

# Draft decision

## Australian Gas Networks (Victoria and Albury) gas distribution access arrangement

1 January to 30 June 2023 extension period

July 2022

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## Executive summary

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable, and affordable energy future for Australia. The regulatory framework governing gas transmission and distribution networks is the National Gas Law and Rules (NGL and NGR). Our work is guided by the National Gas Objective (NGO).<sup>1</sup>

A regulated gas network business must periodically apply to us for a ruling on network charges, in the form of an access arrangement. Our decision on the access arrangement currently in place for Australian Gas Networks' (AGN) Victorian and Albury (NSW) gas distribution networks was made in November 2017, for the period 1 January 2018 to 31 December 2022 (2018–22 period).

On 20 October 2020, the *National Energy Legislation Amendment Act 2020* (Vic) was enacted to change the timing of Victorian gas distribution access arrangement periods. Future access arrangements for AGN will now be made for financial years rather than calendar years. To facilitate this, the 2018–22 period for AGN will be extended by 6 months from 1 January to 30 June 2023 (extension period). AGN's next access arrangement period will then cover the period 1 July 2023 to 30 June 2028 (2023–28 period).

We will determine revenue prices for the extension period in accordance with Orders in Council made on 30 September 2021 (the Orders).<sup>2</sup> Our proposed approach to that determination was set out in a position paper in November 2021:<sup>3</sup>

- To minimise price volatility resulting from price changes on both 1 January and 1 July 2023, we would extend AGN's current, 2022 prices (adjusted for 6 months' inflation to keep them constant in real terms) for an additional 6 months to cover the extension period.
- To determine a building block revenue allowance for the extension period we would use simple, trend-forward approaches to forecast capital expenditure (capex) and operating expenditure (opex) at a level that should be proportionate to the extended tariffs.
- We would then return any difference between allowed revenue under the extended, 2022 tariffs and the trended forward building block revenue calculation to customers in the new, 2023–28 period.

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<sup>1</sup> NGL, s. 23: "...to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."

<sup>2</sup> Minister for Energy, Environment and Climate Change, 'Order Setting Requirements for Modifications and Variations to Instruments – Section 64 National Gas (Victoria) Act 2008', Victoria Government Gazette, No. G39, 30 September 2021, p. 2076 [Section 64 Order]; Minister for Energy, Environment and Climate Change, 'Order Setting Requirements for Modifications and Variations to Instruments – Section 65 National Gas (Victoria) Act 2008', Victoria Government Gazette, No. G39, 30 September 2021, p. 2081 [Section 65 Order].

<sup>3</sup> AER - [Position paper: Approach to six-month extension of access arrangements for Victorian gas distributors - November 2021](#).

Submissions received from AGN, the AER’s Consumer Challenge Panel (CCP28) and Victoria’s other gas distributors (Multinet Gas Networks and AusNet Gas Services) were broadly supportive of that approach.<sup>4</sup> Each suggested some refinements and clarifications that have been taken into account in this draft decision.

The key variable remaining at the time of this draft decision is the demand forecast that should be used for the purposes of calculating extension period allowed revenue. In our position paper we suggested that, for consistency with the simple ‘trend forward’ approach applied to other elements of this draft decision, we could assume forecast demand for 1 January to 30 June 2023 would be the same or similar to that in recent years. Instead, AGN has provided forecasts informed by a June 2022 draft report commissioned from Core Energy & Resources (CORE) which it submits are more robust estimates for demand in the 6-month extension period and better reflects AGN’s circumstances.

The Australian Energy Market Operator’s (AEMO) 2022 Gas Statement of Opportunities (GSOO) consider a number of potential demand scenarios, with greatest emphasis on:

- The step change scenario: an accelerated transition towards a net zero economy with significant electrification occurring in the short to medium term.
- The progressive change scenario, which considers slower action towards the transition to a net zero economy.

While AEMO has observed that stakeholders consider the step change scenario the most likely pathway for Australia’s energy sector, it has also noted that ‘urgent action would be needed to put south-eastern regions on the step change path by next winter’.

The CORE draft report provided by AGN submits that the 2022 GSOO does not provide the level of granularity required. We can see the benefits of a more detailed approach to forecasting, in principle, but have not had time to fully assess the supporting information provided. We have used AGN’s forecast as a placeholder for this draft decision, subject to stakeholder views on the forecast and our completion of that assessment prior to our final decision later this year.

For illustrative purposes, based on the latest available inflation forecasts, this draft decision assumes that AGN’s distribution tariffs from 1 January 2023 to 30 June 2023 will be 2.71% higher in nominal terms, reflecting a half-year inflation applied to its current, 2022 tariffs. In our upcoming final decision, we will update this indexation with actual inflation. If we were to accept AGN’s forecast of demand, the expected, allowed revenue recovered at those prices over the six-month extension period would be \$115.5 million.<sup>5</sup> This would be \$34.5 million (42.7%) higher than our draft decision on AGN’s building block revenue of \$80.9 million for the extension period.<sup>6</sup> This over-recovery of \$34.5 million would therefore be returned to

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<sup>4</sup> <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/australian-gas-networks-victoria-and-albury-access-arrangement-2023%E2%80%9328/transitional-decision>.

<sup>5</sup> The allowed revenue total of \$115.5 million comprises \$113.7 million for reference services and \$1.8 million for ancillary reference services.

<sup>6</sup> The building block total of \$80.9 million comprises \$78.6 million for reference services and \$2.4 million for ancillary reference services.

customers over the course of the next, 2023–28 period as an offset to approved prices for that period.

These draft decision outcomes will change as we update our calculations for changes to market variables, such as inflation. They may also change if our final decision applies a different demand forecast compared with AGN's. Our final decision must be made in time for us to determine what prices will apply from 1 January to 30 June 2023. Our intention is to release our final decision for the 6-month extension period in conjunction with our draft decision for the 2023–28 period later this year.

## How you can get involved

Interested parties are invited to make submissions on this draft decision by **24 August 2022**.

Submissions should be sent to: [VicGAAR@aer.gov.au](mailto:VicGAAR@aer.gov.au)

Alternatively, submissions can be sent to:

Sebastian Roberts  
Specialist Advisor  
Australian Energy Regulator  
GPO Box 3131  
Canberra ACT 2601

We prefer that all submissions be publicly available to facilitate an informed and transparent consultative process. We will treat submissions as public documents unless otherwise requested. All non-confidential submissions will be placed on the AER's website.

We request parties wishing to submit confidential information:

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

For further information regarding the AER's use and disclosure of information provided to it, see the ACCC/AER Information Policy, which is available on our website.

