

Final decision

Australian Gas Networks (Victoria & Albury)
Gas distribution access arrangement
1 July 2023 to 30 June 2028

Attachment 4 – Regulatory depreciation

June 2023

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4 Regulatory depreciation

Depreciation is a method used in our determination to allocate the cost of an asset over its useful life. It is the amount provided so capital investors recover their investment over the economic life of the asset (otherwise referred to as ‘return of capital’). When determining the total revenue for Australian Gas Networks (AGN), we include an amount for the depreciation of the projected capital base.¹ Under the building block framework, regulatory depreciation consists of the net total of the straight-line depreciation less the indexation of the capital base.

This attachment outlines our final decision on AGN’s annual regulatory depreciation amount for the 2023–28 access arrangement period (2023–28 period). Our consideration of specific matters that affect the estimate of regulatory depreciation is also outlined in this attachment. These include:

- the standard asset lives for depreciating new assets associated with forecast capital expenditure (capex)
- year-by-year tracking approach to depreciating assets in the capital base
- proposed accelerated depreciation relating to uncertainty around the future of gas networks.

4.1 Final decision

We determine a regulatory depreciation amount of \$287.5 million (\$ nominal) for AGN for the 2023–28 period. This represents an increase of \$41.5 million (16.9%) from AGN’s revised proposed regulatory depreciation amount of \$246.0 million (\$ nominal). Our final decision reflects the following key components:

- we accept AGN’s revised proposed accelerated depreciation of \$175 million (\$2022–23), which is consistent with the amount in our draft decision
- we adopt a lower expected inflation rate for the 2023–28 period, which reduces the adjustment for indexation of the capital base that is offset against straight-line depreciation in determining regulatory depreciation.

Table 4.1 sets out our final decision on AGN’s regulatory depreciation amount over the 2023–28 period.

¹ NGR, r. 76(b).

Table 4.1 AER’s final decision on AGN’s regulatory depreciation amount for 2023–2028 period (\$ million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
Straight-line depreciation	101.1	108.9	117.2	125.8	134.6	587.6
Less: indexation of capital base	57.0	59.0	60.6	61.5	62.0	300.1
Regulatory depreciation	44.1	49.9	56.6	64.3	72.6	287.5

Source: AER analysis.

The regulatory depreciation amount is the net total of the straight-line depreciation less the inflation indexation of the capital base.

AGN’s straight-line depreciation is impacted by our decisions on accelerated depreciation (section 4.4.2), its opening capital base as at 1 July 2023 (Attachment 2), forecast capex (Attachment 5) and standard asset lives (section 4.4.4). Our final decision straight-line depreciation for AGN is broadly consistent with its revised proposal.² This is due to our acceptance of AGN’s accelerated depreciation, opening capital base and forecast capex in our final decision.

The indexation of the capital base is impacted by our decision on AGN’s accelerated depreciation (section 4.4.2), its opening capital base (Attachment 2), forecast capex (Attachment 5) and the expected inflation rate (Attachment 3).³ Our final decision indexation of AGN’s projected capital base is \$49.7 million lower than its revised proposal. This is largely because of the lower expected inflation rate of 2.92% per annum for the 2023–28 period for this final decision compared to 3.37% per annum in AGN’s revised proposal.

This reduction in indexation of the capital base therefore results in a higher regulatory depreciation amount compared to the revised proposal.

4.2 AGN’s revised proposal

AGN proposed a revised total forecast regulatory depreciation amount of \$246.0 million (\$ nominal) for the 2023–28 period, as set out in Table 4.2.

Table 4.2 AGN’s revised proposal regulatory depreciation amount for 2023–28 period (\$ million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
Straight-line depreciation	101.6	109.9	118.7	128.0	137.6	595.8

² In real terms, our final decision straight-line depreciation for AGN is almost identical to the amount in its revised proposal. In nominal terms, the final decision amount is \$8.2 million lower than the revised proposed amount due to the lower value of expected inflation.

³ Capex enters the capital base net of forecast disposals (and capital contributions where relevant). It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the AER’s PTRM. Our final decision on the capital base (Attachment 2) also reflects our updates to the WACC for the 2023–28 period.

Less: indexation of capital base	65.9	68.5	70.6	72.0	72.9	349.8
Regulatory depreciation	35.7	41.4	48.2	56.1	64.7	246.0

Source: AGN, *Revised proposal PTRM*, January 2023.

