



DRAFT DECISION

ActewAGL Distribution

Access Arrangement

2016 to 2021

Overview

November 2015

© Commonwealth of Australia 2015

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the:

Director, Corporate Communications
Australian Competition and Consumer Commission
GPO Box 4141, Canberra ACT 2601

or publishing.unit@acc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: (03) 9290 1444

Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

Invitation for submissions

Interested parties are invited to make submissions on our draft decision and the revised proposal ActewAGL Distribution will submit on 6 January 2016. Submissions are due by 4 February 2016.

We will consider and respond to submissions in our final decision in late April 2016.

We prefer that all submissions are in Microsoft Word or another text readable document format. Submissions on the draft decision and revised proposal should be sent to: ActewAGL2015GAAR@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:

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

All non-confidential submissions will be placed on our website. For further information regarding our use and disclosure of information provided to us, see the ACCC/AER Information Policy (June 2014), which is available on our website.

Note

This attachment forms part of the AER's draft decision on ActewAGL Distribution's access arrangement for 2016–21. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 - Services covered by the access arrangement

Attachment 2 - Capital base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

Attachment 9 - Efficiency carryover mechanism

Attachment 10 - Reference tariff setting

Attachment 11 - Reference tariff variation mechanism

Attachment 12 - Non-tariff components

Attachment 13 - Demand

Contents

| | |
|---|-----------|
| Invitation for submissions | 2 |
| Note | 3 |
| Contents | 4 |
| Shortened forms | 6 |
| 1 Introduction..... | 8 |
| 1.1 Structure of overview | 9 |
| 2 Draft decision..... | 10 |
| 2.1 Snapshot of draft decision..... | 11 |
| 2.2 Key aspects of our draft decision | 13 |
| 2.2.1 Network funding costs are lower | 14 |
| 2.2.2 Forecast demand | 16 |
| 2.2.3 Approved capital expenditure | 16 |
| 2.2.4 Revenue reconciliation for the 2015–16 interval of delay..... | 17 |
| 3 Total revenue requirement..... | 19 |
| 3.1.1 The building block approach..... | 19 |
| 3.1.2 Revenue reconciliation for 2015–16 | 20 |
| 3.1.3 Draft decision | 21 |
| 3.1.4 Total revenue | 23 |
| 3.1.5 Revenue equalisation (smoothing) and tariffs..... | 24 |
| 4 Key elements of the building blocks..... | 29 |
| 4.1 Capital base..... | 29 |
| 4.2 Rate of return (return on capital)..... | 31 |
| 4.3 Value of imputation credits (gamma) | 35 |
| 4.4 Regulatory depreciation (return of capital) | 37 |

| | | |
|-------|--|----|
| 4.5 | Capital expenditure..... | 39 |
| 4.6 | Operating expenditure..... | 42 |
| 4.7 | Efficiency carryover mechanism amounts | 44 |
| 4.8 | Corporate income tax | 46 |
| 5 | Demand and reference tariffs | 48 |
| 5.1 | Demand..... | 48 |
| 5.2 | Services covered by the access arrangement | 49 |
| 5.3 | Reference tariff setting..... | 50 |
| 5.4 | Reference tariff variation mechanism | 50 |
| 6 | Non-tariff components | 52 |
| 7 | Understanding the NGO..... | 53 |
| 7.1 | Achieving the NGO to the greatest degree..... | 56 |
| 7.1.1 | Interrelationships between individual components..... | 57 |
| 8 | Consultation..... | 59 |
| A | List of submissions | 61 |
| B | Revenue reconciliation for the 2015–16 interval of delay | 62 |
| B.1 | Background..... | 62 |
| B.2 | ActewAGL's proposal..... | 63 |
| B.3 | Reasons for our draft decision..... | 63 |

Shortened forms

| Shortened form | Extended form |
|-----------------------|---|
| AA | Access Arrangement |
| AAI | Access Arrangement Information |
| AER | Australian Energy Regulator |
| ASA | Asset Services Agreement |
| ATO | Australian Tax Office |
| capex | capital expenditure |
| CAPM | capital asset pricing model |
| CCP | Consumer Challenge Panel |
| CMF | construction management fee |
| CPI | consumer price index |
| DAMS | Distribution Asset Management Services |
| DRP | debt risk premium |
| EBSS | Efficiency Benefit Sharing Scheme |
| EIL | Energy Industry Levy |
| ERP | equity risk premium |
| Expenditure Guideline | Expenditure Forecast Assessment Guideline |
| gamma | Value of Imputation Credits |
| GSL | Guaranteed Service Level |
| GTA | gas transport services agreement |
| ICRC | Independent Competition and Regulatory Commission |
| MRP | market risk premium |
| NECF | National Energy Customer Framework |
| NERL | National Energy Retail Law |
| NERR | National Energy Retail Rules |
| NGL | national gas law |
| NGO | national gas objective |
| NGR | national gas rules |
| NPV | net present value |
| opex | operating expenditure |
| PFP | partial factor productivity |

| Shortened form | Extended form |
|----------------|--|
| PPI | partial performance indicators |
| PTRM | post-tax revenue model |
| RBA | Reserve Bank of Australia |
| RFM | roll forward model |
| RIN | regulatory information notice |
| RoLR | retailer of last resort |
| RSA | Reference Service Agreement |
| RPP | revenue and pricing principles |
| SLCAPM | Sharpe-Lintner capital asset pricing model |
| STTM | Short Term Trading Market |
| TAB | Tax asset base |
| UAFG | Unaccounted for gas |
| UNFT | Utilities Network Facilities Tax |
| WACC | weighted average cost of capital |
| WPI | Wage Price Index |

1 Introduction

We, the Australian Energy Regulator (AER), are responsible for the economic regulation of covered gas pipelines¹ in all states and territories in Australia except for Western Australia.

ActewAGL Distribution's (ActewAGL) gas distribution network provides services to customers in the Australian Capital Territory (ACT). Its network also extends into NSW where it supplies gas to Queanbeyan and the Palerang Shire. As with other covered pipelines, we regulate ActewAGL's reference tariffs, and through this, its revenue.

ActewAGL submitted its access arrangement revision proposal on 30 June 2015, for the 2016–21 access arrangement period.

The National Gas Law (NGL) and National Gas Rules (NGR) provide the regulatory framework governing gas networks. In regulating ActewAGL, we are guided by the National Gas Objective (NGO), as set out in the NGL. The NGO is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.²

We apply incentive regulation in making our decision on ActewAGL's forecast revenue requirement.³ Incentive regulation encourages service providers to spend efficiently and to share the benefits of efficiency gains with consumers.⁴

While we approve an overall revenue requirement for ActewAGL, this does not bind the business to a particular operating budget. We determine an overall revenue requirement that is based on a forecast of capital and operating expenditures, such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services. The regime provides incentives for ActewAGL to outperform those forecasts, while delivering safe, reliable and secure services to its customers.

If in assessing ActewAGL's proposal we do not accept that its forecast revenue complies with the requirements of the NGR, we must indicate the nature of amendments required in order to make the proposal acceptable to us, including an alternative amount of revenue that we are satisfied does comply. In doing so, we must

¹ Pipeline 'coverage' under the NGL determines the level of regulation that applies to a particular pipeline or network. ActewAGL's distribution network is a covered pipeline. Under section 132 of the NGL, ActewAGL must therefore submit for our approval an access arrangement in respect of the services it provides through the covered pipeline.

² NGL, s. 23.

³ The revenue and pricing principles (RPPs) state a regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides.

⁴ AEMC, *Consultation paper: National Electricity Amendment (Demand Management Incentive Scheme) Rule 2015*, February 2015, p. 3.

undertake this assessment and make this decision in a manner that will or is likely to contribute to the achievement of the NGO and, where there are two or more possible decisions that will do so, make the decision that we are satisfied will contribute to the greatest degree (see section 7 of this overview).

The purpose of the draft decision is to set out our draft findings based on the information ActewAGL has provided us, the analysis we have done and the stakeholder submissions we have received. Our final decision will be issued in April 2016 and will take into account any new information submitted by ActewAGL in its revised proposal, additional analysis and stakeholder submissions. There are several areas in this draft decision where we have indicated that ActewAGL needs to provide further information to support its proposal. To the extent that new information, analysis or submissions cause us to depart from this draft decision, the final decision will deliver a different total revenue requirement, and therefore a different impact on customers.

This overview, together with its attachments, constitutes our draft decision on ActewAGL's access arrangement for 2016–21.

1.1 Structure of overview

This overview provides a summary of our draft decision and its individual components. It is structured as follows:

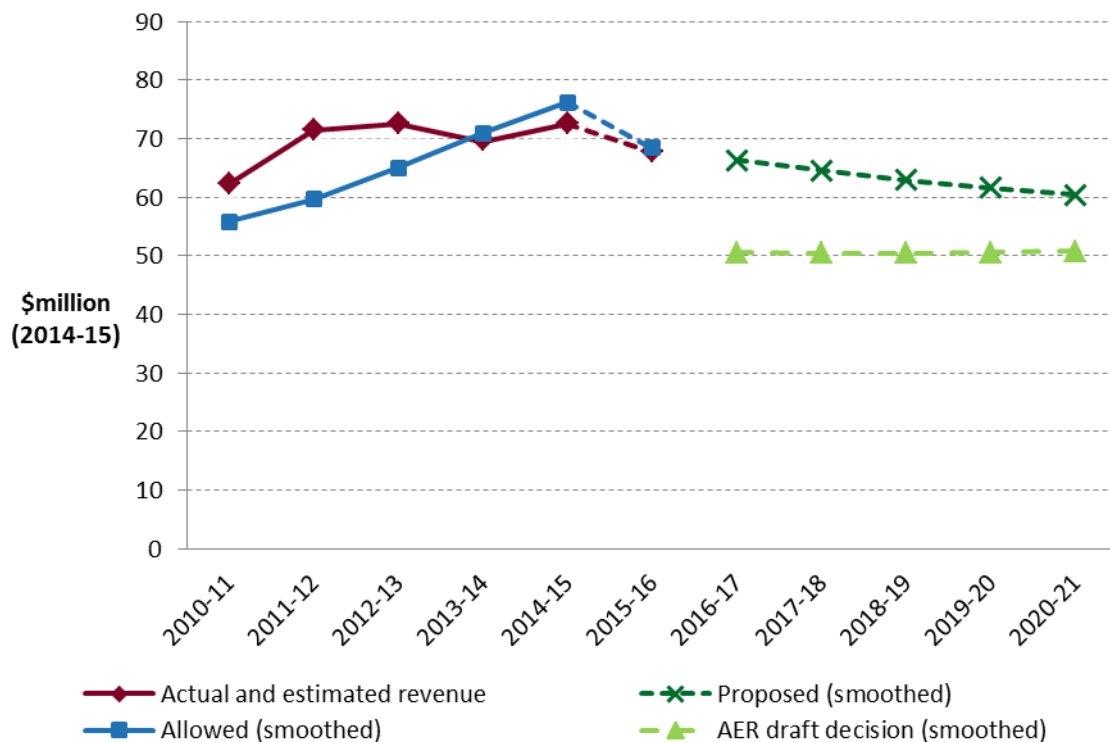
- Section 2 provides a high-level summary of our draft decision and the key issues.
- Section 3 sets out our draft decision on ActewAGL's total revenue requirement.
- Section 4 provides a break-down of our revenue decision into its key components. We determine revenue using the building block approach and this section details the approved amount for each building block.
- Section 5 sets out our draft decision on demand, ActewAGL's reference service, reference tariff setting and the reference tariff variation mechanism that will apply to ActewAGL.
- Section 6 sets out our draft decision on the non-tariff components of ActewAGL's access arrangement.
- Section 7 explains our views on the regulatory framework and the NGO.
- Section 8 outlines the consultation process we undertook in reaching our draft decision.

In our attachments we set out our detailed analysis of the individual components that make up ActewAGL's proposal and our draft decision on each of them.

2 Draft decision

Our draft decision is to approve a forecast revenue requirement of \$279.1 million (\$nominal) over the 2016–21 access arrangement period,⁵ which begins on 1 July 2016 as shown in Figure 1. This is a 19.9 per cent reduction to ActewAGL's proposed revenue of \$348.3 million (\$nominal), and 11.6 per cent lower than the forecast revenue requirement we used to determine reference tariffs for the 2010–15 access arrangement period.

Figure 1 ActewAGL's past total revenue, proposed total revenue and AER's total revenue allowance (\$million, 2014–15)



Source: AER analysis.

Notes: Includes ancillary reference services revenue.

The period between 1 July 2015 (the revision commencement date in the current access arrangement) and 1 July 2016, when revisions will actually take effect, constitutes an interval of delay for the purposes of rule 92(3) of the NGR. During that interval, the reference tariffs in place at 30 June 2015 continued to apply. This draft decision therefore includes a reconciliation (or 'true-up') of revenues, to ensure that the interval of delay does not result in ActewAGL incurring a windfall gain or loss due to the delay of the access arrangement review.

- (a) ActewAGL operates under a weighted average tariff cap. This means the tariffs we determine (including the means of varying the tariffs from year to year) are the binding constraint across an access arrangement period, rather than the total revenue requirement set in our decision. Tariffs are derived from the total

⁵ Includes ancillary reference services revenue.

revenue requirement *after* consideration of demand for each tariff category. Where actual demand varies from the demand forecast in the access arrangement, ActewAGL's actual revenue will vary from the revenue allowance determined in our decision. In general, if actual demand is above forecast demand, ActewAGL's actual revenue will be above forecast revenue, and vice versa.

We are satisfied that the total revenue set in our draft decision is sufficient for ActewAGL, acting prudently and efficiently, to recover costs of investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.⁶

In this section, we provide a snapshot of our draft decision, and highlight key issues considered as part of this review (section 2.2). Further discussion of the components that make up our draft decision follows in sections 3 to 6.

Next steps

Our draft decision sets out the nature of the amendments required to make ActewAGL's proposal acceptable to us, and provides ActewAGL with direction where further evidence is required in support of its proposal. ActewAGL may respond to these in a revised proposal no later than 6 January 2016.

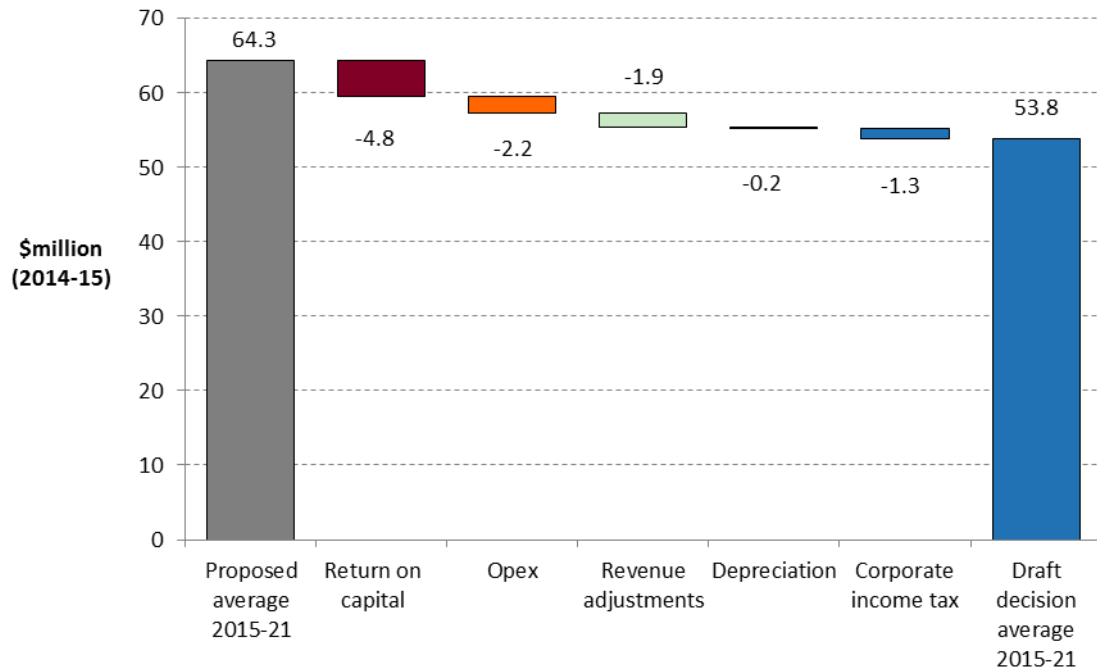
We encourage stakeholders to make submissions on this draft decision, and on ActewAGL's revised proposal, by 4 February 2016. Details on how to make a submission are provided at the start of this overview.