# 1 Introduction

On 20 October 2020, the *National Energy Legislation Amendment Act 2020 (Vic)* was enacted to change the timing of Victorian gas distribution access arrangement periods. Where previous access arrangement decisions for AGN have been made by reference to calendar years, future access arrangements will be made for financial years. To facilitate this, AGN's approved access arrangement for the period 1 January 2018 to 31 December 2022 (2018–22 period) will be extended by 6 months from 1 January to 30 June 2023 (extension period). AGN's next access arrangement will then cover the period 1 July 2023 to 30 June 2028 (2023–28 period).

We will determine revenue and prices for the extension period in accordance with Orders in Council made on 30 September 2021 (the Orders).<sup>7</sup> Our approach to this determination has been informed by the equivalent process we completed for Victorian electricity distributors in 2020. That approach drew on the discretion afforded us under Orders in Council to adopt a pragmatic approach to extending the life of the existing decisions to cover an additional 6 months, keeping the transition process simple by trending forward most elements of our previous decision as a basis for the additional revenue requirement. The Orders in place for Victorian gas distributors give us a similar level of discretion.<sup>8</sup> In addition, they allow us to smooth revenue between the extension period of 1 January to 30 June 2023, and the new 2023–28 period commencing on 1 July 2023.<sup>9</sup>

Our draft decision is to extend AGN's current, 2022 prices to 30 June 2023, adjusted for a half-year of expected inflation to keep them constant in real terms. To the extent the expected revenue that would be recovered at those prices is lower or higher than the building block revenue we approve for that period, any under- or over-recovery will then be corrected in—and its impact on prices smoothed over—the 2023–28 period. This means our decision on revenue and prices for the extension period is in three parts:

1. *Extension period allowed revenue* (the revenue to be derived from the provision of the relevant pipeline services for the 1 January to 30 June 2023 extension period) is determined by reference to the extended, 2022 tariffs and to forecast demand for the extension period. We discuss this in section 2.
2. *Extension period building block revenue* is determined within the parameters set out in the NGR and the Orders, applying a similar, trend forward approach for capex and opex to that used for the electricity distribution extension period. We discuss this in section 3.
3. When smoothing revenue and price paths for the new, 2023–28 period we will complete a *'true up'* of any difference between extension period allowed revenue and extension period building block revenue. We will then distribute that difference over one or more of

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<sup>7</sup> Minister for Energy, Environment and Climate Change, 'Order Setting Requirements for Modifications and Variations to Instruments – Section 64 National Gas (Victoria) Act 2008', Victoria Government Gazette, No. G39, 30 September 2021, p. 2076 [Section 64 Order]; Minister for Energy, Environment and Climate Change, 'Order Setting Requirements for Modifications and Variations to Instruments – Section 65 National Gas (Victoria) Act 2008', Victoria Government Gazette, No. G39, 30 September 2021, p. 2081 [Section 65 Order]

<sup>8</sup> Section 64 Order.

<sup>9</sup> Section 64 Order.

the next 5 years to achieve the best outcome for consumers. We discuss this in section 4.

## 2 Extension period allowed revenue

Extension period allowed revenue is AGN's revenue from the provision of services over the 6-month extension period. Under the Orders, our determination of extension period allowed revenue must be an amount between:<sup>10</sup>

- extension period building block revenue (discussed in section 3), and
- the total revenue for the applicable access arrangement extension period determined by the AER based on the tariffs and tariff classes approved by the AER for the regulatory year commencing on 1 January 2022, adjusted for inflation.

The approach taken in this draft decision is to apply AGN's tariffs and tariff classes from the current (2022) regulatory year, adjusted for a half-year of forecast inflation (1-year lagged), for an additional 6 months over the extension period (i.e. from 1 January to 30 June 2023).

Extension period allowed revenue, in simple terms, will be the approved extended tariffs multiplied by forecast demand.

### 2.1 Extending 2022 prices over the extension period

Our draft decision is to extend the 2022 tariffs by indexing for a half year of inflation, consistent with the approach set out in our position paper. Therefore, we have indexed the tariffs by 2.71%, which is a half year adjustment to the Reserve Bank of Australia's (RBA) full year inflation forecast of 5.50% for the June 2022 quarter.<sup>11</sup> We note that the actual inflation for the June 2022 quarter is not yet available and will be published in late-July 2022. In our final decision, we will update the extension period tariffs using the actual inflation adjusted for a half year.

We consider applying a half year of inflation appropriately converts the tariffs from 'end-of-year' (31 December) 2022 terms to 'end-of-half-year' (30 June) 2023 terms. Further, the June 2022 quarter is appropriate as the June series (1-year lagged) is consistent with the annual tariff mechanism for haulage reference services in our 2018–22 decision, subject to an adjustment for the half year.

In its submission on our position paper, Australian Gas Infrastructure Group (on behalf of AGN and MGN) supported the approach to apply a half year inflation.<sup>12</sup>

In its response to our position paper, CCP28 submitted that while it supported the extension of 2022 tariffs into the 6-month extension period it did not support indexation of the tariffs for inflation.<sup>13</sup> It suggested adjusting 2022 tariffs for inflation is inconsistent with our position paper and the Orders. We consider that adjusting the 2022 tariffs by a half year inflation is

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<sup>10</sup> Section 64 Order, p. 2079.

<sup>11</sup> The 5.50% inflation is taken from the Reserve Bank of Australia's May 2022 Statement on Monetary Policy. The 2.71% is derived from the equation:  $(1+5.5\%)^{0.5} - 1$ .

<sup>12</sup> Australian Gas Infrastructure Group, *Response on six month extension position paper*, December 2021, p.1.

<sup>13</sup> CCP28, *Advice to Australian Energy Regulator on approach to six-month extension of access arrangements for Victorian gas distributors*, December 2021, p. 3.

consistent with the approach in our position paper and the intent of the Orders.<sup>14</sup> We are satisfied with this approach as it extends the tariffs in real terms.

## 2.2 Expected demand over the extension period

We need a demand forecast for each reference service that AGN will provide during the extension period in order to calculate its extension period allowed revenue.

The Orders do not prescribe an approach to our assessment of demand forecasts for the extension period. Our approach to forecast demand for the purposes of the extension period is guided by principles for forecasts and estimates set out in the NGR:<sup>15</sup>

- Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate, and
- A forecast or estimate must be arrived at on a reasonable basis and must represent the best forecast or estimate possible in the circumstances.

Given the short length of the extension period, our position paper suggested a simple approach using the most recent actual demand for the equivalent, January to June period would be reasonable. In the context of this extension decision, the continued application of 2022 tariffs, and the simple, trend-forward approach we have used for our building block determination, we considered this an acceptable approach given the limited time available for submission of proposals.

