

Access arrangement draft decision

Envestra Ltd

2013–17

Part 1

September 2012

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Shortened forms

|  |  |
| --- | --- |
| Shortened form | Full title |
| 2008-12 access arrangement | Access arrangement for Envestra 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 Envestra effective from 1 January 2018 to 31 December 2022 inclusive |
| ACCC | Australian Competition and Consumer Commission |
| AER | Australian Energy Regulator |
| access arrangement information | Envestra Limited, Access arrangement information, 30 March 2012 |
| access arrangement proposal | Envestra Limited, Access arrangement proposal, 30 March 2012 |
| capex | capital expenditure |
| CAPM | capital asset pricing model |
| CPI | consumer price index |
| Code | National Third Party Access Code for Natural Gas Pipeline Systems |
| DRP | debt risk premium |
| Envestra | Envestra Limited (ACN 078 551 685) |
| Envestra Albury | Envestra’s distribution network in Albury, NSW and surrounding regions |
| Envestra Victoria | Envestra’s distribution network in Victoria |
| ESC | Essential Services Commission (Victoria) |
| MRP | market risk premium |
| NGL | National Gas Law |
| NGO | National Gas Objective |
| NGR | National Gas Rules |
| opex | operating expenditure |
| PTRM | post tax revenue model |
| RAB | regulatory asset base |
| RFM | roll forward model |
| RPP | revenue pricing principles |
| WACC | weighted average cost of capital |

Summary

This is the AER's draft decision on Envestra's access arrangement for the 2013–17 access arrangement period for the Envestra Albury and Envestra Victoria networks. It includes the AER's draft decision on reference tariffs as well as terms and conditions for access to Envestra's distribution 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 Envestra's access arrangement proposals, and details a number of revisions that the AER requires Envestra make to its proposals to make them acceptable under the National Gas Rules. Envestra can lodge revised proposals following the draft decision, and the AER will make a final decision on the revised proposals.

Draft decision

The AER’s draft decisions on the total expected revenue derived from Envestra's reference services are:

* Envestra Victoria—$853.5 million ($nominal)
* Envestra Albury—$29.5 million ($nominal).

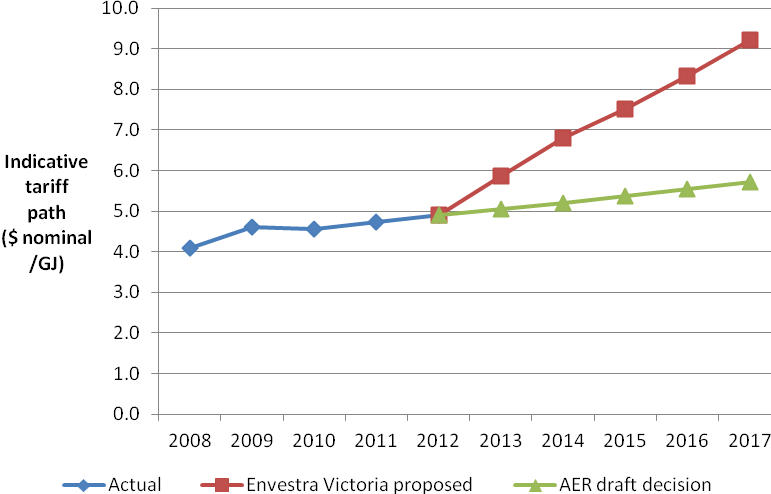
In addition, the AER's draft decision on ancillary reference service revenues are $13.0 million ($nominal) and $0.9 million ($nominal) for Envestra's Victorian and Albury networks respectively.

The AER’s draft decision on smoothed reference service revenues represents a 29.3 per cent and 17.1 per cent reduction of Envestra's proposed smoothed revenues over the 2013–17 access arrangement period for its Victoria and Albury networks respectively.[[1]](#footnote-1)

Indicative tariffs

This draft decision will result in reference tariffs for Envestra Victoria being approximately 29 per cent lower on average and Envestra Albury being approximately 17 per cent lower over the 2013–17 access arrangement period (in nominal dollar terms) compared to Envestra's proposed tariffs. It will also result in reference tariffs for Envestra Victoria being 17 per cent higher on average and Envestra Albury being 16 per cent higher than in the 2008–12 access arrangement period. The indicative tariff path arising from the AER's draft decision compared with that in Envestra's proposal for Envestra Victoria and Envestra Albury are shown in figures 1 and 2.

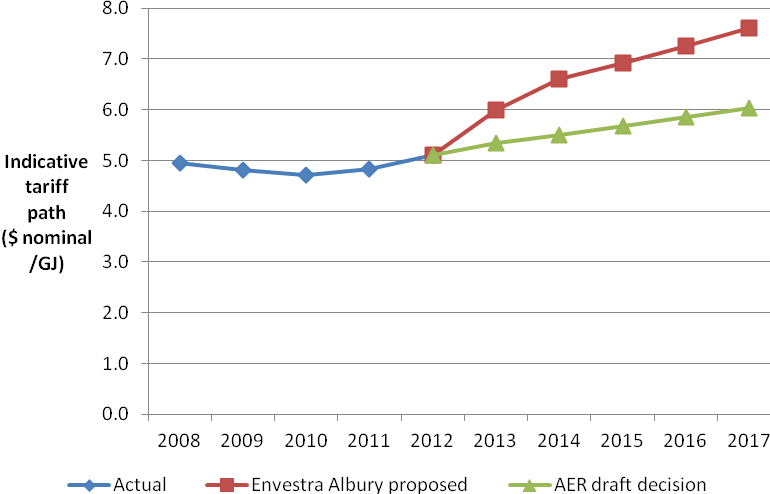
**Figure 1 Indicative reference tariff paths for Envestra Victoria's reference services from 2013 to 2017 ($/GJ, nominal)**



Source: AER analysis.

Note: This chart shows an indicative tariff path, based on forecast revenues and forecast demand for Envestra’s network. Envestra’s actual tariffs will first be updated on 1 July 2013 to reflect the AER’s decision. For this reason, the indicative 2013 tariff above is an average of the higher 2012 tariffs, and lower 2013 tariffs (from 1 July 2013 to 31 December 2013) to reflect the AER’s decision. On 1 January 2014, the AER’s draft decision forecasts that actual tariffs will increase to reflect CPI.

Figure 2 Indicative reference tariff paths for Envestra Albury's reference services from 2013 to 2017 ($/GJ, nominal)



Source: AER analysis.

Note: This chart shows an indicative tariff path, based on forecast revenues and forecast demand for Envestra’s network. Envestra’s actual tariffs will first be updated on 1 July 2013 to reflect the AER’s decision. For this reason, the indicative 2013 tariff above is an average of the higher 2012 tariffs, and lower 2013 tariffs (from 1 July 2013 to 31 December 2013) to reflect the AER’s decision. On 1 January 2014, the AER’s draft decision forecasts that actual tariffs will increase to reflect CPI.

Impact on residential bills

In Envestra's Victorian and Albury distribution networks, gas distribution reference services comprise approximately 31 per cent and 25 per cent of an average residential gas bill, respectively.[[2]](#footnote-2)

The draft decision on Envestra Victoria will result in an approximate increase of $7 per annum to an average residential bill over the 2013–17 access arrangement period. This compares with an estimated increase of $57 per annum ($nominal) that would have resulted from Envestra Victoria's proposal.

The draft decision on Envestra Albury will result in an approximate increase of $5 per annum to an average residential bill over the 2013–17 access arrangement period. This compares with an increase of $22 per annum ($nominal) that would have resulted from Envestra Albury's proposal.

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

Key differences between the draft decision and Envestra’s proposal are in regards to the rate of return, forecast capital expenditure (capex) and forecast operating expenditure (opex).

Rate of return

The rate of return relates to the cost of financing capital assets, such as providing a return on equity or paying interest on loans. The draft decision is to set a rate of return of 7.16 per cent (compared with Envestra's proposed 9.06 per cent). While the AER accepts most of Envestra's rate of return proposal, it does not accept Envestra's proposed risk free rate. Envestra proposed adopting a long term historical average risk free rate in the cost of equity. The AER's view is that a relatively short averaging period, sampled as close as practicably possible to the commencement of the access arrangement period, would better reflect current market conditions and risks.

Capital expenditure

The draft decision is to approve $315.4 million ($2011) of the $764.9 million ($2011) of capex proposed by Envestra for Envestra Victoria (a reduction of approximately 59 per cent). For Envestra Albury, the AER’s draft decision is to approve $5.6 million ($2011) of the $8.2 million ($2011) proposed by Envestra. While a number of proposed capex projects were accepted, the AER rejected aspects of Envestra's proposed mains replacement program where these were assessed as not necessary or prudent and efficient. However, a new mains replacement pass through event is proposed for low pressure (LP) to high pressure (HP) mains replacement. This will provide Envestra the flexibility to access funding where a change in circumstances leads it to undertake addition LP to HP mains replacement above the approved levels. Reductions were also made to IT and overheads capex to bring these in line with industry standards. Materials and labour cost escalators have also been reduced.

Operating expenditure

The draft decision is to approve $293.9 million ($2011) of the $364.8 million ($2011) of opex proposed by Envestra (a reduction of approximately 19 per cent) for Envestra Victoria. For Envestra Albury, the AER’s draft decision is to approve an increase opex of $13.4 million ($2011) (Envestra proposed $12.3 million ($2011)). Envestra 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 materials and labour cost escalators.

Next steps

Envestra 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 Envestra 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/4810>

Once the AER has considered submissions and Envestra'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, including Envestra, and the Victorian gas transmission network. 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 distribution networks are subject to full regulation, which requires a service provider[[3]](#footnote-3) 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 distribution pipeline.[[4]](#footnote-4)

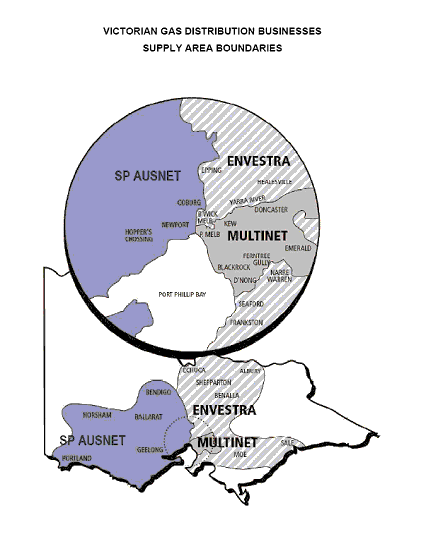
* 1. Overview of the service provider

Envestra Limited is a publicly listed company that owns natural gas distribution networks across Australia. Envestra owns around 23 000 kilometres of natural gas distribution networks serving over 1.1 million customers in Victoria, South Australia, Queensland, New South Wales and the Northern Territory.

Envestra's Victorian gas network includes the distribution mains, inlets, meters, regulators and ancillary equipment that are used to provide pipeline services in Victoria. It serves the northern, outer eastern and southern areas of Melbourne, Mornington Peninsula, rural communities in northern, eastern and north-eastern Victoria, and south-eastern rural townships in Gippsland. Envestra's Victorian gas network comprises around 9900 kilometres of mains delivering gas to around 575 000 customers.

Envestra's Albury gas network includes the distribution mains, inlets, meters, regulators and ancillary equipment that are used to provide pipeline services. It serves the city of Albury and its environs, extending to Jindera to the north of Albury. Envestra's Albury gas network delivers gas to around 20 000 customers.

* + - 1. Map of the Victorian gas distribution networks



* + 1. Regulation prior to 1 July 2008

The Essential Services Commission of Victoria (ESCV) made the previous determination on Envestra's access arrangement for the period 1 January 2008 to 31 December 2012. The ESCV made its determination in accordance with the provisions of the National Third Party Access Code for Natural Gas Pipeline Systems (the Code).

Responsibility for the regulation of Victorian gas networks transferred from the ESCV to the AER on 1 July 2008 as part of the move towards the national regulation of the energy market. This current determination process is the first full assessment by the AER of the access arrangements of the Victorian gas distribution businesses 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 Envestra's access arrangement proposal to be approved. These amendments have been identified by assessing each element of Envestra'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 Envestra'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.[[5]](#footnote-5)

For these reasons, each element of Envestra's access arrangement proposal has been assessed individually in separate attachments in 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 Envestra'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.[[6]](#footnote-6) 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.[[7]](#footnote-7) 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. This is so that the terms and conditions, including prices, will contribute to achieving, among other things, efficient investment in and operation of Envestra's gas distribution network in the long term interests of consumers whilst providing Envestra with a reasonable opportunity to recover at least its efficient costs and effective incentives to promote economic efficiency.

* 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.[[8]](#footnote-8) 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 (see section 1.3.4 below). 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.[[9]](#footnote-9) 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.[[10]](#footnote-10)

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.[[11]](#footnote-11) The AER must include a statement of the reasons for the draft decision.[[12]](#footnote-12) 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.[[13]](#footnote-13)

* + 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.[[14]](#footnote-14) It follows that if the AER withholds its approval to any element of an access arrangement proposal, then the proposal cannot be approved.[[15]](#footnote-15)

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.[[16]](#footnote-16) 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.[[17]](#footnote-17)
  + 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.[[18]](#footnote-18) 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.[[19]](#footnote-19) The amendments must be limited to those necessary to address matters raised in the access arrangement draft decision unless the AER approves further amendments.[[20]](#footnote-20)

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.[[21]](#footnote-21) 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.[[22]](#footnote-22)

An access arrangement final decision is a decision to approve, or to refuse to approve, an access arrangement proposal.[[23]](#footnote-23) An access arrangement final decision, like an access arrangement draft decision, must include a statement of the reasons for the decision.[[24]](#footnote-24) 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.[[25]](#footnote-25) 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.[[26]](#footnote-26)

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.[[27]](#footnote-27) 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.[[28]](#footnote-28)

* + 1. Completeness of Envestra's access arrangement information

The NGR require a service provider to submit, together with an access arrangement proposal, supporting information explaining the basis and derivation of each element of the access arrangement.[[29]](#footnote-29) Incomplete or deficient access arrangement information can impede and delay the AER's consultation and decision making processes.