2.1 Snapshot of draft decision

Figure 2 and Figure 3 compare our draft decision revenue to ActewAGL's proposal—broken down by the building block components that make up the forecast revenue requirement. These figures highlight that the allowed rate of return—which feeds into the return on capital—is the key difference between our draft decision and ActewAGL's proposal.

⁶ NGL, s. 23.

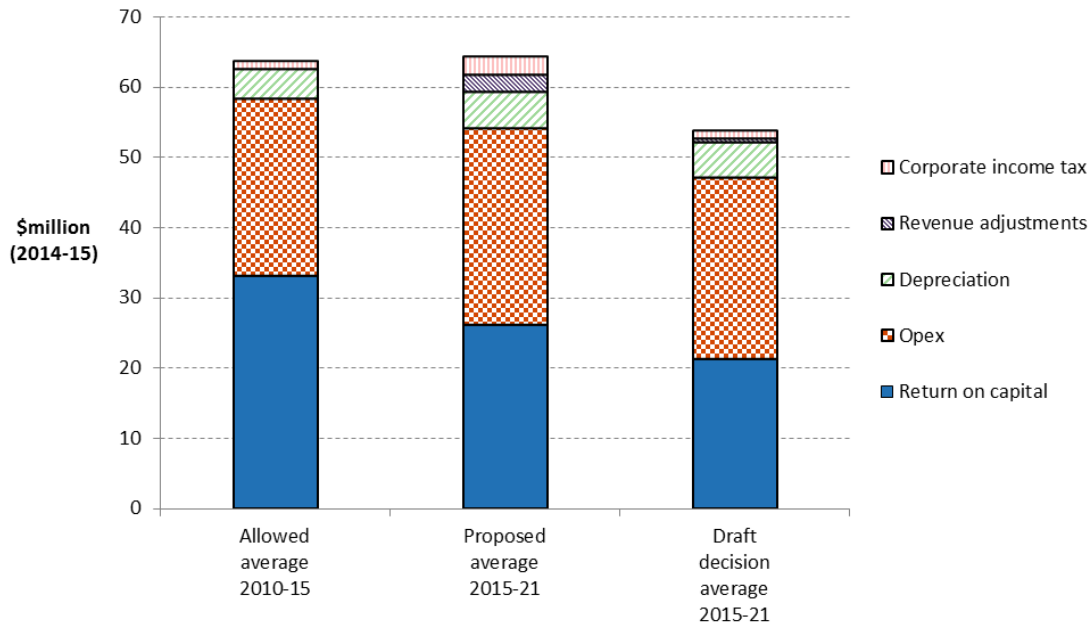
Figure 2 AER's draft decision and ActewAGL's proposed annual average building block costs (\$million, 2014–15)



Source: AER analysis.

Note: The period between 1 July 2015 (the revision commencement date in the current access arrangement) and 1 July 2016, when revisions will actually take effect, constitutes an interval of delay for the purposes of rule 92(3) of the NGR. During that interval, the reference tariffs in place at 30 June 2015 continued to apply. This draft decision therefore includes a reconciliation (or 'true-up') of revenues, to ensure that the interval of delay does not result in ActewAGL incurring a windfall gain or loss due to the delay of the access arrangement review.

Figure 3 AER’s draft decision average annual revenue (unsmoothed) compared with ActewAGL's proposed average annual revenue and approved average annual revenue for 2010–15 (\$million, 2014–15)



Source: AER analysis.

Note: The period between 1 July 2015 (the revision commencement date in the current access arrangement) and 1 July 2016, when revisions will actually take effect, constitutes an interval of delay for the purposes of rule 92(3) of the NGR. During that interval, the reference tariffs in place at 30 June 2015 continued to apply. This draft decision therefore includes a reconciliation (or 'true-up') of revenues, to ensure that the interval of delay does not result in ActewAGL incurring a windfall gain or loss due to the delay of the access arrangement review.

2.2 Key aspects of our draft decision

The total revenue requirement in our draft decision reflects a number of factors:

- an improved investment environment compared to the previous access arrangement period, which translates to lower financing costs necessary to attract efficient investment (section 2.2.1)
- demand is trending downwards, as growth in gas connections and usage gradually falls. This means less pressure on ActewAGL to expand the capacity of its network compared to previous access arrangement periods (section 2.2.3)
- forecast capital expenditure requirements, particularly investment required in growth assets and network capacity, are falling with demand (section 2.2.2)
- reference tariffs for 2015–16 are still being set in accordance with the current access arrangement, which was intended to be updated on 1 July 2015. For the reasons set out at appendix B we consider we are required to determine an appropriate revenue allowance for 2015–16. This revenue allowance is less than what ActewAGL will recover in 2015–16. This draft decision therefore adjusts tariffs

across the 2016–21 access arrangement period to account for the difference between revenue that ActewAGL will recover in 2015–16 and the revenue requirement that we have now determined for that year in this review (section 2.2.4).

2.2.1 Network funding costs are lower

The rate of return provides a network business with revenue to service the interest on its loans and to give a return on equity to shareholders. The allowed rate of return is a key determinant of allowed revenue. The differences in the rate of return determined by us and those proposed by the businesses may appear small—a percentage point or two. However, even a small difference can have a big impact on revenues. This is because the businesses have raised large amounts of funds from lenders and other investors in the past, which is to be expected given the capital intensive nature of the sector. These fund raisings have to continue to be financed, as well as financing of any new capital spending.

The rate of return must be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk to the service provider in respect of the provision of services. The NGR refer to this requirement as the 'allowed rate of return objective'.⁷

Prevailing market conditions for debt and equity heavily influence the rate of return. Financial conditions have changed since our last decision for ActewAGL in April 2010. This is reflected in a lower rate of return in this draft decision. Interest rates are lower and financial market conditions are more stable. This means that the cost of debt and the returns required to attract equity are lower. These factors are reflected in the rate of return.

Our draft decision is for a rate of return of 6.09 per cent (for 2015–16)⁸—compared to 10.04 per cent we set for the current access arrangement period.

We set out our approach to determining the rate of return in the Rate of Return Guideline (Guideline) we published in December 2013.⁹ We undertook extensive consultation in developing the Guideline. Although it is not binding, a service provider must provide reasons to justify any departure from the Guideline.

ActewAGL proposed a rate of return of 7.15 per cent (for 2016–17).¹⁰ It proposed that we depart from the Guideline. We received several submissions regarding ActewAGL's proposed rate of return. Other network businesses generally supported ActewAGL's approach. However, other stakeholder submissions either urged us to maintain the

⁷ NGR, r. 87(3).

⁸ For the remaining years of the access arrangement period, we will update the rate of return annually.

⁹ AER, *Rate of Return Guideline*, December 2013: <http://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline>.

¹⁰ ActewAGL submitted that the 2015-16 year did not constitute an interval of delay. It therefore proposed a rate of return that would take effect from 2016-17, rather than 2015-16 as we have done in this draft decision.

approach set out in the Guideline or argued that even the Guideline yielded a rate of return that is too high.¹¹ We have considered ActewAGL's arguments and those raised in submissions, and do not consider that there are reasons for us to depart from the Guideline.

This draft decision on rate of return is consistent with our mid-2015 final decisions for the New South Wales and ACT electricity distribution and transmission, and New South Wales gas distribution, network businesses. Some of these network businesses—including ActewAGL for its electricity distribution determination—have appealed many aspects of our rate of return decisions to the Australian Competition Tribunal. The Tribunal's process had not been finalised at the time of this draft decision.

Relationship between return on and return of capital

The depreciation (or return of capital) allowance in our decision on ActewAGL's revenue determines how quickly the capital base is being recovered. Higher (or quicker) depreciation leads to higher revenues over the access arrangement period. ActewAGL proposed a depreciation allowance that aligned with our standard approach.¹² However, ActewAGL made its proposed regulatory depreciation approach contingent on an assessment of its financeability.¹³ ActewAGL submitted that it must be allowed sufficient cash flow to maintain the benchmark BBB+ credit rating that is assumed by the AER when setting the rate of return. Its proposal focused on the rate of return as the catalyst for its concerns over its credit rating, and suggested that a different approach to depreciation should apply if particular credit metrics were not met.

We do not accept the contingent nature of ActewAGL's proposal. Its alternative proposal is incomplete and undeveloped. As a result, we are not able to accept it. Further, it is difficult for other stakeholders to provide comments on a proposal that is only referred to in incomplete and general terms.

In making our draft decision we have considered the manner in which the constituent components of our decision relate to each other. We have also considered the manner in which those interrelationships should be taken into account in our overall decision. ActewAGL has not demonstrated why an adjustment to depreciation is the appropriate response to financeability concerns (if they were established), nor has it demonstrated why increased depreciation would achieve the depreciation criteria in the rules.¹⁴

¹¹ A full list of submissions is provided in Appendix A to this overview. These submissions are discussed further in Attachments 3 (Rate of Return) and 4 (Value of Imputation Credits) to this draft decision.

¹² ActewAGL, *Access arrangement information: Attachment 7*, June 2015, pp. 10–11.

¹³ ActewAGL, *Access arrangement information: Attachment 8*, June 2015, pp. 6–7.

¹⁴ NGR, r. 89.

Overall, we are satisfied that ActewAGL's proposed regulatory depreciation approach, as opposed to its alternative contingent proposal, allows for ActewAGL's reasonable needs for cash flow to meet financing, non-capital and other costs.¹⁵

2.2.2 Forecast demand

Past trends in gas connections and usage suggest that demand on ActewAGL's network continues to decline, as reflected in the forecasts of connection volumes and consumption that have informed our draft decision. These point to a reduction in the revenue ActewAGL will require to operate its network and to provide safe, reliable services going forward. This is because ActewAGL will be under less pressure to expand the capacity of its network.

The impact of our draft decision not to accept ActewAGL's forecast demand can be seen in our draft decision on forecast capex for new connections and augmentation, discussed below.

It is also reflected in the approved opex in our draft decision. Opex includes maintenance expenditure which will vary depending on the size of the network, and expenditure due to gas leakage, which will vary depending on throughput. We have included the impact of changes in customer numbers and gas throughput to derive our output rate of change. ActewAGL is also subject to the Utilities Network Facilities Tax (UNFT) and the Energy Industry Levy (EIL) which are likely to be higher under a higher demand scenario.

2.2.3 Approved capital expenditure

Our draft decision approves total forecast capex of \$76.8 million (\$2015–16). This is a reduction of 34 per cent from what ActewAGL proposed. We are satisfied, however, that this forecast will enable ActewAGL to maintain the safety of the network, maintain system integrity and continue to provide a safe and reliable service to its customers. This is because the forecast we have determined makes provision for projects that are justified on grounds set out in the NGR¹⁶, and is capex such as would be incurred by a prudent operator acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.¹⁷

Our draft decision on forecast capex provides sufficient funds to allow ActewAGL to augment the network where necessary, replace assets that have reached the end of their economic life, and invest in information and communication technology.

The key drivers of difference between our draft decision on forecast capex and that proposed by ActewAGL are its proposed capex for connections and augmentation.

¹⁵ NGR, r. 89(1)(e).

¹⁶ NGR, r. 79(2).

¹⁷ NGR, r. 79(1)(a).

ActewAGL proposed forecast expenditure of \$55.5 million (\$2015–16, unescalated) on market expansion (connections) during the 2016–21 access arrangement period. This is a 10.7 per cent increase in connections expenditure compared to the current period, and made up 50.4 per cent of its proposed total capex. Our approved connection forecasts are lower than ActewAGL proposed. We also are not satisfied that ActewAGL's proposed step changes for the cost of new connections are consistent with that which a prudent operator would incur. Our draft decision therefore includes a lower forecast of \$40.6 million (\$2015–16, unescalated) of connections capex—a reduction of 27 per cent—which we consider constitutes forecast conforming capital expenditure.

Our draft decision also reduces ActewAGL's proposed capex for network augmentation capex and capacity development by 66 per cent, from \$17.7 million (\$2015–16, unescalated) to \$6 million. ActewAGL submitted that its proposed augmentation capex would provide supply security and maintenance of supply reliability, and maintain capacity to supply existing services.¹⁸ However, ActewAGL has not demonstrated that all of the projects included in its proposed capex are necessary to either maintain the integrity of gas services or ActewAGL's capacity to meet levels of demand for services in the 2016–21 access arrangement period.¹⁹

2.2.4 Revenue reconciliation for the 2015–16 interval of delay

ActewAGL's current access arrangement included a review submission date—the date on which our review of its access arrangement would start—of 1 July 2014. The date on which the approved revisions to its access arrangement were intended to commence was 1 July 2015.

In November 2012 the AEMC made its final determination on amendments to the economic regulatory frameworks under the National Electricity Rules (NER) and NGR.²⁰ Transitional arrangements to support the introduction of the NER amendments delayed our review of ActewAGL's electricity distribution determination by 12 months. ActewAGL requested that the submission date for revisions to its gas distribution access arrangement be delayed by 12 months also, so that its gas and electricity reviews would not overlap. This was to avoid "serious resourcing issues" for ActewAGL.²¹

The AEMC decided to allow ActewAGL's gas access arrangement review submission date to be delayed to 1 July 2015, and to enable the effect of any delays to be dealt

¹⁸ ActewAGL, *Access Arrangement Information for the 2016-21 ACT, Queanbeyan and Palerang Access Arrangement; Attachment 6: Capital expenditure*, June 2015, p. 48.

¹⁹ NGR, r. 79(2)(c)(ii) and (iv).

²⁰ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney.

²¹ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney, p. 251

with in accordance with rule 92(3) of the NGR.²² Transitional provisions in the NGR allowed ActewAGL a 12 month delay in submitting its access arrangement proposal, from 1 July 2014 to 1 July 2015.²³

Because ActewAGL's submission of its proposal was delayed by 12 months, the commencement of revisions approved by us on review of that proposal has also been delayed, by 12 months from 1 July 2015 to 1 July 2016.

The period between 1 July 2015 (the revision commencement date in the current access arrangement) and 1 July 2016, when revisions will actually take effect, constitutes an interval of delay for the purposes of rule 92(3) of the NGR. During that interval, the reference tariffs that were in place at 30 June 2015 continued to apply.²⁴ This draft decision therefore includes a reconciliation (or 'true-up') of revenues,²⁵ to ensure that the interval of delay does not result in ActewAGL incurring a windfall gain or loss due to the delay to the access arrangement review.

Our forecast total revenue requirement for ActewAGL for the 2016–21 access arrangement period includes a true-up mechanism to account for the difference between:

- revenue that ActewAGL recovered in 2015–16
- the building block revenue requirement that we have now determined for 2015–16.

We have identified a difference of \$18.3 million (\$nominal) that ActewAGL will recover in 2015–16, which will be taken into account in determining tariffs for the 2016–21 access arrangement period. Our draft decision returns this difference in revenues for 2015–16 (adjusted for the time value of money) to customers over the five years of the 2016–21 access arrangement period.

This is discussed in further detail in section 3.1.2 and Appendix B.

²² AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney, p. 251.

²³ NGR, Schedule 1, cl. 35(3).

²⁴ NGR, r. 92(3)(a).

²⁵ NGR, r. 92(3)(b).

3 Total revenue requirement

The total revenue requirement is a forecast of the efficient cost of providing gas distribution services over the access arrangement period. The total revenue set out in this draft decision has been determined by assessing each building block cost of ActewAGL's access arrangement proposal. We have assessed whether these building block costs are consistent with the costs that would be incurred by an efficient provider of gas distribution services. Our forecast total revenue requirement for ActewAGL also reflects the reconciliation of revenue for the 2015–16 interval of delay.