In its extension period proposal, AGN has instead put forward demand forecasts based on a June 2022 draft report commissioned from Core Energy & Resources (CORE) that it submits results in more robust estimates for demand in the 6-month extension period and better reflects AGN's circumstances. The CORE report was provided to us separately in June 2022.

Ongoing transformation in Australia's energy system and the explicit policy goals of reaching net zero emissions by 2050 create considerable uncertainties in future gas demand. The Australian Energy Market Operator's (AEMO) 2022 Gas Statement of Opportunities (GSOO) considers five potential demand scenarios (step change, progressive change, hydrogen superpower, strong electrification, and low gas price) with greatest emphasis on:

- The step change scenario, which considers an accelerated transition towards a net zero economy with significant electrification occurring in the short to medium term, increasing renewable energy penetration and retiring coal generation.
- The progressive change scenario, which considers slower action towards the transition to a net zero economy, allowing time for technologies to develop with strong transformation efforts occurring in the long term to achieve net zero 2050.

AEMO has observed that stakeholders consider the step change scenario the most likely pathway for Australia's energy sector. However, it has also noted that 'urgent action would be needed to put south-eastern regions on the step change path by next winter'.

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<sup>14</sup> Section 64 Order, p. 2079. Under heading *Revenue and tariffs for the applicable access arrangement extension period* the Order refers to 2022 tariffs being "adjusted for inflation".

<sup>15</sup> NGR, r. 74.

The CORE report provided by AGN submits that the 2022 GSOO does not provide the level of granularity required and considers the progressive and slow change scenarios to be the most appropriate for cross-check purposes, with step change setting the lower boundary of potential demand for Victoria.

We can see the benefits of a more detailed approach to forecasting, in principle, but have not had time to fully assess the supporting information provided. We have used AGN's forecast as a placeholder for this draft decision, subject to stakeholder views on the forecast and our completion of that assessment prior to our final decision later this year.

The same CORE report has been provided in support of AGN's demand forecasts for its full, 2023–28 access arrangement period. A submission from stakeholders in support of using AGN's proposed forecasts for the extension period does not mean stakeholders also have to agree to its forecasts for the whole 5-year access arrangement. Nor would a decision by us to adopt AGN's forecasts for the immediate purposes of the extension period require us to accept its forecasts for next 5 years. Demand forecasts for the 2023–28 period will require greater consideration of how outcomes between progressive and step change may converge over time.

## 2.3 Calculating extension period allowed revenue

AGN operates under a weighted average price cap. This means the prices we determine and the means of varying the prices from year to year are the binding constraint across an access arrangement period rather than the revenue requirement that informs them.

In a typical access arrangement determination, forecast demand is applied to the forecast revenue requirement to derive reference tariffs. In this decision, we already have the 2022 reference tariffs and, as discussed above, have indexed these for a half year of inflation to apply them to the extension period. So we are instead multiplying those tariffs by forecast demand to produce extension period allowed revenue.

For illustrative purposes, we estimate that adopting AGN's proposed demand forecasts for 1 January to 30 June 2023 and applying those forecasts to the extended, 2022 tariffs, would result in extension period allowed revenue of \$115.5 million.<sup>16</sup>

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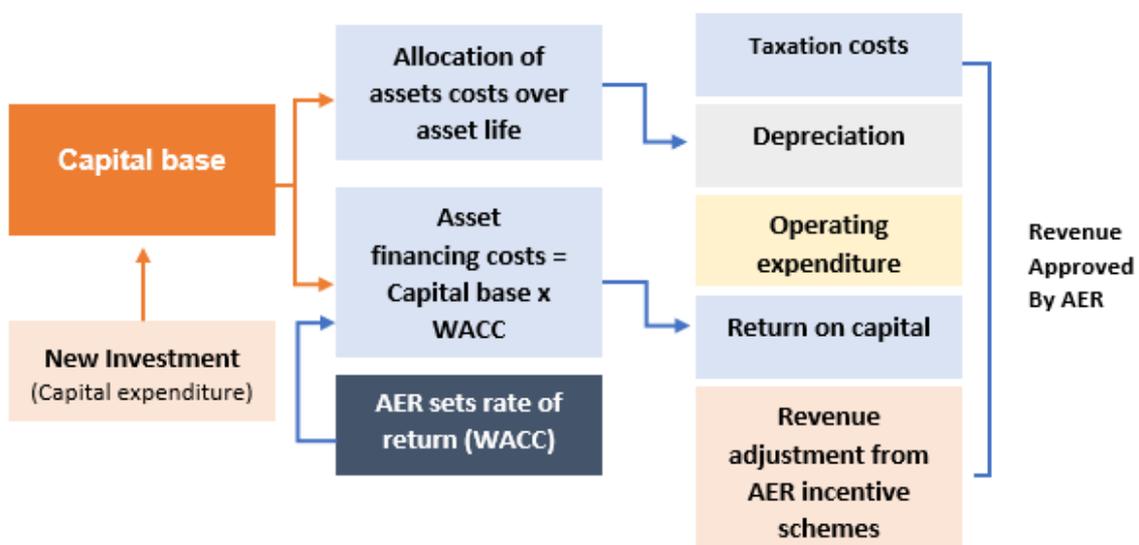
<sup>16</sup> The allowed revenue total of \$115.5 million comprises \$113.7 million for reference services and \$1.8 million for ancillary reference services.

### 3 Extension period building block revenue

Our determination of extension period building block revenue is based on a similar ‘building block’ approach to our usual regulatory decisions. It looks at five cost components:

- return on the capital base – or return on capital, to compensate investors for the opportunity cost of funds invested in this business
- depreciation of the capital base – or return of capital, to return the initial investment to investors over time
- forecast opex – the operating, maintenance and other non-capital expenses, incurred in the provision of network services
- revenue increments/decrements resulting from the opex efficiency carryover mechanism that applied to AGN in the 2018–22 access arrangement period
- estimated cost of corporate income tax.

**Figure 1 The building block approach to determining total revenue**



Source: AER.

For the purposes of determining building block revenue for the 1 January to 30 June 2023 extension period, the Orders allows us to apply variations to our standard, 5-year revenue models.<sup>17</sup> The models used in AGN’s proposal and this draft decision for the extension period are based on the Post Tax Revenue Model (PTRM) and Roll Forward Model (RFM)<sup>18</sup> that AGN must use for its 2023–28 access arrangement proposal, adjusted to accommodate the additional 6-month period.

<sup>17</sup> Section 64 Order, p. 2078.

<sup>18</sup> AER, *Gas transmission and distribution network service providers, Roll forward models (version 1.1)*, April 2020; AER, *Gas transmission and distribution network service providers, Post-tax revenue models (version 2)*, April 2021.

