Draft Decision

Australian Gas Networks (Victoria & Albury) Access Arrangement 2023 to 2028

(1 July 2023 to 30 June 2028)

Overview

December 2022

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601
Tel: 1300 585 165

AER reference: AER212593

Invitation for submissions

Australian Gas Networks (Victoria and Albury) (**AGN**) has the opportunity to submit an access arrangement revised proposal in response to this draft decision by **24 January 2023**.

Interested stakeholders are invited to make a submission on both our draft decision and AGN's revised proposal (once submitted) by **23 February 2023**.

We will consider and respond to all submissions received by that date in our final decision.

Submissions should be sent to: AGNVIC2023@aer.gov.au

Alternatively, submissions can be sent to:

Arek Gulbenkoglu
General Manager
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Submissions should be in Microsoft Word or another text readable document format.

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested.

Parties wishing to submit confidential information should:

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

All non-confidential submissions will be placed on our website.[1]

[1] For further information regarding our use and disclosure of information provided to us, see the *ACCC/AER Information Policy* (June 2014), which is available on our website: www.aer.gov.au/publications/corporate-documents/accc-and-aer-information-policy-collection-and-disclosure-of-information.

Note

This Overview forms part of the AER's draft decision on the access arrangement that will apply to AGN for the 2023–28 access arrangement period. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Services covered by the access arrangement

Attachment 2 – Capital base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency carryover mechanism

Attachment 9 – Reference tariff setting

Attachment 10 – Reference tariff variation mechanism

Attachment 11 – Non-tariff components

Attachment 12 – Demand

Attachment 13 – Capital expenditure sharing scheme

Executive summary

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable, and affordable energy future for Australia. The regulatory framework governing gas transmission and distribution networks is the National Gas Law and Rules (NGL and NGR). Our work is guided by the National Gas Objective (NGO).

A regulated gas network business must periodically apply to us for a ruling on network charges, in the form of an access arrangement specifying the services it will provide, the tariffs for those services, and the other terms and conditions on which they will be provided. On 1 July 2022, AGN submitted a proposal for its Victorian and Albury gas distribution networks for the 1 July 2023 to 30 June 2028 access arrangement period (2023–28 period). The next day, the Victorian Government released its Gas Substitution Roadmap (Roadmap) to help Victoria navigate the path to net zero emissions. We allowed AGN to submit an addendum to its proposal outlining areas in which it specified proposed changes in response to the Roadmap. This draft decision applies to AGN's amended proposal.

AGN's proposal would allow it to set gas network charges resulting in the recovery of $1,256.0 million ($ nominal, smoothed) in expected revenue from consumers over the 2023–28 period. Our draft decision is not to accept that proposal. Our draft decision, if implemented, would currently allow AGN to recover $1,298.3 million in expected revenue from consumers over the 2023–28 period, or $42.3 million (3.4%) more than proposed.

This draft decision marks the mid-point in our assessment of AGN's proposal. Final decision outcomes may be significantly different:

- We have accepted much of AGN's proposal, including its forecasts of capital expenditure (capex) and operating expenditure (opex), and its proposed amount of accelerated depreciation. It is now open to AGN to submit additions or other amendments in an access arrangement revised proposal to address matters raised in this decision. This may result in changes to the revenue requirement we ultimately approve.
- Movements in market variables such as interest rates, bond rates and expected inflation are currently acting to increase the return on AGN's capital base. Updates for these movements are a standard part of our decision making process and do not result from differences between us and AGN. Our final decision will reflect the latest available market information and therefore will likely be different to what is forecast at this draft decision stage.

For illustrative purposes only, we estimate the potential impact of AGN's proposal would be a 14.5% nominal increase to average network charges over the next 5 years, at a system-wide level. While our draft decision would allow for a higher revenue than AGN's proposal, driven mainly by a higher rate of return, our adopted revenue smoothing approach means the modelled impact of our draft decision is a nominal increase of around 11.8%.

In arriving at this draft decision, we make the following observations. Transformation in the energy system and the explicit policy goal of reaching net zero emissions by 2050 create considerable uncertainties in future gas demand expectations.

The Roadmap steps out how Victoria will move towards net zero emissions whilst providing greater choice and cutting energy bills through the use of energy efficiency, electrification, hydrogen and biogas. Change will be driven through several initiatives including stronger incentives to switch from gas to efficient electric appliances, and the removal of planning provisions requiring new housing developments to connect to gas. Whilst these measures are expected to accelerate the decline of gas demand, there is uncertainty as to how quickly that will happen.

As usage falls and fewer consumers remain connected, the ongoing costs of maintaining the gas network are shared by fewer consumers over time. This poses a number of challenges, including that the cost burden of past investments may be disproportionately borne by future consumers and that infrastructure assets may be economically stranded. These considerations prompted us to explore – through the release of our 2021 information paper, *Regulating gas pipelines under uncertainty* – what we can do to manage these risks in our regulation of gas distribution networks.

The decision we make on this access arrangement cannot resolve the current uncertainty. It can, however, begin to manage some of the risks that it presents and mitigate their potential impact. We have been mindful of these challenges in arriving at an outcome with sufficient flexibility to balance affordability with the safe, reliable and secure delivery of essential energy services, so that consumers are better off both now and in the future.

This draft decision approaches this in two ways:

- by ensuring consumers pay no more than necessary and closely scrutinising forecasts of capex and opex that are required to provide a safe, secure and reliable gas supply
- by taking small steps now to manage the equitable recovery of those costs from a declining, and sometimes vulnerable, consumer base over time.

Our review of the proposed forecasts of capex and opex recognise that, as long as there is demand from consumers and businesses for gas distribution services, a level of investment in the network that provides those services is necessary to ensure a safe, reliable and secure gas supply.

We have accepted AGN's total opex forecast as our alternative estimate was not materially different from AGN's total opex forecast proposal. While the difference was not material, we arrived at our alternative estimate in a different way to AGN, with many of these differences being mechanical in nature (including correcting errors and updating for inflation and wage price growth) and offsetting one another (including as a result of not including step changes related to cyber security and renewable gas communications and education). Our assessment is that AGN's total opex forecast proposal is prudent and will enable it to efficiently operate and maintain its network over the 2023–28 period.

Our draft decision accepts AGN's total forecast capex. Following reductions to projected connections and growth driven capex in response to the Roadmap, this forecast is a significant step down from the current period. We have looked closely at remaining growth capex and other key drivers of the proposed expenditure for 2023–28. These include continuation of AGN's mains replacement program and investment in information and communications technology required to maintain acceptable levels of service on the network. Our assessment is that the total capex forecast proposed will allow AGN, acting prudently, efficiently and in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services over the 2023–28 period.

Capex mostly relates to assets with long lives, the costs of which are recovered – or depreciated – over several access arrangement periods. In the context of the anticipated reductions in demand driven by the Roadmap, and subsequent reduced forecasts for investment in new gas connections and network growth, we consider there is sufficient evidence, backed up by a convincing business narrative, to adopt the level of accelerated depreciation that AGN has proposed.

For the purposes of this draft decision, we have set accelerated depreciation to target a 0% per annum real price change. We consider that consumers need to be further consulted on AGN's proposed approach to, and the level of, accelerated depreciation included in its proposal and the impact it will have in this and future access arrangement periods. We acknowledge that the final decision outcome on accelerated depreciation may therefore differ from this draft decision. By taking measured steps now to bring forward the cost recovery of efficient investments, accelerated depreciation would provide investment certainty for capex still needed to maintain a safe, reliable and secure gas supply. In doing so, it mitigates the risk of material price increases as costs are recovered from a declining consumer base. It is also important to consider the impact accelerated depreciation may have on price stability and affordability. If not balanced carefully, higher prices that flow from accelerated depreciation in the short term can potentially drive accelerated disconnections from the gas network. A balance needs to be struck between what consumers pay now to mitigate future price increases, and the risk of greater increases in the future if mitigation is delayed. We consider that consumers need to be further consulted on this topic. Subject to additional consultation, we acknowledge that the final decision outcome on accelerated depreciation may differ from the draft decision.

As more consumers choose to move permanently from gas to other sources of energy, the cost of removing gas connection assets from individual premises and the safety risks associated with leaving dormant connection assets in situ have come under scrutiny. In reviewing AGN's proposal, we have considered the efficiency of the cost of abolishing a gas connection and the broader question of how these costs are recovered from consumers over time. This raises the question as to who should bear this cost – for example, the individual who has chosen to disconnect from the gas network, or to socialise the cost across the consumer base. This may create a risk of leaving a diminishing pool of those least able to move to carry this cost burden, as well as higher maintenance costs to keep the network going. In addition, the recovery of these costs may act as a barrier to the switch to alternative fuels. There may also be a discussion to be had around the merits of permanent abolishment versus temporary disconnection of the service, subject to safety considerations. The most equitable solution to this question warrants further debate.

Our draft decision does not accept AGN's proposed classification of small consumer connection abolishment as an ancillary reference service. While we accept that small consumer connection abolishments should be price regulated, and so should be a reference service, we are not yet convinced that levying abolishment costs on individual disconnecting consumers (as an ancillary service) is the most appropriate way forward. Our draft decision is to keep open the two cost recovery approaches described above and to invite AGN's revised proposal and stakeholder submissions to comment on the merits of each.

Regulatory proposals benefit from genuine engagement with consumers, and that to deliver real benefits it can be a demanding but rewarding process for all. AGN engaged early and widely on its proposal and demonstrated a strong commitment to building a constructive dialogue with consumers and consumer advocates. The lengthy nature of this engagement has meant that a lot of these discussions pre-dated subsequent significant policy and economic changes. While we've seen the benefits of early engagement in considered and impactful submissions to this review, it is not surprising that there is still some lack of consensus on certain issues whilst the impact of these changes is being considered by stakeholders. Maintaining and increasing this level of engagement will play a critical role in resolving the issues that have been most contentious, and identified in our draft decision, as requiring further consideration. We expect AGN's commitment to engagement to continue as it works with consumers to arrive at its revised proposal.

