

Draft Decision

**Australian Gas Networks (Victoria
and Albury)**

Access Arrangement 2023 to 2028

(1 July 2023 to 30 June 2028)

**Attachment 2
Capital base**

December 2022

© Commonwealth of Australia 2022

This work is copyright. In addition to any use permitted under the *Copyright Act 1968* all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website as is the full legal code for the CC BY 3.0 AU licence.

Inquiries about this publication should be addressed to:

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

AER reference: AER212593

Note

This attachment forms part of the AER’s draft decision on the access arrangement that will apply to Australian Gas Networks (Victoria and Albury) (AGN) for the 2023–28 access arrangement period. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Services covered by the access arrangement

Attachment 2 – Capital base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency carryover mechanism

Attachment 9 – Reference tariff setting

Attachment 10 – Reference tariff variation mechanism

Attachment 11 – Non-tariff components

Attachment 12 – Demand

Attachment 13 – Capital expenditure sharing scheme

Contents

Note	iii
2 Capital base	5
2.1 Draft decision.....	5
2.2 AGN’s proposal	7
2.3 Assessment approach	9
2.4 Reasons for draft decision	13
2.5 Revisions	16
Glossary	17

2 Capital base

The capital base roll forward accounts for the value of regulated assets in AGN's distribution network over the access arrangement period. The opening capital base value for a regulatory year within the access arrangement period is rolled forward by indexing it for inflation, adding any conforming capital expenditure (capex), and subtracting depreciation and other possible factors (for example, disposals).¹ Following this process, we arrive at a closing value of the capital base at the end of the relevant year. The opening value of the capital base is used to determine the return of capital (regulatory depreciation) and return on capital building blocks.

This attachment sets out our draft decision on AGN's opening capital base as at 1 July 2023 for the 2023–28 access arrangement period (2023–28 period). It also sets out our draft decision on AGN's projected capital base for the 2023–28 period.

2.1 Draft decision

We determine an opening capital base value of \$1975.6 million (\$ nominal) as at 1 July 2023 for AGN. This value is \$0.3 million (less than 0.1%) lower than AGN's proposed opening capital base of \$1975.9 million (\$ nominal) as at 1 July 2023.² This reduction is mainly due to the updates we made to the inputs related to the period from 1 January to 30 June 2023 (the six-month extension period)³ in AGN's proposed roll forward model (RFM) to be consistent with the values approved in our final decision for that period.⁴ These relate to the forecast inflation, nominal weighted average cost of capital (WACC) and forecast depreciation inputs for the six-month extension period.

To determine the opening capital base as at 1 July 2023, we have rolled forward the capital base over the 2018–22 period from 1 January 2018 to 31 December 2022. We then rolled forward the closing capital base value by a further six months to arrive at a closing capital base value at 30 June 2023 in accordance with our RFM. This roll forward process includes an adjustment at the end of the 2018–22 period to account for the difference between updated actual 2017 capex and the estimate approved in the 2018–22 access arrangement.⁵ All other adjustments are applied as part of the final year adjustments at 30 June 2023 to establish the opening capital base value at 1 July 2023.⁶

¹ The term 'rolled forward' means the process of carrying over the value of the capital base from one regulatory year to the next.

² AGN, *Revisions to Final Plan 2023-28-Attachment 10.1-GSR Response-Revisions to Capital Base*, 2 September 2022, p. 2.

³ The six-months extension period reflects the decision by the Victorian Government to change the timing of the annual Victorian gas network price changes to a financial year basis from a calendar year basis. This change means the current access arrangement period of 2018–22 is extended by six months and the next access arrangement period will commence on 1 July 2023.

⁴ AGN is required to use the AER amended regulatory models for the purpose of its 2023–28 access arrangements proposal due to the six months extension to the 2018–22 period. This includes an amended RFM for rolling forward the capital base over the 2018–22 and the six-month extension periods. AGN has used the amended RFM for its proposal.

⁵ The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2018–22 decision.

⁶ This includes adjustments for asset reallocations for accelerated depreciation purposes. This is a capital base reallocation and does not affect the total value of the opening capital asset base at 1 July 2023.

