

# Draft Decision

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

**Access Arrangement 2023 to 2028**

(1 July 2023 to 30 June 2028)

**Attachment 8**  
**Efficiency carryover mechanism**

**December 2022**

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## 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

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Attachment 13 – Capital expenditure sharing scheme

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## 8 Efficiency carryover mechanism

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

This attachment sets out our draft decision on the ECM carryover amounts accrued over the 2018–22 access arrangement period (2018–22 period) for Australian Gas Networks Victoria and Albury (AGN), and the ECM that we will apply in the 2023–28 access arrangement period (2023–28 period).

### 8.1 Draft decision

Our draft decision is to approve carryover amounts totalling –\$12.0 million (\$2022–23) from the application of the ECM in the 2018–22 access arrangement period. This is \$3.8 million (\$2022–23) lower than AGN's proposal, which was –\$8.1 million (\$2022–23).<sup>1</sup>

This difference between our draft decision and AGN's proposal reflects adjustments we have made to account for:

- ECM exclusions in the previous access arrangement period which are no longer applicable in the 2018–22 period
- the exclusion of ancillary reference services from total opex
- recent updates to actual and forecast inflation.

Table 8.1 sets out our draft decision on the ECM carryover amounts AGN accrued from the operation of the ECM during the 2018–22 period and compares this to the carryover amounts AGN proposed.

**Table 8.1 AER's draft decision on AGN's carryover amounts (\$million, 2022–23)**

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
AGN's proposed carryover	–0.5	–3.0	–3.2	–1.4	–	–8.1
AER's draft decision	–1.7	–4.9	–4.0	–1.4	–	–12.0
<b>Difference</b>	<b>–1.2</b>	<b>–1.9</b>	<b>–0.8</b>	<b>–0.0</b>	<b>–</b>	<b>–3.8</b>

Source: AGN, 2023-28 Final Plan - Attachment 11 - Efficiency carryover mechanism, July 2022; AER analysis.

Note: Numbers may not add up to total due to rounding. Amounts of '0.0' and '–0.0' represent small amounts and '–' represents zero.

In our final decision, we will update the ECM carryover amounts to reflect the full year of actuals for calendar year 2022 and update our inflation forecast for 2022–23.

Our draft decision is to continue to apply the ECM to AGN in the 2023–28 period, subject to minor amendments that we discuss in section 8.4.2.1. These amendments are also reflected in the revisions to AGN's access arrangement proposed ECM set out in section 8.5.

<sup>1</sup> AGN, 2023–28 Final Plan - Attachment 11 - Efficiency carryover mechanism, July 2022.

## 8.2 AGN’s proposal

### 8.2.1 Carryover amounts from the 2018–22 period

AGN proposed an ECM carryover amount of –\$8.1 million (\$2022–23) in its proposal, from the application of the ECM in the 2018–22 period. AGN excluded or adjusted for the following cost categories in calculating its ECM carryover amounts:<sup>2</sup>

- cost categories that are not forecast using a single year revealed cost approach, (including debt raising costs and unaccounted for gas)
- movements in provisions
- approved pass through amounts
- ECM exclusions approved in the 2013–17 access arrangement period, which were:<sup>3</sup>
  - change in scale adjustment
  - other specific, non-controllable costs including:
    - network management fee
    - licence fees
    - incentive fees
    - Energy Safe Victoria levy costs.

### 8.2.2 Application in the 2023–28 period

AGN proposed to continue applying the ECM in the 2023–28 period and supported the following adjustments and exclusions:<sup>4</sup>

- cost categories that are not forecast using a single year revealed cost approach in the period commencing 1 July 2028, which may include:
  - debt raising costs
  - unaccounted for gas
  - priority service program
- movements in provisions
- ancillary reference services
- approved pass through amounts
- any other activity that AGN and the Regulator agree to exclude from the operation of the efficiency carryover mechanism.

### 8.2.3 Stakeholder submissions

We have not received any submissions from stakeholders on AGN’s proposed ECM.

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<sup>2</sup> AGN, *2023–28 Final Plan - Attachment 11 - Efficiency carryover mechanism*, July 2022.

<sup>3</sup> In AGN’s proposal (ECM Model), these categories were only excluded from total opex in 2016 and 2017, but these years were used in the calculation of the incremental efficiency gain for 2018.

<sup>4</sup> AGN, *2023–28 Revisions to Final Plan - GSR Response - Access Arrangement*, September 2022, pp. 22–24.