Contents

1 Our draft decision

AGN's access arrangement proposal sets out the services it will provide over the 2023–28 period, the tariffs for those services, and the terms and conditions on which they will be provided.

The AER's decision on an access arrangement proposal must be to either approve it in its entirety, or not at all. Our draft decision indicates whether we are prepared to approve the proposal as submitted and, if not, the nature of the amendments that are required in order to make the proposal acceptable to us. At the centre of our decision is the forecast total revenue requirement for the provision of the regulated reference services over the next 5 years. In the sections below, we briefly outline what is driving the expected revenue in this draft decision, and the key differences between our draft decision revenue of $1,298.3 million ($ nominal, smoothed) compared to AGN's proposed $1,256.0 million.

Since AGN lodged its proposal, we have seen increases in interest rates. In this draft decision, we have employed current interest rates rather than the placeholder values in AGN's proposal, as set out in section 3.2. It is important that we update for the latest market data so that our decision reflects current financial market conditions. This enables AGN to attract the capital it needs to provide the services that consumers want. Moreover, the return investors receive on their assets should reflect the risks of their investment. These risks include the prospect of inflation eroding the investor's purchasing power. An allowance for expected inflation provides compensation for this risk.

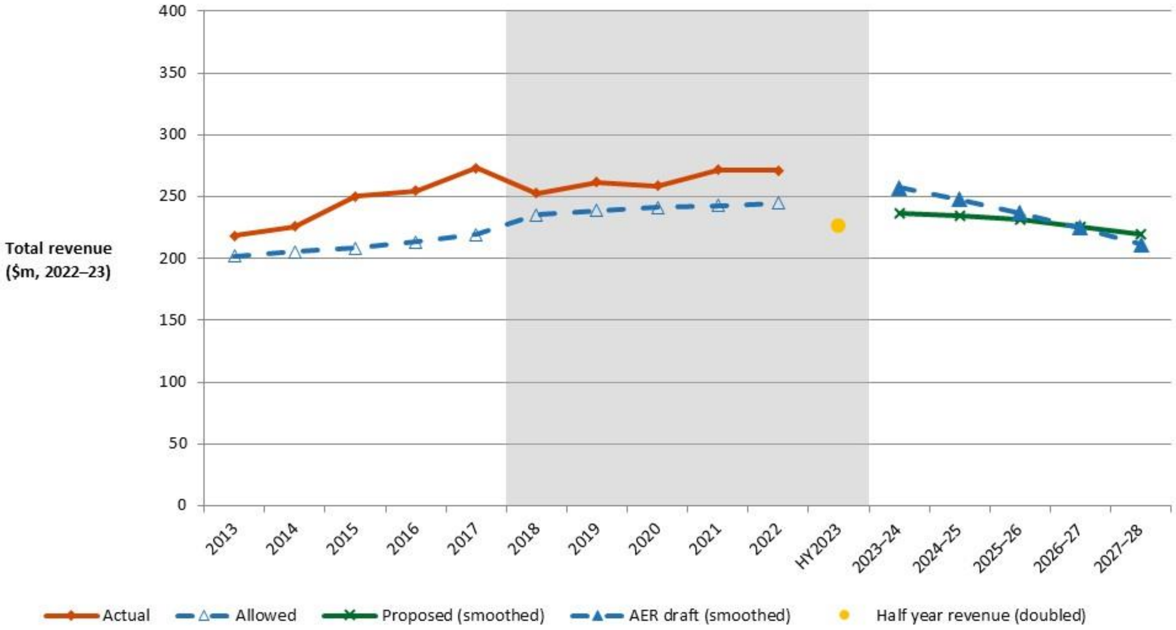
- The 'return on capital' building block applies a nominal rate of return to the capital base. As the nominal rate of return includes expected inflation, part of that building block compensates for expected inflation. Higher expected inflation increases the return on capital mainly due to the capital base and capex.
- The 'return of capital' building block removes expected inflation indexation of the capital base from forecast depreciation. This avoids compensation arising from the effects of inflation being double-counted by including it in the 'return on capital' building block and also as a capital gain (through the indexation of the capital base). Higher expected inflation, therefore, reduces the regulatory depreciation allowance.
- Other building blocks (such as opex and revenue adjustments) include an inflation component, as the costs forecast in real dollar terms are escalated to nominal dollars using expected inflation in determining the required nominal revenues. Higher expected inflation will increase opex and revenue adjustments.

1.1 What is driving revenue?

Over time, inflation impacts the spending power of money. To compare revenue from one period to the next on a like-for-like basis, in this section we use 'real' values based on a common year (2022–23) that have been adjusted for the impact of inflation instead of the nominal values above.

Figure 1 shows how revenue would change over the next 5 years in real terms, under AGN's proposal and our draft decision.

Figure 1 Change in regulated revenue over time ($ million, 2022–23)



Source: AER, *AGN-PTRM - Final Decision - 2022 RoD update*; AGN, *AGN Revisions to Final Plan 2023-28_Attachment 1.5A GSR Response_Post Tax Revenue Model*, September 2022; AER, *AER DD - AGN - 2023-28 PTRM*, December 2022

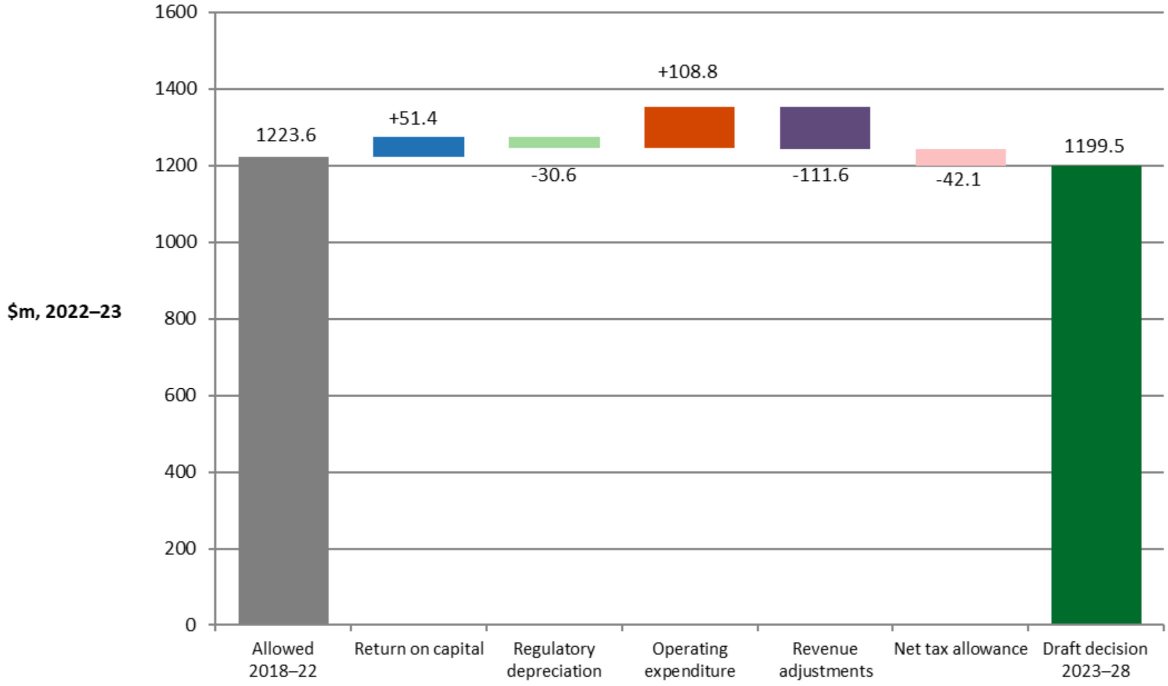
The assumptions in AGN's proposal would have resulted in total revenue that was $54.6 million (4.5%) (real, smoothed) lower than approved for the current (2018–22) period. The modelled impact of our draft decision is currently a decrease of $24.9 million (2.1%) (real, smoothed) compared to the current period.

Figure 2 highlights the key drivers of the change between AGN's expected real revenue approved for the 2018–22 period and that approved in this draft decision for the 2023–28 period.

In our draft decision, AGN's return on capital for the 2023–28 period is higher than for the 2018–22 period. AGN's capital base is projected to decline in value in real terms because of lower forecast capex and accelerated depreciation of assets. Total forecast capex for the 2023–28 period is lower than AGN's forecast capex for the 2018–22 period. However, the placeholder rate of return for the 2023–28 period is higher on average than applied for the 2018–22 period, and will be updated in next year's final decision in accordance with the incoming and binding 2022 Rate of Return Instrument.

The return of capital (regulatory depreciation) for the 2023–28 period is lower than for the 2018–22 period. Depreciation is a method used in our decision to allocate the cost of an asset over its useful life, rather than allocating the full cost to the period in which it is incurred. AGN's 'price cap' form of control means that declining demand will drive the prices it charges to recover its revenue requirement upwards. Our draft decision allows for accelerated depreciation of AGN's capital base as a way to balance the recovery of investment between current users of the network and a declining number of future users. The higher inflation rates we're currently seeing would (all else held constant) be reducing regulatory depreciation. Here, that effect is more than offsetting the impact of accelerated depreciation.

Figure 2 Change in building block revenue, 2018–22 to 2023–28 ($ million, 2022–23, unsmoothed)



Source: AER, *AGN-PTRM - Final Decision - 2022 RoD update*; AER, *AER DD - AGN - 2023-28 PTRM*, December 2022.

Forecast opex for the 2023–28 period is higher than for the 2018–22 period, most significantly as a result the inclusion of previously capitalised overheads as opex, and the reclassification of certain capex activities (such as sampling or repair and maintenance type activities) as opex. This means that these costs will be recovered through revenues in the period incurred rather than distributed across periods through the regulatory depreciation allowance.

