DRAFT DECISION
Australian Gas Networks (SA)
Access Arrangement

2021 to 2026

Overview

November 2020

AUSTRALIAN ENERGY REGULATOR

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165
Email: AERInquiry@aer.gov.au

AER reference: 65192

Invitation for submissions

In response to our draft decision, AGN has the opportunity to submit a revised proposal for its next (2021–26) access arrangement period by **13 January 2021**.

Submissions on our draft decision and AGN's revised proposal are invited from interested stakeholders by **17 February 2021**. We will consider and respond to all submissions received by that date in our final decision. Subject to stakeholder interest, we will also consider holding a public forum following submission of the revised proposal.

Submissions should be sent to: AGNSA2021@aer.gov.au

Alternatively, submissions can be sent to:

Sebastian Roberts
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

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: https://www.aer.gov.au/publications/corporate-documents/accc-and-aer-information-policy-collection-and-disclosure-of-information

Note

This attachment forms part of the AER's draft decision on the access arrangement that will apply to Australian Gas Networks (SA) ('AGN') for the 2021–2026 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

Contents

Executive summary

The Australian Energy Regulator (AER) regulates gas transmission and distribution networks in all Australian jurisdictions except Western Australia. As part of this process, regulated gas network businesses must periodically apply to us for a ruling on the network tariffs that in turn influence the expected amount of revenue they will recover from customers for using their network. The National Gas Law and Rules (NGL and NGR) provide the regulatory framework governing gas transmission and distribution networks. Our work under this framework is guided by the National Gas Objective (NGO).[2] We use our insights and expertise to determine how much money the network business can recover.

We are currently doing this for Australian Gas Networks in South Australia (AGN) for the 2021–26 access arrangement period, which runs from 1 July 2021 to 30 June 2026 (2021–26 period). [3]

AGN is part of the Australian Gas Infrastructure Group (AGIG), one of the largest gas infrastructure businesses in Australia. AGN provides natural gas to over 450,000 homes and businesses across South Australia.

We note that the unprecedented changes to the economic environment as a result of COVID-19 will have wide ranging impacts which may cause aspects of AGN's proposal to differ at the revised proposal stage. We base this draft determination on current information and best forecasts that can reasonably be made, but acknowledge that some aspects of AGN's proposal may need to change.

AGN can recover $1028.5 million ($nominal, smoothed) from its consumers for the 2021–26 period, who are also likely to benefit from bill reductions over the period. The revenue allowed in our draft decision is $107.9 million (or 9.5 per cent) less than the $1136.4 million ($nominal) proposed by AGN.

The revenue we allow forms the distribution network component of retail gas bills. AGN's share of the gas bill for a typical residential customer in its distribution network area is around 54 per cent.[4] Other key components of the gas bill include wholesale, transmission and retail costs.

While the AER does not set retail gas prices, we estimate that if this draft decision is implemented, average annual bills for residential customers in AGN's distribution network would reduce by $17 by the end of the 2021–26 period (as at 30 June 2026) as a result of lower distribution network charges.[5] Average annual bills for small business customers would reduce by around $162 over the same period.

---

2 NGL, s. 23.

3 AGN, *Final Plan: Five year plan for our South Australian network, 2021–2026,* July 2020.

4 AGN, *RIN - Attachment 14 – Workbook 4 – Indicative bill impact,* 1 July 2020.

5 Compared to the current level, as at 30 June 2020.

On an annual basis the average bills for AGN's consumers in the first year of the 2021–26 period (as at 30 June 2022) would decrease by $76 (8.0 per cent) for residential consumers and $744 (7.4 per cent) for small business consumers. Thereafter, bills would increase by an average of $15 (1.7 per cent) and $145 (1.5 per cent) per year over the remaining four years of the 2021–26 period (as at 30 June) for residential consumers and small business consumers, respectively.

The key themes of the draft decision are:

- ensuring consumers pay no more than they need for safe and reliable gas services
- AGN's high-quality consumer engagement approach
- potential future investment uncertainty faced by AGN.

We have had regard to a range of sources in making this draft decision, including AGN's proposal, submissions received, as well as additional analysis undertaken and published by us.

We consider that AGN is performing well and delivering on its expenditure programs in the current period to continue to deliver a high level of safety and reliability for its South Australian gas network. AGN's proposal whilst continuing to connect customers to its network and investing in mains replacement, seeks to innovate with customer engagement and support.

AGN has put forward a well-informed initial proposal, underpinned by extensive consumer engagement. There are few areas of contention remaining between now and our final decision which is due in April 2021. AGN now has an opportunity, in its January 2021 revised proposal, to update its position and reconcile our few remaining concerns.

A key area of difference is the capital expenditure (capex) plan for AGN's mains replacement program. Whilst our draft decision recognises that AGN will need to incur additional capital expenditure, we do not consider all the proposed mains replacement is necessary for the next period. We consider that elements of the proposed mains replacement program, based on observed safety risks, could be undertaken over a longer period of time and therefore deferred to the subsequent period.

Our draft decision approves $478.8 million ($2020–21) of total net capex for AGN for the 2021–26 period. This is $97.8 million or 17 per cent less capex than proposed by AGN.

Our decision on mains replacement also affects AGN's proposed regulatory depreciation. While we accept AGN's proposed approach to accelerate the depreciation of replaced assets that are no longer in service, we have reduced the proposed accelerated depreciation amount reflecting our assessment of the mains replacement capex.

The other key area of contention in this review has been AGN's proposed increase in operating expenditure (opex). This included new expenditure for three initiatives AGN

identified through its engagement program as being valued and supported by its customers.

Two of these initiatives were proposed as step changes. These were providing customers with service improvements through an enhanced digital platform and a vulnerable customer assistance program, which was initiated by AGN's consumers. While AGN's customer engagement found there was genuine support for these projects, we did not consider including the costs of these initiatives as a step change was sufficiently justified. However, we would give further consideration to including the vulnerable customer assistance program as a category specific forecast if AGN provides further information showing the project would materially increase the quantity or quality of services provided.

The third identified initiative is to obtain 20 percent of unaccounted for gas from renewable sources, which AGN sought an increase in forecast opex to fund. AGN's engagement identified strong customer support for doing this. However, we consider AGN can already purchase replacement gas from renewable sources in accordance with the preferences of its customers and recover this through the tariff variation mechanism in the access arrangement.

Our draft decision approves $333.8 million ($2020–21) of total opex for AGN for the 2021–26 period. This is $27.9 million or 7.7 per cent less opex than proposed by AGN. Our opex draft decision is lower than AGN's opex allowance for 2016–21. This was driven by opex efficiency improvements in the 2016–21 period, reflected in AGN's opex base for 2021–26 and reductions in UAFG costs relative to the 2016–21 period.

Whilst we have raised concerns with AGN's expenditure forecasts, our decision is not final and we seek further information and justification on AGN's expenditure plans for capex and opex in its revised proposal. The price estimates may vary between our draft and final determinations following additional information provided in response to our draft decision. These changes may increase or decrease customer bills.

We have also determined a slightly lower rate of return. We have applied the 2018 rate of return instrument and estimate a placeholder allowed rate of return of 4.63 per cent (nominal vanilla) compared to AGN's proposed 4.71 per cent.

Overall, subject to receipt of the additional information that we are seeking in AGN's revised proposal, we are satisfied that our draft decision on AGN's 2021–26 access arrangement proposal is likely to be in the long term interests of consumers and, if implemented in our final decision, customers will be paying no more than they should for safe and reliable gas services.

Ensuring consumers pay no more than they need for safe and reliable gas services

Ensuring consumers pay no more than they need for safe and reliable gas services that they want is a cornerstone of the access arrangement decision process. This involves us assessing whether a business' proposal is a reasonable and realistic forecast of how much money it needs for the safe and reliable operation of the

network. To do this, we have used a range of materials, including AGN's proposal, stakeholders' submissions and our own analysis. Additionally, we have engaged directly with AGN representatives to discuss and seek further information on aspects of its proposal.

Energy affordability remains a key concern for AGN's customers,[6] as well as a safe and reliable gas service and a sustainable network through innovation and planning for the future.[7] In response to these concerns, AGN has submitted a proposal to us that continues to put downward pressure on gas network charges and customers' bills in the 2021–26 period. AGN will deliver a larger bill reduction for consumers in the first year of the 2021–26 period, followed by modest increases in the subsequent years.

While we regard AGN's initial proposal as a step toward achieving positive outcomes for its customers, there is still some disparity between what it has put forward and our draft decision. As noted above, this particularly relates to capex, and to a lesser extent, opex. In order to accept AGN's proposal, we will need further justification and supporting material with its revised proposal. We will carefully consider all additional material that AGN provides before making our final decision next year.

AGN's high-quality consumer engagement approach

We commend AGN on its consumer engagement approach in developing its 2021–26 proposal. AGN has demonstrated meaningful engagement with its customers, which it facilitated through numerous AGN workshops held across several regional SA locations with residential and business customers. All submissions we received on AGN's proposal applauded AGN on its high-quality consumer engagement.

This was also recognised by CCP24. They stated: [8]

> We conclude that AGN has engaged with a diversity of their customers, has actively listened, and acted on the advice given and preferences expresses by customers. It was an extremely high quality, well implemented engagement strategy, and is continuing. AGN has effectively incorporated consumer and stakeholder input into their Final Plan and has documented their responses to consumer advice very clearly.

Based on these submissions and our interactions with, and observations of, AGN during this review, it is apparent that AGN is committed to putting customers at the centre of its business. AGN's consumer engagement program was also acknowledged

---

6 AGN, Attachment 5.1, *Stage 1 Engagement Report*, 1 July 2020, p. 19.

7 AGN, Attachment 5.3, *KPMG Final Report, AGN Customer Engagement Program*, 1 July 2020, p. 13.

8 CCP24, *Advice to Australian Energy Regulator on Australian Gas Networks Final Plan for AGN Gas Networks (South Australia) Access Arrangement July 2021-June 2026,* 10 August 2020, p. 4.

nationally with it being awarded the Energy Network Consumer Engagement Award[9] in recognition of its leadership and innovation in consumer engagement.

While some stakeholders have expressed concern over certain aspects of AGN's proposal, such as the mains replacement program and opex step changes which remains an area of contention in this review, we are encouraged by AGN's proactive actions since lodging its proposal aimed at addressing outstanding issues through continued engagement.

Section 1.4 details further consideration of AGN's consumer engagement program and our framework for assessing consumer engagement. It sets out the considerations that we think can clearly demonstrate whether consumers have been genuinely engaged in the development of the proposal.[10]

Potential future investment uncertainty faced by AGN

The future of natural gas is a live issue, particularly as renewable energy becomes cheaper and is increasingly becoming the choice of consumers. Whilst South Australian customers are still demanding gas and AGN continues to connect customers[11] and support its network operations, gas networks across Australia are facing an evolving landscape with the growing support for reducing carbon emissions by moving away from natural gas use for homes and businesses. This is occurring at varying speeds in different regions driven primarily by state government policy. This issue of uncertainty was considered by the CCP24,[12] acknowledging:

> AGN, along with other gas distribution network businesses, faces fundamental questions about the future of the gas network, driven by jurisdictional governments moving towards net zero emissions policies in a timeframe considerably less than the asset lives of a significant part of the businesses' asset base.[13]

AGN's proposal recognises the need to innovate and consider alternatives to natural gas to sustain investments over time. However, given the uncertainty surrounding natural gas and the future viability of alternative fuels, AGN's proposal is not to make fundamental changes, such as a move to accelerated depreciation[14] in the next period.

---

9 Energy Networks Australia (ENA) in partnership with Energy Consumers Australia (ECA) run the award, which recognises an Australian energy network business that demonstrates outstanding leadership in consumer engagement. https://energyconsumersaustralia.com.au/news/consumer-engagement-award-winner-announced

10 See table 7, AER, *Draft decision, Jemena distribution determination 2021–26*, September 2020, p. 43.

11 Despite the increase in customer numbers the average, total consumption over the 2021−26 period is forecast to continue the declining trend of the current period.

12 CCP24, *Advice to Australian Energy Regulator on Australian Gas Networks Final Plan for AGN Gas Networks (South Australia) Access Arrangement July 2021-June 2026,* 10 August 2020.

13 CCP24, *Advice to Australian Energy Regulator on Australian Gas Networks Final Plan for AGN Gas Networks (South Australia) Access Arrangement July 2021-June 2026*, 10 August 2020, p. 3.

14 Accelerated depreciation is one response to the challenge of gas supply in an emissions constrained environment. Accelerated depreciation seeks to recoup the cost of future investments from its customers over a shorter period of time. Accelerated depreciation is usually adopted when assets are not being utilised.

