

Access arrangement draft decision

APA GasNet Australia (Operations) Pty Ltd

2013–17

Part 1

September 2012

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Shortened forms

|  |  |
| --- | --- |
| Shortened form | Full title |
| 2008-12 access arrangement | Access arrangement for APA GasNet effective from 1 January 2008 to 31 December 2012 inclusive |
| 2008-12 access arrangement period | 1 January 2008 to 31 December 2012 inclusive |
| 2013-17 access arrangement period | 1 January 2013 to 31 December 2017 |
| 2018-22 access arrangement | Access arrangement for APA GasNet effective from 1 January 2018 to 31 December 2022 inclusive |
| ACCC | Australian Competition and Consumer Commission |
| access arrangement information | APA GasNet Australia (Operations) Pty Ltd, Access arrangement information, 31 March 2012 |
| access arrangement submission | APA GasNet Australia (Operations) Pty Ltd, Access arrangement submission, 31 March 2012 |
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| AMDQ CC | authorised maximum daily quantity credit certificates |
| APA GasNet | APA GasNet Australia (Operations) Pty Ltd (ACN 083 009 278) |
| AWOTE | average weekly ordinary time earnings |
| capex | capital expenditure |
| CAPM | capital asset pricing model |
| Code | National Third Party Access Code for Natural Gas Pipeline Systems |
| CPI | consumer price index |
| DRP | debt risk premium |
| ESC | Essential Services Commission (Victoria) |
| GFC | global financial crisis |
| GPG | gas powered generation |
| MRP | market risk premium |
| NGL | National Gas Law |
| NGO | National Gas Objective |
| NGR | National Gas Rules |
| opex | operating expenditure |
| ORC | optimised replacement cost |
| PTRM | post tax revenue model |
| RAB | regulatory asset base |
| RFM | roll forward model |
| RPP | revenue pricing principles |
| SEAGas | South East Australia Gas |
| VTS | Victorian transmission system |
| WACC | weighted average cost of capital |
| WORM | western outer ring main |

Summary

This is the AER's draft decision on APA GasNet's access arrangement for the 2013–17 access arrangement period. It includes the AER's draft decision on reference tariffs as well as terms and conditions for access to APA GasNet's transmission pipelines. In making its draft decision the AER applied the laws and rules governing gas access arrangements.

The draft decision sets out the AER's assessment of APA GasNet's access arrangement proposal, and details a number of revisions that AER requires APA GasNet make to its proposal to make it acceptable under the National Gas Rules. APA GasNet can then lodge a revised proposal following the draft decision, and the AER will make a final decision on the revised proposal.

The AER’s draft decision

The AER’s draft decision on the total expected revenue derived from APA GasNet’s reference services is $464.4 million ($nominal). This is 39.3 per cent lower than APA GasNet's proposed revenue over the 2013–17 access arrangement period.

Indicative tariffs

This draft decision will result in: reference tariffs being approximately 34.2 per cent lower on average over the 2013–17 access arrangement period (in nominal dollar terms) compared to APA GasNet's proposed tariffs; and in reference tariffs being 19 per cent lower on average over the 2008–12 access arrangement period. The indicative tariff path arising from the AER's draft decision compared with that in APA GasNet's proposal is shown in Figure 1.

Figure 1 Indicative reference tariff paths for APA GasNet's reference services from 2013 to 2017 ($/GJ, nominal)

Source: AER analysis.

Impact on residential bills

In Victoria, it is estimated that approximately 8 per cent of an average residential gas bill is from gas transmission reference services. Figure 1 shows that the draft decision results in reference tariffs falling compared with the previous access arrangement period. Hence, the AER's draft decision is not expected to contribute to any price increase to an average residential bill over the 2013–17 access arrangement period. If the decrease in transmission tariffs were passed through to consumers, a typical residential bill could be expected to reduce by up to $4 ($nominal) per year. APA GasNet’s proposal would have resulted in a $6 ($nominal) per annum increase.

Key differences between the draft decision and APA GasNet's access arrangement proposal

Key differences between the draft decision and APA GasNet's proposal relate to the rate of return, forecast capital expenditure (capex), forecast operating expenditure (opex) and regulatory depreciation.

Rate of return

The rate of return relates to the cost of financing capital assets, such as providing a return on equity and paying interest on loans. The draft decision is to set a rate of return of 7.16 per cent (compared with APA GasNet's proposed 9.06 per cent). While the AER accepts most of APA GasNet's rate of return proposal, it does not accept its proposed 8.5 per cent market risk premium for the cost of equity, or the value of the equity beta proposed by APA GasNet to be applied to the speculative capex account. The AER has adopted a lower rate of 6 per cent for the market risk premium for its draft decision.

Capital expenditure

The draft decision is to approve $153.8 million ($2012) of the $340.8 million ($2012) of capex proposed by APA GasNet (a reduction of approximately 55 per cent). The majority of the difference between the AER's draft decision and APA GasNet's proposal relate to augmentation capex. APA GasNet proposed five augmentation projects. The AER approved two of these projects. The AER considered that the remaining three projects did not comply with the criteria governing capex, including that they did not constitute expenditure that a prudent service provider acting efficiently would incur.

Operating expenditure

The draft decision is to approve $146.5 million of the $182.2 million of opex proposed by APA GasNet (a reduction of approximately 20 per cent). APA GasNet proposed a number of 'step changes' to allow for adjustments to a base level estimate of annual opex. The AER accepted some of these but rejected others where these did not relate to a change in circumstances or did not reflect efficient opex. As with capex, reductions were also made to the proposed labour cost escalators.

Regulatory depreciation

Regulatory depreciation is an allowance for the declining value over time of APA GasNet's pipeline assets. The draft decision is to approve $56.2 million ($nominal) of APA GasNet's proposed $157.5 million ($nominal) (a reduction of approximately 64 per cent). The reduction is necessary in large part because APA GasNet’s proposed forecast depreciation approach does not meet the requirement of promoting efficient growth of the market for reference services.

Next steps

APA GasNet is given the opportunity to address this draft decision by submitting a revised access arrangement proposal by 9 November 2012.

The AER invites submissions from interested parties in response to its draft decision and APA GasNet's revised proposal. The deadline for submissions is 7 January 2013. Further information on providing a submission can be found at: <http://www.aer.gov.au/node/13556>

Once the AER has considered submissions and APA GasNet's revised proposal, it will publish its final decision in March 2013.

1. About the review

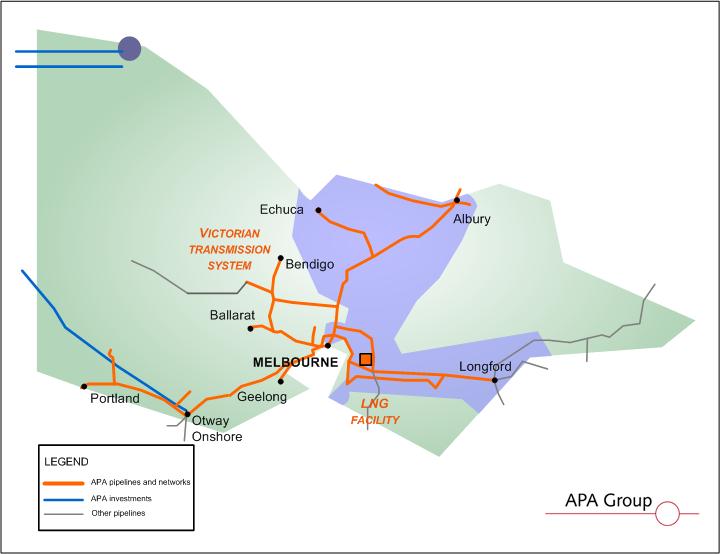
The AER is responsible for the economic regulation of covered natural gas distribution and transmission pipelines in all states and territories except Western Australia. The AER is currently conducting a review of the revised access arrangements of the three Victorian gas distribution networks and the Victorian gas transmission network, which is operated by APA GasNet. The National Gas Law (NGL) and National Gas Rules (NGR) provide the overarching regulatory framework for the gas distribution and transmission sectors.

The Victorian gas transmission network is subject to full regulation, which requires the service provider[[1]](#footnote-1) to submit an initial access arrangement to the AER for approval, and to revise it periodically (typically every five years). The access arrangement sets out the terms and conditions on which third parties can access the transmission pipeline.[[2]](#footnote-2)

* 1. Overview of the service provider

The Victorian Transmission System (VTS) transports gas to more than 1.4 million residential consumers and 43 000 industrial and commercial users throughout Victoria. The VTS is 1993 km in length and consists of 45 licensed pipelines and associated facilities supplying the Melbourne metropolitan area, country Victoria, New South Wales and South Australia (see figure 1.1 below). The VTS primarily transports gas from Esso’s Longford gas treatment plant in south east Victoria (which processes gas from offshore Bass Strait gas fields), the Otway Basin gas field and underground storage in south west Victoria.

APA GasNet is entirely owned by APA Group (APA). APA is Australia's largest natural gas infrastructure business, owning and operating approximately $9 billion of energy infrastructure assets. APA's pipelines span every Australian state and territory, delivering about half of the nation's gas usage. APA also holds minority interests in a number of energy infrastructure enterprises.

* + - 1. Map of Victorian transmission system
    1. Regulation prior to 1 July 2008

The Australian Competition and Consumer Commission (ACCC) made the previous determination on APA GasNet's access arrangement for the period 1 January 2008 to 31 December 2012. The ACCC made its determination in accordance with the provisions of the National Third Party Access Code for Natural Gas Pipeline Systems.

Responsibility for the regulation of gas transmission networks outside of Western Australia transferred from the ACCC to the AER on 1 July 2008. This current determination process is the first full assessment by the AER of the access arrangements of the Victorian gas transmission under the NGL and the NGR.

* 1. The relevant requirements of the NGL and the NGR

This access arrangement draft decision specifies the amendments that the AER considers are required in order for APA GasNet's access arrangement proposal to be approved. These amendments have been identified by assessing each element of [business]'s access arrangement proposal in accordance with the relevant requirements set out in the NGL and the NGR. It is important to recognise that the requirements in the NGL and the NGR relevant to (and accordingly, the assessment required of) a particular element of APA GasNet's access arrangement proposal may differ. For example, the NGR ascribes different levels of discretion—namely full, limited or no discretion—when making certain decisions on an access arrangement proposal. Specifically:

No discretion

(1) If the Law states that the AER has no discretion under a particular provision of the Law, then the discretion is entirely excluded in regard to an element of an access arrangement proposal governed by the relevant provision.

Limited discretion

(2) If the Law states that the AER's discretion under a particular provision of the Law is limited, then the AER may not withhold its approval to an element of an access arrangement proposal that is governed by the relevant provision if the AER is satisfied that it:

(a) complies with applicable requirements of the Law; and

(b) is consistent with applicable criteria (if any) prescribed by the Law.

Full discretion

(3) In all other cases, the AER has a discretion to withhold its approval to an element of an access arrangement proposal if, in the AER's opinion, a preferable alternative exists that:

(a) complies with applicable requirements of the Law; and

(b) is consistent with applicable criteria (if any) prescribed by the Law.[[3]](#footnote-3)

For these reasons, each element of APA GasNet's access arrangement proposal has been assessed individually in separate attachments to this draft decision. The requirements relevant to each element are also set out in each of these attachments.

However, there are two overarching requirements that apply to the assessment of [business]'s access arrangement proposal as a whole. First, the AER must make an access arrangement decision that is in the long term interests of consumers. Specifically, the AER must do so in a manner that will or is likely to contribute to the NGO.[[4]](#footnote-4) Section 23 of the NGL relevantly provides:

The objective of this Law 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.

Consistent with this, r. 100 of the NGR, provides:

The provisions of an access arrangement must be consistent with:

(a) the national gas objective; and

(b) these rules and the Procedures as in force when the terms and conditions of the access arrangement are determined or revised.

Second, the AER must take into account the revenue and pricing principles (RPP) when exercising a discretion in approving or making those parts of an access arrangement relating to a reference tariff, or where it considers appropriate to do so.[[5]](#footnote-5) Section 23 of the NGL relevantly provides:

(1) The revenue and pricing principles are the principles set out in subsections (2) to (7).

(2) A service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in-

(a) providing reference services; and

(b) complying with a regulatory obligation or requirement or making a regulatory payment.

(3) 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-

(a) efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and

(b) the efficient provision of pipeline services; and

(c) the efficient use of the pipeline.

(4) Regard should be had to the capital base with respect to a pipeline adopted-

(a) in any previous-

(i) full access arrangement decision; or

(ii) decision of a relevant Regulator under section 2 of the Gas Code;

(b) in the Rules.

(5) 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.

(6) 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.

(7) 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.

Ultimately, in order to properly take into account the RPP and to determine whether it will or is likely to contribute to the achievement of the NGO, a holistic assessment of an access arrangement proposal must be undertaken. This is because an access arrangement is a complex instrument that is more than just the sum of its elements or component parts. An access arrangement also represents a balance between the possible outcomes, reflecting the AER’s judgment on the level of scrutiny and the form of examination afforded to all relevant material before it.

That balance also recognises that there are interlinkages between different elements of an access arrangement. These interlinkages must be taken into account in order to ensure that all of the elements of an access arrangement work together as a whole. That is, so that the terms and conditions, including prices, will, among other things, contribute to achieving efficient investment in and operation of APA GasNet's gas transmission network in the long term interests of consumers whilst providing APA GasNet with a reasonable opportunity to recover at least its efficient costs and effective incentives to promote economic efficiency. These interlinkages are set out in chapter 16 of the draft decision.

* 1. Access arrangement review process

Under the NGL a service provider must submit an access arrangement proposal to the AER for approval under the NGR.[[6]](#footnote-6) An access arrangement proposal contains the terms, including prices, under which the service provider proposes to provide access to the services provided by their networks to users and prospective users.

When submitting an access arrangement proposal, the service provider must submit 'access arrangement information' for the proposal. The term 'access arrangement information' is defined by r. 42(1), which provides:

Access arrangement information for an access arrangement or an access arrangement proposal is information that is reasonably necessary for users and prospective users:

(a) to understand the background to the access arrangement or the access arrangement proposal; and

(b) to understand the basis and derivation or the various elements of the access arrangement or the access arrangement proposal.

Rule 42(2) provides that access arrangement information must include the information reasonably required by the NGL and the NGR. Rule 48 sets out general requirements including that the service provider must describe the pipeline services it proposes to offer by means of the pipeline and must specify the reference services and reference tariffs. Rule 72 lists specific information relevant to price and revenue regulation that also must be included in an access arrangement. This includes detailed forecasting information and the service provider's proposed approach to the setting of tariffs.