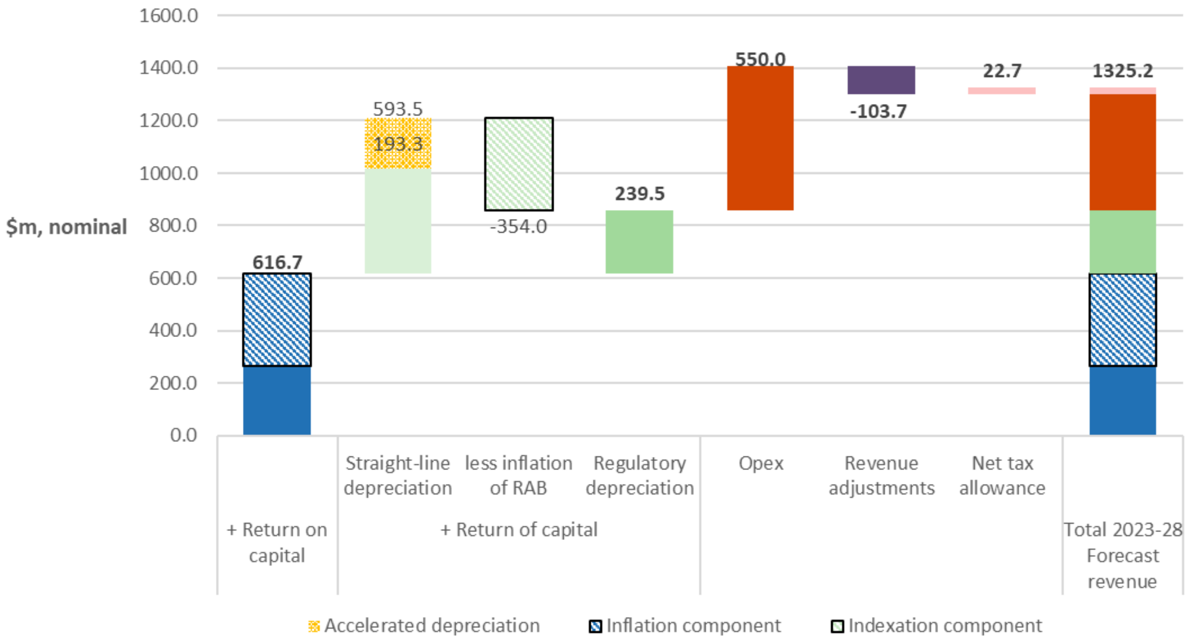
The cost of corporate income tax for the 2023–28 period is lower than for the 2018–22 period, primarily due to applying our regulatory tax approach following our 2018 tax review.

Revenue adjustments for the 2023–28 period is lower than the 2018–22 period. This is primarily driven by the inclusion for a one-off reduction (or 'true up') of $56.6 million to complete the transition of the access arrangement from a calendar year to a financial year cycle.[2] It is also driven by the existing opex incentive mechanism which is now a negative revenue adjustment for the 2023–28 period instead of a positive amount compared to the last period and the inclusion of a negative revenue adjustment resulting from the introduction of the Capital Expenditure Sharing Scheme (CESS) for the first time in this period.

Figure 3 isolates the impact of rising inflation from other parts of our draft decision.

2 The true up figure of $56.6 million is inclusive of WACC adjustments to reflect the time value of money.

Figure 3 Inflation components in draft decision revenue building blocks



Source: AER Analysis
Note: The opex building block and total 2023-28 forecast building block revenue is inclusive of ARS revenue.

1.2 Key differences between this draft decision and AGN's proposal

Our draft decision accepts much of AGN's proposal for the 2023–28 period, including forecast capex and opex. Key areas of difference between our calculation of expected revenue and MGN's are:

- our higher return on capital amount of $616.7 million ($ nominal) compared with AGN's proposed $539.7 million, driven by our higher rate of return
- our lower regulatory depreciation amount of $239.5 million ($ nominal) compared with AGN's proposed $270.9 million, driven by higher inflation increasing indexation of the capital base.

Movements in market variables, including interest rates and expected inflation have led to higher revenue outcomes in our draft decision compared with AGN's proposal. These include:

- higher expected inflation, based on the Reserve Bank of Australia's (RBA) November 2022 Statement on Monetary Policy (3.37% per annum compared with 3.05% in AGN's proposal). While this decreased the return of capital (regulatory depreciation) relative to AGN's proposal, it increased the projected return on the capital base and the indexation of the capital base.
- our updated calculation of AGN's rate of return, which increased to 5.65% from the AGN's placeholder estimate of 5.16%.

These updates are a standard part of our decision-making process and do not reflect areas of difference between us and AGN.

This draft decision marks the mid-point in our consultation on AGN's proposal, and final decision outcomes on most of these components are likely to differ. The components of forecast revenue will also change when we update our final decision for movements in market variables, such as interest rates, bond rates and inflation. It is now open to AGN to submit additions or other amendments in an access arrangement revised proposal to address matters raised in this draft decision.[3] The amendments must be limited to those necessary to address matters raised in our draft decision unless we approve further amendments.[4] They should be limited to externally driven changes that AGN was not in a reasonable position to respond to at the time of its initial proposal. They should also be subject to further engagement with consumers.

1.3 AGN's consumer engagement

Genuine, high quality consumer engagement by AGN is essential to ensuring that its proposal is driven by consumer preferences, supports the delivery of services that meet the needs of its consumers, and does so at a price that is affordable and efficient. We've seen through experience that a regulatory proposal developed through genuine engagement with consumers is more likely to be largely, or wholly, accepted in our decisions. Our framework for considering consumer engagement in access arrangement determinations for gas network businesses is set out in the Better Resets Handbook.[5]

In developing their 2023–28 proposals for lodgement with the AER in July 2022, the three Victorian gas distribution network service providers – AGN, Multinet Gas Networks (MGN) and AusNet Gas Services (AusNet) – undertook an extensive and industry award-winning joint engagement program over 18 months with consumers and industry. The two key stakeholder groups that the businesses jointly engaged with were the:

- Victorian Gas Networks Stakeholder Roundtable (VGNSR): comprising residential customers and communities, business customers and major gas users, as well as building, development and property industries
- Retailer Reference Group (RRG): comprising gas retailers.

The joint engagement program included customer workshops, co-design activities and dedicated engagement with major energy users and the property and development industries. Models were also developed to examine possible future scenarios for the gas networks. Each of the three businesses consulted stakeholders on draft proposals to validate what they had heard up to that point from stakeholders, and to articulate how they had responded to stakeholders' concerns around as price and affordability, reliability of service, public safety, customer service, sustainability and innovation.

We have been observers to the three businesses' joint engagement program and we have been impressed by the:

- comprehensive nature of the program, which has facilitated open and transparent discussions

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3 NGR, r. 60(1).

4 NGR, r. 50(2).

5 AER, *Better Resets Handbook*, December 2021.

- vast amounts of time and effort invested by the businesses and their staff to deliver the program, including additional meetings to round out previous discussions
- extraordinary levels of commitment and endurance from consumer and industry stakeholders, who have largely remained engaged in the process despite competing time commitments elsewhere.

We acknowledge that some of the issues considered over the course of the review to date, such as proposals for accelerated levels of depreciation to mitigate against the potential for asset standing risk, have been difficult for stakeholders to fully engage with due to prevailing future uncertainties for gas networks, especially in the absence of the Roadmap during the development stage of the proposals.

Prior to lodgement of the proposals, the three businesses engaged KPMG to independently obtain feedback from the VGNSR and RRG on the businesses' responses to stakeholders' feedback on the draft proposals:

> 'VGNSR feedback on the engagement process was positive overall and stakeholders stated they felt they were heard and engaged with. The integrated engagement approach by AusNet, AGN and MGN was positively received and stakeholders would like to see this repeated in future engagement programs. Overall, while the process was viewed positively, stakeholders noted that the Draft Plans were not yet capable of acceptance. Primarily, this was due to policy uncertainty and the likelihood of Plans needing to change once policy directions are made. The Draft Plans have been developed in an environment of political and economic uncertainty with businesses awaiting the development of the Gas Substitution Roadmap by the Victorian Government…They [VGNSR] did note that AusNet appear to have responded more to their concerns, by way of changes to the Draft Plan.'[6]

> 'Retailers [RRG] were in agreement that the current Draft Plans are not capable of acceptance, primarily due to concerns regarding the tension between accelerated depreciation and spend on capex and opex.'[7]

After the release of the Roadmap, the businesses worked diligently under very tight timelines to submit updated proposals (addendums) in response to the just-released Roadmap so that stakeholders could more meaningfully engage with the subject matter. Engagement with stakeholders post release of the Roadmap was limited in time and depth compared to that on the initial proposals and largely at an 'inform' level. Our observation is that little new insight was provided by stakeholders. Limited time between preparation and circulation of material before it was presented was likely a factor here.

In submissions on the lodged proposals, stakeholders generally commended the businesses for their joint engagement process, including their future of gas scenario modelling initiative. We encourage stakeholders to continue their participation in the joint engagement process as there are inherent efficiencies to be derived from a single engagement process. However,

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6 AusNet, *Draft five year plans for the Victorian network (July 2023 – June 2028), Stakeholder engagement report*, 27 June 2022, pp. 3.

7 AusNet, *Draft five year plans for the Victorian network (July 2023 – June 2028), Stakeholder engagement report*, 27 June 2022, pp. 8.

the Consumer Challenge Panel (CCP28)[8] expressed reservations about whether this achieved 'partnership' in the development of proposals, and with the lack of engagement with end-consumers since the draft proposals.[9]

Overall, whilst we have been impressed by AGN's engagement approach to date, there are a limited number of areas that warrant further engagement with consumer and industry stakeholders. For example, there are unresolved matters relating to the proposed priority services program for consumers, gas meter disconnection and abolishment, and credit support arrangements for retailers. In responding to our draft decision, AGN's revised proposal needs to explain what further engagement it has undertaken (either independently or jointly with MGN and AusNet) with stakeholders to understand and respond to their residual concerns.