AGN's customers are interested in the future of gas, future energy mixes and the potential for renewable gas and have shown support for AGN's approach.[15] This is in contrast to other gas networks, for example the ACT's Evoenergy gas network, where there is a stronger mandate to reduce reliance on natural gas and hence a more pressing need to consider changes in the next period.[16]

We consider AGN has taken a sound approach to the uncertainties on its network. This is consistent with what we have heard from stakeholders, including CCP24, who support AGN's decision not to seek accelerated depreciation for the 2021–26 period and would like to see further stakeholder engagement on the future of gas.[17]

To this end, and in recognition of the importance of the gas market and our role in determining network access arrangements, we have elevated consideration of future gas market issues in our strategic priorities list. We are currently considering how the AER could advance this discussion with consumers, industry, market bodies and government stakeholders.

Next steps

AGN now has the opportunity to consider our draft decision. It must submit its revised proposal to us by **13 January 2021**.

Interested stakeholders are invited to make submissions on both our draft decision and AGN's revised proposal (once submitted) by **17 February 2021**.

We will make our final decision by **30 April 2021**.

---

15 AGN, Attachment 5.1, *Stage 1 Engagement Report*, 1 July 2020, p. 5.

16 AER, *Draft decision, Evoenergy 2016–21 access arrangement*, Overview, November 2020, pp. 9–11.

17 CCP24, *Advice to Australian Energy Regulator on Australian Gas Networks Final Plan for AGN Gas Networks (South Australia) Access Arrangement July 2021-June 2026*, 10 August 2020, p. 11; Also see CCP24, *Advice to the Australian Energy Regulator on Australian Gas Networks South Australia Draft Plan for Access Arrangement July 2021-June 2026*, 5 June 2020, pp. 31–50.

1 Our draft decision

Our draft decision would allow AGN to recover $1028.5 million ($nominal, smoothed) from its customers from 1 July 2021 to 30 June 2026.

AGN is regulated using a price cap.[18] Incentives are provided to it to reduce costs, improve service quality and undertake efficient investments.

Gas pipelines that are subject to full regulation, like AGN's, are regulated by us under an approved access arrangement.[19] An access arrangement specifies certain pipeline services (reference services) and the price and non-price terms and conditions on which those reference services will be offered over a five-year period.

To approve an access arrangement, we make regulatory decisions on the revenue that pipeline operators, such as AGN, can recover from users of its reference services.

For this draft decision, our assessment is based on the access arrangement proposal that AGN submitted to us on 1 July 2020.[20] AGN's proposal sets out its view of its expected costs, demand and required revenues for the 2021–26 period.

1.1 How our draft decision would affect gas bills

The gas distribution network tariffs that will be set by reference to our final decision next year are one contributor to the total retail gas bills that customers pay. Key contributors to total retail gas bills are:

- the cost of purchasing gas (the wholesale energy cost)
- the cost of the pipelines used to transport the gas (the transmission and distribution networks), and other infrastructure such as metering costs
- the retailer's costs and profit margin.

Each of these costs contributes to the retail prices charged to gas customers by their chosen gas retailer.

Our draft decision on AGN affects the component of the gas bill relating to gas distribution pipelines. For customers on AGN's network, distribution charges account for approximately:[21]

---

18 This is a weighted average price cap (WAPC) tariff basket form of price control. This approach is consistent with other gas distributors and AGN's current period access arrangement. See Attachment 10 for more information.

19 The NGL provides for different types of regulation to apply to gas pipelines, based on competition and significance criteria. A 'full regulation' pipeline must periodically submit an access arrangement to the AER, setting out pricing for a reference service sought by a significant part of the market. 'Light regulation' pipelines are not subject to upfront price regulation. The light regulation model is a negotiate-arbitrate approach, placing greater emphasis on commercial negotiation and information disclosure. The AER plays a role only if dispute resolution mechanisms are triggered.

20 AGN, *Final Plan*: *Five year plan for our South Australian network, 2021–2026,* July 2020.

21 AGN, *RIN - Attachment 14 – Workbook 4 – Indicative bill impact – I July 2020*.

- 54 per cent of an average residential customer's annual gas bill
- 50 per cent of an average small business customer's annual gas bill.

We estimate the expected bill impact by varying the distribution charges in accordance with our draft decision, while holding all other components constant. This approach isolates the effect of our draft decision on distribution tariffs only. However, this does not imply that other components of the bill will remain unchanged across the access arrangement period.

Table 1 shows the estimated average annual impact of our draft decision, if implemented, for the 2021–26 period on gas bills for customers on AGN's network compared with AGN's proposal ($nominal).

In terms of average annual customer gas bills, we estimate that the impact of this draft decision would be to:

- decrease residential customer gas bills by $17 or 1.7 per cent from the current level, compared to an increase of around $40 or 4.2 per cent if we were to accept AGN's proposal in full
- decrease small business customer gas bills by $162 or 1.6 per cent from the current level, compared to an increase of around $391 or 3.9 per cent if we were to accept AGN's proposal in full.

Table 1 AER's estimated impact of our draft decision and AGN's proposal on average annual gas bills for the 2021–26 period ($nominal)

	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26
AER's draft decision						
Residential annual bill[a]	945[a]	869	883	898	913	928
Annual change[c]		–76 (–8.0%)	14 (1.6%)	15 (1.6%)	15 (1.7%)	16 (1.7%)
Small business annual bill[b]	10031[b]	9287	9426	9569	9716	9869
Annual change[c]		–744 (–7.4%)	139 (1.5%)	143 (1.5%)	148 (1.5%)	153 (1.6%)
AGN's proposal						
Residential annual bill[a]	945[a]	911	928	946	965	985
Annual change[c]		–34 (–3.6%)	17 (1.9%)	18 (1.9%)	19 (2.0%)	19 (2.0%)
Small business annual bill[b]	10031[b]	9700	9871	10048	10232	10422
Annual change[c]		–332 (–3.3%)	171 (1.8%)	177 (1.8%)	184 (1.8%)	191 (1.9%)

Source: AER analysis; AGN, *Attachment 1.4_PTRM*, July 2020; AGN, *Attachment 14 – Workbbook 4 – Indicative bill impact*, July 2020.

(a) Annual bill for 2020–21 reflects the average consumption of 16 MJ for AGN's residential customers.

(b) Annual bill for 2020–21 reflects the average consumption of 296 MJ for AGN's small business customers.

(c) Annual change amounts and percentages are indicative. They are derived by varying the network tariff contribution to the 2020–21 bill amounts in proportion to the change in the tariff path. Actual bill impacts will vary depending on gas consumption and tariff class.

1.2 What is driving revenue?

The changing impact of inflation over time makes it difficult to compare revenue from one period to the next on a like-for-like basis. To do this, we use 'real' values based on a common year, which have been adjusted for the impact of inflation ($2020–21).[22]

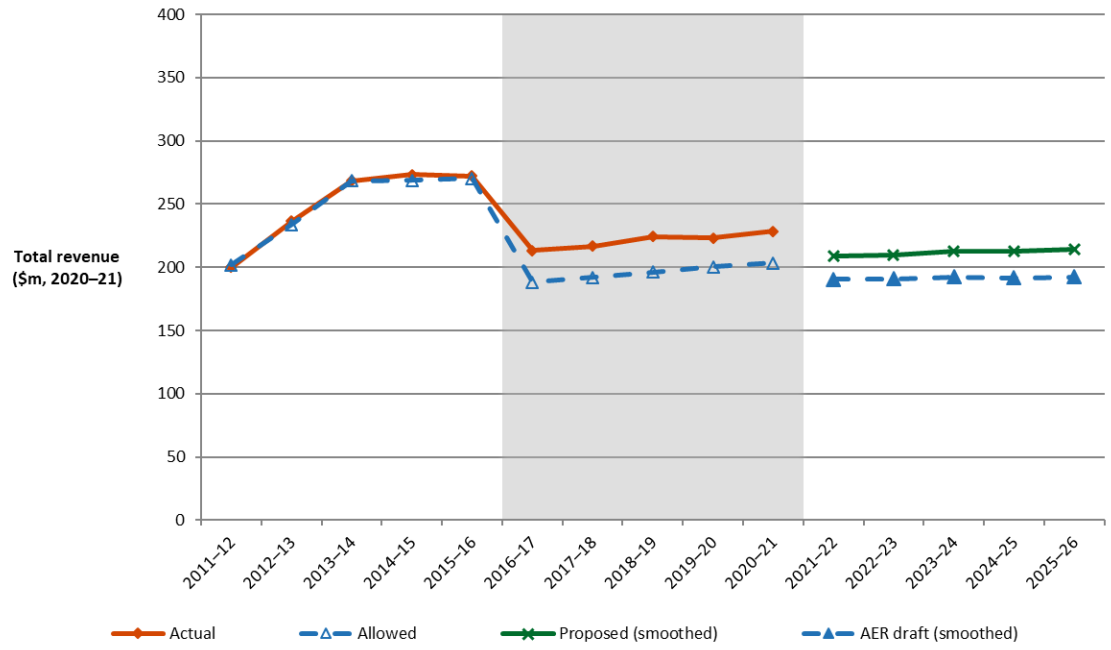
This draft decision approves a total revenue for the 2021–26 period that is $22.5 million (2.3 per cent) lower than we approved in our 2016–21 decision.[23]

Figure 1 shows our draft decision for AGN's smoothed revenue for the 2021–26 period, and its allowed revenues over the 2011–21 periods.

[22] That is, 30 June 2021 dollar terms based on AGN's estimated actual revenue for 2020–21.

[23] The comparison of total revenues between the 2021–26 and 2016–21 periods is based on smoothed revenues. In nominal dollar terms, our draft decision total revenues for the 2021–26 period is $64.5 million, or 6.7 per cent, higher than the total revenues approved for the 2016–21 period.

Figure 1 Revenue over time ($million, 2020–21)



Source: AER analysis.

Figure 2 highlights the key drivers of the change in AGN's allowed revenue from the 2016–21 period compared to what we expect in the 2021–26 period. It shows that our 2021–26 draft decision provides for reductions in the building blocks for:

- return on capital, which is $116.4 million (23.9 per cent) lower than 2016–21, driven by decreases in the nominal weighted average cost of capital (WACC) from 6.14 per cent to 4.63 per cent in the first year of the 2016–21 and 2021–26 periods, respectively[24]
- opex, which is $55.7 million (13.9 per cent) lower than 2016–21, driven by opex efficiency gains in the 2016–21 period, reflected in AGN's opex base for 2021–26 and reductions in unaccounted for gas (UAFG) costs relative to the 2016–21 period
- cost of corporate income tax of zero, which is $8.9 million lower than 2016–21, driven by the lower return on equity and higher gamma as per the 2018 rate of return instrument, and the application of our 2018 tax review.

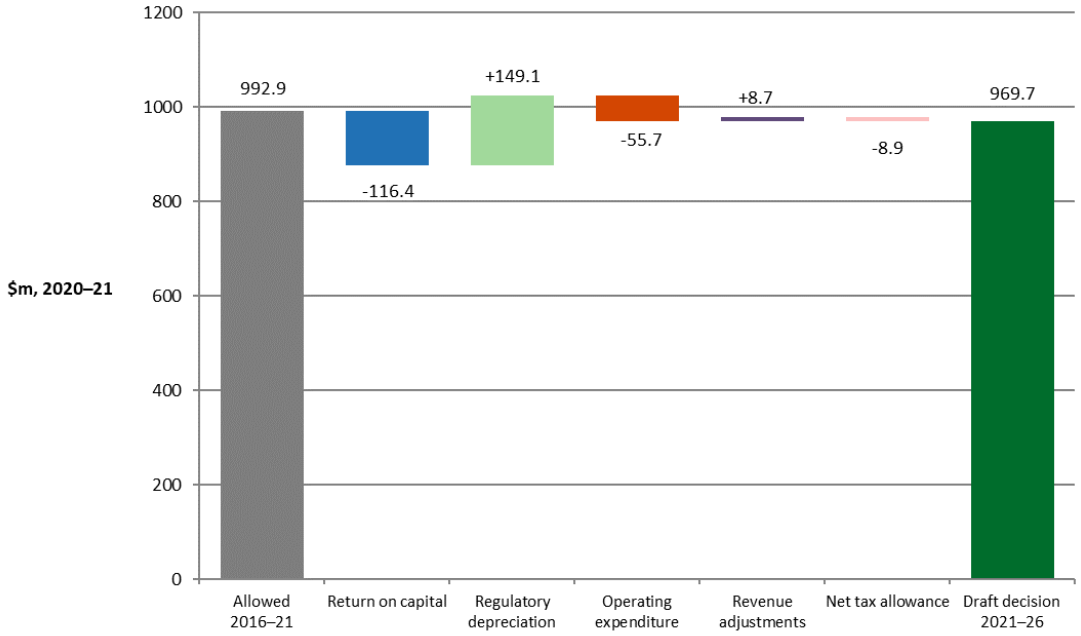
Figure 2 also shows that our decision provides for an increase in the building block for:

- regulatory depreciation, which is $149.1 million (157.8 per cent) higher than 2016–21, driven by the accelerated depreciation of the replaced mains and inlets assets.

