Profitability measures for electricity and gas network businesses

Draft position paper

April 2018

AUSTRALIAN
ENERGY
REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Tel: 1300 585165

Email: AERInquiry@aer.gov.au
AER Reference: 61378

Request for submissions

The Australian Energy Regulator (AER) invites interested parties to make submissions on this draft position paper by Wednesday 30 May 2018.

We prefer that all submissions are in Microsoft Word or another text readable document format. Submissions on our draft position paper should be sent to: AERinquiry@aer.gov.au.

Alternatively, submissions can be sent to:

Mr Warwick Anderson
General Manager
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested. Parties wishing to submit confidential information should:

- clearly identify the information that is the subject of the confidentiality claim
- provide a non-confidential version of the submission in a form suitable for publication.

We will place all non-confidential submissions on our website. For further information regarding our use and disclosure of information provided to us, see the ACCC/AER Information Policy (October 2008), which is available on our website.

Please direct enquires about this paper, or about lodging submissions to AERinquiry@aer.gov.au

Shortened Form

Shortened Form	Extended Form
ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
Balance sheet	Statement of assets, liabilities and equity of a service provider. Also known as the statement of financial position.
Benchmark gearing ratio	The benchmark debt to equity ratio of 60:40.
CCP	Consumer Challenge Panel
core regulated services	Standard Control Services for electricity distribution service providers; Prescribed Transmission Services for electricity transmission service providers; and Haulage Reference Services for gas service providers.
EBIT	Earnings before interest and tax
ECA	Energy Consumers Australia
ENA	Energy Networks Australia
Gearing	The ratio of the value of debt to total capital.
Income statement	Statement of profit or loss and other comprehensive income of the service provider. Also known as the statement of financial performance.
IRR	Internal Rate of Return
MEU	Major Energy Users
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	National Gas Objective

NGR	National Gas Rules
NPAT	Net profit after tax
PIAC	Public Interest Advocacy Centre
QFF	Queensland Farmers Federation
RAB	Regulatory Asset Base (is the closing asset base for core regulated services for a regulatory year based on regulatory rules).
Regulatory accounting information	Financial information that has been prepared in accordance with regulatory rules. Regulatory accounting information is to be prepared for the Service Provider and the core regulated services of the Service Provider.
RII	Regulatory Information Instrument
RIN	Regulatory Information Notice
RIO	Regulatory Information Order
RoA	Return on Assets
RoE	Return on Equity
RoRE	Return on Regulated Equity
SAPN et al.	Joint submission from SAPN, CitiPower, Powercor, Australian Gas Infrastructure Group, United Energy
Service Provider	In the electricity sector the service provider is the regulated network service provider (as defined under the NEL). For the gas sector, the service provider is the scheme pipeline service provider (as defined in the NGL).
Statutory accounting information	Financial information that has been prepared in accordance with the Corporations Act, including relevant accounting standards. Statutory accounting information is to be prepared for the Service Provider.
WACC	Weighted Average Cost of Capital

Contents

Request for submissions iii

Shortened Form iv

1 Overview 1

1.1. Introduction 1

1.2. McGrathNicol scoping study 1

1.3. AER discussion paper 1

1.4. Objective of the review 2

1.5. General support for reporting on profitability 2

1.6. Draft position on profitability measures 3

1.7. Rate of return review 4

2 Key issues raised in submissions 5

2.1. How will the profitability measures be used? 5

2.2. Multiple measures versus a single measure 5

2.3. Assessment criteria 6

2.4. Service coverage 7

2.5. Statutory versus regulatory accounting 9

2.6. Allocations from corporate level to the regulated entity 11

2.7. Factors affecting profitability comparisons 13

2.8. Benchmarking of profitability measures 15

2.9. Other measures of financial performance 15

3 Analysis of individual profitability measures 17

3.1. Return on Assets 17

3.2. Return on Equity 20

3.3. Return on Regulated Equity 21

3.4. Earnings per customer/connection 22

3.5. RAB multiples 23

3.6. Economic profit..25

3.7. Internal Rate of Return 25

4 Data collection and reporting 27

4.1. Data requirements 27

4.2. Mechanism for collecting the data 28

4.3. Reporting 30

4.4. Publication of measures using existing data 30

5 Next steps 32

Appendix A - List of stakeholder submissions 33

Appendix B - Income statement and balance sheet templates 34

1 Overview

1.1 Introduction

Consumer groups and other industry observers have raised concerns about the profit levels of regulated network service providers. They have argued the regulatory framework enables service providers to achieve returns above that expected, given the risks they face.

In response to consumer concerns, we are undertaking this review to identify profitability measures that could be applied to electricity and gas service providers.

1.2 McGrathNicol scoping study

In 2017, we engaged McGrathNicol to undertake a scoping study into relevant measures of profitability that could be applied to electricity and gas service providers. McGrathNicol identified a range of possible profitability measures; assessed the advantages and disadvantages of each; and set out the data requirements for each measure.[1]

Based on its assessment, McGrathNicol found the Return on Assets – Earnings Before Interest and Tax (EBIT) measure met all criteria. It also found that a number of other profitability measures may also be appropriate, specifically Return on Equity; Earnings per Customer/Connection; and Economic Profit.

McGrathNicol suggested we employ a range of measures in our profitability reporting framework, as such an approach can highlight different aspects of profitability.

1.3 AER discussion paper

In November 2017 we published a Discussion Paper on profitability measures and the McGrathNicol scoping study. The discussion paper summarised the findings of McGrathNicol's scoping study, outlined the profitability measures they had identified and set out data requirements to calculate those measures. The paper also raised a number of questions regarding the relevance and applicability of the profitability measures and the data required to support them. We sought submissions from stakeholders on these questions.[2]

In response to our discussion paper we received 14 submissions. The parties who made submissions can be found at Appendix A and the submissions can be found on the AER website.

This paper responds to issues raised in submissions, provides our views on each of the identified measures and indicates those measures that we intend to report and the data requirements underpinning them.

1 McGrathNicol, Review of measures of financial performance that could be applied to the electricity and gas businesses the AER regulates – Final Report – 15 June 2017.

2 AER Discussion Paper, *Profitability measures for regulated gas and electricity network businesses,* November 2017.

1.4 Objective of the review

The aim of this review is to identify suitable profitability measures and their associated data requirements that would allow us to report and compare the returns of electricity and gas service providers we regulate. In particular, we are seeking to identify profitability measures that will allow comparison of:

- expected returns of a service provider to its actual returns
- returns between service providers in the same sector
- returns between the service providers and other regulated/unregulated industries.

We consider reporting on the returns of the service providers will assist in the achievement of the National Electricity Objective (NEO) and the National Gas Objective (NGO) by making those returns and their drivers transparent. This should assist stakeholders in making submissions on service provider's regulatory proposals and to other regulatory processes. In addition, the information should assist us and stakeholders by providing an additional source of information with which to review the overall effectiveness of the regulatory regime.

1.5 General support for reporting on profitability

Industry and consumer groups support our intent to collect and report data on measures of profitability. Submissions on the discussion paper indicated that all stakeholders agreed on the need to increase transparency of the service provider's profitability.

Service providers generally considered it was is in the best interests of all stakeholders for the AER to develop and report on measures that accurately reflect the profitability of networks. They stated reporting on profitability measures would:

- increase the transparency of the AER's regulatory activities
- address the concerns of consumer and user groups in respect of excessive profitability of service providers
- improve stakeholder participation in the regulatory process
- assist in the achievement of the NEO and NGO.[3]

Consumer groups stated profitability analysis formed an essential post-implementation review of the regulatory framework, providing an important check on how service providers performed against the regulatory determination.[4] They considered the measures would assist consumers to identify if the networks were achieving excessive profits relative to the risks they faced and investigate the causes of any excessive profits.[5]

The Consumer Challenge Panel (CCP) stated reporting on profitability would support the key regulatory principles of legitimacy and transparency, and increase confidence in the regulatory system. It considered that the ability to compare profitability between service

3 Energy Networks Australia, Energex and Ergon Energy, AusNet, APA, SAPN et al. (joint submission from SAPN, CitiPower, Powercor, Australian Gas Infrastructure Group, United Energy).

4 ECA p.3

5 MEU p.1

providers and across the broader economy will provide important insight for the AER and other stakeholders.[6]

1.6 Draft position on profitability measures

Table 1.1 summarises our draft position, setting out the measures which we intend to report, how the measures are to be calculated and what comparisons each measure could support. Based on our analysis of submissions and advice from our consultant McGrathNicol, we have chosen to report on a suite of profitability measures rather than a single measure. We consider that a suite of measures approach is superior because it highlights different aspects of profitability, thereby allowing a more comprehensive assessment of the drivers of a service provider's profit outcomes to be undertaken. It also provides for a broader range of comparisons to be undertaken.