Prior to receiving Envestra's access arrangement proposal, the AER consulted with Envestra to develop and refine the Regulatory Information Notice (RIN) and regulatory templates. A RIN is a compulsory information gathering notice that the AER prepares and serves on a service provider. A service provider must provide the AER with the information, and prepare, maintain or keep information in the manner and form, specified in a RIN.[[30]](#footnote-30) The purpose of the RIN was to obtain information from Envestra to assist the AER in assessing its access arrangement proposal.

Upon receiving Envestra's access arrangement proposals, the AER conducted a preliminary assessment of the proposals and access arrangement information against the requirements of the NGR. Following this assessment, the AER considered Envestra's access arrangement information to be deficient as it failed to include a nominated averaging period. The AER requires an averaging period in order to conduct a proper assessment of the proposed weighted average cost of capital.

Pursuant to r. 43, the AER required Envestra to submit further access arrangement information as an addendum to the information already submitted. The time taken to correct this deficiency was disregarded for the purposes of calculating AER decision making time.

* 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 Envestra's access arrangement proposal. The AER considered all submissions in making this draft decision.

The AER also hosted a workshop on the proposed terms and conditions. The workshop provided retailers and distributors (including Envestra) with a forum to identify and discuss key issues arising from the proposed amendments to the non-price terms and conditions of the distributors’ access arrangements.

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 Envestra's revised proposals are due 7 January 2012. Further information on providing a submission to the AER can be found at: <http://www.aer.gov.au/node/14473>

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

|  |  |
| --- | --- |
| Key stages in the decision making process | Scheduled date |
| AER received Envestra proposal | 30 March 2012 |
| Envestra proposal published | 2 May 2012 |
| Industry workshop on terms and conditions | 18 May 2012 |
| AER draft decision released | 10 September 2012 |
| Envestra 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.[[31]](#footnote-31) 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.[[32]](#footnote-32)

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

This draft decision paper addresses Envestra's access arrangement proposal for both the Victorian and Albury gas distribution networks. The AER decided to combine the two draft decisions having regard to the size of the Albury network and the similarities between the two access arrangement proposals.

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 Envestra'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 distribution network, Envestra 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 Envestra’s proposed gas access arrangement for the 2013–17 access arrangement period.

In order to assess Envestra’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 haulage reference services provided by Envestra which provide for the injection, withdrawal and conveyance of gas on its gas distribution network. This is discussed in more detail in section 3 and attachment 1 of the draft decision.

The AER's 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 Envestra's distribution services. 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 incorporating:
* the capital base – section 5 and attachment 2
* capital expenditure (which forms part of the capital base) – section 6, attachment 3 and confidential appendix A
* a rate of return – overview section 7, attachment 4 and appendix B
* regulatory depreciation of the projected capital base – section 8 and attachment 5
* forecast operating expenditure – section 9, attachment 6
* increments and decrements resulting from an incentive mechanism[[33]](#footnote-33) – section 10, and attachment 7
* corporate income tax[[34]](#footnote-34) – section 11 and attachment 8.

This is illustrated in Figure 2.1.[[35]](#footnote-35)

* + - 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 Envestra's total revenue. That total revenue in general terms, is a forecast of its efficient cost of providing gas distribution services. For the AER's draft decision on Envestra's required revenue, see section 3.

Once total revenue is determined, revenue is allocated to reference and other pipeline services. The tariffs for the reference services are determined with regard to the recovery of the total revenue required to provide those services and the forecast demand for those services. Hence, demand forecasts are an important component of the AER's draft decision on tariffs for reference services. Demand is discussed in section 12 and attachment 9.

In relation to tariffs, the access arrangement also details:

* how tariffs for reference services will be set (section 13 and attachment 10 relate to tariff setting)
* the mechanism for varying tariffs annually and arrangements for varying tariffs in certain pre-specified conditions (section 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 Envestra's proposal, the AER assesses whether Envestra's 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 Envestra’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 section 15, attachments 12, and appendix D.

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

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

In forming its draft decision, the AER has:

* considered Envestra's access arrangement proposal and other supporting information provided by Envestra
* considered submissions from interested parties
* considered views expressed at stakeholder events
* undertaken its own analysis to verify the information provided by Envestra
* considered expert advice or analysis commissioned in relation to certain aspects of Envestra's access arrangement proposal.

The release of this draft decision was delayed because of deficiencies in Envestra’s proposal and a lack of responsiveness by Envestra to a number of AER information requests. Envestra failed to provide adequate responses to certain information requests and there have been significant delays in providing requested information. This impeded the AER's assessment process and led to delays in completing the draft decision.

1. Total revenue requirements and the impact on price

Envestra's total revenue, in general terms, is a forecast of its efficient cost of providing gas distribution services.

The total revenue set out in this draft decision has been determined by assessing each element of Envestra'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 distribution services. This also includes taking into account any relevant interlinkages that exist between the elements of Envestra'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 chapter 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.

* 1. Draft decision

The AER’s draft decision on the total (smoothed) expected revenues derived from Envestra’s reference services are:

* Envestra Victoria—$853.5 million ($nominal)
* Envestra Albury—$29.5 million ($nominal).

These (smoothed) reference service revenues are calculated by smoothing the total building block revenue requirements (net of ancillary reference services revenues) of $858.3 million and $29.8 million ($nominal) for Envestra's Victorian and Albury networks respectively.

The AER's draft decision on Envestra’s ancillary reference service revenue over the 2013–17 access arrangement period is:

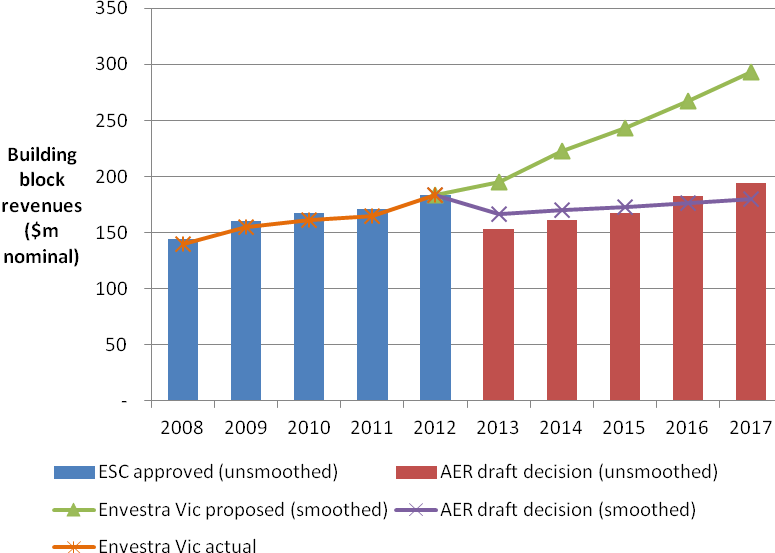
* Envestra Victoria—$13.0 million ($nominal)
* Envestra Albury—$0.8 million ($nominal)

The (smoothed) reference service revenue requirements are 29.3 per cent and 17.1 per cent lower than Envestra's proposed (smoothed) reference services revenue over the 2013–17 access arrangement period for its Victorian and Albury networks respectively.[[36]](#footnote-36) The AER accepts that many aspects of Envestra’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 that would reduce Envestra's proposed revenues include:

* the rate of return
* capital expenditure (capex)
* operating expenditure (opex).

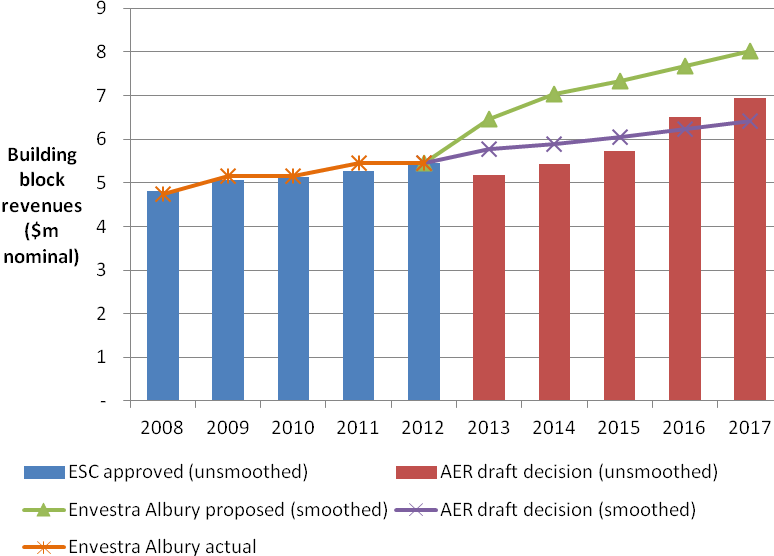
Figure 3.1 and Figure 3.2 compares Envestra's proposal with the AER’s draft decision for revenues over the 2013–17 access arrangement period and the revenue approved by the ESC over the   
2008–12 access arrangement period for the Victorian and Albury networks. As illustrated below, Envestra's proposed smoothed revenues for the 2013–17 access arrangement period are 48 per cent and 42 per cent higher than the ESC allowed revenues over the 2008–12 access arrangement period for the Victorian and Albury networks respectively.

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



Source: AER analysis.

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



Source: AER analysis.

The AER's draft decision on Envestra's total revenue is arrived at by summing the 'building blocks' that were set out earlier in section 2.1 of this document. These building blocks for Envestra's Victorian and Albury networks are displayed in Table 3.1 and Table 3.2, and are each discussed in greater detail in this overview and the attachments to the document.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Return on capital | 79.4 | 84.3 | 89.3 | 92.7 | 96.4 | 442.0 |
| Regulatory depreciation | 12.1 | 14.4 | 18.2 | 21.0 | 23.3 | 88.9 |
| Operating expenditure | 61.0 | 63.3 | 65.7 | 68.2 | 70.6 | 328.9 |
| Efficiency carry-over | 2.2 | –1.0 | –8.1 | –2.5 | – | –9.4 |
| Net corporate income tax | 1.1 | 2.7 | 4.5 | 5.7 | 6.8 | 20.9 |
| Annual building block revenue requirement (unsmoothed) | 155.8 | 163.7 | 169.7 | 185.1 | 197.1 | 871.3 |
| Less: ancillary reference services revenue | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 13.0 |
| Net reference tariff services revenue | 153.4 | 161.2 | 167.1 | 182.4 | 194.3 | 858.3 |
| X factor (per cent) | 2.75% | 0.00% | 0.00% | 0.00% | 0.00% | n/a |
| Annual expected revenue requirement (smoothed) | 164.6 | 167.2 | 170.4 | 173.7 | 177.6 | 853.5 |

Source: AER analysis.

n/a Not applicable.

The effects of the AER’s draft decision on each of the building blocks for Envestra's Victorian and Albury networks, and on Envestra's proposed total (unsmoothed) revenue requirement are shown in Figure 3.3 and Figure 3.4. These show that the AER’s draft decision will reduce Envestra’s proposals for the return on capital, opex, depreciation and tax building blocks.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Return on capital | 2.5 | 2.5 | 2.6 | 2.6 | 2.6 | 12.7 |
| Regulatory depreciation | 0.5 | 0.6 | 0.8 | 0.9 | 0.9 | 3.8 |
| Operating expenditure | 2.8 | 2.9 | 3.0 | 3.1 | 3.2 | 15.0 |
| Efficiency carry-over | –0.7 | –0.7 | –0.8 | –0.2 | – | –2.4 |
| Net corporate income tax | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 1.5 |
| Annual building block revenue requirement (unsmoothed) | 5.3 | 5.6 | 5.9 | 6.7 | 7.1 | 30.6 |
| Less: ancillary reference services revenue | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.8 |
| Net reference tariff services revenue | 5.2 | 5.4 | 5.7 | 6.5 | 6.9 | 29.8 |
| X factor (per cent) | 3.4% | 0.0% | 0.0% | 0.0% | 0.0% | n/a |
| Annual expected revenue requirement (smoothed) | 5.6 | 5.7 | 5.9 | 6.1 | 6.2 | 29.5 |

Source: AER analysis.

n/a Not applicable.

* + - 1. AER’s draft decision and Envestra Victoria's proposed revenue requirement (unsmoothed), by building block ($million, nominal)



Source: AER analysis.

* + - 1. AER’s draft decision and Envestra Albury's proposed revenue requirement (unsmoothed), by building block ($million, nominal)



Source: AER analysis.

* + 1. Sensitivity analysis

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

The AER's draft decision is to approve smoothed revenue requirements for Envestra's reference services over the 2013–17 access arrangement period of:

* Envestra Victoria—$853.5 million ($nominal)
* Envestra Albury—$29.5 million ($nominal).

In addition, the AER's draft decision on ancillary reference service revenues are $13.0 million ($nominal) and $0.8 million ($nominal) for Envestra's Victorian and Albury networks respectively.

The AER’s draft decision on smoothed reference service revenues represents a 29.3 per cent and 17.1 per cent reduction of Envestra's proposed smoothed revenues over the 2013–17 access arrangement period for its Victorian and Albury networks respectively.