[24] We compare first year values because the nominal WACC is annually updated each year to reflect changes in the cost of debt.

- revenue adjustments of $8.2 million, which is higher than the revenue adjustments of –$0.5 million in 2016–21, driven by the opex efficiency carryover mechanism.

Figure 2 AER's draft decision for the 2021–26 period and AGN's 2016–21 allowed building block costs ($million, 2020–21)

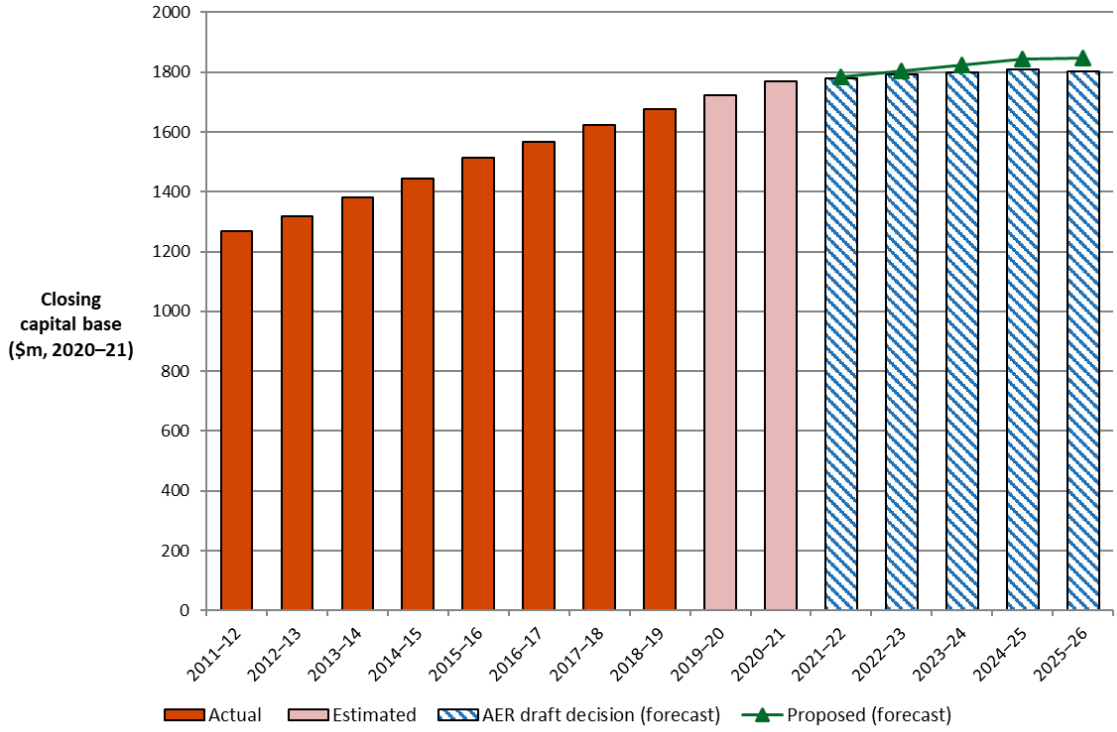


Source: AER analysis.

Note: Includes ancillary reference services revenue.

Figure 3 compares our draft decision on AGN's forecast capital base, to AGN's actual and proposed forecast capital base. It shows that AGN's capital base is increasing slightly over the 2021–26 period.

Figure 3 Value of AGN's capital base over time ($million, 2020–21)



Source: AER analysis.

1.3 Key differences between our draft decision and AGN's proposal

AGN proposes total forecast revenue of $1136.4 million for the 2021–26 period.[25] Our draft decision of $1028.5 million allows $107.9 million (9.5 per cent) less revenue than AGN seeks to recover through its 2021–26 proposal.

Figure 4 compares the building block revenue from our draft decision to AGN's proposal for the 2021–26 period, and to approved revenue for the 2016–21 period.

The biggest contributor to the difference between our draft decision revenue and AGN's proposal is the regulatory depreciation. The regulatory depreciation building block is $56.5 million (17.8 per cent) lower compared to AGN's proposal. This is driven by the reduction we made to the proposed accelerated depreciation amount reflecting our assessment of the mains replacement capex.

For the current rate of return (and, therefore, the return on capital), whilst AGN has applied the 2018 rate of return instrument and proposes a 4.71 per cent rate of return in the first year, currently the risk free rate and cost of debt is lower than at the time of

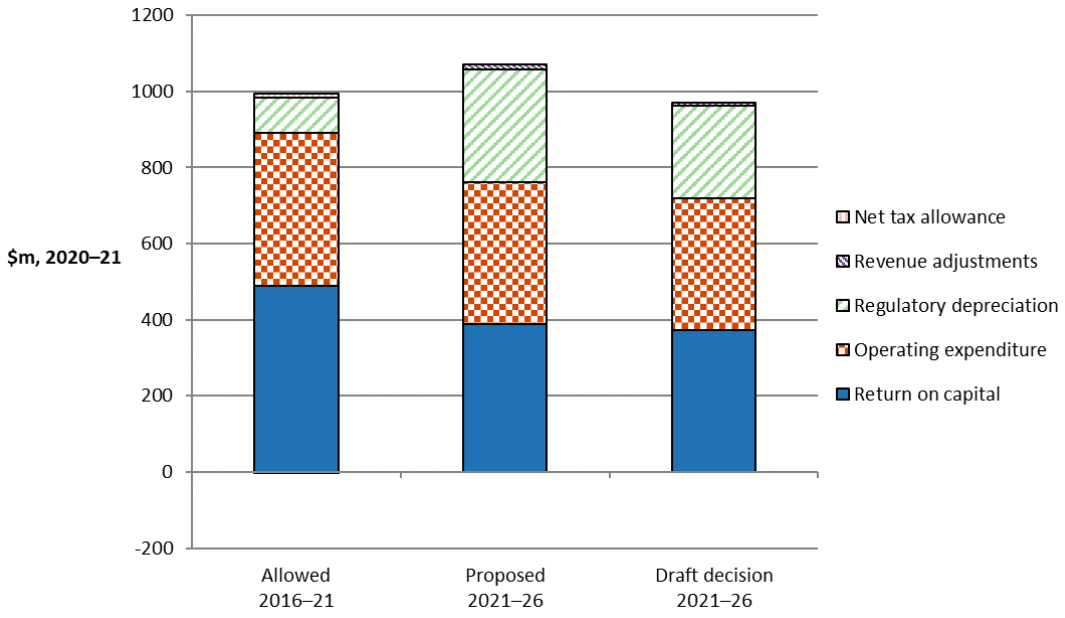
[25] AGN, *Attachment 1.4_PTRM*, July 2020.

its proposal, leading to a rate of return of 4.63 per cent in the first year. Consequently, the amount for the return on capital building block is $17.0 million (4.1 per cent) lower compared to AGN's proposal.

We also consider that AGN has not sufficiently justified the prudency or efficiency of its proposed level of forecast capex. Our substitute net capex forecast of $478.8 million, excluding capital contributions and disposals, is 17.0 per cent lower than AGN's proposal. This leads to a lower projected capital base, as at 1 July 2026, than AGN's proposal which, in turn, also contributes to lower draft decision revenues through lower return on capital building block.

Our approach to forecasting opex is largely the same as AGN (applying the 'base–step–trend' approach). However, our alternative opex forecast of $338.8 million is $27.9 million (7.7 per cent) lower than AGN's opex proposal[26] because we have a lower forecast rate of change, have not included AGN's proposed step changes and lower forecast UAFG costs.

Figure 4 AER's draft decision on components of total revenue ($million, 2020–21)



Source: AER analysis.

Note: Includes ancillary reference services revenue.

[26] Includes ancillary reference services revenue.

1.4 AGN's consumer engagement

Consumer engagement helps AGN determine how best to provide services that align with consumers' long term interests. Consumer engagement in this context is about AGN working openly and collaboratively with consumers and providing opportunities for their views and preferences to be heard and to influence AGN's decisions.

In the regulatory process, stronger consumer engagement can help us test network service providers' expenditure proposals, and can raise alternative views on matters such as service priorities, capex and opex proposals, and tariff structures.

AGN's consumer engagement in the preparation of its 2021–26 proposal has been well received by stakeholders. Stakeholders commented that AGN's consumer engagement was genuine, comprehensive and led from the CEO down. Many expressed their satisfaction in AGN's in depth approach to seeking customer input. For its efforts, in October 2020, AGN was awarded the Energy Networks Consumer Engagement Award in recognition of its leadership and innovation in consumer engagement.[27]

We use a range of considerations to demonstrate whether consumers have been genuinely engaged in the development of AGN's 2021–26 proposal. This is the framework for considering consumer engagement in our recent Victorian electricity draft decisions.[28] These include:

- nature of engagement
- breadth and depth of engagement
- clearly evidenced impact
- assessment of outcomes for the proposed opex and capex allowances.

Nature of engagement

AGN undertook an extensive co-design program with its consumers on the nature of its consumer engagement, including specific co-design activity on vulnerable customers.[29]

Co-design is a process by which organisations collaborate with stakeholders and customers to inform their decision-making. In undertaking this co-design process, AGN seeks to move towards the collaborate phase of the IAP2 public engagement spectrum, partnering with stakeholders to design and agree on decisions.[30]

Overall, we consider that AGN's consumer engagement was genuine, independent and consumer focused. AGN tailored its consumer engagement approach to suit its

---

27 ENA, *ENA annual award winners announced – Media release,* October 2020. https://energyconsumersaustralia.com.au/news/consumer-engagement-award-winner-announced

28 See table 7; AER, *draft decision, Jemena distribution determination 2021–26, Overview*, September 2020, p. 43.

29 AGN, *Attachment 5.4 – KPMG Co-design – Vulnerable customers*, July 2020.

30 AGN, *Attachment 5.4 – KPMG Co-design – Vulnerable customers*, July 2020, p. 7.

stakeholders having regard to the development stage of its proposal and the complexity of issues being discussed, enabling them to contribute to shaping the proposal.

AGN has also continued to engage its consumers through its consumer reference groups, including its South Australian Reference Group (SARG) [31] and Retailer Reference Group (RRG).[32]

To inform its proposal, AGN adopted a four staged approach to its engagement program:

- in February 2019 AGN consulted on its draft engagement strategy as part of stage 1 and in July 2019 AGN published its Stage 1 Consumer and Stakeholder Engagement Report which summarised early engagement insights and documented its final engagement plan.[33]
- stage 2 engagement activities included 22 workshops over a series of three stages across metro and regional SA. During November 2019, AGN hosted a series of 3 Vulnerable Customer Assistance Program (VCAP) Co-design workshops which were independently facilitated. Ten stakeholders with experience of working with vulnerable individuals and communities were invited to participate, including representation from not-for-profit organisations, an energy retailer, peak bodies and the public sector. Working with AGN representatives at the 'collaborate' level of the IAP2 Spectrum of Public Participation, workshop participants generated and assessed ideas for addressing the core question: 'How might AGN better support vulnerable customers – now and in the future?'

  It is important to emphasise that the VCAP arose from participant feedback during the initial round of customer workshops, rather than from AGN.
- on 17 February 2020 AGN published a draft plan. Feedback from consultation with stakeholders on its draft plan was incorporated into AGN's proposal. CCP24 commented favourably on AGN's draft plan engagement process:[34]

  > AGN's Draft Plan was released nearly five months in advance of the date for lodgement of the Access Arrangement Proposal, allowing stakeholders sufficient time to engage with its contents in detail. Overall, this is one of the best written Draft Plans that CCP24 members have seen with complex topics clearly described and appropriate levels of detail for a Draft Plan, showing that customers and their understanding of the issues are respected and valued. We

---

31 This group is made up of the following organisations – SA Council of Social Service (SACOSS), Business SA, UDIA (SA), SA Federation of Residents and Ratepayers Association (SAFRRA), Australian Industry Group (SA), COTA SA, Uniting Communities, Local Government Association (SA), Property Council of Australia (SA), Consumers SA, Multicultural Communities Council of SA and the South Australian Financial Counsellors Association.

32 This group is made up of the following retailers – AGL, Simply Energy, Lumo Energy, Red Energy, Alinta Energy, Origin Energy and EnergyAustralia.

33 AGN, *Final Plan: Five year plan for our South Australian network, 2021–2026,* July 2020 June 2020, p. 32.

34 CCP24, *Advice to AER – AGN(SA) Draft Plan response*, June 2020, p. 5.

> congratulate AGN on a well written, clearly presented Draft Plan with a good balance of detail, data and narrative.

- its final plan for 2021–26, released on 1 July 2020.