Tariffs are derived from the total revenue requirement *after* consideration of demand for each tariff category. ActewAGL operates under a weighted average tariff cap. This means the tariffs we determine (including the means of varying the tariffs from year to year) are the binding constraint across the 2016–21 access arrangement period, rather than the total revenue requirement set in our decision.²⁶

3.1.1 The building block approach

We have employed the building block approach to determine ActewAGL's total revenue requirement—that is, we based the total revenue requirement on our estimate of the efficient costs that ActewAGL is likely to incur in providing gas distribution network services. The building block costs, as shown in Figure 4, include:²⁷

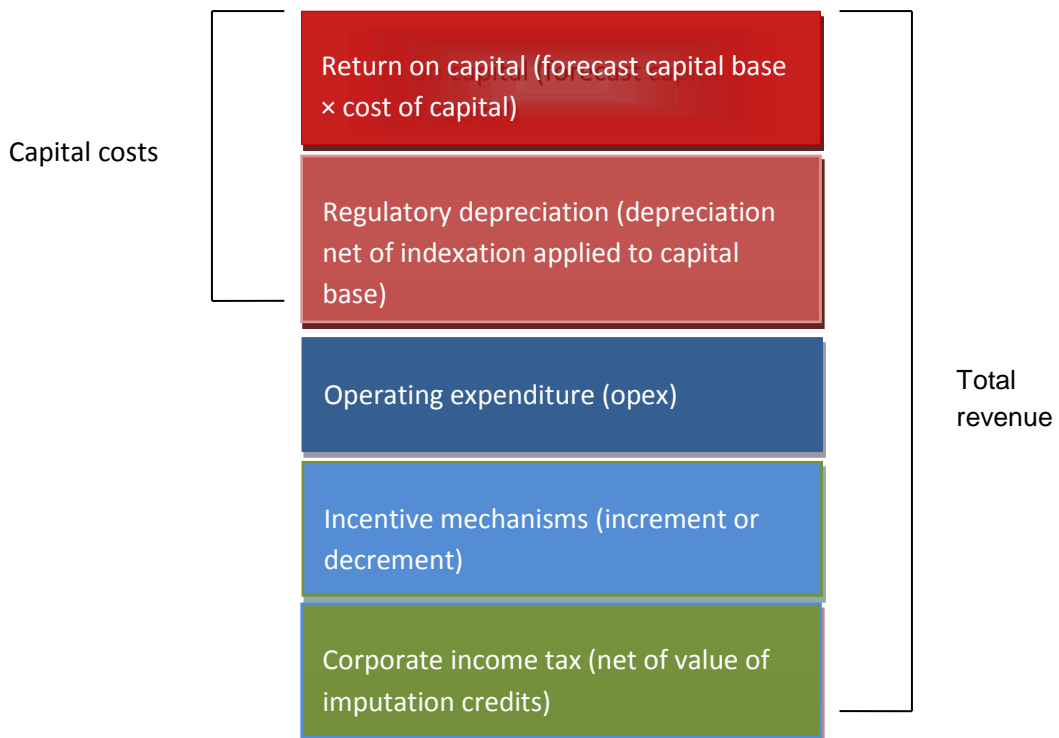
- return on the projected capital base (return on capital)
- depreciation of the projected capital base (return of capital)
- the estimated cost of corporate income tax
- revenue increments or decrements resulting from incentive schemes such as the efficiency carryover mechanism
- forecast opex.

Our assessment of capex directly affects the size of the capital base and therefore, the revenue generated from the return on capital and depreciation building blocks.

²⁶ Where actual demand across the 2016–21 access arrangement period varies from the demand forecast in the access arrangement, ActewAGL's actual revenue will vary from the revenue allowance determined in our decision. In general, if actual demand is above forecast demand, ActewAGL's actual revenue will be above forecast revenue, and vice versa.

²⁷ NGR r. 76.

Figure 4 The building block approach for determining total revenue



3.1.2 Revenue reconciliation for 2015–16

As discussed in section 2.2.4, this draft decision includes a reconciliation (or 'true-up') of revenue for 2015–16. This is to ensure that the 2015–16 interval of delay between the revision commencement date in ActewAGL's current access arrangement and the actual date on which revisions will take effect does not result in ActewAGL incurring a windfall gain or loss due to the delay in the access arrangement review.

ActewAGL's proposal submitted that a reconciliation of revenue for 2015–16 is not required. However, it proposed a reconciliation approach in case we decided to apply a reconciliation of revenue for 2015–16.²⁸ ActewAGL therefore included in its proposal a roll forward model (RFM) and post-tax revenue model (PTRM) that implement the proposed reconciliation approach for 2015–16.²⁹ We have reviewed ActewAGL's proposed reconciliation approach and are satisfied with the implementation. We have therefore adopted the RFM and PTRM submitted by ActewAGL for the reconciliation purposes as the basis for our draft decision.

To give effect to the reconciliation, we use a net present value neutral mechanism to account for the difference between:

²⁸ ActewAGL, *2016–21 access arrangement information: Attachment 11–Revenue requirement and price path*, June 2015, pp. 14–16.

²⁹ ActewAGL, *Proposed RFM (alternative approach)*, June 2015; ActewAGL, *Proposed PTRM (alternative approach)*, June 2015.

- the revenue that ActewAGL will recover in 2015–16
- the building block revenue that we have determined for 2015–16 in this draft decision.

We estimate that the revenue ActewAGL will recover in 2015–16 is \$70.1 million (\$nominal). We calculated this by setting the X factor for 2015–16 to 2.44 per cent in the PTRM. This provides for tariffs in 2015–16 to remain the same (in nominal terms) as the tariffs in force at 30 June 2015. We then estimated the revenue that will be recovered by ActewAGL in 2015–16 by multiplying the tariffs for 2015–16 by the demand for that year. Our estimate of revenue to be recovered in 2015–16 is slightly more than that proposed by ActewAGL (\$69.5 million). This is because we have calculated our estimate using our replacement demand forecast for 2015–16 (discussed in section 5.1 and attachment 13) and forecast inflation (discussed in section 4.2 and attachment 3). We also corrected some modelling errors in ActewAGL's proposed PTRM to include ancillary service revenues which has increased the revenue for 2015–16.

We have determined that the 2015–16 building block revenue should be \$51.8 million (\$nominal).³⁰ This means there is a difference of \$18.3 million (\$nominal) being recovered by ActewAGL in 2015–16, which must be returned to customers. We have done this by adjusting the X factors for each year of the 2016–21 access arrangement period. This approach returns the difference in revenues for 2015–16 (adjusted for the time value of money) to customers over the five years of the 2016–21 access arrangement period.

3.1.3 Draft decision

We accept that some aspects of ActewAGL's proposal are consistent with the requirements of the NGR. However, we have not approved all elements, and, as such, have not approved ActewAGL's access arrangement proposal as a whole.³¹

We do not approve ActewAGL's proposed total revenue requirement (smoothed) of \$348.3 million (\$nominal) for reference services over the 2016–21 access arrangement period.³² Our draft decision on total revenue has been determined using the building block approach set out in rule 76 of the NGR. Based on our assessment of the building block costs, we determine a total revenue requirement (smoothed) of \$279.1 million (\$nominal) for ActewAGL over the 2016–21 access arrangement period.³³ This total

³⁰ Section 4 discusses our decision by building block.

³¹ NGR, r. 41(2).

³² This amount includes revenues for ancillary services. This proposed amount also reflects the revenue true-up for the 2015–16 interval of delay. Without the revenue true-up, the proposed total revenue requirement (smoothed) is \$358.4 million (\$nominal) for the 2016–21 access arrangement period. See ActewAGL, *Access arrangement information: Attachment 11*, June 2015, pp. 7 and 16; AER analysis.

³³ This is calculated by smoothing the unsmoothed building block revenue for 2015–16 and the 2016–21 access arrangement period as set in this draft decision. The unsmoothed building block revenue for 2015–16 for the true-

smoothed revenue requirement is \$69.2 million (or 19.9 per cent) lower than ActewAGL's proposal.

We do not approve ActewAGL's proposed 2016–21 tariffs, which imply an annual decrease of 1.70 per cent (in real terms) in weighted average tariffs over the 2016–21 access arrangement period.³⁴ As a result of our lower total revenue requirement and higher demand (consumption) forecast, our draft decision is for a real decrease in weighted average tariffs of 25.68 per cent for 2016–17, and then real increases of 1.0 per cent for each subsequent year of the 2016–21 access arrangement period. The lower tariffs in our draft decision also reflect the revenue reconciliation for 2015–16 (discussed in section 3.1.2 above).

Table 1 sets out our draft decision on ActewAGL's revenue requirement by building block costs for 2015–16 and for each year of the 2016–21 access arrangement period, the total revenue after equalisation (smoothing) and the X factors for use in the tariff variation mechanism.

up purposes is \$51.7 million. The total unsmoothed building block revenue is \$298.8 million (\$nominal) for the 2016–21 access arrangement period.

³⁴ These tariffs reflect the revenue true-up for 2015–16. Without the revenue true-up, the proposed tariffs would imply a real decrease of 2.23 per cent for 2016–17 and no real changes for the remaining years of the 2016–21 access arrangement period.

Table 1 AER's draft decision on ActewAGL's smoothed total revenue and X factors for 2015–16 and the 2016–21 access arrangement period (\$million, nominal)

| Building block | 2015–16 ^c | 2016–17 | 2017–18 | 2018–19 | 2019–20 | 2020–21 | Total 2016–21 |
|--|----------------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Return on capital | 20.6 | 22.2 | 23.1 | 23.9 | 24.6 | 25.1 | 118.9 |
| Regulatory depreciation | 3.7 | 4.3 | 5.0 | 5.8 | 6.6 | 7.5 | 29.1 |
| Operating expenditure | 24.8 | 26.8 | 27.7 | 28.7 | 30.2 | 31.2 | 144.6 |
| Revenue adjustments | 1.5 | 3.7 | 0.6 | -0.4 | -2.6 | 0.0 | 1.3 |
| Corporate income tax | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 7.2 |
| Building block revenue – unsmoothed | 51.8 | 58.4 | 57.7 | 59.4 | 60.3 | 65.3 | 301.0 |
| Building block revenue – smoothed | 70.1 | 53.1 | 54.4 | 55.7 | 57.2 | 58.8 | 279.1 |
| X factor ^a | 2.44% | 25.68% | -1.00% | -1.00% | -1.00% | -1.00% | n/a |
| Inflation forecast | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | 2.50% | n/a |
| Nominal price change | 0.00% | -23.82% | 3.53% | 3.53% | 3.53% | 3.53% | n/a |

Source: AER analysis.

n/a: not applicable.

(a) Under the CPI-X form of control, a positive X factor is a decrease in price (and therefore in revenue).

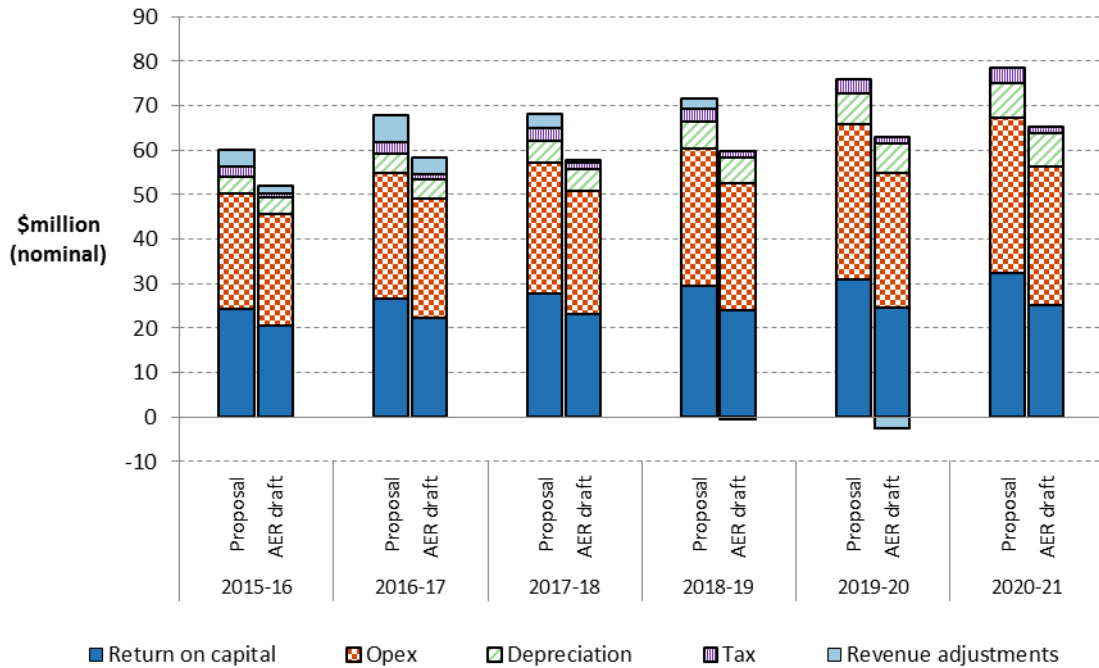
(b) We set the X factor for 2015–16 at 2.44 per cent so that the tariffs are equal (in nominal terms) to the tariffs as in force at 30 June 2015.

(c) The period between 1 July 2015 (the revision commencement date in the current access arrangement) and 1 July 2016, when revisions will actually take effect, constitutes an interval of delay for the purposes of rule 92(3) of the NGR. During that interval, the reference tariffs in place at 30 June 2015 continued to apply. This draft decision therefore includes a reconciliation (or 'true-up') of revenues, to ensure that the interval of delay does not result in ActewAGL incurring a windfall gain or loss due to the delay to the access arrangement review.

3.1.4 Total revenue

Figure 5 shows the effect of our draft decision adjustments on ActewAGL's proposed building blocks for 2015–16 and the 2016–21 access arrangement period. It shows the reductions to ActewAGL's proposal for the return on capital, opex, depreciation and tax building blocks.

Figure 5 AER’s draft decision and ActewAGL’s proposed building block revenue (unsmoothed) (\$million, nominal)



Source: AER analysis.

3.1.5 Revenue equalisation (smoothing) and tariffs

After our assessment of ActewAGL’s total building block revenue (unsmoothed revenue), we need to determine the smoothed revenue profile across 2015–16 and the 2016–21 access arrangement period. ActewAGL operates under a weighted average tariff cap as its tariff variation mechanism. This means we determine the weighted average tariff change each year such that the net present value (NPV) of unsmoothed and smoothed revenue is equal across the entire period. This weighted average tariff change is labelled the 'X factor'. The mechanics of the tariff variation mechanism are addressed in attachment 11.

Table 2 presents our draft decision X factors, and compares them to ActewAGL’s proposal.

Table 2 Weighted average tariff change across the access arrangement period (X factors) — comparison of ActewAGL's proposal and AER's draft decision (per cent)

| | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 | 2020–21 |
|---------------------------|-------------------|---------|---------|---------|---------|---------|
| AER draft decision | | | | | | |
| X factor ^a | 2.44 ^b | 25.68 | -1.00 | -1.00 | -1.00 | -1.00 |
| Nominal price change | 0.00 | -23.82 | 3.53 | 3.53 | 3.53 | 3.53 |
| ActewAGL proposal | | | | | | |
| X factor ^a | 2.49 | 1.70 | 1.70 | 1.70 | 1.70 | 1.70 |
| Nominal price change | 0.00 | 0.80 | 0.80 | 0.80 | 0.80 | 0.80 |

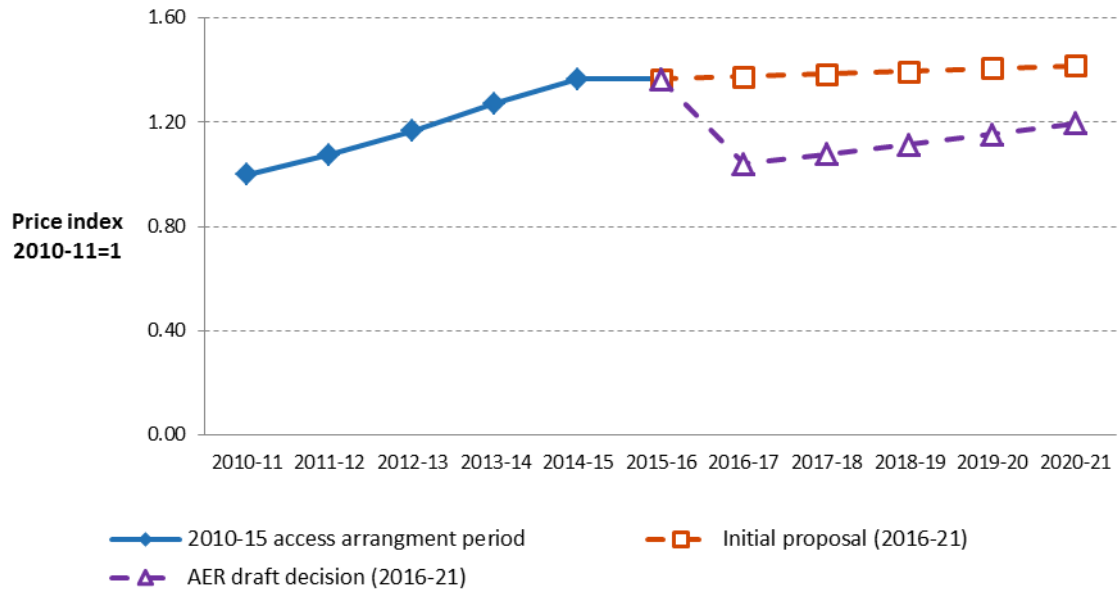
Source: ActewAGL, *Access arrangement information: Attachment 11*, June 2015, p. 16; AER analysis.