The reductions are primarily driven by differences between Envestra's proposal and the draft decision on:

* rate of return, which has reduced from 9.06 per cent to 7.16 per cent
* forecast net capex, which have reduced from $871.7 million ($nominal) to $354.2 million ($nominal) (a reduction of approximately 59 per cent) and from $9.3 million ($nominal) to $6.4 million ($nominal) (a reduction of approximately 32 per cent) for Envestra's Victorian and Albury networks respectively
* forecast opex[[37]](#footnote-37), which have reduced from $411.2 million to $306.5 million (a reduction of approximately 25.5 per cent) and from $13.1 million ($nominal) to $11.7 million (a reduction of approximately 10.4 per cent) for Envestra's Victorian and Albury networks respectively.

and show that total unsmoothed revenues would be $171.12 million ($nominal) or 14.17 per cent lower and $4.32 million ($nominal) or 12.08 per cent lower than Envestra's proposed total revenues for its Victorian and Albury networks respectively, when the AER's draft decision rate of return is adopted.

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Envestra Victoria's proposal (per cent) | AER’s draft decision (per cent) | Revenue change  ($million, nominal) | Revenue change (per cent) |
| Risk free rate | 3.99 (for debt)  5.99 (for equity) | 2.98 | –161.47 | –13.37 |
| DRP | 3.92 | 3.76 | –7.22 | –0.60 |
| Debt raising cost benchmark | 0.15 | 0.093 | –2.47 | –0.20 |
| WACC | 9.06 | 7.16 | –171.12 | –14.17 |

Source: AER analysis.

Notes: The above scenario analysis was undertaken using the proposed Post-tax Revenue Model, with the formulae in the 'WACC' sheet corrected for the AER's approach.

(a) The AER has accepted Envestra’s proposed method for calculating the risk free rate used to determine the cost of debt. The difference between this risk free rate 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, Envestra’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 Envestra’s final averaging period. In contrast, the AER has not accepted Envestra’s proposed method for calculating the risk free rate used to determine the cost of equity. Hence, the difference between the AER’s risk free rate and that proposed by Envestra (for equity).

(b) The difference between the DRP proposed by Envestra and the AER’s draft decision predominantly reflects the difference in indicative averaging periods (as explained for the risk free rate). The AER, however, has also amended the bond sample relied on by Envestra 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 Envestra Albury's proposed total unsmoothed revenue, when AER's draft decision WACC parameters are adopted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Envestra Albury's proposal (per cent) | AER’s draft decision (per cent) | Revenue change  ($million, nominal) | Revenue change (per cent) |
| Risk free rate | 3.99 (for debt)  5.99 (for equity) | 2.98 | –4.09 | –11.44 |
| DRP | 3.92 | 3.76 | –0.18 | –0.51 |
| Debt raising cost benchmark | 0.15 | 0.108 | –0.05 | –0.13 |
| WACC | 9.06 | 7.16 | –4.32 | –12.08 |

Source: AER analysis.

Notes: The above scenario analysis was undertaken using the proposed Post-tax Revenue Model, with the formulae in the 'WACC' sheet corrected for the AER's approach.

(a) The AER has accepted Envestra’s proposed method for calculating the risk free rate used to determine the cost of debt. The difference between this risk free rate 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, Envestra’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 Envestra’s final averaging period. In contrast, the AER has not accepted Envestra’s proposed method for calculating the risk free rate used to determine the cost of equity. Hence, the difference between the AER’s risk free rate and that proposed by Envestra (for equity).

(b) The difference between the DRP proposed by Envestra and the AER’s draft decision predominantly reflects the difference in indicative averaging periods (as explained for the risk free rate). The AER, however, has also amended the bond sample relied on by Envestra 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.

and show that total unsmoothed revenues, based on the AER's draft decision forecast capex, would be $92.8 million ($nominal) or 7.7 per cent and $0.8 million ($nominal) or 2.2 per cent lower than Envestra's proposed total proposed revenues for its Victoria and Albury networks respectively. They also show that when the AER's draft decision opex is adopted, the total unsmoothed revenues would be around $104.7 million ($nominal) or 8.7 per cent and $1.4 million ($nominal) or 3.8 per cent lower than Envestra's proposed total revenues for its Victoria and Albury networks respectively.

* + - * 1. Changes to Envestra Victoria's proposed total unsmoothed revenue, when AER's draft decision capex and opex forecasts are adopted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Envestra Victoria's proposal  ($million, nominal) | AER's draft decision  ($million, nominal) | Revenue change ($million, nominal) | Revenue change (per cent) |
| Capex | 871.7 | 354.2 | –92.8 | –7.7 |
| Opexa | 411.2 | 306.5 | –104.7 | –8.7 |

Source: AER analysis.

(a) Includes carryover amounts.

* + - * 1. Changes to Envestra Albury's proposed total unsmoothed revenue, when AER's draft decision capex and opex forecasts are adopted

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Envestra Albury's proposal  ($million, nominal) | AER's draft decision  ($million, nominal) | Revenue change ($million, nominal) | Revenue change (per cent) |
| Capex | 9.3 | 6.4 | –0.8 | –2.2 |
| Opexa | 13.1 | 11.7 | –1.4 | –3.8 |

Source: AER analysis.

(a) Includes carryover amounts.

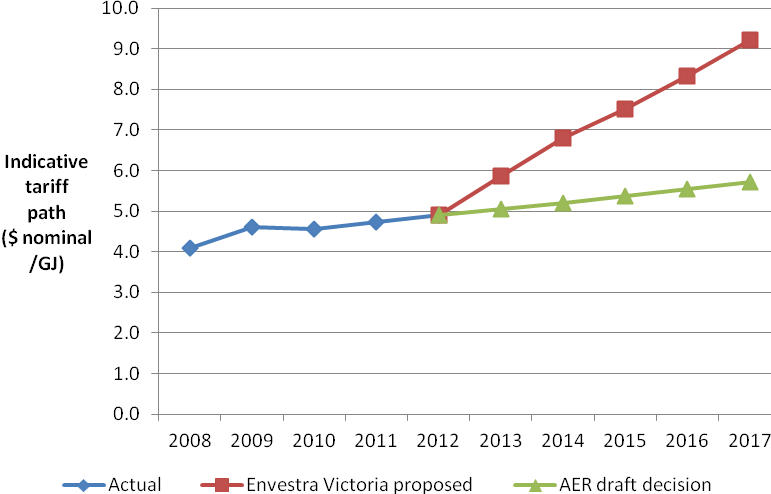
* 1. Impact on prices
     1. Reference tariffs

The effect of the AER’s draft decision on Envestra's forecast reference tariffs for its reference services can be estimated by comparing these with Envestra's forecast reference tariffs. Using this approach the AER estimates that the draft decision will result in reference tariffs being 28.7 per cent and 17.4 per cent lower on average over the 2013–17 access arrangement period in nominal dollar terms than Envestra’s proposed tariffs for its Victorian and Albury networks respectively.

The AER’s draft decision will result in average reference service distribution charges ($/GJ of demand) for Envestra's Victoria and Albury networks over the 2013–17 access arrangement period that are 17.4 per cent and 16.3 per cent respectively higher than average reference service charges per GJ for the 2008–12 access arrangement period.

These higher reference tariffs are largely driven by the effects of inflation. The AER’s draft decision has reduced revenues in real terms compared to the 2008–2012 access arrangement period, and results in no real price increases (known as X factors). The indicative tariff paths arising from the AER's draft decision compared with that in Envestra's proposal for its Victoria and Albury networks are shown in Figure 3.5 and Figure 3.6 respectively.

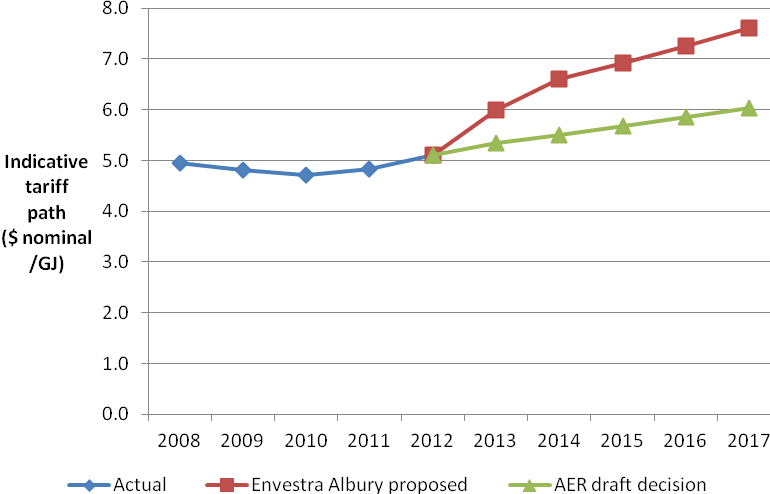
* + - 1. Indicative reference tariff paths for Envestra Victoria's reference services from 2013 to 2017 ($/GJ, nominal)



Source: AER analysis.

Note: This chart shows an indicative tariff path, based on forecast revenues and forecast demand for Envestra’s network. Envestra’s actual tariffs will first be updated on 1 July 2013 to reflect the AER’s decision. For this reason, the indicative 2013 tariff above is an average of the higher 2012 tariffs, and lower 2013 tariffs (from 1 July 2013 to 31 December 2013) to reflect the AER’s decision. On 1 January 2014, the AER’s draft decision forecasts that actual tariffs will increase to reflect CPI.

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



Source: AER analysis.

Note: This chart shows an indicative tariff path, based on forecast revenues and forecast demand for Envestra’s network. Envestra’s actual tariffs will first be updated on 1 July 2013 to reflect the AER’s decision. For this reason, the indicative 2013 tariff above is an average of the higher 2012 tariffs, and lower 2013 tariffs (from 1 July 2013 to 31 December 2013) to reflect the AER’s decision. On 1 January 2014, the AER’s draft decision forecasts that actual tariffs will increase to reflect CPI.

* + 1. Average retail customer bill

Across Envestra's Victoria and Albury networks, the proportion of the average residential gas bill attributable to gas distribution reference tariffs is estimated to be approximately 31 per cent and 25 per cent respectively.[[38]](#footnote-38)

If the increase in distribution tariffs from the AER’s draft decision was passed through to end consumers of Envestra’s Victoria and Albury networks, the typical residential bill[[39]](#footnote-39),[[40]](#footnote-40) could be expected to increase on average by up to $7 and $5 ($nominal) per year respectively. Envestra’s proposal would have resulted in an average $57 and $22 ($nominal) increase in bills per year respectively.

Similarly, the AER's draft decision on Envestra's access arrangement proposal for its Victoria and Albury networks is expected to contribute towards estimated average price increases for non-residential customers[[41]](#footnote-41) of $29 per annum and $27 per annum respectively. Envestra’s proposal would have resulted in an average $235 and $106 ($ nominal) increase in bills per year respectively.

1. Services covered by the access arrangement

A service is deemed a reference service if it is a pipeline service that is likely to be sought by a significant part of the market.[[42]](#footnote-42) The full draft decision and the AER's detailed reasons and analysis on the services covered by the access arrangement can be found in attachment 1.

* 1. Draft decision

Envestra provides for two proposed categories of reference services, with one of those categories divided between residential and non residential. Each proposed category allows for the injection, conveyance and withdrawal of gas. However, the categories are restricted to users that hold a retail authorisation issued under Part 5 of the National Energy Retail Law. This Part is not in force in Victoria. The AER considers that a significant part of the market is likely to seek reference services that do not contain this restriction. Accordingly, the AER does not approve Envestra’s proposed reference services. Envestra’s proposed ancillary services are carried over from its current access arrangement. The AER considers that these services are likely to be sought by a significant part of the market.

1. Capital base

The capital base is the value of Envestra's capital assets—including gas distribution 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 Envestra can earn a rate of return. Further, Envestra 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 accordingly, the revenue requirement.

As part of this draft decision, the AER is required to assess Envestra's proposed opening values for the capital base of its Victoria and Albury networks for each year of the 2008–12 and 2013–17 access arrangement periods. This involves the AER:

* Confirming the value of the opening capital base at 1 January 2008 (the first year of the 2008–12 access arrangement period). This involves assessing whether Envestra'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 distribution 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 (which became conforming 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 arrangement period to roll forward Envestra'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 forecast values of Envestra's capital bases as at 1 January 2013 and forecast closing capital bases 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 Envestra's proposed opening capital bases as at 1 January 2013 of:

* Envestra Victoria—$1116.3 million ($nominal)
* Envestra Albury—$35.2 million ($nominal).

This is because the AER considers that some of Envestra's inputs into the capital base roll forward model do not comply with the NGR.[[45]](#footnote-45) These include:

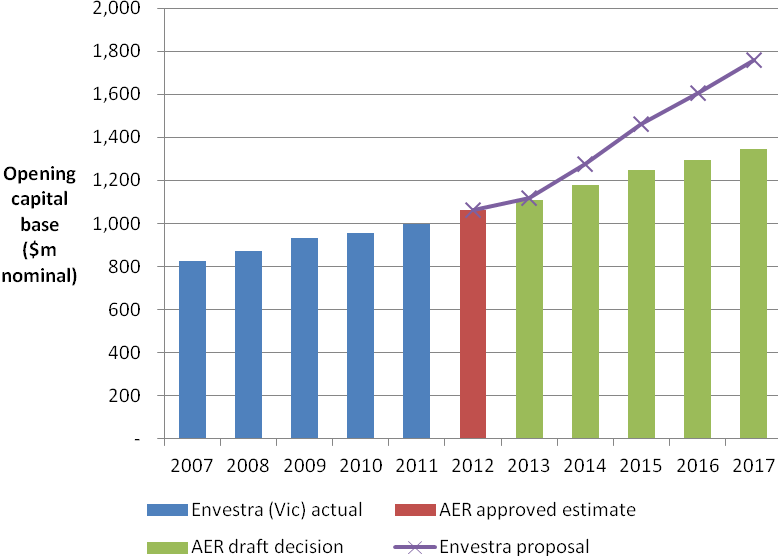
* Envestra's proposed indexation of the capital base
* Envestra's revised estimate for capex in 2012
* minor amendments to ensure consistency with historical regulatory accounts.