We sought advice from our CCP24 on the extent of AGN's consumer engagement on three components of AGN's opex forecast[35] and this has informed our assessment of AGN's consumer engagement. CCP24 commented that:

> AGN has a history of pro-active consumer engagement and that they deliver on their commitments. AGN's record of genuine consumer engagement has been recognised by AER, CCP and we suggest, local consumers, for at least 4 years.[36]
>
> We saw AGN undertake quality engagement – a co-design process involving representatives from community service organisations and other bodies that support vulnerable members of the community, and then wider engagement through customer workshops and the SARG and RRG.[37]

As highlighted above, AGN listened to its customers through its engagement on vulnerable customers. CCP24 further commented that:[38]

> Interest in and commitment to the VCAP co-design process from co-design workshop participants was extremely high…Our observation is that this engagement was indeed conducted as a collaborative effort…A significant proportion of the South Australian-based community organisations, and other bodies supporting vulnerable consumers were involved in the co-design workshops.

Breadth and depth of engagement

Overall, we consider that AGN's consumer engagement was appropriately broad and tailored where necessary through its co-design activities.

CCP24 has described AGN's consumer engagement as high quality and well implemented and submitted the following comments in respect of AGN's consumer engagement in developing its 2021–26 proposal:[39]

---

35 This included the digital customer experience program (step change), vulnerable customer assistance program (step change) and purchasing renewable unaccounted for gas (at a premium). We asked whether in the CCP24's opinion, the outcomes of AGN's consumer engagement supports or does not support (as the case may be) AGN's proposed customer initiated opex expenditure programs. See CCP24, *Advice on AGN customer initiated opex*, 6 October 2020.

36 CCP24, *Advice on AGN's customer initiated opex*, 6 October 2020, p. 6.

37 CCP24, *Advice on AGN's customer initiated opex*, 6 October 2020, p. 8.

38 CCP24, *Advice on AGN's customer initiated opex*, 6 October 2020, p. 14.

39 CCP24, *Advice to Australian Energy Regulator on Australian Gas Networks Final Plan for AGN Gas Networks (South Australia) Access Arrangement July 2021-June 2026*, 10 August 2020, p. 4.

> We conclude that AGN has engaged with a diversity of their customers, has actively listened, and acted on the advice given and preferences expresses by customers. It was an extremely high quality, well implemented engagement strategy, and is continuing. AGN has effectively incorporated consumer and stakeholder input into their Final Plan and has documented their responses to consumer advice very clearly.

This is also reflect in numerous submissions we received on AGN's access arrangement revision for 2021–26.

BusinessSA submitted:[40]

> Business SA has been represented on AGIG's customer panel for several years, including for the full extent of consultation leading up to this final plan. From our perspective, AGIG has been quite open with their plans and willing to take on board feedback from a range of interested parties. The approach of AGIG has instilled confidence that consumer's expectations about affordable energy are predominately being met. While Business SA accepts there will always be some degree of competitive tension on cost and prices, we have felt AGIG are particularly mindful of their status providing a 'fuel of choice'.

The SA Financial Counsellors Association submitted:[41]

> SAFCA considers this process has been highly successful. AGN is to be congratulated both on its high levels of customer satisfaction in the current AA period on its endeavour in undertaking a wide and in depth approach to seeking customer input.

Clearly evidence impact

We have observed that AGN is committed to including consumers in its decisions. This has occurred through both its engagement activities for the 2021–26 access arrangement revision and continued engagement with its South Australian Reference Group and Retailer Reference Group.

In its proposal, AGN highlights a number of themes that it heard through its engagement with customers, including the following:

> Price and affordability are the most important issues for customers and customers welcome the proposed price cut
>
> 96% of customers support AGN's Draft Plan and investment proposals
>
> AGN is trusted for its delivery of safe, reliable gas and customers support investment levels to maintain these standards
>
> Customers value current customer service levels but expect digital services to be introduced in a cost effective way

---

[40] BusinessSA, *Submission on AGN's Access Arrangement*, 10 August 2020.

[41] SAFCA, *Submission on AGN's Access Arrangement*, 10 August 2020, p. 3.

> Environmental sustainability is a high priority for customers and there is a high level of support for investment in renewable gas to replace unaccounted for gas.
>
> Customers support AGN investment in innovation
>
> Customers support investment in a Vulnerable Customer Assistance Program (VCAP) and consider this responsible business
>
> Customers consider education is important, but initiatives considered by AGN must be assessible and funding models need to be further explored.[42]

While stakeholder submissions commended AGN on its consumer engagement and for incorporating many consumer views and priorities into its 2021–26 proposal, some stakeholders have expressed concern over certain aspects of AGN's proposal.

For instance, SACOSS stated:

> SACOSS congratulates AGN for taking a proactive, leadership role in seeking ways to better support customers in vulnerable situations. We note that the program has been underpinned by strong consumer engagement, including three co-design workshops with the social services sector.[43]
>
> …
>
> Overall, SACOSS invites the AER to consider the extent to which some of AGN's proposed activities could be funded outside of AGN's regulated revenue and which proposals would be more efficient to be provided for by governments or incorporated into retailers' existing programs.[44]

Similar remarks have also been echoed by CCP24, who commented that AGN's proposal does not provide full detail of the intended vulnerable customer strategy.[45] Notwithstanding this, we are encouraged by AGN's proactive actions since lodging its proposal aimed at addressing outstanding issues through continued engagement.

Assessment of outcomes

Once we have considered the nature, scope and impact of the consumer engagement, our final step is to consider whether the outcome as presented by AGN is in the long-term interests of consumers. We do this undertaking our standard process. We compare allowances proposed by AGN with those our established models and approaches suggest represent alternative estimates. If AGN's proposal aligns with or is below our estimates, we are able to have greater confidence that the results of the consumer engagement is in the long-term interests of consumers.

---

42 AGN, *Final Plan*: *Five year plan for our South Australian network, 2021–2026,* July 2020, p. 35.

43 SACOSS, *Submission on AGN AA*, 11 August 2020, p. 3.

44 SACOSS, *Submission on AGN AA*, 11 August 2020, p. 6.

45 CCP24, *Advice to Australian Energy Regulator on Australian Gas Networks Final Plan for AGN Gas Networks (South Australia) Access Arrangement July 2021-June 2026*, 10 August 2020, p. 26.

As set out in sections 4.4 (capex) and 4.5 (opex), our draft decision does not approve AGN's proposals for capex and opex for the 2021–26 period. Whilst we have raised concerns with AGN's expenditure forecasts, our decision is not final and we seek further information and justification on AGN's expenditure plans for capex and opex in its revised proposal.

2 Reference services and tariffs

This section summarises our 2021–26 draft decision on the services covered by AGN's access arrangement, the reference tariff and reference tariff variation mechanism, and forecast demand.

2.1 Services covered by the access arrangement

The access arrangement must specify the pipeline services AGN proposes to be reference services having regard to the reference service factors.[46] For each reference service, including services ancillary to the reference services, the access arrangement specifies the reference tariff and the other terms and conditions on which these services will be provided.[47]

AGN is to provide access to its reference services on the terms set out in its 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.[48]

AGN's proposed reference service for the 2021–26 access arrangement is largely the same as its reference service for the 2016–21 access arrangement. It is also consistent with our November 2019 decision on AGN's June 2019 reference service proposal.[49] It includes:

- haulage:
    - receipt of and transportation of gas from an upstream pipeline or other gas facility through the AGN network to each customer's premises for use and consumption within the premises
    - providing gas metering equipment at customers' premises and associated services to read the quantity of gas flowing through the gas meters.
- ancillary services.

Our draft decision approves the haulage component of the proposed reference service.

---

46 NGR, modified rule 48(1)(c) and rule 47A(15).

47 NGR, modified rule 48(1)(e).

48 NGL, Chapter 6.

49 AER, *Final Decision – Australian Gas Networks (South Australia) Gas Distribution Determination 2021 to 2026 Reference Service*, November 2019; https://www.aer.gov.au/system/files/AER%20-%20Final%20Decision%20-%20AGN%20SA%202021-26%20Reference%20Service%20Proposal%20-%20November%202019.pdf

We also approve the ancillary services AGN proposes for the 2021–26 access arrangement as part of its reference service, which are:

- special meter reads
- disconnection
- reconnection
- meter and gas installation test
- meter removal / reinstallation.

2.2 Reference tariff setting and reference tariff variation mechanism

Our draft decision includes decisions on the structure and levels of AGN's reference tariffs (reference tariff setting) and the mechanism by which those tariffs can vary over the access arrangement period (reference tariff variation mechanism).

Reference tariff setting requires AGN to explain how it allocates revenues and costs between reference services and other services, and how it determines different tariffs. This involves setting and applying the formula by which AGN can recover its costs. Our draft decision is to approve AGN's proposed structure of reference tariffs for the 2021–26 period.

Our draft decision also updates the cost pass through events that will apply to AGN in the 2021–26 period. We have accepted the cost pass through events proposed by AGN, with some minor adjustments, and they are consistent with those we approved for AGN's 2016–21 access arrangement.

The reference tariff variation mechanism:

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

AGN proposes to retain its reference tariff variation mechanism for the 2021–26 period with a weighted average price cap control mechanism. Our draft decision is to approve AGN's proposal. We have also revised AGN's proposed initial reference tariffs to reflect changes to the forecast total revenue identified in section 3 of this Overview.

2.3 Forecast demand

Under a weighted average price cap, demand is an important input into the derivation of AGN's reference tariffs. In simple terms, tariffs are determined by dividing cost (as

reflected in forecast revenue) by total demand (GJ/day). This means that a decrease in forecast demand has the effect of increasing tariffs, and vice versa. Forecast demand also affects the forecasts of opex and capex (new connections) that form part of our decision on the total revenue requirement.

Our draft decision principally accepts AGN's demand forecasts for residential, small commercial, and industrial customers, pending further clarifications and updates to the latest source data.

AGN's demand forecasts represent:

- a decrease in total residential gas demand of 1.54 per cent per year over the 2021–26 period, which is lower than the 1.27 per cent per year increase for the 2016–21 period. This is due to forecast reductions in consumption per connection of 2.55 per cent per year being offset by net customer growth of 1.04 per cent per year[50]
- an increase in total small commercial demand of 0.31 per cent per year over the 2021–26 period, which is lower than the 0.76 per cent per year decrease for the 2016–21 period. This is due to a forecast reduction of 0.30 per cent per year in consumption per connection, and an increase of 0.62 per cent per year in commercial net connections[51]
- a reduction in industrial demand of 3.12 per cent per year for the maximum daily quantity and 2.85 per cent per year for the annual quantity demand over the 2021–26 period, compared to reductions of 2.93 and 2.24 per cent per year, respectively, over the 2016–21 period.

[50] This compares to a reduction in consumption per connection of 2.50 per cent per year and a growth in net customer connections of 1.26 per cent in the current period.

[51] This compares to a reduction in consumption per connection of 0.25 per cent per year and a growth in net customer connections of 1.02 per cent in the current period.

3 Total revenue requirement

The total revenue requirement is a forecast of the efficient cost of providing gas distribution services over the access arrangement period. We determine annual revenue, and the total revenue requirement, in nominal terms. To do this, we take into account expected future inflation to determine nominal price levels in future periods. Our decision uses 10-year inflation expectations to convert revenues to nominal values.

Tariffs are derived from the total revenue requirement after consideration of demand for each tariff category. Our draft decision is that AGN will continue to operate under a weighted average price cap. This means the tariffs we determine (including the means of varying the tariffs from year-to-year) are the binding constraint across the 2021–26 period, rather than the total revenue requirement set in our decision.[52] Tariffs are adjusted each year using 'X factors' — the percentage changes in real weighted average tariffs from year-to-year — as explained further in section 3.3.

3.1 The building block approach

We employ a building block approach to determine AGN's total revenue requirement. That is, we base the total revenue requirement on our estimate of the efficient costs that AGN is likely to incur in providing its reference services. The building block costs, as shown in Figure 5, include:[53]

- return on the projected capital base (or return on capital) — to compensate investors for the opportunity cost of funds invested in the business[54]
- depreciation of the projected capital base (or return of capital) — to return the initial investment to investors over time[55]
- forecast opex — the operating, maintenance and other non-capital expenses incurred in the provision of network services
- revenue adjustments — including revenue increments/decrements resulting from the application of incentive schemes
- estimated cost of corporate income tax.