Table 2.1 sets out our draft decision on the roll forward of AGN’s capital base over the 2018–22 period and six-month extension period.

Table 2.1 AER’s draft decision on AGN’s capital base for the 2018–2023 period (\$ million, nominal)

	2018	2019	2020	2021	2022 ^a	2023 ^b
Opening capital base	1572.0	1612.1	1668.2	1729.1	1778.4	1900.6
Net capex ^c	87.7	108.1	129.9	142.2	172.6	65.5
Indexation of capital base	30.4	33.5	26.6	–6.0 ^e	68.4	40.0
Less: straight-line depreciation ^d	77.9	85.4	95.6	86.9	94.3	30.5
Interim closing capital base	1612.1	1668.2	1729.1	1778.4	1925.1	1975.6
Difference between estimated and actual capex in 2017					–19.2	
Return on difference for 2017 capex					–5.3	
Closing capital base as at 30 December 2022					1900.6	
Closing capital base as at 30 June 2023						1975.6

Source: AER analysis.

- (a) 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 reset.
- (b) The six-month extension period of 1 January to 30 June 2023. 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 reset.
- (c) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.
- (d) Adjusted for actual CPI. Based on forecast capex.
- (e) A negative indexation of the capital base was due to the annual CPI rate of –0.35% (based on June 2020 quarter) published by the ABS.

We determine a forecast closing capital base value as at 30 June 2028 of \$2218.1 million (\$ nominal) for AGN. This is \$35.4 million (1.6%) higher than AGN’s proposed closing capital base value of \$2182.7 million (\$ nominal). This increase is primarily driven by a higher expected inflation rate (Attachment 3). It also reflects our draft decision on the amended opening capital base as at 1 July 2023, forecast depreciation (Attachment 4) and forecast capex (Attachment 5).⁷

Table 2.2 sets out our draft decision on the forecast capital base values for AGN over the 2023–28 period.

⁷ 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 the PTRM. Therefore, our draft decision on the forecast capital base also reflects our amendments to the rate of return for the 2023–28 period (Attachment 3).

Table 2.2 AER’s draft decision on AGN’s capital base for the 2023–28 period (\$ million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28
Opening capital base	1975.6	2054.1	2117.2	2159.9	2188.6
Net capex ^a	113.0	103.3	89.5	83.5	92.7
Indexation of capital base	66.6	69.3	71.4	72.9	73.8
Less: straight-line depreciation	101.1	109.5	118.3	127.6	137.1
Closing capital base	2054.1	2117.2	2159.9	2188.6	2218.1

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 a six-month period before capex is added to the capital base for revenue modelling.

We accept AGN’s proposal to establish the opening capital base as at 1 July 2028 using the approved depreciation schedules based on forecast capex over the 2023–28 period.⁸ These depreciation schedules will be adjusted for actual inflation outcomes over this period.

2.2 AGN’s proposal

AGN proposed an opening capital base of \$1572.0 million (\$ nominal) as at 1 January 2018. Rolling forward this capital base and using depreciation based on forecast capex approved for the 2018–22 period and placeholder forecast capex approved in our draft decision for the six-month extension period, AGN proposed a closing capital base of \$1975.9 million (\$ nominal) as at 30 June 2023.⁹

Table 2.3 sets out AGN’s proposed roll forward of its capital base during the 2018–23 period.

⁸ AGN, *AGN Access Arrangement 2023–28*, July 2022, ch 4.13, p. 20.

⁹ AGN, *AGN 2023–28 Access Arrangement Addendum–RFM*, 2 September 2022.

Table 2.3 AGN’s proposed capital base for the 2018–23 period (\$ million, nominal)

	2018	2019	2020	2021	2022 ^a	2023 ^a
Opening capital base	1572.0	1612.1	1668.3	1729.2	1778.5	1900.7
Net capex ^b	87.7	108.1	129.9	142.2	172.6	65.7
Indexation of capital base	30.4	33.5	26.6	-6.0 ^d	68.4	39.9
Less: straight-line depreciation ^c	77.9	85.4	95.6	86.9	94.3	30.4
Interim closing capital base	1612.1	1668.3	1729.2	1778.5	1925.2	1975.9
Difference between estimated and actual capex in 2017					-19.2	
Return on difference for 2017 capex					-5.3	
Closing capital base as at 30 December 2022					1900.7	
Closing capital base as at 30 June 2023						1975.9

Source: AGN, *AGN 2023–28 Access Arrangement Addendum–RFM*, 2 September 2022.