After adjusting these inputs, the AER has determined opening capital bases as at 1 January 2013 of:

* Envestra Victoria—$1109.7 million ($nominal)
* Envestra Albury—$34.6 million ($nominal).

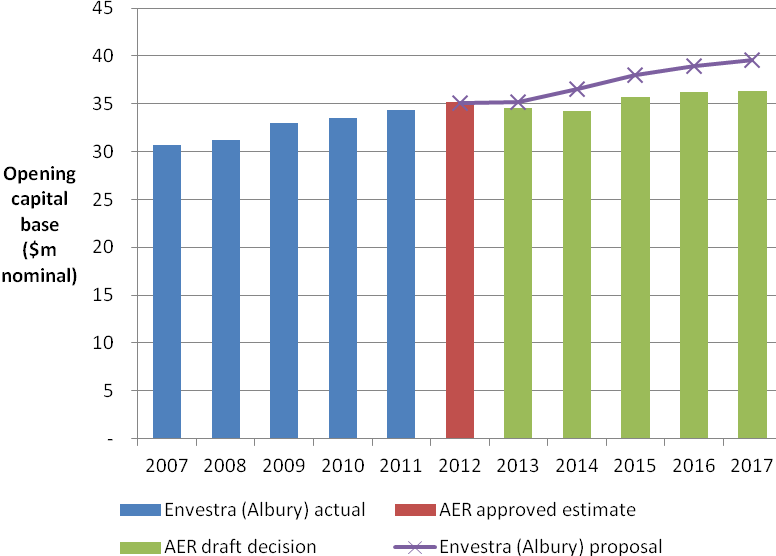
Figure 4.1 and figure 4.2 show Envestra's past actual opening capital base values compared to forecast values.

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



Source: AER analysis.

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



Source: AER analysis.

and table 5.2 show the AER’s draft decision on the roll forward of Envestra’s capital base during the 2008–12 access arrangement period.

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2008 | 2009 | 2010 | 2011 | 2012 |
| Opening capital base | 984.5 | 1 005.9 | 1 014.4 | 1 030.0 | 1 059.9 |
| Net capex | 55.5 | 46.2 | 56.8 | 73.7 | 95.6a |
| Less: depreciation | 34.1 | 37.8 | 41.1 | 43.8 | 45.8 |
| Closing capital base | 1 005.9 | 1 014.4 | 1030.0 | 1059.9 | 1109.7 |
| Opening capital base at 1 January 2013 |  |  |  |  | 1109.7 |

Source: AER analysis.

(a) The AER has approved 2012 capex values equal to the ESC's benchmark capex, adjusted for actual growth. This is consistent with the ESC's capex incentive scheme and is discussed in attachment 2.

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2008 | 2009 | 2010 | 2011 | 2012 |
| Opening capital base | 35.3 | 35.6 | 35.6 | 35.6 | 35.2 |
| Net capex | 1.5 | 1.3 | 1.3 | 1.1 | 0.8 |
| Less: depreciation | 1.2 | 1.3 | 1.3 | 1.4 | 1.5 |
| Closing capital base | 35.6 | 35.6 | 35.6 | 35.2 | 34.6 |
| Opening capital base at 1 January 2013 |  |  |  |  | 34.6 |

Source: AER analysis.

Based on the above opening capital bases for 1 January 2013, and the AER's draft decisions on forecast capex, depreciation, and inflation, the AER has determined projected closing capital bases as at 31 December 2017 of:

* Envestra Victoria—$1375.1 million ($nominal)
* Envestra Albury—$37.1 million ($nominal).

Table 4.3 and table 4.4 set out the projected roll forward of the capital bases during the 2013–17 access arrangement period.

* + - * 1. AER's draft decision on projected capital base roll forward for Envestra Victoria during the 2013–17 access arrangement period ($million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| Opening capital base | 1109.7 | 1177.6 | 1247.7 | 1295.1 | 1346.6 |
| Net capex | 79.9 | 84.5 | 65.6 | 72.5 | 51.7 |
| Less: depreciation | 39.8 | 43.8 | 49.4 | 53.3 | 57.0 |
| Indexation | 27.7 | 29.4 | 31.2 | 32.4 | 33.7 |
| Closing capital base | 1177.6 | 1247.7 | 1295.1 | 1346.6 | 1375.1 |

Source: AER analysis.

* + - * 1. AER's draft decision on projected capital base roll forward for Envestra Albury during the 2013–17 access arrangement period ($million, nominal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| Opening capital base | 34.6 | 35.1 | 35.8 | 36.2 | 36.4 |
| Net capex | 1.1 | 1.3 | 1.2 | 1.1 | 1.7 |
| Less: depreciation | 1.4 | 1.5 | 1.7 | 1.8 | 1.9 |
| Indexation | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| Closing capital base | 35.1 | 35.8 | 36.2 | 36.4 | 37.1 |

Source: AER analysis.

* 1. Summary of analysis and reasons

The AER approves some aspects of Envestra's proposal for the opening capital bases as at 1 January 2013 including:

* To use the opening capital bases at 1 January 2007 as the basis from which to roll forward the capital bases (the values being consistent with those adopted in the ESC'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 ESC.

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

* Envestra's proposed inflation of the capital base would result in six months of unnecessary additional CPI adjustment. This would overstate the value of the opening capital base as at 1 January 2013. In addition, by applying six months of additional inflation, Envestra’s proposal creates an inconsistency between inflation applied to tariffs and inflation applied to the capital base. Hence, the AER's draft decision is to adjust the opening capital bases for six years of inflation, rather than six and a half years of inflation.
* Envestra's 2008–12 access arrangement included a capex incentive scheme. However, Envestra has not applied the ESC's capex incentive scheme. To make 2012 capex consistent with the ESC's capex incentive scheme the AER has replaced Envestra's estimated 2012 capex with benchmark (forecast) 2012 capex adjusted for actual growth.
* Envestra's initial conforming net capex amounts were for some years inconsistent with its audited historical regulatory accounts.[[46]](#footnote-46) The AER has made several minor amendments to Envestra's proposed capex for the 2008–11 period to correct for these discrepancies.
* The draft decision on forecast capex and depreciation form inputs into the roll forward for the projected capital base for the 2013–17 access arrangement period. These need to be adopted in place of Envestra's proposed forecast capex and depreciation. See overview sections 5 and 7 and attachments 3 and 5 for more on the AER's draft decision on these matters.

These adjustments result in a $6.6 million and $0.6 million reductions to Envestra's proposed opening capital bases at 1 January 2013 for its Victoria and Albury networks respectively. The AER's draft decision is for opening capital bases of $1109.7 million and $34.6 million ($nominal) as at 1 January 2013 for Envestra's Victoria and Albury networks respectively. Based on these, and the AER's draft decisions on forecast capex, depreciation, and inflation, the AER has determined projected closing capital bases as at 31 December 2017 of $1375.1 million and $37.1 million ($nominal) for Envestra's Victoria and Albury networks respectively.

The AER also does not approve Envestra's proposal to use actual depreciation rather than forecast depreciation to establish its opening capital bases as at 1 January 2018.[[47]](#footnote-47) The AER considers the use of forecast depreciation (approved in the final decision for this access arrangement review) to roll forward the capital base from 2013–17 at the next access arrangement review is a preferable alternative that complies with the requirements of the NGO and the revenue and pricing principles.[[48]](#footnote-48) See attachment 2 for more on the AER's draft decision on the capital bases 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. 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 – including IT, plant and equipment, motor vehicles and buildings.

An efficient network business will require capex for one or more of these categories during an access arrangement period. 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 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.

Envestra proposed a total forecast capex of $773.1 million ($2011) for the 2013–17 access arrangement period. The AER must accept Envestra’s forecast capex if it is satisfied that it is conforming capex as specified in the NGR.[[49]](#footnote-49)

In assessing Envestra’s proposed capex for both the previous and upcoming regulatory access agreement periods, the AER reviewed Envestra’s proposal and supporting material. This included information on Envestra's reasoning and, where relevant, business cases, audited regulatory accounts, and other relevant information. In addition, the AER engaged consultants to review aspects of Envestra's capex proposals.

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

* 1. Draft decision

Envestra Victoria

The AER’s draft decision is to approve Envestra's proposed $277.9 million ($2011) total net capex for 2007–11[[50]](#footnote-50) as conforming capex for the purpose of setting the capital base for 2007-11 (see chapter 5 and attachment 2). For the 2013-17 access arrangement period, the AER’s draft decision is to approve $315.4 million ($2011) of Envestra's proposed $764.9 million ($2011) total capex.

Figure 6.1 shows actual and ESC approved capex for 2008-11, Envestra’s proposed capex and the AER’s draft decision on capex for 2012-17.

* + - 1. Comparison of Envestra Albury past and forecast total capex and AER draft decision ($million, 2012)



* + - * 1. Comparison of AER approved(a) and Envestra Victoria's proposed capital expenditure over the 2013–17 access arrangement period ($million, 2011)

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Proposed | Approved(a) | Difference |
| Mains replacement | 328.6 | 73.9 | -77.5% |
| Residential connections | 141.7 | 95.6 | -32.5% |
| Commercial/industrial connections | 25.6 | 14.9 | -41.8% |
| Residential meter replacement | 28.1 | 21.6 | -23.2% |
| Commercial/industrial meter replacement | 7.7 | 7.1 | -7.9% |
| Augmentation | 52.0 | 27.6 | -46.8% |
| IT | 19.3 | 15.5 | -19.9% |
| SCADA | 1.1 | 1.0 | -8.7% |
| Other | 53.2 | 18.5 | -65.2% |
| Gas Extensions | 19.7 | – | -100.0% |
| Overheads | 97.5 | 46.2 | -52.6% |
| GROSS TOTAL CAPITAL EXPENDITURE | 774.4 | 321.9 | -58.4% |
| Customer contributions | 9.5 | 6.5 | -31.1% |
| Government contributions | – | – | 0.0% |
| NET TOTAL CAPITAL EXPENDITURE | 764.9 | 315.4 | -58.8% |

Source: AER analysis, Envestra.

Notes: (a) Including AER material and labour escalation adjustments and network management fee.

Envestra Albury

The AER’s draft decision is to approve Envestra's proposed $6.1 million ($2011) total net capex for 2007–2011 as conforming capex for the purpose of setting the capital base for 2007-11. For the 2013-17 access arrangement period, the AER’s draft decision is to approve $5.6 million ($2011) of Envestra's proposed $8.2 million ($2011) total capex.

Table 6.2 is a comparison of Envestra's proposed capex for its Albury network and the AER's draft decision on capex for the 2013-17 access arrangement period by category.

* + - * 1. Comparison of AER approved(a) and Envestra Albury's proposed capital expenditure over the 2013–17 access arrangement period ($million, 2011)

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Proposed | Approved(a) | Difference % |
| Mains replacement | 0.04 | 0.04 | -8.1% |
| Residential connections | 3.88 | 2.71 | -30.1% |
| Commercial/industrial connections | 0.19 | 0.13 | -32.3% |
| Residential meter replacement | 0.38 | 0.35 | -8.7% |
| Commercial/industrial meter replacement | 0.15 | 0.13 | -8.7% |
| Augmentation | 0.53 | 0.47 | -12.4% |
| IT | 0.70 | 0.56 | -19.3% |
| SCADA | 0.11 | 0.10 | -9.0% |
| Other | 0.87 | 0.01 | -98.8% |
| Gas Extensions-NGEP | – | – | 0.0% |
| Overheads | 1.37 | 1.10 | -20.1% |
| GROSS TOTAL CAPITAL EXPENDITURE | 8.23 | 5.60 | -32.0% |
| Customer contributions | – | – | 0.0% |
| Government contributions | – | – | 0.0% |
| NET TOTAL CAPITAL EXPENDITURE | 8.23 | 5.60 | -32.0% |

Source: AER analysis, Envestra.

Notes: (a) Includes AER material and labour escalation adjustments and network management fee.

* 1. Summary of analysis and reasons
     1. Envestra Victoria

While the AER has accepted a number of Envestra's capex proposals, it has made some amendments. The main amendments are in the categories of mains replacements, residential and commercial/industrial connections, augmentation, IT and capital overheads.

Mains replacements

Distribution mains are the pipes that convey gas to service pipes at each end user point. Envestra proposed mains replacement capital expenditure of $328.6 million ($2011, escalated direct costs) for two mains replacement programs:

* Low pressure pipe replacement – the AER draft decision is to approve the replacement program but to reduce the scale of works proposed. The AER proposes to use historic volumes delivered over the 2008-11 period to set the scale of works. The AER considers that this level of works reflects a robust benchmark for what a prudent and efficient service provider would undertake. However, to allow for changing circumstances, the AER proposes to allow for a pass through event to apply, where the trigger event is the completion of approved volumes. The AER has reduced Envestra's average unit rate as it does not consider the proposed average unit rate provides a reasonable basis for estimating the unit rates.
* Ad hoc mains replacements and service renewal program – Envestra forecast a step up in the number of renewals in 2013. The reason for this was not justified by Envestra. The AER interpolated the number of services from 2012 to the proposed number in 2017, and determined that the step up in ad hoc service renewal capex was not arrived at on a reasonable basis. The AER's application of an alternative forecast results in reduced capex.

