STAFF PAPER

March 2017

CMAC Meeting

Project	**Rate-regulated Activities**		
Paper topic	Regulatory assets and regulatory liabilities—illustrative examples		
CONTACT(S)	Jane Pike	jpike@ifrs.org	+44 (0)20 7246 6925
	Michael Stewart	mstewart@ifrs.org	+44 (0)20 7246 6922

Purpose of the paper

1. The International Accounting Standards Board (the Board) is currently developing an accounting model for entities that carry out rate-regulated activities. The model will result in entities recognising regulatory assets and regulatory liabilities to depict rights and obligations arising from the regulatory agreement between the entity and the rate regulator.

2. In this paper, we present three examples in which a regulatory asset or regulatory liability could be recognised using the model being developed. We ask CMAC members to comment on the usefulness of recognising such amounts for understanding the financial position, performance and expected cash flows of the entity.

Background

3. Many governments regulate the supply and pricing of particular types of goods and services by entities. These ‘rate-regulated activities’ usually involve providing goods or services that are considered in that jurisdiction to be essential to customers, especially the transmission and distribution of utilities such as gas, electricity and water.

4. Some forms of rate regulation establish a cap on the rate or rates per unit that the entity is permitted to charge to customers for its rate-regulated goods or services. However, the entity's management is then free to manage the business in order to maximise its profitability. In the project, we refer to this type of rate regulation as 'market regulation'.

5. In contrast, some forms of rate regulation have a more significant effect on the entity's financial results. The rate regulator not only regulates the rate(s) to be charged to customers for the rate-regulated goods or services, but also establishes obligations on the entity. Such obligations typically focus on the quality and availability of the rate-regulated goods or services. However, they may also involve wider regulatory objectives, such as supporting vulnerable customers. In the project, we refer to this type of rate regulation as 'defined rate regulation'.

6. Defined rate regulation is designed to ensure that the rate-regulated entity receives a determinable amount of compensation in exchange for satisfying its regulatory obligations. In addition, the rate regulation establishes, through the rate(s) chargeable to customers, the time at which the entity can bill customers to receive that compensation. Defined rate regulation applies when demand for the rate-regulated goods or services is predictable and relatively stable and the rate-regulated entity's supply of those goods or services is protected from competition.

7. The intervention of the rate regulator can significantly affect the timing of the entity's cash flows. This is because the rate regulator's intervention can result in significant time lags between the time when the entity bills amounts to customers and when it satisfies its regulatory obligations. Further differences between amounts billed and amounts to which the entity is entitled can arise because of 'estimation variances'. The rate chargeable to customers is initially based on estimated input costs and volumes, but the regulatory agreement is clear that the rate will be revised to reflect actual events and transactions. Consequently, the rate-setting mechanism is designed to reverse specified differences between the amount of the entity's entitlement to compensation accrued and the amount billed to customers. This regulatory adjustment mechanism seeks to ensure that the rate-regulated entity earns no more and no less than the amount of the compensation to which it is entitled through the regulatory agreement.

Current accounting requirements

8. Generally accepted accounting principles/ practice (GAAP) in some jurisdictions, including the USA, contain specific accounting requirements that recognise the origination and reversal of these timing differences and estimation variances in financial statements as regulatory assets and regulatory liabilities. There are currently no equivalent requirements in IFRS Standards. As a result, most existing IFRS financial statement preparers do not recognise such amounts in their financial statements.

9. The Board is developing an accounting model for defined rate-regulation that aims, in IFRS financial statements, to recognise at least some of these timing differences and estimation variances as regulatory assets and regulatory liabilities. We are looking for CMAC input on how useful the recognition of regulatory assets and regulatory liabilities is to users of financial statements and how best to present the regulatory adjustments to profit or loss.

Questions for CMAC members

For each of the examples below:
1. How useful is the recognition of a regulatory asset or regulatory liability (plus the resulting profit or loss adjustment) in providing useful information about the entity's: a. financial position; b. financial performance; and c. expected cash flows?
2. Where in the profit or loss account would you prefer to see the regulatory adjustment? a. as a separate 'regulatory adjustment' line item; b. as an adjustment to the revenue line; c. as an adjustment to the costs line; or d. a combination of any of the above? Please explain your preference.

Examples

10. All examples are based on a water utility, Entity W. Background information about Entity W and its rate-regulatory environment are contained in the appendix. The examples assume that the regulatory adjustments are within the scope of the model, are material to Entity W and are expected to be included within the future regulated rate. For simplicity, the time value of money is assumed to be immaterial.