Table 1.1: Draft position on profitability measures

Proposed measure	Calculation	Comparators
Return on Assets (Regulatory)	Regulatory EBIT / RAB, where Regulatory EBIT is for core regulated services and the RAB for core regulated services.	• Pre-tax real WACC allowed in a service provider's regulatory determination. • Regulatory returns of other service providers. • Regulatory returns of Australian and international regulated businesses where the RAB is valued on a reasonably consistent basis to that of the service provider.
Return on Assets (Statutory)	Statutory EBIT for the Service Provider / Statutory Total Assets for the Service Provider.	• Statutory returns of other service providers. • Statutory returns of other businesses outside of the sector that have a similar capital intensity and risk.
Return on Equity (Statutory)	Statutory NPAT for the service provider / Statutory Equity for the service provider.	• Statutory returns of other service providers. • Statutory returns of other businesses outside of the sector that have a similar capital intensity and risk.
Return on Regulatory Equity (Regulatory)	Regulatory NPAT / Regulated Equity, where Regulatory NPAT is for core regulated services, and Regulatory equity is determined by applying the benchmark gearing ratio to the RAB for core regulated services.	• Post-tax real return on equity allowed in a service provider's regulatory determination.[7] • Regulatory returns of other service providers. Regulatory returns of Australian and international regulated businesses where the RAB is valued on a reasonably consistent basis, and the debt to equity mix is similar to the service providers.
EBIT / customers numbers (Regulatory)	Regulatory EBIT / Total customer/connections, where Regulatory EBIT and customer/connection numbers are for core regulated services.	• Previous year's outcomes for the service provider. • Other service providers in the same sub-sector.
RAB multiples	Enterprise Value / RAB, where Enterprise Value is the total market value of the business as determined by reference to a sale value or based on the value of the company's shares (if listed).	• Transactions/valuations of other service providers. • Transactions/valuations of other regulated business outside of the sector that have a similar level of risk and capital intensity.

6 CCP p.5-6

7 Note that this component of the WACC is not updated annually but is fixed for the regulatory period.

To assist us in our review of profitability measures for this draft position paper we engaged McGrathNicol. In particular, McGrathNicol was asked to provide a response to submissions and that document has been published with this draft position paper.

1.7 Rate of return review

Parallel to our review of profitability measures, we are also undertaking a review of our rate of return guideline (Guideline). That review will formulate an approach to Rate of Return that best satisfies the NEO and NGO.

The rate of return is a key component of the allowed revenue we determine service providers can recover from customers for the use of their networks. It is a forecast of the cost of funds a service provider requires to attract investment in its network, and is one of the main drivers of the network charges consumers pay.

On 31 October 2017, we released an issues paper setting out the priority issues and posing a series of targeted questions on which we would like stakeholder input. This was followed on 28 November 2017 by the release of our position paper on the process for reviewing the Guideline.

During February and March 2018 we released six discussion papers on matters to be discussed at concurrent evidence sessions.[8] We expect to release our draft decision in late June, with our final decision being released in December.

Several stakeholders have commented on the link between profitability and the rate of return. They submitted our approach to determining the rate of return and overall revenue may have consistently resulted in higher profits for service providers compared to unregulated businesses or the required rate of return for investors.[9] In order to address these concerns information on profitability is required. This draft position paper identifies suitable profitability measures and associated data requirements so we can implement a profitability reporting framework.

---

8 AER Discussion Paper, *Financial Performance Measures* February 2018; AER Discussion Paper, *Gearing* February 2018; and AER Discussion Paper, *Risk and Judgement* February 2018. AER Discussion Paper, *Value of imputation credits* March 2018; AER Discussion Paper, *Equity beta* March 2018; and AER Discussion Paper, *Market Risk Premium, risk free rate averaging period and automatic application of the rate of return* March 2018.

9 CCP p.4; MEU p.2; ECA p.4.

2 Key issues raised in submissions

This section outlines key issues raised in submissions to our discussion paper and provides our response to those issues.

2.1 How will the profitability measures be used?

A recurring theme in submissions was the need for us to clarify how we intended to use the proposed profitability measures.[10] ENA stated that it was unclear whether the measures were simply to be reported for the information of stakeholders or whether we intend the comparisons would have a role within the regulatory process. For example, ENA questioned whether the measures would result in some sort of adjustment to allowed revenues and, if so, how that process would work.[11]

The CCP raised similar issues, noting the discussion paper did not explain how we intend to use the profitability measures in our decision making.[12] ECA submitted profitability measures should be part of the post-implementation review of the regulatory framework.[13] It characterised incentive regulation as an iterative process, requiring the regulator to continually check performance against the terms of the settlement.

Our primary purpose in reporting the measures is to provide transparency for stakeholders on the profitability of the service providers. We intend to publish the measures (including our analysis of the outcomes and any relevant caveats) in annual performance reports for gas and electricity businesses. We consider this additional information will assist stakeholders in making submissions to our regulatory determination processes and other regulatory reviews.

We will have regard to profitability outcomes of the service providers as part of our regulatory determination processes. However, the information would not be used in a mechanistic way to make adjustments to allowed revenues. Rather, the information would be contextual, along with other information such as expenditure and service performance outcomes from previous regulatory periods.

Profitability outcomes may also be used by us and stakeholders as an additional factor by which to monitor the overall effectiveness of the regulatory regime in achieving the national energy objectives.

2.2 Multiple measures versus a single measure

Service providers generally indicated that Return on Assets (EBIT) best met the assessment criteria and was the most appropriate measure to report.[14] However, consumers stated that, in their view, reporting on multiple profitability measures was likely to provide greater benefit

10 Energy Networks Australia, AusNet Services, APA, SAPN et al., Energex and Ergon Energy.
11 ENA p.5
12 CCP p.9
13 ECA p.3
14 APA, AusNet Services, Energy Networks Australia, Energex and Ergon Energy.

than reporting a single profitability measure.[15] They noted each individual measure looks at profitability from a different perspective, with different measures highlighting different aspects of profitability.

In its submission, the CCP provided an example of the benefits of using multiple profitability measures.[16] It submitted that in a situation, across a number of regulatory decisions, where Return on Assets (EBIT) is comparable to the WACC, it may suggest profit levels are appropriate. However, if the same dataset also shows a Return on Equity significantly greater than that allowed in the WACC, the CCP stated it may suggest:

- the tax allowed is higher than the actual tax paid
- gearing levels are significantly different from those assumed, and/or
- actual debt costs are significantly below the benchmark debt costs.

We agree different measures examine different aspects of profitability, so multiple measures should enable a more comprehensive assessment of the drivers of a service providers' profits than a single measure. This point was also made by McGrathNicol in its 2017 Scoping Study.[17] We therefore consider the application of multiple measures supports our aim of increasing transparency on service providers' profits and would allow us and stakeholders to more fully assess the drivers of profits. We also agree with a number of submissions and McGrathNicol[18] that the gas and electricity sectors are sufficiently similar that the same suite of measures can be used for both sectors.

2.3 Assessment criteria

In its Scoping Study McGrathNicol identified a number of profitability measures it considered to be appropriate based on the following five assessment criteria:

1. The measure is based on clear concepts and able to be calculated consistently over time
2. The measure can be calculated without the need for manipulation of data or assumptions
3. The measure is generally accepted and easily understood by those without a financial background
4. The measure is suited to the characteristics of the industry (e.g. capital intensive, long lived assets, regulated revenue and returns, etc.)
5. The measure can be used to compare across the sector and with other businesses in the broader economy.[19]

15 CCP p.6

16 CCP p.9

17 McGrathNicol, Review of measures of financial performance that could be applied to the electricity and gas businesses the AER regulates – Final Report – 15 June 2017 (p.52).

18 McGrathNicol - Response to submissions on performance measures. p.16

19 McGrathNicol, Review of measures of financial performance that could be applied to the electricity and gas businesses the AER regulates – Final Report – 15 June 2017 (p.15).

Stakeholders generally accepted the assessment criteria proposed by McGrathNicol as being reasonable to guide the selection of profitability measures.[20] However, some issues were raised with criterion 2 and criterion 5.

It was suggested, in some cases, it may not be possible to satisfy criterion 2, as some assumptions and adjustments to the underlying data are necessary to prepare the regulatory accounting information from statutory accounting information. Also, it was stated that for large consolidated corporations some assumptions and adjustments are necessary to allocate revenue, expenses, tax, interest, depreciation, shared assets, debt and equity from the corporate level to the regulated entity.[21] While consumer groups and the CCP agreed it is desirable for the measures to be calculated without adjustment or assumptions, they acknowledged in practice some measures will require adjustments or assumptions to improve comparability and better extract the relevant information.[22]

We agree it may not be possible for some measures to meet criterion 2, and consider the benefits of getting a more appropriate comparison outweighs the loss of simplicity from using unadjusted data. We accept adjustment and assumptions may be necessary to calculate some of the proposed profitability measures, particularly where the service provider is part of a consolidated group of companies. In our assessment of profitability measures we have therefore given less weight to criterion 2.