---

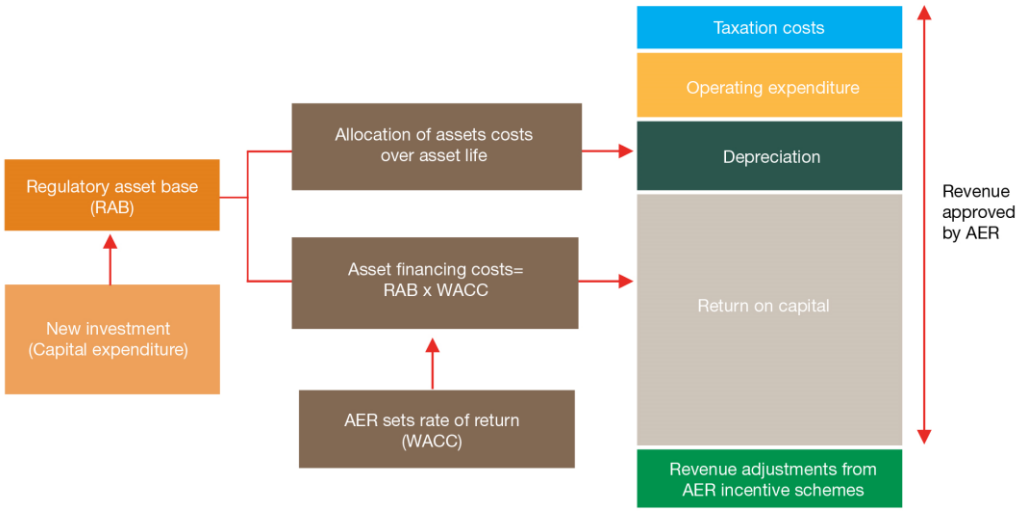
52 Where actual demand across the 2021–26 access arrangement period varies from the demand forecast in the access arrangement, AGN's actual revenue will vary from the revenue allowance determined in our decision. In general, if actual demand is above forecast demand, AGN's actual revenue will be above forecast revenue, and vice versa.

53 NGR, r. 76.

54 Note that the forecast capex approved in our decisions affects the projected size of the capital base and, therefore, the revenue generated from the return on capital and depreciation building blocks.

55 Ibid.

Figure 5 The building block approach to determining total revenue



We use an incentive approach where, once regulated revenues are set for a five-year period, networks who keep actual costs below the regulatory forecast of costs retain part of the benefit. This incentive framework is a foundation of our regulatory approach and promotes the delivery of the National Gas Objective (NGO). 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.

The following section summarises our draft decision, by building block, and provides our high level reasons and analysis.

3.2 Draft decision on total revenue

Our draft decision sets out a number of amendments to the building block inputs making up AGN's proposal for a total revenue requirement (smoothed) of $1136.4 million ($nominal). We expand on these in section 4.

Based on our assessment of the building block costs,[56] our draft decision determines a lower smoothed total revenue requirement of $1028.5 million ($nominal).[57]

It follows that our draft decision requires amendments to the 2021–22 tariffs set out in AGN's proposal, which is for a reduction in real tariffs of 8.8 per cent. We also require consequential amendments to AGN's proposed 2021–26 tariff path, which is for an increase in real tariffs of 1.2 per cent per year throughout 2022–26.

---

[56] Using the building block approach set out in NGR, r. 76.

[57] This is calculated by smoothing the unsmoothed building block revenue for the 2021–26 period, as set in this decision.

As a result of our lower total revenue requirement, our draft decision is for a larger real decrease in weighted average tariffs of 16.8 per cent in 2021–22, followed by smaller real increases of 0.9 per cent in each of the remaining years of the 2021–26 period. Section 3.3 expands on our approach to revenue smoothing and tariffs.

Table 2 sets out our draft decision on AGN's total revenue requirement, by building block, for each year of the 2021–26 period, the total revenue after equalisation (smoothing) and the X factors for use in the tariff variation mechanism.

Table 2 AER's draft decision on AGN's smoothed total revenue and X factors for the 2021–26 period ($million, nominal)

Building block	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Return on capital	81.9	80.9	79.9	78.6	77.1	398.3
Regulatory depreciation	46.6	50.9	55.0	52.3	57.0	261.8
Operating expenditure	70.4	72.1	74.1	76.3	78.8	371.7
Revenue adjustments	6.2	–0.4	5.0	–2.4	0.0	8.4
Cost of corporate tax	0.0	0.0	0.0	0.0	0.0	0.0
Building block revenue – unsmoothed (including ARS)	205.1	203.5	214.4	204.8	212.8	1040.3
Less ancillary reference services revenue	2.5	2.6	2.7	2.7	2.8	13.3
Building block revenue – unsmoothed (excluding ARS)	202.6	200.9	211.4	202.1	210.0	1027.0
Building block revenue – smoothed	**194.9**	**200.0**	**206.6**	**210.6**	**216.4**	**1028.5**
X factors[a]	16.81%	–0.85%	–0.85%	–0.85%	–0.85%	n/a
Inflation forecast	2.37%	2.37%	2.37%	2.37%	2.37%	n/a
Nominal price change[b]	–14.84%	3.24%	3.24%	3.24%	3.24%	n/a

Source: AER analysis.

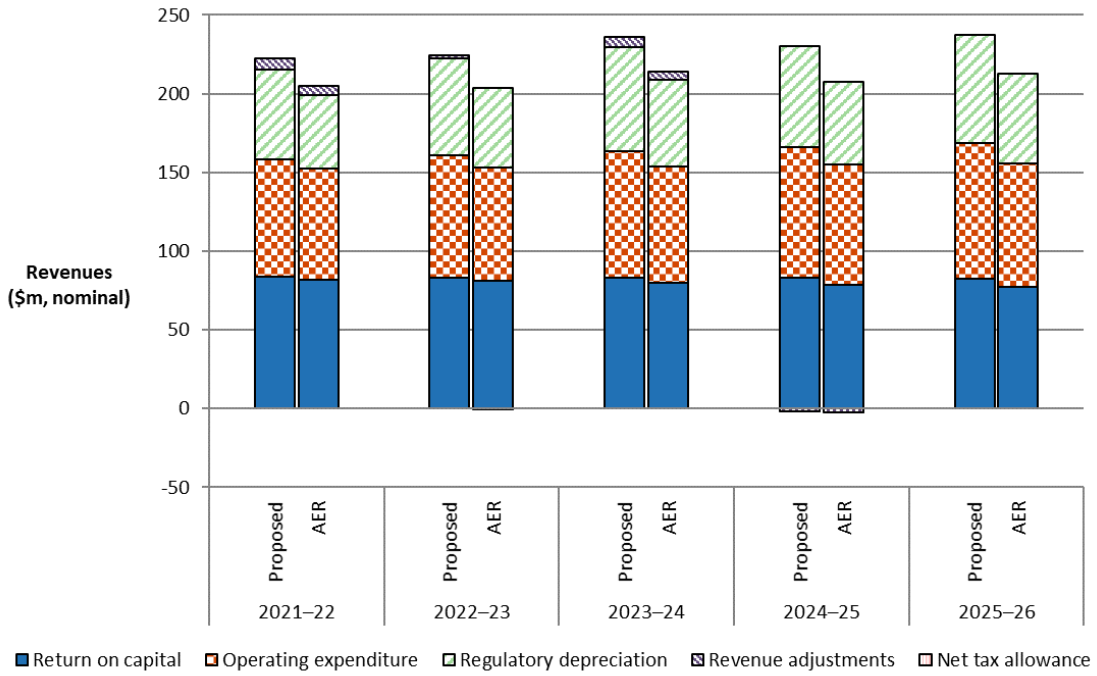
n/a: not applicable.

(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 2021–22 is indicative only. The draft decision establishes 2021–22 tariffs directly, rather than referencing a change from 2020–21 tariffs.

(b) The mathematical formula for a nominal price change under the CPI–X form of control is [(1+CPI)*(1–X factor)] – 1.

Figure 6 shows the effect of our draft decision adjustments to AGN's proposed building blocks for the 2021–26 period. It shows reductions to the proposed building blocks for the return on capital, depreciation, opex and revenue adjustments.

Figure 6 AER's draft decision and AGN's proposed building block revenue (unsmoothed) ($million, nominal)



Source: AER analysis.

Note: Revenue adjustments includes the opex efficiency carryover mechanism carryover amount.

3.3 Revenue smoothing and tariffs

After our assessment of AGN's total building block revenue (unsmoothed), we need to determine the forecast revenue (smoothed) profile across the 2021–26 period.[58] 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 2021–26 period.[59] This weighted average tariff change is known as the 'X factor'.

As part of the annual reference tariff variation process, we combine the X factors we have determined in our decision with actual inflation to create reference tariffs for the coming year. This means that the average prices paid by consumers, and therefore the revenues received by the network business, change with the X factor plus actual inflation.[60]

---

58 This process of smoothing revenues is described in the NGR as 'revenue equalisation'. See NGR, r. 92.

59 See Attachment 10 for information on the mechanics of the tariff variation mechanism.

60 Under the CPI–X form of control, a positive X factor represents a decrease in price (and, therefore, in revenue). Conversely, a negative X factor represents an increase in price (and, therefore, in revenue).

Table 3 presents our draft decision X factors compared to AGN's proposal.

Table 3 Weighted average tariff change (X factors) across the 2021–26 period — AER's draft decision and AGN's proposal

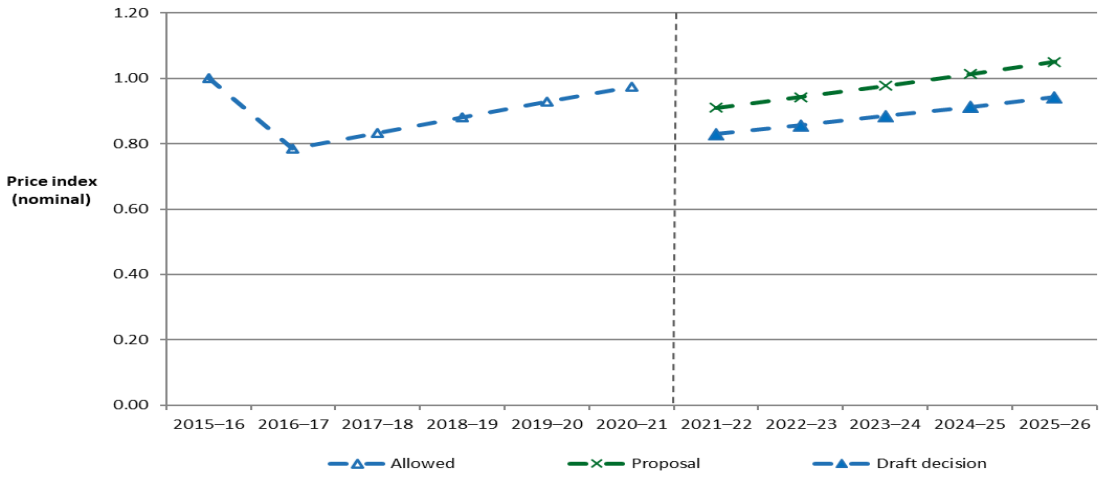
	2021–22	2022–23	2023–24	2024–25	2025–26
AER's draft decision					
X factor[a]	16.81%	–0.85%	–0.85%	–0.85%	–0.85%
Nominal price change	–14.84%	3.24%	3.24%	3.24%	3.24%
AGN's proposal					
X factor[a]	8.78%	–1.25%	–1.25%	–1.25%	–1.25%
Nominal price change	–6.61%	3.65%	3.65%	3.65%	3.65%

Source: AGN, *Attachment 1.4_PTRM*, July 2020; AER analysis.

(a) Under the CPI–X form of control, a positive X factor is a decrease in price (and, therefore, in revenue). For example, a negative X factor of 1.25 per cent in 2022–23, as proposed by AGN, means a real price increase of 1.25 per cent that year. After consideration of inflation, this becomes a nominal price increase of 3.65 per cent.

Figure 7 shows indicative tariff paths for AGN's reference services across the 2021–26 period. It compares AGN's proposed tariff path with that approved previously for the 2016–21 period, and with this draft decision.[61] This provides a broad, overall indication of the average movement in tariffs across the 2021–26 period.

Figure 7 Indicative reference tariff paths for AGN's reference services from 2016 to 2026 (nominal index)



Source: AER analysis; AER, *Draft decision – AGN (SA) – PTRM*, 27 November 2020, AGN, July 2020.

[61] The tariff path for 2015–25 uses actual inflation outcomes for 2015–19, and expected inflation for 2019–25.

AGN's proposed tariff path suggests a decrease of 6.6 per cent (nominal) in 2021–22, followed by tariffs that increase at 3.7 per cent per year for the remaining years of the 2021–26 period.[62] Our draft decision provides for lower total smoothed revenue than AGN's proposal, in line with our amendments to total unsmoothed revenue. As such, a decrease of 14.8 per cent to tariffs is required at the start of the 2021–26 period to reflect the change in smoothed revenue from the 2016–21 period. This is followed by smaller increases of 3.2 per cent per year in subsequent years.

In choosing the smoothing profile we have balanced a number of competing objectives:

- equalising (in NPV terms) unsmoothed and smoothed revenue
- providing price signals that reflect the underlying efficient costs
- minimising variability in tariffs in 2020–21 and within the 2021–26 access arrangement period
- minimising the likelihood of variability in tariffs at the start of the 2026–31 access arrangement period
- recognising stakeholder preferences for a particular tariff path.

Each of these points is discussed in turn.