Following the service provider's submission of an access arrangement proposal, the AER conducts a preliminary assessment of the proposal and access arrangement information against the requirements of the NGR.[[7]](#footnote-7) The AER must publish a notice (initiating notice) on its website and in a newspaper notifying receipt of, and describing the access arrangement proposal, giving a website where it can be inspected, and inviting written submissions on the proposal by a specified date.[[8]](#footnote-8) The AER may defer the initiating notice if, on a preliminary inspection, the AER considers that the proposal or related information is deficient in some respect.[[9]](#footnote-9)

After considering the access arrangement proposal, any submissions in response to the service provider’s access arrangement proposal, and any other matters the AER considers relevant, the AER must make an access arrangement draft decision.[[10]](#footnote-10) The AER must include a statement of the reasons for the draft decision.[[11]](#footnote-11) An access arrangement draft decision indicates whether the AER is prepared to approve the service provider’s access arrangement proposal as submitted and, if not, the nature of the amendments that are required in order to make the proposal acceptable to the AER.[[12]](#footnote-12)

* + 1. Access arrangement proposal to be approved in its entirety or not at all

The AER's approval of an access arrangement proposal implies approval of every element of the proposal.[[13]](#footnote-13) It follows that if the AER withholds its approval to any element of an access arrangement proposal, then the proposal cannot be approved.[[14]](#footnote-14)

If, in an access arrangement final decision, the AER does not approve an access arrangement proposal, the AER must itself propose an access arrangement or revisions to the access arrangement for the relevant pipeline.[[15]](#footnote-15) The AER's proposal for an access arrangement or revisions is to be formulated with regard to:

* the matters that the NGL requires an access arrangement to include
* the service provider's access arrangement proposal
* the AER's reasons for refusing to approve that proposal.[[16]](#footnote-16)
  + 1. Revision of access arrangement proposal and commencement of public consultation

If an access arrangement draft decision indicates that revision of the access arrangement proposal is necessary to make the proposal acceptable to the AER, the decision must fix a period for revision of the proposal.[[17]](#footnote-17) This is known as the revision period. In the revision period, the service provider may submit additions or other amendments to the access arrangement proposal to address matters raised in the access arrangement draft decision.[[18]](#footnote-18) The amendments must be limited to those necessary to address matters raised in the access arrangement draft decision unless the AER approves further amendments.[[19]](#footnote-19)

After the AER makes an access arrangement draft decision, it must notify stakeholders, establish a procedure for stakeholders to make written submissions on the draft decision, and make the draft decision available. It must do this by publishing the decision on its website, and publishing a notice on its website and in a national newspaper. [[20]](#footnote-20) Pursuant to r. 59(5)(c), the notice must invite written submissions. The due date for written submissions must be at least 20 business days after the end of the revision period.

After considering the submissions made in response to the access arrangement draft decision within the time allowed, and any other matters the AER considers relevant, the AER must make an access arrangement final decision.[[21]](#footnote-21)

An access arrangement final decision is a decision to approve, or to refuse to approve, an access arrangement proposal.[[22]](#footnote-22) An access arrangement final decision, like an access arrangement draft decision, must include a statement of the reasons for the decision.[[23]](#footnote-23) The final decision must also be published on the AER's website.

* + 1. Time limits on AER decision making

The AER is required to make an access arrangement final decision to approve or not approve the access arrangement proposal within six months of receipt of the access arrangement proposal.[[24]](#footnote-24) For the purpose of calculating elapsed time in the making of a decision under the NGL and NGR, certain periods may be disregarded, such as a period allowed for public consultation and a period taken by the service provider to respond to a request for information from the AER.[[25]](#footnote-25)

For instance, when calculating the six month period, the AER may disregard any period allowed for public submissions on the proposal or on a draft decision.[[26]](#footnote-26) The time taken for a service provider to remedy a deficiency in their access arrangement information under r. 43(3) of the NGR can also be disregarded for the purposes of calculating the six month period. However, the access arrangement review must be completed within an absolute overall time limit of 13 months between the date on which the service provider submits its access arrangement proposal and the AER's final decision.[[27]](#footnote-27)

* 1. Public consultation

The NGR require the AER to consult with interested parties at various stages during an access arrangement review. Effective consultation and engagement with stakeholders is essential to the AER's performance of its regulatory functions.

The AER invited interested parties to make submissions on APA GasNet's access arrangement proposal. The AER considered all submissions in making this draft decision.

Table 1.1 below outlines the various stages of public consultation that the AER has undertaken as part of the review process, and upcoming consultation following this draft decision. The AER may also hold a public forum and industry workshop following the release of the AER's draft decision.

Submissions on APA GasNet's revised proposal are due 7 January 2012. Further information on providing a submission to the AER can be found at: <http://www.aer.gov.au/node/13556>

* + - * 1. Scheduled dates for key stages in the decision making process

|  |  |
| --- | --- |
| **Key stages in the decision making process** | **Scheduled date** |
|  |  |
|  |  |
| AER received APA GasNet proposal | 31 March 2012 |
| APA GasNet proposal published | 17 April 2012 |
|  |  |
|  |  |
| AER draft decision released | 10 September 2012 |
| APA GasNet revised proposal to be submitted | 9 November 2012 |
| Submissions on revised proposal due | 7 January 2013 |
| Release of AER final decision | March 2013 |

* + 1. Protected information submitted to the AER

As part of the review process the AER receives protected information from the businesses and other stakeholders. The AER is committed to treating protected information responsibly and in accordance with the law.

Division 1 of Part 2 of Chapter 10 of the NGL deals with disclosure of confidential information held by the AER. The NGL authorises the AER to disclose confidential information in specified circumstances.[[28]](#footnote-28) In summary, the AER is authorised to disclose confidential information where it is of the opinion that:

* disclosure would not cause detriment to the person who gave the information, or
* although disclosure would cause detriment, the public benefit in disclosing the information outweighs the detriment to the disclosing person.[[29]](#footnote-29)

Before disclosing information, the AER must undertake the process set out in s. 329(2) of the NGL. It provides that the AER must: give a notice to the person who gave the information of the intended disclosure; give the person an opportunity to address the AER's case for disclosure; and properly consider that person's case for nondisclosure in making its decision.

The AER undertook the NGL process described above to disclose information where it was of the opinion that the information would be relevant to stakeholder submissions or would need to be referred to in its decision, and after it had satisfied itself of the matters required under the NGL.

* 1. Structure of decision paper

The draft decision paper is set out as follows:

* Part 1: AER draft decision – draft decision on access arrangement proposal and summary of reasons
* Part 2: attachments – detailed analysis of the various components of the draft decision (excluding analysis based on confidential information)
* Part 3: appendices – detailed discussion of common, technical issues
* Part 4: confidential appendices – sections of the AER's analysis that include protected information.

In making its draft decision, the AER considered APA GasNet's access arrangement proposal and supporting information, submissions by interested parties and specialist advice provided to the AER by engineering, financial and economic experts.

The attachments to the AER's draft decision contain the AER's more detailed analysis. AER analysis that refers to protected information is contained in a confidential appendix to the decision.

1. AER approach

As the owner and operator of a gas transmission network, APA GasNet is required to submit an access arrangement to the regulator for approval. An access arrangement sets out the terms and conditions under which third parties can use a pipeline. It must specify at least one reference service likely to be sought by a significant part of the market, and a reference tariff for that service.

As the national energy regulator the AER is required to assess APA GasNet’s proposed gas access arrangement for the 2013–17 access arrangement period. In order to assess APA Group's proposal, the AER must first identify the covered pipeline that will be regulated through the access arrangement. That is, the 'reference services' covered by the access arrangement. For this draft decision the reference service is essentially the gas transmission service provided by APA GasNet on the Victorian transmission system (VTS). This is discussed in more detail in overview section 3, attachment 1.

The AER then undertakes the more substantial task of assessing and providing a draft decision on:

* tariffs for regulated pipeline services (reference services)
* non-tariff terms and conditions for reference and ancillary services.
  1. Tariffs for reference services

Assessing tariffs for reference services involves first assessing the total revenue required to deliver reference services on the VTS. Consistent with the NGR, the AER uses the building block approach to determine the total revenue allowance.

Total revenue under the building block approach is set out in r. 76 of the NGR and comprise of the following capital and non-capital costs relating to pipeline services:

* a return on the projected capital base[[30]](#footnote-30) incorporating:
* capital base – chapter 5 and attachment 2
* capital expenditure (which forms part of the capital base) – chapter 6, attachment 3 and confidential appendix A
* rate of return – chapter 7, attachment 4 and appendix B
* regulatory depreciation of the projected capital base – chapter 8 and attachment 5
* forecast operating expenditure – chapter 9 and attachment 6
* increments and decrements resulting from an incentive mechanism[[31]](#footnote-31) – chapter 10 and attachment 7
* corporate income tax[[32]](#footnote-32) – chapter 11 and attachment 8.

This is illustrated in Figure 2.1.[[33]](#footnote-33)

* + - 1. Building block approach

Total revenue

Return on capital

(projected capital base × rate of return)

Regulatory depreciation

Operating expenditure

Corporate income tax

Capital costs

Incentive mechanism  
(increment or decrement)

These building blocks are taken into account in determining APA GastNet's total revenue. That total revenue in general terms, is a forecast of its efficient cost of providing gas transmission services. For the AER's draft decision on APA GasNet's required revenue see overview section 2.

Once total revenue is determined, revenue is allocated to reference and other pipeline services. The tariffs for the pipeline services are determined by reference to the recovery of the total revenue required to provide those services and the forecast demand or capacity utilisation for those services. Hence, capacity utilisation forecasts are an important component of the AER's draft decision on reference services. Capacity utilisation forecasts are discussed in the capacity utilisation forecast section of this document (chapter 12), and at attachment 9 and appendix D.

In relation to tariffs, the access arrangement also details:

* how tariffs for reference services will be set (chapter 13 and attachment 10 relate to tariff setting)
* the mechanism for varying tariffs annually and arrangements for varying tariffs in certain pre-specified conditions (chapter 14 and attachment 11 discuss the tariff variation mechanism).
  1. Non-tariff terms and conditions

Non-tariff terms and conditions essentially define the commercial relationship between the network service provider and users. In considering APA GasNet's proposal, the AER assesses whether its proposed terms and conditions are consistent with the NGO and the broader regulatory framework. While parties can agree on terms that are different to those set out in APA GasNet's access arrangement proposal, the AER's approved terms and conditions can act as a starting point for negotiations.

The AER’s consideration of the access arrangement’s non–tariff components is set out in chapter 15 and attachment 12.

* 1. What the AER considers in reaching its draft decision

The AER’s draft decision on APA GasNet's 2013–17 access arrangement has been made in accordance with the relevant sections of the NGL and NGR.

The AER has made its draft decision by:

* considering APA GasNet's access arrangement proposal and other supporting information provided by APA GasNet
* considering submissions from interested parties
* considering views expressed at stakeholder events
* undertaking its own analysis to verify the information provided by APA GasNet
* considering expert advice or analysis commissioned by the AER on certain parts of APA GasNet's access arrangement proposal.

APA GasNet prepared a reasonably comprehensive proposal with additional information to support their proposals where required. This meant the AER had most of the information required to assess the proposal from the start, which avoided any significant delays to the process.

For more on the steps undertaken by the AER in coming to this draft decision, as well as an overview of the regulatory framework, see the introductory chapter at the beginning of this document.

1. Total revenue requirements and the impact on price

The total revenue allowance, in general terms, is a forecast of the efficient cost of providing pipeline reference services.

The total revenue set out in this draft decision has been determined by assessing each element of APA GasNet's access arrangement proposal. These elements include the building blocks, which have been assessed to ensure that they are consistent with the costs that would be incurred by an efficient service provider in providing gas transmission services. This also includes taking into account any relevant interlinkages that exist between the elements of APA GasNet's access arrangement proposal.

These elements are discussed in more detail in the remainder of the overview, as well as in the attachments to this draft decision. The interlinkages are discussed in chapter 16 of this draft decision.

This section also includes some analysis on the likely impact of this draft decision on prices for end consumers. This analysis has been undertaken with reference to the AER's draft decision on tariffs.

In making its draft decision the AER considered APA GasNet's proposal and supporting information as well as information from consultants, where relevant.

* 1. Draft decision

The AER’s draft decision on the total (smoothed) expected revenue derived from APA GasNet’s reference services is $464.4 million ($nominal) over the 2013–17 access arrangement period.[[34]](#footnote-34)

This (smoothed) revenue is 39.3 per cent lower than APA GasNet's proposed (smoothed) revenue over the 2013–17 access arrangement period. The AER accepts that many aspects of APA GasNet’s proposed access arrangement proposal are consistent with the requirements of the NGR. However, the AER has not approved all elements. The key elements of the AER’s draft decision which would reduce APA GasNet's proposed revenues are:

* the rate of return
* capex
* opex
* regulatory depreciation.

Figure 3.1 compares APA GasNet's proposal with the AER's draft decision for revenues over the 2013–17 access arrangement period and the revenue approved by the ACCC over the 2008–12 access arrangement period. APA GasNet's proposed smoothed revenues for the 2013–17 access arrangement period are 45.7 per cent higher than the ACCC allowed (unsmoothed) revenues for the 2008–12 access arrangement period.

* + - 1. AER’s draft decision compared to APA GasNet's proposed revenue requirement and approved revenue for 2008–12 ($million, nominal)

Source: AER analysis.

The AER's draft decision on APA GasNet's total revenue is arrived at by summing the 'building blocks'[[35]](#footnote-35) that were set out earlier in section 2.1 of this document. These building blocks are displayed in Table 3.1 and are each discussed in greater detail in this overview and the attachments to the document.

* + - * 1. AER's draft decision on APA GasNet's proposed revenue requirements for its reference services ($million, nominal)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **2013** | **2014** | **2015** | **2016** | **2017** | **Total** |
| Return on capital | 43.8 | 45.2 | 50.5 | 51.5 | 51.6 | 242.7 |
| Regulatory depreciation | 9.3 | 10.2 | 11.8 | 13.2 | 11.7 | 56.2 |
| Operating expenditure | 28.2 | 29.2 | 30.9 | 32.7 | 33.5 | 154.6 |
| Benefit sharing allowance | 1.0 | –1.7 | –2.2 | –1.9 | – | –4.8 |
| Net corporate income tax allowance | 3.1 | 3.4 | 3.2 | 3.3 | 2.7 | 15.7 |
| Annual building block requirement (unsmoothed) | 85.4 | 86.4 | 94.3 | 98.8 | 99.5 | 464.4 |
| Annual expected revenue (smoothed) | 85.2 | 87.0 | 94.3 | 97.4 | 100.4 | 464.4 |
| X factor | 32.3%a | 0% | 0% | 0% | 0% | n/a |

Source: AER analysis.

(a) This is the Po for revenue for the first year of the 2013–17 access arrangement period.

n/a Not applicable.

The effect of the AER’s draft decision adjustments to the building blocks on APA GasNet's proposed total (unsmoothed) revenue requirement is displayed in Figure 3.2. This figure shows that the AER’s draft decision will reduce APA GasNet’s proposals for the return on capital, opex, depreciation and tax building blocks.

* + - 1. AER’s draft decision and APA GasNet's proposed revenue requirement (unsmoothed) ($million, nominal)

Source: AER analysis.