Our draft decision is that AGN’s building block revenue for the 1 January to 30 June 2023 extension period is \$80.9 million.<sup>19</sup> Table 1 shows our draft decision on the building block revenue for the 6-month extension period.

**Table 1. Extension period building block revenue 1 January to 30 June 2023 (\$nominal)**

	HY2023 <sup>d</sup>
Return on capital	48.6
Regulatory depreciation <sup>a</sup>	-9.5
Operating expenditure <sup>b</sup>	42.1
Revenue adjustments <sup>c</sup>	-0.3
Cost of corporate income tax	0.0
<b>Building block revenue (including ARS)</b>	<b>80.9</b>
Less: Ancillary reference services	2.4
<b>Building block revenue (excluding ARS)</b>	<b>78.6</b>

Source: AER analysis.

- (a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening capital base.
- (b) Includes debt raising costs.
- (c) Revenue adjustments from the efficiency carryover mechanism.
- (d) This is for the 6-month extension period of 1 January to 30 June 2023.

We discuss the building block components of this calculation in the sections below.

### 3.1 Capital base

The capital base roll forward accounts for the value of AGN’s regulated assets over the extension period. The opening value of the capital base on 1 January 2023 is used to determine the return on capital and return of capital (depreciation) building blocks.

This draft decision includes opening capital base value of \$1899.9 million as at 1 January 2023 for AGN. To determine the opening capital base, AGN has rolled forward the capital base over the 2018–22 access arrangement period. We have reviewed the key inputs of AGN’s proposed RFM, such as forecast inflation, rate of return, gross capex values, capital contribution values, forecast depreciation amounts and asset lives. We found most of these inputs were correct and reconciled with relevant data sources.<sup>20</sup>

We have established the opening capital base on 1 January 2023 using the standard published RFM that roll forwards the capital base for 2018–22, based on actual capex up to 2021 and latest estimates for 2022 capex. We note that AGN might provide an updated estimated capex for 2022 before our final decision for the half year extension period, in which case the opening capital base may increase or decrease. The RFM also reflects 2018–22 forecast depreciation and actual CPI.

<sup>19</sup> Includes Ancillary Reference Services. Nominal revenue includes the expected impact of inflation.

<sup>20</sup> Data sources included Australian Bureau of Statistics (ABS) data, annual regulatory information notices (RINs) and the 2018–22 decision models.

This roll forward process includes an adjustment at the end of the 2018–22 access arrangement period to account for the difference between actual 2017 capex and the estimate approved in the 2018–22 decision.<sup>21</sup> Additionally, final year adjustments may be applied at 30 June 2023 to establish the opening capital base value at 1 July 2023 for the purposes of the 2023–28 access arrangement.<sup>22</sup> Table 2 sets out the roll forward of AGN’s capital base over the 2018–22 access arrangement period.

**Table 2. Capital base roll forward for the 2018–22 period (\$ nominal)**

	2018	2019	2020	2021	2022 <sup>a</sup>
Opening capital base	1572.0	1612.1	1668.3	1729.2	1778.5
Net capex <sup>b</sup>	87.7	108.1	129.9	142.2	171.8
Indexation of capital base	30.4	33.5	26.6	–6.0	68.4
Less: straight-line depreciation <sup>c</sup>	77.9	85.4	95.6	86.9	94.3
Interim closing capital base	1612.1	1668.3	1729.2	1778.5	1924.4
Difference between estimated and actual capex in 2017					–19.2
Return on difference for 2017 capex					–5.3
<b>Closing capital base as at 31 December 2022</b>					<b>1899.9</b>

Source: AER analysis.

- (a) Based on estimated capex provided by AGN. We will true-up the capital base for actual capex at the next access arrangement review.
- (b) As-incurred, net of disposals, and adjusted for actual CPI and half-year WACC.
- (c) Adjusted for actual CPI. Based on forecast capex.

Reference tariffs for the 2023–28 period (from 1 July 2023) will be established using a modified 5.5-year RFM to establish the opening capital base at 1 July 2023. That opening capital base will include capex undertaken during the extension period.

## 3.2 Regulatory depreciation

Our calculation of extension period building block revenue includes –\$9.5 million for the depreciation of AGN’s capital base. The depreciation amount is negative as the indexation of AGN’s capital base exceeds the straight line depreciation.<sup>23</sup> AGN’s proposal reflects:

- the straight-line depreciation method for calculating the regulatory depreciation amount as set out in the PTRM, and the year-by-year tracking approach to implement this method.<sup>24</sup> An adjustment is required to reflect that the 2023 period is a half year rather than full year and AGN has therefore used our modified depreciation tracking module of the RFM, which allows for the tracking calculations to reflect the extension period

<sup>21</sup> The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2018–22 determination.

<sup>22</sup> This includes reallocation for accelerated depreciation purposes.

<sup>23</sup> The regulatory depreciation amount is the net total of the straight-line depreciation less the indexation of the capital base.

<sup>24</sup> For this 6-month extension period, the straight-line depreciation is not impacted by the 6-month forecast net capex. This is consistent with our standard approach of capex entering the capital base at the end of the year in which it is incurred and depreciating from the following year.

- the same asset classes and standard asset lives approved for the 2018–22 period
- the opening capital asset base at 1 January 2023 (section 3.1)
- expected inflation (section 3.3.1) for the 6-month extension period.

Our draft decision regulatory depreciation is a larger negative amount than AGN's proposed amount of –\$4.3 million (\$ nominal). This adjustment reflects our correction to the year-by-year tracking depreciation inputs in the PTRM to align with the outputs calculated in the depreciation tracking module.

In our final decision, we will update the regulatory depreciation amount to reflect any updates to the opening capital base and expected inflation.

Table 3 sets out our draft decision on the regulatory depreciation amount for AGN's 6-month extension period.

**Table 3. Regulatory depreciation amount for 1 January to 30 June 2023 (\$ nominal)**

	HY2023 <sup>a</sup>
Straight-line depreciation	30.4
Less inflation indexation on opening capital base	40.0
<b>Regulatory depreciation</b>	<b>–9.5</b>

Source: AER analysis.

(a) HY2023 is the 6-month extension period of 1 January to 30 June 2023.

Reference tariffs for the 2023–28 period will also be established using the modified depreciation tracking module to calculate the depreciation of assets in the 1 July 2023 capital base.

### 3.3 Rate of return and value of imputation credits

For the purposes of determining extension period building block revenue, the Orders require us to apply our 2018 Rate of Return Instrument (2018 Instrument), with modifications to give effect to the change of the access arrangement period from a calendar year to a financial year basis.<sup>25</sup>

We published the modified 2018 Instrument that applies to this decision on 29 October 2021.<sup>26</sup> The key reasons the application of the 2018 Instrument and modifications are required are:

- The 2018 Instrument reduces the allowed return on both debt and equity compared to those applied in the current period, all else remaining equal. Not applying these changes from 1 January 2023 would delay the impact of these lower returns for consumers.