## 8.3 Assessment approach

An ECM is a form of incentive mechanism. A full access arrangement may include (and we may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.<sup>5</sup> An incentive mechanism must be consistent with the revenue and pricing principles.<sup>6</sup>

We consider the following revenue and pricing principle is most relevant for assessing AGN's proposed efficiency carryover mechanism:

A service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides.

The economic efficiency that should be promoted includes:

- (a) efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
- (b) the efficient provision of pipeline services; and
- (c) the efficient use of the pipeline.<sup>7</sup>

### 8.3.1 Interrelationships

The ECM is intrinsically linked to our opex revealed cost forecasting approach.

Our opex forecasting method typically relies on using the 'revealed costs' of the service provider in a chosen base year to develop a total opex forecast if the chosen base year opex is not considered to be 'materially inefficient'. Under this approach, a service provider would have an incentive to spend more opex in the expected base year. Also, a service provider would have less incentive to reduce opex towards the end of the access arrangement period, where the benefit of any efficiency gains is retained for less time.

The application of the ECM serves two important functions:

1. It removes the incentive for a service provider to inflate opex in the expected base year in order to gain a higher opex forecast for the next access arrangement period.
2. It provides a continuous incentive for a service provider to pursue efficiency improvements across the access arrangement period.

The ECM does this by allowing a service provider to retain efficiency gains (or losses) for a total of six years, regardless of the year in which the service provider makes them. Where we do not propose to rely on the single year revealed costs of a service provider in forecasting opex, this has consequences for the service provider's incentives and our decision on how we apply the ECM.

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<sup>5</sup> National Gas Rules (NGR), r. 98(1).

<sup>6</sup> NGR, r. 98(3).

<sup>7</sup> NGL, s. 24(3).

When a business makes an incremental efficiency gain, it receives a reward through the ECM, and consumers benefit through a lower revealed cost forecast for the subsequent access arrangement period. This is how efficiency improvements are shared between consumers and the business. If we subject costs to the ECM that are not forecast using a revealed cost approach, a business would in theory receive a reward for efficiency gains through the ECM (at a cost to consumers), but consumers would not benefit through a lower revealed cost forecast in the subsequent access arrangement period. Therefore, we typically exclude costs that we do not forecast using a single year revealed cost forecasting approach.

For these reasons, our decision on how we will apply the ECM has a strong interrelationship with our decision on a business's opex (see Attachment 6). We have careful regard to the effect of our ECM decision when making our opex decision, and our ECM decision is made largely in consequence of (and takes careful account of) our past and current decisions on opex.

## **8.4 Reasons for draft decision**

### **8.4.1 Carryover amounts from the 2018–22 period**

We do not accept AGN's proposed carryover amounts of –\$8.1 million (\$2022–23) from the application of the ECM in the 2018–22 period. Our draft decision is to approve carryover amounts totalling –\$12.0 million (\$2022–23), which is \$3.8 million (\$2022–23) lower than AGN's proposal.

Our lower ECM total carryover amount is due to our alternative estimate:

- updating actual inflation for calendar year 2022 and forecast inflation for 2022–23, which reduced total carryovers by \$0.8 million (\$2022–23)
- removing ECM exclusions approved for the 2013–17 access arrangement period (2013–17 period) which were not applicable to the 2018–22 period. This increased total carryovers by \$0.9 million (\$2022–23)
- excluding ancillary reference services from total opex, which decreased our carryover amount by \$3.6 million (\$2022–23).

We discuss each of these reasons in more detail below.

We consider that the ECM carryover amounts we have calculated provide for a fair sharing of efficiency gains and losses between AGN and its consumers. It both rewards AGN for the efficiency gains it has made and penalises it for its efficiency losses. Further, we consider that the benefit to consumers, through lower forecast opex (prior to any trend or step changes being added), is sufficient to warrant the ECM carryover amounts we have determined.

#### **8.4.1.1 Inflation**

We have used updated consumer price index (CPI) values compared to those AGN applied when it escalated into \$2022–23 terms. We have used the inflation forecasts in the Reserve Bank of Australia's (RBA) November 2022 Statement on Monetary Policy, which was



published after AGN submitted its proposal.<sup>8</sup> In our final decision, we will update our inflation forecasts and December 2022 actuals to reflect the latest available inflation figures from the RBA and Australian Bureau of Statistics.