[8] CCP28 comprises Robyn Robinson, and formerly included Helen Bartley (until October 2022) and Ron Ben-David (until July 2022).

[9] CCP28, *CCP28 advice to the AER, Victorian gas distribution network access arrangement 2023-28 proposals*, 30 September 2022, p. 1.

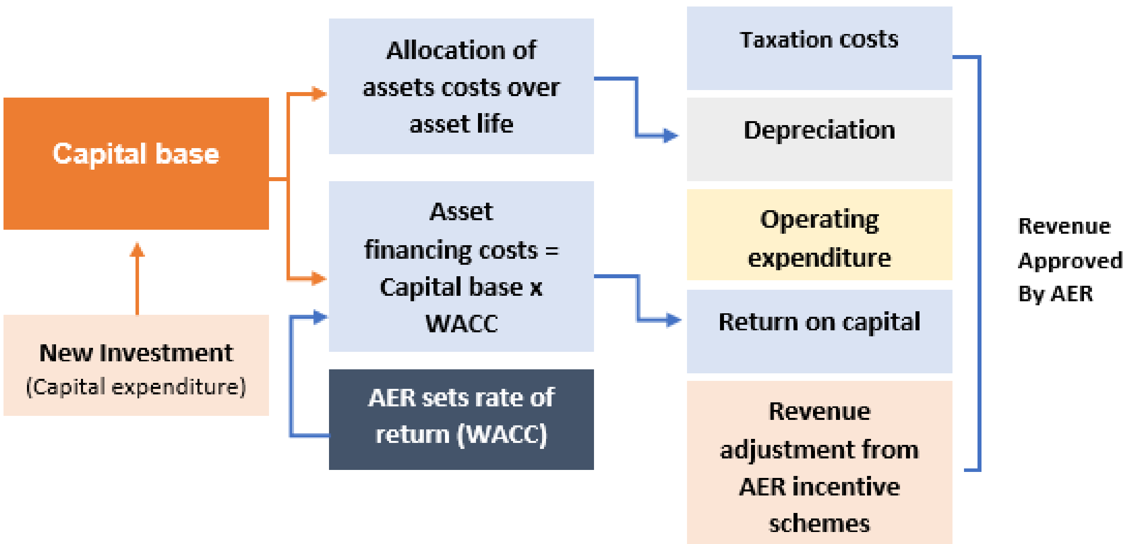
2 Total revenue requirement

The foundation of our regulatory approach is a benchmark incentive framework to setting revenues: once regulated revenues are set for the 5-year period, a network that keeps its actual costs below the regulatory forecast of costs retains part of the benefit. Service providers have an incentive to become more efficient over time, as they retain part of the financial benefit from improved efficiency. Consumers also benefit when efficient costs are revealed, and a lower cost benchmark is set in subsequent regulatory periods.

AGN's proposed revenue requirement, and our assessment of it under the NGL and NGR, is based on six cost components, or 'building blocks', as illustrated in Figure 4:

- return on the capital base – to compensate investors for the opportunity cost of funds invested in the business
- depreciation of the capital base – or return of capital, to return the initial investment to investors over time
- capex – the capital costs and expenditure incurred in the provision of network services, which directly affects the size of the capital base and, therefore, the revenue generated from the return on capital and depreciation building blocks
- forecast opex – the operating, maintenance and other non-capital expenses, incurred in the provision of network services
- revenue increments/decrements resulting from the application of incentive schemes, such as the opex Efficiency Carryover Mechanism that applies to MGN
- estimated cost of corporate income tax.

Figure 1 The building block approach to determining total revenue



Source: AER.

2.1 Draft decision on total revenue

The total revenue requirement is a forecast of the efficient cost of providing gas distribution services over the access arrangement period. We determine annual revenue, and the total revenue requirement, in nominal terms that take into account expected future inflation. We use 5-year inflation expectations to convert revenues to nominal values.

Our draft decision on AGN's total revenue requirement is $1,298.3 million ($ nominal, smoothed), or $42.3 million (3.4%) more than AGN's proposal of $1,256.0 million.

Table 1 sets out our draft decision on AGN's total revenue requirement (by building block) for each year of the 2023–28 period, the total revenue after equalisation (smoothing), and the X factors that we have determined for use in the tariff variation mechanism.

Table 1 AER's draft decision on AGN's smoothed total revenue and X factors for the 2023–28 period ($ million, nominal)

Building block	2023–24	2024–25	2025–26	2026–27	2027–28	Total
Return on capital	111.7	118.3	124.3	129.2	133.3	616.7
Regulatory depreciation	34.5	40.2	46.9	54.7	63.2	239.5
Operating expenditure	101.1	106.7	109.9	115.3	117.1	550.0
Revenue adjustments	–6.2	–9.9	–9.2	–6.6	–71.9	–103.7
Net tax allowance	2.4	4.5	4.3	5.8	5.7	22.7
Building block revenue – unsmoothed (including ARS)	243.4	259.8	276.2	298.3	247.5	1,325.2
Less ancillary reference services revenue	4.0	4.2	4.4	4.6	4.8	21.9
Total revenue - unsmoothed (excluding ARS)	239.4	255.6	271.8	293.8	242.7	1,303.3
Building block revenue – smoothed	**265.9**	**264.5**	**261.7**	**256.5**	**249.6**	**1,298.3**
X factors[a]	1.36%	1.00%	1.00%	1.00%	1.00%	n/a

Source: AER analysis.
n/a: not applicable.
(a) Under the CPI–X form of control, a positive X factor is a decrease in price (and therefore, in revenue). The X factor for 2023–24 is indicative only. Our decision establishes 2023–24 tariffs directly, rather than referencing a change from tariffs for 1 January to 30 June 2023.

2.2 Revenue smoothing and tariffs

AGN operates under a weighted average price cap as its tariff variation mechanism. This means we must determine the weighted average tariff change each year such that the net present value (NPV) of unsmoothed and smoothed revenue is equal across the 2023–28 period. This average tariff change is known as the 'X factor'.

Our decision on AGN's access arrangement proposal includes a determination of AGN's total building block revenue (unsmoothed revenue), and a smoothed revenue profile across the 2023–28 period.

The X factors represent the weighted average *real* change in tariffs. As part of the annual reference tariff variation process applying from 2024, we combine the X factors we have determined in our decision with actual inflation to create *nominal* reference tariffs for the coming year. This means that the prices paid by consumers, and therefore the revenues received, change with actual inflation, plus the annual X factor rate.

By smoothing revenue we also aim to minimise price volatility between and within access arrangement periods by keeping the difference between smoothed and unsmoothed revenue in the final year of each period as close as possible, and to provide price signals across tariffs that reflect AGN's underlying, efficient costs of providing services.

The higher revenue we have arrived at in this draft decision, and our draft decision on AGN's proposed demand forecasts, mean that revenue smoothing has also changed.[10] Further, our smoothing achieves the price stability which was a key consideration of our decision to adopt AGN's proposed accelerated depreciation. As a result, the average annual tariffs in year 1 (2023–24) are 1.96% higher in nominal terms than those for the six-month extension period. This is not necessarily indicative of final decision tariffs, which will change again with our final decisions on revenue and forecast demand. While our decision establishes tariffs for year 1 (2023–24) directly, tariffs for years 2 to 5 will be set as part of the annual reference tariff variation mechanism reflecting actual inflation, updated return on debt and any cost pass throughs.[11]

Figure 5 shows indicative tariff paths for AGN's reference services across the 2023–28 period. It compares AGN's proposed tariff path with that approved previously for the 2018–22 period, and with this draft decision. For illustrative purposes, the modelled impact of this draft decision is an estimated increase of around 11.8%. These are simple estimates only, calculated based on an aggregate level rather than individual zone level tariffs. Final decision outcomes will be different again.

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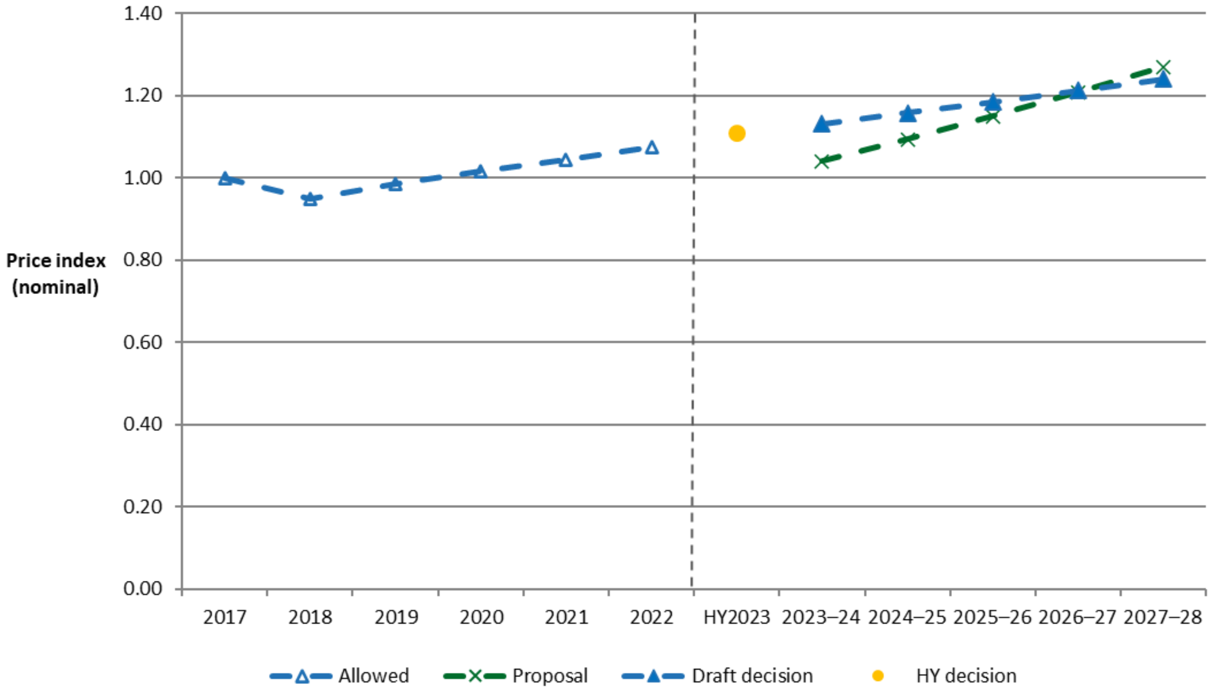
10 Our revenue smoothing for the 2023–28 period will also smooth the return of AGN's over-recovered revenue of $50.2 million from the 6-month extension period. This return will reflect interest to be calculated at the regulatory WACC to maintain the time value of money. This true up is net present value (NPV) neutral and so should ensure that both AGN and consumers are not materially better (or worse) off as a result of continuing the 2022 tariffs (extended for actual inflation) throughout the applicable access arrangement extension period.