The CCP also noted criterion 5 did not include comparisons with the allowed level of profitability, only a comparison to peers and businesses in other sectors.[23] As noted in section 1.4 of this paper, we are seeking profitability measures that will allow comparisons between service providers and other service providers, as well as with businesses in the broader economy. We are also seeking to compare the expected returns of service providers with their actual returns. We agree with submissions that the ability to make these types of comparisons should form part of our profitability reporting framework. We note in this paper we have proposed to include some measures that allow comparisons between expected and actual returns. Criterion 5 should therefore be read as including measures that compare a service provider's expected returns to actual returns.

This is consistent with our view that there is no single perfect measure and a suite of measures approach best meets our overall objectives.

2.4 Service coverage

Electricity and gas service providers deliver a number of regulated and unregulated services. In the context of electricity distribution service providers, the core regulated services are Standard Control Services. For electricity transmission service providers, core regulated services are Prescribed Transmission Services and for gas service providers (both transmission and distribution) they are Haulage Reference Services.

---

20 Essential Energy, AusNet Services, APA, Ergon Energy and Energex, PIAC, Agricultural Industries Energy Taskforce

21 Ergon Energy and Energex p.9; ENA p.4; APA p.10; AusNet Services p.1.

22 CCP p.15; Agricultural Industries Energy Group p.11.

23 CCP, p.15.

In addition to core regulated services, service providers often deliver a number of other regulated services that are subject to different forms of regulation. For example, electricity distributors also provide Alternative Control Services (ACS) and Negotiated Services. Some also provide services in competitive markets and these services are not regulated.

A number of submissions observed that the discussion paper did not specifically set out whether the profitability measures would be applied to core regulated services or all regulated services provided by a business.[24] Energex and Ergon Energy stated the importance of defining the term 'regulated business' to ensure the correct data is sourced and suggested we should focus on core regulated services.[25]

Essential Energy stated it had assumed that the proposed data requirements would only be required for Standard Control Services[26] because:

- Other regulated services operate under a price cap mechanism, which includes limited or no profit.
- Alternative Control Services customer numbers and revenues are directly related to the number of services provided.
- Due to Power of Choice reforms, over time metering will be transitioned to retailers.
- Ancillary network services and negotiated services do not have asset bases and have limited fixed assets, generally just a share of non-system assets like buildings, fleet and Information Technology.

We agree that the services to be included in the calculation of the profitability measures is an important issue as it determines what data is required to be reported by service providers and what comparisons can be made. As discussed in chapter 3, we are proposing to report on a number of profitability measures that will allow a range of comparisons. In relation to measures that will be used to compare service providers with regulatory benchmarks and against one another we consider the appropriate service coverage should be core regulated services (using regulatory accounting information). We consider this is appropriate for the following reasons:

- Core regulated services are the focus of the regulatory regime;
- Core regulated services represent the majority of service providers' revenues and expenditures;
- The focus of performance reporting is generally on core regulated services;
- The sector continues to evolve, with some (non-core) regulated services transitioning to a competitive framework (for example, metering services in electricity distribution).

However, for those measures that are to be used to compare service providers against regulated and unregulated businesses in the broader economy, we propose to use statutory accounting information for the service provider as a whole. We note that this information will

24 Essential Energy - Attachment 1.
25 Energex and Ergon Energy p.10.
26 Essential Energy, p.2.

necessarily include both regulated and non-regulated services of the service provider (not just core regulated services).

2.5 Statutory versus regulatory accounting

An objective of this review is to identify measures that will allow comparison of the profit outcomes of the service providers with other businesses in the broader economy. Consumer groups considered this to be a key goal of any profitability reporting framework. However, both consumer groups and service providers identified issues with comparing profitability of businesses operating under a regulatory accounting framework, with businesses in the broader economy that operate under a statutory accounting framework.

McGrathNicol noted in its 2017 Scoping Study there may be substantial differences between the regulatory accounting information and statutory accounting information, with accounting standards requiring the inclusion of a number of items in the statutory accounts that are excluded from the regulatory accounts, such as:

- amortisation expenses related to good will or intellectual property, which will reduce EBIT and NPAT;
- revaluation of assets, depreciation expenses, impairment losses, unrealised gain/loss on investments and other accounting adjustments, which will impact on NPAT;
- current assets (income from holding cash and investments are excluded from the RAB).[27]

Service providers' submissions generally proposed limiting any comparisons of the service providers' profitability to regulatory benchmarks or to other businesses in the sector. However, the joint submission from SAPN, CitiPower, Powercor, Australian Gas Infrastructure Group, United Energy (SAPN et al.) stated that there was a danger of circularity, where results are driven by regulatory assumptions and those results are used to validate those assumptions or decisions.[28] It considered information from outside the regulatory sector would provide a cross check that the regulated returns are commensurate with those earned by businesses with a similar level of risk operating in a competitive environment.

Although acknowledging some differences between statutory and regulatory reporting, consumer groups strongly supported a comparison of the regulated businesses returns against those of businesses operating in the broader economy. For example, the Major Energy Users (MEU) stated it is seeking a comparison of service providers' profits against a cohort of comparator firms operating in a competitive environment.[29]

Both consumer groups and service providers identified adjustments to regulatory financial information to allow like-for-like comparisons to be made with other businesses in the broader economy. For example, APA stated significant adjustments would be required to

27 McGrathNicol, Review of measures of financial performance that could be applied to the Electricity and Gas businesses the AER regulates – Final Report – 15 June 2017 (p.41).

28 SAPN et al. p.2.

29 MEU p.6.

translate regulatory financial information to any meaningful form of Australian Accounting Standard information. In particular it referred to different approaches to asset valuation, the treatment of indexation and regulatory depreciation. It also considered these adjustments would cause a number of the proposed measures to be problematic to apply in practice and would cause them to deliver spurious results.[30]

Consumer groups also acknowledged that comparisons need to be carried out on a similar basis. For example, the MEU stated measures of profitability between regulated firms and firms operating in the competitive markets need to be carried out on a consistent basis for asset valuation (specifically removal of indexation and optimisation of assets).[31] The MEU also stated there are other aspects which will impact on comparisons such as abnormal adjustments and goodwill that will need to be assessed. The CCP noted profitability comparisons with unregulated businesses may require adjustments and data requirements for such comparisons would need to be identified.[32]

In its response to submissions, McGrathNicol agreed there were issues with comparing regulatory and statutory returns and noted there is no perfect comparison.[33] It also noted that where adjustments are made to enhance comparability by adjusting data to make regulatory and statutory data more consistent, these adjustments will be difficult and complex and still open to criticism. It suggested the AER collect financial information from service providers on both a statutory and regulatory basis so that comparisons of returns of the service providers to other businesses in the broader economy could be undertaken using measures based on statutory information. McGrathNicol considered this would improve comparability and avoid the need for complex adjustments.

There is value in comparing the profitability of service providers with firms operating in the broader economy. It provides a useful check on the profitability levels of the regulated businesses, particularly given the potential for circularity as noted by SAPN et al. However, we also recognise the difficulties in making such comparisons primarily due to the differing nature of regulatory and statutory accounting frameworks.

We see two main options available to us to make the information of service providers and firms in the broader economy more comparable.

The first is to make a number of adjustments and amendments to the regulatory accounting information to better align it with the statutory accounting information. For example, this may involve including amortisation expenses relating to intangible assets, removal of indexation from the asset base, adjustments for impairment losses and the inclusion of non-current assets. We accept McGrathNicol's advice that these adjustments would be complex, would need to be made for each service provider and would likely remain open to criticism. We also acknowledge that even after these adjustments have been made, the measures calculated may still not be comparable to those calculated for other businesses on a statutory accounting basis.

30 APA pp. 7-8.
31 MEU p.6
32 CCP pp. 16-17.
33 McGrathNicol - Response to submissions on performance measures (pp.2-4).

The second option is to require the service providers to report information on a statutory basis, thereby allowing some measures to be calculated for service providers using information that has been developed using the same statutory accounting rules as other entities. This would allow a more like for like comparison of service providers' profitability with businesses in the broader economy. This approach would avoid the need for complicated adjustments to each service provider's regulatory accounting information.