First, we are satisfied that our draft decision tariff path for AGN's 2021–26 access arrangement period achieves revenue equalisation as required under the rules.[63] As we have reduced the unsmoothed revenue proposed by AGN, we have set the tariff path so that it adjusts the smoothed revenue downward to better reflect the unsmoothed building block costs.

Second, and related to the first point, our smoothing allows closer alignment of tariffs and costs. This aids the achievement of the NGO and the revenue and pricing principles (RPP), including through providing a price signal that facilitates efficient use of natural gas services.[64] Our tariff path shows a larger decrease in the first year of the 2021–26 period (2021–22) reflecting the lower unsmoothed building block costs compared to AGN's proposal.

Third, in setting the tariff path, we aim to minimise tariff volatility in 2020–21 and within the 2021–26 period. Our chosen tariff path reflects this objective, but also reflects the consideration we must give to other competing objectives. For instance, setting a flat tariff path from 2020–21 would better minimise within-period volatility, but would not achieve revenue equalisation.

---

62 AGN's proposed nominal tariff path reflects its proposed expected inflation of 2.37 per cent.

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

64 NGL, ss. 23, 24.

Fourth, in setting the tariff path, we also aim to minimise the likelihood of tariff volatility between the 2021–26 and 2026–31 periods. We do not know with certainty what AGN's efficient costs will be in 2026–27, or across the 2026–31 period more generally. The unsmoothed building block costs for 2025–26 (the last year of the 2021–26 period) are the best available proxy. Hence, this objective requires minimising the divergence between the smoothed and unsmoothed revenues for the last year of the 2021–26 period (2025–26). If there are no significant changes in forecast costs from 2025–26 to 2026–27, this final year divergence gives us an estimate of the size of the tariff change at the start of the 2026–31 period. For this draft decision, this final year divergence is 3 per cent, which is within our preferred target range of +/-3 per cent. We note that if there are significant changes in costs at the start of the 2026–31 period, this might increase or decrease the required tariff change at that time.

Finally, we also considered AGN's preference for the tariff path. AGN noted its preference that the tariff path be aligned with the growth in the forecast capital base. It stated that this approach will be more likely to allow it to sustain the credit metrics at the levels assumed in setting the return on debt because its revenue will more closely match its underlying costs over time, including its contractual obligations.[65] We consider that the tariff path largely reflects this preference. We note the average growth in the forecast capital base set in this draft decision is about 2.7 per cent per year over the 2021–26 period, whereas the average revenue growth resulted from the draft decision tariff path is about 2.6 per cent per year. Stakeholders did not raise concerns with the proposed smoothing profile.

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

[65] AGN, *Final Plan: Five year plan for our South Australian Network July 2021-June 2026*, July 2020, p. 139.

4 Key elements of our draft decision on revenue

The components of our draft decision include the building blocks we use to determine the revenue that AGN may recover from its users. 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.

4.1 Capital base

The capital base roll forward accounts for the value of AGN's regulated assets over the access arrangement period. The opening value of the capital base is used to determine the return on capital and return of capital (depreciation) building block allowances. To calculate the capital base for a regulatory year within an access arrangement period, the opening value of the capital base is rolled forward by indexing it for inflation, adding any conforming capex, and subtracting depreciation and other possible factors (such as disposals or customer contributions). Following this process, we also arrive at a closing value of the capital base at the end of each regulatory year of an access arrangement period.

We are required to make a decision on AGN's opening capital base as at 1 July 2021 for the 2021–26 period, and AGN's projected capital base for the 2021–26 period.

For this draft decision, we determine an opening capital base of $1769.3 million ($nominal) as at 1 July 2021, which is $0.1 million lower than AGN's proposed opening capital base.[66] We have updated actual capex, asset disposals and capital contribution values, and the approved forecast inflation rate for 2016–21 in the roll forward model (RFM). However, these updates did not result in a material change in the opening capital base value.

To determine the opening capital base as at 1 July 2021, we have rolled forward the capital base over the 2016–21 period to determine a closing capital base value at 30 June 2021, in accordance with the proposed RFM. This roll forward includes an adjustment at the end of the 2016–21 period to account for the difference between actual 2015–16 capex and the estimate approved in our 2016–21 decision.[67]

Table 4 summarises our draft decision on the roll forward of AGN's capital base during the 2016–21 period.

[66] AGN, *2021–26 Access Arrangement Proposal – Attachment 1.2 – RFM*, July 2020.

[67] The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the value approved at the 2016–21 decision.

Table 4 AER's draft decision on AGN's capital base roll forward for the 2016–21 period ($million, nominal)

	2016–17	2017–18	2018–19	2019–20[a]	2020–21[b]
Opening capital base	1385.6	1454.1	1534.7	1614.0	1690.2
Net capex[c]	91.9	101.9	108.2	109.6	156.2
Indexation of capital base[d]	20.5	27.8	27.4	29.7	33.8
Less: straight-line depreciation[e]	43.8	49.0	56.3	63.2	64.8
Closing capital base	1454.1	1534.7	1614.0	1690.2	1815.3
Difference between estimated and actual capex in 2015–16 capex					–35.4
Return on difference for 2015–16 capex					–10.7
Opening capital base as at 1 July 2021					**1769.3**

Source: AER analysis.

(a) Based on estimated capex. We will update the capital base roll forward for actual capex in the final decision.

(b) Based on estimated capex provided by AGN. We expect to update the capital base roll forward with a revised capex estimate in the final decision, and true-up the capital base for actual capex at the next review.

(c) Net of disposals and capital contributions, and adjusted for actual consumer price index (CPI)

(d) We will update the capital base roll forward for actual CPI for 2019–20 in the final decision.

(e) Adjusted for actual CPI. Based on forecast capex.

We determine a projected closing capital base of $2025.5 million ($nominal) as at 30 June 2026. This is $50.4 million ($nominal) (or 2.4 per cent) lower than AGN's proposed closing capital base of $2075.9 million ($nominal).[68] Our draft decision reflects the updated opening capital base as at 1 July 2021, and our decisions on forecast depreciation (attachment 4) and forecast capex (attachment 5).[69]

We accept AGN's proposal to establish the opening capital base as at 1 July 2026 using the approved depreciation schedules based on forecast capex over the 2021–26 period.[70] These depreciation schedules will be adjusted for actual inflation outcomes over this period.

Attachment 2 sets out detailed reasons for our draft decision on AGN's capital base. Table 5 sets out the projected roll forward of the capital base for the 2021–26 period.

---

68 AGN, *2021–26 Access Arrangement Proposal – Attachment 1.4 – PTRM*, July 2020.

69 Capex enters the capital base net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our draft decision on the forecast capital base also reflects our amendments to the rate of return for the 2021–26 access arrangement period (attachment 3).

70 AGN, *Final Plan: Five year plan for our South Australian network July 2021-June 2026,* July 2020, p. 108.

Table 5 AER's draft decision on AGN's projected capital base roll forward for the 2021–26 period ($million, nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26
Opening capital base	1769.3	1821.4	1878.8	1931.9	1986.1
Net capex[a]	98.8	108.2	108.1	106.5	96.4
Indexation of opening capital base	42.0	43.2	44.6	45.9	47.2
Less: straight-line depreciation	88.6	94.1	99.6	98.2	104.1
Closing capital base	**1821.4**	**1878.8**	**1931.9**	**1986.1**	**2025.5**

Source: AER analysis.

(a) Net of forecast disposals and capital contributions. In accordance with the timing assumptions of the PTRM, the capex includes a half-year WACC allowance to compensate for the six-month period before capex is added to the capital base for revenue modelling.

4.2 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.

An accurate estimate of the rate of return is necessary to promote efficient prices in the long term interests of consumers. If the rate of return is set too low, the network business may not be able to attract sufficient funds to be able to make the required investments in the network and reliability may decline. Conversely, if the rate of return is set too high, the network business may seek to spend too much and consumers will pay inefficiently high tariffs.

We are required by the National Gas Law (NGL) to apply a rate of return instrument—the current 2018 Rate of Return Instrument (2018 Instrument)—to estimate an allowed rate of return.[71]

We have applied the 2018 Instrument and estimate a placeholder allowed rate of return of 4.63 per cent (nominal vanilla), which will be updated for our final decision on the averaging periods. AGN's proposal adopted the 2018 Instrument.[72]

[71] NGL, Chapter 2, Part 1, division 1A, AER, *Rate of Return Instrument*, December 2018. See https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-instrument-2018/final-decision.

Our calculated rate of return, in Table 6 would apply to the first year of the 2021–26 access arrangement period. A different rate of return would apply for the remaining regulatory years of the period. This is because we will update the return on debt component of the rate of return each year, in accordance with the 2018 Instrument, to use a 10-year trailing average portfolio return on debt that is rolled-forward each year. Hence, only 10 per cent of the return on debt is calculated from the most recent averaging period with 90 per cent from prior periods.

Our draft decision accepts AGN's proposed risk free rate averaging period[73] and debt averaging periods because they comply with the conditions set out in the 2018 Instrument.[74]

Table 6 AER's draft decision on AGN's rate of return (% nominal)

	AER final decision (2016–21)	AGN's Proposal (2021–26)	AER draft decision (2021–26)	Allowed return over the access arrangement period
Nominal risk free rate	2.57%	1.06%	0.91%[a]	
Market risk premium	6.50%	6.10%	6.10%	
Equity beta	0.7	0.6	0.6	
Return on equity (nominal post–tax)	7.10%	4.72%	4.57%	Constant (%)
Return on debt (nominal pre–tax)	5.51%[b]	4.19%	4.67%[a]	Updated annually
Gearing	60%	60%	60%	Constant (60%)
Nominal vanilla WACC	6.15%	4.40%	4.63%	Updated annually for return on debt
Expected inflation	2.39%	2.40%	2.37%	Constant (%)

Source: AER analysis; AGN, *Five year plan for our South Australian network, 2021–2026, Final plan,* July 2020.

(a) Calculated using a placeholder averaging period of 20 business days ending 31 August 2020.

(b) Applies to the first year of the 2016 –2021 access arrangement period.

4.2.1 Debt and equity raising costs

In addition to providing for the required rate of return on debt and equity, we provide an allowance for the transaction costs associated with raising debt and equity. We include debt raising costs in the opex forecast because these are regular and ongoing costs.

---

72 AGN, *Final Plan: Five year plan for our South Australian network, 2021–2026,* July 2020, p. 112.

73 This is also known as the return on equity averaging period.

74 AER, *Rate of Return Instrument*, December 2018, cll. 7-8, 23-25, 36.

We include equity raising costs in the capex forecast because these costs are only incurred once and would be associated with funding the particular capital investments.

For debt raising costs, our draft decision is to accept the method used in AGN's proposal which uses an annual rate of 8.1 basis points per annum (bppa).[75] We have considered this annual rate and found that our alternative benchmark estimate (8.2 bppa) is not materially different from AGN's proposal.

AGN forecast zero equity raising costs in the post-tax revenue model (PTRM).[76] We have updated our estimate for this access arrangement period based on the benchmark approach using updated inputs. This results in zero ($2020–21) equity raising costs.

4.2.2 Imputation credits

Our draft decision applies a value of imputation credits (gamma) of 0.585, as set out in the binding 2018 Instrument.[77] AGN's proposal adopts the 2018 Instrument for gamma.[78]

4.2.3 Expected inflation

AGN proposed to apply our current approach to estimate expected inflation. Our draft decision estimate of expected inflation is 2.37 per cent for the access arrangement period. We are currently undertaking a review into the treatment of inflation in our regulatory framework, including the method likely to result in the best estimate of expected inflation. The final outcomes of this review are expected in December 2020. If we consider a different method for estimating expected inflation should be adopted, we intend to commence the consultation process under the NGR for amending the PTRM. We expect to apply amendments to the post tax revenue model (PTRM) (if any) in our final determination for AGN in April 2021, unless a rule change proposal is required.

Whilst our inflation review is ongoing, we have modelled the potential outcome on AGN's total revenue and consumers' retail gas bills from applying a lower expected inflation rate of 1.87 per cent (as per our inflation review draft position). As an indicative estimate only, this has the effect of increasing our draft decision total revenue for AGN by $32.4 million (3.2 per cent) for the 2021–26 period, and for average annual bills for residential and small business consumers to be $11 (0.3 per cent) and $106 (1.1 per cent) higher by the end of the 2021–26 period, respectively, than estimated under this draft decision and set out at section 1.1.

---

75 AGN, *2021–26 Access Arrangement Proposal – Attachment 1.4 – PTRM*, July 2020; AGN, *Final Plan: Five year plan for our South Australian network, 2021–2026,* July 2020, p. 83.

76 AGN, *2021–26 Access Arrangement Proposal – Attachment 1.4 – PTRM*, July 2020.

77 AER, *Rate of return instrument*, December 2018, cl. 27.

78 AGN, *Final Plan: Five year plan for our South Australian network, 2021–26,* July 2020, pp. 115–116.

Further detail on our draft decision in regard to AGN's allowed rate of return, expected inflation, debt and equity raising costs is set out in Attachment 3.

