled by the government and regulated by special governmental authorities.</p> <p>We are not aware of special problems in investment or lending decisions stemming from the recognition of such deferral accounts by these entities. This may partially result from the fact that these entities are owned and controlled by the government and, therefore, lenders usually regard them as part of the government itself (even if the liabilities of such entities are not formally covered by governmental guarantees)."</p>	Comment Letter (2015)

Asia-Pacific			
Date	Area & Group	Extract of Comments	Source
Jan 2015	China Standard Setter	"We believe regulatory deferral account balances should not be recognized in IFRS financial statements, therefore, we suggest the IASB not to develop specific accounting requirement for it. This is because regulatory deferral account balances don't meet the definitions of asset and liability in accordance with the Conceptual Framework. And there might be arbitrage opportunity of earnings management if the entities are permitted to recognize such balances."	Comment Letter (2015)
Jan 2015	Australia Standard Setter	"The AASB considers that, in most cases, regulatory deferral account balances do not meet the definitions of assets and liabilities in the Conceptual Framework, and that an exception should not be introduced into IFRSs to allow their recognition. However, some specific disclosures in the financial statements regarding rate regulation could be useful to identify the financial effects of rate regulation."	Comment Letter (2015)
Jan 2015	Korea Standard Setter	"Financial statements should be prepared to provide useful financial information for decision making on supply of resources by the stakeholders such as investors and lenders. If rate regulated entities recognize regulatory deferral account, and sufficient classification and disclosure on notes for this are accompanied, more useful information can be provided to the stakeholders."	Comment Letter (2015)
Jan 2015	Japan Standard Setter	"... the ASBJ finds that users are relatively neutral as to whether an asset or a liability should be recognised, although they believe that information relevant to a rate regulation would be useful for users to assess the prospect for future cash inflows to an entity. Thus, the ASBJ is not sure if financial information would become more relevant and provide more faithful representation if assets or liabilities relating to rate regulatory schemes are recognised."	Comment Letter (2015)

Americas			
Date	Area & Group	Extract of Comments	Source
Dec 2014	U.S. Roundtable with analysts, preparers, auditors and rate regulators	<p>Extract of some comments made by analysts in the meeting:</p> <ul style="list-style-type: none"> Courts support regulatory recovery of prudently incurred costs Regulator's objectives include maintaining a low cost of capital for utilities If there is no recognition of regulatory assets and liabilities under IFRS, <ul style="list-style-type: none"> will result in an increased reliance on non-GAAP disclosures, thus increasing uncertainty, risk premiums and cost of capital will require greater resources and costs for FS users to find information from other sources Rate regulation creates a "new economic reality" Noted that a major credit rating agency evaluates all 50 states from most supportive to least supportive regulatory environment, which impacts credit quality Focus is on future cash flows and when expected to be recovered, so useful disclosures include: <ul style="list-style-type: none"> analysis of how/why regulatory balances arise a maturity schedule indicating when balances are expected to be recovered/reversed Wants to see the information audited – non-GAAP disclosures are not consistent 	Meeting summary of outreach event in Washington, D.C.
Jan 2015	Brazil Securities and Exchange Commission of Brazil	"... in our view, financial statements, especially those prepared by distribution companies, have been inaccurate since IFRS were adopted in 2010. Market players, such as financial institutions, ANEEL and others share this view and accordingly have required companies to adjust their financial statements by recognizing regulatory assets and liabilities since 2010 in order to analyze the companies' financial position. In this context, many companies have negotiated covenants with financial institutions based on financial information that included regulatory assets and liabilities."	Comment Letter (2015)
Jan 2015	Canada Scotia Capital (Corporate Bond Research)	"...MD&A disclosure may not be uniform, hindering comparability across companies. I think it would be optimal to have recognition and disclosure of regulatory assets and liabilities in the financial statements. In the long run, this will enhance transparency and comparability, and in the long run, transparency and comparability play a big role in determining a firm's cost of capital."	Comment Letter (2015)
Jan 2015	DBRS (Credit Rating Agency)	"In order to properly assess the financials of these entities and to ensure consistency and comparability year-over-year, DBRS adjusts the IFRS financial statements of rate-regulated entities to include the effects of rate-regulated accounts as DBRS views that regulatory assets and liabilities will eventually be reflected in future rates."	Comment Letter (2015)
Nov 2009	RBC Dominion Securities (Equity Analyst)	"...I believe that not allowing companies in the sector to reflect regulatory assets and liabilities in their financial statements has the potential to be misleading, and that I also continue to be concerned about the increased use of non-GAAP measures to communicate financial results following the transition to IFRS."	Comment Letter (2009)