To calculate the depreciation amount, AGN used a similar approach to its initial proposal. It adopted the draft decision positions in relation to depreciation.

4.3 Assessment approach

We have followed our assessment approach for regulatory depreciation from our draft decision. Attachment 4 (section 4.3) of our draft decision details that approach.⁴

4.4 Reasons for final decision

We accept AGN’s proposed straight-line depreciation method for calculating the regulatory depreciation amount as set out in the post-tax revenue model (PTRM) and the year-by-year tracking approach to implement this method, subject to amending some inputs in the depreciation module. However, we have increased AGN’s revised proposed forecast regulatory depreciation to \$287.5 million (\$ nominal) for the 2023–28 period. This is \$41.5 million (16.9%) higher compared to AGN’s revised proposal and is mainly due to the lower expected inflation rate we have applied (Attachment 3).

Our assessment of AGN’s continuation of the year-by-year tracking depreciation approach, accelerated depreciation, and its proposed standard asset lives are discussed in turn in the following subsections.

4.4.1 Year-by-year tracking approach

For this final decision, we accept AGN’s continuation of the year-by-year tracking approach in its revised proposal for calculating the depreciation schedule for its existing assets. This approach is consistent with AGN’s initial proposal, our draft decision and the 2018–22 access arrangement period. As discussed in our draft decision we consider this approach meets the requirements of the NGR.⁵

AGN has used our amended template depreciation tracking module to implement year-by-year tracking consistent with its initial proposal and our draft decision.⁶

⁴ AER, *Draft Decision, Australian Gas Networks Access Arrangement 2023–2028, Attachment 4, Regulatory depreciation*, December 2022, pp. 3–9.

⁵ AER, *Draft decision, Australian Gas Networks Access Arrangement 2023–28, Attachment 4 – Regulatory Depreciation*, December 2022, pp. 9–10.

⁶ As discussed in the draft decision, we required the Victorian distributors to use this amended version of our template in their proposals since it allows for the half-year 2023 extension period. AER, *Draft decision, Australian Gas Networks Access Arrangement 2023–28, Attachment 4 – Regulatory Depreciation*, December 2022, p. 4.

In our draft decision, we made some amendments to AGN’s proposed depreciation tracking module.⁷ AGN’s revised proposal adopted all of our draft decision changes.

For this final decision, we have accepted AGN’s revised proposed accelerated depreciation amount of \$175 million (\$2022–23) for the reasons discussed in section 4.4.2. However, we have updated a remaining asset life input in the final year asset adjustments section of the depreciation tracking module. In its revised proposal roll forward model (RFM), AGN updated the remaining asset life for its ‘Mains and services’ asset class to 43.9 years reflecting updated capex for 2022 and the six-month extension period. Its revised proposal depreciation tracking module, however, contained an unchanged remaining asset life of 44.2 years, which is consistent with the draft decision. We have therefore updated the remaining asset life in the depreciation tracking module to be 43.9 years consistent with the RFM in our final decision.

4.4.2 Accelerated depreciation for future of gas and risk of network stranding

For this final decision, we accept AGN’s revised proposed accelerated depreciation of \$175 million (\$2022–23). Our reasons for this decision are discussed below.

4.4.2.1 Case for accelerated depreciation

For this final decision, we confirm our draft decision position that there is a case for accelerated depreciation relating to the uncertain future for gas networks in Victoria. In accepting AGN’s proposed accelerated depreciation, we recognise that the publication of the *Gas Substitution Roadmap* indicates that the Victorian Government is committed to the net zero emissions target by 2050.⁸ This will likely mean a limited role for natural gas beyond this date. The 2023 *Gas Statement of Opportunities* (GSOO) shows a material decline in gas volumes over the next 20 years under the most likely scenario. There is also considerable uncertainty around likely medium to long term forecast volumes of customer abolishments. Further, the future role for hydrogen and other renewable gases is also uncertain at this time.

We consider the case for accelerated depreciation is also supported by the long term ‘future of gas’ modelling that AGN provided with its initial proposal and September 2022 addendum. While AGN did not provide updated future of gas models with the revised proposal, its proposed \$175 million (\$2022–23) of accelerated depreciation is consistent with the amount it modelled in the September 2022 addendum. As noted in the draft decision, this modelling shows that where stranding occurs, accelerated depreciation both in the 2023–28 period and subsequent periods generally extends the life of the network because the associated higher revenue and tariffs in the shorter term are not enough to strand the asset and this is followed by lower tariffs due to the reduction to the capital base.