11 The annual reference tariff variation mechanism is discussed in Attachment 10.

Figure 5 Indicative reference tariffs paths for AGN's reference services from 2018 to 2028 ($ nominal)



Source: AER analysis; AER, *AGN-PTRM - Final Decision - 2022 RoD update*.

AGN's distribution charges make up around 24% of its residential consumers' gas bills and 18% of its commercial consumers' gas bills.[12] Other components of the supply chain – the cost of purchasing energy from the wholesale market, transmission charges, and the costs and margins applied by electricity retailers in determining the prices they will charge consumers for supply – make up larger portions of the prices ultimately paid by consumers. These sit outside the decision we are making here, but will also continue to change throughout the period.

In nominal terms, which include the impact of expected inflation, we estimate the impact of this draft decision, if implemented, would be an increase to the current distribution component of energy bills for AGN consumers. For illustrative purposes only, holding other components constant, we estimate the modelled impact of this draft decision on the average annual gas bill for a residential consumer,[13] as it is today, would be an increase of $48 (2.8%) by 2027–28 ($ nominal). For small business consumers,[14] the impact would be an increase of $272 (2.1%) by 2027–28.

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12 These proportions reflect the estimates proposed by AGN. AGN, *AGN (Victoria & Albury) - Attachment 12 - Workbook 4 - Indicative bill impact - July 2022*, July 2022.

13 Based on typical gas consumption of 54,400 MJ. Bill impact is compared to a nominal annual residential gas bill of $1,673 as at 30 June 2023. The base bill is sourced from Essential Services Commission, *Victorian Energy Market Report*, September 2022, Figure 38, p. 56. indexed by expected inflation from the RBA's November 2022 SoMP.

14 Based on typical gas consumption of 500,000 MJ. Bill impact is compared to a nominal annual small business gas bill of $12,750 as at 30 June 2023. The base bill is sourced from Essential Services Commission, *Victorian Energy Market Report*, September 2022, Figure 75, p. 80. indexed by expected inflation from the RBA's November 2022 SoMP.

3 Key elements of our draft decision on revenue

The components of our draft decision include the building blocks we use to determine the total revenue requirement. The following sections summarise our revenue decision by building block. The attachments to this draft decision provide a more detailed explanation of our analysis and findings.

3.1 Capital base

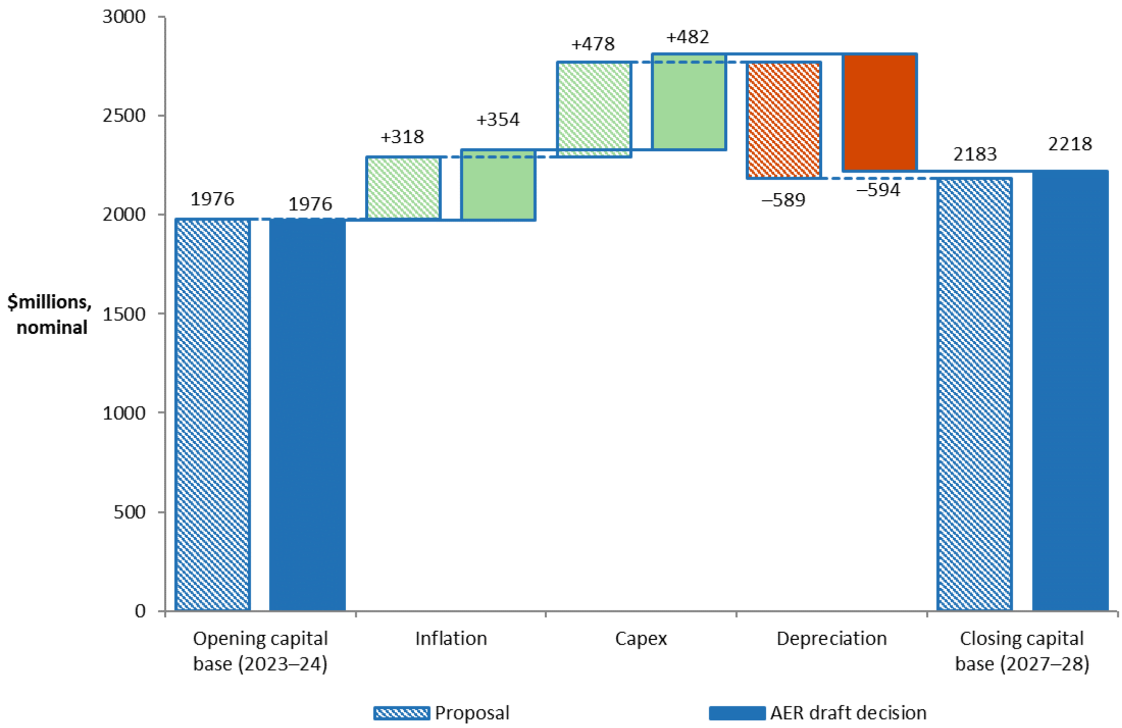
The capital base accounts for the value of regulated assets over time. To set revenue for a new access arrangement period, we take the opening value of the capital base from the end of the last period and roll it forward year-by-year by indexing it for inflation, adding new capex and subtracting depreciation and other possible factors (such as disposals). This gives us a closing value for the capital base at the end of each year of the access arrangement period. The value of the capital base is used to determine the return on capital and depreciation building blocks.

For this draft decision, we have determined an opening capital base value of $1,975.6 million ($ nominal) as at 1 July 2023. This value is $0.3 million (less than 0.1%) lower than AGN's proposed opening capital base of $1,975.9 million as at 1 July 2023. While we largely accept the proposed method for calculating the opening capital base, we made several input updates to AGN's proposed roll forward model (RFM) for expected inflation, the nominal weighted average cost of capital (WACC), and forecast depreciation for the 6-month extension period (1 January to 30 June 2023) to be consistent with our final decision post-tax revenue model (PTRM) for that period.

Figure 6 shows the key drivers of the change in capital over the 2023–28 period compared to AGN's proposal. Our draft decision projects an increase of $242.5 million (12.3%) to the capital base by the end of the 2023–28 period compared to the $206.8 million (10.5%) increase from AGN's proposal.

We have determined a projected closing capital base of $2,218.1 million ($ nominal) as at 30 June 2028, which is $35.4 million (1.6%) higher than AGN's proposed $2,182.7 million. This increase is mainly due to a higher expected inflation rate applied in our draft decision. It also reflects our draft decisions on the opening capital base as at 1 July 2023, forecast depreciation and forecast capex (discussed in the sections below).

Figure 6 Key drivers of changes in the capital base over the 2023–28 period – AGN's proposal compared with AER draft decision ($ million, nominal)



Source: AGN, *2023-28 Post-tax revenue model*, 2 September 2022; AER, 2023-28 *Draft decision – PTRM*, November 2022

3.2 Rate of return and value of imputation credits

The return each business is to receive on its capital base (the 'return on capital') is a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the value of the capital base.

We estimate the rate of return by combining the returns of two sources of funds for investment – equity and debt. The allowed rate of return provides the business with a return on capital to service the interest rate on its loans and give a return on equity to investors. We have applied our 2018 Rate of Return Instrument to estimate the rate of return for this draft decision.[15] For our final decision, we will apply the 2022 Rate of Return Instrument, which is scheduled to be published in February 2023. This may affect the estimate of the rate of return as well as the value of imputation credits.

For the purposes of this draft decision, the placeholder rate of return is 5.65% (nominal vanilla). Updates to risk-free rate and the return on debt have resulted in an increase from the placeholder estimate of 5.16% in AGN's proposal.

Our estimate of expected inflation for the purposes of this draft decision is 3.37% per annum. It is an estimate of the average annual rate of inflation expected over a 5-year period based

15 AER, *Rate of return Instrument*, December 2018. See www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline-2018/final-decision.

on the approach adopted in our 2020 inflation review[16] and the forecast from the RBA's November 2022 Statement on Monetary Policy. This is a higher estimate of inflation than used in AGN's proposal (3.05%).

These variables will be updated again in AGN's revised proposal and in our final decision, which is part of our standard process.