- (a) Under the CPI-X form of control, a positive X factor is a decrease in price (and therefore in revenue). For example, an X factor of 1.7 per cent in 2016–17 means a real price decrease of 1.7 per cent that year. After consideration of inflation (assumed at 2.5 per cent) this becomes a nominal price increase of 0.8 per cent.
- (b) To give effect to the revenue reconciliation for 2015–16, the X factor for 2015–16 is set at 2.44 per cent so that the tariffs for 2015–16 are equal (in nominal terms) to the tariffs as in force at 30 June 2015.

Figure 6 shows the indicative tariff paths for ActewAGL's reference services across the 2010–21 period. It compares ActewAGL's proposed tariff path with that approved in the 2010–15 access arrangement, and with this draft decision.³⁵ This provides a broad overall indication of the average movement in tariffs across this period.

³⁵ The tariff path for 2010–21 uses inflation outcomes for the 2010–15 period, and estimated inflation for 2015–21.

Figure 6 Indicative reference tariff paths for ActewAGL's reference services from 2010 to 2021 (nominal index)



Source: AER analysis.

ActewAGL's proposed tariff path reflected an average increase (in nominal terms) of 0.8 per cent per year over the 2016–21 access arrangement period. Our draft decision provides for lower total smoothed revenue than ActewAGL's proposal, in line with our reductions to total unsmoothed revenue. As such, a decrease to the tariff path is required over the 2016–21 access arrangement period to reflect the lower smoothed revenue than provided for in the 2010–15 access arrangement period. Our draft decision tariff path shows a decrease of 23.8 per cent in tariffs (in nominal terms) in 2016–17, followed by an increase of 3.5 per cent for each subsequent year of the 2016–21 access arrangement period.

In choosing the smoothing profile for this draft decision we have balanced a number of competing objectives:

- Equalising (in NPV terms) unsmoothed and smoothed revenue.
- Providing price signals that reflect the underlying efficient costs.
- Minimising variability in tariffs in 2015–16 and within the 2016–21 access arrangement period.
- Minimising the likelihood of variability in tariffs at the start of the 2021–26 access arrangement period.
- Recognising stakeholder preferences for a particular tariff path.

Each of these points is discussed in turn.

First, we are satisfied that our draft decision tariff path for ActewAGL's 2016–21 access arrangement period achieves revenue equalisation as required by rule 92(2) of the

NGR.³⁶ As set out above, we have made substantial reductions to the unsmoothed revenue proposed by ActewAGL. Accordingly, we set the tariff path so that it adjusts the smoothed revenue downward to better reflect the unsmoothed building block costs. The reconciliation of revenue for 2015–16 is an important factor here. ActewAGL's smoothed revenue currently being recovered in this year is expected to be \$18.3 million more than its unsmoothed building block costs. Hence, smoothed revenue in later years needs to be reduced below unsmoothed revenue to offset this initial over-recovery.

Second, but closely related to the first point, our smoothing allows closer alignment of tariffs and costs. This aids the achievement of the NGO and the revenue and pricing principles, including through providing a price signal that facilitates efficient use of natural gas services.³⁷ Our draft decision tariff path shows a large decrease in the first year of the 2016–21 access arrangement period reflecting the lower unsmoothed building block costs.

Third, in setting the tariff path, we aim to minimise tariff volatility in 2015–16 and within the 2016–21 access arrangement period. Our chosen tariff path reflects this objective, but also reflects the consideration we must give to competing objectives. For instance, adopting the relatively flat tariff path proposed by ActewAGL would better minimise within-period volatility, but would not achieve revenue equalisation. Another proposal that would minimise within-period volatility would be to gradually reduce prices by the same percentage each year across the 2016–21 access arrangement period. This would mean a reduction of 9.4 per cent each year for five years; but by 2020–21, annual smoothed revenue would be 29 per cent below unsmoothed revenue. This implies a substantial tariff increase at the start of the next access arrangement period, and so conflicts with the next objective.

Fourth, in setting the tariff path, we also aim to minimise the likelihood of tariff volatility between this access arrangement period and the next. We do not know with certainty what ActewAGL's efficient costs will be in 2021–22, or across the 2021–26 access arrangement period more generally. The unsmoothed building block costs for 2020–21 (the last year of the 2016–21 access arrangement period) are the best available proxy. Hence, this objective requires minimising the divergence between the smoothed and unsmoothed revenues for the last year of the access arrangement period—for ActewAGL, this is 2020–21. If there were no significant changes in forecast costs from 2020–21 to 2021–22, this final year divergence gives us an estimate of the size of the tariff change at the start of the 2021–26 access arrangement period. For this draft decision, this final year divergence is 10 per cent, which is more than our usual target. Overall, however, we consider this a reasonable gap given the need to balance our competing objectives. We note that if there are significant changes in costs at the start

³⁶ The revenue equalisation occurs in NPV terms, discounting the yearly cash flows at the rate of return to reflect the time value of money.

³⁷ NGL, ss. 23, 24.

of the 2021–26 access arrangement period, this might increase or decrease the required tariff change at that time.³⁸

Finally, we also considered the customer preferences expressed in ActewAGL's proposal. We note that stakeholders' preference is to have an initial step decrease in tariffs followed by flat profile of tariffs, if tariffs are being reduced.³⁹ We consider that the draft decision tariff path largely reflects this preference. Our tariff path provides for an initial decrease in 2016–17 and then allows 1 per cent increase per year (in real terms) in the last four years of the 2016–21 access arrangement period. However, if we were to provide for an initial decrease in 2016–17 and then set a flat tariff profile for the last four years (that is, no change in prices in real terms), this would require the difference between the last year smoothed and unsmoothed revenues to exceed 10 per cent. We consider this is not optimal as this will further increase the risk of tariff volatility at the start of the 2021–26 access arrangement period.

We are satisfied that our draft decision tariff path reflects our balanced consideration of these competing objectives. We will review this smoothing profile for the final decision if necessary.

³⁸ In particular, we give consideration to the possibility that there could be a cumulative effect if the revealed costs for 2021–22 are above the current estimate (for example, by 10 per cent), and we have set smoothed revenue to be below unsmoothed revenue in 2020–21 (by 10 per cent, as in this draft decision). These differences operate in the same direction, so there would be an implied 20 per cent increase in tariffs at the start of the 2021-26 access arrangement period.

³⁹ ActewAGL, *2016–21 access arrangement information: Attachment 11:Revenue requirement*, June 2015, pp. 6–7.

4 Key elements of the building blocks

The components of our decision include the building blocks we use to determine the revenue ActewAGL may recover from its customers.

In determining our overall total revenue requirement of \$352.8 million (\$nominal, unsmoothed) for 2015–16 and the 2016–21 access arrangement period⁴⁰, we:

- apply relevant tests under the NGR, the assessment methods and tools developed as part of our Better Regulation guidelines⁴¹.
- consider information provided by ActewAGL, the Consumer Challenge Panel (CCP), consultants and stakeholder submissions.
- consider our overall revenue decision against section 23 of the NGL, including the constituent decisions and the interrelationships we discuss in sections 4 and 7.1.1.

The following section summarises our decision by building block and provides our high level reasons and analysis. The attachments provide a more detailed explanation of our analysis and findings.

4.1 Capital base

We are required to make a decision on ActewAGL's opening capital base as at 1 July 2015. We are also required to make a decision on ActewAGL's projected capital base for the 2016–21 access arrangement period.

The capital base roll forward accounts for the value of ActewAGL's regulated assets over the access arrangement period. The level of the capital base substantially impacts the service provider's revenue and the price consumers ultimately pay. It is an input into the determination of the return on capital and depreciation (return of capital) allowances.⁴² Other things being equal, a higher capital base increases both the return on capital and depreciation allowances. In turn, it increases the service provider's revenue, and prices for its services.

We do not approve ActewAGL's proposed opening capital base of \$339.0 million (\$nominal) as at 1 July 2015.⁴³ This is because we do not accept ActewAGL's proposal to exclude the negative opening capital base value for the 'IT systems' asset class (about -\$0.4 million) from the proposed PTRM on the basis that its IT systems capital base has been fully depreciated as at 30 June 2015.⁴⁴ Instead, we consider the approach used to roll forward the capital base and the resulting negative value for the

⁴⁰ \$51.8 million (\$nominal) for 2015–16 plus \$301 million (\$nominal, unsmoothed) for 2016–21.

⁴¹ <http://www.aer.gov.au/Better-regulation>.

⁴² The size of the capital base also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

⁴³ ActewAGL, *Proposed PTRM (Alternative approach)*, June 2015.

⁴⁴ ActewAGL, *Proposed PTRM (Alternative approach)*, June 2015.

'IT systems' asset class means there is an over recovery for that asset class.⁴⁵ The negative value is due to ActewAGL's adjustment to the 2013–14 capex to reverse the effect of an incorrect record in 2012–13, and its adjustment to the 2009–10 capex for overspending relative to forecast capex for that year. Therefore, the negative value for this asset class reflects over recovery by ActewAGL in 2009–10 and 2012–13. For this reason, we consider this negative value should not be excluded from the opening capital base as at 1 July 2015. We have therefore added this small negative value back to the opening capital base asset at 1 July 2015. We determine an opening capital base of \$338.6 million (\$nominal) as at 1 July 2015, which is \$0.4 million (or 0.1 per cent) less than that proposed by ActewAGL.

Table 3 summarises our draft decision on the roll forward of ActewAGL's capital base during 2010–15 access arrangement period.

Table 3 AER's draft decision on ActewAGL's capital base roll forward for 2010–15 access arrangement period (\$million, nominal)

| | 2010–11 | 2011–12 | 2012–13 | 2013–14 | 2014–15 |
|---|---------|---------|---------|---------|--------------|
| Opening capital base | 278.1 | 288.6 | 302.2 | 313.8 | 326.9 |
| Net capex | 12.0 | 15.0 | 18.7 | 18.6 | 24.8 |
| Indexation of capital base | 7.9 | 9.8 | 5.3 | 7.7 | 8.1 |
| Depreciation | –9.4 | –11.2 | –12.5 | –13.2 | –13.7 |
| Closing capital base | 288.6 | 302.2 | 313.8 | 326.9 | 346.1 |
| Adjustment for difference between estimated and actual capital expenditure in 2009–10 | | | | | –7.5 |
| Opening capital base at 1 July 2015 | | | | | 338.6 |

Source: AER analysis.

We also do not approve ActewAGL's projected closing capital base of \$467.2 million (\$nominal) as at 30 June 2021. We instead determine a closing capital base of \$419.7 million (\$nominal) as at 30 June 2021, a reduction of \$47.5 million or 10.2 per cent from the proposed value. The main reasons for the reduction are our adjustments—also reductions—to ActewAGL's opening capital base as at 1 July 2015 (discussed above), forecast net capex (see section 4.5) and forecast depreciation (see section 4.4).

Table 4 sets out the projected roll forward of the capital base during 2015–16 and the 2016–21 access arrangement period.

⁴⁵ This situation can arise particularly when the roll forward approach uses actual conforming capex and approved forecast depreciation.

Table 4 AER’s draft decision on projected capital base roll forward for 2015–16 and the 2016–21 access arrangement period (\$million, nominal)

| | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 | 2020–21 |
|----------------------------|---------|---------|---------|---------|---------|---------|
| Opening capital base | 338.6 | 365.0 | 378.9 | 392.0 | 403.9 | 411.4 |
| Net capex | 30.2 | 18.3 | 18.1 | 17.7 | 14.1 | 15.8 |
| Indexation of capital base | 8.5 | 9.1 | 9.5 | 9.8 | 10.1 | 10.3 |
| Depreciation | -12.2 | -13.4 | -14.5 | -15.6 | -16.7 | -17.7 |
| Closing capital base | 365.0 | 378.9 | 392.0 | 403.9 | 411.4 | 419.7 |

Source: AER analysis.

The capital base at the commencement of the 2021–26 access arrangement period will be subject to adjustments consistent with the NGR.⁴⁶ The adjustments include (but are not limited to) actual inflation and approved depreciation over the 2015–16 and 2016–21 access arrangement period. We accept ActewAGL’s proposal to use forecast depreciation for 2015–16 and the 2016–21 access arrangement period to establish ActewAGL’s opening capital base as at 1 July 2021.

4.2 Rate of return (return on capital)

The return on capital provides ActewAGL with revenue to service the interest on its loans and give a return on equity to shareholders. The return on capital building block is calculated as a product of the rate of return and the value of the capital base.⁴⁷

The NGR set out that the allowed rate of return must be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the distributor in respect of the provision of distribution services. The NGR refers to this requirement as the 'allowed rate of return objective'.⁴⁸

We have determined an allowed rate of return of 6.09 per cent (for 2015–16, nominal vanilla⁴⁹). We have not accepted ActewAGL’s proposed 7.15 per cent rate of return (for 2016–17).⁵⁰ In accordance with the Rate of Return Guideline, we will update the rate of return annually.⁵¹ Table 5 sets out the parameters we have used to determine the rate of return.

⁴⁶ NGR, r. 77(2).

⁴⁷ NGR, r. 87(1).

⁴⁸ NGR, r. 87(3).

⁴⁹ The nominal vanilla rate of return formula combines a post-tax return on equity and pre-tax return on debt, for consistency with other building blocks.

⁵⁰ ActewAGL submitted that the 2015-16 year did not constitute an interval of delay. It therefore proposed a rate of return that would take effect from 2016-17, rather than 2015-16 as we have done in this draft decision.

⁵¹ NGR, r. 87(9)(b).

Table 5 AER's draft decision on ActewAGL's rate of return (nominal)

| | AER previous decision (2010–15) | ActewAGL proposal (2016–17) ^(a) | AER draft decision (2015–16) | Return over 2016–21 access arrangement period |
|-------------------------------------|------------------------------------|---|---------------------------------|---|
| Return on equity (nominal post-tax) | 10.83% | 9.87% | 7.3% | Remains constant (7.3%) |
| Return on debt (nominal pre-tax) | 9.52% | 5.34% | 5.29% | Updated annually |
| Gearing | 60% | 60% | 60% | Remains constant (60%) ^(b) |
| Nominal vanilla WACC | 10.04% | 7.15% | 6.09% | Updated annually as return on debt is updated |
| Forecast inflation | 2.52% | 2.55% | 2.50% | Remains constant (2.50%) |

Source: AER analysis; AER, *Final decision: ActewAGL Gas distribution determination 2010-15*, March 2015; Australian Competition Tribunal order, *ActewAGL access arrangement 2010-15*, 23 September 2010; ActewAGL, *Access arrangement - Attachment 8: Rate of return, gamma and inflation*, June 2015.

- (a) ActewAGL's proposal uses values derived from the placeholder averaging periods for risk free rate and rate on debt.
- (b) This rate will be updated in the final decision because our draft decision rate is based on a placeholder averaging period. However, after the rate is updated for the final decision it will then 'remain constant' for the access arrangement period and will not be updated each regulatory year.

Our approach

All NGR requirements relating to the rate of return are subject to the overall rate of return achieving the allowed rate of return objective.⁵² The NGR recognise that there may be several plausible answers that could achieve the allowed rate of return objective. We agree with stakeholders that predictability and consistency in our approach to rate of return issues, consistent with prevailing market conditions materially benefits the long term interests of consumers and also benefits investors.⁵³

We developed our approach prior to the submission of ActewAGL's proposal. As required by the rate of return framework, in December 2013 we published the Guideline.⁵⁴ The Guideline was developed through extensive consultation and involved effective and inclusive stakeholder participation.⁵⁵

⁵² NGR, r. 87(2).