* + 1. Sensitivity analysis

This section provides additional analysis to consider how revenue has changed between APA GasNet's proposal and this draft decision and the key drivers of this.

The AER's draft decision is to approve smoothed revenue requirement of $464.4 million ($nominal) for APA GasNet over the 2013–17 access arrangement period.[[36]](#footnote-36) The AER’s draft decision represents a 39.3 per cent reduction of APA GasNet's proposed smoothed revenue over the 2013–17 access arrangement period.

The AER also assessed the impact of key aspects of the AER's draft decision on APA GasNet's proposed revenue. These include the AER's draft decision on the rate of return, forecast capex, opex and depreciation. The AER's draft decision on each is:

* a rate of return of 7.16  per cent, compared to APA GasNet's proposed 9.06 per cent
* capex of $166.8 million ($nominal), compared to APA GasNet's proposed $394.0 million ($nominal); a reduction of 57.7 per cent
* opex[[37]](#footnote-37) of $149.9 million ($nominal), compared to APA GasNet's proposed $198.2 million ($nominal); a reduction of 24.4 per cent
* depreciation of $56.2 million ($nominal), compared to APA GasNet's proposed $157.5 million; a reduction of 64.3 per cent.

Table 3.2 shows that total revenue would be $90.0 million ($nominal) or 11.8 per cent lower than APA GasNet's proposed total revenue when the AER's draft decision on the rate of return is adopted.

Table 3.3 shows that total unsmoothed revenue, based on the AER's draft decision on forecast capex, would be $78.2 million ($nominal) or 10.2 per cent lower than APA GasNet's proposed revenue. It also shows that when the AER's draft decision on forecast opex is adopted, the total unsmoothed revenue would be around $48.3 million ($nominal) or 6.3 per cent lower than the APA GasNet's total proposed revenue. In addition, the total unsmoothed revenue would be $101.6 million ($nominal) or 13.3 per cent lower than APA GasNet's proposed revenue, when AER's draft decision on regulatory depreciation is adopted.

* + - * 1. Changes to APA GasNet's total proposed unsmoothed revenue, when AER's draft decision WACC parameters are adopted

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **APA GasNet proposal  (per cent)** | **AER’s draft decision  (per cent)** | **Revenue change ($million, nominal)** | | **Revenue change (per cent)** |
| Risk free rate | 3.99 | 2.98 | | –45.0 | –5.9a |
| DRP | 3.92 | 3.76 | | –3.9 | –0.5b |
| MRP | 8.50 | 6.00 | | –41.2 | –5.4 |
| WACC | 9.06 | 7.16 | | –90.0 | –11.8c |

Source: AER analysis.

(a) The AER has accepted the method for determining the risk free rate proposed by APA GasNet. The difference between the risk free rate proposed by APA GasNet and the AER’s draft decision, therefore, is due entirely to the AER’s draft decision relying on data from a more recent indicative averaging period. That is, APA GasNet's proposed rate is based on market data from November–December 2011, whereas the AER's draft decision is based on market data from July–August 2012. The AER will update this data for its final decision to reflect APA GasNet’s final averaging period.

(b) The difference between the DRP proposed by APA GasNet and the AER’s draft decision predominantly reflects the difference in indicative averaging periods (as outlined for the risk free rate). The AER, however, has also amended the bond sample relied on by APA GasNet to extrapolate the Bloomberg fair value curve. This amendment, albeit minor, is discussed in greater detail in attachment 4 of this draft decision.

(c) The impact from each individual parameter change does not add up to the total impact of the WACC change (last row in the table). This is due to the interaction of individual parameters that contribute to calculating the WACC.

* + - * 1. Changes to APA GasNet's total proposed unsmoothed revenue, when AER's draft decision capex forecasts, opex forecasts and regulatory depreciation allowance are adopted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **APA GasNet proposal ($million, nominal)** | **AER's draft decision  ($million, nominal)** | **Revenue change ($million, nominal)** | **Revenue change (per cent)** |
| Capex | 394.0 | 166.8 | –78.2 | –10.2 |
| Opexa | 198.2 | 149.9 | –48.3 | –6.3 |
| Regulatory depreciation | 157.5 | 56.2 | –101.6 | –13.3 |

Source: AER analysis.

(a) Includes benefit sharing amounts.

* 1. Impact on prices
     1. Reference tariffs

The effect of the AER’s draft decision on APA GasNet's forecast reference tariffs for its reference services can be estimated by comparing these with APA GasNet's forecast reference tariffs. Using this approach the AER estimates that the draft decision will result in reference tariffs being 34.2 per cent[[38]](#footnote-38) lower on average over the 2013–17 access arrangement period in nominal dollar terms than APA GasNet’s proposed tariffs.

The AER’s draft decision will result in average reference service transmission charges ($/GJ of demand) for the 2008–12 access arrangement period that are 19 per cent lower than average reference service charges per GJ for the 2013–17 access arrangement period.

This includes a reduction in average transmission charges ($/GJ) from 2012 to 2013 of approximately 28 per cent.

These lower reference tariffs are largely driven by the AER’s draft decision on a lower rate of return, lower capex forecast and lower regulatory depreciation allowance. This is also reflected in no real price increases (known as X factors). The indicative tariff path arising from the AER's draft decision compared with that in APA GasNet's proposal is shown in Figure 3.3.

* + - 1. Indicative reference tariff paths for APA GasNet's reference services from 2013 to 2017 ($/GJ, nominal)

Source: AER analysis.

* + 1. Average residential customer bill

In Victoria, the proportion of the average residential gas bill attributable to gas transmission reference tariffs is estimated to be approximately 8 per cent.[[39]](#footnote-39) The AER's draft decision on APA GasNet's access arrangement proposal is not expected to contribute towards any price increase for an average residential bill of $1154 per year.[[40]](#footnote-40) The expected lower revenues under the AER's draft decision over the 2013–17 access arrangement period results in lower tariffs compared to APA GasNet's proposal. If these lower transmission tariffs were passed through to end consumers, a typical residential bill could be expected to reduce by up to approximately $4 per year. Under APA GasNet's proposal the estimated increase in a typical residential gas bill would be approximately $6 per annum ($nominal) or $28 in total over the 2013–17 access arrangement period.

* + 1. Average commercial customer bill

The impact of this draft decision on commercial users will depend on the proportion of the gas bill attributable to gas transmission. It is estimated that transmission costs form approximately 21 per cent of the gas bill for large commercial users.[[41]](#footnote-41) However, the proportion attributable to large commercial users will depend on the terms of private bi-lateral contracts. Based on the above estimated proportion, this draft decision is not expected to contribute towards any price increase in the overall gas bill for this type of users. By comparison, APA GasNet's proposal would result in an estimated annual average increase of 1.3 per cent over the 2013–17 access arrangement period.

1. Services covered by the access arrangement

In considering a full access arrangement for a gas pipeline network, the first step is to identify the covered pipeline that will be regulated through the access arrangement. After identifying the covered pipeline, the next step is to describe the reference service(s) that will be regulated through the access arrangement. A service is deemed a reference service if it is a pipeline service that is is likely to be sought by a significant part of the market, pursuant to r. 121(2) of the NGR.

The full draft decision and the AER's detailed reasons and analysis on reference services base can be found in attachment 1.

* 1. Draft decision

As a market carriage system APA GasNet's Victorian gas transmission network is made available in its entirety to AEMO. The terms of this single reference service are set out in the service envelope agreement between APA GasNet and AEMO. AEMO operates the network in accordance with the NGR. The AER considers that this service is likely to be sought by a significant part of the market.

In addition to the single reference service, APA GasNet also offer authorised maximum daily quantity credit certificates (AMDQ CC), which provide preferential rights to users who purchase these certificates for specified amounts of pipeline capacity when the transmission system becomes constrained.

The AER considers that AMDQ CC should be classified as a pipeline service as it is likely to be sought by a significant part of the market. The AER has calculated an initial reference tariff for AMDQ CC of $0.0025 per GJ (in real 2013 dollars).

The AER's draft decision is based on the current definitions of a reference service and also of a rebateable service. These definitions are currently the subject of a proposed rule change.[[42]](#footnote-42) The AEMC has advised that a final rule determination will be made on 1 November 2012. The AER will give effect to that rule change in the event that it takes effect prior to the final decision.

1. Capital base

The capital base is the value of APA GasNet's capital assets — including gas transmission pipelines, connections, IT systems, plant and equipment, motor vehicles and buildings — that are required to provide reference services. The capital base is the value on which APA GasNet can earn a rate of return. Further, APA GasNet is allowed to earn a depreciation allowance (or a return of capital) on assets in its capital base. Hence, the capital base is an important input to the return on capital and depreciation building blocks and consequently, the revenue requirement.

As part of this draft decision, the AER is required to assess APA GasNet's proposed opening value for the capital base for each year of the previous and upcoming access arrangement period. This involves the AER:

* Confirming the value of the opening capital base at 1 January 2008 (the first year of the 2008–12 access agreement period). This involves assessing whether APA GasNet's actual capex in 2007 is conforming capex and adjusting for differences between actual conforming capex and estimated capex for 2007.[[43]](#footnote-43) Conforming capex is essentially that which would have been undertaken by an efficient transmission service provider in providing reference services.
* Rolling forward the opening capital base as at 1 January 2008 to determine the closing capital base as at 31 December 2012.[[44]](#footnote-44) This involves, for each year:
* adding conforming actual capex and any speculative capex or redundant assets that were reused during the 2008–12 access arrangement period
* removing forecast depreciation, any capital contributions, any redundant assets and any disposals
* indexing the roll forward for actual inflation.
* Using the AER's draft decision on forecast depreciation, capex, disposals and inflation for the 2013–17 access agreement period to roll forward APA GasNet's projected capital base for each year of that access arrangement period. In particular, conforming forecast capex is added to the capital base while forecast depreciation and disposals are removed from the capital base. Forecast inflation is used to index the resulting capital base.

Following this process, the AER's draft decision includes a forecast value of APA GasNet's capital base as at 1 January 2013 and a forecast closing capital base at 31 December 2017.

The full draft decision and the AER's detailed reasons and analysis on the capital base can be found in attachment 2.

* 1. Draft decision

The AER does not approve APA GasNet's proposed opening capital base of $620.6 million as at 1 January 2013 because it considers that some of APA GasNet's inputs into the capital base roll forward model (RFM) do not comply with the NGR.[[45]](#footnote-45) These include:

* APA GasNet's proposed inflation input for 2007
* APA GasNet's proposal not adjusting the capital base for the accumulated return on capital associated with the difference between actual and estimated capex for 2007.

After adjusting these inputs, the AER has determined an opening capital base of   
$1023.1 million ($nominal) as at 1 January 2013, which is approximately $50 million less than that proposed by APA GasNet. Figure 5.1 shows APA GasNet's past actual opening capital base values compared to forecast values.

* + - 1. APA GasNet's past and forecast opening capital base and the AER’s draft decision on the opening capital base ($million, nominal)

Source: AER analysis.

Table 5.1 shows the AER’s draft decision on the roll forward of APA GasNet's capital base during the 2008–12 access arrangement period.

* + - * 1. AER's draft decision on APA GasNet's capital base roll forward for the 2008–12 access arrangement period ($million, 2012)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2008 | 2009 | 2010 | 2011 | 2012 |
| Opening capital base | 559.6 | 591.1 | 583.2 | 575.9 | 613.0 |
| Net capex | 37.8 | 10.2 | 10.6 | 53.6 | 52.5a |
| Less: depreciation | 27.0 | 30.7 | 33.4 | 34.3 | 35.5 |
| Indexation | 20.6 | 12.5 | 15.5 | 17.9 | 15.3 |
| Closing capital base | 591.1 | 583.2 | 575.9 | 613.0 | 645.3 |
| Less: difference between 2007 forecast and actual capex |  |  |  |  | 20.0 |
| Less: return on difference for 2007 capex |  |  |  |  | 13.2 |
| Opening capital base at 1 January 2013 |  |  |  |  | 612.1 |

Source: AER analysis.

Note: Totals may not add due to rounding.

(a) Based on forecast capex.

Based on the approved opening capital base and the AER's draft decisions on forecast capex, depreciation, and inflation, the AER has determined a projected closing capital base of $722.7 million ($nominal) as at 31 December 2017. Table 5.2 set out the projected roll forward of the capital base over the 2013–17 access arrangement period using the 'partially as incurred' approach for recognising capex.[[46]](#footnote-46)

* + - * 1. AER's draft decision on projected (partially as incurred) capital base roll forward for the access arrangement period ($million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| Opening capital base | 612.0 | 631.8 | 706.1 | 719.9 | 721.5 |
| Net capexa | 29.0 | 84.5 | 25.6 | 14.8 | 12.9 |
| Less: depreciationb | 24.6 | 26.0 | 29.5 | 31.2 | 29.8 |
| Indexation | 15.3 | 15.8 | 17.7 | 18.0 | 18.0 |
| Closing capital base | 631.8 | 706.1 | 719.9 | 721.5 | 722.7 |

Source: AER analysis.

(a) Based on as incurred capex.

(b) Based on as commissioned capex.

* 1. Summary of analysis and reasons

The AER approves some aspects of APA GasNet's proposal to determine the opening capital base as at 1 January 2013. These include:

* Using the opening capital base at 1 January 2007 as the basis from which to roll forward the capital base. The opening value is consistent with that adopted in the ACCC's final decision for the 2008–12 access arrangement period.
* The use of forecast depreciation for the 2008–12 access arrangement period as approved by the ACCC.

However, the AER considers that a number of APA GasNet's proposed inputs into the capital base roll forward model overstate the value of the opening capital base as at 1 January 2013 and consequently, the projected closing capital base as at 31 December 2017. In particular, the AER does not agree with APA GasNet's approach in the following areas:

* APA GasNet's proposed RFM included an incorrect inflation input for 2007 and therefore overstates the opening capital base at 1 January 2008.
* APA GasNet's proposed RFM did not correctly include the adjustment for the accumulated return on capital associated with the difference between actual and estimated capex for 2007. This has the effect of overstating the opening capital base as at 1 January 2013.
* APA GasNet's proposed forecast capex and depreciation inputs used to roll forward the projected capital base for the 2013–17 access arrangement period need to be amended. The AER considers that APA GasNet's proposed inclusion of capitalised interest in its capex forecasts will overstate its efficient capital requirements. The AER's assessment of APA GasNet's forecast capex and depreciation inputs is discussed in attachments 3 and 5 respectively.

These adjustments add up to a $50 million reduction to APA GasNet's proposed opening capital base at 1 January 2013. The AER's draft decision is an opening capital base of $621.1 million ($nominal) as at 1 January 2013. Based on this, and the AER's draft decisions on forecast capex, depreciation, and inflation, the AER has determined a projected closing capital base of $722.7 million ($nominal) as at 31 December 2017. See attachment 2 for more on the AER's draft decision on the capital base and reasons for this.