- (a) Based on estimated capex, and includes the six-month extension period of 1 January to 30 June 2023.
- (b) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.
- (c) Adjusted for actual CPI. Based on forecast capex.
- (d) A negative indexation of the capital base was due to the annual CPI rate of -0.35% (based on June 2020 quarter) published by the ABS.

AGN proposed a forecast closing capital base as at 30 June 2028 of \$2182.7 million (\$ nominal). This value reflects its proposed opening capital base, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2023–28 period.

Table 2.4 shows AGN’s projected capital base over the 2023–28 period.

Table 2.4 AGN’s proposed capital base for the 2023–28 period (\$ million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28
Opening capital base	1975.9	2047.8	2103.9	2139.3	2160.8
Net capex ^a	112.8	102.7	88.7	82.4	91.1
Indexation of capital base	60.2	62.4	64.1	65.2	65.9
Less: straight-line depreciation	101.1	109.0	117.4	126.2	135.0
Closing capital base	2047.8	2103.9	2139.3	2160.8	2182.7

Source: AGN, *AGN 2023–28 Access Arrangement Addendum–PTRM*, 2 September 2022.

- (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 a six-month period before capex is added to the capital base for revenue modelling.

AGN proposed to use forecast depreciation to determine the opening capital base as at the commencement of the 2028–33 period, consistent with the approach applied in the 2018–23 period.¹⁰

¹⁰ AGN, *AGN Access Arrangement 2023–28*, July 2022, ch 4.13, p. 20.

2.3 Assessment approach

Our approach to assessing AGN's projected capital base is consistent with that adopted in previous gas access arrangement decisions made under the National Gas Rules (NGR).¹¹ To determine the opening capital base, we developed a capital base RFM that the service provider must use in preparing its proposal.¹² In accordance with rules 77(2) and 78 of the NGR, we applied three steps to calculate the projected capital base:

- First, we confirm the value of the opening capital base for the first year of the 2018–22 period (in this case, 1 January 2018). This includes making an adjustment to account for any difference between actual and estimated capex in the final year of the previous period (in this case, 2017). This adjustment is made at the end of the 2018–22 period, and must also remove any benefit or penalty associated with any difference between the estimated and actual capex for that year.¹³
- Second, the opening capital base as at 1 January 2018 is rolled forward to determine the closing capital base as at 31 December 2022. We then further roll forward the capital base by an additional six months (from 1 January to 30 June 2023) to establish the closing capital base at 30 June 2023.¹⁴ This closing capital base is also used as the value of the opening capital base for the 2023–28 period as at 1 July 2023. This involves:¹⁵
 - adding conforming actual capex for each year – this requires assessing the capex and determining that it is consistent with the provisions of the 2018–22 access arrangement and the decision for the six-month extension period, and data from historical Regulatory Information Notices (RINs), as well as the definition of 'conforming capital expenditure' in the NGR¹⁶
 - removing depreciation for each year based on the approach approved for the 2018–22 and six-month extension period¹⁷
 - adding any speculative capex or previously redundant assets that will be reused during the 2023–28 period

¹¹ For example, AER, *Final decision: APA VTS Australia access arrangement 2018–22*, November 2017; AER, *Final decision: AusNet Services access arrangement 2018–22*, November 2017; AER, *Final decision: Multinet gas access arrangement 2018–22*, November 2017; AER, *Roma to Brisbane Gas Pipeline access arrangement 2017–22*, November 2017; AER, *Australian Gas Networks Victoria and Albury access arrangement 2018–22*, November 2017; AER, *Final decision: Jemena Gas Networks (NSW) access arrangement 2020–25*, June 2020; AER, *Final decision: Australian Gas Networks (SA) access arrangement 2021–26*, April 2021; AER, *Final decision: Evoenergy access arrangement 2021–26*, April 2021; AER, *Final decision: Amadeus Gas Pipeline access arrangement 2021–26*, April 2021.