Both AGN's proposal and our draft decision apply a value of imputation credits (gamma) of 0.585 as set out in the 2018 Instrument.[17]

3.3 Regulatory depreciation (return of capital)

Depreciation is a method used in our decision to allocate the cost of an asset over its useful life. It is the amount provided so capital investors recover their investment over the economic life of the asset (otherwise referred to as 'return of capital'). When determining the total revenue for AGN, we include an amount for the depreciation of the projected capital base.[18]

Our draft decision includes a regulatory depreciation amount of $239.5 million ($ nominal). This is $31.4 million (11.6%) lower than from AGN's proposed $270.9 million. One reason for this decrease compared to AGN's proposal is the higher expected inflation rate for the 2023–28 period, which increases the adjustment for indexation of the capital base that is offset against straight-line depreciation in determining regulatory depreciation. Updates to inflation are a standard part of our process, and this is not an area of disagreement between us and AGN. Our final decision will update these same inputs again.

In our assessment of accelerated depreciation, our draft decision adopts AGN's proposed amount of $175 million. AGN's proposed accelerated depreciation is about 15.2% of its total proposed revenue for the 2023–28 period.[19] That proposal, made in September 2022 with the benefit of the Roadmap, was an increase from the $144 million it initially included in its July 2022 proposal.

In accepting some accelerated depreciation for AGN, we recognise that the publication of the Roadmap indicates that the Victorian Government is committed to the net zero emissions target by 2050.[20] This will likely mean a limited role for gas beyond this date. The Roadmap included several initiatives that will reduce the role for gas in Victoria, such as incentives for residential consumers to switch to electric appliances, and the removal of planning provisions requiring new housing developments to connect to gas. The future role for hydrogen is also uncertain at this time.

16 AER, *Final position – Regulatory treatment of inflation*, December 2020.

17 AER, Rate of return Instrument, Explanatory Statement, December 2018, pp. 307–382.

18 NGR, r. 76(b).

19 Based on proposed total revenue in real ($2022–23) terms and excluding ancillary reference services.

20 Victorian State Government, *Gas Substitution Roadmap*, July 2022.

We have considered the balance between accepting some accelerated depreciation and also price stability. This is consistent with our 2021 information paper, *Regulating gas pipelines under uncertainty*, which stated:

> '… regulated depreciation or risk compensation cannot be adjusted without constraint to guarantee cost recovery for the regulated businesses. [The AER] must have regard to consumers' interest in having affordable and stable or reasonably predictable gas access prices to encourage their use of the gas infrastructure. Having said that, it is fair to note that regulated businesses also have an interest to maintain price affordability to avoid further decline in gas customer numbers.'

Submissions also raised concerns about escalating distribution prices in the face of rising cost of living stresses, and the risk that higher prices resulting from accelerated depreciation in the immediate term may lead to consumers increasingly disconnecting from the network sooner than necessary.

AGN recognised in its engagement on accelerated depreciation that price stability is important to avoid this disconnection 'death spiral'. We agree that long term price stability should be considered. However, price stability for the 2023–28 period should also be a focus, noting the current cost of living pressures and concerns submitted by stakeholders. A balance needs to be struck between what consumers pay now to mitigate future price increases, and the risk of greater increases in the future if mitigation is delayed.

In assessing accelerated depreciation, we consider a target of 0% per annum real price change is appropriate for the draft decision. We have adopted AGN's proposed accelerated depreciation for the draft decision because it results in real price decreases and so meets the 0% per annum price path target. We consider that consumers need to be further consulted on this topic. Subject to additional consultation, we acknowledge that the final decision outcome on accelerated depreciation may differ from the draft decision.

In undertaking this consultation and considering its response to this draft decision, we expect AGN to look at accelerated depreciation in the context of other components of its total revenue requirement. AGN needs to consider the potential impact of rising inflation, and higher WACC values, in modelling the impact of accelerated depreciation on revenue and prices.

3.4 Capital expenditure

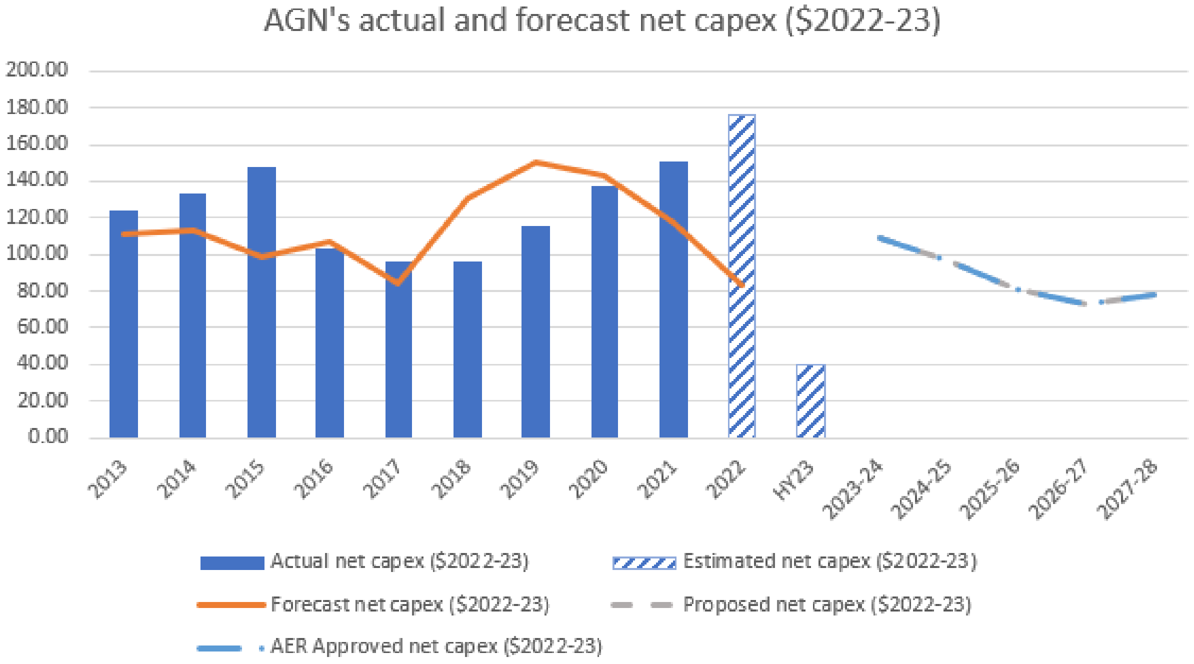
Capital expenditure (capex) mostly relates to assets with long lives, the costs of which are recovered over several regulatory control periods. Forecast capex directly affects the size of the capital base and the revenue generated from the return on capital and depreciation building blocks.

Our draft decision accepts AGN's total forecast capex of $433.5 million ($2022–23) for the 2023–28 period.[21] Figure 7 compares the approved forecast in our draft decision to forecast and actual capex in the current and previous periods. The forecast we have approved for the

21 Net of capital contributions. Total gross capex for 2023-28 is forecast to be $453.2 million ($2022-23).

2023–28 period is 36% lower than the $680.7 million actual net capex for the 2018–22 period.[22]

Figure 7 Historical and forecast capex ($ million, 2023)



Source: AER analysis

Our draft decision relates to AGN's total capex proposal. To make this decision, we construct an alternative estimate of efficient capex, and compare it to AGN's proposal. If our alternative estimate is not materially different to AGN's proposal, we will accept the proposal. On the other hand, if there is a material difference at the total capex level, we will not accept AGN's forecast, and substitute it with our alternative estimate.

To construct our alternative estimate, we focussed on assessing the key drivers of AGN's capex forecast. This included programs where we observed significant increases in capex compared to the current period, and in areas of strategic importance for stakeholders.

Overall, we found that most aspects of AGN's proposal were likely to be conforming capex. We determined an alternative forecast of $418.2 million, which is $15.3 million (3.5%) lower than AGN's forecast, because we did not accept all of AGN's proposed hydrogen readiness ($10 million) and information technology expenditure to uplift its cyber security capabilities ($5.3 million). On balance, our alternative estimate is not materially different from AGN's forecast capex and we accepted AGN's total capex proposal as prudent and efficient. This includes:

- $29.5 million for forecast mains replacement (6% of total capex), which we consider is reasonably required to maintain network safety and the integrity of network services. AGN is nearing completion of its mains replacement program having spent

22 AGN's capex for both 2019-20 and 2020-21 are estimates only.

$264.7 million in the current period to replace 300 km of mains. The remaining works involve targeted and proactive replacements.

- $165.9 million for forecast new consumer connections (38% of total capex). This amount is a significant reduction from the current period and from the proposal AGN initially submitted to us on 1 July 2022. In line with the Roadmap, the Victorian Government will clarify that natural gas connections to new estates are not compulsory and implement a 7-star energy efficiency rating for new dwellings. This new standard will make the installation of gas appliances less attractive than electric alternatives, as new dwellings will need to meet a carbon emission 'budget'.
- $74.9 million for forecast information and communications (17% of total capex). This is an increase of $24.9 million (50%) compared to the current period estimate of $50.0 million. This is largely driven by a major program of work to upgrade and consolidate IT solutions across the Australian Gas Infrastructure Group (AGIG) businesses, including a single enterprise resourcing planning system to be managed by AGN rather than its third-party operational partner. This program is reasonably required, and a common enterprise-wide platform across its networks is a prudent approach that is likely to minimise risks and enable economies of scale in operational planning as well as the costs of procuring and supporting IT. However, we consider AGN's proposed cyber security uplift is not prudent and efficient and does not constitute conforming capex, as the expenditure proposal for the gas distribution network is higher than the efficient investment required to meet the likely security capabilities under the *Security Legislation Amendment (Critical Infrastructure Protection) Act 2022*.
- $37 million for other distribution capex (9% of total capex). This includes modifications to the high-pressure mains to allow inline inspections, maintaining and replacing a series of smaller items, such as regulators, valves and cathodic protection equipment, which we consider to be prudent and efficient. However, we do not consider AGN's proposed $10 million for hydrogen readiness capex is conforming capex and have excluded this from our alternative forecast.

3.5 Operating expenditure

Operating expenditure (opex) is the operating, maintenance and other non-capital expenses incurred in the provision of pipeline services.