1. Capital expenditure

Forecast capital expenditure (capex) is a forecast of the cost of new assets that are likely to be required by a network business during an access arrangement period for the efficient operation of the network. As well as assessing forecast capex, the AER reviews actual capex undertaken during the previous access arrangement period (using actual data for the first four years and a forecast of the fifth). The final approved level of capex is used in conjunction with the opening capital base, rate of return and depreciation as an input in the return on capital building block.

Capex is broken down into several categories:

* Augmentation capex – assets that expand the capacity of the network or provide connections to new customers
* Refurbishment and upgrade capex – used to replace or upgrade aging, obsolete or inefficient assets
* Non-network capex – includes IT, plant and equipment, motor vehicles and buildings.

An efficient network business will require one or more of these categories of capex during an access arrangement period. The amount of overall capex required will vary based on the circumstances facing the business. Factors that will influence the required level of capex include the age and condition of existing assets, changes in the number of customers connected to the network, changes in the demand profile of customers, and general 'stay in business' requirements of the business.

The AER assesses the capex forecasts of regulated gas network businesses to determine whether they conform to the criteria set out within r. 79 of the NGR. In particular, the forecast capex must:

* be arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances
* be expenditure that would be incurred by a prudent service provider acting efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of providing pipeline services
* be shown that one of the following criteria is met:
* the capex has a positive economic value
* the expected present value of the incremental revenue exceeds the expenditure
* the capex is necessary to either:
* maintain and improve the safety of services
* maintain the integrity of services
* comply with a regulatory obligation or requirement
* maintain capacity to meet levels of demand existing at the time the capex is incurred
* the capex is justifiable as a combination of the preceding two dot points.

APA GasNet proposed a total forecast capex of $340.8 million ($2012) for the 2013–17 access arrangement period. The AER must accept APA GasNet’s forecast capex if it is satisfied that it is conforming capex as specified in the NGR. [[47]](#footnote-47)

In assessing APA GasNet's proposed capex for both the previous and upcoming regulatory access agreement periods, the AER reviewed APA GasNet's supporting material. This included information on APA GasNet's reasoning and, where relevant, business cases, major risks and risk management practices and other relevant information.

The full draft decision and the AER's detailed reasons and analysis on the capital expenditure can be found in attachment 3.

* 1. Draft decision

The AER’s draft decision is to approve APA GasNet's proposed $160.4 million ($2012) total net capex for 2008–2012 as conforming capex for the purpose of setting the capital base for 2007-11 (see chapter 5 and attachment 2).

The AER approves $153.8 million ($2012) of APA GasNet's proposed $340.8 million ($2012) total capex for the 2013-17 access arrangement period. The AER is satisfied that this amount of capex is conforming. The AER is not satisfied that the remainder of APA GasNet's proposed capex is conforming.

Figure 6.1 shows actual and ACCC approved capex for 2008-12 and APA GasNet's proposed capex and the AER’s draft decision on capex for 2013-17.

* + - 1. Comparison of APA GasNet's past and forecast total capex and AER draft decision

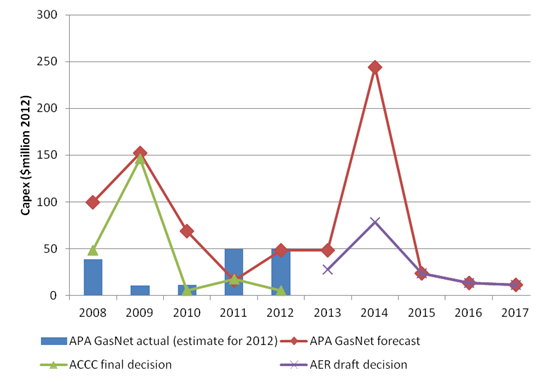


Table 6.1 is a comparison of APA GasNet's proposed capex and the AER's approved capex for the 2013-17 access arrangement period.

* + - * 1. Comparison of APA GasNet proposed and AER approved capex including labour cost escalation adjustment over the 2013-17 access arrangement period ($million, 2012)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | APA GasNet proposal ($million 2012) | AER approved excluding AER labour escalation adjustments ($million 2012) | AER approved including AER labour escalation adjustments ($million 2012) | Variance between APA GasNet proposed and AER approved including labour escalation adjustment (per cent) |
| Augmentation | 270.3 | 85.2 | 84.5 | 68.7% |
| Refurbishment and upgrade | 54.2 | 54.2 | 53.2 | 1.8% |
| Non-system | 16.4 | 16.4 | 16.2 | 1.2% |
| Total capital expenditure | 340.8 | 155.7 | 153.8 | 54.9% |

Source: AER analysis.

* 1. Summary of analysis and reasons
     1. Labour cost escalators

The AER is not satisfied APA GasNet's proposed labour cost escalators were arrived at on a reasonable basis or represent the best possible forecast of labour costs over the 2013-17 access arrangement period.[[48]](#footnote-48) The AER considers forecast annual increases in the labour price index (LPI), as forecast by Deloitte Access Economics represent the best possible forecast of labour costs over the 2013-17 access arrangement period. Appendix C contains the AER’s consideration of the real cost escalators proposed by APA GasNet.

* + 1. Augmentation

The AER considers that two of the five major augmentation projects proposed by APA GasNet meet the conforming capex criteria. The majority of the AER's required amendments to APA GasNet's proposed capex are attributed to the three remaining major augmentation projects. The three projects are:

Gas to Calcairn

The Gas to Culcairn project is designed to augment the VTS's capacity on the South West Pipeline and in the Northern Zone. Construction of the Gas to Culcairn project is forecast to occur in 2013 and 2014 at a total cost of $157.5 million ($2012). APA GasNet submitted that the Gas to Culcairn project is justified as the overall economic value of the project is positive. The economic value identified by APA GasNet includes benefits accruing to a gas shipper, in addition to the economic value of the project to APA GasNet.

The AER considers that the proposed capex for the Gas to Culcairn project would not be incurred by a prudent service provider acting efficiently. In reaching this view, it considered that the forecast incremental gas volumes driving the project have not been arrived at on a reasonable basis and do not represent the best forecast possible in the circumstances.

APA GasNet proposed the Gas to Culcairn project to augment the capacity of the South West Pipeline and the VTS Northern zone to transport an additional 45 TJ/day from Iona for export through Culcairn.[[49]](#footnote-49) The AER reviewed the business case and additional information submitted by APA GasNet, along with expert advice and submissions from AGL and TRUenergy. On the basis of this review, the AER considers that the gas volume forecasts have not been arrived at on a reasonable basis, and do not represent the best forecast possible in the circumstances. As a result, the scope of the Gas to Culcairn project proposed by APA GasNet is not prudent. The economic benefits of the project identified by APA GasNet are overstated, and the project as proposed is unlikely to have a positive overall economic value.

Based on the information provided by APA GasNet, AGL and TRUenergy, the AER is satisfied that some augmentation of the VTS to facilitate incremental gas volumes for export via Culcairn is justified. The AER considers that the scope of the Gas to Culcairn project should be amended to reflect the best available estimate of forecast incremental capacity requirements. Taking into account the information from the parties mentioned earlier and the advice of it consultants, the AER considers a reduced scope of work is prudent and consistent with achieving the lowest sustainable cost of providing services. Accounting for the amended project scope, the AER's estimate of conforming capex for the Gas to Culcairn project is $68.6 million ($2012) of the $157.5 million ($2012) proposed by APA GasNet.

Western Outer Ring Main

APA GasNet submits that the purpose of the Western Outer Ring Main (WORM) project is to enhance the security of supply for domestic customers in the event of a major gas plant outage at Longford.[[50]](#footnote-50) The WORM project has three stages, the first of which (the Sunbury loop) will be completed by APA GasNet in the 2008–12 access arrangement period. APA GasNet proposed to undertake stages two and three of the WORM project in the 2013–17 access arrangement period, consisting of:

* laying 49.3 km of 500 mm pipeline from Wollert to Rockbank via Kalkallo
* installing an additional compressor at Wollert Compressor Station B to allow compression from the Pakenham – Wollert pipeline to the new WORM pipeline
* installing a new interconnecting pressure reduction station at Wollert, connecting the Brooklyn – Lara Pipeline to the Pakenham – Wollert pipeline.[[51]](#footnote-51)

APA GasNet proposed to complete the WORM project in 2013 and 2014 at a total cost of $93.4 million ($2012). APA GasNet submitted that the WORM project is justified under the NGR as necessary to maintain the integrity of services. APA GasNet considered the WORM project is also justified under the NGR, to the extent that it avoids other 'stay in business' capital expenditure that would otherwise be required at a number of sites.

The AER considers that the purported security of supply benefits provided by the WORM project are not supported by APA GasNet’s proposal.

Part of APA GasNet’s business case for the WORM project was that the project results in the avoidance of alternative expenditure on the Brooklyn compressor station. However, the AER is satisfied that, regardless of whether the WORM project proceeds, significant expenditure on the Brooklyn compressor station will not be required in the 2013–17 access arrangement period. To the extent that APA GasNet has sought to justify the WORM project on the basis of avoiding alternative expenditure, the AER considers that justification is not supported.

Consequently, the proposed capex would not be incurred by a prudent service provider, and is not consistent with achieving the lowest sustainable cost of providing services.

Kalkallo lateral

APA GasNet submits that the Kalkallo lateral project supplies a new city gate station to serve a significant housing and industrial development at Kalkallo. The project consists of a 4.5 km lateral pipeline, to be completed in 2014 at a cost of $4.1 million ($2012). The scope and timing of the project is affected by the WORM project. APA GasNet submitted that if the WORM project does not proceed, the Kalkallo lateral would need to be 9.5 km long, at a correspondingly higher cost.[[52]](#footnote-52) APA GasNet submitted that the project is justified under the NGR as the net present value of the project is positive.

The AER considers that the need for the proposed expenditure on the Kalkallo lateral is not established. The AER does not accept the need for a new city gate station near Kalkallo. In the absence of the new city gate station, the proposed mains extension capex would not be incurred by a prudent service provider.

These amendments, together with the AER's decision on labour cost escalators, result in a 68.7% per cent reduction to APA GasNet's proposed augmentation capex (from $270.3 million ($2012) to $84.5 million ($2012)). Attachment 3 contains further details on the AER's draft decision on forecast capex.

* + 1. Replacement and upgrade

APA GasNet’s refurbishment and upgrade capex forecast includes funding for:

* the installation of pipeline inspection gauge traps
* the actuation of mainline valves
* capacity management at pressure reduction and compressor stations
* the replacement of assets.

On the basis of its review, the AER is satisfied that the refurbishment and upgrade projects are necessary to maintain the safety, reliability and integrity of the VTS. However, the AER approves a lower amount of $53.2 million ($2012) due to required changes to the labour cost escalator.

* + 1. Non–system

Non-system capital expenditure, required to support the VTS and ensure the provision of pipeline services to Australian Energy Market Operator (AEMO), is forecast by APA GasNet to be $16.4 million ($2012). The most significant non–system capex project is the redevelopment of its Dandenong office facility which has a total forecast cost of $11.5 million ($2012). The other significant non–system capex project is the upgrade of APA GasNet's Supervisory Control and Data Acquisition system.

The AER considers that APA GasNet's proposed non-system capex is necessary to maintain the safety, reliability and integrity of the VTS. However, the decision on labour cost escalators will result in the AER approving $16.2 ($2012) million of APA GasNet's $16.4 million ($2012) proposed non–system capex.

1. Rate of return

The rate of return is an input to the building block approach that the Australian Energy Regulator (AER) uses to determine total revenue for each regulatory year of the access arrangement period. The rate of return is to be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services.[[53]](#footnote-53)

The AER calculated APA GasNet's return on capital building block by multiplying the rate of return with the value of the service provider's projected capital base. Consistent with APA GasNet's access arrangement proposal and previous AER gas decisions, the AER adopted a rate of return that is based on a nominal vanilla weighted average cost of capital (WACC) formulation.

The AER's detailed reasons for its decision on the rate of return are provided in attachment 4, with additional reasons on some matters set out in appendix B.

* 1. Draft decision

The AER does not approve APA GasNet's proposed (indicative) rate of return of 9.06 per cent. The AER withholds its approval because, in the AER's opinion, 7.16 per cent (subject to updating) is a preferable alternative that is commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services.[[54]](#footnote-54)

APA GasNet's proposed rate of 9.06 per cent is based on market data from November–December 2011. The AER's draft decision rate of 7.16 per cent is based on market data from July–August 2012. APA GasNet's proposed rate of return method, if also applied to market data from July–August 2011, would result in a proposed rate of 7.99 per cent.

Both APA GasNet's proposed rate of return method, and the AER's method in this draft decision, will be updated using market data for the risk free rate and debt risk premium (DRP) updated closer to the time of the final decision.

The AER considers a 7.16 per cent rate of return (subject to updating) provides APA GasNet with a reasonable opportunity to recover at least the efficient costs of capital financing. Consequently, the AER expects APA GasNet will be able to attract funds to support the efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers.

The AER agrees with the following aspects of APA GasNet's proposed rate of return method:

* adopting the capital asset pricing model (CAPM) to calculate the cost of equity
* adopting the yield on 10 year Commonwealth Government Securities (CGS) as the proxy for the risk free rate
* adopting an equity beta of 0.8.
* specifying the cost of debt as the debt risk premium over the risk free rate
* determining the debt risk premium by defining the benchmark bond as a 10 year Australian corporate bond with a BBB+ credit rating and measuring the benchmark bond rate using the extrapolated Bloomberg BBB rated seven year fair value curve
* extrapolating the Bloomberg BBB rated seven year fair value curve to a 10 year maturity (consistent with the definition of the benchmark bond) using paired bond analysis[[55]](#footnote-55)
* adopting a 60 per cent gearing ratio
* adopting the inflation forecasting method based on short term Reserve Bank of Australia (RBA) forecasts and the mid-point of the RBA's inflation targeting band

However, the AER does not agree with the following aspects of APA GasNet's proposal:

* the value for the market risk premium (MRP). The AER adopts a MRP of 6 per cent instead of APA GasNet's proposal of 8.5 per cent, as explained in section 7.2.1.
* the value of the equity beta in the rate applied to GasNet's speculative capex account. The AER will not set a rate of return on the speculative capex account at this time, as explained in section 7.2.2.

Table 7.1 sets out the individual WACC parameters and consequent (indicative) rate of return determined by the AER.

* + - * 1. AER's draft decision on APA GasNet's rate of return (nominal)

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | Previous ACCC decision | APA GasNet proposal | AER draft decision |
| Nominal risk free rate | 6.29% | 3.99%a | 2.98% a |
| Equity beta | 1.0 | 0.8 | 0.8 |
| Market risk premium | 6% | 8.5% | 6% |
| Debt risk premium | 3.09% | 3.92% a | 3.76% a |
| Gearing level | 60% | 60% | 60% |
| Inflation forecast | 2.68% | 2.5% a | 2.5% a |
| Gamma | 0.50 | 0.25 | 0.25 |
| Nominal post-tax cost of equity | 12.29% | 10.79% a | 7.78% a |
| Nominal pre-tax cost of debt | 9.38% | 7.91% a | 6.74% a |
| Nominal vanilla WACC | 10.55% | 9.06% a | 7.16% a |

Source: ACCC decision; APA GasNet, Access arrangement proposal, March 2012 and AER analysis.

a Indicative only. The risk free rate, debt risk premium and inflation forecast will be updated closer to the date of the final decision.