¹² NGR, rr. 72(3) and 75A(2). This includes a RFM that applied to the 2018–22 access arrangement and a modified RFM that provides for a further roll forward of the capital base for the six-month extension period.

¹³ NGR, r. 77(2)(a). This adjustment is made in 2022 and is escalated by CPI for the six-month period.

¹⁴ The additional roll forward for six months is due to the decision by the Victorian Government to change the timing of the annual Victorian electricity network price changes to a financial year basis from a calendar year basis. This change means the current access arrangement period of 2018–22 is extended by six months and the next access arrangement period will commence on 1 July 2023.

¹⁵ NGR, r. 77(2).

¹⁶ NGR, r. 79(1).

¹⁷ In this case, forecast depreciation approach as approved for AGN at the 2018–22 access arrangement period and 2023 six-month extension period final decisions.

- removing any redundant assets and disposals during the 2018–22 and the six-month extension periods
- indexing the roll forward each year for actual inflation.
- Third, the capital base is projected over the 2023–28 period by rolling forward the opening capital base as at 1 July 2023 to 30 June 2028. This involves performing the following on the opening capital base:¹⁸
 - adding forecast conforming capex for each year (net of any forecast capital contributions)
 - removing forecast depreciation for each year
 - removing the forecast value of assets to be disposed of during the 2023–28 period
 - indexing the capital base of the roll forward each year for expected inflation.

2.3.1 Interrelationships

The size of the capital base substantially impacts the service provider's revenue and the price consumers pay. It is an input into the determination of the return on capital and depreciation (return of capital) building blocks.¹⁹ Factors that influence the capital base will therefore flow through to these building block components and the annual building block revenue requirement. Other things being equal, a higher capital base increases both the return on capital and depreciation amounts. In turn, it increases the service provider's revenue, and prices for its services.

The capital base is determined by various factors, including;

- the opening capital base (meaning the value of existing assets at the beginning of the access arrangement period)
- net capex²⁰
- depreciation
- indexation adjustment – so the capital base is presented in nominal terms, consistent with the rate of return.

The opening capital base depends on the value of existing assets as well as actual conforming net capex, actual inflation outcomes and depreciation in the past.

The capital base when projected to the end of the access arrangement period may increase due to forecast new capex and the indexation adjustment. The size of the indexation adjustment depends on expected inflation (which also affects the nominal rate of return or WACC) and the size of the capital base at the start of each year throughout the access arrangement period.

¹⁸ NGR, r. 78.

¹⁹ The size of the capital base also impacts the benchmark debt raising cost. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

²⁰ Net capex is gross capex less disposals and capital contributions.

Depreciation reduces the capital base. The depreciation amount depends on the size of the opening capital base, the forecast net capex and the depreciation schedules applied to the assets.

We maintain the capital base in real terms by indexing for inflation. A nominal rate of return WACC is multiplied by the opening capital base to produce the return on capital building block.²¹ To prevent double counting of inflation through the nominal WACC and indexed capital base, the regulatory depreciation building block has an offsetting reduction for indexation of the capital base.²² Indexation of the capital base and the offsetting adjustment made to depreciation results in smoother revenue recovery profile over the life of an asset than if the capital base was un-indexed. The implications of our approach to indexing the value of the capital base on revenues are discussed further in Attachment 4.