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<sup>25</sup> Section 64 Order, pp. 2077–2078.

<sup>26</sup> Available here and on project page for the AGN access arrangement review: <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/australian-gas-networks-victoria-and-albury-access-arrangement-2023-28/transitional-decision>.

- Debt yields have changed materially since the commencement of the trailing average. Consequently, not modifying the weights feeding into the trailing average return on debt in an appropriate way could make consumers materially better or worse off. For this reason, we have modified the trailing average weights in a manner that can prevent consumers and businesses from being materially impacted, including to have a new on the day return on debt for the applicable access arrangement extension period feed into the trailing average.<sup>27</sup>

The rate of return applied in this draft decision on extension period building block revenue is 2.56% (5.19% annualised). This is a higher placeholder rate of return than applied in AGN's proposal because we have updated our estimates of the risk-free rate using more recent placeholder dates and the return on debt using AGN's nominated averaging period. The risk-free rate estimate will be updated again in our final decision. We accept AGN's proposed risk-free rate averaging period<sup>28</sup> and debt averaging periods because they comply with the conditions set out in the modified Instrument.<sup>29</sup>

CCP28 questioned why we use the weighted average cost of capital (WACC) to adjust under- or over-recovery of revenues in the extension period and instead proposed that we use the trailing average cost of debt.<sup>30</sup> We do not agree with this view, because the networks' capital investment, including any capital required for a period of under- or over-recovery of revenues, is funded by all of the capital holders of the firm, including both shareholders and debt holders. Therefore, the risk associated with any under- or over-recovery of revenues would be best approximated by the WACC. Furthermore, it is also our standard practice to adjust under- or over-recovery of revenues in a net present neutral way using the WACC.

### 3.3.1 Expected inflation

In implementing our current approach to estimating the expected inflation rate for the 6-month access arrangement extension period, this draft decision:

- uses inflation forecasts (CPI) from the May 2022 RBA Statement on Monetary Policy for the year ending 30 June 2023.
- halves this one-year forecast from the RBA to derive an estimate of expected inflation for the 6-month period, 1 January to 30 June 2023.

This results in an inflation forecast of 2.10%. Our estimate of expected inflation will be updated again in our final decision.

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<sup>27</sup> The decision on how the trailing average will apply post 1 July 2023 will be determined by future rate of return instruments.

<sup>28</sup> This is also known as the return on equity averaging period.

<sup>29</sup> AER, *Modified Rate of Return Instrument for the Victorian gas distribution networks during the extension period of 1 January 2023 to 30 June 2023*, October 2021, cl. 7–8, 23–25 and 36.

<sup>30</sup> CCP28, *Advice to Australian Energy Regulator on: Approach to six-month extension of access arrangements for Victorian gas distributors*, 7 December 2021, p. 4.

### 3.4 Capital expenditure

For the purposes of determining the projected capital base for the applicable access arrangement extension period, the Orders requires forecast capital expenditure (capex) consists of parts that:<sup>31</sup>

- the AER is satisfied meet the new capital expenditure criteria set out in rule 79 of the NGR; or
- are expenditure not exceeding half of the average of the corresponding forecast capital expenditure as approved by the AER over the previous regulatory years as selected by the AER, adjusted for inflation.

As set out in our position paper, we and AGN have taken the second of these options. To forecast capex for the 6 months from 1 January to 30 June 2023, we have:

- halved the forecast conforming capex that we determined for 2022, and
- escalated the resultant allowance by CPI only.

This produces forecast capex \$40.3 million for the extension period.

**Table 4. Forecast capex allowance 1 January to 30 June 2023 (\$2022–23)**

	Forecast capex (\$ million)
Total capex (including customer contributions)	\$40.99
Customer contributions	\$0.75
<b>Net capex (excluding contributions)</b>	<b>\$40.25</b>

Source: AGN, AGN Vic Alb Variation Proposal H1 2023 Attachment 1.7 Six month extension capex

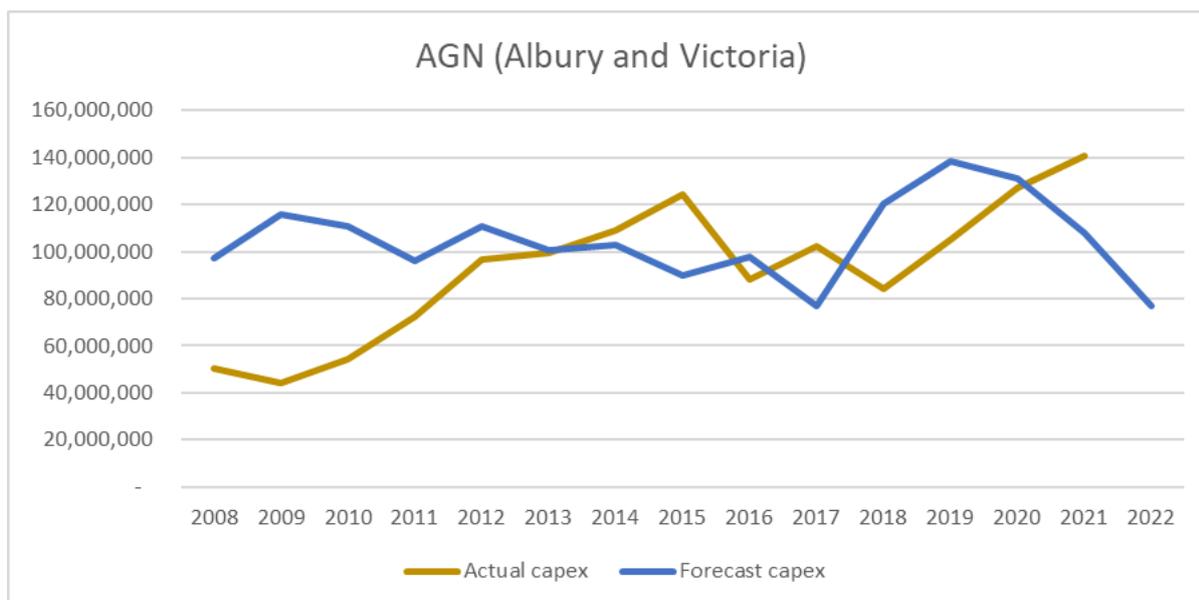
This approach, which was supported in submissions to our position paper, recognises the limited time available between the making of the Orders and the due date for AGN's extension period proposal, which was insufficient for us to prepare and serve specifications for a full capex proposal in a Regulatory Information Notice (RIN), and for AGN to then comply with that notice. It is also consistent with the approach we took in the equivalent determination for Victorian electricity distributors.