* 1. Reasons for draft decision

In forming this draft decision, the AER has considered an extensive range of material on the rate of return. This includes APA GasNet's access arrangement proposal, the Victorian gas distribution service providers' proposals, and the submissions into these reviews from users. The AER has also sought a range of expert advice to assist in making these decisions—from the RBA, Treasury, AOFM, Professor McKenzie, Associate Professor Partington and Associate Professor Lally.

In this review, APA GasNet proposed a higher MRP (8.5 per cent) because it considered the AER's approach to the cost of equity in previous decisions resulted in a cost of equity that is too low in current market conditions. The Victorian gas distribution service providers held a similar concern but proposed a different approach. They proposed a 6 per cent MRP but adopted a long run historical average risk free rate (5.99 per cent) for the cost of equity.

On the other hand, BHP Billiton submitted that the MRP is between 5-6 per cent. The Energy Users Coalition of Victoria (EUCV) considered the AER should adopt a 5 year term for the risk free rate and an equity beta of 0.65. The 5 year term and 0.65 equity beta were adopted by the ERA in its access arrangement decision for the Dampier to Bunbury Natural Gas Pipeline (DBNGP). The Tribunal found no error in ERA's position on these matters. Incorporating any of the changes proposed by users to the term, equity beta or MRP would result in a lower cost of equity than applying the AER's approach from previous decisions.

In this draft decision, the AER has maintained its cost of equity approach of adopting a prevailing risk free rate (currently 2.98 per cent), an equity beta of 0.8 and a 6 per cent MRP.

In this review, APA GasNet proposed adopting the extrapolated Bloomberg fair value curve to estimate the DRP. This results in a DRP of 3.82 based on current market data.[[56]](#footnote-56) The Victorian gas distribution service providers also proposed this approach. BHP Billiton considered this method was appropriate but also considered there was merit in the AER exploring alternative methods.

On the other hand, the EUCV considered the DRP should be no more than 195 basis points (based on a 5 year term). The EUCV noted this resulted in a DRP similar to the ERA's approach.

In the ATCO and DBNGP matters, the Tribunal upheld the use of the 'bond yield' approach adopted by the ERA.[[57]](#footnote-57) Under this approach the DRP is estimated by averaging observed bond yields that meet certain criteria.[[58]](#footnote-58) The Tribunal did, however, direct the ERA to amend the simple averaging process used to aggregate these bond yields.[[59]](#footnote-59) The Tribunal also provided guidance on the relevance of various criteria and the use of a more complex weighted average.[[60]](#footnote-60) Such a weighted average was implemented by the ERA on remittal.[[61]](#footnote-61) If the bond-yield approach (with the weighting method adopted in the ERA’s re-determination) was applied to APA GasNet, the DRP would be 2.72 per cent.[[62]](#footnote-62)

Consistent with the AER’s observations previously, the AER considers that the Bloomberg fair value curve continues to provide DRP estimates which are higher than other potential approaches (such as the ERA’s approach). The Bloomberg fair value curve also provides estimates which are high in comparison to recent bond issuances from firms with similar characteristics to the benchmark firm. For these reasons, the AER has commenced an internal review into alternatives to the Bloomberg fair value curve. The AER will advise of a public consultation process on the development of an alternative in due course. However, the AER does not expect to implement any new method in time for APA GasNet's forthcoming access arrangement period given the Tribunal's previous comments on the consultation approach that should be adopted in the development of any new approach.

In this draft decision, the AER has maintained adoption of the extrapolated Bloomberg BBB rate fair value curve. This currently provides a cost of debt of 6.74 per cent, or DRP of 3.76 per cent.[[63]](#footnote-63)

In the next sections, the AER outlines its reasons on the MRP and escalation rate for the speculative capex account. These are the two areas where the AER does not agree with APA GasNet's rate of return proposal.

* + 1. Market risk premium

The AER does not agree with APA GasNet’s proposed MRP of 8.5 per cent.

As evidence on the MRP is imprecise, the AER considers it is reasonable to assess a range of evidence to estimate the MRP. From that information, the AER considers an MRP of 6.0 per cent is commensurate with prevailing conditions in the market for funds because:

* Historical excess returns provided a range of 4.9–6.1 per cent if calculated on an arithmetic average basis and a range of 3.0–4.7 per cent if calculated on a geometric average basis.
* Professor McKenzie and Associate Professor Partington advised a 6 per cent MRP is appropriate.
* The MRP is an economy wide measure and other economic regulators in Australia have consistently adopted a 6 per cent MRP under the same CAPM framework.
* In the Envestra, ATCO and DBNGP matters, the Tribunal found no error in the AER's and the Economic Regulatory Authority of Western Australia's 6 per cent MRP. The Tribunal found it was open for both regulators to adopt 6 per cent on the available evidence.
* Surveys of market practitioners consistently supported 6 per cent as the most commonly adopted value for the MRP. They also indicated the average MRP adopted by market practitioners was approximately 6 per cent.

The AER acknowledges that APA GasNet was concerned with the impact of the lower risk free rate on its overall rate of return and that this was a driving factor in APA GasNet proposing a higher MRP. The AER and APA GasNet agree on the methodology for estimating the risk free rate. It is the value of the MRP that is in disagreement. Accordingly, the AER has addressed APA GasNet’s concerns as part of its estimation of the MRP.

* + 1. Escalation rate applied to speculative capex account

The AER does not accept APA GasNet's proposal for a 1.2 equity beta to determine the escalation rate for its speculative capex account. The AER considers it is more appropriate to determinate the appropriate escalation rate at the time speculative capex is made.

The AER amends a provision in the access arrangement associated with a speculative capex account. The AER proposes a revision that makes it clear that prior to any expenditure being placed into such an account, APA GasNet must inform the AER that the capex is not to be recovered by a surcharge or capital contribution, and that the expenditure is otherwise conforming but for the type or volume of the services associated with the capex.

To provide guidance on how the AER may assess the appropriate escalation rate at the time the speculative capex is made, the AER makes the following observations on APA GasNet's justification for a 1.2 equity beta:

* APA GasNet has not explained why 1.2, specifically, is an appropriate equity beta for its speculative capex account. The only justification presented by APA GasNet for this quantification appears to be based on an inconsistency in its own proposal.
* It is not clear to the AER that investment in the speculative capex account faces greater risk such as to warrant a different equity beta than provided for reference services.
* Even if investment in the speculative capex account does face greater risk, it is not clear to the AER that the risk is driven by systematic risk factors. The Sharpe Lintner CAPM has been proposed by APA GasNet and accepted by the AER as the well accepted model to estimate the cost of equity component of the rate of return. Under the Sharpe Lintner CAPM, only systematic risk is compensated for.

See attachment 4 for more on the AER's draft decision on the rate of return and reasons for this.

1. Regulatory depreciation

Regulatory depreciation models the nominal value of APA GasNet's assets over the 2013–17 access arrangement period. It is used to determine the depreciation allowance for APA GasNet in the total revenue requirement under the building block model. APA GasNet’s annual regulatory depreciation allowance is the net total of the straight-line depreciation (negative) and the annual inflation indexation (positive) on the projected capital base.

APA GasNet must provide a forecast of depreciation for the 2013–17 access arrangement period setting out a depreciation method and demonstrating how the depreciation method has been applied. The depreciation schedule sets out the basis on which the pipeline assets constituting the capital base are to be depreciated for the purpose of determining a reference tariff.

The AER then assesses whether the proposed depreciation schedule complies with the depreciation criteria set out within the NGR. In particular, the depreciation schedule should be designed:

* so that reference tariffs will vary, over time, in a way that promotes efficient growth in the market for reference services[[64]](#footnote-64)
* so that each asset or group of assets is depreciated over the economic life of that asset or group of assets[[65]](#footnote-65)
* so as to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset, or a particular group of assets[[66]](#footnote-66)
* so that (subject to the rules about capital redundancy), an asset is depreciated only once[[67]](#footnote-67)
* so as to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.[[68]](#footnote-68)

Compliance with these criteria may involve the deferral of a substantial amount of depreciation.

The AER must also take into account the depreciation schedule approved in the 2008–12 access arrangement period[[69]](#footnote-69), the NGO and the revenue and pricing principles.[[70]](#footnote-70)

The full draft decision and the AER's detailed reasons and analysis on regulatory depreciation is provided in attachment 5.

* 1. Draft decision

The AER's draft decision on APA GasNet's regulatory depreciation allowance is $56.2 million ($nominal) over the 2013–17 access arrangement period. This represents a reduction of $101.3 million ($nominal) or 64.3 per cent of APA GasNet's proposed total regulatory depreciation allowance. Table 8.1 sets out the AER’s draft decision on APA GasNet's annual regulatory depreciation allowance for the 2013–17 access arrangement period.

* + - * 1. AER's draft decision on APA GasNet's depreciation allowance   
           ($million, nominal)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Straight-line depreciation | 24.6 | 26.0 | 29.5 | 31.2 | 29.8 | 140.9 |
| Less: indexation on opening capital base | 15.3 | 15.8 | 17.7 | 18.0 | 18.0 | 84.8 |
| Regulatory depreciation | 9.3 | 10.2 | 11.8 | 13.2 | 11.7 | 56.2 |

Source: AER analysis.

* 1. Summary of analysis and reasons

The AER's draft decision on APA GasNet's regulatory depreciation allowance is $56.2 million ($nominal) over the 2013–17 access arrangement period.

The AER does not accept APA GasNet's proposed regulatory depreciation allowance of $157.5 million ($nominal) for the 2013–17 access arrangement period. This is mainly because APA GasNet’s proposed forecast depreciation approach does not meet the requirement of promoting efficient growth of the market for reference services.

The AER approves APA GasNet's proposed standard economic lives and the proposed weighted average method to calculate the remaining economic lives as at 1 January 2013. However, the AER has updated APA GasNet's remaining economic lives as at 1 January 2013 to reflect the revised capital base roll forward for the 2008–12 access arrangement period.

In addition, the AER has made changes to other building block components of APA GasNet's proposal that impact on the proposed regulatory depreciation allowance.

* + 1. Change of depreciation approach

The AER does not accept APA GasNet's proposed forecast depreciation approach. The AER considers that it would not promote efficient growth of the market for reference services in accordance with the NGR.[[71]](#footnote-71) The AER is concerned with the incentives created by APA GasNet's proposed approach and the potential for unnecessarily high prices in the short to medium term. There appear to be no offsetting benefits to users arising from the proposed approach that could be considered to be in customers’ long term interests. Nor does the AER consider that continuation of the current approach would impinge upon APA GasNet's reasonable cash flow needs consistent with the NGR.[[72]](#footnote-72)

APA GasNet proposed to change its method for modelling the return of capital (and return on capital) over the 2013–17 access arrangement period from that used previously in the   
2008–12 access arrangement. Under APA GasNet's proposal:

* The opening capital base is based on historical costs and is not indexed for inflation over the 2013–17 access arrangement period. In contrast the AER’s approach (and currently applying to APA GasNet) does index the capital base by the forecast rate of inflation when forecasting the revenue requirements (and subsequently indexed by actual inflation during the roll forward of the capital base in future access arrangement reviews).
* The return on capital for each year is determined based on multiplying the nominal WACC by the historical cost value of the opening capital base of the relevant year.
* The regulatory depreciation allowance in each year is equal to the straight-line depreciation amount. Because the capital base is not indexed for inflation, there is no required offsetting inflation adjustment to the depreciation allowance (that is, there is no negative depreciation/revaluation gain to be accounted for) as occurs under the AER approach.

APA GasNet's proposed change in depreciation approach alters the profile of its cash flow over the useful life of its assets (for both new and existing assets). Compared to the current approach, the proposed approach brings forward cash flows for APA GasNet by requiring customers to pay a greater proportion of an asset's costs earlier in its life (or remaining economic life in the case of existing assets).

The AER considers that APA GasNet's proposed approach could result in a revenue profile that is effectively NPV neutral over the life of the assets, just as the AER's standard approach does. However, the AER considers that APA GasNet's proposed approach does not comply with the NGR, which states that reference tariffs should be determined in a way to promote the efficient growth in the market for reference services.[[73]](#footnote-73) There are several reasons to expect APA GasNet’s proposal will inhibit efficient growth of the market. These include:

* Inefficient asset utilisation – Depreciation schedules which provide for price paths that encourage inefficient utilisation of assets, that is, under or over utilisation of the asset at different times in its life cycle.
* Unnecessarily high prices in the short to medium term – These could discourage gas usage and downstream investment.
* Inefficient management of assets – Incentives to manage assets based on reasons other than the efficient provision of reference services.
  + 1. Standard economic lives and remaining economic lives

The AER approves APA GasNet's proposed standard economic lives assigned to each of its asset classes for the 2013–17 access arrangement period. The AER considers that the proposed standard economic lives are consistent with the ACCC’s approved standard economic lives for the 2008–12 access arrangement period.[[74]](#footnote-74) APA GasNet did not propose any new asset classes for the 2013–17 access arrangement period.

The AER accepts APA GasNet's proposed weighted average method to calculate the remaining economic lives as at 1 January 2013. In accepting the weighted average method, the AER has updated APA GasNet's remaining economic lives as at 1 January 2013 to reflect the AER's adjustments to APA GasNet's remaining economic lives as at 1 January 2008 in the capital base roll forward model.[[75]](#footnote-75)

See attachment 5 for more on the AER's draft decision on depreciation and reasons for its decision.

1. Operating expenditure

Operating expenditure (opex) refers to the operating, maintenance and other non-capital costs incurred in the provision of reference services.[[76]](#footnote-76) Opex incorporates labour costs and other non-capital costs associated with providing reference services.

The AER is required to assess APA GasNet’s forecast opex to decide whether it is satisfied that the forecast opex complies with applicable criteria prescribed by the NGL and NGR. The AER must accept a forecast that is arrived at on a reasonable basis and represents the best forecast or estimate possible in the circumstances.[[77]](#footnote-77)

The regulatory regime provides incentives for APA GasNet to deliver its required services at least cost. In particular, if APA GasNet is able to provide its services at a lower cost than what was forecast in its access arrangement, it is able to 'keep the difference' for a period of five years as provided under its opex incentive mechanism (see chapter 10). Given these incentives, actual opex can be used to effectively reveal the efficient level of opex required in providing reference services. This means that rather than assess all aspects of opex the AER can instead focus on what changes need to be made to this base level of opex. In particular, once the base year is set, the AER assess the following adjustments:

* forecast labour cost changes,
* network growth changes (referred to as scope changes by APA GasNet),
* step changes, to provide an additional opex allowance where a certain circumstance, requirement or project will require the business to undertake expenditure that is not incorporated in the base year,
* other allowances.