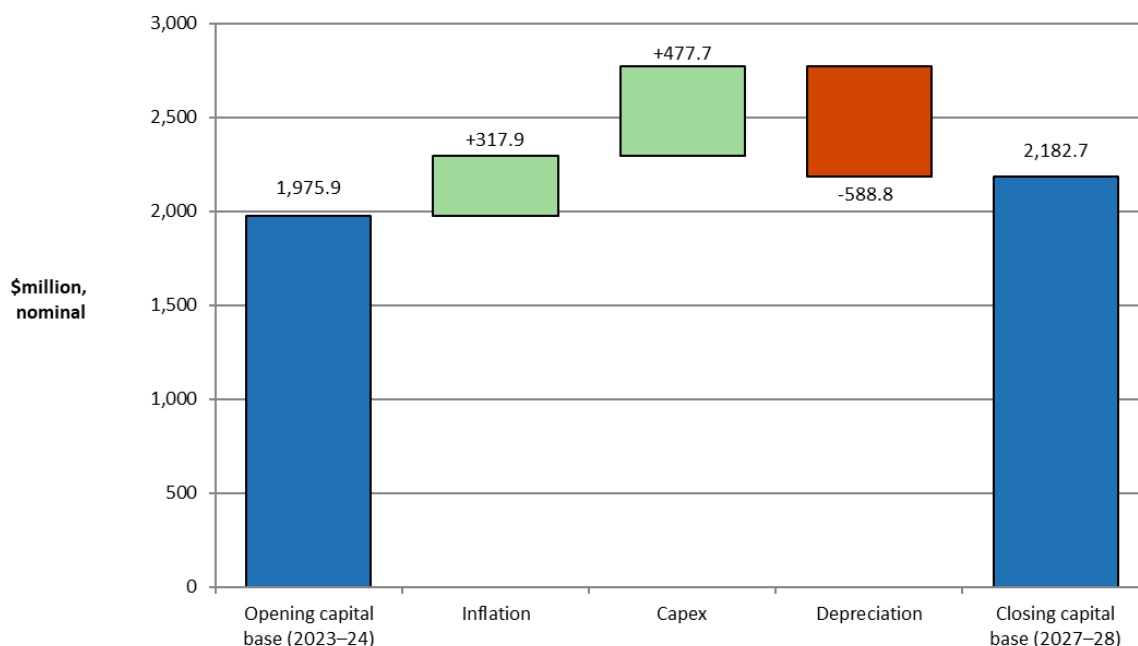
Figure 2.1 shows the key drivers of the change in the capital base over the 2023–28 period as proposed by AGN. Overall, the closing capital base at the end of the 2023–28 period would be 10.5% higher than the opening capital base at the start of that period based on the proposal, in nominal terms.²³ The proposed forecast net capex increases the capital base by about 24.2%, while expected inflation increases it by about 16.1%. Forecast depreciation, on the other hand, reduces the capital base by about 29.8%.

²¹ NGR, r. 87.

²² If the asset lives are extremely long, such that the capital base depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the capital base depreciation in such circumstances. Please also refer to section 4.3.1 of Attachment 4 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

²³ In real terms, the capital base decreases by 4.9% over the 2023–28 period.

Figure 2.1 Key drivers of changes in the capital base proposed by AGN (\$ million, nominal)



Note: Capex is net of forecast disposals and capital contributions. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

Source: AGN, *AGN 2023–28 Access Arrangement Addendum–PTRM*, 2 September 2022.

AGN's proposed forecast straight-line depreciation for the 2023–28 period is \$588.8 million (\$ nominal). The depreciation amount largely depends on the proposed level of accelerated depreciation and the opening capital base. The opening capital, in turn, depends on capex in the past.²⁴ Depreciation associated with forecast capex is a relatively smaller amount. For this draft decision, we accept AGN's proposal for accelerated depreciation and have adopted the proposed amount. However, we note concerns about the impact on network tariffs and this is discussed in Attachment 4.

In this draft decision, we largely accept AGN's proposed total net capex for the 2023–28 period \$477.7 million (nominal).²⁵ Our review of AGN's forecast capex is set out in Attachment 5 of this draft decision.

A 10% increase in the opening capital base causes revenues to increase by about 1.7% (\$ nominal). However, the impact of the annual change in capital base on revenues depends on

²⁴ At the time of this draft decision, the roll forward of AGN's capital base includes estimated capex values for 2022 and the six-month extension period. We may update these estimated capex with a revised estimate in the final decision.