These amendments result in a 77 per cent reduction Envestra's proposed mains replacement capex (from $328.6 million to $73.9 million).

Residential and commercial/industrial connections

Distribution businesses have a regulatory obligation to connect residential and commercial/industrial customers to the distribution network upon request. The capex associated with connecting customers to the distribution network generally includes the cost of new mains, gas service pipe from the main to the meter, and the meter.

The AER's draft decision is to reduce forecast capex for customer connections. Due to conflicting information over a number of information requests, the AER did not consider the abolishments rate to be arrived at on a reasonable basis. The AER used another Victorian service provider's abolishment rate as a substitute. Envestra based its unit rates on a simple average of 2009 and 2010 unit rates plus adjustments for recent contractor rates. Envestra failed to substantiate the uplift associated with the contractor rates. The AER considers that, given the nature of the tendering process that Envestra undertakes, a 2008–11 average provides a better estimate of future unit rates. Envestra's forecast volumes and unit rates is not arrived at on a reasonable basis and did not produce the best estimates possible in the circumstances. The AER's application of an alternative forecast results in reduced capex. These amendments result in a 33 per cent reduction Envestra's proposed residential connections capex (from $141.7 million to $95.6 million) and a 42 per cent reduction in its proposed commercial/industrial connections capex (from $25.6 million to 14.9 million).

Augmentation

Envestra proposed augmentation capex to provide for:[[51]](#footnote-51)

* Reinforcement of network areas that are vulnerable to gas supply constraints, as well as improvements to reduce the likelihood of gas outages occuring.
* A network that is capable of continuously satisfying the demand for services, particularly in high growth areas.
* The availability of high pressure gas in a manner that supports the systematic and planned replacement of low pressure mains.

The AER considers that the majority of Envestra's augmentation expenditure is justifiable as it is necessary to maintain or improve the safety and integrity of services. However, the AER has reduced the level of approved expenditure on some augmentation projects. This is due to an adjustment to Envestra's growth or load forecasts which, in the AER’s assessment, were not arrived at on a reasonable basis.

These amendments result in a 47 per cent reduction in Envestra's proposed augmentation capex in Victoria (from $52.0 million to $27.6 million).

Overheads

The level of overheads is reduced. The AER does not consider, on the basis of the approved projected capital base, that the scale of Envestra's business is going to change such that a step up in the fixed proportion of overheads is warranted. The AER has reduced overheads to align better with historic levels of capital overheads. These amendments result in a 53 per cent reduction in Envestra's proposed overheads in Victoria (from $97.5 million to $46.2 million).

Other (non-demand)

The AER has not approved a number of projects in "Other non-demand" capex are not approved. Reasons for this include that the expenditure does not meet the definition of capex, the forecast was not arrived at on a reasonable basis or such projects would not be undertaken by a prudent and efficient service provider. These amendments result in a 65 per cent reduction in Envestra's proposed other non-demand capex in Victoria (from $53.2 million to $18.5 million).

Labour and materials cost escalators

The AER is not satisfied Envestra's proposed labour and material cost escalators were arrived at on a reasonable basis or represent the best possible forecast of labour and material costs over the 2013-2017 access arrangement period.[[52]](#footnote-52) Instead, the AER considers forecast annual increases in the labour price index (LPI) should be used to forecast labour costs and the consumer price index (CPI) should be used to forecast network materials prices. Appendix C contains the AER’s consideration of the real cost escalators proposed by Envestra.

Other categories

The AER’s draft decision also includes revisions in the following categories of capex:

* Two IT programs were not approved as the AER did not consider them to constitute capex that would be undertaken by a prudent or efficient service provider.
* Envestra's Extention capex program is not approved as the forecast was not arrived at on a reasonable basis and would not be undertaken by a prudent or efficient service provider at this time.
* Contributions associated with the customer connections program are scaled back.

All of the above taken together results in a 59 per cent reduction to Envestra's proposed capex (from $764.9 million to $315.4 million). See attachment 3 for the AER's draft decision on forecast capex and reasons for this.

* + 1. Envestra Albury

The AER's draft decision on forecast capex for Envestra's Albury network also contains a number of similar reductions. These reductions relate to:

* Residential and commercial/industrial connections capex.
* Certain projects within Envestra's "Other non-demand" capex.
* Overheads.
* Material and labour cost escalation.

The reasons and analysis for these are broadly the same as those discussed above for Envestra's Victorian network.

All of the above taken together results in a 32 per cent reduction to Envestra's proposed capex (from $8.23 million to $5.60 million).

1. Rate of return

The rate of return is one of the inputs to the building block approach used by the AER to determine total revenue for each regulatory year of the access arrangement period. The rate of return on capital is to be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services.[[53]](#footnote-53)

Envestra's return on capital building block is calculated by multiplying the rate of return with the value of Envestra's capital base. Consistent with Envestra's access arrangement proposal and previous AER gas decisions, the rate of return adopted by the AER is the nominal vanilla 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 Envestra'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)

Envestra'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. Envestra's proposed rate of return method, if also applied to market data from July–August 2011, would result in a proposed rate of 8.40 per cent.

Both Envestra'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's draft decision method involves updating the risk free rate used in both the cost of equity and cost of debt. Envestra's proposed method involves only updating the risk free rate used in the cost of debt.

The AER considers a 7.16 per cent rate of return (subject to updating) provides Envestra with a reasonable opportunity to recover at least the efficient costs of capital financing. Consequently, the AER expects Envestra 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 Envestra'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 a market risk premium (MRP) of 6 per cent
* 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

But the AER does not agree with the following aspect of Envestra's proposal:

* adopting a long term historical average risk free rate in the cost of equity. Rather, the AER adopts a short term averaging period sampled as close as practicably possible to the commencement of the access arrangement period, as explained in section 7.2.1.

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 Envestra's rate of return (nominal)

|  |  |  |
| --- | --- | --- |
| Parameter | Envestra proposal | AER draft decision |
| Nominal risk free rate (cost of equity) | 5.99% | 2.98% a |
| Nominal risk free rate (cost of debt) | 3.99% a | 2.98% a |
| Equity beta | 0.8 | 0.8 |
| Market risk premium | 6% | 6% |
| Debt risk premium | 3.92% a | 3.76% a |
| Gearing level | 60% | 60% |
| Inflation forecast | 2.5% a | 2.5% a |
| Gamma | 0.25 | 0.25 |
| Nominal post-tax cost of equity | 10.80% a | 7.78% a |
| Nominal pre-tax cost of debt | 7.91% a | 6.74% a |
| Nominal vanilla WACC | 9.06% a | 7.16% a |

Source: ACCC decision; Envestra, 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.

The rate of return in this draft decision (7.16 per cent) is similar to the rate of return determined by the AER recently in the APTPPL final decision (7.31 per cent).[[56]](#footnote-56) However, the rate of return in this decision for Envestra is lower than the rate of return determined by the AER in decisions before that time. The fact that the overall rate of return in this decision is lower than in previous decisions does not of itself make it unreasonable. The cost of debt in this decision makes up 60 per cent of the overall rate of return. The AER and Envestra agree on the approach to determining the cost of debt. The cost of debt has fallen by approximately one per cent compared with AER decisions from earlier this year.[[57]](#footnote-57) Hence, the AER and Envestra agree that this reduction reflects changing conditions in the market for funds. This provides the AER with a degree of comfort that a fall in the overall rate of return, in itself, is not unreasonable.

Envestra's concerns surround the cost of equity and the extent to which the cost of equity determined by the AER in this decision is lower than that determined in previous decisions. A lower cost of equity contributes to a lower overall rate of return.

The AER acknowledges that Envestra was concerned with the impact of the lower risk free rate on its overall rate of return. The AER has carefully considered the consequences of the low CGS yields and is confident that CGS yields remain the most appropriate proxy of the risk free rate in Australia. This position is supported by advice from the Reserve Bank of Australia (RBA). The AER has also considered whether or not the MRP should be increased from that used in previous decisions. The AER remains of the view that a 6 per cent MRP is commensurate with prevailing conditions in the market for funds.

* 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 Envestra's access arrangement proposal, the other Victorian gas 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.[[58]](#footnote-58)

In this review, Envestra 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 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 other Victorian gas distribution service providers also proposed this approach. APA GasNet held a similar concern but proposed a different approach. APA GasNet proposed a higher MRP (8.5 per cent).

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, Envestra proposed adopting the extrapolated Bloomberg fair value curve to estimate the DRP.[[59]](#footnote-59) This results in a DRP of 3.82 based on current market data.[[60]](#footnote-60) The other Victorian gas service providers also proposed this approach.[[61]](#footnote-61) BHP Billiton considered this method was appropriate but also considered there was merit in the AER exploring alternative methods.[[62]](#footnote-62)

On the other hand, the EUCV considered the DRP should be no more than 195 basis points above the risk free rate (based on a 5 year term).[[63]](#footnote-63) 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.[[64]](#footnote-64) Under this approach the DRP is estimated by averaging observed bond yields that meet certain criteria.[[65]](#footnote-65) The Tribunal did, however, direct the ERA to amend the simple averaging process used to aggregate these bond yields.[[66]](#footnote-66) The Tribunal also provided guidance on the relevance of various criteria and the use of a more complex weighted average.[[67]](#footnote-67) Such a weighted average was implemented by the ERA on remittal.[[68]](#footnote-68) If the bond-yield approach (with the weighting method adopted in the ERA’s re-determination) was applied to Envestra, the DRP would be 2.72 per cent.[[69]](#footnote-69)

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 Envestra's forthcoming access arrangement period. This follows the Tribunal's previous comments on the consultation approach that should be adopted in the development of any new approach.[[70]](#footnote-70)

In this draft decision, the AER has maintained adoption of the extrapolated Bloomberg BBB rated fair value curve. This currently provides a cost of debt of 6.74 per cent, or DRP of 3.76 per cent.[[71]](#footnote-71)

Taking Envestra's proposal and the submissions from stakeholders together, the AER considers that the rate of return in this draft decision (subject to updating) satisfies the criterion of the NGR.[[72]](#footnote-72)

* + 1. Risk free rate

The AER does not agree with Envestra's proposed method for estimating the risk free rate used in the cost of equity.

The risk free rate calculated using the method determined in this draft decision is commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services. This method involves estimating the risk free rate by reference to the yield on 10 year CGS bonds sampled over a period as close as practicably possible to the commencement of the access arrangement period.

The AER considers 10 year CGS yields are the most appropriate proxy for the risk free rate because:

* CGS are low risk
* the CGS market is liquid and functioning well, as confirmed by advice from the Reserve Bank of Australia (RBA), the Australian Treasury and the Australian Office of Financial Management (AOFM)[[73]](#footnote-73)
* the RBA advised 'CGS yields are the most appropriate measure of a risk free rate in Australia'.[[74]](#footnote-74)

The AER and Envestra agree on the proxy for the risk free rate.

However, Envestra proposed the risk free rate be calculated using a historical averaging period over the last 20 years. In contrast, the AER considers the most appropriate averaging period for determining the risk free rate is a short period (10-40 business days), as close as practicably possible to the commencement of the regulatory period, because:

* at any point in time, the prevailing risk free rate is the benchmark that the expected return on a risky investment must exceed (by a magnitude equal to the risk premium for the risky investment)
* prevailing 10 year CGS yields reflect the risk free rate over the appropriate forward looking investment horizon (which is 10 years)
* CGS yields are market determined—that is, prevailing CGS yields reflect the return that investors are willing to receive in current market conditions on an investment that is almost default risk free
* this approach promotes the regulatory objective that the present value of a service provider's expected revenue should match the present value of a service provider's expected expenditure (plus or minus any efficiency rewards or penalties)
* the use of prevailing CGS yields is consistent with the use of the building block model because this model is designed to uphold the present value principle, as advised by Associate Professor Lally
* the use of prevailing CGS yields is consistent with the use of the CAPM. In the ActewAGL matter, both the expert for the AER (Associate Professor Lally) and the expert for the service provider (Greg Houston) agreed on this point.[[75]](#footnote-75)
* this approach provides an unbiased method for determining the risk free rate
* advice from Professor McKenzie and Associate Professor Partington, and from Associate Professor Lally supported the use of a prevailing risk free rate.[[76]](#footnote-76)

The AER recognises CGS yields are at historical lows, but that fact does not invalidate any of the above reasons. The current historically low CGS yields reflect what would be expected of a well functioning risk free rate proxy in current demand and supply conditions.[[77]](#footnote-77) In the Telstra matter, the Tribunal stated:

...it is not unusual for yields to move from time to time in order to reflect prevailing market conditions and the expectations about the prospect for prices into the future.[[78]](#footnote-78)

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

1. Regulatory depreciation

Regulatory depreciation models the nominal value of Envestra's assets over the 2013–17 access arrangement period. It is used to determine the depreciation allowance in Envestra's total revenue requirement under the building block model. Envestra’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.