Appendix B

Understanding the regulatory framework: Questionnaire

Questions	Response
1. For each industry, what rate-regulated activity are you describing in your responses?	<i>Open-ended</i>
2. What is the name of the rate regulator responsible for regulating the activity named in your response to Question 1?	<i>Open-ended</i>
3. Does the rate regulator have the power to establish or approve the regulatory rate that the rate-regulated entity can charge to the end customer?	<i>Yes or No</i>
Legislation	
4. If the answer to Question 3 is “yes”, what piece(s) of legislation gives power to the rate regulator to establish or approve the regulatory rate? Please provide website references, if possible.	<i>Open-ended</i>
5. Is the legislation specifically worded to make clear, or does it imply, that an underlying objective of rate regulation is a regulatory rate that is fair and reasonable to both the rate-regulated entity and the customer? For example, an overall objective of rate regulation in Canada is to balance the entity’s right to earn a fair return, with reasonable customer rates based on prudently incurred costs. In addition, rate regulators attempt to ensure that various classes of customers pay their fair share of the costs incurred to service the entire customer base.	<i>Yes or No</i>
Rules and Procedures set by the Rate Regulator (i.e., form of rate regulation)	
6. The following questions may be easier to answer with specific entities in mind. Please name one or two entities regulated by the rate regulator identified in your response to Question 2.	<i>Open-ended</i>
7. Does the rate regulator indicate the type of activities that the rate-regulated entity needs to perform, or metrics that the entity needs to achieve, in order to earn a determinable amount of consideration based on the current or future year’s regulatory rate?	<i>Yes or No</i>
8. Are certain components of the regulatory rate established or approved by the rate regulator for the current period provisional to some extent? Components of the current period’s regulatory rate are provisional to some extent if it is sufficiently clear that the regulatory rate for one or more future periods will be adjusted to reflect differences between estimated amounts used to calculate the regulatory rate charged in the current period and actual amounts when they are known.	<i>Yes or No</i>
8a. If the answer to Question 8 is “yes”, are the differences (also referred to as adjustments) mentioned tracked in a variance or deferral account that is approved by the rate regulator? If so, please provide an example illustrating the rate regulator’s approval to set up a variance or deferral account.	<i>Open-ended</i>
9. Please provide a brief description of the rate adjustments occurring in the industry you have identified. Possible adjustments arising from rate regulation may include the following:	<i>Open-ended</i>

Questions	Response
<p>a) Adjustments that relate to costs “passed through” to customers, and that are recovered/settled through customer rates in the short term (e.g., commodity cost variances).</p> <p>b) Adjustments to be recovered/settled through customer rates in the short or medium term (e.g., storm costs, bonus/penalty adjustments).</p> <p>c) Adjustments to be recovered/settled through customer rates over the longer term (e.g., policy deferrals, such as pension deferrals, or balances relating to the construction of infrastructure).</p>	
10. Are the adjustments described in your response to Question 9 recognized in the entity's primary financial statements?	<i>Open-ended</i>
<p>10a. If the answer to Question 10 is “no” or only some adjustments are recognized, please explain why not all such adjustments are recognized in the primary financial statements.</p> <p>Also, please indicate if these entities provide any supplemental information to users about unrecognized adjustments (for example, in the management commentary, notes to the financial statements, investor package).</p>	<i>Open-ended</i>
Interpretation of Legislation, and Rules and Procedures (i.e., regulatory decisions, and subsequent court rulings)	
<p>11. Does the rate regulator undertake procedures to ensure the reasonableness of the adjustments identified in the response to Question 9?</p> <p>Examples of procedures might be conducting regular inspections or audits of the entity, or requiring regular reporting of variance or deferral accounts, etc.</p>	<i>Yes or No</i>
<p>12. Is there evidence to indicate that the rate regulator's decisions on the rates to be charged to customers can be influenced by political pressures?</p> <p>Please provide examples of such instances, if possible.</p>	<i>Open-ended</i>
13. If the rate-regulated entity disagrees with a rate regulator's rate decision (or the effect of political pressures on rates), does the entity have the ability to challenge or appeal the results in a court or tribunal whose decision is binding on both parties?	<i>Yes or No</i>
<p>13a. If the answer to Question 13 is “yes”, please provide one or two examples illustrating this ability of the entity.</p> <p>For example, consider providing the results of a court ruling that illustrates the entity's ability to file a lawsuit against the rate regulator, or documents that describe this ability.</p>	<i>Open-ended</i>
Other Information	
14. Does the rate-regulated entity control the infrastructure assets used to provide the regulated goods or services to the end customers?	<i>Yes or No</i>
14a. If the answer to Question 14 is “no”, please explain whether the entity is operating under a service concession arrangement.	<i>Open-ended</i>
15. For the entities identified in your response to Question 6, what accounting framework does each entity use to prepare its general purpose financial statements?	<i>Open-ended</i>

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