²⁵ This amount is net of asset disposals and capital contributions, and inclusive of half-year WACC adjustment. AGN submitted updated forecast capex values which reduced total net capex (exclusive of half-year WACC) by \$0.8 million (\$2022–23). AGN, *Response to AER Information request #021*, 25 October 2022.

the source of the capital base change, as some drivers affect more than one building block cost.²⁶

2.4 Reasons for draft decision

We determine an opening capital base value for AGN of \$1975.6 million (nominal) as at 1 July 2023, a decrease of \$0.3 million (less than 0.1%) from the proposed value. We forecast a closing capital base value of \$2218.1 million by 30 June 2028. This represents an increase of \$35.4 million (1.6%) compared with AGN's proposal. This results from our draft decision on the inputs used to determine the projected capital base in the post-tax revenue model (PTRM). We are satisfied this amendment is necessary having regard to the requirements of the NGR.

The reasons for our decision are discussed below.

2.4.1 Roll forward of capital base during the 2018–23 period

AGN has established the opening capital base as at 1 January 2023 using our RFM. Therefore, we reviewed the key inputs of AGN's proposed RFM such as actual inflation, rate of return, gross capex values, asset disposals, forecast depreciation amounts and asset lives. We found these inputs were generally correct and reconciled with relevant data sources such as Australian Bureau of Statistics (ABS) data, RINs and the 2018–22 decision models.²⁷ However, we identified some of the proposed inputs required updating with newly available data.

Therefore, we have made the following amendments to AGN's proposed RFM inputs:

- Amended the 2017 capex and capital contributions inputs for the 'Meters' and 'Mains and services' asset classes, respectively, to be consistent with the values reported in the RIN for that year.²⁸
- Updated actual inflation for the six-month extension period to use an unrounded figure of 2.1% reflecting the lagged consumer price index (CPI) series and is calculated using actual June 2021 CPI to December 2021 CPI published by the ABS. This is consistent with the approach we applied for the Victorian electricity distribution 2016–20 six-month extension period.²⁹
- Updated the inputs for expected inflation, nominal WACC and forecast depreciation for the six-month extension period to be consistent with our final decision PTRM for that

²⁶ If capex causes the capital base to increase—return on capital, depreciation, and debt raising costs all increase too. If a reduction in depreciation causes the capital base to increase, revenue could increase or decrease. In the latter case, the higher return on capital is offset (perhaps more than offset) by the reduction in the depreciation amount. Inflation naturally increases the capital base in nominal terms.

²⁷ At the time of this draft decision, the roll forward of AGN's capital base includes estimated capex values for 2022 and the six-month extension period. We may update these estimated capex with a revised estimate in the final decision.

²⁸ AGN, *Regulatory Information Notice-Attachment 1-Written Response*, July 2022. sc. 3.1, p. 8. This amendment reflects AGN's 2017 RIN resubmission which reduces net capex for 2017 slightly (by about \$1700). We accept AGN's basis for a RIN resubmission as we consider the change provides an accurate representation of capex for that year.

²⁹ AER, *Draft Decision: Jemena electricity distribution determination 2021–26, Attachment 2 – Regulatory asset base*, September 2020, p. 14.

period. AGN's proposed RFM adopted the values in our draft decision for this extension period as placeholders. Our final decision for this extension period has been completed and is available for the purposes of this draft decision for the 2023–28 period. We have therefore updated these inputs in the RFM to be consistent with our final decision PTRM for the extension period.

In addition, we have amended the input associated with the accelerated depreciation in the RFM. This input change does not affect the total opening capital base value. While we accept the proposed new 'Future of gas' asset class, we updated the associated final year asset adjustment capital base reallocation amount to \$197.1 million (\$ nominal) as at 1 July 2023 to target our acceptance of AGN's proposed accelerated depreciation amount of \$175 million (\$2022–23).³⁰ Our draft decision on accelerated depreciation is set out in Attachment 4.

2.4.1.1 Conforming capital expenditure in the 2018–23 period

Our assessment of conforming capex is set out in Attachment 5. In determining AGN's opening capital base as at 1 July 2023, we assessed whether its proposed capex amounts for the 2018–23 period are properly accounted for in the capital base roll forward.