#### **8.4.1.2 2013–17 ECM exclusions not applicable to the 2018–22 period**

To calculate the incremental efficiency gain for 2018, we did not exclude change in scale adjustments, licence fees, network management fees, incentive fees or Energy Safe Victoria levy costs from AGN's forecast and actual opex for 2016 and 2017, as it proposed.<sup>9</sup> These categories of opex were excluded from the operation of the ECM for the 2013–17 period,<sup>10</sup> but not for the 2018–22 period. We did not exclude these costs because doing so would result in the incremental gain we calculated for 2018 including the incremental gains made in 2017 related to these costs.

To calculate the incremental gain (loss) made in the first year of 2018–22 period we start with the opex underspend (overspend) in that year. Since the forecast for 2018 will reflect the level of efficiency revealed in the base year of the 2013–17 period, this underspend (or overspend) will reflect all efficiency gains or losses made after the base year. We then subtract any incremental gains or losses made after the base year in the 2013–17 period. When we do this, we subtract efficiency gains (or losses) made in all categories of opex subject to the ECM in the 2018–22 period. This includes categories of opex that we excluded from the ECM in the 2013–17 period as we are calculating the incremental efficiency gain in 2018 for those categories of expenditure subject to the ECM in the 2018–2022 period.

For this reason, we do not exclude change in scale adjustments, licence fees, network management fees, incentive fees or Energy Safe Victoria levy costs from AGN's forecast and actual opex for 2016 and 2017 to calculate the incremental efficiency gain for 2018 (they were not excluded from the ECM for the 2018–22 access arrangement period). This is our standard approach for both electricity and gas distributors, such as our decision on SA Power Networks' 2020–25 revenue proposal.<sup>11</sup>

#### **8.4.1.3 Exclusion of ancillary reference services**

We agree with AGN's proposal<sup>12</sup> that ancillary reference services should be excluded from total opex in the 2023–28 period, as they are not forecast using a single year revealed cost approach. We also consider ancillary reference services should also be excluded from total opex for the 2018–22 period for the same reason.

Additionally, ancillary reference services are subject to a separate form of control (separate price cap) compared to the haulage reference services we determine opex for and are only recovered from customers who request these services. We consider it would not be

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<sup>8</sup> RBA, *Statement on Monetary Policy – Appendix: Forecast*, November 2022.

<sup>9</sup> AGN, *2023–28 Final Plan - Attachment 11 - Efficiency carryover mechanism*, July 2022.

<sup>10</sup> AER, *Draft decision – AGN (Victoria and Albury) access arrangement 2018–22, Attachment 9 - Efficiency carryover mechanism*, July 2017, pp. 10–15.

<sup>11</sup> AER, *Draft decision – SA Power Networks determination 2020–25, Attachment 8 - Efficiency benefit sharing scheme*, October 2019, pp. 11–12.

<sup>12</sup> AGN, *2023–28 Revisions to Final Plan - GSR Response - Access Arrangement*, September 2022, p. 24.

appropriate to share cost efficiencies due to ancillary reference services across all customers when the cost of ancillary reference services is not shared across all customers.

#### **8.4.2 Application in the 2023–28 period**

Consistent with AGN's proposal<sup>13</sup> our draft decision is to continue to apply the ECM to AGN during the 2023–28 period. We consider applying the scheme will benefit the long-term interests of gas consumers as it will provide continuous incentives for AGN to reduce opex. Provided we forecast AGN's future opex using its revealed costs in the 2023–28 period, any efficiency gains it achieves will lead to lower opex forecasts, and thus lower network tariffs.

The ECM specifies our approach to adjusting forecast or actual opex when calculating carryover amounts. We provide details on this process below.

##### **8.4.2.1 Adjustments to forecast or actual opex when calculating carryover amounts**

The ECM allows us to exclude categories of costs that we do not forecast using a single year revealed cost forecasting approach in the following access arrangement period. We do this to fairly share efficiency gains and losses. For instance, where a service provider achieves efficiency improvements, it receives a benefit through lower forecast opex in the next access arrangement period. This is the way consumers and the service provider share in the benefits of an efficiency improvement. If we do not use a single year revealed cost forecasting approach, we may not pass the benefits of these revealed efficiency gains to consumers. It follows that consumers should not pay for ECM rewards where they do not receive the benefits of a lower opex forecast.

In applying the ECM to AGN in the 2023–28 period, we will adjust the following when we calculate the carryover amounts accrued during the period:

- actual opex to reverse any movements in provisions related to opex
- forecast and actual opex to remove cost categories that are not forecast using a single year revealed cost approach in the period commencing 1 July 2028, which may include:
  - debt raising costs
  - unaccounted for gas
  - priority service program
- forecast and actual opex for any cost that the Regulator determines to exclude from the operation of the ECM, which would not promote the National Gas Objective
- forecast and actual opex to remove ancillary reference services
- forecast opex to add (subtract) any approved revenue increments (decrements) made after the initial regulatory determination, such as approved pass through amounts
- forecast and actual opex for inflation.