APA GasNet proposed an opex forecast based on a base year roll forward methodology setting 2011 as the base year. It then proposed cost trends and step changes to provide for year on year adjustments to this base level of opex.

The full draft decision and the AER's detailed reasons and analysis on operating expenditure are provided in attachment 6.

* 1. Draft decision

The AER does not approve APA GasNet’s forecast opex of $182.2 million ($2012). The AER instead considers a forecast opex of $140.6 million ($2012) complies with the criteria governing opex and the criteria for forecasts and estimates.[[78]](#footnote-78) The reduction of approximately $41.6 million ($2012) reflects the AER view that a number of elements of APA GasNet’s forecast opex do not comply with the criteria governing opex or the criteria for forecasts and estimates.

Table 9.1 shows how APA GasNet’s proposed opex compares with the AER’s draft decision on opex. Figure 9.1 shows how the AER's draft decision for opex compares to APA GasNet’s proposal, its opex in the 2008–12 access arrangement period, and the opex approved by the ACCC for this period.

* + - * 1. APA proposed and approved opex ($million, 2012)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| APA GasNet proposed | 32.58 | 35.15 | 37.39 | 38.56 | 38.56 | 182.25 |
| AER draft decision | 27.03 | 27.30 | 28.15 | 29.06 | 29.07 | 140.61 |
| Difference | –5.55 | –7.85 | –9.24 | –9.50 | –9.49 | –41.63 |

Source: AER analysis

* + - 1. APA GasNet's total proposed and approved opex ($m, $2012)



Source: APA GasNet's RIN submission. Note that figures from 2011 onwards are forecasts

* 1. Summary of analysis and reasons

Table 9.2 shows the factors driving opex and differences between APA GasNet’s proposed opex and the AER’s draft decision on opex for the total 2013–17 access arrangement period.

* + - * 1. APA GasNet’s proposed and AER’s draft decision on opex ($million, 2012)

|  |  |  |  |
| --- | --- | --- | --- |
|  | APA GasNet proposal | AER draft decision | Difference |
| Base year costs | 136.3 | 134.6 | –1.7 |
| Labour cost escalation | 15.8 | 5.1 | –10.7 |
| Scope changes | 7.0 | 3.8 | –3.2 |
| Step changes | 20.3 | –2.9 | –23.2 |
| Errors | 2.9 | 0.0 | –2.9 |
| Total | 182.2 | 140.6 | –41.6 |

Source: AER analysis

As can be seen from table 9.2, the main differences between APA GasNet's proposed opex and the AER's draft decision relate to step changes and differences in the labour cost escalator.

* + 1. Base year costs

APA GasNet forecast opex using a base year roll forward methodology and proposed 2011 as the base year. The AER considers that 2011 is the appropriate base year to use in forecasting APA GasNet's opex allowance. The use of 2011 as the base year also complies with the fixed principle. The AER considers that $27.5 million ($2012) as proposed by APA GasNet is the appropriate base year opex.

However, the AER does not consider that APA GasNet has properly applied its fixed principle clause in rolling forward from this base year from 2011 to 2012 [clause 7.2(h)(ii) in its 2008–12 Access arrangement]. This clause requires that in calculating the allowable revenues for operations and maintenance expenditure for the Fourth Access Arrangement Period, the Regulator must take into account the actual operating costs in 2011, adjusted for the change in forecast operating costs between 2011 and 2012 and, to avoid doubt, not taking into account the efficiency gain (loss) made in 2012. APA GasNet has rolled forward from 2011 to 2012 using a number of adjustments to its base year opex and has used the forecast escalation that APA GasNet proposed for the 2013–17 access arrangement period. The AER consider this does not comply with the fixed principle and accordingly the AER does not approve the manner in which APA has applied its roll forward methodology.

* + 1. Labour cost escalators

The AER is not satisfied APA GasNet's proposed labour cost escalators were arrived at on a reasonable basis or represent the best possible forecast of labour and material costs over the 2013–17 access arrangement period.[[79]](#footnote-79) The AER considers forecast annual increases in the labour price index (LPI), as forecast by Deloitte Access Economics represent the best possible forecast of labour costs over the 2013–17 access arrangement period. Appendix C contains the AER’s consideration of the real cost escalators proposed by APA GasNet.

* + 1. Step changes

Step changes allow for additional funding where the service provider faces a new requirement or change in circumstance requiring it to undertake additional expenditure that was not accounted for in the base year level of opex. Examples of step changes include new safety regulations requiring additional opex on an ongoing basis, opex related to a new capital project or other new legislative requirements. In assessing APA GasNet's proposed step changes, the AER has considered whether these are consistent with that which 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. Where the AER considers these step changes meet this requirement an incremental increase in base year opex is included in total forecast opex. Where they do not meet this requirement no additional opex is included in total forecast opex.

In general the AER considers a step increase in opex is not consistent with the above requirement where the additional expenditure is intended to comply with a regulatory requirement or industry standard that has not changed since the 2008–12 access arrangement period. In such cases, it is the AER's view that such expenditure would already be included in base opex for a prudent service provider acting in accordance with accepted good industry practice to achieve the lowest sustainable cost of delivering pipeline services.

In some cases a program of expenditure may be consistent with the above requirement but might not justify an incremental increase in the total opex allowance as it should already be couvered in the base level of opex. For instance, if a program of expenditure is intended to improve productivity, the AER would generally consider that there is sufficient expenditure in the base opex in order to fund the program.

The AER's assessment of proposed step changes also recognises that a service provider's opex program will not be exactly the same from year to year. For example, actual opex in the base year reflects both recurrent expenditure and non-recurrent expenditure. That is, some of the expenditure will be ongoing while some will be related to one-off occurrences. When forecasting opex for the 2013–17 access arrangement the AER has not sought to estimate all non-recurrent (or one-off) expenditure incurred in the base year. In this way, the base year will inevitably include some opex that will not be undertaken in all other years.

Given this, the AER does not automatically consider there should be a step change in opex solely because a program of expenditure was not undertaken in the base year but needs to be undertaken in the 2013–17 access arrangement period. Instead, the AER considers on case by case basis whether base year opex would be likely to be sufficient in order to fund the proposed program of opex or whether a step up in opex is required. This avoids potential asymmetries that would occur if all additional opex requirements for the 2013–17 access arrangement were included as step changes without subtracting any one-off or non-recurrent opex that is inevitably included in the base year.

In considering the above, the AER made a number of revisions to APA GasNet's proposed step changes. These adjustments lead to APA GasNet's proposed step change related opex being reduced from $20.3 million to –$2.9 million. The negative amount has been caused by the reallocation of pipeline inspection gauges from the opex forecast into capex forecasts. See attachment 6 for more on the AER's draft decision on opex step changes and reasons for its decision.

* + 1. Allowances

APA GasNet submitted that its forecast opex is supplemented by a number of other allowances that are not step changes or real cost escalations to make up the total forecast opex allowance. The AER considers each allowance on a case by case basis.

APA GasNet proposed an efficiency carryover mechanism as part of their allowances. The application of the efficiency benefit sharing scheme to APA GasNet is discussed in attachment 7.

The AER accepted APA GasNet's allowances for debt raising costs and a return on passive linepack and spare parts which are inventories related to the VTS. However as the AER does not approve APA GasNet's proposed WACC, the AER has adjusted APA GasNet's proposed allowances to account for the AER's approved WACC.

APA GasNet proposed an allowance for reset costs incurred in 2008-12. The AER considers under the NGR costs recovered in the period relate to those incurred in the period and as such costs incurred in the 2008-12 access arrangement period cannot be recovered as part of the 2013-17 Access arrangement.

See attachment 6 for more on the AER's draft decision on opex allowances and reasons for its decision.

* 1. Network Growth (scale escalation)

APA GasNet proposed an increase in opex related to the operation and maintenance of several new compressor stations and pipelines.[[80]](#footnote-80) However, as discussed in section 5 of this overview, the AER’s draft decision is to reject capex for several augmentation projects, which will negate the need for associated opex. Consequently, the AER’s draft decision is to not accept APA GasNet’s network growth opex forecast of $7 million ($2012). Instead, the AER considers a forecast increase in opex of $3.8 million ($2012) to fund opex relating to increased scope from the augmentation capex projects approved by the AER.

* + 1. Other changes

The other changes to APA GasNet's opex relate to errors identified in APA GasNet's calculation of its opex forecast.

1. Incentive mechanisms

Incentive mechanisms offer service providers incentives to reduce costs and increase efficiency in the provision of pipeline services. Incentive mechanisms provide a financial reward (or penalty) for efficiency gains (or losses) achieved relative to opex or capex expenditure benchmarks for the access arrangement period. Any rewards (or penalties) for efficiency gains (or losses) are added to the service provider's total revenue and carried forward for five years after the year in which the efficiency gain (or loss) is made. The five year period corresponds to the length of the access arrangement period.

The full draft decision and the AER's detailed reasons and analysis on the incentive mechanism are provided in attachment 7.

* 1. Draft decision

The AER is required under transitional arrangements to ensure increments or decrements resulting from the operation of the incentive mechanism in APA GasNet's current access arrangement are properly reflected increments or decrements in its total revenue.[[81]](#footnote-81)

The AER must also consider whether the incentive mechanism proposed by APA GasNet will encourage efficiency in the provision of services by the service provider and is consistent with the revenue and pricing principles.[[82]](#footnote-82)

The AER does not approve APA GasNet's proposed carryover of –$2.6 million ($2006) from the 2008–12 access arrangement period. This proposed carryover was not correctly calculated in accordance with the benefit sharing allowance in APA GasNet's 2008–12 access arrangement. The AER instead calculated a carryover of –$5.6 million ($2006) to be carried over from the 2008–12 access arrangement period (table 9.1).

* + - * 1. AER draft decision carryover from the 2008­–12 access arrangement period ($million, 2006)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| APA GasNet proposal | 1.7 | 0.3 | –1.9 | –2.8 | – | –2.6 |
| AER draft decision | 0.8 | –1.4 | –1.7 | –1.5 | 0.0 | –3.7 |
| Difference | 0.9 | 1.7 | 3.6 | –1.3 | 0.0 | 1.1 |

Source: APA GasNet, Access arrangement information, 31 March 2012, table 9.2, p. 24, AER analysis.

The AER does not approve the incentive mechanism proposed by APA GasNet for inclusion in the 2013–17 access arrangement. The AER considers amendments are necessary to ensure the incentive mechanism encourages efficiency in the provision of services by APA GasNet and is consistent with the revenue and pricing principles.

* 1. Summary of analysis and reasons

The AER considers APA GasNet did not correctly calculate the carryover in accordance with clause 7.2 of its 2008–12 access arrangement.[[83]](#footnote-83) Specifically, APA GasNet adjusted the forecast opex benchmarks in the 2008–12 access arrangement period by:

* subtracting the efficiency carryover amounts from the 2003–07 access arrangement period
* adding the approved forecasts for asymmetric risk, equity raising costs and returns on inventories and linepack.

This calculation does not meet the requirements set out in clause 7.2(f) of APA GasNet's 2008–12 access arrangement.[[84]](#footnote-84)

The AER considers the forecast opex benchmarks already exclude any efficiency carryover and no subtraction from the total forecast opex is required. This reduces the negative carryover accrued by APA GasNet in the 2008–12 access arrangement period. Further, clause 7.2(f) only allows for the addition of specific costs to the forecasts. These costs do not include asymmetric risks, equity raising costs or returns on inventories and linepack. The AER therefore considers APA GasNet's additions to the forecast opex do not accord with the requirements set out in clause 7.2.

The AER has recalculated the benefit sharing allowance to ensure the revenue calculations made for the 2013–17 access arrangement period properly reflect increments or decrements resulting from the operation of the benefit sharing mechanism, in accordance with the requirements set out in clause 7.2.

For these reasons, the AER recalculated the carryover amounts using the approach set out in APA GasNet 's Access Arrangement for 2008–12.

The AER accepts APA GasNet's proposal to apply an incentive mechanism to opex. However, the AER considers APA GasNet's proposed approach to calculating the opex efficiency gain (or loss) for 2013 does not properly account for the efficiency gain (or loss) in that year. The AER proposes to amend APA GasNet's incentive mechanism to replace the equation used to calculate efficiency carryover for the first year of the next access arrangement period (2013). This approach is consistent with rule 98(3) because it ensures APA GasNet is consistently rewarded for achieving efficiency gains (losses) regardless of the year those gains (losses) are achieved. The AER also considers APA GasNet's proposed fixed principle for the incentive mechanism requires clarification.

See attachment 7 for more on the AER's draft decision on incentive mechanisms and reasons for its decision.

1. Corporate income tax

The estimated cost of corporate income tax is one of the building blocks used to determine the total revenue requirement for APA GasNet over the 2013–17 access arrangement period.

APA GasNet adopted the post-tax framework to derive its revenue requirement for the   
2013–17 access arrangement period.[[85]](#footnote-85) Under the post-tax framework, a separate corporate income tax allowance is calculated as part of the building block assessment.

The AER uses the PTRM to produce an estimate of the taxable income that would be earned by an efficient company operating APA GasNet's business. The AER modelled APA GasNet's tax expenses over the access arrangement period using a benchmark 60 per cent gearing. Tax depreciation is calculated using a separate tax asset base. All tax expenses are offset against the service provider's forecast revenue to estimate the taxable income. The statutory income tax rate of 30 per cent is then applied to the estimated taxable income to arrive at a notional amount of tax payable. The AER then applies a discount to that notional amount of tax payable to account for the assumed utilisation of imputation credits (gamma), which has a value of 0.25. This amount is then included as a separate building block in determining APA GasNet's total revenue.[[86]](#footnote-86)

The full draft decision and the AER's detailed reasons and analysis on corporate income tax are provided in attachment 8.

* 1. Draft decision

The AER’s draft decision on APA GasNet’s corporate income tax allowance is $15.7 million ($nominal), which is a reduction of $35.8 million ($nominal) or 69.5 per cent to APA GasNet’s proposal. Table 11.1 sets out the AER’s draft decision on APA GasNet’s corporate income tax allowance for the 2013–17 access arrangement period.

* + - * 1. AER's draft decision on corporate income tax allowance for APA GasNet ($million, nominal)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Tax payable | 4.2 | 4.6 | 4.3 | 4.4 | 3.5 | 20.9 |
| Less: value of imputation credits | 1.0 | 1.1 | 1.1 | 1.1 | 0.9 | 5.2 |
| Net corporate income tax allowance | 3.1 | 3.4 | 3.2 | 3.3 | 2.7 | 15.7 |

Source: AER analysis.

* 1. Summary of analysis and reasons

The AER accepts most of APA GasNet’s proposed methods for calculating the corporate income tax allowance. However, the AER adjusted some of APA GasNet’s proposed inputs to the PTRM for calculating the corporate income tax allowance, which include:

* the opening tax asset base as at 1 January 2013
* remaining tax asset lives as at 1 January 2013.

In addition, there are various other changes to the building block components in this draft decision that impact forecast revenues. These include changes to capex, opex, depreciation and the rate of return, among other things. These will consequently affect the forecast income tax allowance. See attachment 8 for more on the AER's draft decision on the corporate income tax allowance and reasons for its decision.