We accept AGN's actual capex for 2018–21 as conforming capex during the 2018–23 period.³¹ Therefore, we accept that actual conforming capex has been properly accounted for in the proposed capital base roll forward consistent with the requirements of the NGR.³²

However, we note that the proposed capex for 2022 and the six-month extension period are estimates. These capex estimates may be revised based on more up to date information for the final decision. We will assess whether AGN's actual capex for 2022 and the six-month extension period is conforming capex under the NGR in the subsequent (2028–33) access arrangement review and adjust for any differences between actual and estimated capex.³³

2.4.2 Projected capital base during the 2023–28 period

We forecast a closing capital base of \$2218.1 million (\$ nominal) as at 30 June 2028 for AGN, which represents an increase of \$35.4 million (or 1.6%) compared to AGN's proposed amount of \$2182.7 million. This results from our draft decision on the inputs for determining the projected capital base in the PTRM. We have amended the inputs in the following ways:

- we reduced the opening capital base as at 1 July 2023 by \$0.3 million (less than 0.1%) due to minor modelling and input updates
- we updated AGN's proposed expected inflation rate of 3.05% per annum for the 2023–28 period to 3.37% per annum (Attachment 3). Compared to the proposal, our draft

³⁰ This is a capital base reallocation and does not affect the total value of the opening capital asset base at 1 July 2023. Note the asset adjustment value of \$197.1 million will not match the target accelerated depreciation amount of \$175 million over the 2023–28 period due to asset adjustment offsets in the RFM depreciation tracking module. We have also amended AGN's proposed remaining asset life for this asset adjustment.

³¹ See section 5.1 of Attachment 5 of this draft decision for details.

³² NGR, r. 77(2)(b).

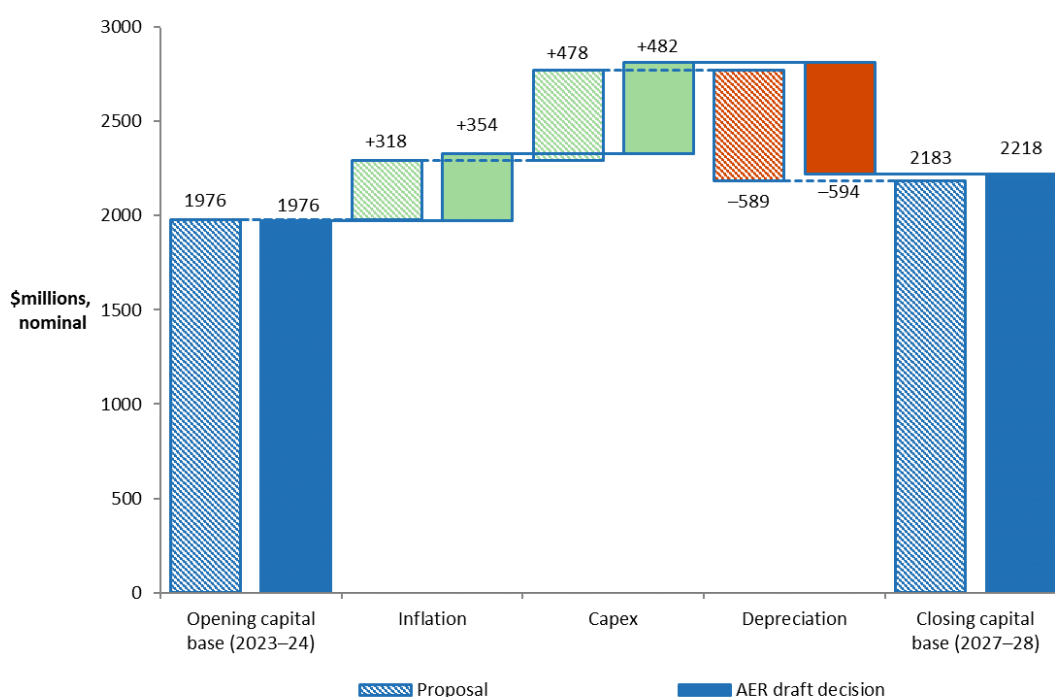
³³ NGR, rr. 77(2)(b), 79.