⁵³ ENA, *Response to the Draft Rate of Return Guideline of the AER*, 11 October 2013, p. 1; AER, *Better regulation: Explanatory statement Rate of Return Guideline, Appendices*, December 2013, Appendix I, Table I.4, pp. 185–186.

⁵⁴ NGR, r. 87(13).

⁵⁵ <http://www.aer.gov.au/node/18859>.

Return on debt

Previously, we used an on-the-day approach to determine the return on debt.⁵⁶ This is the approach that several Australian regulators continue to use. We have determined a return on debt estimate that gradually transitions from an on-the-day approach to a trailing average approach.⁵⁷ This is consistent with the approach most stakeholders supported during the Guideline development process.

In its proposal, ActewAGL proposed a hybrid transition from the on-the-day to trailing average approach. We have not accepted ActewAGL's proposal, because we consider it is backward looking and produces a biased estimate of the return on debt. We discuss this more extensively in attachment 3 rate of return.

Return on equity

Our approach to determining the return on equity involves considering all of the information before us, through a six step process as set out in the Rate of Return Guideline (foundation model approach). This includes detailed consideration of a number of financial models for determining the return on equity.⁵⁸ Considering all of this material helps inform a return on equity estimate that contributes to the achievement of the allowed rate of return objective.

Notwithstanding the approach set out in the guideline, ActewAGL proposed a multi-model approach to calculating the return on equity.

We consider that the Sharpe–Lintner capital asset pricing model (SLCAPM) is the superior financial model in terms of estimating expected equity returns. We have therefore adopted this model as our foundation model. We are persuaded by the evidence before us that also indicates that, on balance, employing our foundation model approach and using the SLCAPM as the foundation model is expected to lead to a rate of return that achieves the allowed rate of return objective.⁵⁹

We also evaluated our point estimate from the SLCAPM against other information. The critical allowance for an equity investor in a benchmark efficient entity is the allowed equity risk premium (ERP) over and above the estimated risk free rate at any given time.⁶⁰ Our estimate of the ERP for the benchmark efficient entity is 4.55 per cent which is within the range of other information available to inform the return on equity (see

⁵⁶ This involved determining the return on debt by reference to the return on BBB+ rated bonds over a 10-40 business day averaging period that occurred as close as practicable to the start of the access arrangement period.

⁵⁷ In broad terms, this means that the return on debt for any year will represent the average return on debt over the previous ten years.

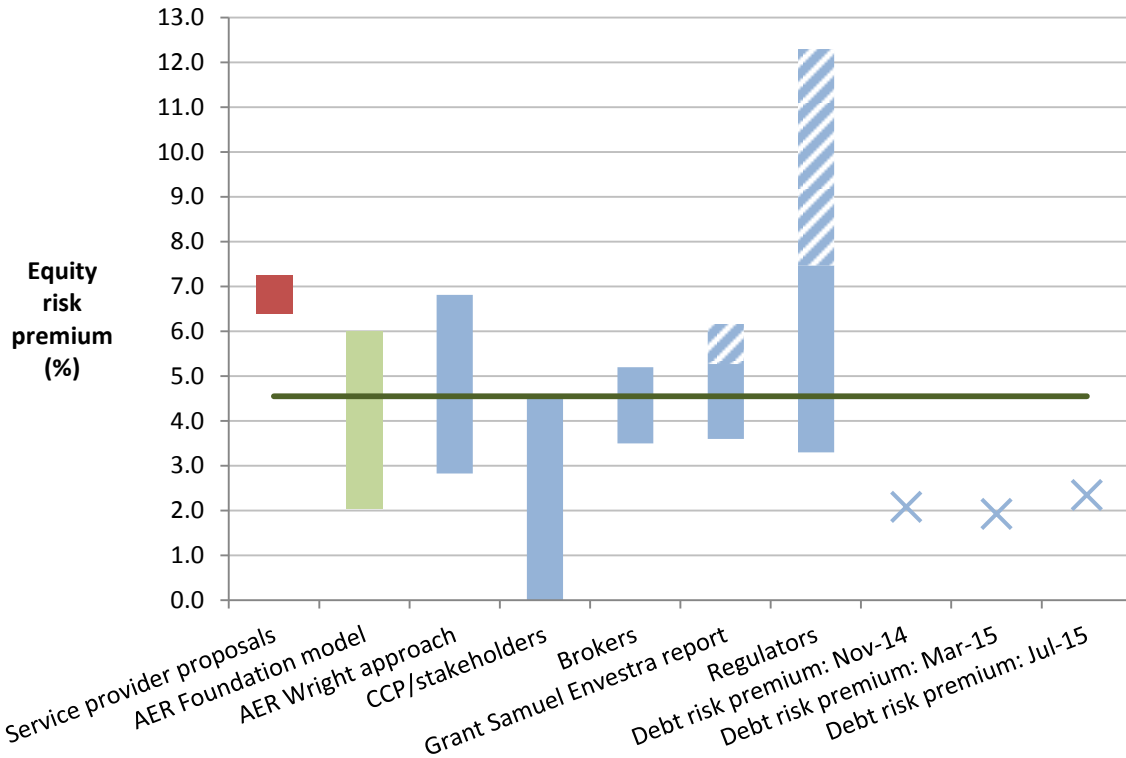
⁵⁸ NGR, r. 87(5)(a).

⁵⁹ McKenzie & Partington, *Part A: Return on equity, Report to the AER*, October 2014, p. 13; John Handley, *Advice on return on equity, Report prepared for the AER*, October 2014, p. 3.

⁶⁰ Our task is to determine the efficient financing costs commensurate with the risk of providing regulated network service by an efficient benchmark entity (allowed rate of return objective). Risks in this context are those which are compensated via the return on equity (systematic risks).

Figure 7). A detailed explanation of our findings on return on equity and this figure can be found in attachment 3 – Rate of return.

Figure 7 Other information comparisons with the AER allowed equity risk premium



Source: AER analysis and various submissions and reports.

Notes: The AER foundation model equity risk premium (ERP) range uses the range and point estimate for MRP and equity beta as set out in step three. The calculation of the Wright approach, debt premium, brokers, and other regulators ranges is outlined in Attachment 3, Appendices E.1, E.2, E.4, and E.5 respectively. Grant Samuel's final WACC range included an uplift above an initial SLCAPM range. The lower bound of the Grant Samuel range shown above excludes the uplift while the upper bound includes the uplift and is on the basis that it is an uplift to return on equity. Grant Samuel made no explicit allowance for the impact of Australia's dividend imputation system. We are uncertain as to the extent of any dividend imputation adjustment that should be applied to estimates from other market practitioners. Accordingly, the upper bound of the range shown above includes an adjustment for dividend imputation, while the lower bound does not. The upper shaded portion of the range includes the entirety of the uplift on return on equity and a full dividend imputation adjustment.⁶¹

The service provider proposals range is based on the proposals from businesses for which we are making final or preliminary/draft decisions in October-November 2015.⁶² Equity risk premiums were calculated as the

⁶¹ Grant Samuel, *Envestra: Financial services guide and independent expert's report*, March 2014, Appendix 3.

⁶² ActewAGL, Ausgrid, Directlink, Endeavour Energy, Energex, Ergon Energy, Essential Energy, Jemena Gas Networks, SA Power Networks, TasNetworks, and TransGrid. Jemena Gas Networks' revised proposal contained an indicative return on equity based on an indicative risk free rate averaging period. On 27 March 2015 JGN

proposed return on equity less the risk free rate utilised in the service provider's proposed estimation approach.

The CCP/stakeholder range is based on submissions made (not including service providers) in relation to our final or preliminary/draft decisions in October-November 2015. The lower bound is based on the Alliance of Electricity Consumers submission on Energex and Ergon Energy revised proposals. The upper bound is based on Origin Energy's submission on the preliminary decision for SA Power Networks.⁶³

4.3 Value of imputation credits (gamma)

Under the Australian imputation tax system, investors can receive an imputation credit for income tax paid at the company level.⁶⁴ These are received after company income tax is paid, but before personal income tax is paid. For eligible investors, this credit offsets their Australian income tax liabilities. If the amount of imputation credits received exceeds an investor's tax liability, that investor can receive a cash refund for the balance. Imputation credits are therefore a benefit to investors in addition to any cash dividend or capital gains they receive from owning shares.

In determining a service provider's revenue allowance, the NGR require that the estimated cost of corporate income tax be estimated in accordance with a formula that reduces the estimated cost by the 'value of imputation credits'.⁶⁵ That is, the revenue a service provider recovers from customers in respect of its expected tax liability must be reduced in a manner consistent with the value of imputation credits.

Our draft decision is to adopt a value of imputation credits of 0.4. This differs from ActewAGL's proposed value of imputation credits of 0.25.

Although we have broadly maintained the approach to determining the value of imputation credits set out in the Rate of Return Guideline, we have re-examined the relevant evidence and estimates since the release of our Guideline. This re-examination, and new evidence and advice considered since the Guideline was released, led us to depart from the value of 0.5 in the Guideline. Most notably, our updated consideration of the relevant advice and evidence led us to generally lower estimates of the 'utilisation rate' from the 0.7 estimate in the Guideline.

Estimating the value of imputation credits is a complex and somewhat imprecise task. There is no consensus among experts on the appropriate value or estimation techniques to use.

Consistent with the relevant academic literature, we estimate the value of imputation credits as the product of the distribution rate and the utilisation rate. While there is a

provided submissions that updated its approach using values derived from its proposed averaging periods. We have shown the 27 March 2015 updates.

⁶³ Alliance of Electricity Consumers, *Submission to the Australian Energy Regulator's Preliminary Decision (Queensland)*, July 2015, p. 29; Origin Energy, *Submission to AER Preliminary Decision SA Power Networks*, July 2015, p. 9.

⁶⁴ *Income Tax Assessment Act 1997*, parts 3–6.

⁶⁵ NGR, rr. 76(c) and 87A.

widely accepted approach to estimating the distribution rate, there is no single accepted approach to estimating the utilisation rate. There is a range of evidence relevant to the utilisation rate:

- the proportion of Australian equity held by domestic investors (the 'equity ownership approach')
- the reported value of credits utilised by investors in Australian Taxation Office (ATO) statistics ('tax statistics')
- implied market value studies—there is no separate market in which imputation credits are traded, and therefore there is no observable market price for imputation credits.

In estimating the utilisation rate, we place:

- significant reliance upon the equity ownership approach
- some reliance upon tax statistics
- less reliance upon implied market value studies.

Overall, the evidence on the distribution rate and the utilisation rate suggests that a reasonable estimate of the value of imputation credits is within the range of 0.3 to 0.5. From within this range, we choose a value of 0.4. This is because:

- the equity ownership approach, on which we have placed the most reliance, suggests a value between 0.40 and 0.47 when applied to all equity and between 0.29 and 0.42 when applied to only listed equity. Therefore, the overlap of the evidence from the equity ownership approach suggests a value between 0.40 and 0.42.
- the evidence from tax statistics suggests the value could be lower than 0.4. Therefore, with regard to this evidence and the less reliance we place on it, we choose a value at the lower end of the range suggested by the overlap of evidence from the equity ownership approach (that is, 0.4).
- an estimate of 0.4 is reasonable in light of both higher and lower estimates from implied market value studies and the lesser degree of reliance we place on these studies. The service providers submitted evidence to support placing more reliance on SFG's dividend drop off study relative to other implied market value studies. However, we consider that neither the difference from 0.4 of the estimate from this study (0.31) nor any increased reliance we might place on it relative to other implied market value studies are sufficient to warrant an estimate lower than 0.4.

4.4 Regulatory depreciation (return of capital)

Regulatory depreciation is a building block component of the annual building block revenue requirement.⁶⁶ When determining the total revenue for ActewAGL, we must decide on the depreciation for the projected capital base (otherwise referred to as ‘return of capital’).⁶⁷ Regulatory depreciation is used to model the nominal asset values over the 2016–21 access arrangement period and the depreciation forecast in the total revenue requirement.

Ultimately, however, a service provider can only recover the capex it has incurred on assets once. The depreciation forecast reflects how quickly the capital base is being recovered and is based on the remaining and standard asset lives used in the depreciation calculation. Higher (or quicker) depreciation leads to higher revenues over the access arrangement period. It also causes the capital base to reduce more quickly (assuming no further capex). This reduces the return on capital building block, although this impact is usually less than that of the increased depreciation forecast.

In making a decision on the proposed depreciation schedule, we assess the compliance of the proposed depreciation schedule with the depreciation criteria set out in the NGR.⁶⁸ We must also take into account the NGO and the revenue and pricing principles.⁶⁹ If a proposed depreciation schedule complies, we must approve it.

We approve ActewAGL’s proposal to use the real straight-line method to calculate regulatory depreciation. However, we do not approve ActewAGL’s proposed regulatory depreciation forecast of \$33.9 million (\$nominal) for 2015–16 and the 2016–21 access arrangement period. Our draft decision on ActewAGL’s regulatory depreciation forecast is \$32.9 million (\$nominal) in total for 2015–16 and the 2016–21 access arrangement period as set out in Table 6.

Table 6 AER’s draft decision on ActewAGL’s regulatory depreciation for 2015–16 and the 2016–21 access arrangement period (\$million, nominal)

| | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 | 2020–21 | Total |
|----------------------------------|------------|------------|------------|------------|------------|------------|-------------|
| Straight-line depreciation | 12.2 | 13.4 | 14.5 | 15.6 | 16.7 | 17.7 | 90.1 |
| Less: indexation on capital base | 8.5 | 9.1 | 9.5 | 9.8 | 10.1 | 10.3 | 57.2 |
| Regulatory depreciation | 3.7 | 4.3 | 5.0 | 5.8 | 6.6 | 7.5 | 32.9 |

Source: AER analysis.

⁶⁶ Under our standard approach, the distinction is made between straight-line depreciation and regulatory depreciation. The difference being that regulatory depreciation is the straight-line depreciation minus the indexation adjustment.

⁶⁷ NGR, r. 76(b).

⁶⁸ NGR, r. 89.

⁶⁹ NGL, s. 28; NGR, r. 100(1). The NGO is set out in NGL, s. 23. The revenue and pricing principles are set out in NGL, s. 24.

This reduction to ActewAGL's proposal is required because of:

- Our draft decision not to depreciate forecast land and easement capex. Land assets (including easements and related purchases) do not depreciate and therefore should not have a standard asset life for depreciation purposes. This approach is consistent with Australian accounting standards and the ATO's treatment for such assets.⁷⁰
- Our draft decision on other components of ActewAGL's proposal, which also affect the calculation of forecast regulatory depreciation. These include reductions to forecast capex (see section 4.5) and the ActewAGL's opening capital base (see section 4.1).

In proposing the regulatory depreciation method, ActewAGL made its proposed regulatory depreciation approach contingent on meeting certain BBB to BBB+ credit metrics.⁷¹ ActewAGL submitted that it must be allowed sufficient cash flow to maintain the benchmark BBB+ credit rating that is assumed by the AER when setting the rate of return. ActewAGL stated that it reserves its right to amend its depreciation schedule should its proposed methodology to estimate the rate of return be changed by the AER.⁷²

We do not accept ActewAGL's contingent proposal to adjust its depreciation schedule in response to a financeability assessment.⁷³ We consider that ActewAGL's contingent proposal appears to be incomplete and not fully specified. It is unclear how exactly ActewAGL proposes to assess its financeability, or exactly what adjustment would be made to its depreciation schedules if this assessment indicated that there was a financeability problem. ActewAGL has not demonstrated why an adjustment to depreciation is the appropriate response to financeability concerns, if they were established. ActewAGL's proposal submitted that it is the rate of return that is its core concern.⁷⁴ It is unclear why the depreciation building block, which is estimated accurately according to ActewAGL's own proposal, should be adjusted in response. We note that a submission from Alternative Technology Association stated that it does not agree with ActewAGL's proposal to increase its depreciation if the AER determines a lower rate of return.⁷⁵

⁷⁰ Australian accounting standard board, *Accounting standard AASB1021: Depreciation, August 1997*, pp. 10–11; ATO, *Guide to depreciating assets 2011*, 2011, p. 3.

⁷¹ ActewAGL specifically mentioned the credit metric *Funds From Operations (FFO) to Debt*, which is a financial ratio used by credit rating agencies.