We accept that this approach has a cost for some businesses who do not currently report statutory information at the service provider level. However, we note some electricity distribution and transmission business currently report to us at this level as part of their annual reporting RINs. For other service providers, there may be an initial cost, but once established, we consider the ongoing cost of reporting will be lower. This approach will require some service providers to make allocations and adjustments for certain data in producing statutory accounting information at this level, particularly where they are part of a larger corporate group (this is discussed further in the next section). However, we see this as preferable to making adjustments to regulatory accounting information.

We also recognise the statutory accounting information includes both regulated and unregulated activities, but note that the majority of revenues and expenditures relate to the service provider's core regulated services. Analysis by McGrathNicol of income statements provided in the electricity distribution RINs found regulated revenue represented 74 per cent of total statutory revenue of the service provider.[34]

Overall, our preferred approach to enable the profitability of service providers to be compared to businesses in the broader economy is to require service providers to report the relevant information on a statutory accounting basis. Other profitability measures based on regulatory accounting information would be used to compare service providers against their regulatory benchmarks and other service providers in their sector.

2.6 Allocations from corporate level to the regulated entity

Stakeholders raised a number of issues with the allocation of tax and interest in the calculation of net profit after tax (NPAT) to report return on equity. Submissions from service providers noted that many electricity and gas businesses are part of a large consolidated corporation, which can include a number of regulated and non-regulated businesses. For these businesses, tax is typically managed at the group level. In order to prepare financial information for the service provider, it would need to be allocated from the corporate level. It was submitted that, without clear guidance for making these allocations, they are likely to be made on an arbitrary basis.[35]

Financing arrangements were also raised by stakeholders as a significant issue. Similar to tax and interest, the financing of assets or business units that are part of large consolidated corporations may also be managed at the group level. APA stated that where a company raises capital at the corporate level, it is possible that the reporting entity does not hold any

34 McGrathNicol - Response to submissions on performance measures p.8.

35 APA p.9; SAPN et al. p.3; ENA p.3.

equity (that is, it is structured for statutory accounting purposes with $1 of equity and the balance as a shareholder or inter-company loan).[36]

McGrathNicol stated it may be difficult for some service providers to prepare a statutory income statement that goes beyond EBIT to the net profit after tax level. In addition, it considered service providers that are part of a larger group may have difficulty allocating liabilities and equity, as financing arrangements are typically made at a group level. However, it advised that once an upfront process is put in place, adjustments and assumptions could be made to support the allocation of interest, tax, liabilities and equity to the service provider level. However, it considered that the basis for these adjustments and assumptions should be explained in an accompanying basis of preparation document.[37]

McGrathNicol noted some electricity distributors are already providing interest and tax information as part of their annual reporting requirements. It stated that for businesses that do not currently provide this information, there may be some upfront costs in putting in place a process to make these allocations, but once the process is in place it could be readily rolled forward.

McGrathNicol suggested that reasonable assumptions to allocate interest and tax may include:

- interest payable by the regulated business is allocated based on a relevant driver;
- tax payable by the regulated business is based on the group's effective tax rate applied to the regulated business' net profit before tax.[38]

Similarly for total equity in the balance sheet, McGrathNicol suggested reasonable assumptions to allocate equity might include applying the overall group financial structure (percentage of debt to equity) to the service provider. [39]

Information on interest, tax, total assets and equity is important in order to calculate profitability measures that will allow comparisons to regulatory benchmarks, other regulated service providers and businesses in the broader economy. We acknowledge that there are difficulties for some businesses in making such allocations but accept McGrathNicol's advice that the allocation of interest, tax, liabilities and equity from the corporate level to the service provider level is possible. Our draft position is therefore to require businesses that manage aspects of their financial arrangements at a group level to make allocations to the service provider level.

We recognise that initially there will be additional costs for service providers in developing the processes to make these allocations, but once these process are established the annual cost will be lower. To assist service providers we will provide guidance on how the allocation of tax, interest, liabilities and equity from the corporate level to the service provider level is to be undertaken.

36 APA p.7
37 McGrathNicol - Response to submissions on performance measures. p.10.
38 McGrathNicol - Response to submissions on performance measures. p.11.
39 McGrathNicol - Response to submissions on performance measures. p.11.

Service providers will be required to include in a basis of preparation the assumptions and adjustments used in making the allocations. To provide confidence to us and other users of the information, we will require independent assurance that the information reported is consistent with a service provider's basis of preparation and our guidance. This is consistent with our general approach to financial information in our annual reporting RINs. The level of assurance required for this aspect would be determined as part of the development of the annual reporting instrument in which this information is to be collected.

2.7 Factors affecting profitability comparisons

Submissions identified a number of factors that they considered impact earnings and profitability outcomes and therefore needed to be considered by the AER in making comparisons. The main factor identified was the impact of incentive schemes but other regulatory, operational and environmental factors were also raised.

2.7.1 Incentive schemes

The regulatory framework offers service providers incentives to improve the efficiency of their service. The benefits of these efficiencies are then shared between the service provider and its customers, with the service provider able to retain part of the savings in the short term and the customer realising the benefits over the long term. So, while the incentive schemes provide higher earnings for the service provider in the short term, they also lead to better customer outcomes, now and in the future.

Some consumer groups questioned whether incentive mechanisms are effective in driving efficient investment and providing the right profit incentives. For example, the Queensland Farmers Federation suggested incentive schemes in the regulatory framework encourage over-investment in the network, resulting in low capital efficiency levels.[40] The MEU submitted incentive schemes distort the EBIT/RAB comparison relative to other capital intensive firms operating in the market which do not benefit from similar incentive schemes.[41]

Service providers were concerned incentive schemes can bias profitability measures, stating high levels of profitability, measured on an ex-post basis, may simply indicate businesses are responding to efficiency and service quality incentives and that the regulatory framework is working effectively.[42] The implication being that revenue impacts from incentive schemes should be removed when comparing actual returns to expected returns. APA also suggested that the calculation methodology should isolate the impact of the incentive schemes from earned revenues to ensure it does not influence the profitability measures.[43]

The CCP also observed that higher-than-allowed profits may signal that regulation is working in the long-term interests of consumers, with the incentive schemes encouraging sustainable

40 QFF p.3.
41 MEU p.5.
42 ENA pp. 3-4, AusNet Services p.1.
43 APA p.5.

efficiency gains that reveal lower costs upon which to base future prices.[44] However, the CCP also stated that if efficiency gains are not real (for example, due to forecasting error) or not consistent with consumer preferences, high profits may signal a need to improve regulation.

Despite their contrasting views, stakeholders were in agreement that consideration should be given to the impact of incentive schemes, in calculating the profitability measures.

In its response to submissions, McGrathNicol stated that it considered there was merit in calculating profitability measures, both including and excluding the impact of incentive schemes.[45] It agreed with service providers that if comparison is to be made to the pre-tax WACC, then the impact of incentive schemes should be removed, as the WACC does not take these incentives into account. However, when calculating the ratios based on the statutory accounting information, McGrathNicol saw merit in including incentives, so the service providers' total returns could be compared to that of other businesses in the broader economy.

We recognise that revenue associated with incentive schemes (increments and decrements) could impact on profitability measures. To observe its significance, we undertook a review of the contribution of incentive schemes to total revenue for a number of electricity distributors using data from the service providers' Economic Benchmarking RIN responses. This found that on average the revenue impact was minor as a percentage of total revenue.

Based on the result of this analysis, we do not consider it necessary to adjust revenues for incentive scheme impacts when comparing the profitability of service providers against regulatory benchmarks or other businesses in the sector. Nevertheless, we will note any incentive scheme revenues that impact significantly on profitability outcomes in our performance report so that users of the information can properly interpret the result.

2.7.2 Other regulatory, operational and environmental factors

Service provider's earnings can vary year-on-year due to a range of regulatory, operational and environmental factors (for example, revenue smoothing, the timing of regulatory decisions, WACC parameters, pass throughs events, one-off type events). However, we consider adjusting for these yearly fluctuations to try to make the RoA (EBIT) more comparable to the pre-tax WACC would add complexity and never fully account for all variations. Consistent with the approach to incentive scheme impacts, we will note any factors that impact significantly on profitability outcomes in our performance report so that users of the information can properly interpret the results.

---

44 CCP p.9.

45 McGrathNicol - Response to submissions on performance measures, p.5.

2.8 Benchmarking of profitability measures

Several stakeholders raised the need to compare the profitability measures against regulatory benchmarks to ensure a like-for-like comparison.[46] They stated that this approach would improve transparency and assist stakeholders to interpret outturn measures of profitability.

For example, the ENA suggested we should set out benchmark profitability metrics in accordance with our regulatory allowance for a particular service provider.[47] It stated that this this would require us to include profitability measures in the Post Tax Revenue Model (PTRM) for the regulatory reset process, and establish a process to require service providers to report actual outturn profitability metrics on the same basis.