4.3 Regulatory depreciation

We use regulatory depreciation to model the nominal asset values over the 2016–21 period and set the depreciation building block as part of calculating the total revenue for AGN. The depreciation allowance is the net total of real straight-line depreciation (negative) and annual inflation indexation (positive) on the projected capital base.

We are required to make a decision on AGN's proposed:[79]

- depreciation on the projected capital base
- depreciation schedule, which sets out the basis on which the depreciation is calculated.

Attachment 4 sets out our draft decision on AGN's annual regulatory depreciation allowance for the 2021–26 period. It also details our consideration of specific matters that affect the estimate of regulatory depreciation, including the:

- standard asset lives for depreciating new assets associated with forecast capex[80]
- year-by-year tracking approach to depreciating assets in the capital base
- proposed accelerated depreciation for assets no longer in use as a result of AGN's mains replacement program.

We determine a regulatory depreciation amount of $261.8 million ($nominal) for AGN for the 2021–26 period. This represents a reduction of $56.5 million (or 17.8 per cent) from AGN's proposed regulatory depreciation amount of $318.3 million ($nominal).[81] The main reason for this reduction is our amendments to AGN's proposed accelerated depreciation of mains and inlets assets that have been replaced or are forecast to be replaced by 30 June 2026. We accept, in principle, AGN's proposed accelerated depreciation of the residual value of the mains and inlets assets that have been replaced or are forecast to be replaced by 30 June 2026. However, we do not accept the proposed total amount of $251.5 million at 1 July 2021 for accelerated depreciation purposes. We have reduced this amount by about $49.0 million (or 19.5 per cent) to reflect our assessment of AGN's mains replacement program. We have also amended the proposed remaining asset lives as at 1 July 2021 for the replaced assets. These amendments have resulted in a reduction to the total regulatory depreciation amount by $56.7 million (or 17.8 per cent).

---

79 NGR, rr. 59, 72, 76, 88, 89.

80 The term 'standard asset life' may also be referred to as 'standard economic life', 'asset life', 'economic asset life' or 'economic life'.

81 AGN, *2021–26 Access Arrangement Proposal – Attachment 1.4 – PTRM*, July 2020.

Our draft decision is to accept the following aspects of AGN's proposal which are also relevant to the calculation of the regulatory depreciation amount for the 2021–26 period. Specifically, we accept:

- AGN's existing asset classes, its straight-line depreciation method, and the standard asset lives used to calculate the regulatory depreciation amount
- AGN's proposal to use the year-by-year tracking method to calculate real straight-line depreciation for its existing assets. We have previously considered and approved this method in our decisions for other regulated businesses. However, we have corrected some modelling issues in AGN's application of the year-by-year tracking method in its proposed depreciation model.

We made determinations on other components of AGN's proposal which also affect the forecast regulatory depreciation allowance. Specifically, they relate to:

- the opening capital base as at 1 July 2021 (section 4.1)
- expected inflation rate (section 4.2)
- forecast capex (section 4.4) including its effect on the projected capital base over the 2021–26 period.[82] [83]

Table 7 sets out our draft decision on AGN's regulatory depreciation amount over the 2021–26 period.

Table 7 AER's draft decision on AGN's regulatory depreciation allowance for the 2021–26 period ($million, nominal)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
Straight-line depreciation	88.6	94.1	99.6	98.2	104.1	484.7
Less: indexation on opening capital base	42.0	43.2	44.6	45.9	47.2	222.9
Regulatory depreciation	46.6	50.9	55.0	52.3	57.0	261.8

[82] Capex enters the capital base net of forecast disposals and capital contributions. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in our PTRM. Our draft decision on the capital base also reflects our updates to the WACC for the 2021–26 period.

[83] The reduction we made to the proposed forecast mains replacement capex did not result in a material impact on the total regulatory depreciation amount. This is because the regulatory depreciation allowance is the net total of the straight-line depreciation less the inflation indexation of the capital base. While the reduction to the forecast mains replacement capex has reduced the forecast straight-line depreciation amount, it also reduced the indexation amount on the capital base. The decrease in indexation has more than offset the decrease in straight-line depreciation (since indexation is deducted from the straight-line depreciation).

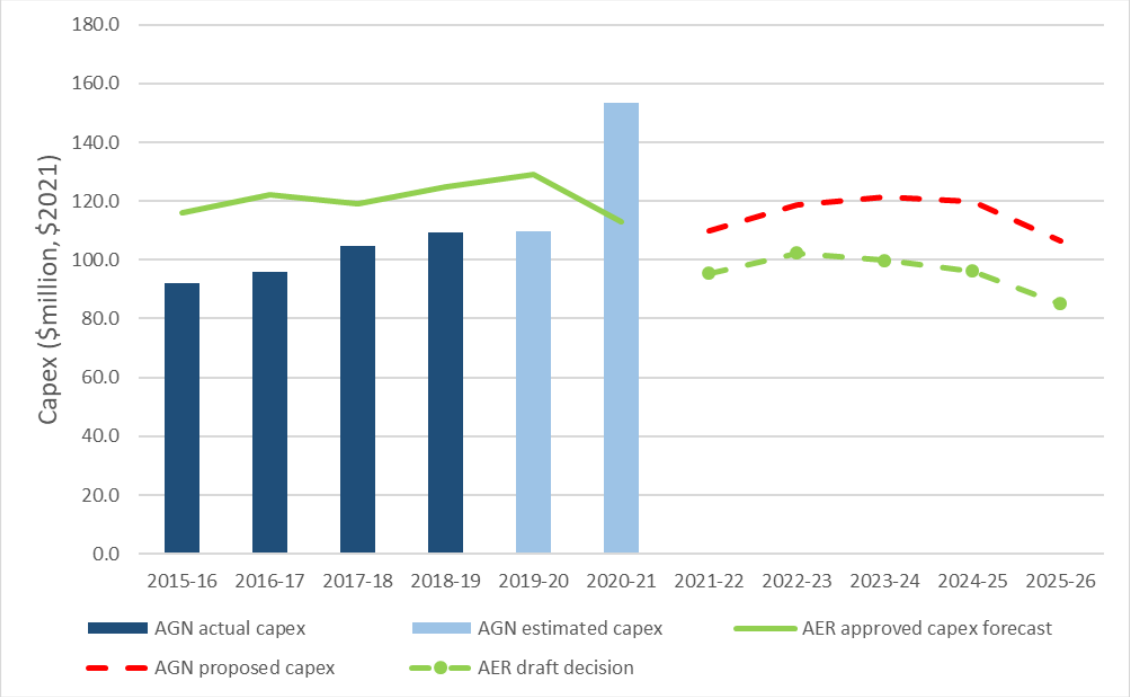
4.4 Capital expenditure

Capital expenditure (capex) refers to the capital costs and expenditure incurred in the provision of pipeline services.[84] This investment mostly relates to assets with long lives. AGN recovers the costs of these assets through the return on capital and depreciation building blocks. In this way, AGN recovers the financing cost and depreciation associated with these assets over the expected life of these assets.

Our draft decision includes an assessment of AGN's actual capex in the 2016–21 period (which forms part of its opening capital base)[85] and its forecast capex for the 2021–26 period (which forms part of its projected capital base).[86]

Figure 8 compares AGN's past and proposed forecast capex, and the forecasts approved by us in our previous 2016–21 decision and this 2021–26 draft decision.

Figure 8 AER's draft decision compared to AGN's past and proposed capex ($million, 2020–21)



Source: AER analysis. The increase in 2020-21 is due to the inclusion of the Mount Baker expansion.

[84] NGR, r. 69.

[85] NGR, r. 77.

[86] NGR, r. 78(b)

4.4.1 Conforming capex for the 2016–21 period

AGN expects to spend less than the 2016–21 period net capex forecast we approved previously, but notes over-spends on connections (15.6 per cent), meter replacement (21.1 per cent) and other distribution system (190.4 per cent) contemplated in our 2016–21 decision.

We approve $402.0 million ($2020–21) of total net capex for AGN as conforming capex under the NGR.[87] We will review AGN's actual capex for 2019–20 in our 2021–26 final decision, and 2020–21 as part of our review of AGN's 2026–31 access arrangement.

4.4.2 Conforming capex for the 2021–26 period

AGN proposes forecast net capex of $576.6 million ($2020–21) for the 2021–26 period, which is $3.5 million (0.6 per cent) lower than its actual net capex for the 2016–21 period.[88]

Our draft decision for the 2021–26 period approves forecast net capex of $478.8 million ($2020–21), which is $97.8 million (17.0 per cent) less than proposed.

Table 8 compares our 2021–26 draft decision for forecast capex to AGN's proposal. Key differences relate to:

- mains replacement — our draft decision includes $189.1 million for mains replacement capex, which is $80.4 million (29.8 per cent) less than AGN proposed. We require further justification on some of AGN's cast iron and High Density Polyethylene (HDPE) replacement program to enable us to consider it conforming capex
- other distribution system — our draft decision includes $46.6 million for other distribution system capex, which is $11.7 million (20.1 per cent) less than proposed. We require further justification on some of AGN's valve replacement and pipeline modification programs to enable us to consider it conforming capex
- labour real cost escalation — our draft decision also includes a reduction to the labour component of capex in line with our opex decision.

---

87 NGR, r. 79(1). We have assessed conforming capex for 2015–16, 2016–17, 2017–18 and 2018–19. We have not assessed 2019–20 and 2020–21 as they are estimated capex.

88 AGN's capex for 2019-20 and 2020-21 is based on an estimate only.

Table 8 AER's draft decision and AGN's proposal for forecast capex for the 2021–26 period ($million, 2019–20)

Category	AGN's Proposal	AER's Draft Decision	Difference
Connections	135.1	132.6	2.5
Augmentation	10.6	10.5	0.1
Mains Replacement	269.5	189.1	80.4
Meter Replacement	19.0	18.6	0.4
Other Distribution System	58.3	46.6	11.7
IT System	33.5	32.8	0.7
Other Non-distribution System	4.7	4.6	0.1
Overheads	48.2	46.4	1.8
Gross total capex	**578.8**	**481.0**	**97.8**
Contribution	2.3	2.3	-
Net total capex	**576.6**	**478.8**	**97.8**

Source: AER analysis. Totals may not sum due to rounding.

4.5 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 include our alternative estimate of total opex forecast of $333.8 million ($2020–21), including debt raising costs, for the 2021–26 access arrangement period. We are not satisfied AGN's forecast opex meets the opex criteria[89] and the requirements for forecasts and estimates.[90]

Our alternative estimate of total opex for the 2021–26 period is $27.9 million ($2020–21), or 7.7 per cent, lower than AGN's proposed opex forecast of $361.8 million ($2020–21)[91], including debt raising costs.

Figure 9 below shows our opex draft decision (discussed further in Attachment 6) and AGN's proposal in the context of its past allowances and actual expenditure. Our opex draft decision is lower than AGN's opex allowance for 2016–21. This was driven by

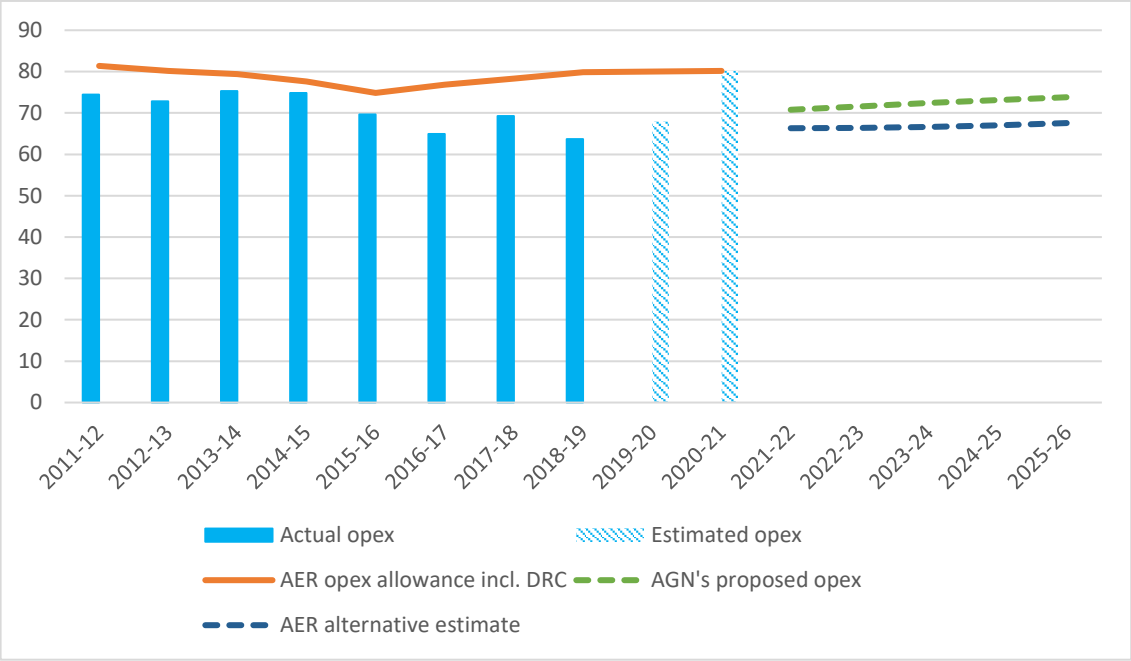
[89] NGR, r. 74.