In applying the ECM to AGN in the 2023–28 period, consistent with that set out above, we have made the following amendments to AGN's proposed Access Arrangement:

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<sup>13</sup> AGN, *2023–28 Revisions to Final Plan - GSR Response - Access Arrangement*, September 2022, pp. 22-24.

- revised clause 5.1(iii)(a) in relation to the incremental efficiency gain (or loss) formula for regulatory year 2023–24, so the carryover results in the Service Provider retaining the reward (or penalty) associated with an operating expenditure efficiency gain (or loss) for five years after the year in which the gain (or loss) was achieved.
- included a separate clause which stipulates the formula that will be used to calculate the true-up for the regulatory year 2022. This amendment ensures the carryovers allow the Service Provider to retain the reward (or penalty) associated with an operating expenditure efficiency gain (or loss) for five years after the year in which the gain (or loss) was achieved.
- included a separate clause which stipulates the formula that will be used to calculate the true-up for the six-month extension period from 1 January 2023 to 1 July 2023. This amendment ensures the carryovers allow the Service Provider to retain the reward (or penalty) associated with an operating expenditure efficiency gain (or loss) for five years after the year in which the gain (or loss) was achieved.
- revised clause 5.1(iii)(g)(i) relating to the exclusion of movements in provisions, to read ‘movements in provisions related to opex’. This amendment will ensure clarity around the treatment of this cost, as this adjustment is limited to movements in provisions specifically related to opex and does not necessarily include all movements in provisions.
- revised clause 5.1(iii)(g)(ii) relating to the exclusion of cost categories that are not forecast using a single year revealed cost approach to include specific mention of the priority service program. This amendment is consistent with AGN’s proposal, clause 5.1(iii)(i).
- revised clause 5.1(iii)(g)(iii) relating to the exclusion of ‘any other activity that AGN and the Regulator agree to exclude from the operation of the efficiency carryover mechanism’, to read ‘any cost that the Regulator determines to exclude from the operation of the efficiency carryover mechanism, which would not promote the National Gas Objective.’ This amendment will ensure the operation of the ECM remains aligned with the National Gas Objective.
- included a separate clause 5.1(iii)(g)(iv) relating to the exclusion of ancillary reference services. This will ensure clarity around the treatment of this cost category, which is both subject to a separate form of control and typically not forecast on a single year revealed cost basis. We discuss this in section 8.4.1.3 and it is consistent with AGN’s proposal, clause 5.1(iii)(i).
- included a separate clause regarding a Service Provider’s approach to classifying costs as either capital expenditure or operating expenditure during the Access Arrangement Period, to align the accounting treatment of expenditure within a period with that in the approved expenditure for that period. We consider it is more appropriate to align the accounting treatment of expenditure within a period with that in the approved expenditure for that period, i.e. not to implement any mid-period accounting changes until the start of the new period.
- removed clause 5.1(iii)(i), which listed separate exclusions applicable for each year used in the calculation of the ECM carryovers for the 2023–28 period. We consider that exclusions should be applied consistently across all years. Any exclusions from the

previous period, which are no longer applicable, should not be excluded from the total opex of any year during the calculation of the carryover amounts for the current period. However, we agree with AGN’s proposed exclusions for ancillary reference services and the priority service program. We have added exclusions for both these categories under clause 5.1(iii)(g) instead of AGN’s proposed clause 5.1(iii)(i). We have also removed the reference to the approved forecast operating expenditure for the ECM in the 2023–28 period, as this information is available in the post-tax revenue model which is updated annually.

## 8.5 Revisions

We require the following revisions to make the access arrangement proposal acceptable as set out in Table 8.2.