⁷² ActewAGL, *Access arrangement information: Attachment 8*, June 2015, pp. 6–7.

⁷³ We have addressed a similar contingent proposal in our draft decision for Australian Gas Networks. See AER, *Draft decision, Australian Gas Networks Access Arrangement 2016 to 2021*, November 2015, pp. 5-13 to 5-16 (Attachment 5 – Regulatory depreciation).

⁷⁴ ActewAGL, *Access arrangement information: Attachment 8*, June 2015, pp. 6–7.

⁷⁵ Alternative Technology Association, *Submission on ActewAGL access arrangement proposal 2016–21*, August 2015, pp. 10–11.

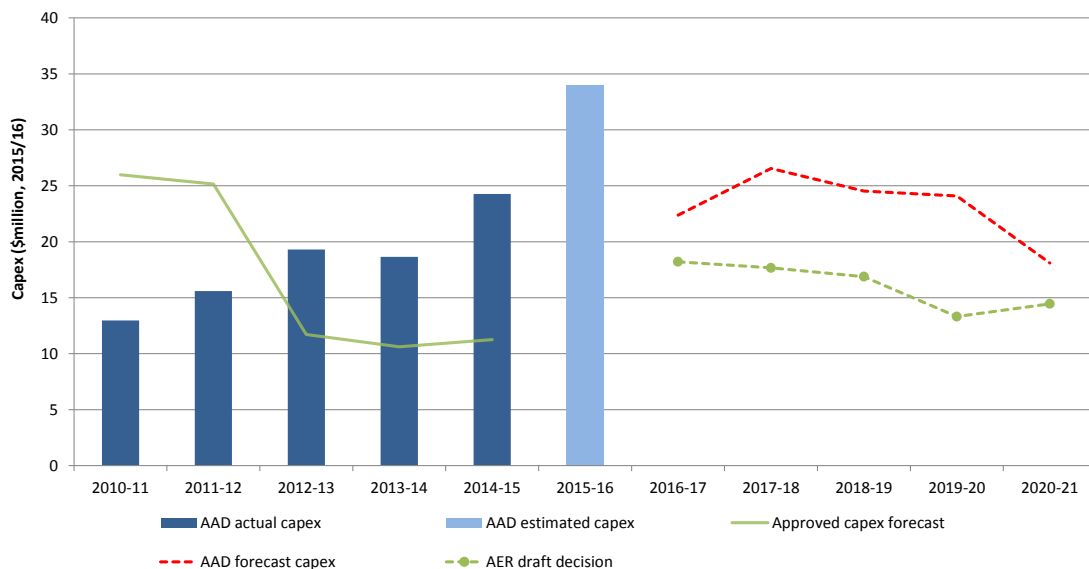
4.5 Capital expenditure

Capital expenditure (capex) refers to the capital expenses incurred in the provision of network services. The return on and of forecast capex for reference services are two of the building blocks we use to determine a service provider's total revenue requirement.

We must make two decisions regarding ActewAGL's capex. First, we are required to assess past capex and determine whether it meets the criteria set out in the NGR to be added to the starting capital base.⁷⁶ Where capex meets these criteria, it is referred to as "conforming capex".⁷⁷ Secondly, we are required to assess ActewAGL's forecast of required capex for the 2016-21 access arrangement period to determine whether it is conforming capex.

Figure 8 shows the difference between ActewAGL's past and proposed forecast capex and the forecasts we have approved in our previous decision for 2010–15 and this draft decision.

Figure 8 AER draft decision compared to ActewAGL's past and proposed capex (\$million, \$2015–16)



Note: There was no approved capex allowance for 2015–16 because the access arrangement was intended to be revised from 1 July 2015.

Source: AER analysis.

⁷⁶ NGR, r. 77(2)(b).

⁷⁷ NGR, r. 79.

We consider that the \$102.6 million (\$2015–16) net capex incurred by ActewAGL for 2009–15 is conforming capex that complies with rule 79(1) of the NGR.⁷⁸ This amount will be rolled into ActewAGL's opening capital base.

However our draft decision does not accept ActewAGL's proposed forecast of \$115.6 million (\$2015–16) total net capex for 2016–21. Instead we approve a forecast of \$76.8 million as conforming capex under rule 79(1) of the NGR. This is a reduction of a 34 per cent from ActewAGL's proposal. Much of this reduction is because we did not have sufficient information to find the proposed expenditures to be prudent or efficient. We have identified where further information needs to be provided by ActewAGL in order for us to be satisfied that the proposed expenditures meet the criteria in the NGR to be conforming capex.

Our assessment has revealed that some aspects of ActewAGL's proposal such as forecast non-system capex were consistent with the NGR requirements in that the proposed expenditures are justified and would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.

We found that other aspects of ActewAGL's proposal, in particular its proposed capex for connections and augmentation, did not meet the NGR requirements for conforming capex.

Table 7 shows ActewAGL's proposed capex compared with our approved allowance for each category.

⁷⁸ As we noted previously, the approved capex for 2014–15 is a placeholder because capex for that year is based on estimates. We expect ActewAGL will provide actual capex for that year in its revised proposal.

Table 7 Draft decision on total capex—ActewAGL (\$million, 2015–16)

| Category | Proposed | Approved | Difference (\$millions) |
|-------------------------------------|----------|----------|-------------------------|
| Market expansion (Connections) | 55.5 | 40.6 | -14.9 |
| Capacity development (Augmentation) | 17.7 | 6.0 | -11.8 |
| Stay in business | | | |
| - Network renewal and upgrade | 15.4 | 14.0 | -1.4 |
| - Meter renewal | 13.3 | 12.9 | -0.4 |
| Non-system | 0.5 | 0.5 | 0.0 |
| Escalation | 7.2 | 2.3 | -4.9 |
| Overheads | 6.6 | 4.6 | -2.0 |
| GROSS TOTAL CAPITAL EXPENDITURE | 116.2 | 80.9 | -35.2 |
| Contributions | 0.5 | 4.1 | 3.6 |
| Asset disposals | 0.0 | 0.0 | 0.0 |
| NET TOTAL CAPITAL EXPENDITURE | 115.6 | 76.8 | -38.8 |

Source: AER analysis.

Notes: (a) Some categories include a construction management fee (CMF) paid by ActewAGL. A confidential version of this table showing direct costs (excluding the CMF) is set out in confidential appendix C.

As can be seen in Table 7, the main differences between our alternative capex estimate and ActewAGL's proposal relate to the following two capex categories:

- Connections—we have included \$40.6 million (\$2015–16, unescalated) of connections capex in our alternative capex forecast. This is 27 per cent less than ActewAGL's forecast expenditure of \$55.5 million (\$2015–16, unescalated). Our reduction is driven by lower new connection forecasts for medium density type connections.
- Augmentation—we have included \$6.0 million (\$2015–16, unescalated) of augmentation capex in our alternative capex forecast. This is 66 per cent less than ActewAGL's forecast expenditure of \$17.7 million (\$2015–16, unescalated). This reduction is driven by our assessment that the forecast capex associated with two projects over the 2016–21 access arrangement period is not prudent and efficient.

We set out our reasons for our draft decision on ActewAGL's conforming capex for both the current and forecast access arrangement periods in attachment 6.

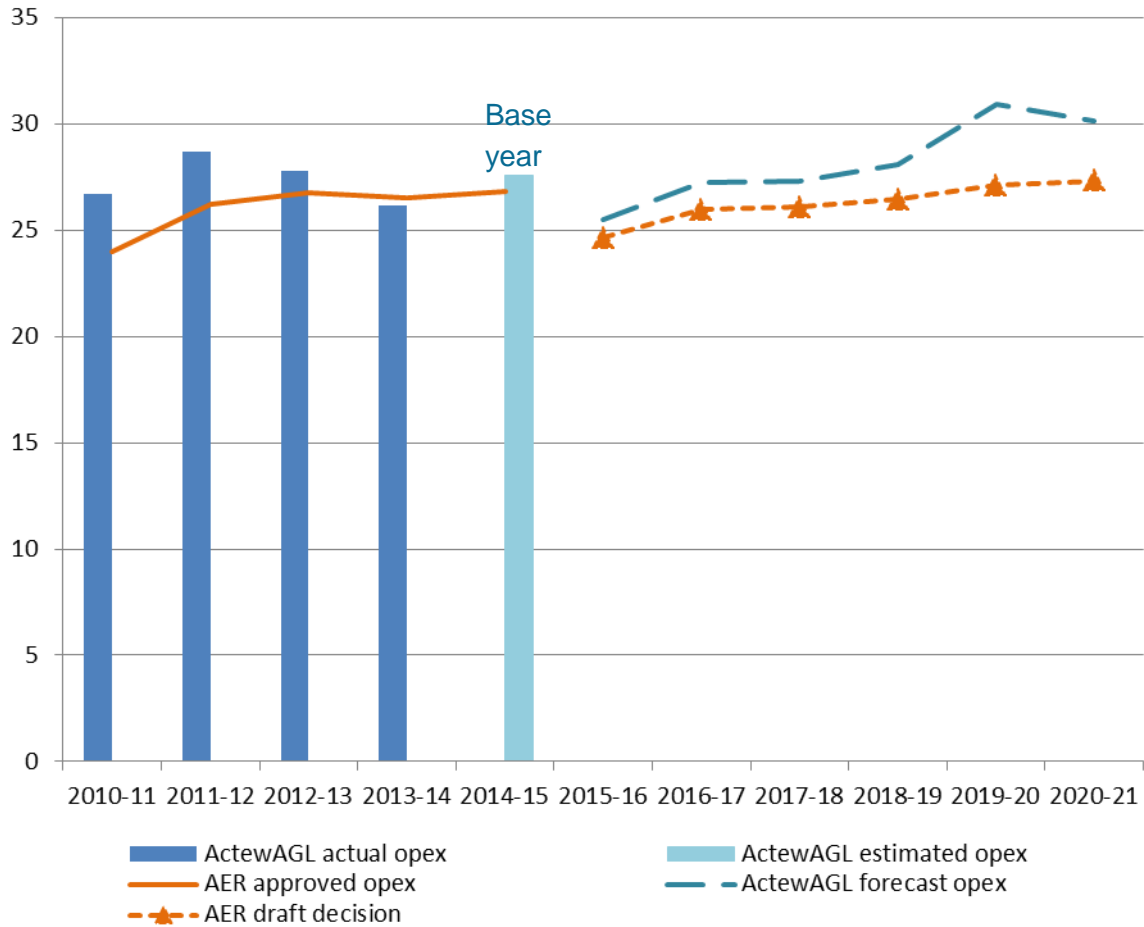
4.6 Operating expenditure

Forecast opex is the forecast of operating, maintenance and other non-capital costs incurred in the provision of distribution services. It includes the labour costs and other non-capital costs that a prudent service provider is likely to require during an access arrangement period for the efficient operation of its pipeline.

ActewAGL proposed total opex of \$143.8 million (\$2015–16) over the 2016–21 access arrangement period, equivalent to an average annual opex of \$28.8 million. We are not satisfied that the forecast of total opex ActewAGL proposed complies with the opex criteria and the criteria for forecasts and estimates under the NGR.⁷⁹ Our approved opex forecast—which we consider is such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice to achieve the lowest sustainable cost of delivering pipeline services—is \$133.0 million (\$2015–16), a 7.5 per cent reduction from ActewAGL’s proposal. This is illustrated in Figure 9.

⁷⁹ NGR, rr. 74, 91.

Figure 9 AER draft decision compared to ActewAGL’s past and proposed opex (\$million, \$2015–16)



Source: AER analysis.

Note: Excludes debt raising costs. ActewAGL's opex model included forecast opex for 2015–16 of \$25.5 million (\$2015–16).

As discussed in section 3.1.2 and appendix B, ActewAGL requested a 12 month delay in the review of its access arrangement to avoid the overlap with the AER's ActewAGL electricity distribution determination. The NGR provide where there is an interval of delay a reconciliation (or true-up) of revenues may be undertaken. To allow a reconciliation of revenues we have determined the relevant building blocks for 2015–16, including opex. Our forecast opex allowance for 2015–16 is \$24.7 million (\$2015–16), which is less than ActewAGL's forecast of \$25.5 million for that year.

Table 8 sets out the difference between ActewAGL’s proposal and our draft decision on total opex.

Table 8 Draft decision on total opex—ActewAGL (\$million, 2015–16)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Total (2016-21) |
|---------------------|---------|---------|---------|---------|---------|---------|--------------------|
| ActewAGL's proposal | n/a | 27.3 | 27.3 | 28.1 | 30.9 | 30.2 | 143.8 |
| AER draft decision | 24.7 | 26.0 | 26.1 | 26.5 | 27.1 | 27.3 | 133.0 |
| Difference | n/a | (1.3) | (1.2) | (1.7) | (3.8) | (2.8) | (10.8) |

Note: Excludes debt raising costs. ActewAGL did not propose a forecast for 2015–16, however its estimated actual opex for 2015–16 is \$25.5 million (\$2015–16).

Source: ActewAGL Distribution Gas network Access Arrangement 2016-21 Opex model; AER analysis.

The key areas of difference between our opex forecast and ActewAGL's forecast are:

- Adjusted base year expenditure—we do not consider that ActewAGL's proposed base year expenditure of \$16.9 million (\$2015–16) is a reasonable estimate for the purpose of forecasting opex for the 2016–21 access arrangement period. We have not removed a number of cost categories that ActewAGL proposed to specifically forecast from the revealed base opex. This results in a higher than proposed efficient base year opex of \$18.6 million (\$2015–16), which we have applied for the purpose of forecasting total opex.
- Rate of change—we consider ActewAGL's forecast price changes, output growth and productivity changes are not the best estimate possible in the circumstances. As such we consider that including these in our forecast of total opex would not lead to a forecast of opex that complies with the opex criteria.
- Step changes— ActewAGL proposed 11 step changes, totalling \$5.6 million (\$2015–16), be added to the base opex after the base opex was trended over the 2016-21 period. We have not accepted most of the step changes as we consider they are not new regulatory obligations or material changes in circumstances. Our assessment of step changes results in a reduction in forecast opex of \$1.7 million (\$2015–16).

Attachment 7 sets out our detailed reasons for our draft decision on ActewAGL's total forecast opex.

4.7 Efficiency carryover mechanism amounts

An efficiency carryover mechanism provides an additional incentive for service providers to pursue efficiency improvements in opex.

An efficiency carryover mechanism applied to ActewAGL during the current access arrangement period. Our draft decision is that ActewAGL should receive a carryover amount of \$1.4 million (\$2015-16) in the 2016-21 period from the application of the efficiency carryover mechanism during the 2010-15 period. This is less than the \$11.2 million (\$2015-16) carryover amount proposed by ActewAGL.

The key reason for the difference is that ActewAGL did not apply the correct equations to calculate its efficiency gains and losses. In particular, ActewAGL did not adjust the equations to reflect its chosen base year of 2014-15.⁸⁰ Therefore its carryover calculations did not include the impact of incremental efficiency losses in 2014-15, while our calculations do.

We have also included in the revenue building blocks a carryover amount of \$1.5 million for the 2015-16 regulatory year.⁸¹ This brings the total carryover amount for the 2015-21 period to \$2.9 million (\$2015–16). Our draft decision is shown in Table 9.

Table 9 AER’s draft decision on ActewAGL’s carryover amounts from the 2010–15 access arrangement period (\$million, 2015–16)

| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | Total |
|---|---------|---------|---------|---------|---------|---------|-------|
| AER draft decision on carryover amounts | 1.5 | 3.6 | 0.6 | -0.4 | -2.4 | 0.0 | 2.9 |

Source: AER analysis.

To account for the delay in the commencement of its next access arrangement, ActewAGL proposed the efficiency carryover mechanism be closed in 2015–16 and restarted in 2016–17. It proposed an efficiency carryover mechanism for the 2016–21 period that reflected this approach. While we agree that an efficiency carryover mechanism should continue to apply to ActewAGL in the 2016–21 period, we do not agree with the efficiency carryover mechanism proposed by ActewAGL. In particular, we consider that the efficiency carryover mechanism should not be stopped and restarted but rather continued from the current period in order to apply a continuous incentive on ActewAGL to pursue efficiency improvements. We have made amendments to ActewAGL’s proposed efficiency carryover mechanism which:

- apply a different equation to calculate the incremental efficiency gain (loss) in the first regulatory year of the 2016–21 period (2016–17), given that we do not agree that the efficiency carryover mechanism should be closed in 2015–16 and restarted in 2016–17.
- streamline and reduce the categories of costs that are excluded from the operation of the mechanism; and
- adjust ActewAGL’s approved opex forecasts to account for (1) approved pass through amounts and (2) capitalisation policy changes.

