Economic Regulation Authority

Proposed revisions to the access arrangement for the Mid-West and South-West Gas Distribution Systems

Issues paper

24 October 2023

D267761

Economic Regulation Authority

Level 4, Albert Facey House

469 Wellington Street, Perth WA 6000

Telephone 08 6557 7900

Email info@erawa.com.au

Website www.erawa.com.au

This document can also be made available in alternative formats on request.

National Relay Service TTY: 13 36 77

Contents

List of appendices

Invitation to make submissions

Submissions are due by 4:00 pm WST, Monday 27 November 2023

The ERA invites submissions on this issues paper. Interested parties are encouraged to consider the questions raised in this paper and provide comments, including comments on any other matters of concern not yet raised.

Submissions should be lodged online using the ERA's submission portal:

https://www.erawa.com.au/consultation

Alternatively, submissions can be made via:

Email: publicsubmissions@erawa.com.au
Post: Level 4, Albert Facey House, 469 Wellington Street, Perth WA 6000

Please note that submissions provided electronically do not need to be provided separately in hard copy.

All submissions will be made available on our website unless arrangements are made in advance between the author and the ERA. This is because it is preferable that all submissions be publicly available to facilitate an informed and transparent consultative process. Parties wishing to submit confidential information are requested to contact the ERA at info@erawa.com.au to discuss the nature of the information.

For further information please contact:

General Enquiries

Tyson Self
Ph: 08 6557 7900
info@erawa.com.au

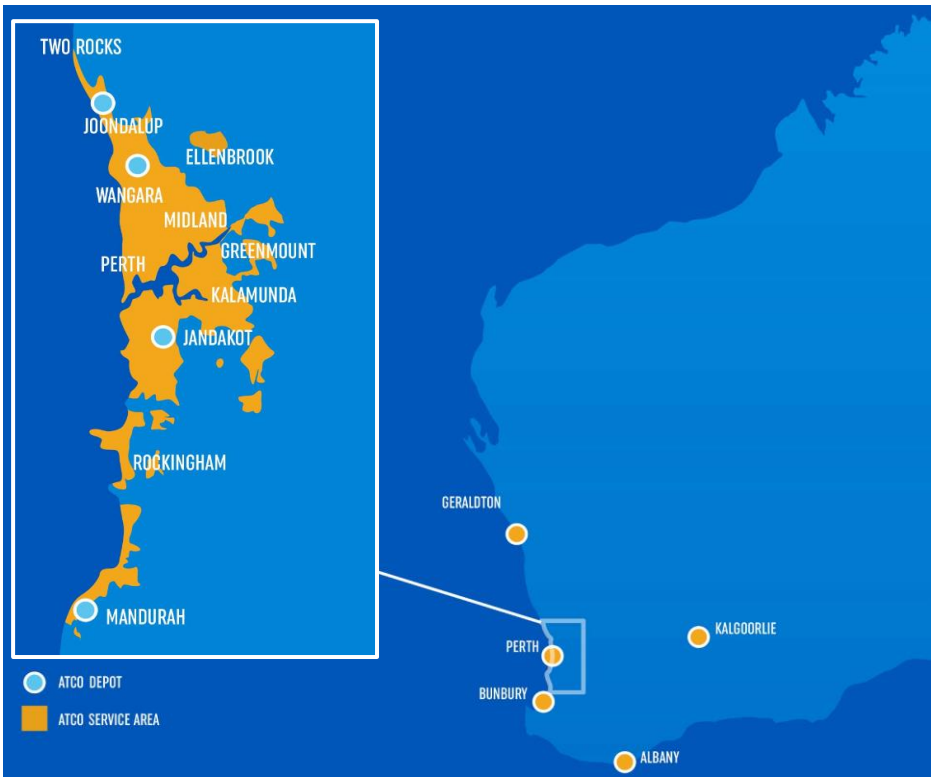
Media Enquiries

Danielle Asarpota
Ph: +61 428 859 826
media@erawa.com.au

1. Introduction

ATCO Gas Australia Pty Ltd (ATCO) operates the Mid-West and South-West Gas Distribution Systems (GDS), which comprise natural gas distribution networks that service Geraldton, Bunbury, Busselton, Harvey, Pinjarra, Brunswick Junction, Capel and the Perth greater metropolitan area that includes Mandurah (Figure 1).