We agree that it is useful to compare actual returns of a service provider to expected returns using regulatory benchmarks and to analyse the reasons for outperformance/ underperformance. We have therefore included Return on Assets (EBIT) and Return on Regulated Equity measures in the suite of measures we intend to report. These measures can be benchmarked respectively against the pre-tax real WACC and the real return on equity allowed in the relevant regulatory determination for a service provider. We note these benchmarks are already contained in each service provider's approved PTRM for a regulatory period.

The profitability measures we propose to report on have been defined and service providers will be required to report the data underpinning their calculation as part of their annual reporting obligations (this is discussed further in chapter 4). The calculated measures, relevant regulatory benchmarks and our assessment of outcomes will be included in our annual performance reports.

2.9 Other measures of financial performance

In our discussion paper we noted that, in addition to profitability ratios, other financial ratios, such as liquidity ratios, financing ratios and activity ratios can also illustrate aspects of financial performance of a business. Although indicating our intention to focus our reporting on profitability measures, we sought feedback on other measures of financial performance that would be useful to stakeholders.[48]

Service providers did not support the inclusion of any additional financial performance measures.[49] AusNet Services stated it is not clear what purpose reporting other financial performance measures would serve in terms of allowing the AER to better carry out its regulatory functions.[50] Essential Energy noted that the benefit of further suggested measures must be balanced against the additional regulatory burden.[51] ENA submitted that

46 APA, SAPN et al., ENA, Major Energy Users, Queensland Farmers Federation.
47 ENA p.6.
48 AER Discussion Paper, November 2017 (p.11).
49 APA p.13, SAPN et al. p.5, Energex and Ergon Energy, p.14.
50 AusNet Services p.5.
51 Essential Energy p.4.

the broader suite of financial performance measures should be considered as part of the process for setting the allowed return on capital.[52]

Consumers provided some support for additional financial performance measures, but considered they could be addressed through other AER processes. CCP suggested the AER consider other measures, such as financeability analysis and sensitivity analysis for return on equity as done by other regulators, but proposed that they could be dealt with in a supplementary paper.[53] PIAC supported the consideration of other financial measures, but thought profitability should be the primary metric.[54]

Given the low level of support from stakeholders for a broader set of financial performance measures as part of this review and that financeability metrics are being considered as part of the rate of return guideline review, we have limited discussion in our draft position paper to profitability measures.[55]

52 ENA p.10
53 CCP p.19
54 PIAC p.3
55 AER Discussion Paper, *Overall performance measures* February 2018 (pp.26-32).

3 Analysis of individual profitability measures

The following section discusses each of the measures considered, the issues raised by stakeholders and sets out our draft position on each of the measures. It also describes the data requirements for the measures and how we intend to apply them.

Based on the measures included in our discussion paper and submissions received from stakeholders, we have selected five profitability measures we intend to report. Reporting on multiple profitability measures will provide greater benefit than reporting a single profitability measure, as each measure highlights different aspects of profitability, supports a range of comparisons and enables a comprehensive assessment of the drivers of profitability. The application of multiple measures therefore supports our broader objective of increasing the transparency of a service provider's profitability.

3.1 Return on Assets

It was generally agreed that Return on Assets (RoA) was the most appropriate measure due to the simplicity of the calculation and availability of the data. Consistent with McGrathNicol's Scoping Study, stakeholders considered RoA (EBIT) best reflected operational performance, as it was unaffected by corporate and tax structures and therefore was not affected by allocation issues.[56] It was also observed that calculating the RoA using the RAB would allow comparison to the pre-tax WACC in the service provider's determination, thus allowing an assessment of actual returns against expected returns.[57]

While the majority of submissions supported the measure, some issues were raised:

- CME did not consider RoA (EBIT) to be a useful measure of profitability. It stated that RoA will equal the pre-tax WACC as long as the revenue recovered, capex and opex are the same as the AER determined in its regulatory decision. CME considered that the only information you get from tracking RoA (EBIT) is opex and depreciation variances. CME considered that such information is more usefully expressed simply as the difference in allowed and actual capex and opex, which it noted were already reported in the AER's RINs.[58]
- The MEU considered the measure would not be comparable to those used widely in financial markets unless the impact of indexation of the RAB was removed and optimisation of the asset base was undertaken.[59] Our response to this issue is contained in section 2.5 of this paper.
- The CCP considered the key problem with the measure was that it did not appear to include the other sources of return for the owner of the regulated network such as capital appreciation due to the indexation of the RAB.[60]

56 AusNet Services p.3; CCP p.6; SAPN et al. p.2-3; Energex and Ergon Energy p.9
57 APA p.11
58 CME pp1-2.
59 MEU p.2
60 CCP p.6

- A number of submissions identified factors (such as incentive schemes, revenue smoothing, the timing of regulatory decisions (WACC parameters), pass through events, etc.) that impacted on EBIT and therefore the profitability outcomes of service providers. Our response to this issue can be found in section 2.7 of this paper.

In its response to submissions McGrathNicol considered that preparing RoA on a regulatory accounting basis (EBIT/RAB) would enable comparison with the pre-tax WACC and would highlight variances between the actual RoA and the regulatory allowance, and allow further exploration of these variances. It also considered that calculating RoA on a statutory accounting basis (EBIT/total assets) would improve the comparability of the measure for the service provider with similar businesses operating in the broader economy, as EBIT and asset values would be prepared on a similar basis. [61]

3.1.1 Our draft position

Our draft position is to include RoA (EBIT) in the measures we will report.

Of all of the measures assessed, RoA (EBIT) best aligns with our objectives and the assessment criteria. Overall we consider this measure:

- is an easily understood and commonly used ratio;
- is suited to capital intensive businesses and can be applied across similar industries; and
- minimises the need for adjustment and/or assumptions to data.

We note that this view is broadly consistent with that of most stakeholders.

With regard to the CME's comments, we recognise that one measure cannot fully achieve our objectives or meet all of the criteria. Analysis of ROA (EBIT) may highlight issues with comparisons of PTRM forecasts to outturn results, but its simplicity of use and calculation makes it a useful tool in any profit analysis. Therefore, we see benefit in using this measure in our suite of measures to highlight a broader range of factors influencing profitability. As discussed in section 2.2, we consider multiple measures will provide a more comprehensive assessment of the drivers of a service providers' profits.

We agree with the comments by the CCP and MEU that different approaches to asset valuation between regulatory and statutory accounting frameworks (for example, indexation in the regulatory framework) make it difficult to compare service providers with other businesses in the broader economy. However, as noted in section 2.5, any adjustments to make regulatory and statutory data more consistent would be difficult and complex. Therefore, consistent with McGrathNicol's advice we intend to calculate RoA (EBIT) on both regulatory and statutory accounting bases, with the latter measure allowing comparisons to be made between service providers and businesses in the broader economy.

We agree with the CCP submission that we should have regard to our inflation treatment, and in particular the indexation of the RAB, when interpreting profitability measures. The regulatory framework (that is, the combined operation of our PTRM, RFM and annual

[61] McGrathNicol - Response to submissions on performance measures. p.9

revenue adjustment process) works to target a real rate of return plus compensation for actual inflation outcomes.[62] Inflation compensation on the RAB is provided through indexation of the RAB, not through the annual cash-flow captured in EBIT.

Therefore, RoA should either be compared against the *real* pre-tax WACC, or the sum of RoA and outturn inflation should be compared against the *nominal* pre-tax WACC.[63] The former is preferable for comparisons against other entities regulated on a similar basis (that is, where the RAB is indexed), including comparisons against other AER-regulated networks.

For comparisons between service providers and other businesses in the economy, including those where the RAB is not indexed we will calculate RoA using statutory accounting information. This avoids the need to add back inflation outturns as assets are not indexed under a statutory accounting framework. However, when making cross-sector comparisons regard should still be had to the AER's inflation approach, which moves returns in line with outturn inflation.[64] If there is no similar approach for the comparator businesses then variation in inflation outcomes may contribute to observed differences in actual returns.

3.1.2 Calculation and application

RoA (EBIT) is calculated as EBIT divided by RAB, with:

- EBIT reported for the core regulated services of a service provider on regulatory accounting basis.
- RAB reported for the core regulated services of a service provider on a regulatory accounting basis.

We intend to compare RoA (EBIT) for service providers, calculated on a regulatory accounting basis, to:

- the pre-tax real WACC contained in the service providers determination (updated annually for the cost of debt).
- regulatory returns of other service providers in the sector.
- regulatory returns of other Australian and international regulated businesses where the RAB is valued on a reasonably consistent basis to that of the service provider.

RoA (EBIT) is also to be calculated as EBIT divided by total assets, with:

- EBIT reported for the service provider on a statutory accounting basis.
- Total assets reported for the service provider on a statutory accounting basis.