Example 1—input price estimation adjustment

Fact pattern

11. The rate-setting mechanism allows Entity W to recover the actual input cost incurred for chemicals used in treating waste water. As a result, the entity tracks any variances from the estimated input cost used in the rate calculation. Any variance is included in the future regulated rate.

12. The rate regulator anticipates that the input cost for the water treatment chemicals will be CU30,000 for the year ended 31 December 20X1. [1] This amount is included in the rate calculation and is billed to customers during 20X1. However, the input cost actually incurred was CU28,000, resulting in a variance of CU2,000.

Applying the model

13. At 31 December 20X1, the entity has received from customers CU30,000 relating to the water treatment chemicals, through the bills sent to customers for delivering water services during the year. The rate regulation specifies that the entity is entitled to receive CU28,000, being the actual input cost incurred to deliver those services. The variance of CU2,000 will be 'corrected' by reducing the regulated rate that the entity uses to bill customers during 20X2. As a result, the entity will bill customers CU2,000 less during 20X2 as a result of the variance arising during 20X1.

[1] In this Staff Paper, currency amounts are denominated in 'currency units' (CU).

14. Using the model, at 31 December 20X1, Entity W will recognise a regulatory liability of CU2,000 to reflect its obligation to deliver further goods and services at a reduced rate during 20X2.

Entity W records the following at 31 December 20X1:

Year to 31 December 20X1	**CU**
Existing IFRS Standards	
Revenue (amounts billed)	30,000
Operating expenses	(28,000)
Profit	2,000
Proposed model	
Revenue (amounts billed)	30,000
Regulatory adjustment in profit or loss	(2,000)
Operating expenses	(28,000)
Profit	0
Regulatory liability	2,000

Example 2—bonus/ penalty adjustments

Fact pattern

15. The regulatory agreement includes a target for the quality of water to be supplied to customers. The regulatory agreement specifies that the regulated rate will be adjusted in future periods to provide, in each year, Entity W with a CU20,000 bonus for exceeding this target or a CU24,000 penalty for failing to meet the target. The initial regulated rate set for the four-year period 20X1-20X4 does not anticipate any bonuses or penalties. Any bonus or penalty will be applied to the rate in the year following the year in which it is earned or incurred.

16. During November 20X1, Entity W suffered contamination at one of its water treatment plants. As a result, customers in the area supplied from that plant had to boil all tap water before use for three weeks, until the contamination was cleared and water quality was restored to a safe standard.

17. The contamination resulted in Entity W failing to meet its water quality target for 20X1. Consequently, the entity incurred a penalty of CU24,000.

18. In addition, the rate regulator decided that, because of the severity of the disruption to customers, Entity W would have to pay CU15,000 cash back to the customers affected by the contamination.

Applying the model

19. Entity W will bill customers CU24,000 less during 20X2 because of the contamination incident in 20X1. Using the model, Entity W recognises, at 31 December 20X1, a regulatory liability of CU24,000 for the penalty, together with an adjustment in profit or loss. This regulatory liability will be settled during 20X2 by Entity W delivering services at a reduced rate.

20. In addition, Entity W will recognise a liability for the CU15,000 refund that it must also pay to the customers affected by the contamination. This liability will be reflected as a provision or a payable using existing IFRS Standards.

Entity W records the following at 31 December 20X1:

Year to 31 December 20X1	**CU**
Existing IFRS Standards	
Revenue (amounts billed)	xx
Operating expenses	(15,000)
Loss	(15,000)
Proposed model	
Revenue (amounts billed)	xx
Regulatory adjustment in profit or loss	(24,000)
Operating expenses	(15,000)
Loss	(39,000)
Regulatory liability	24,000

Example 3—timing adjustment

Fact pattern

21. For the four-year period 1 January 20X1 through 31 December 20X4, Entity W is obliged to carry out an agreed programme of maintenance on the network of pipes supplying water to customers' premises and removing waste water from those premises. The estimated cost of the agreed work is CU200,000. The rate

regulator rate establishes the rate to be charged to customers in each year by assuming that the costs to be incurred to carry out the maintenance work will be incurred evenly in each of the four years, 20X1-20X4. As a result, Entity W receives CU50,000 each year through the amounts billed to customers for the delivery of water services.

Example 3(a)

22. During the three years 20X1-20X3, Entity W does not carry out any of the agreed maintenance work on the network of pipes. Instead, the entity completes all of the agreed works during 20X4. The work costs CU200,000.

Example 3(b)

23. During 20X1, Entity W carries out all of the agreed maintenance work on the network of pipes. The work costs CU200,000.