Figure 1: ATCO's gas distribution systems



Source: ATCO Gas Australia

The Mid-West and South-West GDS is a regulated gas distribution pipeline and is required to have an approved access arrangement. Once approved, the access arrangement remains in effect, with scheduled revisions to it, until coverage of the pipeline is revoked.[1]

The last scheduled revisions to ATCO's access arrangement for the Mid-West and South-West GDS were approved in November 2019 for the fifth access arrangement period from 1 January 2020 to 31 December 2024 (AA5).[2] On 1 September 2023, ATCO submitted its access arrangement proposal for the sixth access arrangement period from 1 January 2025 to 31 December 2029 (AA6).[3] ATCO's proposal and related access arrangement information and other supporting documentation is published on the ERA website.[4]

The ERA's review of ATCO's proposal is taking place in an environment of rapid and ongoing transformation of the energy sector. There is a strong focus on emissions reductions with a shift towards renewable energy, such as solar and wind. ATCO's proposal highlights this

1 The access arrangement for ATCO's Mid-West South-West Gas Distribution Systems was first approved by the ERA in July 2000.

2 ERA, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020 to 2024*, 15 November 2019 (online) (accessed October 2023).

3 The AA5 access arrangement applies until the ERA approves a new (AA6) access arrangement.

4 A summary of ATCO's proposal is provided in Appendix 6 of this paper.

energy transformation and the associated uncertainty for gas and seeks to take initial steps to prepare the distribution network for this uncertain future. For example, ATCO has proposed to both undertake investments to facilitate the transport of renewable gases (hydrogen and/or biomethane) and to accelerate the return of its assets over the access arrangement period to mitigate possible stranded asset risks.

The increased uncertainty about the future use of natural gas and the utilisation of gas pipelines over time creates challenges for the ERA when making decisions about regulated gas networks.

Stakeholder submissions are an integral part of the ERA's considerations and decision-making process. The ERA's decision on ATCO's proposal affects all gas users on the distribution network for a five-year period. ATCO has proposed a 42.3 per cent tariff increase on 1 January 2025, with tariffs increasing by inflation for the other years in the period. This makes it very important for gas users to have a say now on the proposed gas tariffs and the services provided by ATCO over this period. While the Western Australian Government sets a maximum gas retail tariff for residential customers and some small businesses, many of these customers have switched to competitive tariffs offering discounts and ATCO's proposed network tariffs may affect the level of these discounts in the future. All other small and larger commercial and industrial customers will be directly affected by the proposed tariff increases.

After an initial review of ATCO's proposal, the ERA has identified nine areas of interest and is seeking comments from interested parties on some specific matters. Submissions on these matters will assist the ERA with its decision making on elements of the access arrangement. These issues are as follows.

Stakeholder engagement

ATCO undertook various customer and stakeholder engagement activities to develop its proposal. The outcomes from these engagement activities are used by ATCO to directly support elements of its proposal. The ERA seeks comments from customers and stakeholders to validate ATCO's engagement processes, including ATCO's interpretation and use of the consultation outcomes in support of its proposal (for example, customer survey results).

Changes to the legislative framework

Legislative changes to the National Gas Law and Rules have been made (or are in the process of being made) but are not yet effective in Western Australia. ATCO has assumed these changes will come into effect before the review process is completed. The ERA will, however, apply the relevant regulatory framework at the time of making its draft and final decisions, while seeking a pragmatic way to deal with the legislative changes that may, or may not, come into effect during the review process.[5]

Demand forecasts

ATCO relied on advice from its consultant to develop its demand forecasts for AA6. The ERA seeks comments on the demand forecasting methodology used and whether the demand forecasts are reasonable and consistent with customer expectations.

Cost recovery for disconnections

ATCO has reclassified its existing demolition non-reference service as a permanent disconnection ancillary reference service for AA6. A new permanent disconnection agreement sets out the terms and conditions for the service, which is to be offered at a fixed price ($1,184 ex-GST) that is paid by the customer. The ERA seeks comments on whether the

[5] Appendix 5 of this paper provides information on the regulatory framework, including anticipated timeframes for this review.

proposed terms, conditions and charges for the permanent disconnection service will work operationally for those customers who will use the service.

Network tariff structures

ATCO has retained its current (AA5) declining block tariff structure for AA6, which provides that consumption charges are lower beyond certain levels of consumption. With proposed changes to the regulatory framework to include a specific emissions reduction objective, there may be a need to consider alternative tariff structures that are more consistent with any new (amended) national gas objective, such as a flat or inclining block tariff. The ERA seeks comments on whether an alternative tariff structure and associated tariff variation mechanism is more appropriate if the emissions reduction objective is applied in Western Australia.

Investment in renewable gases

While the regulatory framework does not currently support hydrogen and other renewable gases, there is potential for this to occur if there are regulatory changes. For AA6, in anticipation of legislative changes coming into effect, ATCO has proposed to invest $26.4 million in renewable gases (in real terms). The ERA seeks comments on the reasonableness of ATCO's proposed investments considering the regulatory framework and government policies applicable in Western Australia, and the availability and cost of supplying renewable gases and how this affects consumer needs and preferences.