⁸⁰ The equations to calculate incremental efficiency gains in ActewAGL's 2010-2015 access arrangement implied 2013–14 would be used as the base year to forecast opex, where 2014–15 was proposed and used by ActewAGL in its opex forecast.

⁸¹ ActewAGL did not include the carryover amount of \$3.7 million (\$2015-16) it calculated for the 2015-16 regulatory year.

Our draft decision also removes a clause from the efficiency carryover mechanism which sets out how the efficiency carryover mechanism would operate should an interval of delay occur after the 2016–21 access arrangement period. We do not consider that the 2016–21 access arrangement should incorporate specific provisions for a potential interval of delay because the NGR deal with the occurrence of an interval of delay.

Attachment 9 sets out our reasons for our draft decision on ActewAGL's efficiency carryover mechanism.

4.8 Corporate income tax

When determining the total revenue for ActewAGL, we must estimate ActewAGL's cost of corporate income tax.⁸² ActewAGL has adopted the post-tax framework to derive its total revenue requirement for the 2016–21 access arrangement period.⁸³ Under the post-tax framework, a separate corporate income tax building block is calculated, based on the estimated cost of corporate income tax less the value of imputation credits. The corporate income tax building block feeds directly into the annual revenue requirement.

Our draft decision on ActewAGL's corporate income tax building block over 2015–16 and the 2016–21 access arrangement period is \$8.3 million (\$nominal), as set out in Table 10. This represents a reduction of \$8.8 million (\$nominal) or 51.5 per cent of ActewAGL's proposed corporate income tax building block.

Table 10 AER's draft decision on the corporate income tax building block for ActewAGL for 2015–16 and the 2016–21 access arrangement period (\$million, nominal)

| | 2015–16 | 2016–17 | 2017–18 | 2018–19 | 2019–20 | 2020–21 | Total |
|--|------------|------------|------------|------------|------------|------------|------------|
| Tax payable | 1.9 | 2.0 | 2.2 | 2.4 | 2.6 | 2.7 | 13.8 |
| Less: value of imputation credits | 0.7 | 0.8 | 0.9 | 1.0 | 1.0 | 1.1 | 5.5 |
| Net corporate income tax building block | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 8.3 |

Source: AER analysis.

We accept ActewAGL's proposed approach to calculating the corporate income tax building block. The difference between our draft decision and ActewAGL's proposal is mainly a consequence of our adjustments to:

⁸² NGR, r. 76(c).

⁸³ ActewAGL, *Access arrangement information: Attachment 9*, June 2015, p. 1.

- the remaining tax asset lives as at 1 July 2015 and the addition of the new asset class for 'Land and easement' (see section 4.4)
- the value of gamma, from 0.25 to 0.4 (see section 4.3)
- other building block components, including reductions made in this draft decision to the rate of return, forecast capex and forecast opex (see sections 4.2, 4.5 and 4.6, respectively).⁸⁴

⁸⁴ NGR, r. 87A.

5 Demand and reference tariffs

5.1 Demand

Demand is an important input to the derivation of ActewAGL's reference tariffs. Tariff prices depend on estimates of total demand (GJ/day). Changes in these forecasts will translate into changed tariff prices. In simple terms, tariff prices are determined by cost divided by total demand (GJ/day), such that an increase in forecast demand has the effect of reducing the tariff price and vice versa. Demand forecasts also affect capex and opex linked to increased network capacity.

Our review of ActewAGL's proposed demand forecasts has identified concerns with the forecasting method and assumptions used to forecast new residential connection numbers and residential and commercial consumption per connection for volume ('Tariff V') customers. We are not satisfied that these forecasts comply with the NGR. They have not been arrived at on a reasonable basis and are not the best estimates in the circumstances.⁸⁵

We have developed alternative demand forecasts that we consider address these concerns and comply with the NGR. We have used these alternative demand forecasts in this draft decision. These forecasts result in:

- on average, 2600 forecast new estate and new medium density/high rise connections in the 2016-21 period (a reduction of 31.9 per cent from ActewAGL's proposed 3816 for those connection types).
- forecast consumption per connection of –3.57 per cent for all residential customers, compared to ActewAGL's estimate of –4.52 per cent
- forecast consumption per connection of –3.62 per cent for all commercial customers, compared to ActewAGL's estimate of –2.83 per cent.

Our alternative estimate for Tariff V business connection numbers also reflects updated GSP forecasts for 2015-16.⁸⁶

We are satisfied that ActewAGL's demand forecasts for Tariff D (demand) customers comply with the NGR.

Demand forecasts are a critical input into the calculation of reference tariffs and approved capex and opex. In particular, the demand forecasts approved in this draft decision have impacted our draft decisions on:

- forecast connections capex, given the number of new connections affects the amount of connections capex required

⁸⁵ NGR, r. 74(2).

⁸⁶ ACT Government, 2015-16 Budget Paper, Chapter 1: Economic Performance, Outlook and Strategy.

- the following opex items:
 - unaccounted for gas (UAFG) expenditure, which is forecast as a fixed proportion of the forecast of total throughput⁸⁷
 - Utilities Network Facilities Tax (UNFT) is charged on ‘total service length’, given ActewAGL’s forecast of total services length is based on the forecast growth in customer numbers⁸⁸
 - Energy Industry Levy (EIL), which is based partly on forecast consumption⁸⁹
 - output growth rate, given the variables that constitute the opex rate of change, namely the number of total connections and the gas demand (consumption), is used to determine the change in outputs. This is an element of the rate of change which is applied to the base opex.
- tariff prices, given they depend on forecast demand (consumption) per connection. Changes in these forecasts will change tariff prices. In simple terms, tariff prices are determined by cost divided by quantity (where quantity is measured by demand per connection). This means that an increase in forecast quantity has the effect of reducing the tariff price.

5.2 Services covered by the access arrangement

Our draft decision accepts the reference services ActewAGL proposes to offer on its network over the 2016–21 access arrangement period. We consider that a significant part of the market is likely to seek the reference services provided by ActewAGL. This means they must be covered by the access arrangement.

The proposed singular haulage reference service is consistent with the seven reference services offered by ActewAGL during the 2010–15 access arrangement period. However, we note ActewAGL has included in the haulage reference service the ancillary reference services and their associated revenues. As the ancillary reference services are specific customer requested services, the associated costs and revenues are difficult to forecast with accuracy. Therefore including these costs and revenues together with the other haulage reference services may reduce the cost reflectivity of the ancillary reference services and potential allow the double recovery of the costs. Our draft decision has not separated the ancillary reference services from the singular haulage reference service but we may review our draft decision when making the final decision. We invite submissions on this issue from stakeholders and in ActewAGL’s revised proposal.

The reasons for our draft decision are set out in attachment 1.

⁸⁷ ActewAGL, *2016-21 Access Arrangement Information*, June 2015, p. 24.

⁸⁸ ActewAGL, *2016-21 Access Arrangement Information*, June 2015, p. 24.

⁸⁹ ActewAGL, *2016-21 Access Arrangement Information*, June 2015, p. 24.

5.3 Reference tariff setting

Our draft decision accepts ActewAGL's proposed structure of reference tariffs for the 2016–21 access arrangement period. We are satisfied the proposed structure of the reference tariffs complies with the requirements of the NGR.⁹⁰

ActewAGL proposed significant changes to its reference tariff structures and tariffs for the 2016–21 access arrangement period. Its proposed tariff structure is consistent with that we approved recently for Jemena Gas Networks' New South Wales distribution network, consistent with ActewAGL's proposal to further align the New South Wales and ACT access arrangements. However, as noted above, the inclusion of the ancillary reference services within ActewAGL's haulage reference service may be reviewed when making our final decision.

5.4 Reference tariff variation mechanism

The reference tariff variation mechanism:

- permits building block revenues to be recovered smoothly over the access arrangement period, subject to any differences between forecast and actual demand
- accounts for actual inflation
- accommodates other reference tariff adjustments that may be required, such as for an approved cost pass through event
- sets administrative procedures for the approval of any proposed changes to reference tariffs.

Our draft decision does not accept ActewAGL's proposed reference tariff variation mechanism for the 2016–21 access arrangement period. As set out at attachment 11, we accept ActewAGL's proposal to transition to a weighted average price cap from a schedule of fixed prices. However:

- the proposed initial reference tariffs and X factors must be revised to reflect the changes to the forecast total revenue approved in this draft decision
- we do not accept definitions for certain parameters within the control and rebalancing mechanisms
- we do not accept the proposal to vary reference tariffs during a financial year to apply at a date prior to the start of the next financial year
- we do not accept the cost pass through events proposed by ActewAGL. We require amendments to the definitions of the regulatory change event, service standard event, insurance cap event, insurer credit risk event, terrorism event, natural disaster event and network user failure event. We do not approve the proposed

⁹⁰ NGR, rr. 93, 94.

short term trading market event, supply curtailment event and general pass through event.

The reasons for our draft decision on the tariff variation mechanism are set out in attachment 11.

6 Non-tariff components

ActewAGL's proposed 2016–21 access arrangement includes its Reference Service Agreement (RSA). The RSA sets out terms and conditions on which ActewAGL offers to supply its Haulage Reference Services, Ancillary Reference Services, and Negotiated Services. These describe the relationship between ActewAGL and users, including, amongst other things, their obligations and liabilities under the agreement.

ActewAGL's access arrangement also includes specific provisions around:

- review submission date and revision commencement date
- extension and expansion requirements
- capacity trading requirements
- changing receipt and delivery points.

Together we refer to these as the non-tariff components of the access arrangement.

Our draft decision accepts most of ActewAGL's proposed terms and conditions. However, we require ActewAGL to make some amendments in order for the proposed terms and conditions to be acceptable to us. In our view these amendments will make the terms and conditions consistent with the applicable criteria in the NGL and NGR.⁹¹ We have also made a small number of revisions to improve the clarity of the terms and conditions on which the services will be provided.

The reasons for our draft decision are set out in attachment 12.

⁹¹ NGR, r. 40(3).

7 Understanding the NGO

The NGO is the central feature of the regulatory framework. The NGO is

to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.⁹²

Energy Ministers have provided us with a substantial body of explanatory material that guides our understanding of the NGO.⁹³ The long term interests of consumers are not delivered by any one of the NGO's factors in isolation, but rather by balancing them in reaching a regulatory decision.⁹⁴

In general, we consider that we will achieve this balance and, therefore, contribute to the achievement of the NGO, where consumers are provided a reasonable level of safe and reliable service that they value at least cost in the long run.⁹⁵ We have also considered the quality and reliability of services provided to consumers. For example, the opex allowance and pass through mechanism approved in this draft decision has been set so that it delivers a revenue allowance that is sufficient to enable ActewAGL to meet existing and new regulatory requirements. Our approved capex forecast includes expenditure to replace assets that are aged or in unacceptable condition. It also allows for augmentation and connections capex, catering for expected areas of growth.

The nature of decisions under the NGR is such that there may be a range of economically efficient decisions, with different implications for the long term interests of consumers.⁹⁶ At the same time, however, there are a range of outcomes that are unlikely to advance the NGO, or advance the NGO to the degree that others would.

For example, we do not consider that the NGO would be advanced if allowed revenues encourage overinvestment and result in prices so high that consumers are unwilling or unable to efficiently use the network.⁹⁷ This could have significant longer term pricing implications for those consumers who continue to use network services.

Equally, we do not consider the NGO would be advanced if allowed revenues result in prices so low that investors are unwilling to invest as required to adequately maintain

⁹² NGL, s. 23.

⁹³ Hansard, SA House of Assembly, 9 February 2005, pp. 1451–1460.

Hansard, SA House of Assembly, 27 September 2007, pp. 963–972.

Hansard, SA House of Assembly, 26 September 2013, pp. 7171–7176.

⁹⁴ Hansard, SA House of Assembly, 26 September 2013, p. 7173.

⁹⁵ Hansard, SA House of Assembly, 9 February 2005, p. 1452.

⁹⁶ *Re Michael: Ex parte Epic Energy* [2002] WASCA 231 at [143].

Energy Ministers also accept this view – see Hansard, SA House of Assembly, 26 September 2013 p. 7172.

AEMC, *Rule Determination National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, p. 50.

⁹⁷ NGL, s. 24(7).

the appropriate quality and level of service, and where customers are making more use of the network than is sustainable. This could create longer term problems in the network⁹⁸ and could have adverse consequences for safety, security and reliability of the network.

The NGL also includes the revenue and pricing principles (RPP), which support the NGO.⁹⁹ As the NGL requires,¹⁰⁰ we have taken the RPPs into account throughout our analysis. The RPPs are:

A service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in—

- providing reference services; and
- complying with a regulatory obligation or requirement or making a regulatory payment.

A service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides. The economic efficiency that should be promoted includes—

- efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
- the efficient provision of pipeline services; and
- the efficient use of the pipeline.

Regard should be had to the capital base with respect to a pipeline adopted—

- in any previous—
- full access arrangement; or
- decision of a relevant regulator under section 2 of the Gas Code; or
- in the Rules.

A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.

Regard should be had to the economic costs and risks of the potential for under and over investment by a service provider in a pipeline with which the service provider provides pipeline services.

Regard should be had to the economic costs and risks of the potential for under and over utilisation of a pipeline with which a service provider provides pipeline services.

⁹⁸ NGL, s. 24(6).

⁹⁹ NGL, s. 24.

¹⁰⁰ NGL, s. 28(2).

Consistent with Energy Ministers' views, we set the amount of revenue that service providers can recover from customers to balance all of the elements of the NGO and consider each of the RPPs.¹⁰¹ For example:

- In determining forecast opex and capex that reasonably reflects the opex and capex criteria, we take into account the revenue and pricing principle that we should provide ActewAGL with a reasonable opportunity to recover at least efficient costs. (Refer to capex attachment 6 and opex attachment 7).
- We take into account the economic costs and risks of the potential for under and over investment in our assessment of ActewAGL's forecast capex and opex proposals. (Refer to capex attachment 6 and opex attachment 7).
- We consider the economic costs and risks of the potential for under and over utilisation of ActewAGL's distribution system in our decisions on demand forecasting and augmentation capex (Refer to capex attachment 6 and demand attachment 13).
- Our application of the efficiency carryover mechanism in this decision provides ActewAGL with effective incentives which we consider will promote economic efficiency with respect to the reference service that ActewAGL provides throughout the access arrangement period. (Refer to attachment 9).
- We have determined ActewAGL's opening capital base taking into account the capital adopted in the previous access arrangement. (Refer to attachment 2, capital base).
- The allowed rate of return objective reflects the revenue and pricing principle in section 24(5). We have determined a rate of return that we consider will provide ActewAGL with a return commensurate with the regulatory and commercial risks involved in providing pipeline services. (Refer to attachment 3, rate of return).
- Our financing determinations provide ActewAGL with a reasonable opportunity to recover at least the efficient costs of accessing debt and capital. (Refer to attachment 3, rate of return).

In some cases, our approach to a particular component (or part thereof) results in an outcome towards the end of the range of options that may be favourable to the businesses, for example, our choice of equity beta. Some of these decisions include:

- selecting at the top of the range for the equity beta
- setting the return on debt by reference to data for a BBB broad band credit rating, when the benchmark is BBB+
- the cash flow timing assumptions in the post-tax revenue model.

¹⁰¹ Hansard, SA House of Assembly, 27 September 2007 pp. 965, Hansard, SA House of Assembly, 9 April 2008 p. 2886, Hansard, SA House of Assembly, 26 September 2013, p. 7173.

We take into account the RPPs when exercising discretion about an appropriate estimate. This requires recognition that for the long term interests of consumers, the risk of under-compensation for, or underinvestment by, a service provider may be less desirable than the risk of overcompensation or overinvestment. However, we are also conscious of the risk of introducing an inherent bias towards higher amounts where estimates throughout the different components of the forecast revenue requirement are each set too conservatively.¹⁰² The legislative framework recognises the complexity of this task by providing us with significant discretion in many aspects of the decision-making process to make judgements on these matters.