Noting that our decision on AGN's forecast capex for the 2022 regulatory year was made more than 5 years ago, Figure 2 compares AGN's actual capex to the forecasts in our last decision.

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<sup>31</sup> Section 64 Orders, p. 2078.

**Figure 2. Comparison of actual and forecast capex**



Source: AER analysis

Irrespective of any over or under spend during the extension period, it is AGN’s actual capex, which must be assessed by us as conforming capex under the NGR as part of our next review, that will ultimately be rolled into the capital base at the conclusion of the 2023–28 access arrangement period.

### 3.5 Operating expenditure

For the purposes of determining the extension period building block revenue, the Orders require that the forecast of operating expenditure (opex) consist of parts that:<sup>32</sup>

- the AER is satisfied meet the criteria governing opex set out in rule 91 of the NGR; or
- are expenditure not exceeding half of the corresponding forecast opex as approved by the AER for the regulatory year commencing on 1 January 2022, adjusted for inflation and any rate of change that the AER considers appropriate having regard to changes in output, prices, productivity, and any other relevant factors that the AER may consider relevant.

As set out in our position paper, we and AGN have taken the second of these options. To forecast opex for the 6 months from 1 January to 30 June 2023, we have:

- Applied a rate of change to half the forecast opex that we determined for 2022<sup>33</sup>, in addition to adjusting for inflation. The applicable rate of change is equal to three quarters of the rate of change we used for 2022. We apply three-quarters of the rate of change for 2022 to forecast opex for the extension period, rather than half, to represent the change in the *average* level of output, opex input prices (e.g. wages), and productivity between the *average* levels over the 2022 calendar year and the first six months of

<sup>32</sup> Section 64 Orders, p. 2078.

<sup>33</sup> Excluding debt raising costs.

2023. This can be thought of as the change in prices, output and productivity at the end of June 2022 compared to the end of March 2023 (that is, at the mid points of the 2 periods). This is 9 months. Further, the change in prices output and productivity between the 6-month extension period and the first year of the new access arrangement period will also be 9 months. This gives a total of 18 months rate of change between calendar year 2022 and 2023–24.

- Forecast debt raising costs consistently with our use of category specific forecasts for debt raising costs in our opex forecasts for 2022. Debt raising costs are transaction costs incurred each time debt is raised or refinanced. Unlike other elements of our opex forecasts for 2022, for which we used a base–step–trend forecasting approach, we forecast debt raising costs based on a benchmarking approach rather than a service provider’s actual costs. This ensures consistency with the forecast of the cost of debt in the rate of return building block.

This produces forecast opex for the 1 January to 30 June 2023 extension period of \$41.2 million (\$2022). This is consistent with AGN’s proposed forecast, but applies a more recent forecast of inflation for the year to December 2022.<sup>34</sup> We will update forecast opex again in our final decision, with the RBA’s latest available forecast of inflation.

**Table 5. Forecast opex allowance 1 January to 30 June 2023 (\$2022)**

	AGN proposal	AER draft decision
Forecast opex, excluding ARS & DRC	37.5	38.4
Ancillary reference services	2.3	2.3
Debt raising costs	0.5	0.5
<b>Total forecast opex</b>	<b>40.2</b>	<b>41.2</b>

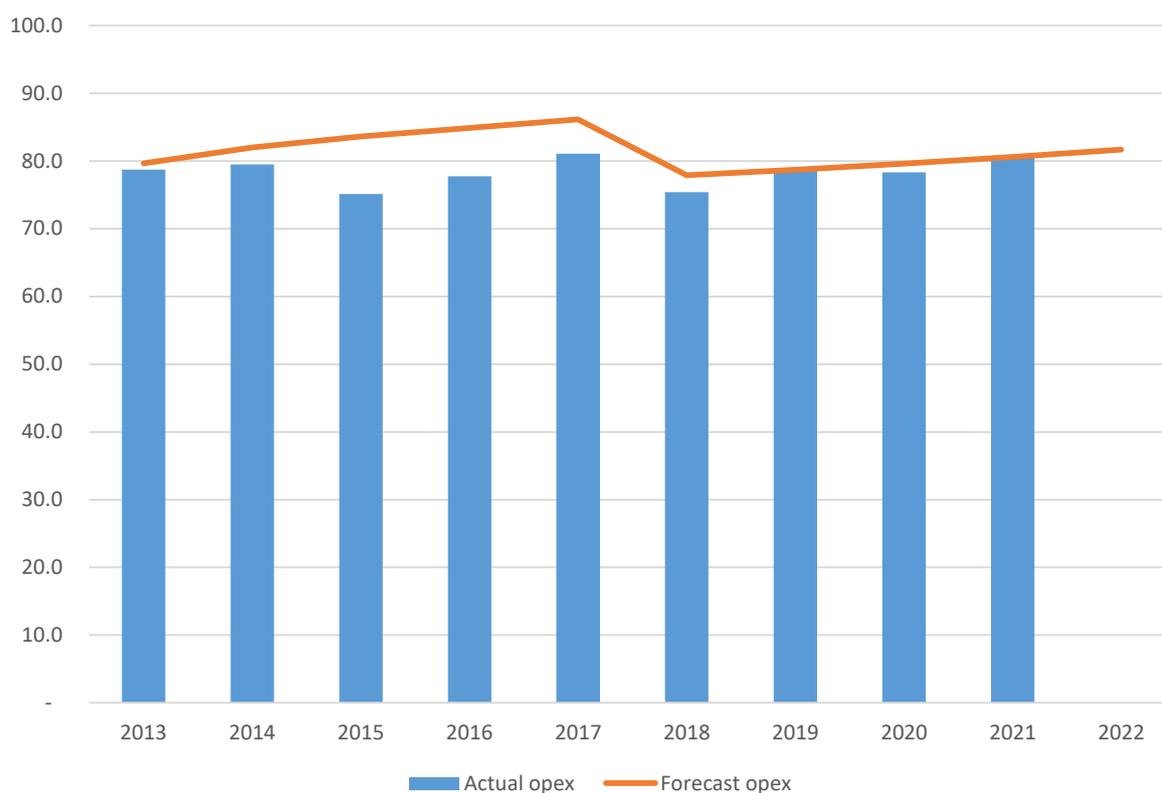
Source: AGN, *Proposed half year 2023 PTRM*, April 2022; AER analysis.

As with capex, this approach recognises the limited time available between the making of the Orders and the due date for AGN’s extension period proposal and is consistent with the approach we took in the equivalent determination for Victorian electricity distributors.