As part of its proposed access arrangement Envestra is required to 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[[79]](#footnote-79)
* so that each asset or group of assets is depreciated over the economic life of that asset or group of assets[[80]](#footnote-80)
* 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[[81]](#footnote-81)
* so that (subject to the rules about capital redundancy), an asset is depreciated only once[[82]](#footnote-82)
* so as to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.[[83]](#footnote-83)

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,[[84]](#footnote-84) the NGO and the revenue and pricing principles.[[85]](#footnote-85)

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

* 1. Draft decision

The AER's draft decision on Envestra's total regulatory depreciation allowances over the 2013–17 access arrangement period are:

* Envestra Victoria—$88.9 million ($nominal) as shown in table 7.1. This represents a reduction of $12.9 million ($nominal) or 12.7 per cent of Envestra's proposal.
* Envestra Albury—$3.8 million ($nominal) as shown in table 7.2. This represents an increase of $0.2 million ($nominal) or 5.2 per cent of Envestra's proposal.
  + - * 1. AER's draft decision on Envestra Victoria's depreciation allowance   
           ($million, nominal)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Straight-line depreciation | 39.8 | 43.8 | 49.4 | 53.3 | 57.0 | 243.3 |
| Less: indexation on opening capital base | 27.7 | 29.4 | 31.2 | 32.4 | 33.7 | 154.4 |
| Regulatory depreciation | 12.1 | 14.4 | 18.2 | 21.0 | 23.3 | 88.9 |

Source: AER analysis.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Straight-line depreciation | 1.4 | 1.5 | 1.7 | 1.8 | 1.9 | 8.2 |
| Less: indexation on opening capital base | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 4.4 |
| Regulatory depreciation | 0.5 | 0.6 | 0.8 | 0.9 | 0.9 | 3.8 |

Source: AER analysis.

* 1. Summary of analysis and reasons

The AER does not approve Envestra's proposed regulatory depreciation allowances over the 2013–17 access arrangement period of $101.8 million and $3.8 million ($nominal) for its Victoria and Albury networks respectively. The AER's draft decision is to make amendments in the following areas:

* The AER considers that the ‘Land & buildings’ asset class should be split into two separate 'Land' and 'Buildings' asset classes from 1 January 2013 to reflect their different depreciation treatment. In terms of economic life, the AER considers that the 'Buildings' asset class should be assigned a standard economic life of 50 years[[86]](#footnote-86) whereas the 'Land' asset class should not be assigned a standard economic life reflecting the non‑depreciating nature of the asset.
* The AER considers that Envestra's proposed standard economic life of 10 years for the 'SCADA' asset class is too short. The AER notes that the proposed capex for the ‘SCADA’ asset class is comprised of hardware-related components (such as the Remote Telemetry Units) which have longer standard economic lives. The AER therefore has determined a standard economic life of 15 years is more appropriate.
* The AER accepts Envestra's proposed weighted average method to calculate the remaining economic lives as at 1 January 2013. However, the AER has updated Envestra's remaining economic lives as at 1 January 2013 to reflect the AER's adjustments to Envestra's opening capital base roll forward (discussed in attachment 2).

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.[[87]](#footnote-87) Opex incorporates labour costs and other non–capital costs associated with providing reference services.

The AER is required to assess Envestra’s forecast opex to decide whether it is satisfied that the forecast opex complies with applicable criteria prescribed by the NGL and NGR. In particular, opex must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services. In addition, opex forecasts must be arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances.[[88]](#footnote-88)

The regulatory regime provides incentives for Envestra to deliver its required services at the lowest sustainable cost. In particular, if Envestra 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) during the access arrangement period. 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 only assesses the following adjustments:

* Annual cost trends, to account for forecast labour and material cost changes, output growth and partial productivity growth.
* 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.

Envestra 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 can be found in attachment 6 and appendix C.

* 1. Draft decision

The AER's draft decision is to approve $293.9 million ($2011) of Envestra’s $364.8 million ($2011) forecast of opex for the 2013-17 access arrangement period for the Victorian network. The AER's draft decision for Envestra Albury is to approve an increased amount of $13.4 million of Envestra's $12.3 million ($2011) forecast. This reduction of approximately $70.8 million and increase of $1.1 million ($2012) for Envestra Victoria and Envestra Albury respectively, reflects the AER view that a number of elements of Envestra's forecast opex do not comply with the criteria governing opex or the criteria for forecasts and estimates:[[89]](#footnote-89) Specifically for Envestra Albury, it accrued a negative carryover under the efficiency carryover mechanism largely due to liabilities paid from provisions in 2010 and 2011. The increased opex ensures Envestra Albury is not penalised twice for those increases. This is discussed in more detail in the following section.

Table 9.1 shows how Envestra’s proposal for its Victorian network opex compares with the AER’s draft decision on opex. Figure 9.1 shows how the AER's draft decision for opex compares to Envestra's proposal, its opex in the 2008–12 access arrangement period, and the opex approved by the ESC for this period. Table 9.2 and figure 9.2 presents the same information as it relates to Envestra Albury. In the 2008–12 access arrangement period, Envestra's actual opex has been on average the same as the ESC approved opex in Victoria and 1.5 per cent higher in Albury. Envestra’s proposed total opex represents a 39.8 per cent real increase on actual expenditure in the current period in Victoria and 43 per cent in Albury.

* + - * 1. Envestra Victoria proposed and approved opex ($million, 2011)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Envestra's proposal | 63.8 | 71.8 | 75.4 | 76.0 | 77.8 | 364.8 |
| AER's draft decision | 57.5 | 58.1 | 58.8 | 59.5 | 60.1 | 293.9 |
| Difference | –6.3 | –13.7 | –16.6 | –16.5 | –17.7 | –70.8 |

Source: AER analysis

* + - * 1. Envestra Albury proposed and approved opex ($million, 2011)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Envestra's proposal | 2.1 | 2.4 | 2.5 | 2.6 | 2.7 | 12.3 |
| AER's draft decision | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 13.4 |
| Difference | 0.5 | 0.3 | 0.2 | 0.2 | 0.0 | 1.1 |

Source: AER analysis

* + - 1. Envestra Victoria total proposed and approved opex ($m, $2011)



Note: Current period opex includes liabilities paid from provisions but excludes movements in provisions.

* + - 1. Envestra Albury total proposed and approved opex ($m, $2011)



Note: Current period opex includes liabilities paid from provisions but excludes movements in provisions. Increased expenditure in 2010 and 2011 relates to liabilities paid from provisions.

* 1. Summary of analysis and reasons

Table 9.3 shows the factors driving opex and differences between Envestra’s proposed opex and the AER’s draft decision on opex for Envestra Victoria for the total 2013–17 access arrangement period. Table 9.4 shows the factors driving opex and differences between Envestra’s proposed opex and the AER’s draft decision on opex for Envestra Albury for the total 2013–17 access arrangement period.

* + - * 1. Envestra Victoria proposed and AER’s draft decision on opex ($million, 2011)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Envestra proposal | AER draft decision | Difference |
| Base year costs | 251.8 | 255.2 | 3.4 |
| Errors | –0.1 |  | 0.1 |
| Labour cost escalation | 21.7 | 5.4 | –16.3 |
| Materials cost escalation | 14.0 | – | –14.0 |
| Network growth | 3.7 | 3.6 | –0.1 |
| Step changes | 42.7 | 6.7 | –35.9 |
| NMF | 16.1 | 11.2 | –4.9 |
| Incentive fee | 3.0 | – | –3.0 |
| ARS | 11.7 | 11.7 | –0.0 |
| Total | 364.8 | 293.9 | –70.8 |

Source: AER analysis

* + - * 1. Envestra Albury proposed and AER’s draft decision on opex ($million, 2011)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Envestra proposal | AER draft decision | Difference |
| Base year costs | 9.1 | 11.8 | 2.7 |
| Errors | –0.0 |  | 0.0 |
| Labour cost escalation | 0.5 | 0.2 | –0.3 |
| Materials cost escalation | 0.6 | – | –0.6 |
| Network growth | 0.1 | 0.1 | 0.0 |
| Step changes | 0.8 | 0.2 | –0.6 |
| NMF | 0.5 | 0.4 | –0.1 |
| Incentive fee | – | – | – |
| ARS | 0.7 | 0.7 | – |
| Total | 12.3 | 13.5 | 1.1 |

Source: AER analysis

As can be seen from table 9.3 and table 9.4, the main differences between Envestra’s proposed opex and the AER’s draft decision on opex relate to step changes and differences in the labour cost escalation. These and other differences are discussed below.

* + 1. Base year costs

Envestra proposed 2011 as the base year, proposing base year expenditure as 2011 actual expenditure less certain costs. The base year costs are determined by taking actual opex from the fourth year of the 2008–12 access arrangement period, indexing these figures and making any required adjustments.

The AER's base year estimate for opex is set on the basis of actual 2011 costs incurred by Envestra. In forming this estimate, the AER made adjustments to the costs incurred by Envestra in 2011 to remove movement in provisions and licence fees.

The AER did not accept the proposed removal of network development costs from the 2011 base year. The AER considers the removal of this cost from the base year is inconsistent with the correct operation of the opex incentive mechanism (discussed in chapter 10). This requires that the base year for determining opex is consistent with the actual opex used to calculate any carryovers arising from the incentive mechanism. Network development expenditure was included in both the actual and forecast opex for the purposes of calculating the efficiency carryover under the incentive mechanism. The AER therefore has not removed this expenditure from the 2011 base year for the purpose of forecasting Envestra's 2013–17 opex allowance.

Provision accounts are used to set aside amounts for the payments of liabilities of uncertain timing or amount for when they arise. A movement in provision occurs when the amount set aside differs to the amount paid out. Envestra's opex forecast for Envestra Victoria included movements in provisions. Envestra's opex forecast for Envestra Albury effectively did not include any expenses for liabilities paid from provision accounts for the 2013–17 access arrangement period. The AER considers the movement in these provisions does not represent actual costs incurred in a given year and should be removed from the base year expenditure. The AER also considers the removal of movements in provision from the base year opex is consistent with the correct operation of the opex incentive mechanism (discussed in chapter 10). In calculating the carryover of efficiency gains and losses under the opex incentive mechanism the AER removed the movement in provisions from Envestra's actual opex. The AER has therefore removed the movement in provisions from actual opex in 2011 for Envestra Victoria and included the liabilities paid from provision in 2011 for Envestra Albury.

The AER's base year estimate is also different to Envestra's estimate because of some other minor adjustments to reflect errors made by Envestra about the actual costs it incurred in 2011, and to remove licence fees, which are recovered through the price control mechanism.

* + 1. Labour and material cost escalators

The AER is not satisfied Envestra's proposed labour and material 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.[[90]](#footnote-90) 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. The AER considers that the consumer price index (CPI) represents the best possible forecast of network materials prices. Appendix C contains the AER’s consideration of the real cost escalators proposed by Envestra.

* + 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 Envestra'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.

In general, the AER considers an 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 covered 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 a 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 Envestra's proposed step changes. These adjustments lead to Envestra's proposed step change related opex being reduced from $42.7 million to $3.2 million for Envestra Victoria and $0.81 million to $0.08 million for Envestra Albury.

* + 1. Network growth

Envestra stated that it will incur additional opex as the number of customers on the network increases. It forecast it would connect, on average, 12 000 net new volume customers to the network in each year of the 2013–17 access arrangement period.[[91]](#footnote-91)

The AER considers Envestra's forecast expenditure for incremental growth was arrived at on a reasonable basis and represents the best forecast possible in the circumstances and delivers a total opex forecast consistent with achieving the lowest sustainable cost of delivering pipeline services.[[92]](#footnote-92)

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. This five year period corresponds to the length of the access arrangement period.

The AER is required under transitional arrangements to ensure increments or decrements resulting from the operation of the incentive mechanism in Envestra's current access arrangement, are properly reflected increments or decrements in its total revenue.[[93]](#footnote-93)

The AER must also consider whether the incentive mechanism proposed by Envestra will encourage efficiency in the provision of services by the service provider and is consistent with the revenue and pricing principles.[[94]](#footnote-94)

The full draft decision and the AER's detailed reasons and analysis on incentive mechanisms can be found in attachment 7.

* 1. Draft decision

The AER does not approve Envestra Victoria's proposed carryover of $4.7 million ($2012) from the   
2008–12 access arrangement period because it has not been calculated according to the incentive mechanism in Envestra Victoria's current access arrangement. The AER has calculated that Envestra Victoria accrued a total carryover of –$8.6 million ($2012) during the 2008–2012 access arrangement period (Table 10.1).

* + - * 1. AER draft decision on Envestra carryover from the 2008­–2012 access arrangement period ($million, 2012)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Envestra proposed | 4.8 | 2.6 | –1.1 | –1.6 | – | 4.7 |
| AER draft decision | 2.1 | –1.0 | –7.5 | –2.2 | – | –8.6 |
| Difference | –2.6 | –3.6 | –6.4 | –0.7 | – | –13.3 |

Source: Envestra Victoria Access Arrangement Information, pp. 177–178, Envestra Vic PTRM , AER analysis

Similarly, the AER does not approve Envestra Albury's proposed carryover of zero from the 2008–12 access arrangement period, which was also not calculated in accordance with the efficiency sharing mechanism set out in its 2008–12 access arrangement. The AER calculated that Envestra Albury has instead accrued –$2.3 million ($2012) to be carried over from the 2008–12 access arrangement period (table 10.2).

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Envestra proposed | – | – | – | – | – | – |
| AER draft decision | –0.7 | –0.7 | –0.7 | –0.2 | – | –2.3 |
| Difference | –0.7 | –0.7 | –0.7 | –0.2 | – | –2.3 |

Source: AER analysis.

The AER does not approve Envestra Victoria and Envestra Albury's proposal to not include an incentive mechanism to apply to opex in the 2013–17 access arrangement. The AER may require the inclusion of one or more incentive mechanisms to encourage efficiency in the provision of services by Envestra Victoria and Envestra Albury.[[95]](#footnote-95) The AER has decided to require Envestra Victoria's and Envestra Albury's access arrangements include the incentive mechanism set out in attachment 7.

The AER approves Envestra Victoria and Envestra Albury's proposal to not include an incentive mechanism to apply to capex in the 2013–17 access arrangement.