**Table 8.2 AGN’s ECM revisions**

Revision	Amendment
Revision 8.1	<p>Amend clause 5.1(iii)(a) so that it reads:</p> <p>a) The incremental efficiency gain (loss) for 2023/24 will be calculated using:</p> $I_{2023/24} = (F_{2023/24} - A_{2023/24}) - 2 \times (F_{HY2023} - A_{HY2023}) + (F_{2021} - A_{2021})$ <p>where:</p> <p><math>I_{2023/24}</math> is the incremental efficiency gain (loss) for Regulatory Year 2023–24.  <math>F_{2023/24}</math> is the approved forecast operating expenditure for Regulatory Year 2023–24.  <math>A_{2023/24}</math> is the actual operating expenditure for Regulatory Year 2023–24.  <math>F_{HY2023}</math> is the approved forecast operating expenditure for the six-month extension period from 1 January 2023 to 30 June 2023.  <math>A_{HY2023}</math> is the actual operating expenditure for the six-month extension period from 1 January 2023 to 30 June 2023.  <math>F_{2021}</math> is the approved forecast operating expenditure for Regulatory Year 2021.  <math>A_{2021}</math> is the actual operating expenditure for Regulatory Year 2021.</p>
Revision 8.2	<p>Include a new clause which reads:</p> <p>Prior to the submission date for the Access Arrangement Period commencing 1 July 2028, actual operating expenditure data will be available for the regulatory year 2022. Where the Service Provider’s actual operating expenditure differs from the operating expenditure estimate used to calculate the efficiency carryover mechanism, a true-up will be made to account for the difference. The true-up for regulatory year 2022 will be:</p> $T_{2022} = -0.5 \times [(F_{2022} - A_{2022}) - (F_{2021} - A_{2021})]$ <p>where:</p> <p><math>T_{2022}</math> is the true-up for Regulatory Year 2022  <math>F_{2022}</math> is the forecast operating expenditure for Regulatory Year 2022  <math>A_{2022}</math> is the actual operating expenditure for Regulatory Year 2022  <math>F_{2021}</math> is the forecast operating expenditure Regulatory Year 2021  <math>A_{2021}</math> is the actual operating expenditure for Regulatory Year 2021</p>
Revision 8.3	<p>Include a new clause which reads:</p> <p>Prior to the submission date for the Access Arrangement Period commencing 1 July 2028, actual operating expenditure data will be available for the six-month extension period from 1 January 2023 to 30 June 2023. Where the Service Provider’s actual operating expenditure differs from the operating expenditure estimate used to calculate the efficiency carryover mechanism, a true-up will be made to account for the difference. The true-up for the six-month extension period from 1 January 2023 to 30 June 2023 will be:</p> $T_{HY2023} = (F_{HY2023} - A_{HY2023}) - 0.5 \times (F_{2022} - A_{2022})$ <p>where:</p>

Revision	Amendment
	<p><math>T_{HY2023}</math> is the true-up for the six-month extension period from 1 January 2023 to 30 June 2023</p> <p><math>F_{HY2023}</math> is the forecast operating expenditure for the six-month extension period from 1 January 2023 to 30 June 2023</p> <p><math>A_{HY2023}</math> is the actual operating expenditure for the six-month extension period from 1 January 2023 to 30 June 2023</p> <p><math>F_{2022}</math> is the forecast operating expenditure Regulatory Year 2022</p> <p><math>A_{2022}</math> is the actual operating expenditure for Regulatory Year 2022</p> <p>The <math>T_{HY2023}</math> true-up amount will be applied as a revenue adjustment to Regulatory Year 2028–29 of the Access Arrangement Period commencing 1 July 2028.</p>
Revision 8.4	Amend clause 5.1(iii)(g)(i) so that it reads: (i) movements in provisions related to opex.
Revision 8.5	Amend clause 5.1(iii)(g)(ii) so that it reads: (ii) any cost category that is not forecast using a single year revealed cost approach in the access arrangement period following this Access Arrangement Period (intended to commence 1 July 2028). These costs may include, debt raising costs, unaccounted for gas and priority service program expenses.
Revision 8.6	Amend clause 5.1(iii)(g)(iii) so that it reads: (iii) any cost that the Regulator determines to exclude from the operation of the efficiency carryover mechanism in the 2023–28 period, which would not promote the National Gas Objective.
Revision 8.7	Include a new clause, clause 5.1 (iii)(g)(iv), which reads: (iv) ancillary reference services.
Revision 8.8	Include a new clause which reads: Where the Service Provider changes its approach to classifying costs as either capital expenditure or operating expenditure during the Access Arrangement Period, the Service Provider will report the actual operating expenditure, to align the accounting treatment of expenditure within a period with that in the approved expenditure for that period (reflecting the AER's final decision on this access arrangement).
Revision 8.9	Delete clause 5.1(iii)(i)

## Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
AGN	Australian Gas Networks (Victoria and Albury)
CPI	Consumer Price Index
ECM	Efficiency carryover mechanism
opex	Operating expenditure
RBA	Reserve Bank of Australia

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