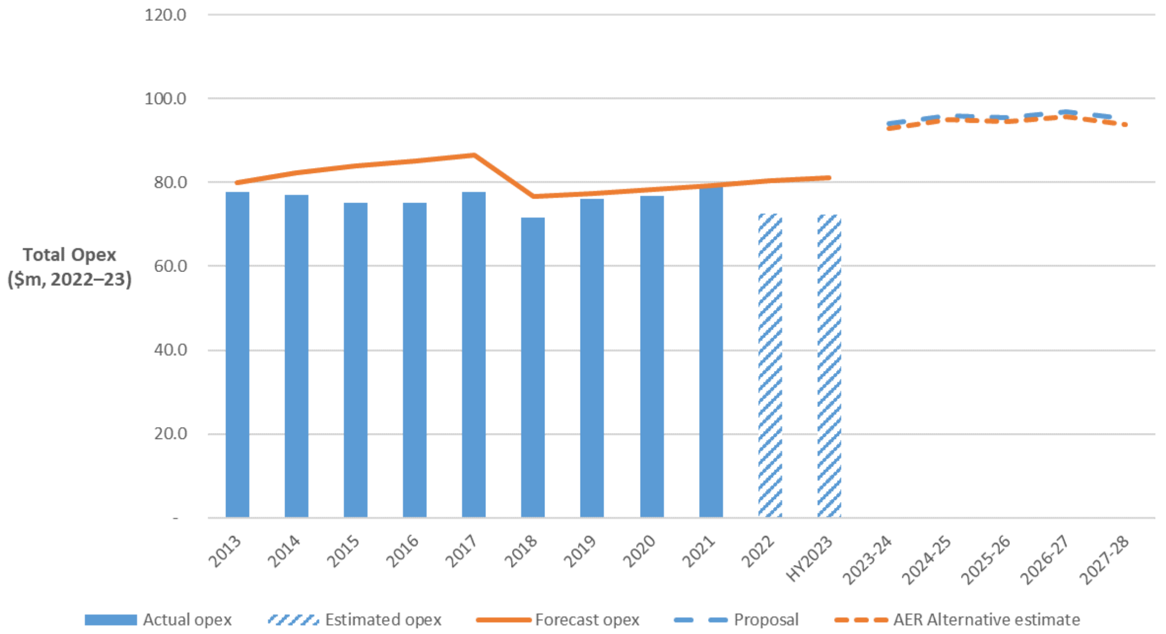
Our draft decision is to accept AGN's proposed opex forecast of $477.5 million ($2022-23) for the 2023–28 period.[23] This is because our alternative estimate of $470.0 million is not materially different ($7.5 million or 1.6% lower) than AGN's proposal. While the difference between our alternative estimate and AGN's proposal is not material, we arrived at our alternative estimate in a different way to AGN, with many of these differences being mechanical in nature and offsetting one another.

Figure 8 compares our draft decision alternative estimate, AGN's proposal, and AGN's actual and estimated opex in the current and previous periods. AGN's total forecast opex accepted in this draft decision is $85.8 million ($2022–23) (21.9%) higher than approved for the 2018–

23 Excluding ancillary reference services.

2022 period, and $101 million ($2022–23) (26.8%) higher than AGN's actual and estimated opex for the 2018–22 period.

Figure 8 Historical and forecast opex ($ million, 2023)



Source: Australian Gas Networks, *Regulatory accounts 2013 to 2021*; Australian Gas Networks, *Access arrangement 2023–28 - Opex model*, September 2022; Australian Gas Networks, Access arrangement, PTRM (multiple periods: 2013–17, 2018–22, 2023–28); AER analysis.

Note: Includes debt raising costs and movements in provisions.

After its July 2022 proposal, AGN submitted an addendum in September 2022, to reflect changes to estimates following release of the Roadmap. From an opex perspective, this primarily impacted the trend forecasts, with updated output and productivity growth forecasts. We have considered this updated proposal, and the opex forecast it contained, in making our draft decision to accept the proposed opex forecast.

Price and output growth, which we include in our assessment of forecast opex, are increasing in line with forecast changes to the consumer price index and wage price index and forecast growth on the network. Further, a key driver of the increase is the inclusion of $37.7 million in previously capitalised overheads as opex, and $25.7 million in step changes for the reclassification of certain capex activities as opex (such as sampling or repair and maintenance type activities) that are more opex in nature. We have reviewed the relevant activities and associated costs proposed to be treated as opex, and consistent with the advice provided by AGN, consider they are more opex in nature. Further, AGN has made the required offsetting changes to its capex forecast.

The total forecast opex in this draft decision includes $5.0 million in new funding for a Priority Service Program to support consumers experiencing vulnerability. Our *Towards Energy Equity Strategy*,[24] recognises the need to deliver better outcomes for consumers experiencing vulnerability and to avoid exacerbating harm, which is a core objective of this

[24] AER, *Towards energy equity – a strategy for an inclusive energy market*, October 2022 p.2.

program.[25] We recognise the genuine effort and processes undertaken to engage with consumers in relation to the program and their support as well as the impact that engagement has had on some of the initiatives before us in terms of changes made to the Priority Service Program to respond to initial feedback. However, noting that submissions have raised concerns about the funding of the program, we encourage AGN to continue to work with consumers and relevant stakeholders in preparing its revised proposal. This includes considering refining and revising the scope of the program, particularly where there are differing views between consumers and stakeholders. This continued discussion is important given the economic and policy changes that have occurred since consumer workshops on the program ended in March 2022.

3.6 Revenue adjustments

Our calculation of total revenue for AGN includes adjustments under the operating expenditure incentive mechanism and capital expenditure sharing scheme in its access arrangement. These mechanisms provide a continuous incentive for AGN to pursue efficiency improvements in opex and capex, and provides for a fair sharing of these between AGN and users.

Our draft decision includes a negative adjustment of $12.0 million ($2022–23) from the application of the opex ECM in the 2018–22 period. This is $3.8 million lower than AGN's proposal which was –$8.1 million. This difference reflects adjustments to account for the exclusions from the earlier, 2013–17, period which are no longer applicable in the 2023–28 period and updated inputs for actual and forecast inflation. Our carryover amount also excludes ancillary reference services.

We have also included a negative adjustment of $21.5 million under the CESS, consistent with AGN's proposal.

We have also approved AGN's proposal that the ECM and CESS continue to apply during the 2023–28 period. For the CESS going forward, we consider AGN's proposal to exclude connections capex from the calculation of rewards or penalties is sound, as these are largely outside the control of a service provider.

On 20 October 2020, the *National Energy Legislation Amendment Act 2020* (Vic) was enacted, changing the timing of Victorian gas distribution access arrangements to financial years rather than calendar years. To facilitate this, our 2018–22 access arrangement was extended by 6 months from 1 January to 30 June 2023 until our decision for the 2023-28 period takes effect on 1 July 2023. We approached tariffs and revenue for the extension period in three parts:

1. We extended AGN's current, 2022 prices (adjusted for 6 months' inflation to keep them constant in real terms) for an additional 6 months to cover the extension period.
2. To determine a building block revenue allowance for the extension period, we used simple, trend-forward approaches to forecast capex and opex at a level that should be proportionate to the extended tariffs.

[25] AusNet, *Priority Service Program - Business Case*, April 2022, p.6.

3. In this draft decision for the 2023–28 period, we have returned the difference of $50.2 million ($2022–23) between allowed revenue under the extended, 2022 tariffs and the trended forward building block revenue calculation to consumers as an adjustment (reduction) to AGN total revenue requirement for 2023–28. In applying this revenue adjustment in the 2023–28 PTRM, we have appropriately applied the WACC to reflect the time value of money.

3.7 Corporate income tax

Our determination of the total revenue requirement includes the estimated cost of corporate income tax for 2023–28 period. Under the post-tax framework, this amount is calculated as part of the building blocks assessment using our PTRM.

Our draft decision is to determine an estimated cost of corporate income tax of $22.7 million over the 2023–28 period. This decision represents a decrease of $2.5 million (9.9%) from AGN's proposal of $25.1 million. The key reason for the decrease is the inclusion of the tax loss over the 2023 half-year extension period and our draft decision on regulatory depreciation (Section 3.3) which, in turn, reduced AGN's taxable revenue and, therefore, the cost of corporate income tax.

Our draft decision on the forecast tax amount for the 2023–28 period is significantly lower than that forecast for the 2018–22 period. This change is primarily due to the implementation of our findings from the 2018 tax review, which introduced the immediate expensing of capex and diminishing value method of tax depreciation, resulting in a significant increase in forecast tax depreciation.

Our adjustments to the return on capital (Sections 3.1, 3.2 and 3.4) and the regulatory depreciation (Section 3.3) building blocks affect revenues, which in turn impacts the tax calculation.

4 Forecast demand

Forecast demand plays an important role in AGN's access arrangement:

- Demand is an important input into the derivation of AGN's reference tariffs under the price cap form of control in its access arrangement. In simple terms, tariffs are determined by dividing cost (forecast revenue) by total demand. This means that a decrease in forecast demand leads to an increase in tariffs, and vice versa.
- Forecast demand is also a driver of opex and capex (new connections), which inform our decision on the total revenue requirement.

The NGR require demand forecasts and estimates that are arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances.

Our draft decision accepts the updated demand forecasts AGN submitted in September 2022, taking into account the implications of the Roadmap. These project a significant reduction in new connections, and an increase in disconnections as consumers choose to leave the network. It also anticipates a fall in usage for consumers that continue to rely on gas as part of their energy mix. New connections are forecast to use significantly less gas than existing connections, due to incentives to install heat pumps instead of gas central heating. For existing dwellings, an adjustment has been made for progressive replacement of space and water heating demand as consumers replace aging appliances and respond to cash incentives.