* 1. Summary of analysis and reasons

In carrying over incentives from the 2008-12 access arrangement period, the AER considers that the adjustments Envestra made to benchmark opex[[96]](#footnote-96) were not consistent with Envestra's 2008–12 access arrangement for either Albury or Victoria. The AER also found errors in the actual opex Envestra used to calculate the carryover.[[97]](#footnote-97) In particular, the AER considers Envestra did not account for movements in provisions to ensure the expenditure used to calculate carryover amounts reflected the actual expenditure incurred. For these reasons, the AER recalculated the carryover amounts using the approach set out in Envestra's access arrangement for 2008–12.

Envestra Victoria and Envestra Albury proposed to not include an incentive mechanism to apply to either opex or capex in their 2013–17 access arrangements. Envestra considered its outsourcing contract with the APA Group will provide sufficient incentives to achieve lower costs.[[98]](#footnote-98)

The AER does not accept Envestra’s proposal not to include an incentive mechanism applying to opex in the 2013–17 access arrangement. Envestra's forecast opex is based on its historical opex in a single year, consistent with the AER's general approach to determining forecast opex allowances. The AER considers it important to give Envestra a continuous incentive to reduce costs through the operation of an incentive mechanism. An incentive mechanism applying to opex would encourage efficiency in the provision of services by Envestra Victoria and Envestra Albury and is consistent with the revenue and pricing principles.

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 Envestra over the 2013–17 access arrangement period.

Envestra adopted the post-tax framework to derive its revenue requirement for the 2013–17 access arrangement period.[[99]](#footnote-99) 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 Envestra’s business. The AER modelled Envestra’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 this 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 Envestra’s total revenue.[[100]](#footnote-100)

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

* 1. Draft decision

The AER’s draft decision on Envestra’s corporate income tax allowances over the 2013–17 access arrangement period are:

* Envestra Victoria—$20.9 million ($nominal) as shown in table 10.1. This represents a reduction of $19.4 million ($nominal) or 48.2 per cent of Envestra's proposal.
* Envestra Albury—$1.5 million ($nominal) as shown in table 10.2. This represents a reduction of $0.5 million ($nominal) or 23.5 per cent of Envestra's proposal.

Based on the approach to modelling the cash flows in the PTRM for this draft decision, the AER has derived effective tax rates of 23.73 per cent and 33.87 per cent for Envestra's Victorian and Albury networks respectively.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Tax payable | 1.5 | 3.6 | 6.0 | 7.7 | 9.1 | 27.9 |
| Less: value of imputation credits | 0.4 | 0.9 | 1.5 | 1.9 | 2.3 | 7.0 |
| Net corporate income tax allowance | 1.1 | 2.7 | 4.5 | 5.7 | 6.8 | 20.9 |

Source: AER analysis.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2013 | 2014 | 2015 | 2016 | 2017 | Total |
| Tax payable | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 2.0 |
| Less: value of imputation credits | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 |
| Net corporate income tax allowance | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 1.5 |

Source: AER analysis.

* 1. Summary of analysis and reasons

The AER accepts most of Envestra’s methods for calculating its corporate income tax allowance. However, the AER adjusted several of Envestra’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, including:
* Amendments to tax additions from 2007–12 to be consistent with the AER's draft decision on the roll forward of the capital base (attachment 2).
* Splitting the 'Land & buildings' asset class into two separate asset classes of 'Land' and 'Buildings' as set out in the AER's draft decision on depreciation (attachment 5).
* Correcting minor formulae errors in the proposed tax roll forward model.
* The tax depreciation approach for the 'Land & buildings' asset class in group 7 tax assets:
* Consistent with the 2008–12 access arrangement, the AER considers that the 'Buildings' asset class should be depreciated using the straight-line method.
* The AER has not assigned a tax depreciation method for the 'Land' asset class due to the non-depreciating nature of this asset.

In addition, there are various other changes to the building block components in this draft decision that impact forecast revenues (for example, the capital base and opex). These will consequently affect the forecast corporate income tax allowance.

1. Demand forecasts

The NGR requires an access arrangement to include a forecast of pipeline demand over the access arrangement period and the basis on which the forecast has been derived. Demand is an important input into the derivation of Envestra's reference tariffs for its Victorian and Albury gas distribution networks. In particular, 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. Demand forecasts also affect opex and capex linked to network growth. For example, if gas demand decreases and revenue remains largely unchanged, this is likely to result in higher tariffs. However, lower demand could also be expected to reduce capex and opex, somewhat offsetting this effect. Conversely, higher demand could be expected to reduce tariffs, other things being equal.

The AER is required to assess Envestra's demand forecasts to determine whether they have been arrived at on a reasonable basis and represent the best forecast possible in the circumstances, pursuant to r. 74 of the NGR.

The full draft decision and the AER's detailed reasons and analysis on demand forecasts can be found in attachment 9.

* 1. Draft decision

The AER approves Envestra's forecasting methodology as a reasonable basis for determining its forecasts. However, the AER does not approve Envestra's proposed demand forecasts as they do not comply with rule 74(2). The AER’s draft decision makes revisions to Envestra’s demand forecast proposals in respect of the use of effective degree day (EDD) and heating degree days (HDD) for .

* 1. Summary of analysis and reasons

In applying its forecasting methodology, Envestra used some assumptions and data sets that have biased the modelling results. In particular:

* Estimates of effective degree day (EDD) used by Envestra to weather normalise historic gas consumption were based on a projection of EDD between 2005 and 2011, rather than historic data.
* The heating degree days (HDD) data used by Envestra for its Albury network is not the most current data available.

For these reasons the AER considers that Envestra's demand forecasts are not arrived at on a reasonable basis and do not represent the best forecasts possible in the circumstances.[[101]](#footnote-101) The AER's draft decision makes adjustments to the EDD used by Envestra to weather normalise historic gas consumption and updates the HDD data to include data from 2011.

1. Tariff setting – distribution 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.[[102]](#footnote-102)

The AER is required to assess Envestra's proposed reference tariffs against the provisions established by r. 93 and r. 94 of the NGR, and the revenue and pricing principles and the NGO, both established by the NGL. In particular, r. 94 requires that:

* Customers must be divided into tariff classes on the basis of what is economically efficient and the need to avoid unnecessary transaction costs.
* For each tariff class, the revenue recovered should be between the total cost of providing that reference service and the avoidable cost of not providing that reference service to those customers.
* Where a tariff consists of two or more charging parameters, each parameter must:
* take into account the long run marginal cost of the reference service (or element of the service to which the parameter relates)
* be determined with regard to the transaction costs associated with the tariff (or each charging parameter) and whether customers belonging to the relevant tariff class are able or likely to respond to price signals.
* However, if the above point means that a service provider may not recover its expected revenue, the tariffs must be adjusted to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

The AER's role also includes an assessment of Envestra'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 can be found in attachment 10.

* 1. Draft decision

The AER's draft decision is to approve Envestra's proposed structure of reference tariffs for the   
2013–17 access arrangement period. The AER is satisfied that the proposed structure of the reference tariffs complies with the requirements under rules 93 and 94 of the NGR.

However, the quantum of the proposed reference tariffs must be amended as set out in attachment 10 of this draft decision to reflect the AER's draft decision on forecast total revenue and forecast demand.

1. Tariff variation mechanism

The reference tariff variation mechanism:

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

The AER assessed Envestra’s access arrangement 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 can be found in attachment 11.

* 1. Draft decision

The AER does not approve Envestra's proposed tariff variation mechanisms for the 2013‑17 access arrangement period. The AER considers that some elements of Envestra's proposed tariff variation mechanism are not consistent with the NGL and the NGR or that there are alternatives to some elements of Envestra's proposal that better meet the NGO and RPP.

* 1. Summary of analysis and reasons

The AER's draft decision is to make the following amendments to Envestra's proposaled tariff variation mechanism:

* Rebalancing constraint for the annual tariff variation formula—the draft decision does not accept Envestra's proposal to increase its rebalancing constraint. A rebalancing constraint is a mechanism that restricts the amount that a tariff can vary on an annual basis. The AER is not convinced that the current rebalancing constraint has inhibited Envestra's ability to achieve to cost reflective pricing in previous regulatory periods and hence, is not convinced of the need to increase this. Further, a higher rebalancing constraint could lead to increased price volatility and potential price shocks. In sum, the AER considers that the current magnitude of rebalancing constraint in combination with the cost pass through provisions under the NGR provides Envestra with a reasonable opportunity to recover at least its efficient costs, consistent with the RPP.
* Revenue equalisation—the initial reference tariffs and X factors must be amended to reflect the changes to forecast total revenue and forecast demand.
* Cost pass through events—the AER requires two of Envestra's proposed pass through events to be removed, revisions to be made to the definitions of two further pass through events and a new pass through event to be included:
* Amendment of the network user failure event to remove the reference to insolvency. The AER was of the view that this reference did not add to the definition of the event.
* Amendment of the definition of the proposed 'tax change event'—Envestra's proposed definition referred to a direct and material impact on the revenue received. The AER considers this is not relevant; the relevant consideration is that the event is an uncontrollable event that impacts on costs to the business.
* Amendment of the definition of 'insurance event'—Envestra's proposed definition would have meant that this pass through event would have been triggered when the service provider incurred costs beyond its insurance policy limit. The AER is concerned that this definition could alter the incentive to obtain adequate insurance where an insurance cap exists (as it would allow such costs to be passed through to users). To address this, the policy limit should be defined by reference to the policy coverage funded through the 2013‑17 base opex allowance for Envestra in this decision. In addition, in assessing whether this pass through event should apply the AER should consider the efficiency of Envestra’s decisions and actions in relation to the risk of a pass through event, including whether Envestra has taken action to mitigate the risk of the event occurring or the magnitude of the costs of the event.
* Inclusion of a new cost pass through event to allow Envestra to undertake further low pressure mains replacement where it has exceeded the AER's approved volumes (which were set with reference to historic volumes delivered over the 2008-11 access arrangement period). This relates to the AER's draft decision on capex (overview section 6 and attachment 3).
* Inclusion of a new NECF event to allow Envestra to recover any expenditure it incurs in implementing the NECF once it commences in Victoria. The NECF has not yet commenced in Victoria and there is uncertainty surrounding when it will be adopted. For this reason, the AER did not approve Envestra’s proposed opex step change for NECF related expenditure. However, the AER considers that Envestra should be able to recover through this pass through event any expenditure it incurs in implementing NECF once it is adopted in Victoria.

See attachment 7 for more on the AER's draft decision on incentive mechanisms and reasons for its 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 Envestra'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 AER's reasons for its draft decision on the above non-tariff components are provided in attachment 12 and appendix D.

* 1. Draft decision

The AER has decided to accept most of Envestra’s terms and conditions. The AER accepts Envestra's terms and conditions that it considers are consistent with the NGO. The AER received submissions that do not support the AER’s draft 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 Envestra's capacity trading requirements, its terms and conditions for a change of receipt or delivery point and its review submission date. The AER proposes to accept Envestra’s proposal in relation to queuing arrangements, its extensions and expansions policy, and its revision commencement date.

* 1. Summary of analysis and reasons

The AER has undertaken significant consultation in the process of assessing Envestra's proposed terms and conditions for this draft decision. The AER held an industry workshop, and considered stakeholder submissions and Envestra's response to those submissions.

The AER sought to facilitate increased engagement between Envestra and retailers on Envestra's proposed terms and conditions. The objective was to foster agreement between Envestra and key users on the proposed terms and conditions prior to the release of the AER's draft decision where possible, and to highlight areas of significant disagreement or particular concern.

As part of this engagement process, the AER hosted a workshop attended by representatives of the three Victorian gas distribution network owners and a number of retailer businesses. This workshop provided each of the parties attending with an opportunity to discuss the network owners' proposed terms and conditions.

Discussion during the workshop centred on the impact that NECF would have on the structure of the proposed terms and conditions. Further, participants highlighted inconsistencies in the terms and conditions across access arrangements, which could increase retailer transaction costs. The minute of the workshop is available on the AER's website at: <http://www.aer.gov.au/node/14473>

At the workshop, the gas network owners committed to consider the retailers’ submissions and seek to resolve any disputes prior to the release of the AER’s draft decision in September 2012. They also committed to take steps to minimise inconsistencies across their access arrangements, and clarify any drafting ambiguities.

Following the workshop, the AER received submissions on terms and conditions from some retailers, which identified areas of concern and gave reasons for those concerns (discussed in more detail below). The AER subsequently wrote to Envestra giving it the opportunity to consider the submissions made by stakeholders in response to its proposal.

The AER seeks further feedback from stakeholders on terms and conditions in their submissions to this draft decision. The AER expects that Envestra will undertake further consultation with users before it submits its revised access arrangement to the AER. The AER may hold another terms and conditions workshop to facilitate the parties' understanding of the operation of the terms and conditions.