[90] NGR, r. 91.

[91] AGN, *AGN(SA) Final Plan – Supporting document – Proposal Opex model*, July 2020.

opex efficiency improvements in the 2016–21 period, reflected in AGN's opex base for 2021–26 and reductions in UAFG costs relative to the 2016–21 period.

Figure 9 AER's draft decision compared to AGN's past and proposed opex for the 2021–26 period ($million, 2020–21)



Source: AGN (SA), *AGN(SA) – Supporting document - Annual reset RIN*, 30 September 2020; AER, *AER Final Decision – Australian Gas Networks Arrangement – Post Tax Revenue Model*, May 2016; AER, Envestra *SA – PTRM – final decision – amended – tribunal varied*; AER analysis.

Note: Includes debt raising costs and unaccounted for gas.

Table 9 sets out AGN's proposal and our draft decision alternative estimate.

Table 9 AER's alternative estimate compared to AGN's opex for the 2021–26 period ($million, 2020–21)

	AGN's proposal	AER's alternative estimate	Difference
Based on reported opex in 2019–20	338.5	339.5	0.9
Base year adjustments	-48.6	-52.1	-3.5
2019–20 to 2020–21 increment	4.0	1.1	–2.9
Output growth	7.3	6.9	–0.4
Price growth	4.4	-1.4	–5.8
Productivity growth	–3.7	-3.4	0.2
Step changes	8.1	0	-8.1
Category specific forecasts	47.2	38.9	-8.3

	AGN's proposal	AER's alternative estimate	Difference
Total opex (excluding debt raising costs)	**357.4**	**327.8**	**–27.9**
Debt raising costs	4.4	4.4	0.0
Total opex (including debt raising costs)	361.8	333.8	**–27.9**

Source: AER analysis; AGN, *AGN(SA) Final Plan – Supporting document – Proposal Opex model,* July 2020.

Note: Numbers may not add up due to rounding.

The key differences between AGN's opex proposal and our draft decision alternative estimate are:

- we have used a more recent inflation forecast from the Reserve Bank of Australia (RBA).[92]
- we have forecast a lower input price growth rate compared to that proposed by AGN. We have forecast labour price growth using only Deloitte Access Economics' (Deloitte) forecasts.[93] This is a change to our previous approach of averaging the forecasts from Deloitte and the business' consultant (generally BIS Oxford Economics). It reflects that the price growth estimates submitted by AGN are not reflective of the economic and financial impacts resulting from COVID-19. For the final decision we will consider updating the rate of change forecast using our standard approach provided the necessary forecasts are available.
- we have not included the three step changes proposed by AGN. Two of the step changes, the digital experience (customer relationship management system) and vulnerable customer assistance program, arose out of the consumer engagement undertaken by AGN. While there was strong consumer support for AGN to undertake both projects, we do not consider that they have been justified as step changes. The customer relationship management system is a refinement of existing services provided by AGN and is compensated for through the forecast rate of change.

  For the vulnerable customer assistance program we require further information that the program will materially increase the quantity or quality of services provided by AGN.

  The other proposed step change is in relation to insurance. We have not included this step change as we consider the impact of these cost increases on AGN's total opex are captured through the rate of change.
- we have adjusted the forecast of UAFG proposed by AGN due to changes made to the forecast of UAFG volumes and the cost of replacement gas. Our forecast of UAFG volumes accounts for the downward trend in UAFG as a result of AGN's

[92] RBA, *Statement on Monetary Policy—Appendix: Forecast*, August 2020.

[93] Deloitte Access Economics, *Labour Price Growth Forecasts Prepared for the AER*, August 2020.

mains replacement program. Our forecast of replacement gas does not factor in the purchase of a portion of gas from renewable sources, as proposed by AGN. We recognise that AGN's customer engagement demonstrated consumer support for the initiative. However, we consider it is already open to AGN to purchase replacement gas from renewable sources in accordance with its customers' preferences and recover any additional costs under the tariff variation mechanism.

4.6 Revenue adjustments

We have applied a revenue adjustment to AGN's revenue for the 2021–26 period as a result of the efficiency carry over mechanism.

An efficiency carryover mechanism (ECM) is intended to provide a continuous incentive for service providers to pursue efficiency improvements in opex, and provide for a fair sharing of these between service providers and network users.

Our draft decision is to approve a carryover amount totalling $8.2 million ($2020–21) from the application of the ECM in the 2016–21 access arrangement period. This is $4.2 million ($2020–21) lower than AGN's proposed $12.4 million ($2020-21) submitted in its proposal. This is because we have used different inflation figures to convert amounts into 2020–21 dollars.

Table 10 AER's draft decision on carryover amounts compared to AGN's proposal for the 2021–26 period ($million, 2020–21)

	2021–22	2022–23	2023–24	2024–25	2025–26	Total
AER's draft decision	6.1	-0.4	4.7	-2.2	0	8.2
AGN's proposed carryover	6.5	1.8	5.8	-1.6	0	12.4
Difference	-0.5	-2.1	-1.1	-0.56	0	-4.2

Source: AER analysis.

Note: Numbers may not add up due to rounding.

4.7 Corporate income tax

Our decision on AGN's total revenue includes the estimated cost of corporate income tax for the 2021–26 period.[94] AGN's proposal adopts the post-tax framework to derive its revenue requirement for the 2021–26 period, whereby a corporate income tax amount is calculated as part of the building blocks assessment.[95] This allows AGN to recover the estimated cost of corporate income tax during the 2021–26 period.

94 NGR, r. 76(c).

95 AGN, *2021–26 Access Arrangement Proposal – Attachment 1.4 – PTRM*, July 2020.

We accept AGN's proposed approach to calculate its forecast corporate income tax allowance. AGN's proposed approach is based on our PTRM for electricity service providers and consistent with the findings from our regulatory tax approach review.[96]

We determine an estimated cost of corporate income tax of zero for AGN in the 2021–26 period, consistent with AGN's proposal. We expect AGN to incur a forecast tax loss over the 2021–26 access arrangement period.[97] For this reason, our draft decision is to set out the cost of corporate income tax at zero for the 2021–26 period. We have determined that $205.3 million in tax losses as at 30 June 2026 will be carried forward to the 2026–31 access arrangement period where it can be used to offset future tax liabilities. The forecast tax losses arise because AGN's forecast tax expenses will exceed its revenue for tax assessment purposes over the 2021–26 access arrangement period. This is mostly due to the implementation of our findings from the tax review, where the introduction of immediate expensing of capital expenditure (capex) and diminishing value method of tax depreciation have resulted in a significant increase of forecast tax depreciation.[98]

We accept AGN's proposed standard tax asset lives for all of its existing asset classes as they are broadly consistent with the tax asset lives prescribed by the Australian Tax Office's (ATO) taxation ruling 2020/3.[99]

We also accept AGN's proposal to use the year-by-year tracking method to estimate forecast tax depreciation over 2021–26 access arrangement period for the purpose of calculating tax expenses. In doing so, AGN has used our depreciation tracking module attached to the RFM.

Further, we determine an opening tax asset base (TAB) value as at 1 July 2021 of $913.4 million ($ nominal) for AGN. This represents a small reduction of $0.01 million compared to AGN's proposed value. While we accept AGN's proposed method to establish the opening TAB, we have updated the actual capex, asset disposal and capital contributions inputs for 2015–19 in the RFM to be consistent with the values reported in the annual RIN. These updates did not result in a material change to the total opening TAB value as at 1 July 2021.

Our adjustments to the return on capital (sections 4.1, 4.2 and 4.4), and the regulatory depreciation (section 4.3) building blocks affect revenues, which in turn impacts the tax calculation.

---

96 AER, *Final report: Review of regulatory tax approach*, December 2018.

97 A forecast tax loss occurs when the forecast assessable income is lower than the forecast tax expense. In this event no tax is payable. Any residual amount of tax loss will be carried forward over to future access arrangement periods to offset future taxable income until the tax loss is fully exhausted.

98 The third key finding from the 2018 tax review relates to capping tax lives for gas assets to 20 years. However, AGN has historically assigned tax asset lives of 20 years or less to its asset classes, hence this change does not affect AGN.

99 ATO, *Taxation Ruling TR2020/3 – Income tax: effective life of depreciating assets (applicable from 1 July 2020), p. 181.*

5 Incentive schemes to apply for 2021–26

Our incentives schemes encourage network businesses to make efficient decisions. They give network businesses an incentive to pursue efficiency improvements in opex and capex, and to share them with consumers. If network businesses reduce their costs to below our forecast of efficient costs, the savings are shared with their customers in future access arrangement periods through the ECM and CESS.

This draft decision determines that two incentive schemes will apply to AGN for the 2021–26 period, as presented below.

5.1 Efficiency carryover mechanism

As noted in section 4.6.2, an efficiency carryover mechanism (ECM) is intended to provide a continuous incentive for service providers to pursue efficiency improvements in opex, and provide for a fair sharing of these between service providers and network users.

Our draft decision is to approve the application of an ECM to AGN in the 2021–26 period. We have made minor amendments to AGN's proposed ECM in this draft decision to be consistent with version 2 of the efficiency benefit sharing scheme (EBSS) for electricity service providers and other gas distribution businesses.[100]

Attachment 8 sets out our ECM draft decision in detail, including our revisions to AGN's proposed ECM.

5.2 Capital expenditure sharing scheme

The capital expenditure sharing scheme (CESS) rewards efficiency gains and penalises efficiency losses, each measured by reference to the difference between forecast and actual capex.

AGN proposes to introduce a CESS to cover the 2021–26 period.[101] This incentive scheme currently does not exist for AGN.

Our draft decision does not accept AGN's proposed CESS application. In line with our recent decision,[102] we have provided an alternate application of a CESS that excludes connections capex in the 2021–26 period. We also require amendments to AGN's access arrangement to fine tune its CESS so that it provides genuine incentives and captures the environment it is operating in.

Attachment 12 provides further information on our CESS draft decision for AGN.

---

100 AER, *Efficiency benefit sharing scheme for electricity network service providers*, November 2013.

101 AGN, *Final Plan*: *Five year plan for our South Australian network, 2021–2026,* July 2020, p. 121.

102 AER, *Final decision, JGN (NSW) 2015–20 access arrangement, Attachment 13*, June 2020, p. 5.

6 Non-tariff components

The non-tariff components of an access arrangement include:

- the terms and conditions for the supply of reference services
- queuing requirements — a process or mechanism for establishing an order of priority between prospective users of spare and/or developable capacity
- extension and expansion requirements — the method for determining whether an extension or expansion is a part of the covered pipeline and the effect this will have on tariffs
- capacity trading requirements — the arrangements for users to assign contracted capacity and change delivery and receipt points
- change of receipt or delivery point by the user — the process or mechanism for changing a user's receipt or delivery point
- a review submission date and a revision commencement date — in this case, those dates being 30 June 2025 and 1 July 2026 respectively, as proposed by AGN.

Our draft decision is to approve the amendments that AGN has proposed to its terms and conditions for the supply of gas. We approve AGN's proposed non-tariff components for queuing requirements, extension and expansion requirements, capacity trading requirements, change of receipt or delivery point by the user, and the review submission and revision commencement dates.

Attachment 11 sets out our draft decision on the non-tariff components in further detail.

A List of submissions

We received 10 submissions in response to AGN's proposal. These are listed below.

Stakeholder	Date
Business SA	10 August 2020
Consumer Challenge Panel, Sub-panel 24	10 August 2020
EnergyAustralia	10 August 2020
Energy Consumers Australia	11 August 2020
Energy and Water Ombudsman SA	6 August 2020
Origin Energy	10 August 2020
South Australian Federation of Residents and Ratepayers Association Inc.	10 August 2020
South Australian Council of Social Services	11 August 2020
South Australian Financial Counsellors Association	7 August 2020
South Australian Minister for Energy and Mining	3 August 2020

Shortened forms

Shortened form	Extended form
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGN	Australian Gas Networks
capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CCP24	Consumer Challenge Panel, sub-panel 24
CPI	Consumer price index
EBSS	Efficiency benefit sharing scheme
ECM	Efficiency carryover mechanism
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
opex	Operating expenditure
PTRM	Post-tax revenue model
RBA	Reserve Bank of Australia
RFM	Roll forward model
RPP	Revenue and pricing principles
TAB	Tax asset base
UAFG	Unaccounted for gas
WACC	Weighted average cost of capital