Applying the model—example 3(a)

24. During 20X1, Entity W will receive CU50,000 of the agreed maintenance costs because the regulated rate used to bill customers reflects the rate regulator's assumption that Entity W will incur those costs during that year. Using the model, Entity W will recognise a regulatory liability of CU50,000 at 31 December 20X1, together with a related adjustment in profit or loss.

25. During each year 20X2 and 20X3, Entity W will receive CU50,000 through the bills sent to customers and the regulatory liability will be increased by CU50,000 each year because the entity has not yet satisfied its obligation to carry out the agreed maintenance work.

26. During 20X4, Entity W receives the remaining CU50,000 through the bills sent to customers and incurs costs of CU200,000 to satisfy its obligation to carry out the agreed maintenance work. The satisfaction of this obligation settles the regulatory liability, which is derecognised by the end of 20X4.

Entity W records the following at 31 December:

Each year to 31 December 20X1, 20X2 and 20X3	**CU**
Existing IFRS Standards	
Revenue (amounts billed)	50,000
Operating expenses	(—)
Profit	50,000
Proposed model	
Revenue (amounts billed)	50,000
Regulatory adjustment in profit or loss	(50,000)
Operating expenses	(—)
Profit	—
Regulatory liability	50,000

Year to 31 December 20X1	**CU**
Existing IFRS Standards	
Revenue (amounts billed)	50,000
Operating expenses	(200,000)
Loss	(150,000)
Proposed model	
Revenue (amounts billed)	50,000
Regulatory adjustment in profit or loss	150,000
Operating expenses	(200,000)
Profit	—
Regulatory liability	—

Applying the model—example 3(b)

27. During 20X1, Entity W incurs the full cost of CU200,000 and recognises this as an expense in profit or loss because it has fully satisfied its regulatory obligation to complete the agreed maintenance work on the pipe network. Entity W will receive CU50,000 of the agreed maintenance costs during the year through bills sent to customers. Using the model, Entity W will recognise a regulatory asset of CU150,000 at 31 December 20X1, together with a related adjustment in profit or loss. This asset reflects the entity's right to receive a further CU150,000 through

bills to customers in exchange for settling its regulatory obligation to carry out the agreed maintenance work.

28. During each year 20X2-20X4, Entity W will receive CU50,000 through the bills sent to customers and the regulatory asset will be decreased by CU50,000 each year. By the end of 20X4, the regulatory asset is fully recovered.

Entity W records the following at 31 December:

Year to 31 December 20X1	**CU**
Existing IFRS Standards	
Revenue (amounts billed)	50,000
Operating expenses	(200,000)
Loss	(150,000)
Proposed model	
Revenue (amounts billed)	50,000
Regulatory adjustment in profit or loss	150,000
Operating expenses	(200,000)
Loss	—
Regulatory asset	150,000

Each year to 31 December 20X2, 20X3 and 20X4	**CU**
Existing IFRS Standards	
Revenue (amounts billed)	50,000
Operating expenses	—
Profit	50,000
Proposed model	
Revenue (amounts billed)	50,000
Regulatory adjustment in profit or loss	(50,000)
Operating expenses	—
Profit	—
Regulatory asset at 31 December 20X4 (reduces by CU50,000 each year)	—

Appendix A: Entity W background information

A1. Entity W is a water utility and is subject to a regulatory framework that includes regulatory adjustments that are within the scope of the proposed accounting model. The other features of the regulatory environment support the enforceability of the rate regulation.

A2. Entity W:

(a) is a publicly owned company listed on the Country X stock exchange;

(b) prepares IFRS financial statements and a set of regulatory returns for its reporting periods ending 31 December each year;

(c) operates under a licence agreement granted by the government to be the sole supplier of clean and waste water services in Country X; and

(d) is subject to a well-established and stable system of rate regulation, as described in the paragraphs 5-7 of this paper.

A3. The licence grants Entity W the sole supplier right for an indefinite period, in exchange for Entity W agreeing to provide water services in accordance with the regulatory agreement. The rate regulator, which is a government body, can only terminate the agreement if Entity W persistently fails to satisfy its obligations under the regulatory agreement.

A4. The regulated rate is reviewed and set every four years; this example considers the position for the next rate period from 1 January 20X1-31 December 20X4. For simplicity, please assume that there are no regulatory balances to carry forward as at 31 December 20X0.

A5. In mid-20X0, the rate regulator approves Entity W's budgets and forecasts for the four-year period starting 1 January 20X1. Estimated demand for the period is based on population forecasts provided by the government of Country X.