Noting that our decision on AGN’s forecast opex for the 2022 regulatory year was made more than 5 years ago, annual reporting from AGN during the 2018–22 period shows that its actual opex over the first 4 years has been \$313.0 million (\$2022) This is \$3.8 million (\$2022) (1.2%) below our approved forecast. Figure 3 compares AGN’s actual opex during the current period to the forecast approved in that decision.

<sup>34</sup> RBA, *Statement on Monetary Policy, Forecast Table*, 5 May 2022.

**Figure 3. Comparison of actual and forecast opex (\$ million 2022)**



Source: AER analysis.

Note: Includes debt raising costs.

The approach we have taken to forecasting extension period opex does not account for the efficiency gains and losses AGN has achieved in the current period. That is, forecast opex for the extension period allows AGN to retain the recurrent efficiency gains and losses it has achieved in the 2018–22 access arrangement period. We will account for this when we calculate the efficiency carryover amounts to be included in AGN’s revenue for the extension period so that these efficiency gains are not double counted. While we could have adjusted the opex in the 6-month extension period to account for efficiency gains and losses, as illustrated below, we would also need to take into account the efficiency carryover amounts, which results in the same revenue outcome.

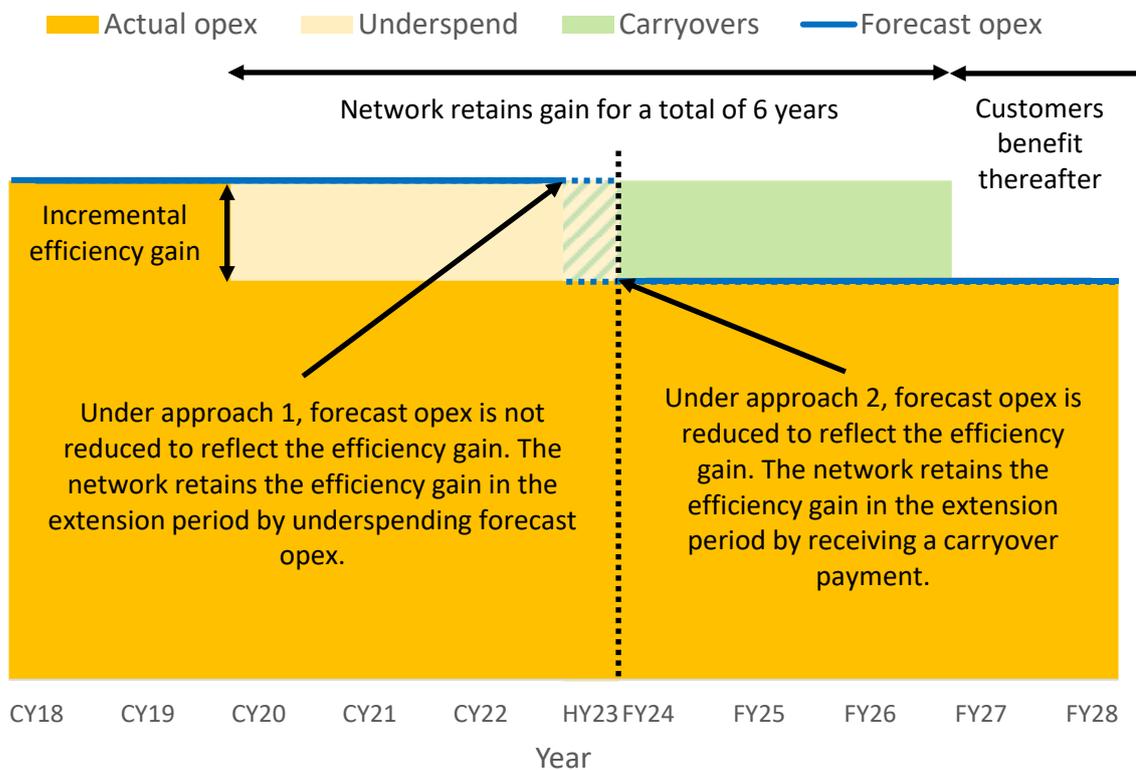
In its submission on our position paper, CCP28 suggested a fuller explanation of this would be helpful to assure customers that our approach will deliver a fair outcome.<sup>35</sup>

Under the approach taken in this draft decision for the 6-month period, we set (annualised) forecast opex equal to the level previously determined for the period. This can be thought of as the level of opex we would have forecast for the 6-month extension period had we known the full period would be 5.5 years in total. To illustrate, in Figure 4 we assume the distributor reduces its ongoing level of opex in 2020 as can be seen by the step down in the yellow actual opex box in 2020. So the network underspends its opex forecast for an extra 6 months. This is not reflected in our (lower) opex forecast until the start of the next access

<sup>35</sup> CCP28, *Gas distribution businesses extension advice*, 7 December 2021, p. 3.

arrangement period (the blue line from financial year 2023-24). Under the incentive mechanism in place, the business retains the lower spend for 3.5 years in the current period (the light brown underspend box) and it will receive carryovers for 2.5 years in the next period (the green carryover box). Therefore, the network retains the benefits from the lower ongoing opex for six years, after which customers benefit.

**Figure 4. Draft decision approach to forecasting opex**



Source: AER analysis.

If we had instead reflected the lower opex revealed in 2020 in the forecast opex for the extension period, we would then need to include these gains in the efficiency carryover amounts for the extension period. This would reduce forecast opex but increase carryover amounts. It would not change the overall opex and efficiency carryover revenues since the two impacts would offset each other.

Using the same example as above, in Figure 4 we could have set (annualised) forecast opex for the 6-month extension period to reflect the now lower ongoing level of opex in 2020 (as reflected by the lower blue dashed line). The distributor would now no longer underspend its opex forecast in the 6-month period because we set opex to reflect the lower level of opex. In addition to the underspend for three years (the light brown underspend box), the incentive mechanism that is operating allows the business to retain the opex reduction it has made as a carryover in the extension period (shown by the green hatched box) and for 2.5 years in the next period (the green carryover box). Therefore, under both approaches the distributor retains its gains for the same amount of time, the difference being whether this is through underspending opex in the 6-month period or through a carryover (the green hatched box).

### 3.6 Revenue adjustments and the application of incentive schemes

Our draft decision includes revenue adjustments of  $-\$0.2$  million ( $\$2022$ ) from the application of the opex incentive mechanism in the 2018–22 access arrangement period in AGN's building block revenue for the extension period.

As we noted in our position paper, this is a change from how we applied the efficiency benefit sharing scheme (EBSS) to the Victorian electricity distributors. In that case we considered there was insufficient time to determine the carryover amounts and include them in revenues for the extension period. In this case, we consider there is sufficient time and carryovers could be included in the revenues for the extension period.