⁷ AER, *Draft decision, Australian Gas Networks Access Arrangement 2023–28, Attachment 4 – Regulatory Depreciation, December 2022*, p. 10.

⁸ Victorian State Government, *Gas Substitution Roadmap*, July 2022.

Consistent with our draft decision, we have considered the balance between accepting some accelerated depreciation and also price stability. This is also consistent with our 2021 information paper, *Regulating gas pipelines under uncertainty*, which stated:⁹

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

4.4.2.2 Targeting a ‘base’ real price path of 1.5% per annum

For the final decision, we have adjusted our draft decision approach to accelerated depreciation, by first excluding capital expenditure sharing scheme (CESS) and operating expenditure (opex) efficiency carryover mechanism (ECM) amounts from revenue when setting a base real price path constraint for determining the amount of accelerated depreciation. This ‘base’ real price path constraint is 1.5% per annum and applies to all 3 Victorian gas distributors.

In the draft decision, as a placeholder:

- we set a limit on accelerated depreciation such that a 0% per annum real price change was achieved over the 2023–28 period
- we noted that the 0% per annum value could change for the final decision.

We consider that our amended approach for the final decision addresses a concern submitted by AusNet Gas Services (AusNet) in its revised proposal that our draft decision approach did not appropriately consider incentive schemes. AusNet submitted that under our draft decision approach, any 2023–28 (CESS and ECM) revenue adjustment rewards (or penalties) for 2018–22 expenditure were effectively negated by a corresponding reduction (or increase) to accelerated depreciation.

To address this, our final decision approach excludes these revenue adjustments when determining the allowed accelerated depreciation. We consider this adjustment is appropriate as it preserves the intended objectives of the CESS and ECM schemes applying to expenditures in the 2018–22 period. Under these incentive schemes, networks are rewarded for efficient expenditure and penalised for inefficient expenditure. Our amended approach for accelerated depreciation is therefore to:

- Set a base real price path constraint of 1.5% per annum for all 3 Victorian gas distributors which excludes the impact of the 2023–28 revenue adjustments for CESS and ECM. The accelerated depreciation allowance is calculated using this base price path constraint.

⁹ AER, *Information paper on regulating gas pipelines under uncertainty*, 15 November 2021, p. 29

- Add back in the 2023–28 revenue adjustments relating to the CESS and ECM to adjust the building block revenue allowance and resmooth for the resulting real price path (which is therefore different from the base price path constraint).

For AGN, this approach results in acceptance of its revised proposed accelerated depreciation of \$175 million (\$2022–23).

4.4.2.2.1 Increased price path constraint relative to the draft decision

Our final decision base price path constraint of 1.5% per annum is higher than the 0% per annum real price path constraint we set in the draft decision. It reflects the respective updates since the draft decision including for opex (abolishments), forecast demand, weighted average cost of capital (WACC) and expected inflation. It also reflects that AGN's engagement with consumers subsequent to the draft decision, showed a willingness to pay a higher price now if it would mitigate the risk of price increases in the long-term. The Energy Users' Association of Australia also submitted that modest real increases to network charges from accelerated depreciation would be appropriate.

In their submissions, stakeholders were mostly supportive of the draft decision price path constraint approach and they acknowledged the impact of uncertainty of future demand in assessing accelerated depreciation. Several raised concerns about increasing the draft decision price path target of 0% per annum in the face of sustained rising cost of living stresses.

AGN also submitted various concerns about both the reasoning and the implementation of our draft decision approach as discussed in section 4.4.2.2.2.

Having carefully assessed the material before us, we consider our final decision approach achieves a balance between what consumers pay now to mitigate future price increases, and the risk of greater price increases in the future if mitigation is delayed. While we acknowledge stakeholders' concerns around affordability, we consider that on balance it is appropriate to increase the price path constraint above the 0% per annum set in the draft decision to reflect updated inputs since the draft decision including for opex (abolishments), forecast demand, WACC and expected inflation. Setting the base real price path constraint at 1.5% per annum allows for an appropriate amount of accelerated depreciation for each distributor.