---

62 The real rate of return is derived from the initial nominal rate of return at the commencement of the regulatory control period, less inflation expectations. AER, *Regulatory treatment of inflation, Final position*, December 2017, pp. 63–66.

63 Both real and nominal pre-tax WACC are presented in the PTRM.

64 See AER, *Regulatory treatment of inflation, Final position*, December 2017, pp. 10–11.

We intend to compare RoA (EBIT) for service providers calculated on a statutory basis to:

- statutory returns for other service providers.
- statutory returns for other businesses outside of the sector that have similar capital intensity and risk.

3.2 Return on Equity

The return on equity measure received mixed views from stakeholders. Some noted it was the most commonly used and most comprehensive measure of profits available for owners and would provide a useful second measure to compare financial performance of the service providers with the competitive market.[65] However, others considered the measure to be problematic due to issues with the ability to source consistent and reliable data, particularly for a consolidated business that pays tax and raises capital at the corporate level.[66]

3.2.1 Our draft position

Our draft position is to include Return on Equity in the measures we will report.

We acknowledge some assumptions and adjustments to data will be necessary for some service providers to allocate tax, interest, liabilities and equity to enable net profit after tax and total equity to be calculated (these issues are discussed in section 2.6). However, overall we consider that the benefits of being able to calculate this measure exceed the costs associated with some businesses needing to make allocations to produce the data to calculate it. We consider the key benefits of this measure are that it:

- is a widely accepted and commonly used measure of the ultimate return to shareholders/owners;
- will allow service provider's returns to be compared to other regulated and unregulated businesses in the economy;
- provides further information by which to assess the drivers of profitability outcomes; and
- addresses potential circularity issues, where service providers are only compared against themselves.

As with RoA, we will have regard to our inflation treatment when interpreting RoE. In particular, one component of the financing effect noted in several submissions arises from our inflation approach. As part of our recent review of the regulatory treatment of inflation, we examined (and quantified) the interaction between debt returns, equity returns and inflation outcomes under an approach that targets the (overall) real rate of return.[67] If there is no similar approach for the comparator businesses then variation in inflation outcomes may contribute to observed differences in actual RoE.

---

65 CCP p.11; MEU p.6

66 SAPN et al. p.3; APA p.9.

67 See AER, *Regulatory treatment of inflation, Final position*, December 2017, pp. 87–98 and Sapere, Efficient allocation and compensation for inflation risk, Report prepared for the Australian Energy Regulator, 25 September 2017.

3.2.2 Calculation and application

RoE is calculated as net profit after tax (NPAT) divided by total equity.

In order to calculate RoE, service providers will be required to provide an income statement showing NPAT and a balance sheet showing total equity at the service provider level (on a statutory accounting basis). We consider this measure will enable comparison of a service provider with other service providers and other regulated and unregulated businesses outside the sector that have a similar level of capital intensity and risk.

3.3 Return on Regulated Equity

A number of submissions from service providers encouraged the use of measures that had a regulatory benchmark.

Newgrange Consulting suggested that Return on Regulated Equity (RoRE) could be used to understand how a service provider has made more profit than expected.[68] It suggested that where a service provider's allowed revenues are determined using a building block approach, RoRE can be compared with the regulatory benchmark (the allowed return on equity). Newgrange Consulting submitted this comparison could be used to break down the overperformance into the different components or building blocks of the revenue determination. It also noted that Ofgem in the UK use RoRE to provide an indication of the returns received relative to the cost of equity allowed in the price control settlement.[69]

3.3.1 Our draft position

Our draft position is to include RoRE in the measures we will report.

We agree with submissions that there is value in measures that allow actual returns to be compared to those forecast in a determination. The comparison of actual returns to expected returns is one of the objectives of this review. In this regard, we note that RoRE can be compared to the real return on equity in a determination and the reasons for differences between forecast and actual returns can be analysed. We consider that RoRE should be compared against the real return on equity for the reasons discussed in section 3.1.1 of this paper.

3.3.2 Calculation and application

RoRE is calculated as net profit after tax (NPAT) over regulated equity. NPAT is sourced from the income statement (on a regulatory accounting basis) using data related to core regulated services. Regulated equity is calculated as the equity component of the RAB based on the benchmark gearing ratio.

68 Newgrange Consulting p.5
69 Newgrange Consulting p.9

We intend to use the RoRE measure to compare a service provider against:

- the post-tax real return on equity allowed in a service provider's regulatory determination;
- other service providers in the sector;
- other regulated businesses outside of the sector where the asset base is valued on a reasonably consistent basis, and the debt to equity mix is similar.

3.4 Earnings per customer/connection

The CCP noted earnings per customer is an easily understood measure of the returns to the service provider 'coming out of the customer's pocket'. However, it noted comparisons would need to be limited to comparisons between energy service providers or businesses with similar asset intensities and turnovers.[70]

Earnings per customer/connection was not supported by service providers. They submitted the measure was unlikely to provide sensible comparisons between businesses even in the energy sector, due to difference in customer density, business size, customer connection types and variation across geographical location.[71] It was also submitted that the differences are even greater for transmission businesses, which are characterised by very few connections, mainly large industrial users and distribution networks.[72]

ENA noted the differences in customer density, business size and industry characteristics are magnified when compared to other infrastructure businesses, such as toll roads and airports, despite these sectors being in a similar risk class with a similar return on capital.[73]

In its response to submissions, McGrathNicol considered there was value in reporting earnings per customer/connection, as it is an easily understood measure that is simple to calculate. In its view, it may be a useful measure to show changes in profitability where growth in EBIT exceeds the growth in customer numbers.[74]

3.4.1 Our draft position

Our draft position is to include earnings per customer/connection in the measures we will report.

We consider there is benefit in reporting earnings per customer/connections for comparison with other regulated service providers in the same sector and for individual service providers over time. The measure provides a simple approach to standardising EBIT so that service providers of different size can be compared on similar terms.

This measure offers a different perspective on the profitability of service providers, as unlike the other profitability measures, earnings per customer/connection does not rely on asset or

70 CCP p.12
71 SAPN et al. p.4, Energex and Ergon Energy p.9, TransGrid p.1.
72 APA p.10.
73 ENA p.7
74 McGrathNicol - Response to submissions on performance measures. p.14.

equity values. As this measure is not directly influenced by the size of the asset base, it highlights different aspects of a services provider's earnings.

We recognise that this measure does not meet our objective of enabling comparison with other unregulated or regulated businesses in the broader economy. However, it is consistent with our approach of using multiple measures to enable a more comprehensive assessment of the drivers of a service provider's profits. Therefore, despite operating profit per customer/connection not allowing comparison with other unregulated or regulated businesses in the broader economy, we consider that it is still a useful measure to compare profitability of service providers within the same sector and a service provider over time.

We accept customer density may impact this measure. However, we will have regard to the differences in customer density between the service providers and take this into account in our analysis of the outturn results of this measure.

We also accept this measure is more suited to businesses that have a large number customers/connections. Therefore, we intend to apply this measure only to distribution businesses (both electricity and gas). We note that transmission businesses service a relatively small number of directly connected customers, typically distribution networks and large industrial users, therefore profit per customer will be less meaningful for these service providers.

3.4.2 Calculation and application

Earnings per customer/connection is calculated as EBIT divided by customer numbers or connections. With EBIT based on core regulated services (calculated on a regulatory accounting basis) and customer numbers or connections related to core regulated services.

We intend to use earnings per customer/connection to compare outcomes for a service provider over time and to compare a service provider with other service providers in the same sector.

3.5 RAB multiples

RAB multiples were also identified as a potentially useful measure of profitability by consumer groups, who noted recent sales of regulated assets have been at premiums to the value of the RAB.

The CCP submitted that RAB multiples provide a direct indicator of the relativity of the allowed returns to an investor's expected returns on capital or equity. It stated RAB multiples are easily observed at the time of transaction and commonly used by other regulators and investment advisors in examining transactions.[75] However, the CCP acknowledged that it is necessary to make adjustments for other sources of value, such as asset value or future revenue from unregulated parts of a service provider. It noted that the measure could not be used in a mechanical manner. The CCP also noted RAB multiples are sensitive to business specific factors, so are less suited to making comparisons of profitability with unregulated businesses.

[75] CCP p.12.

McGrathNicol saw merit in reporting RAB multiples in a profitability measures framework. However, it stated that RAB multiples can only be used for comparison with regulated businesses and are only relevant for a limited period following the transaction, becoming less relevant as time passes.[76]

3.5.1 Our draft position

Our draft position is to include RAB multiples in the measures we will report.

RAB multiples are relatively easy to calculate and commonly used by investors. We also note that unlike other measures of profitability, RAB multiples provide insights on expected returns.