Part 9 of the NGR provides specifically for the economic regulation of covered pipelines. It includes detailed rules about the individual components of our decisions. These are intended to contribute to the achievement of the NGO.

7.1 Achieving the NGO to the greatest degree

An access arrangement decision is complex and must be considered as such. In most instances, the provisions of the NGR do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgment. For example, Part 9 of the NGR requires us to prepare forecasts, which are predictions about unknown future circumstances. As a result, there will likely always be more than one plausible forecast. There is substantial debate amongst stakeholders about the costs we must forecast, with both sides often supported by expert opinion. As a result, for certain components of our decision there may be several plausible answers or several plausible point estimates.

When the components of our decision are considered together, this means there will almost always be several potential, overall decisions. More than one of these may contribute to the achievement of the NGO. Where this is the case, our role is to make an overall decision that we are satisfied contributes to the achievement of the NGO to the *greatest degree*.¹⁰³

We approach this from a practical perspective, accepting that it is not possible to consider every permutation specifically. Where there are choices to be made among several plausible alternatives each of which would result in an overall decision that contributes to the achievement of the NGO, we have selected what we are satisfied would result in an overall decision that contributes to the achievement of the NGO to the greatest degree.

Also, in coming to this draft decision we have considered ActewAGL's proposal. We have examined each of the building block components of the forecast revenue requirement, and the incentive mechanisms that should apply across the next access arrangement period. We have considered submissions we received in regard to

¹⁰² AEMC, Rule Determination, National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18, 16 November 2016, p. 52.

¹⁰³ NGL, s. 28(1)(b)(iii).

ActewAGL's proposal (listed at appendix A). We have conducted our own analysis and engaged expert consultants to help us better understand if and how ActewAGL's proposal contributes to the achievement of the NGO. We have also considered how the individual components of our decision relate to each other, the impact that particular components of our decision have on others, and have described these interrelationships in this draft decision. We have had regard to and weighed up all of the information assembled before us in making this draft decision, and have made as much of this information publicly available as practicable for the purposes of consultation.

Therefore, we are satisfied that among the options before us, our draft decision on ActewAGL's access arrangement for the 2016–21 access arrangement period contributes to achieving the NGO to the greatest degree.

7.1.1 Interrelationships between individual components

Considering individual components in isolation ignores the importance of interrelationships between components of the overall decision, and would not contribute to the achievement of the NGO. As outlined by Energy Ministers, considering the elements in isolation has resulted in regulatory failures in the past.¹⁰⁴ Interrelationships can take various forms, including:

- underlying drivers and context which are likely to affect many constituent components of our decision. For example, forecast demand affects the efficient levels of capex and opex in the access arrangement period (see attachment 6, 7 and 13).
- direct mathematical links between different components of a decision. For example, the value of imputation credits (γ) has an impact on the appropriate tax allowance; the benchmark efficient entity's debt to equity ratio has a direct effect on the cost of equity, the cost of debt, and the overall vanilla rate of return (see attachments 3, 4 and 8).
- trade-offs between different components of revenue. For example, undertaking a particular capex project may affect the need for opex and vice versa (see attachments 6 and 7).
- trade-offs between forecast and actual regulatory measures. The reasons for one part of a proposal may have impacts on other parts of a proposal. For example, completion of forecast augmentation (capex) to the network will mean the service provider has more assets to maintain leading to higher opex requirements (see attachments 6 and 7).
- the service provider's approach to managing its network. The service provider's governance arrangements and its approach to risk management will influence most

¹⁰⁴ SCER, *Regulation Impact Statement: Limited Merits Review of Decision-Making in the Electricity and Gas Regulatory Frameworks – Decision Paper*, 6 June 2013, p. 6.

aspects of the proposal, including capex/opex trade-offs (see attachments 6 and 7).

We have considered interrelationships, including those above, in our analysis of the individual components of our decision. These considerations are explored in the relevant attachments.

8 Consultation

Stakeholder participation is important to informed decision making under the NGL and NGR. It allows us to take a range of views into account when considering how a proposal or decision contributes to the NGO. Effective consultation and engagement provide confidence in our processes and are good regulatory practice. This is reflected in the consultation process set out in the NGR.

We published ActewAGL's access arrangement revision proposal and supporting material on our website in July 2015, and invited written submissions on the access arrangement proposals.¹⁰⁵ We also sought advice on ActewAGL's access arrangement proposal from the AER's Consumer Challenge Panel (CCP). During this consultation period, AER staff and members of the CCP met with a number of key stakeholders in Canberra. In developing this draft decision we have considered views presented to us by all stakeholders.¹⁰⁶ We received 11 written submissions from stakeholders. This includes written advice from the CCP, which was presented to the AER Board in August 2015. A list of stakeholder submissions is provided in appendix A to this Overview. All submissions are available on our website.

This process builds on consultation undertaken by the AER as part of the Better Regulation program. Following the 2012 changes to the National Electricity Rules (NER) and NGR, we spent much of 2013 consulting on and refining our assessment methods and approaches to decision making. We referred to this as our Better Regulation program. The Better Regulation program was designed to be an inclusive process that provided an opportunity for all stakeholders to be engaged and provide their input.¹⁰⁷

This gives us confidence the approaches set out in the Guidelines, which we have applied in this decision, will result in decisions that will or are likely to contribute to the achievement of the NGO to the greatest degree. It also provides investors and consumers with predictability in our decision making. Our Better Regulation guidelines are available on our website and include:¹⁰⁸

- Expenditure Forecast Assessment Guideline
- Expenditure Incentives Guideline
- Rate of Return Guideline
- Consumer Engagement Guideline for Network Service Providers
- Shared Assets Guideline

¹⁰⁵ NGR, r. 58(1).

¹⁰⁶ NGR, r. 59(1).

¹⁰⁷ AER, *Overview of the Better Regulation reform package*, April 2014, pp. 4 and 7–13.

¹⁰⁸ <http://www.aer.gov.au/networks-pipelines/better-regulation>.

- Confidentiality Guideline.

We acknowledge that the changes to the NGR were more limited than those to the National Electricity Rules. However, many of the concepts and analytical tools are the same and we involved gas service providers in consultation on all aspects of the Better Regulation program.

ActewAGL presented its access arrangement revision proposal to the AER Board in August 2015. AER staff directly engaged with ActewAGL staff throughout the review process, and tested material and information underpinning its access arrangement revision proposal. During this process, we requested and considered additional information from ActewAGL to help us understand its proposal.

ActewAGL also undertook its own stakeholder engagement in the development of its proposal. We consider that ActewAGL has taken important steps to involving consumers in the regulatory process. Submissions received by us from ACT Council of Social Services (ACTCOSS),¹⁰⁹ the North Canberra Community Council (NCCC),¹¹⁰ and Peter Sutherland of the ANU College of Law,¹¹¹ and advice from the Consumer Challenge Panel,¹¹² support this view, and indicate there are further opportunities for ActewAGL (and us) to improve our engagement. We will consider this in developing our consumer engagement programs going forward, and encourage ActewAGL to do the same.

¹⁰⁹ ACTCOSS, *Submission on ACTEWAGL Gas Distribution Pricing Determination 2016-2021*, 3 September 2015.

¹¹⁰ North Canberra Community Council, *Submission on ActewAGL's access arrangement proposal*, 10 August 2015.

¹¹¹ Peter Sutherland Visiting Fellow ANU College of Law, *Submission ActewAGL Distribution Submission to the AER for the period 2016-2021*, 13 August 2015.

¹¹² CCP8, *Advice to AER from Consumer Challenge Panel sub-panel 8 regarding the ActewAGL Distribution (AAD) Access Arrangement (AA) 2016-2021 Proposal*, 26 August 2015.

A List of submissions

| Submission from | Date received |
|---|--------------------------------|
| ACT Council of Social Service Inc. | 3 September 2015 |
| Alternative Technology Association | 10 August 2015, 1 October 2015 |
| Care Inc. | 10 August 2015 |
| Consumer Challenge Panel | 27 August 2015 |
| CitiPower and Powercor | 24 July 2015 |
| Energy Networks Association | 3 September 2015 |
| Jemena Electricity Networks | 24 July 2015 |
| North Canberra Community Council | 10 August 2015 |
| Peter Sutherland, Visiting Fellow at the ANU College of Law | 13 August 2015 |
| Origin Energy | 10 August 2015 |

B Revenue reconciliation for the 2015–16 interval of delay

B.1 Background

ActewAGL's access arrangement must include:

- A review submission date—a date on or before which an access arrangement revision proposal must be submitted
- A revision commencement date—a date on which revisions resulting from a review of an access arrangement are intended to take effect.

ActewAGL's current access arrangement included a review submission date of 1 July 2014.

In November 2012 the AEMC made its final determination on amendments to the economic regulatory frameworks under the NER and NGR.¹¹³ Transitional arrangements to support the introduction of the NER amendments delayed our review of ActewAGL's electricity distribution determination by 12 months. ActewAGL requested that the submission date for revisions to its access arrangement be delayed by 12 months also, so that its gas and electricity reviews would not overlap. This was to avoid "serious resourcing issues" for ActewAGL.¹¹⁴

The AEMC decided to allow ActewAGL's gas access arrangement review submission date to be delayed to 1 July 2015, and to enable the effect of any delays to be dealt with in accordance with rule 92(3) of the NGR.¹¹⁵ Transitional provisions in the NGR allowed ActewAGL a 12 month delay in submitting its access arrangement proposal, from 1 July 2014 to 1 July 2015.¹¹⁶

Because ActewAGL's submission of its proposal was delayed by 12 months, the commencement of revisions approved by us on review of that proposal has also been delayed, by 12 months from 1 July 2015 to 1 July 2016.

Rule 92(3) of the NGR provides that, if there is a delay (the interval of delay) between a revision commencement date stated in an access arrangement and the date on which revisions to the access arrangement actually commence:

¹¹³ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney.

¹¹⁴ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney, p. 251

¹¹⁵ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney, p. 251.

¹¹⁶ NGR, Schedule 1, cl. 35(3).

- (a) Reference tariffs, as in force at the end of the previous access arrangement period, continue without variation for the interval of delay; but
- (b) The operation of rule 93(2) may be taken into account in fixing reference tariffs for the new access arrangement period.

This appendix explains the application of rule 92(3) to this decision.

B.2 ActewAGL's proposal

ActewAGL submitted that:

- An interval of delay is the interval between a revision commencement date specified in an access arrangement and the date on which revisions to the access arrangement actually commence.
- The revisions commencement date specified in ActewAGL's 2010–15 access arrangement was "the later of 1 July 2015 and the date on which the approval by the relevant regulator of the revisions to the access arrangement take effect under the NGR".
- The continued application of the reference tariffs in force at the end of the 2010–15 over the 2015–16 year was, in ActewAGL's view, part of the access arrangement for that period, and not the result of an interval of delay or the operation of rule 92(3)(a).
- Because the access arrangement contemplates commencement of revisions after 1 July 2015, and makes provision for continuation of tariffs where this occurs, ActewAGL submitted no interval of delay has occurred.
- Rule 92(3) applies only to an interval of delay, and our power to effect a reconciliation (or 'true-up') is not enlivened where no interval of delay has occurred.

ActewAGL has implied, incorrectly, that we have previously accepted this position. It did this by reference to language used by us in correspondence, in the Regulatory Information Notice served on ActewAGL for this reset and on our website.¹¹⁷ This argument misinterprets that material and does not accurately reflect our position on this matter, set out below.

B.3 Reasons for our draft decision

The period between 1 July 2015 (the revision commencement date) and 1 July 2016, when revisions will actually take effect, constitutes an interval of delay for the purposes of rule 92(3).

¹¹⁷ ActewAGL Distribution, *Attachment 11: Revenue requirement and price path, Access arrangement information for the 2016-21 Access Arrangement, Submission to the AER*, June 2015, pp. 7–8.

The NGR requires an access arrangement to include a date on which revisions will commence.¹¹⁸ The NGR contemplate that the revision commencement date approved in an access arrangement is distinct from the actual date on which revisions commence. This possibility is reflected in rule 3 of the NGR, which defines 'revision commencement date':

Revision commencement date of an applicable access arrangement means the date fixed in an access arrangement as the date on which revisions resulting from review of an access arrangement *are intended to take effect*.

The note to rule 3 also states that:

One should bear in mind that the actual date on which a revision takes effect may differ from a revision commencement date stated in the access arrangement (which is a date fixed some time in advance as the intended date for the revision to take effect). The revision commencement date is relevant to the definition of the access arrangement period only until the revision actually takes effect and the date thus crystallises.

We consider that the revision commencement date in ActewAGL's current access arrangement is to be interpreted in the context of the NGR, which require a revision commencement date to be specified. In our final decision on ActewAGL's access arrangement proposal, released on 26 March 2010, we stated clearly that "ActewAGL proposes and the AER approves a review submission date of 30 June 2014 and a revision commencement date of 1 July 2015".¹¹⁹

This is also supported by the following:

- Clause 1.17 of the current access arrangement nominates 1 July 2015 as a date on which the revisions may commence.
- Clause 5.4 of that access arrangement has the effect that the reference tariffs for each reference service set out in Attachment 3 of the access arrangement are to "continue" to apply after 1 July 2015 if the revisions have not commenced before that date.
- The current access arrangement first took effect on 1 July 2010. The date of 1 July 2015 is therefore consistent with the "general rule" set out in rule 50 of the NGR that "a review commencement date will fall 5 years after the access arrangement took effect or the last revision commencement date".
- The various tariffs or "charges" (see the definition of "reference tariff" in the Access Arrangement) specified in Attachment 3 to the current access arrangement concern the period 30 June 2011 to 30 June 2015.

¹¹⁸ NGR, r. 49.

¹¹⁹ AER, *Final decision—Public, Access arrangement proposal, ACT Queanbeyan and Palerang gas distribution network, 1 July 2010–30 June 2015*, March 2010, p. 10.

We are therefore satisfied that the interval between the 1 July 2015 revision commencement date and the date on which revisions to the access arrangement will actually commence as a result of their delayed submission (1 July 2016) constitutes an interval of delay.

This enlivens rule 92(3) of the NGR which, as noted above, provides that if there is an interval of delay between a revision commencement date stated in an access arrangement and the date on which revisions to the access arrangement actually commence:

- (a) Reference tariffs, as in force at the end of the previous access arrangement period, continue without variation for the interval of delay; but
- (b) The operation of rule 93(2) may be taken into account in fixing reference tariffs for the new access arrangement period.

We consider that taking the continuation of reference tariffs from 1 July 2015 for the interval of delay—by effecting a reconciliation or 'true-up' of revenue recovered in that year with what would otherwise have occurred—will ensure that the interval of delay does not result in ActewAGL incurring a windfall loss or gain as a result of the delay. This supports the achievement of the NGO and is consistent with the RPP. It is therefore an appropriate exercise of our discretion to do so under rule 92(3).

These positions are consistent with that which informed the AEMC's decision to allow a delay to the revisions submission date.¹²⁰ At the time the delayed submission of its proposal was considered, ActewAGL raised concerns with the AEMC as to whether we would be compelled to undertake the 'true-up' contemplated by rule 92(3)(b). Noting that use of the word 'may' implies some discretion for us, the AEMC considered that the requirement that we have regard to the NGO and RPP in exercising that discretion supported the application of a true-up were reference tariffs prevailing during the interval of delay lower (or higher) than they would otherwise have been. The AEMC stated that it expects that any true-up we carry out will result in the new NGR being effectively applied to the transitional year. That is, that the timing of the application of the new NGR to ActewAGL's gas distribution network should be unchanged by the 12 month delay.¹²¹

This draft decision therefore uses a net present value neutral mechanism to account for the difference between:

- the revenue that ActewAGL recovered in 2015–16
- the building block revenue that we determined for 2015–16 in this draft decision.

¹²⁰ AEMC 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Rule Determination*, 29 November 2012, Sydney, pp. 252–253.

ActewAGL's proposal included the mechanism by which it submitted any reconciliation under rule 92(3) should be executed, in the event that we do not accept its submission that no interval of delay has arisen. We have reviewed ActewAGL's proposed reconciliation approach and are satisfied with the implementation. We have therefore adopted the RFM and PTRM submitted by ActewAGL for the reconciliation purposes as the basis for our draft decision. This adjustment is explained in section 3.1.2 of this overview.