4.4.2.2.2 AGN's submission on our draft decision approach

AGN's revised proposal acknowledged the importance of price stability but considered our draft decision price path constraint approach did not best balance the needs of current and future customers. It commissioned Incenta Economic Consulting (Incenta) to provide opinion on the degree to which AGN's long-term future of gas modelling scenarios promote consumer surplus and allocative efficiency. We consider the findings in Incenta's report support the case for accelerated depreciation.¹⁰

AGN submitted that long term price stability can be achieved without the need for the 'very tight' 0% per annum real price path constraint from our draft decision. It also submitted that for the accelerated depreciation and long-term future of gas modelling in its initial proposal

¹⁰ AGN, *Attachment 6.8 Incenta – Assessing the appropriate degree of depreciation advancement*, January 2023, pp. 1–2.

(July 2022) and addendum (September 2022), the focus was to remove future price shocks by preventing a collapse in demand.¹¹ Further, AGN stated that if we were to apply a 0% per annum constraint over the longer term, there would not be sufficient flexibility to accommodate changes and resulting price impacts could precipitate stranding.

For the reasons discussed in section 4.4.2.2.1, our final decision is to apply a higher base real price path constraint than the draft decision constraint of 0% per annum. Further, as discussed in section 4.4.2.1, we acknowledge that AGN’s long term future of gas modelling supports the case for accelerated depreciation in the 2023–28 period. We also note that in applying a 1.5% per annum constraint for this final decision, we are not making a decision on the approach for subsequent access arrangement periods.

4.4.2.3 Stakeholder submissions

There was a mixed range of views expressed by stakeholders on the issue of accelerated depreciation, which included submissions from Origin Energy (Origin), Energy Users’ Association of Australia (EUAA), Brotherhood of St. Laurence (BSL), the AER’s Consumer Challenge Panel (CCP28), AGL, Red/Lumo Energy, and a combined submission from BSL, St Vincent de Paul and Victorian Council of Social Service (VCOSS).

Retailers Origin, AGL and Red/Lumo Energy were supportive of the draft decision’s 0% per annum real price path approach considering the uncertainty of demand in the future.¹²

Origin acknowledged stranding risk arising from the Victorian Gas Substitution Roadmap, and the difficulty for the networks and the AER in balancing the interests of networks and customers. Due to demand uncertainty, Origin submitted that accelerated depreciation is a matter of judgement.¹³

Origin and BSL stated that increases to gas tariffs in the short term would exacerbate the cost-of-living pressures for many customers and increase the incentive for customers to disconnect from the gas network, leaving those who remain with higher costs.¹⁴

EUAA was more supportive of the networks’ revised proposals and submitted that the proposed accelerated depreciation for AusNet and MGN will have a ‘small influence’ on the overall bill price compared to the impact of movements in wholesale prices.¹⁵

¹¹ AGN, *Revised Final Plan 2023/24-2027/28 Attachment 6.7 Future of Gas Response to AER Draft Decision*, January 2023, p. 7.

¹² Origin, *Submission to Victorian gas access arrangement draft decision and revised proposals*, 23 February 2023, p. 1. AGL, *Victorian Gas Distribution Access Arrangements 2023 - 2028: Draft Decisions and Revised Proposals*, 24 February 2023, pp. 1–2. Red Energy and Lumo Energy, *Revised proposals - Victorian Gas distributors Access Arrangement 2023-2028*, 23 February 2023, pp. 2–3.

¹³ Origin, *Submission to Victorian gas access arrangement draft decision and revised proposals*, 23 February 2023, pp. 1.

¹⁴ Origin, *Submission to Victorian gas access arrangement draft decision and revised proposals*, 23 February 2023, p. 1. Brotherhood of St Laurence, *2023-2028 Victorian gas distribution access arrangement, Draft decision and revised proposals*, February 2023, pp. 7, 8 & 11.

¹⁵ The EUAA submitted this in the context that for AusNet and MGN, the revised proposed accelerated depreciation amounts were higher than those in our draft decision. For AGN the revised proposed accelerated depreciation is equal to that in our draft decision. The Energy Users’ Association of Australia, *Submission - Victorian Gas Access Arrangement Proposal 2023-2028*, February 2023, pp. 2–3.