decision results in an increase to the indexation of the capital base component for the 2023–28 period by \$36.2 million (\$ nominal) or 11.4%³⁴

- we increased AGN's proposed forecast straight-line depreciation amount for the 2023–28 period by \$4.7 million (\$ nominal) or 0.8% (Attachment 4) due to some updates³⁵
- we have accepted AGN's proposed forecast capex for the 2023–28 period subject to some minor updates (Attachment 5).³⁶

Figure 2.2 shows the key drivers of the change in AGN's capital base over the 2023–28 period for this draft decision. Overall, the closing capital base at the end of the 2023–28 period is forecast to be 12.3% higher than the opening capital base at the start of that period, in nominal terms. The approved forecast net capex and expected inflation increase the capital base by about 24.4% and 17.9%, respectively. Forecast depreciation, on the other hand, reduces the capital base by about 30.0%.

Figure 2.2 Key drivers of changes in the capital base over the 2023–28 period – AGN's proposal compared with AER's draft decision (\$ million, nominal)



Note: Capex is net of forecast disposals and capital contributions. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

Source: AER analysis.

³⁴ The increase in the indexation to the capital base is primarily due to an increase in the expected inflation rate which more than offsets the lower opening capital base in our draft decision.

³⁵ Regulatory depreciation is the net total of straight-line depreciation and inflation indexation of the capital base.

³⁶ AGN submitted updated forecast capex values which reduced total net capex by \$0.8 million (\$2022–23). AGN, *Response to AER Information request #021*, 25 October 2022.

2.4.3 Capital base at commencement of 2028–33 period

The capital base at the commencement of the 2028–33 period will be subject to adjustments consistent with the NGR. The adjustments for AGN include (but are not limited to) actual inflation and approved depreciation over the 2023–28 period.

We accept AGN’s proposal to establish the opening capital base as at 1 July 2028 using the approved depreciation schedules based on forecast capex over the 2023–28 period.³⁷ This is consistent with the requirement in AGN’s current access arrangement which requires that depreciation be based on forecast capex.³⁸ We approved such an approach in our recent gas access arrangement decisions.³⁹ This approach is also consistent with the approach outlined in our *Access Arrangement Guideline*.⁴⁰ The amount of the forecast depreciation is to be approved by us in the final decision for the 2023–28 period.

2.5 Revisions

We require the following revisions to make the access arrangement proposal acceptable as set out in Table 2.5.

Table 2.5 AGN’s capital base revisions

Revision	Amendment
Revision 2.1	Make all necessary amendments to reflect this draft decision on the roll forward of the capital base for the 2018–22 access arrangement period and the six-month extension period, and to reflect this draft decision on the projected capital base for the 2023–28 access arrangement period.

³⁷ AGN, *AGN Access Arrangement 2023–28*, July 2022, ch 4.13, p. 20.

³⁸ AER, *Final Decision AGN Access Arrangement 2018–22, Attachment 2 – Capital base*, November 2017, p. 6.

³⁹ AER, *Final decision: Jemena Gas Networks (NSW) access arrangement 2020–25, Attachment 2 – Capital base*, June 2020, p. 14; AER, *Final decision: Australian Gas Networks (SA) access arrangement 2021–26, Attachment 2 – Capital base*, April 2021, p. 7; AER, *Final decision: Evoenergy access arrangement 2021–26, Attachment 2 – Capital base*, April 2021, p. 7; AER, *Final decision: Amadeus Gas Pipeline access arrangement 2021–26*, April 2021, p. 23; AER, *Roma to Brisbane Pipeline access arrangement 2022–27, Overview*, May 2022, p. 32.

⁴⁰ AER, *Final access arrangement guideline*, March 2009, pp. 61–62.

Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
AGN	Australian Gas Networks (Albury and Victoria)
CPI	Consumer price index
NGR	National Gas Rules
PTRM	Post-tax revenue model
RFM	Roll forward model
RIN	Regulatory Information Notice
WACC	Weighted average cost of capital