We have previously examined using RAB multiples to provide a general test of the reasonableness of regulatory decisions.[77] RAB acquisition and trading multiples outside a specified range (possibly 0.9 to 1.3) may act as a prompt to re-examine the approach to estimating return on equity, return on debt, or gearing ratio.[78] This is consistent with the approach taken by the New Zealand Commerce Commission, which uses RAB multiples as an indicator of whether the allowed rate of return has been set at a sufficient level to adequately compensate investors for putting capital at risk.[79]

We acknowledge there are a range of factors, in addition to expected returns, that can influence RAB multiples. A RAB multiple greater than one may be the result of a buyer:

- Expecting to achieve greater efficiency gains that result in actual operational and capital expenditure below the amount currently allowed by the regulator;
- Expecting to increase the service provider's revenue by increasing demand for regulated services;
- Benefiting from a more efficient tax structure or high gearing levels than the benchmark assumption adopted by the regulator; and
- Expecting to achieve higher returns if regulation is relaxed.[80]

It is also possible that a high RAB multiple is a reflection of the 'winner's curse', with the winning party in an auction or tender process likely to have over-paid as a result of the competitive nature of the acquisition process.[81]

While noting there are significant issues in decomposing RAB multiples, we agree with consumer groups that there is benefit in collecting and reporting RAB multiples of service providers resulting from a sale/transaction. Trading multiples can also be calculated at

---

76 McGrathNicol - Response to submissions on performance measures. p.16

77 AER Discussion Paper, *Overall Performance Measures* February 2018, p.10

78 Biggar D. February 2018, *Understanding the role of RAB multiples in regulatory processes,* ACCC Regulatory Economic Unit (p.12).

79 NZCC, *Input methodologies review draft decisions Topic paper 4: Cost of capital issues.* June 2016 (p.161).

80 AER Discussion Paper, *Overall Performance Measures,* February 2018, p.13

81 Biggar D, *Understanding the role of RAB multiples in regulatory processes,* ACCC Regulatory Economic Unit, February 2018 (p.4).

regular intervals, where an individual business or its parent are listed on the stock exchange, with the enterprise value based on the share price at a point in time.

3.5.2 Calculation and application

RAB multiples are calculated as the market value of the service provider relative to its asset base. Information on market values can be obtained at the time of a sale of the business or based on the value of a company's shares.

We maintain a database of reported RAB multiples from the sale of network assets and will add to this database with RAB multiples from future sales/transactions and trading multiples when they become available. We will present this information alongside other measures of profitability in our performance reports.

3.6 Economic profit

In general, stakeholder submissions did not see value in reporting on economic profit, due to comparability issues. They noted it was a dollar measure, not an index, so it would be influenced by the size of the network business.[82] It was also suggested that it was not a new or additional measure of profitability, but simply a means of benchmarking an existing measure (EBIT) against allowed WACC.[83]

3.6.1 Our draft position

Our draft position is not to include Economic Profit in the measures we will report.

We agree with stakeholders that this measure does not meet our overarching objectives for reporting on profitability. As a dollar value measure, it is of limited use in comparing profitability between service providers in the sector or other regulated or unregulated sectors due to differences in size and other business characteristics. We also agree that this measure is basically a re-expression of the RoA (EBIT) measure – allowing EBIT to be benchmarked against the pre-tax WACC. Therefore, we do not intend to report this measure.

3.7 Internal Rate of Return

The internal rate of return was raised as a potential profitability measure of service providers.

It was identified by the Agriculture Industry Energy Taskforce as the Commerce Commission in New Zealand use it to assess profitability of regulated electricity distribution businesses by comparing the IRR to the expected return.[84] The ECA recommended adoption of IRR in the suite of profitability measures produced by the AER, to allow comparison of the profitability of domestic service providers with their New Zealand counterparts.[85]

82 APA p.10; ENA p.7; Energex and Ergon Energy p.14.
83 CCP p.11
84 Agriculture Industry Energy Taskforce p.7
85 Energy Consumers Australia p.7

3.7.1 Our draft position

Our draft position is not to include the Internal Rate of Return in the measures we will report.

We note that IRR is complex to calculate, requires many inputs, and does not appear to be widely used by other regulators. McGrathNicol also did not support the adoption of this measure in the initial Scoping Study, due to the amount of data required to calculate it and the number of adjustments that need to be made to the data, diluting the value of this measure for comparison with other businesses.[86]

However, we expect to be able to use RoA and RoE (both on a statutory accounting basis) to compare returns between the NZ electricity distributors and service providers regulated by us.

86 McGrathNicol Review of measures of financial performance that could be applied to the Electricity and Gas businesses the AER regulates – Final Report – 15 June 2017. p.32

4 Data collection and reporting

This section discusses what data is required to be collected to support the proposed measures, how it is to be collected and how it is intended to be reported.

4.1 Data requirements

As discussed in Chapter 3 we are proposing to report the following profitability measures:

- Return on Assets (EBIT) = EBIT / RAB (regulatory accounting basis)
- Return on Assets (EBIT) = EBIT / Total Assets (statutory accounting basis)
- Return on Equity = NPAT / Equity (statutory accounting basis)
- Return on Regulated Equity = NPAT / [RAB x 0.4] (regulatory accounting basis)
- Earnings per customer = EBIT/customer numbers (regulatory accounting basis)
- RAB multiples = Market value / RAB

As previously indicated, we also intend to compare Return on Assets (EBIT/RAB) and Return on Regulated Equity (NPAT/Regulated Equity) against their regulatory benchmarks, the pre-tax real WACC and the post-tax real return on equity respectively.[87]

4.1.1 Requirement for balance sheet and income statement

While some information to report on the proposed measures is already available, other information is not and will need to be requested. For example, EBIT, NPAT, total assets and total equity information will require an income statement and a balance sheet to be provided by service providers. These statements will provide us with a comprehensive and consistent set of financial information across the sectors by which to calculate the proposed measures. To enable this, existing annual reporting instruments will need to be amended and where those annual reporting instruments do not exist (for example, for gas service providers), they will need to be developed. The mechanism by which we will collect information is discussed in the next section.

We recognise there is a cost involved for service providers in producing an annual balance sheet and income statement. However, we consider the information is central to most of the measures and in providing the transparency sought by stakeholders. We note that Essential Energy stated in its submission that establishing the balance sheet data would be difficult and time consuming in the first instance, but the burden would be reduced in subsequent years.[88]

87 Note the pre-tax WACC is updated annually for changes in the cost of debt.

88 Essential Energy p.2

For profitability reporting, the income statement for a service provider[89] will be required to be completed on a statutory accounting basis and a regulatory accounting basis, with an adjustments column showing the difference between the two accounting frameworks.[90] In addition, a column for the core regulated services will need to be completed on a regulatory accounting basis. Information in this column will be used to calculate measures that can be compared to the benchmarks in a service provider's determination and against other service providers.

We will also require a balance sheet to be provided annually for the service provider developed on a statutory accounting basis. However, we will not require a balance sheet on a regulatory accounting basis as it is not required for our proposed measures. Indicative balance sheet and the income statement templates to be completed by service providers are shown in Appendix B.

We acknowledge that guidance will need to be provided to service providers to ensure a consistent approach to completing the balance sheet and income statement. As noted in section 2.6, guidance will include instructions on how allocations (for example, tax, interest, debt and liabilities) are to be undertaken where the service provider is part of a larger corporate entity.

4.2 Mechanism for collecting the data

The main mechanism available to us to collect information is through Regulatory Information Instruments (RII). The NEL and NGL authorise us to serve a RII on a service provider to provide and maintain information if we consider it reasonably necessary for the performance or exercise of our functions or powers.[91] In considering whether it is reasonably necessary to serve a RII on a regulated business we must have regard to the matters to be addressed by the service of the instrument and the likely costs that may be incurred by an efficient service provider in complying with the instrument.[92]

We have been issuing RIIs for some time now in order to obtain information from service providers. We already collect financial, expenditure and service performance information from electricity service providers through RINs (for example, the economic benchmarking and the category analysis RINs). We also issue an annual reporting RIN to electricity distributors, which requires them to report financial, expenditure and service performance information annually. We also receive financial and expenditure information from electricity transmission businesses annually in response to our *Electricity Transmission Information Guideline (Version 2)*.[93]

89 For electricity the service provider is the regulated network service provider (as defined under the NEL) and for gas, the service provider is the scheme pipeline service provider (as defined in the NGL).

90 The difference should reflect differences between the statutory and regulatory accounting frameworks.

91 NEL, s.28F; NGL, s. 48. A RII can be either a regulatory information notice (RIN) or a regulatory information order (RIO).