* + 1. Opening tax asset base as at 1 January 2013

The AER accepts APA GasNet’s proposed method for calculating the opening tax asset base as at 1 January 2013, but does not accept APA GasNet’s proposed opening tax asset base of $262.9 million ($nominal) as at 1 January 2013. This is because APA GasNet's proposal included estimated rather than actual capex in 2007 and did not account for actual disposals in 2010. These changes reduce APA GasNet’s proposed opening tax asset base as at 1 January 2013 by about $27 million ($nominal) or 10 per cent.

* + 1. Standard tax asset life and remaining tax asset lives

The AER approves APA GasNet's proposed standard tax asset lives assigned to each of its asset classes for the 2013–17 access arrangement period. This is because they are consistent with the statutory cap on the effective life of gas transmission assets under the Income Tax Assessment Act (ITAA) 1997,[[87]](#footnote-87) and with the standard tax asset lives prescribed in the Tax Ruling 2012/2. The AER also accepts APA GasNet's proposed weighted average method to calculate the remaining tax asset lives as at 1 January 2013. In accepting the weighted average method, the AER has updated APA GasNet's remaining tax asset lives[[88]](#footnote-88) as at 1 January 2013 to reflect APA GasNet's revised tax asset base roll forward in the RFM.[[89]](#footnote-89)

* + 1. Utilisation of imputation credits (gamma)

The AER accepts APA GasNet’s proposal to adopt the value of 0.25 for gamma. The proposed gamma value is consistent with the findings by the Australian Competition Tribunal (Tribunal) in its review of the AER’s 2010 distribution determinations for Energex, Ergon Energy and ETSA Utilities.[[90]](#footnote-90) There is no new evidence before the AER to cause it to vary from the findings of the Tribunal.

1. Capacity utilisation forecasts

The AER assesses forecasts of pipeline capacity and utilisation of pipeline capacity as part of its review of an access arrangement. Capacity utilisation forecasts are an important component of the tariff setting process. Understanding how much each reference service is likely to be used over the five year period allows the AER to determine the quantum of each tariff and the overall efficient allocation of tariffs.

APA GasNet is required to provide a forecast of pipeline capacity and utilisation of pipeline capacity and the basis on which the forecast has been derived.

The AER assesses this forecast to determine whether it has been arrived at on a reasonable basis and represents the best forecast possible under the circumstances, pursuant to r. 74 of the NGR.

The full draft decision and the AER's detailed reasons and analysis on capacity utilisation forecasts are provided in attachment 9.

* 1. Draft decision

The AER does not approve APA GasNet's proposed forecast of capacity utilisation on the basis that it has not been arrived at on a reasonable basis and does not represent the best possible forecast in the circumstances. The AER considers that for some sections of the VTS, the levels of demand proposed by APA GasNet are made on a reasonable basis, and the best possible in the circumstances.

* 1. Summary of analysis and reasons

The AER does not approve APA GasNet's capacity utilisation forecasts for the 2013–17 access arrangement period. The AER considers that:

* the forecasts provided for the NSW Interconnect section of the VTS are not arrived at on a reasonable basis, and are not the best possible in the circumstances—the AER considers that the throughput of gas on this section of the VTS will be lower than that forecast by APA GasNet. This assessment has been arrived at based on information provided by shippers that would (or would not) utilise the proposed increased capacity on the interconnect.
* the AER has not approved some augmentation projects proposed by APA GasNet. This reduces the capacity and utilisation rates of some sections of the VTS compared to those forecast by APA GasNet.

The AER considers that APA GasNet's forecasts of usage on other sections of the pipeline are arrived at on a reasonable basis and are the best possible in the circumstances.

The AER considers that in the circumstances, it is appropriate to use the forecasts provided by AEMO, and that these forecasts are provided based on reasonable assumptions and methodologies. These forecasts will, however, require updating at the final decision using the most recent information to remain the best forecasts in the circumstances. The AER's forecast of capacity utilisation for the 2013–17 access arrangement period is provided at attachment 9 of this draft decision.

1. Tariff setting – transmission pipelines

An access arrangement must set out how a service provider intends to charge for reference services. The NGR requires that the access arrangement information must include an explanation of the basis for setting reference tariffs, including the method used to allocate costs and a demonstration of the relationship between costs and tariffs.[[91]](#footnote-91)

The AER is required to assess APA GasNet's proposed reference tariffs against the provisions established by r. 93 and r. 95 of the NGR, and the revenue and pricing principles and the NGO, both established by the NGL. In particular, r. 95 requires that:

* A tariff for a reference service provided by means of a transmission pipeline must be designed:
* to generate from the provision of each reference service the portion of total revenue referable to that reference service; and
* as far as is practicable consistent with the above dot point, to generate from the user, or the class of users, to which the reference service is provided, the portion of total revenue referable to providing the reference service to the particular user or class of users.
* The portion of total revenue referable to a particular reference service is determined as follows:
* costs directly attributable to each reference service are to be allocated to that service; and
* other costs attributable to reference services are to be allocated between them on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the AER.
* The portion of total revenue referable to providing a reference service to a particular user or class of users is determined as follows:
* costs directly attributable to supplying the user or class of users are to be allocated to the relevant user or class; and
* other costs are to be allocated between the user or class of users and other users or classes of users on a basis (which must be consistent with the revenue and pricing principles) determined or approved by the AER.

The AER's role also includes an assessment of APA GasNet's proposed reference services to which the reference tariff applies.

The full draft decision and the AER's detailed reasons and analysis on tariff setting are provided in attachment 10.

* 1. Draft decision

The AER accepts the fundamental features of the proposed reference tariff, including the tariff design, the zonal structure, the basis for charging users, and the general approach to allocating costs.

However, the AER does not approve a number of specific elements of the proposal, principally in relation to cost allocation. This necessarily affects the calculation of the reference tariff. APA GasNet is required to recalculate the reference tariff incorporating the amendments detailed in Attachment 10 and the various other amendments in this draft decision that affect the inputs to the tariff calculation such as the approved capex forecast, opex forecast and rate of return.

* 1. Summary of analysis and reasons

APA GasNet proposed a highly detailed and complex tariff setting methodology. The AER accepts that the fundamental aspects of the proposed tariff methodology which are carried over from the 2008–12 access arrangement are consistent with the NGR and the NGL. This includes the tariff design, the definition of tariff zones and tariff classes, and the charging parameters.

The AER has reviewed the proposed prudent discounts and accepts the discounted tariffs proposed by APA GasNet. The AER also accepts key aspects of the cost allocation procedures which are carried over from the 2008–12 access arrangement.

However, in a number of specific areas the AER does not accept the proposal from APA GasNet. As a consequence, the AER does not approve the reference tariff as proposed by APA GasNet. The AER's detailed analysis of tariff setting is at attachment 10. APA GasNet is required to recalculate the reference tariff incorporating the amendments below, along with those detailed in Attachment 10 and the various other amendments in this draft decision that affect the inputs to the tariff calculation such as the approved capex forecast, opex forecast and WACC. Specifically, the AER:

* requires that the proposed Anglesea, Kalkallo and Warragul laterals be allocated to the correct tariff zones
* does not accept the application of the optimised replacement cost (ORC) cost allocation procedure for the existing Murray Valley pipeline and the South West pipeline, and requires the allocation to these pipelines be determined on a stand-alone basis
* does not accept the ORC allocation procedure for the proposed Gas to Culcairn project, and requires the allocation to this project be determined on a stand-alone basis
* requires that the forecast export volumes through Culcairn pay at least the incremental cost of the proposed Wollert to Wodonga expansion
* requires that users in the northern tariff zones receive an allocation of indirect costs which minimises the movement in tariffs from the 2008-2012 access arrangement.

1. Tariff variation mechanism

The tariff variation mechanism:

* permits building block revenues to be recovered smoothly over the access arrangement period
* accounts for actual inflation
* adjust for volume risk due to uncontrollable weather factors
* accommodates other tariff adjustments that may be required, such as for an approved cost pass through event; and
* sets administrative procedures for the approval of any proposed changes to tariffs.

The AER assessed APA GasNet's proposal against the tariff variation mechanism requirements of the NGL and NGR.

The full draft decision and the AER's detailed reasons and analysis on the tariff variation mechanism is provided in attachment 11.

* 1. Draft decision

The AER does not approve the reference tariff variation mechanism proposed by APA GasNet for the 2013-17 access arrangement period. The AER considers that some elements of APA GasNet's proposed tariff variation mechanism are not consistent with the NGL and the NGR or that there are alternatives to some elements of APA GasNet's proposal that better meet the purpose of the NGR and NGL. The AER requires the following revisions to APA GasNet's access arrangement proposal:

* price control formula – correction of minor typographical errors in relation to the definition of the Actual EDD factor where the reference to VENCorp should be to AEMO and the definition of the VW factor where the reference to PTS should instead be VTS
* annual tariff variation process – in the event that the AER does not approve an annual tariff variation before the variation comes into effect, the existing reference tariff should apply until such time that the AER makes a decision to either approve the proposed tariff variation, or specify a tariff variation that is consistent with the access arrangement
* schedule of initial tariffs – the inclusion of a new schedule of tariffs as a result of the AER's draft decision on such matters as WACC, capex, opex and capacity utilisation forecasts.

The AER accepts each of APA GasNet's proposed cost pass through events, subject to amendments to the definition of an insurance cap event and carbon cost event, and the addition of an extra factor for the AER to consider when assessing a cost pass through application.

* 1. Summary of analysis and reasons

Annual tariff variation process

The AER does not accept APA GasNet's proposal on how tariff variations may come into effect. It proposed that a tariff variation would take effect automatically; if the AER does not approve an annual tariff variation before the variation is due to come into effect (by 1 January of the next year). The AER considers that the proposal is inconsistent with the NGR [r. 97(3)].

Consequently, the AER does not approve APA GasNet's proposed procedures for the approval of annual tariff variations. The AER considers that in the event that it does not approve an annual tariff variation before the variation comes into effect, the existing reference tariff should apply until such time that the AER makes a decision to either approve the proposed tariff variation, or specify a tariff variation that is consistent with the access arrangement. This approach is consistent with the 2008–12 access arrangement.[[92]](#footnote-92)

The AER accepts that any material error or deficiency in a past annual tariff adjustment should be corrected, potentially by changes to subsequent tariffs in the next annual tariff variation, provided that the proposed changes are consistent with relevant requirements in access arrangement. This will ensure the error does not result in any under or over recovery of the allowed revenue.

The price control formula

The AER accepts the proposed removal of the limit on revenue variations from the price control formula. This encourages the service provider to better manage the costs associated with uncontrollable events. Apart from the correction of minor typographical errors in relation to the definition of the Actual EDD factor and the VW factor, the AER accepts the proposed retention of all other terms in the price control formula.

The AER accepts that the side constraints applied in the 2008-2012 access arrangement should be retained. The constraint provides a reasonable balance between the need for APA GasNet to rebalance tariffs over the access arrangement period to enable increased efficiency and pipeline utilisation, and the user's need to have a reasonable degree of certainty to facilitate their investments.

The AER considers that the schedule of initial tariffs should be amended to reflect the AER's draft decision on WACC, capex, opex and capacity utilisation forecasts.

Cost pass through

Rule 97(1)(c) of the NGR provides that a reference tariff variation mechanism may provide for variation of a reference tariff as a result of a cost pass through for a defined event. The AER has full discretion to withhold its approval to an element of a reference tariff variation mechanism if it believes that a preferable alternative exists.[[93]](#footnote-93)

The AER considers that most of APA GasNet's proposed cost pass through events meet the criteria outlined in the NGR, are consistent with the NGO and are needed to provide APA GasNet with sufficient cover when acting prudently and efficiently. The AER requires the definition of two of APA GasNet's proposed cost pass through events to be amended.

Carbon Cost Event

APA GasNet has submitted that a carbon cost event is required in respect of the carbon costs that may be incurred in connection with the consumption of fuel gas and fugitive emissions.[[94]](#footnote-94) APA GasNet also stated that the costs for fuel gas will be incurred by AEMO, as the operator of the pipeline. However, there is a significant degree of uncertainty as to whether APA GasNet will incur a carbon liability associated with fuel gas consumption.

The AER considers that in view of the uncertainty surrounding APA GasNet's liability for carbon costs, it is appropriate to approve an event that enables any carbon costs to be passed through, in the event that any are incurred. The AER notes that APA GasNet's proposed carbon cost pass through event will operate without a materiality threshold.

Insurance Cap event

An insurance cap event allows a service provider to pass through costs that exceed the maximum payout that the service provider receives from its insurer when an insured risk eventuates. APA GasNet's proposed an insurance cap event similar to the insurance cap event approved by the AER in its recent gas decisions. However, the AER requires a number of amendments to be made to this pass through event which reflect that the AER will conduct a broad assessment of the cause of the claim leading to the insurance cap event, the extent to which APA GasNet mitigated any risk of the event occurring including whether it obtained an efficient level of insurance having regarding to its forecast opex allowance. These are detailed in Attachment 11 of the draft decision.

1. Non-Tariff components

Non-tariff components refer to the terms and conditions that are not directly related to the nature and level of tariffs paid by users, but which are important to the relationship between the network service provider and users.

The AER has considered the non-tariff components of APA GasNet's access arrangement proposal including capacity trading requirements, queuing requirements, extension and expansion requirements, and terms and conditions on which the reference service will be provided.

The full draft decision and the AER's detailed reasons and analysis on the tariff variation mechanism is provided in attachment 12.

* 1. Draft decision

The AER has decided to accept most of APA GasNet's terms and conditions. The AER accepts APA GasNet's terms and conditions that it considers are consistent with the NGO. The AER received submissions that do not support its decision for some of those terms and conditions. The AER has addressed these submissions and reasons for its decision are provided in attachment 12.

The AER requires minor amendments to capacity trading requirements, queuing arrangements and review dates. The AER proposes to accept APA GasNet's proposal in relation to a change of receipt or delivery point.

The AER’s draft decision approves the majority of non-tariff terms included in APA GasNet's access arrangement proposal. However, the AER proposes revisions to be made to certain non-tariff terms to:

* make it clear at what rate interest will be charged
* provide that APA GasNet cannot terminate the Deed for non-payment where a user has disputed the charge
* make it clear that there are no applicable capacity trading requirements.