1. Interlinkages between decision components

In assessing each element of Envestra's access arrangement, including the building blocks, the AER has taken into account the interlinkages between the building blocks and between the elements of Envestra's access arrangement proposal. 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 that 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 costs that are uncontrollable and not otherwise provided in the forecast capex and opex allowances. This for example relates to certain costs for additional mains replacement and costs associated with the commencement of NECF in Victoria, which were not included as part of the forecast allowances (see attachments 3, 6 and 11).
* Non price terms and condition and opex—the efficient level of insurance that the AER has allowed for in Envestra'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. The AER's smoothed revenues are derived from the AER's smoothed tariffs. Smoothed tariffs multiplied by forecast demand equals the smoothed revenue. The smoothed revenues are equal in net present value terms to Envestra’s unsmoothed building block revenue requirements. [↑](#footnote-ref-1)
2. The AER derived this estimate based on annual consumption of 60GJ per annum. This is consistent with data sourced from the ESC’s published standing offer bills contained in its Energy retailers comparative performance report - Pricing 2010–11, and Envestra’s approved tariffs for 2010 and 2011. The averages of the tariffs across Envestra’s distribution zones applied in the AER’s analysis uses a weighted average of volume by tariff class. [↑](#footnote-ref-2)
3. Under s.8 of the NGL a service provider is a person who owns, controls or operates a gas pipeline. [↑](#footnote-ref-3)
4. Providers of gas distribution services typically negotiate contracts to sell pipeline services to customers such as energy retailers. Section 322 of the NGL provides that contracts between service providers and users may differ from those approved by the AER as part of an access arrangement review. In the event of a dispute, however, a user or prospective user may request dispute resolution by the AER under Chapter 6, Part 3 of the NGL. In the event that the AER makes an access determination in order to resolve the dispute, it must give effect to the access arrangement: s. 189. [↑](#footnote-ref-4)
5. NGR, r. 40. [↑](#footnote-ref-5)
6. NGL, s. 28(1). [↑](#footnote-ref-6)
7. NGL, s. 28(2). [↑](#footnote-ref-7)
8. NGL, s. 132. [↑](#footnote-ref-8)
9. NGR, r. 58(1). [↑](#footnote-ref-9)
10. NGR, r. 58(2). [↑](#footnote-ref-10)
11. NGR, r. 59(1); r. 71(2). [↑](#footnote-ref-11)
12. NGR. r. 59(4). [↑](#footnote-ref-12)
13. NGR, r. 59(2). [↑](#footnote-ref-13)
14. NGR, r. 41(1). [↑](#footnote-ref-14)
15. NGR, r. 41(2). [↑](#footnote-ref-15)
16. NGR, r. 64(1). [↑](#footnote-ref-16)
17. NGR, r. 65(2). [↑](#footnote-ref-17)
18. NGR, r. 59(2). [↑](#footnote-ref-18)
19. NGR, r. 60(1). [↑](#footnote-ref-19)
20. 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-20)
21. NGR, r. 59(5)(b) & (c) [↑](#footnote-ref-21)
22. NGR, r. 62(1). [↑](#footnote-ref-22)
23. NGR, r. 62(2). [↑](#footnote-ref-23)
24. NGR, r. 62(4). [↑](#footnote-ref-24)
25. NGR, r. 62(7). [↑](#footnote-ref-25)
26. NGR, r. 11. [↑](#footnote-ref-26)
27. NGR, r. 11(1)(c). [↑](#footnote-ref-27)
28. NGR, r. 13. [↑](#footnote-ref-28)
29. NGR, r. 42(1). [↑](#footnote-ref-29)
30. NGL, s. 46. [↑](#footnote-ref-30)
31. NGL, ss. 324 to 329 (Division 1 of Part 2 of Chapter 10 of the NGR). [↑](#footnote-ref-31)
32. NGL, s. 329(1). [↑](#footnote-ref-32)
33. This may relate to operating expenditure and/or capital expenditure depending on the incentive mechanism. [↑](#footnote-ref-33)
34. 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-34)
35. AER, *Access arrangement guidelines*, March 2009, p. 55. [↑](#footnote-ref-35)
36. The AER's smoothed revenues are derived from the AER's smoothed tariffs. Smoothed tariffs multiplied by forecast demand equals the smoothed revenue. The smoothed revenues are equal in net present value terms to Envestra’s unsmoothed building block revenue requirements. [↑](#footnote-ref-36)
37. Includes carryover amounts. [↑](#footnote-ref-37)
38. The AER derived an estimate of the proportion of distribution charges that contribute to the typical residential and non-residential (businesses) customer bills based on annual consumption of 60GJ and 500 GJ per annum, respectively. This is consistent with data sourced from the ESC’s published standing offer bills contained in its Energy retailers comparative performance report – Pricing 2010–11, and Envestra’s approved tariffs for 2010 and 2011. The averages of the tariffs across Envestra's distribution zones applied in the AER’s analysis uses a weighted average of volume by tariff class. [↑](#footnote-ref-38)
39. The AER has calculated a typical residential bill to be $1132 per year for Envestra Victoria customers and $1171 per year for Envestra Albury customers. The typical residential bill for Envestra Victoria was calculated as the average standing offer contract for a customer consuming 60 GJ per annum. The average was calculated across each of Envestra’s distribution zones. Standing offer prices charged by retailers represent charges applied to those customers who have not switched from their incumbent or local retailer. [↑](#footnote-ref-39)
40. Envestra Albury’s retail prices are regulated by IPART. Residential and non-residential bills were calculated based upon information contained in IPART’s price comparator website, [www.myenergy.offers.nsw.gov.au](http://www.myenergy.offers.nsw.gov.au), viewed on 31 August 2012. The residential bill is based upon bi-monthly billing with consumption of 10 GJ per bill, and the non‑residential offers based upon annual consumption of 500 GJ applying actual tariffs from market offers available from Origin and TRUEnergy, exclusive of discounts and GST. [↑](#footnote-ref-40)
41. The AER has calculated a typical non-residential bill to be $6786 per year for Envestra Victoria customers and $8333 per year for Envestra Albury customers. The typical non-residential bill for Envestra Victoria was calculated as the average standing offer contract for a customer consuming 500 GJ per annum. The average was calculated across each of Envestra’s distribution zones. Standing offer prices charged by retailers represent charges applied to those customers who have not switched from their incumbent or local retailer. The Envestra Albury non-residential bill calculations are based on current market offers published by IPART. [↑](#footnote-ref-41)
42. NGR r. 101(2). [↑](#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 2013–17 access arrangement period. [↑](#footnote-ref-44)
45. NGR, r. 77(2). [↑](#footnote-ref-45)
46. The AER identified these discrepancies with Envestra, who provided a revised roll forward model to reconcile the values: Envestra, Response to AER information request 10 regarding the reconciliation of 2007-2011 proposal capex with Envestra’s audited regulatory accounts, 19 June 2012. [↑](#footnote-ref-46)
47. Envestra, Access arrangement information, March 2012, pp. 166–167. [↑](#footnote-ref-47)
48. NGL, ss.23 and 24. [↑](#footnote-ref-48)
49. NGR, r. 40. [↑](#footnote-ref-49)
50. The AER has not assessed the capex for 2012. The AER is required under the NGR to properly reflect any increments or decrements arising from the operation of the ESC’s capex incentive scheme. The AER has applied the transitional provision. This requires the AER to include in the capital base roll forward benchmark capex for 2012, adjusted for actual growth. At the next access arrangement review, the AER will assess whether Envestra's actual capex for 2012 is conforming capex under the NGR. [↑](#footnote-ref-50)
51. Envestra, AAI, 30 March 2012, p.123. [↑](#footnote-ref-51)
52. Appendix C contains the AER’s more detailed consideration of the real cost escalators proposed by Envestra. [↑](#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 Envestra's proposed paired bonds extrapolation method, including the selection criteria to choose the paired bonds. However, Envestra appears to have incorrectly applied the selection criteria in its proposal. Accordingly, the AER has corrected this error in applying Envestra's proposed paired bonds extrapolation method. [↑](#footnote-ref-55)
56. AER, Final decision: APT Petroleum Pipeline Pty Ltd, Access arrangement final decision, Roma to Brisbane Pipeline 2012–13 to 2016–17, August 2012, p. (AER, Final decision: APTPPL access arrangement, August 2012). [↑](#footnote-ref-56)
57. AER, Final distribution determination, Aurora Energy Pty Ltd 2012–13 to 2016–17, April 2012, p. 29, (AER, Final decision: Aurora distribution determination, April 2012) [↑](#footnote-ref-57)
58. Reserve Bank of Australia, Letter to the ACCC: The Commonwealth Government Securities Market, 16 July 2012; Australian Treasury and Australian Office of Financial Management, Letter to the ACCC: The Commonwealth Government Securities Market, 18 July 2012; M. McKenzie, and G. Partington; Report to the AER: Review of regime switching framework and critique of survey evidence, 7 September 2012; M. McKenzie and G. Partington, Report to the AER: Review of NERA report on the Black CAPM, 24 August 2012; M. Lally, The cost of equity and the market risk premium, 25 July 2012; M. Lally, The risk free rate and the present value principle, 22 August 2012. [↑](#footnote-ref-58)
59. Envestra, Access arrangement submission: Part A, 30 March 2012. [↑](#footnote-ref-59)
60. This estimate reflects the paired bonds sample proposed by Envestra. [↑](#footnote-ref-60)
61. Envestra, Access arrangement information, 30 March 2012; APA GasNet, Access arrangement submission, 31 March 2012; Envestra, Access arrangement information, 30 March 2012. [↑](#footnote-ref-61)
62. BHP Billiton, Submission to the AER: APA GasNet access arrangement proposal, 29 June 2012, p. 17. [↑](#footnote-ref-62)
63. EUCV, Submission to the AER: APA GasNet access arrangement proposal,18 June 2012, p. 50. [↑](#footnote-ref-63)
64. 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-64)
65. Specifically, all bonds (sourced from Bloomberg) were from Australian companies, denominated in Australian dollars and issued in Australia. Further, bonds could be either fixed or floating and either bullet, callable or putable. Different scenarios used other slightly different criteria, such as a minimum term (two or five years), and a range of credit ratings (BBB-/BBB/BBB+ or BBB/BBB+). [↑](#footnote-ref-65)
66. 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-66)
67. 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 two 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-67)
68. ERA, Revised decision, Access arrangement revisions for the Mid-West and South-West Gas Distribution System, 25 June 2012, pp. 5–12. [↑](#footnote-ref-68)
69. Based on Envestra's indicative averaging period, this ‘bond-yield approach’ estimate incorporates 60 bonds with an average term to maturity of 5.94 years. [↑](#footnote-ref-69)
70. Australian Competition Tribunal, Application by Envestra Limited (No 2) [2012] ACompT 3, 11 January 2012, paragraphs 95, 118, 120–121; see also Australian Competition Tribunal, Application by APT Allgas Energy Ltd [2012] ACompT 5, 11 January 2012. [↑](#footnote-ref-70)
71. This estimate reflects an adjustment to Envestra's proposed extrapolation approach. This adjustment is discussed in detail in attachment 4 of this draft decision. [↑](#footnote-ref-71)
72. R. 87, NGR. [↑](#footnote-ref-72)
73. Australian Treasury and Australian Office of Financial Management, The Commonwealth Government Securities Market, July 2012. [↑](#footnote-ref-73)
74. Reserve Bank of Australia, The Commonwealth Government Securities Market, July 2012. [↑](#footnote-ref-74)
75. Federal Court of Australia, ActewAGL Distribution v The Australian Energy Regulator [2011] FCA 639, 8 June 2011, paragraph 148. [↑](#footnote-ref-75)
76. McKenzie, M. and G. Partington, G., Supplementary report on the market risk premium, 22 February 2012, pp. 11–-12; Lally, M., The risk free rate and the present value principle, 22 August 2012, p. 3. [↑](#footnote-ref-76)
77. The Treasury and AOFM advice indicates that the movement in the Australian yield curve reflects a range of factors, including the changed stance of monetary policy and global financial market instability. Australian Treasury and Australian Office of Financial Management, The Commonwealth Government Securities Market, July 2012. [↑](#footnote-ref-77)
78. Australian Competition Tribunal, Telstra Corporation Limited ABN 33 051 775 556 [2010] ACompT 1, 10 May 2010, paragraph 417. [↑](#footnote-ref-78)
79. NGR, r. 89(1)(a). [↑](#footnote-ref-79)
80. NGR, r. 89(1)(b). [↑](#footnote-ref-80)
81. NGR, r. 89(1)(c). [↑](#footnote-ref-81)
82. NGR, r. 89(1)(d). [↑](#footnote-ref-82)
83. NGR, r. 89(1)(e). [↑](#footnote-ref-83)
84. NGR, schedule 1, r. 5(1)(d). [↑](#footnote-ref-84)
85. 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-85)
86. This is consistent with the standard economic life approved by the ESC for 2008–12. See ESC, Envestra GAAR 2008 Revenue Model Further Final Decision, 2008. [↑](#footnote-ref-86)
87. NGR, r. 69. [↑](#footnote-ref-87)
88. NGR, r. 74. [↑](#footnote-ref-88)
89. NGR, r. 91, r. 71 [↑](#footnote-ref-89)
90. Appendix C contains the AER’s more detailed consideration of the real cost escalators proposed by Envestra. [↑](#footnote-ref-90)
91. Envestra, Victorian Access Arrangement Information, 30 March 2012, p. 105. [↑](#footnote-ref-91)
92. NGR, r. 74(2), r. 91(1) [↑](#footnote-ref-92)
93. NGR, Schedule 1, clause 5(1)(a). [↑](#footnote-ref-93)
94. NGR, rule 98. [↑](#footnote-ref-94)
95. NGR, r. 98. [↑](#footnote-ref-95)
96. In particular, Envestra did not remove its licence fees from actual opex for 2011, which it did for the other years, and included an incorrect estimate of its network management fee for 2011. [↑](#footnote-ref-96)
97. Some items were included that should not have been since they did not form part of the benchmark opex. [↑](#footnote-ref-97)
98. Envestra, Victoria Access arrangement information March 2012, p. 179; Envestra, Albury Access arrangement information March 2012, pp. 163­–164. [↑](#footnote-ref-98)
99. Envestra, Post tax revenue model, March 2012. [↑](#footnote-ref-99)
100. NGR, r. 76(c). [↑](#footnote-ref-100)
101. NGR, rule 74(2). [↑](#footnote-ref-101)
102. NGR, r. 72(1)(j), 95(1) and 95(3)(a). [↑](#footnote-ref-102)