92 NEL, s.28F(2); NGL, s. 48(2).

93 This guideline can be found on the AER's website at this link.

We have previously issued an annual reporting RIN to some gas distributors but these RINs have since lapsed and have not been reissued. We have also issued a RIO to gas service providers (both full and light regulation pipelines) requiring them to report annually on their compliance with specific obligations in the gas rules.[94]

Information to support the proposed profitability measures will need to be incorporated into the annual reporting arrangements for each sector. This will require amendments to the annual reporting RIN for electricity distributors and the development of annual reporting requirements for the electricity transmission, gas transmission and gas distribution sectors.

We also note that we can seek historical information to be reported through our regulatory information instruments. In order to provide stakeholders with information on the profitability of the service providers as soon as possible, we consider that the initial annual RII should require service providers to provide three years of historical data in addition to the actual year that they are being required to report. This would allow us and stakeholders to obtain a view on profitability trends relatively soon, rather than waiting for several years to be able to make useful assessments. We are interested in stakeholders' views on this approach.

4.2.1 Assurance requirements on data

In our RIIs we generally require historical financial and non-financial information reported by service providers to be audited or reviewed in compliance with specific Australian Auditing Standards.[95]

In our annual RINs we generally require historical financial information to be audited in accordance with Australian Auditing Standard ASA 805 *[Special consideration] - Audits of Single Financial Statements and Specific Elements, accounts or items of a financial statement*. The audit report must include an opinion as to whether or not the financial information provided presents fairly in accordance with the requirements of the specific RII.

We also require non-financial information to be reviewed in accordance with Australian Standards on Assurance Engagements ASAE 3000 - *Assurance engagements other than audits or reviews of historical financial information*. The review report must include a conclusion statement as to whether or not anything has come to the auditor’s attention to suggest that the non-financial information does not, in all material respects, present fairly in accordance with the requirements of the RII.

These audit and review requirements would also apply to financial information and non-financial information included in any RII developed for the purpose of calculating the proposed profitability measures. We would also retain a provision in our annual RINs that if information to be submitted has been previously been reviewed or audited to the required standard, the information does not need to be reviewed or audited again.

94 This order can be found on the AER’s website at this link.

95 For example, see AER Guideline *Economic benchmarking RIN for distribution network service providers: Instructions and Definitions* November 2013 p.12 (link)

4.3 Reporting

Our functions and powers, as set out in the NEL and NGL, include the preparation and publication of reports on the financial and operational performance of service providers.[96] Further, the NEL and NGL, in providing us with the power to prepare and publish performance reports, specify that a report dealing with the financial performance of one or more service providers may include a comparison of their profitability or efficiency.[97]

Consistent with the objective of enhancing the transparency around the financial performance of the gas and electricity businesses, we will publish the annual responses from businesses on our website. We note this is consistent with our current approach where annual responses to annual reporting, economic benchmarking and category analysis RINs are published on our website.

Based on our analysis of the information received we would report the proposed profitability measures and relevant comparisons in our annual performance reports for gas and electricity businesses. The performance reports would include commentary on the outcomes, factors driving those outcomes and any caveats that should be taken into consideration when interpreting the outcomes.

For comparative purposes we will develop industry averages for other regulated and unregulated industries for those measures calculated using statutory information. To the extent possible the firms included would have similar levels of capital intensity and risk. We would include these industry averages in our performance reports. This would allow stakeholders to compare, for some measures, the actual returns achieved by the service providers against industry averages for other regulated and unregulated industries.

While acknowledging the difficulties of such comparisons, we consider that the industry averages would provide us and stakeholders with some external context by which to judge the returns being achieved by service providers and address to some extent the issue of circularity that exists when comparisons only include service providers.

We note that before publishing a performance report we are required to provide service providers with the opportunity to comment on a draft of the performance report.[98] As part of this process we would ask service providers to review their calculated measures, the data supporting the measures and our commentary on outcomes and any relevant caveats.

4.4 Publication of measures using existing data

As part of this draft position paper, we had intended to publish some of the profitability measures for electricity network service providers based on data that was published in RIN responses on our website.

The annual reporting RINs for electricity distribution and transmission service providers include an income statement. The economic benchmarking RINs include RAB information

96 NEL, s.15(1) (ea); NGL, s. 27(1)(f).

97 NEL, s.28V(3)(b); NGL, s. 64(3)(b).

98 National Electricity Law Division 5 s.28V(4); National Gas Law Division 1 s.27(f) and Division 5 s. 64(4).

for electricity distribution and transmission service providers and customer numbers for electricity distribution service providers. This information allowed us to calculate Return on Assets (EBIT) for electricity transmission service providers and Return on Asset (EBIT), Return on Regulated Equity and Earnings per customer for electricity distributors.

Before publishing the calculated measures we provided them and the underlying data to the electricity network service providers. The feedback from the service providers highlighted a range of issues with the data, including that:

- Distributors had interpreted the reporting requirements differently, for example in some cases statutory depreciation had been reported instead of regulatory depreciation.
- Not all distributors had reported interest and tax and where they had potentially inconsistent approaches to the allocation of interest and tax existed.
- The RAB reported in the economic benchmarking RIN for transmission businesses is on an as-commissioned basis not an as-incurred basis.

In view of the issues raised we have come to the view that the data is currently not fit for purpose and that further quality assurance on it is necessary before any measures could be published. As such, no calculated profitability measures have been published with this draft position paper. However, the exercise has highlighted that we need to provide clear and detailed guidance on how the balance sheet and income statement are to be completed. This should ensure that consistent information is reported that will allow valid comparisons between businesses to be undertaken.

5 Next steps

We are interested in your views on the profitability measures we are proposing to report, as set out in this draft position paper. Stakeholders are invited to make written submissions to us in response to this draft position paper by 30 May 2018.

We will hold a public forum in Sydney on 16 May 2018 seeking feedback from stakeholders on our proposed profitability measures, how the measures are to be calculated and the comparisons they will support.

Taking into consideration the views of stakeholders from the public consultation and comments on this draft position paper, we will publish a final position on the profitability measures we will apply in future performance reporting in August 2018.

Table 5.1 shows the key milestones for this review.

Table 5.1: Key milestones

27 April 2018	Publish draft position paper
16 May 2018	Public forum on the draft position paper
30 May 2018	Submissions due on draft position paper
August 2018	Release of final position on profitability measures

Appendix A - List of stakeholder submissions

We received 14 submissions in response to our draft position paper, including from:

1. Agriculture Industries Task Force
2. AusNet Services
3. Australian Pipeline Ltd (APA)
4. CME
5. Consumer Challenge Panel (CCP)
6. Energex and Ergon Energy
7. Energy Consumers Australia (ECA) , with discussion paper from Newgrange Consulting
8. Energy Networks Australia (ENA)
9. Essential Energy
10. Major Energy Users (MEU)
11. Public Interest Advocacy Centre (PIAC)
12. Queensland Farmers Federation (QFF)
13. Joint submission from SAPN, CitiPower, Powercor, Australian Gas Infrastructure Group, United Energy
14. TransGrid.

Appendix B - Income statement and balance sheet templates

Income Statement

	Regulatory Year			
	Statutory Basis		Regulatory Basis	
	Service Provider	Adjustments	Service Provider	Core Regulated Services
	$0's, nominal			
REVENUE				
Service Revenue				
Contributions				
Interest income				
Profit from sale of fixed assets				
Other Revenue				
Total revenue	-	-	-	-
Cost of Goods Sold expenditure				
Total Gross Profit	-	-	-	-
OPERATING EXPENSES				
Maintenance expenditure				
Operating expenditure excluding maintenance expenditure				
Impairment losses				
Loss from disposal of fixed assets				
Loss from sale of fixed assets				
Other non depreciation and finance charges expenses				
Total Operating Expenses	-	-	-	-
Total Earnings before Interest, Tax, Depreciation & Amortisation (EBITDA)	-	-	-	-
Depreciation and Amortisation				
Total Earnings before Interest & Tax (EBIT)	-	-	-	-
INTEREST AND TAX EXPENSE				
Interest Expense				
Profit before tax				
Income tax expenses (/ benefit)				
Profit after tax				

Balance Sheet

	Regulatory Year
	Statutory Basis
	Service Provider
	$0's, nominal
PROPERTY, PLANT & EQUIPMENT	
Opening value	
Inflation addition	
Straight line depreciation	
Actual additions (recognised in RAB)	
Disposals	
Closing value	-
OTHER ASSETS	
Current Assets	
Investments	
Intangible Assets	
Other assets	
Total Other Assets	-
Total Assets	-
LIABILITIES	
Current Liabilities	
Long-term Liabilities	
Total liabilities	-
EQUITY	
Shareholder Equity	
Total Shareholder Equity	-
Total Liabilities and Shareholder Equity	-