BSL remained concerned about the impact of the draft decision, as a whole, on energy costs for the 2023–28 period and beyond. It submitted that the risk of asset stranding means that our draft decision to accept accelerated depreciation is contradictory with the amount of forecast capex and opex that was accepted. It noted that since accelerated depreciation is still ‘open’ at the final decision stage, capex and opex should also similarly still be considered. It further submitted that accelerated depreciation should not be increased from the draft decision. Similar views were expressed in BSL’s joint submission with St Vincent de Paul and VCOSS. Discussion of our final decision capex and opex is contained in Attachments 5 and 6.¹⁶

4.4.2.4 Consultation by the distributors

The Victorian gas distributors have undertaken extensive consumer engagement including on the topic of accelerated depreciation for the future of gas. This has included customer workshops, stakeholder roundtables, retailer reference groups and deep dives. While some stakeholders still hold concerns on accelerated depreciation, we consider aspects of the distributors’ process are consistent with some of the expectations listed in our *Regulating gas pipelines under uncertainty* information paper including to “actively and meaningfully engage with their customers on the range of available options” and “that good consultation will involve a range of scenarios being put to consumers with respect to demand forecasts, expenditure and any stranding mitigation measures, together with the price impacts of those scenarios”.¹⁷

In our draft decision, we noted that the Victorian gas distributors should further engage with their customers on the issue of accelerated depreciation, and where relevant discuss updates to their respective proposed accelerated depreciation amounts for other parameters such as WACC and inflation. Since then, Australian Gas Infrastructure Group (AGIG) undertook four online customer workshops in January 2023 to seek input from 91 customers of both AGN and MGN, focussing on accelerated depreciation and gas connection abolishment issues.

CCP28 noted the quick response of the networks to engage with customers and stakeholders between the draft decision and revised proposal. However, it raised concerns about the robustness of the conclusions of the engagement regarding the impact of accelerated depreciation on consumer bills. It also submitted that other stakeholders were not consulted on this and that many stakeholders do not support any accelerated depreciation for the 2023–28 period.¹⁸

¹⁶ Brotherhood of St Laurence, *2023-2028 Victorian gas distribution access arrangement, Draft decision and revised proposals*, February 2023, pp. 6–22. Victorian Community Organisations, Joint submission to 2023–28 Victorian Distribution Access arrangements, February 2023, p. 2.

¹⁷ AER, *Information paper on regulating gas pipelines under uncertainty*, 15 November 2021, p. 47.

¹⁸ Consumer Challenge Panel 28 (CCP28), *Advice to AER on AGN, AusNet and MGN Revised Proposals*, 24 February 2023, p. 11.

4.4.3 Standard asset lives

For the final decision, we accept the standard asset lives in AGN's revised proposal as they are consistent with those approved for the draft decision.¹⁹

Table 4.3 sets out our final decision on AGN's standard asset lives for the 2023–28 period. We are satisfied the asset lives approved in this final decision will result in a depreciation schedule that reflects the depreciation criteria of the NGR.²⁰

¹⁹ For this final decision, we have not assigned a standard asset life to the 'Buildings Albury' asset class since it has no forecast capex. This change is presentational and does not impact revenue.

²⁰ NGR, r. 89.

Table 4.3 AER’s final decision on AGN’s standard asset lives for the 2023–28 period

Asset class	Standard asset life
Mains & services	60
Meters	15
Buildings	50
SCADA	15
Computer equipment	5
Other assets	15
Land	n/a
Mains & services Albury	60
Meters Albury	15
Buildings Albury	n/a
SCADA Albury	15
Computer equipment Albury	5
Other assets Albury	15
Land Albury	n/a
Future of gas	n/a
Equity raising costs ^a	n/a

Source: AER analysis.

n/a not applicable. We have not assigned a standard asset life to some asset classes because the assets allocated to them are not subject to depreciation or they have no forecast capex.

(a) For this final decision, the forecast capex determined for AGN does not meet a level to trigger any benchmark equity raising costs.

Glossary

Term	Definition
AER	Australian Energy Regulator
AGIG	Australian Gas Infrastructure Group
AGN	Australian Gas Networks (Victoria and Albury)
AusNet	AusNet Gas Services
Capex	capital expenditure
GSOO	Gas Statement of Opportunities
MGN	Multinet Gas Networks
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
Opex	operating expenditure
PTRM	post-tax revenue model
RFM	roll forward model
WACC	weighted average cost of capital