1. Interlinkages between elements of the access arrangement

In assessing each element of APA GasNet's access arrangement, including the building blocks, the AER has taken into account the interlinkages between the building blocks and between the elements of APA GasNet's access arrangement proposal. Some examples of interlinkages between the elements include:

* Rate of return and the weighted average cost of capital parameters—there are various interlinkages between these parameters including: the AER has determined each of them on the basis of a 10 year investment horizon, the 60 per cent gearing ratio affects the estimation of the equity beta, and the debt risk premium and the assumed utilisation of imputation credits (gamma) affects the estimation of the market risk premium.
* Forecast opex allowance and the incentive mechanism—the use of actual opex in establishing the forecast opex allowance and the efficiency carryover resulting from the operation of the efficiency carryover mechanism is necessary to preserve the rewards or penalties associated with the efficiency of a service provider's operations.
* Capex and opex allowances and the cost pass through mechanism—the cost pass through mechanism allows a service provider to recover certain costs that are not otherwise provided in the forecast capex and opex allowances.
* Non price terms and condition and opex—the efficient level of insurance that the AER has allowed for in APA GasNet's forecast opex is determined to some extent by how risk is allocated through its terms and conditions (see attachments 6 and 12).
* Capex and opex—capex can result in potentially higher or lower opex, depending on whether, for example, that capex goes to network augmentation (increased opex could be required to support new systems) or replacement of aging assets (which can require higher maintenance opex) (see attachments 3 and 6).

1. Under s. 8 of the NGL a service provider is a person who owns, controls or operates a gas pipeline. [↑](#footnote-ref-1)
2. In Victoria, the Australian Energy Market Operator manages the Victorian Transmission System, and users are not required to enter into commercial contracts with their transmission network service provider/s. Instead, a user's daily gas flow is determined by its injection bids into the wholesale gas market. The injection bids enter into a market clearing engine, which dispatches the lowest priced injection bids to meet demand. The access arrangement approved by the AER sets the reference tariff that users pay for gas haulage services based on the actual gas flows following this dispatch process. [↑](#footnote-ref-2)
3. NGR, r. 40. [↑](#footnote-ref-3)
4. NGL, s. 28(1). [↑](#footnote-ref-4)
5. NGL, s. 28(2). [↑](#footnote-ref-5)
6. NGL, s. 132. [↑](#footnote-ref-6)
7. The AER assessed APA GasNet's access arrangement proposal and access arrangement information and considered that it complies with the requirements of the NGR. [↑](#footnote-ref-7)
8. NGR, r. 58(1). [↑](#footnote-ref-8)
9. NGR, r. 58(2). [↑](#footnote-ref-9)
10. NGR, r. 59(1); r. 71(2). [↑](#footnote-ref-10)
11. NGR. r. 59(4). [↑](#footnote-ref-11)
12. NGR, r. 59(2). [↑](#footnote-ref-12)
13. NGR, r. 41(1). [↑](#footnote-ref-13)
14. NGR, r. 41(2). [↑](#footnote-ref-14)
15. NGR, r. 64(1). [↑](#footnote-ref-15)
16. NGR, r. 65(2). [↑](#footnote-ref-16)
17. NGR, r. 59(2). [↑](#footnote-ref-17)
18. NGR, r. 60(1). [↑](#footnote-ref-18)
19. NGR, r. 60(2). For example, the AER might approve amendments to the access arrangement proposal to deal with a change in circumstances of the service provider's business since submission of the access arrangement proposal. [↑](#footnote-ref-19)
20. NGR, r. 59(5)(b) & (c) [↑](#footnote-ref-20)
21. NGR, r. 62(1). [↑](#footnote-ref-21)
22. NGR, r. 62(2). [↑](#footnote-ref-22)
23. NGR, r. 62(4). [↑](#footnote-ref-23)
24. NGR, r. 62(7). [↑](#footnote-ref-24)
25. NGR, r. 11. [↑](#footnote-ref-25)
26. NGR, r. 11(1)(c). [↑](#footnote-ref-26)
27. NGR, r. 13. [↑](#footnote-ref-27)
28. NGL, ss. 324 to 329 (Division 1 of Part 2 of Chapter 10 of the NGR). [↑](#footnote-ref-28)
29. NGL, s. 329(1). [↑](#footnote-ref-29)
30. Includes any forecast capital expenditure. [↑](#footnote-ref-30)
31. This may relate to operating expenditure and/or capital expenditure depending on the incentive mechanism. [↑](#footnote-ref-31)
32. This will be included as a building block revenue component in the estimate of corporate income tax payable under the post-tax framework or in the return on the capital under the pre-tax framework. The AER employs the post-tax framework. [↑](#footnote-ref-32)
33. AER, *Access arrangement guidelines*, March 2009, p. 55. [↑](#footnote-ref-33)
34. This is based on unsmoothed revenue of $464.4 million ($nominal). [↑](#footnote-ref-34)
35. NGR, r. 76. [↑](#footnote-ref-35)
36. This is based on unsmoothed revenue of $464.4 million ($nominal). [↑](#footnote-ref-36)
37. Includes benefit sharing amounts. [↑](#footnote-ref-37)
38. This is an indicative value, calculated using the AER's estimate of average tariffs. These average tariffs are based on the AER's draft decision on APA GasNet's forecast revenue recovery over the 2013–17 access arrangement period and the AER's draft decision on aggregate withdrawal demand. This calculation excludes refill demand and refill revenues as demand for this service is highly variable and may cause bias to the estimated average tariffs. The actual price path for individual tariffs may vary from the AER's estimated average tariffs. [↑](#footnote-ref-38)
39. The AER derived an estimate of the proportion of transmission charges that contribute to the typical residential customer bill based on a cost per unit of gas ($/GJ). This information was sourced from the ESC’s published standing offer bills contained in Energy retailers comparative performance report – Pricing 2010–11 (December 2011,pp. 54–55, viewed on 30 August 2012 at <http://www.esc.vic.gov.au/getattachment/14281692-b36d-4c03-9c73-65815ee43bfe/Energy-Retail-Performance-Report-2010-11-Pricing.pdf>); and APA GasNet’s approved tariffs for 2010 and 2011. The averages of the tariffs applied in the AER’s analysis uses a weighted average of volume by tariff class. [↑](#footnote-ref-39)
40. The average residential bill is calculated as the average standing offer contract for a customer consuming 60 GJ per annum, across each distribution zone. Standing offer prices charged by retailers represent charges applied to those customers who have not switched from their incumbent or local retailer. [↑](#footnote-ref-40)
41. The AER’s calculation of the proportion of transmission charges for large commercial users is based upon the cost of gas per GJ of $5.40 ($nominal) and the weighted average demand transmission charge of $1.40/GJ ($nominal).

    The AER’s analysis is based on information sourced from ACIL Tasman, Preparation of energy market modelling data for the Energy White Paper – supply assumptions report, 13 September 2010, p. 36, viewed on 30 August 2012 at < http://www.aemo.com.au/~/media/Files/Other/planning/0400-0019%20pdf.pdf>. [↑](#footnote-ref-41)
42. On 5 August 2011 the AER submitted a rule change proposal to amend the definition of a reference and rebateable service in the NGR. The AEMC released its draft decision on the proposed rule change in March 2012. On 27 July 2012, the AEMC extended the period of time for the making of the final rule determination to 1 November 2012. [↑](#footnote-ref-42)
43. This is required because the 2008–12 access arrangement was agreed in 2007, and hence capex in 2007 was estimated rather than actual. [↑](#footnote-ref-43)
44. This closing capital base is also used as the value of the opening capital base as at 1 January 2013 for the access arrangement period. [↑](#footnote-ref-44)
45. NGR, r. 77(2). [↑](#footnote-ref-45)
46. Under the partially as incurred approach, capex is recognised in the capital base in the year in which it is incurred. APA GasNet previously included capex to its capital base using an as commissioned approach for recognising capex. Under this approach, capex is recognised in the capital base when the project it related to was commissioned and began providing reference services. APA GasNet's proposed roll forward of the capital base during the 2008–12 access arrangement period is therefore based on the as commissioned approach. [↑](#footnote-ref-46)
47. NGR, r. 79(1). [↑](#footnote-ref-47)
48. Appendix D contains the AER’s more detailed consideration of the real cost escalators proposed by Envestra. [↑](#footnote-ref-48)
49. APA GasNet, BC175 - Gas to Culcairn Project Redacted, 14 May 2012, p. 2. [↑](#footnote-ref-49)
50. APA GasNet, Access arrangement submission, March 2012, p. 96. [↑](#footnote-ref-50)
51. APA GasNet, Access arrangement submission, March 2012, pp. 99-100. [↑](#footnote-ref-51)
52. APA GasNet, Access arrangement submission, March 2012, pp. 102-103. [↑](#footnote-ref-52)
53. NGR, r. 87. [↑](#footnote-ref-53)
54. The AER's adoption of this rate is subject to the risk free rate and debt risk premium parameters being updated closer to the date of the final decision. [↑](#footnote-ref-54)
55. The AER agrees with APA GasNet's proposed paired bonds extrapolation method, including the selection criteria to choose the paired bonds. However, APA GasNet appears to have incorrectly applied the selection criteria in its proposal. Accordingly, the AER has corrected this error in applying APA GasNet's proposed paired bonds extrapolation method. [↑](#footnote-ref-55)
56. This estimate reflects the paired bonds sample proposed by APA GasNet. [↑](#footnote-ref-56)
57. Though the AER and ERA operate under different legislative instruments, the sections relevant to the determination of the rate of return are identical. Australian Competition Tribunal, Application by WA Gas Networks Pty Ltd (No 3) [2012] ACompT 12, 8 June 2012, paragraphs 167, 180; and Australian Competition Tribunal, Application by DBNGP (WA) Transmission Pty Ltd (No 3) [2012] ACompT 14, 26 July 2012, paragraphs 280–282, 287. [↑](#footnote-ref-57)
58. All bonds (sourced from Bloomberg) were Australian-issued by Australian companies, denominated in Australian dollars and issued in Australia; bonds could be either fixed or floating and either bullet or callable/putable, Different scenarios used other slightly different criteria, such as a minimum term (2 or 5 years), and credit rating (BBB-/BBB/BBB+ or BBB/BBB+). [↑](#footnote-ref-58)
59. Australian Competition Tribunal, Application by WA Gas Networks Pty Ltd (No 3) [2012] ACompT 12, 8 June 2012, paragraphs 176, 180, 187; Australian Competition Tribunal, Application by DBNGP (WA) Transmission Pty Ltd (No 3) [2012] ACompT 14, 26 July 2012, paragraphs 290, 310–313. [↑](#footnote-ref-59)
60. More specifically, the Tribunal endorsed the use of the ERA’s ‘scenario 2’, which encompassed a minimum credit rating of BBB and a minimum term of 2 years. It also suggested that it would be appropriate to apportion weight by considering both term to maturity and issuance amount for the relevant bonds. [↑](#footnote-ref-60)
61. ERA, Revised decision pursuant to rule 64(4) of the National Gas Rules giving effect to the Economic Regulation Authority’s proposed access arrangement revisions for the Mid-West and South-West Gas Distribution System Revised by reason of and pursuant to orders of the Australian Competition Tribunal made on 8 June 2012, 25 June 2012, pp. 5–12. [↑](#footnote-ref-61)
62. Based on APA GasNet's indicative averaging period, this ‘bond-yield approach’ estimate incorporates 60 bonds with an average term to maturity of 5.94 years. [↑](#footnote-ref-62)
63. This estimate reflects an adjustment to APA GasNet's proposed extrapolation approach. This adjustment is discussed in detail in attachment 4 of this draft decision. [↑](#footnote-ref-63)
64. NGR, r. 89(1)(a). [↑](#footnote-ref-64)
65. NGR, r. 89(1)(b). [↑](#footnote-ref-65)
66. NGR, r. 89(1)(c). [↑](#footnote-ref-66)
67. NGR, r. 89(1)(d). [↑](#footnote-ref-67)
68. NGR, r. 89(1)(e). [↑](#footnote-ref-68)
69. NGR, schedule 1, r. 5(1)(d). [↑](#footnote-ref-69)
70. 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. [↑](#footnote-ref-70)
71. NGR, r. 89(1)(a). [↑](#footnote-ref-71)
72. NGR, r. 89(1)(e). [↑](#footnote-ref-72)
73. NGR, r. 89(1)(a). [↑](#footnote-ref-73)
74. ACCC, Final decision: GasNet Australia—revised access arrangement 2008–12, 30 April 2008, pp. 56-60. [↑](#footnote-ref-74)
75. APA GasNet submitted a revised capital base roll forward to the AER on 10 July 2012. However, it did not revise the remaining economic lives as at 1 January 2008 which are required inputs for the RFM. See APA GasNet, Response to AER information request - Revised models, 6 July 2012, p.1; APA GasNet, Revised RFM, 10 July 2012. [↑](#footnote-ref-75)
76. NGR, r. 69. [↑](#footnote-ref-76)
77. NGR, r. 74. [↑](#footnote-ref-77)
78. NGR, r. 91, r. 71 [↑](#footnote-ref-78)
79. Appendix C contains the AER’s more detailed consideration of the real cost escalators proposed by APA GasNet. [↑](#footnote-ref-79)
80. APA GasNet, Access arrangement submission, 31 March 2012 pp. 174‑6. [↑](#footnote-ref-80)
81. NGR, Schedule 1, cl. 5(1)(a). [↑](#footnote-ref-81)
82. NGR, r. 98. [↑](#footnote-ref-82)
83. APA GasNet, Access Arrangement 2008–2012, p. 10–11. [↑](#footnote-ref-83)
84. APA GasNet, Access Arrangement 2008–2012, p. 11. [↑](#footnote-ref-84)
85. APA GasNet, Post tax revenue model, March 2012. [↑](#footnote-ref-85)
86. NGR, r. 76(c). [↑](#footnote-ref-86)
87. ITAA 1997, s. 40.102(5). [↑](#footnote-ref-87)
88. At the time of this draft decision the roll forward of APA GasNet's capital base includes forecast capex for 2012. The AER may update this capex figure for its final decision. These capex figures are used to calculate the weighted average remaining tax asset lives of the assets. Therefore, the AER may recalculate APA GasNet's remaining tax asset lives using the method approved in this draft decision to reflect the updated 2012 capex for the final decision. [↑](#footnote-ref-88)
89. APA GasNet submitted a revised tax asset base roll forward with 2007 actual capex and revised remaining tax asset lives as at 1 January 2008 which took into account the 2007 actual capex. See APA GasNet, Response to AER information request No. 7, 6 June 2012, p. 3; APA GasNet, Revised RFM, 10 July 2012. The AER notes that there is an error in APA GasNet's formula used to calculate the revised remaining tax asset lives as at 1 January 2008. The AER has corrected the error to account for one year of roll forward of the remaining tax asset lives from 1 January 2007 to 1 January 2008. This results in slightly shorter remaining tax asset lives as at 1 January 2008 compared to APA GasNet's revised figures. [↑](#footnote-ref-89)
90. Australian Competition Tribunal, *Application by Energex Limited (Gamma) (No. 5)[2011] ACompT 9*, 12 May 2011, paragraph 42. [↑](#footnote-ref-90)
91. NGR, r. 72(1)(j), 95(1) and 95(3)(a). [↑](#footnote-ref-91)
92. See GasNet Australia Access Arrangement, 2008–2012, Schedule 3. [↑](#footnote-ref-92)
93. NGR, r. 40(3) [↑](#footnote-ref-93)
94. APA GasNet - Access arrangement proposal - March 2012, p. 223. [↑](#footnote-ref-94)