Our calculation of the carryover amount is based on the calculation of carryovers for the current access arrangement period. The purpose of the carryover amount for the half year is to subtract half of the efficiency gain made in 2017. Because 2016 was used as the base year to forecast opex for the 2018–22 access arrangement period, forecast opex did not reflect any efficiency gains (or losses) made after 2016. Similarly, the calculation of carryovers for the 2018–22 access arrangement period assumed AGN underspent its opex in 2017 by the same amount it underspent opex in 2016. Because the access arrangement period was expected to be 5 years this would allow AGN to retain the actual efficiency gain it made in 2017 for an additional five years, consistent with gains made in other years. However, because the access arrangement period has been extended by 6 months, we need to subtract half of the difference between the actual efficiency gain it made in 2017 and the efficiency gain we assumed for 2017 when we calculated carryovers for the 2018–22 period. This ensures the efficiency gain made in 2017 is only retained for five years, consistent with the access arrangement for the 2013–17 access arrangement period.

AGN, in its proposal, stated that any carryovers included in the building block revenue for the extension period would not be passed through to customers until the next access arrangement period. AGN, therefore, considered it 'simpler to apply any revenue increments or decrements from 1 July 2023,' rather than from 1 January 2023.<sup>36</sup> We, however, see no reason to delay determining any of the building block revenue amounts for the extension period, including carryover amounts accrued under the opex incentive mechanism. We consulted with AGN on our proposed approach to calculating carryover amounts and it stated that it was comfortable for half of the incremental gain made in 2017 to be subtracted from allowed revenues in the extension period.<sup>37</sup>

Our draft decision does not include any revenue adjustments associated with capital expenditure sharing scheme (CESS) calculations for the 2018–22 period. Consistent with our position paper, these revenue adjustments will be deferred to begin from 1 July 2023.

### 3.7 Corporate income tax

AGN's proposal, and our draft decision, have based the calculation of the cost of corporate income tax on the approach used for the current 2018–22 period, except for the value of

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<sup>36</sup> Australian Gas Networks, *Victoria and Albury Access Arrangement Variation Proposal, January – June 2023*, April 2022, p. 27.

<sup>37</sup> Australian Gas Networks, *Response to information request*, 25 May 2022.

imputation credits (gamma), which is based on the modified 2018 Instrument as set out in section 3.3.

For our draft decision, we determine a cost of corporate income tax of zero for AGN for the 6-month extension period, consistent with AGN's proposal. This is due to AGN incurring a forecast tax loss for the six-month extension period.<sup>38</sup> We have determined that \$8.1 million in tax losses as at 30 June 2023 will be carried forward to the 2023–28 access arrangement period where it can be used to offset future tax liabilities.

Our draft decision:

- applies an opening TAB of \$1240.7 million as at 1 January 2023, consistent with AGN's proposal. The opening TAB may be updated as part of the final decision for the extension period to reflect any revised 2022 capex estimates
- reflects AGN's proposed standard tax asset lives that are the same as the approved standard tax asset lives for the 2018–22 period
- reflects AGN's proposed approach to calculating the remaining tax asset lives as at 1 January 2023 for all asset classes, because they are calculated based on the weighted average method as set out in our RFM.

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<sup>38</sup> A forecast tax loss occurs when the forecast taxable 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.

## 4 True up for revenue for the applicable access arrangement extension period

Because there is a difference between the extension period allowed revenue and the extension period building block revenue set out in sections 2 and 3 above, the Orders allow us to make adjustments for that difference through the 2023–2028 access arrangement.<sup>39</sup>

Our draft decision suggests that AGN will over recover by \$34.5 million<sup>40</sup> during the extension period if we accept its proposed demand forecast for the extension period.<sup>41</sup> As a result, its tariffs in the 2023–28 access arrangement period will be adjusted (reduced) so that AGN will return \$34.5 million dollars to consumers, with interest at the regulatory WACC to maintain the time value of money.

**Table 6. True up between extension period allowed revenue and extension period building block revenue (\$ nominal)**

	HY2023 <sup>a</sup>
Building block revenue (excluding ARS)	78.6
Less: Total revenue - AER determined (excluding ARS)	113.7
<b>True-up amount (excluding ARS)</b>	<b>-35.2</b>
ARS building block revenue	2.4
Less: ARS revenue - AER determined	1.8
True-up amount for ARS revenue	0.6
<b>Total true-up amount (including ARS)</b>	<b>-34.5</b>

Source: AER analysis.

Note: Totals shown in table may not add up due to rounding.

(a) HY2023 is the 6-month extension period of 1 January to 30 June 2023

This true up is net present value (NPV) neutral and so should ensure that both AGN and consumers are not materially better (or worse) off as a result of continuing the 2022 tariffs throughout the applicable access arrangement extension period.

The Orders allow us to spread this adjustment over the whole of the 2023–28 access arrangement period, or to apply it only to some years within that period. This decision does not need to be made now, and can instead be deferred until our final decision on revenue and price paths for the 2023–28 access arrangement period. In considering this, we will have

<sup>39</sup> Section 64 Orders, p. 2080.

<sup>40</sup> Including Ancillary Reference Services.

<sup>41</sup> This true up is based on AGN's expected revenue during the extension period and not its actual revenue. If actual revenue and allowed revenue in the extension period differ—e.g. because customer numbers or actual demand differ from the forecast customer numbers and demand over the 6-month period applied in our decision on extension period allowed revenue—this will not be adjusted for. This outcome is consistent with the existing weighted average price cap form of control.

regard to any submissions from stakeholders on the 2023–28 price paths in AGN’s proposal for 2023–28.

## Glossary

Term	Definition
AER	Australian Energy Regulator
AEMO	Australian Energy Market Operator
AusNet	AusNet Gas Services
EBSS	Efficiency benefit sharing scheme
CESS	Capital expenditure sharing scheme
Capex	Capital expenditure
Opex	Operating expenditure
CPI	Consumer Price Index
Instrument (2018)	2018 Rate of Return Instrument
NGL	National Gas Law
NGR	National Gas Rules
NPV	Net present value
PTRM	Post tax revenue model
Orders	Minister for Energy, Environment and Climate Change, <i>'Order Setting Requirements for Modifications and Variations to Instruments – Section 64 National Gas (Victoria) Act 2008'</i> , Victoria Government Gazette, No. G39, 30 September 2021, p. 2076 [Section 64 Orders]  Minister for Energy, Environment and Climate Change, <i>'Order Setting Requirements for Modifications and Variations to Instruments – Section 65 National Gas (Victoria) Act 2008'</i> , Victoria Government Gazette, No. G39, 30 September 2021, p. 2081 [Section 65 Orders]
RBA	Reserve Bank of Australia
RFM	Roll forward model