Forecast demand for AGN's industrial consumers has been less impacted by the Roadmap. Industrial consumers are more difficult to electrify given the need for high heat applications and using gas as a feedstock, and the Roadmap is less clear on options for large industrial users to reduce their natural gas use. New connections for industrial consumers are expected to fall slightly, and consumption only marginally, over the 2023–28 period.

When compared to the Australian Energy Market Operator's (AEMO) *2022 Gas Statement of Opportunities (GSOO)*, AGN's demand is relatively close to the 'progressive change' scenario at the start of the period, but reduces more quickly than AEMO's projection. It remains well above the 'step change' scenario and short term projections in the Roadmap. For our final decision, we will also have regard to AEMO's 2023 GSOO when released early next year.

Under a price cap form of control, the risk that actual demand in the 2023–28 period is less than forecast rests with AGN, rather than its consumers. If, however, it becomes clear that there is a material difference between actual demand and the forecast we use to set revenue and tariffs in our final decision, it is open to AGN to seek an earlier review of its access arrangement under rule 65 of the NGR.

5 Reference services and tariffs

AGN's access arrangement specifies the reference service it will provide, the tariffs for that service, and the other terms and conditions on which it will be provided.[26]

5.1 Services covered by the access arrangement

AGN is to provide access to its reference services on the terms set out in the access arrangement but may negotiate alternative terms and conditions at alternative prices with users. AGN may also offer other non-reference services (negotiated services) which are not subject to regulation under the access arrangement. We may be called upon to determine the tariff and other conditions of access to services if an access dispute arises.[27]

AGN submitted its reference service proposal for 2023–28 in July 2021. We published our decision to approve that proposal in November 2021. This draft decision confirms our approval of AGN's proposed reference services, with the exception of the small consumer connection abolishment ancillary reference service.

As more consumers choose to move from gas to other sources of energy, the costs of removing connection assets for individual premises – abolishing the connection permanently – have come under close scrutiny. Connection abolishment involves removal of pipes connecting a consumer's premises to the mains pipeline, sealing the mains and making the site safe.

The alternative cease of service options are to either cap supply at the meter (a temporary disconnection that can be reversed by removing the cap at a later date) or to have the meter itself removed while connecting pipes are retained. In both cases, safety issues arise because gasified connection pipes remain underground. While these alternatives are considerably cheaper than abolishment, they raise issues such as the safety aspect of gas pipelines remaining underground and the costs to maintain this unused service.

The decision on which type of cease of service is safest is not for us to make. It sits with Energy Safe Victoria as the jurisdictional safety regulator.

While we may have a view on such safety aspects, our role in assessing AGN's proposed access arrangement is to determine:

- whether this pipeline service should be price regulated, and if so
- the efficient price for the regulated service, and
- whether the costs should be socialised across all (or a class of) consumers or recovered from individual consumers requesting it.

In reviewing this proposal, we have therefore considered the costs of abolishing connections and the broader question of how they are recovered from consumers over time.

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26 NGR, r. 48(1).

27 NGL, Chapter 6.

AGN's proposal classifies this as an ancillary reference service, the cost of which is recovered solely from the requesting consumer. Its proposed price for this service in 2023–28 is $950. Based on both our benchmarking analysis and cost build up assessment, AGN's proposed charge for the abolishment service appears reasonable. It is consistent with abolishment charges levied by gas distributors outside Victoria. The abolishment service is almost entirely opex and does not include an additional cost recovery. It reflects the labour cost of staff attending the consumer's premises to perform the task. It does not incorporate any contribution to shared network cost recovery – it is not an exit fee.

While we, like the Victorian distributors, expect the Roadmap will see more demand for small consumer connection abolishment, we are not yet satisfied that we have sufficient information to approve small consumer connection abolishment as an ancillary reference service for the 2023–28 period. We are considering 2 pathways for small consumer connection abolishment cost recovery, which we set out below for stakeholder comment:

- As an ancillary reference service (as proposed by the Victorian distributors). A number of gas distributors across Australia provide abolishment as a price regulated ancillary network service currently, consistent with the Victorian distributors' proposals. The nature of the abolishment service, provided in respect of an individual consumer's connection, has to date led to the service being considered an ancillary network service, because it is not a haulage service provided using shared network assets.
- The alternative cost recovery mechanism would be to bundle abolishment with haulage tariffs. This is sometimes referred to as 'socialising' abolishment costs. As a socialised cost, abolishment would be funded by haulage tariffs paid by consumers using gas network services at the time. That is, consumers choosing to permanently disconnect from the gas network would not be required to pay an abolishment charge.

The implications of socialising or bundling abolishment costs require consideration of equity issues. By sharing these costs across the consumer base, a cross-subsidy would be created, benefiting consumers who switch earliest. As larger numbers of small consumers permanently disconnect from Victoria's gas distribution networks over time, the financial burden of abolishment costs would fall on a diminishing consumer base, exacerbating the equity issue.

However, in other respects bundling abolishment costs with haulage services may be beneficial. It would reduce the financial barrier to consumers switching from natural gas to electricity, consistent with the Roadmap. As such it may facilitate realisation of the environmental benefits described by the Roadmap. Any consumer choosing to switch from natural gas to electricity, including disadvantaged consumers, would receive a benefit financed by those consumers who continue to receive gas network supply services.

Perhaps most importantly, socialising small consumer connection abolishment costs may be the most pragmatic way of giving effect to Energy Safe Victoria's safety determination. This is because socialising those costs would remove the financial barrier to small consumer connections being abolished in a timely manner. The alternative, to levy an ancillary service reference tariff on disconnecting consumers, may lead to small consumer connection pipes remaining in situ with gas in them for extended periods.

Our draft decision is to not approve AGN's proposed ancillary reference service for small consumer connection abolishments. Instead, we consider AGN and stakeholders need further time to consider the relative strengths and weaknesses of the two approaches above, and to respond to these in AGN's revised proposal and in submissions on our draft decision and that revised proposal.

5.2 Reference tariff setting and variation mechanism

Our draft decision is that the same tariff setting and tariff variation mechanisms that have applied in the current period should continue to apply to AGN in 2023–28, noting the above discussion about small consumer connection abolishment relates to tariff setting in addition to determining reference services.

We also accept AGN's proposal that the cost pass through events available to it in the current period will continue to apply in the 2023–28 period, but with some minor revisions to provide greater drafting consistency between AGN and other network service providers.

5.3 Non-tariff terms and conditions

In addition to its total revenue requirement, demand forecast and resultant tariffs, our decision on AGN's proposed access arrangement includes an assessment of a range of non-tariff components that go to the commercial relationships between AGN and its retailer and other network users. Our draft decision approves the majority of the non-tariff components of AGN's proposed access arrangement for the 2023–28 period.

There are, however, a small number of elements of the terms and conditions set out in Part C of AGN's proposed access arrangement around consumer data and the provision its access arrangement makes for a requirement of up-front credit support from retailers that we have decided require further consideration by AGN in its revised proposal before we can accept them.

In addition, since AGN has submitted its proposal, the Australian Energy Market Commission (AEMC) has made the *National Gas Amendment (DWGM Distribution connected facilities) Rule 2022*. That rule amends the NGR to allow the participation of distribution connected facilities in the Victorian gas market. It contemplates a range of matters to be addressed, or managed, in accordance with the terms and conditions of a distributor's access arrangement. The final rule will come into effect on 1 May 2024, within the first year of the 2023–28 period. While the final rule was not made in time for AGN's proposal, it is therefore one that we expect to see fully addressed in its revised proposal.

We are mindful that there will be limited time for iterative engagement on options and solutions between submission of AGN's revised proposal in January 2023 and the close of stakeholder submissions in February 2023. We have therefore encouraged AGN to make full use of the time available between the publication of the final rule and January 2023 to engage on options and solutions with a view to presenting a revised proposal that has stakeholder support.

A.List of submissions

Submission	Received
Australian Energy Market Operator	30 September 2022
Brotherhood of St. Laurence	30 September 2022
Consumer Challenge Panel, sub-panel 28	30 September 2022
Darebin Climate Action Now	28 September 2022
EnergyAustralia	30 September 2022
Energy Users Association of Australia	30 September 2022
Evoenergy	30 September 2022
Friends of the Earth Melbourne	30 September 2022
Origin Energy	30 September 2022
Red Energy / Lumo Energy	5 October 2022
Simply Energy	3 October 2022
Sumo / 1st Energy / Energy Locals	30 September 2022
Victorian Community Organisations	30 September 2022

B.Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AGIG	Australian Gas Infrastructure Group
AGN	Australian Gas Networks: AGN means AGN Vic in the case of the network to the extent that the network is located within the State of Victoria, and AGN Albury in the case of the network to the extent that the network is located within the State of NSW, where AGN Vic means Australian Gas Networks (Vic) Pty Ltd (ABN 73 085 899 001) and AGN Albury means Australian Gas Networks (Albury) Limited (ABN 84 000 001 249)
ARS	Ancillary reference service
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AusNet	AusNet Gas Services
CCP/CCP28	Consumer Challenge Panel, sub-panel 28
CESS	Capital expenditure sharing scheme
DWGM	Declared Wholesale Gas Market
ECM	Efficiency carryover mechanism
GSOO	Gas Statement of Opportunities
MGN	Multinet Gas Networks
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
Capex	Capital expenditure
CCP/CCP28	Consumer Challenge Panel, sub-panel 28
CPI	Consumer price index
Instrument	Rate of Return Instrument
NPV	Net present value
Opex	Operating expenditure
PTRM	Post-tax revenue model
RBA	Reserve Bank of Australia
Roadmap	Victorian Gas Substitution Roadmap
RFM	Roll forward model
RRG	Retailer Reference Group
SoMP	Statement on Monetary Policy
VGNSR	Victorian Gas Networks Stakeholder Roundtable
WACC	Weighted average cost of capital