Accelerated depreciation

Decarbonisation policies are driving market, technological, social and regulatory changes that will affect the ongoing utilisation of its gas network. For AA6, ATCO has proposed to use accelerated depreciation as a method to bring forward capital recovery while maintaining its current asset lives, which represents a change from the current straight-line method of depreciation. ATCO's proposed accelerated depreciation of $80 million (in real terms) represents 23 per cent of the increase in ATCO's calculated total revenue requirements for AA6, and is in addition to its straight-line depreciation revenue.

Rate of return and inflation

The rate of return and inflation are key factors affecting ATCO's proposed revenue increases for AA6. Approximately 56 per cent of the increase in ATCO's calculated total revenue requirement for AA6 is attributable to a higher rate of return (38 per cent) and expected inflation (18 per cent). The method to set the financial parameters for the regulated gas pipelines is pursuant to the gas rate of return instrument which was reviewed last year. The increase in these financial parameters is predominantly a result of current financial market conditions which is outside of the control of both ATCO and the ERA.

Revenue and price paths

ATCO has calculated its total revenue requirement for AA6 to be $1,298 million (in real terms, or $1,452 million nominal), which is $343 million (36 per cent) higher than the approved revenue requirement for AA5. This material increase flows through to a rise in reference tariffs. ATCO has proposed a price step increase in 2025 followed by constant real prices from 2026 to 2029. For residential (B3) customers, the average annual distribution charge for an average B3 customer will increase by $78 (approximately $1.50 per week), from $199 in 2024 to $277 in 2025. ATCO has noted that if gas retailers pass on this increase in full, this will represent an increase of 12 per cent on an annual retail gas bill at the gazetted retail price. The ERA seeks comments on ATCO's proposed price path and the impact of this on price stability, including any preferences for an alternative price path.

2. Key areas for consideration

To assist interested parties in making submissions, the ERA has identified nine key areas for consideration. This is not an exhaustive list, and the ERA encourages interested parties to provide comments on any matters related to ATCO's access arrangement proposal that, in their opinion, require particular consideration by the ERA.

2.1 Stakeholder engagement

In developing its access arrangement proposal, ATCO undertook various customer and stakeholder engagement activities. ATCO engaged market research consultants Kantar Public, in partnership with Synergies Economic Consulting, to assist in the design and delivery of an appropriate engagement program. Details of this engagement program, including engagement outcomes, are set out in ATCO's proposal.[6] ATCO noted the following highlights related to its engagement program outcomes:

> ATCO's planned program investment areas have strong support, with most residents indicating the programs are of high personal importance and more than half of ATCO's customers rating "gas from renewable sources" as their top priority compared to the other areas.
>
> Gas continues to be regarded as a safe and reliable energy source, and household access remains a valued option for 97% of residents, with 53% considering it "extremely important."
>
> Customers believe that gas has an important role in a low-carbon future and expect ATCO to drive the decarbonisation of the gas network in WA. However, government policy and greater education around sustainability initiatives could further bolster customer support.[7]

In support of its customer and stakeholder engagement program, ATCO submitted the following supporting information:

- AA6 Voice of the Customer Insights Report[8]
- ATCO's AA6 Draft Plan External Feeback[9]
- ATCO Customer Insights Report – Summary.[10]

After the customer and stakeholder engagement program, ATCO adjusted its proposal to include, among other things, an $80 million increase ($18 increase in the average residential network bill) for accelerated depreciation.

6 ATCO, *2025-29 Plan*, 1 September 2023, pp. 28-44.

7 ATCO, *2025-29 Plan*, 1 September 2023, p. 28.

8 ATCO, *2025-29 Plan - Attachment 04.001: AA6 Voice of the Customer Insights Report*, 1 September 2023 (online) (accessed October 2023).

9 ATCO, *2025-29 Plan - Attachment 04.002: ATCO's Draft Plan External Feedback (confidential)*.

10 ATCO, *2025-29 Plan - Attachment 04.003: ATCO Customer Insights Report - Summary*, 1 September 2023 (online) (accessed October 2023).

Questions

1. Did ATCO provide reasonable opportunities for stakeholders to provide input into the development of its access arrangement proposal? Where stakeholders provided comments/feedback to ATCO, did ATCO give due consideration to and adequately address the comments/feedback?
2. How representative are ATCO's customer research findings and are they consistent with stakeholders' understanding of customer preferences?
3. Do stakeholders agree with ATCO's use of the customer research findings in its proposal, and in particular ATCO's use of specific findings from its Voice of Customer Survey to support its additional expenditure and/or higher tariffs?

2.2 Changes to the legislative framework

The NGL and NGR, as enacted by the *National Gas (South Australia) Act 2008*, establish the legislative framework for the independent regulation of certain gas pipelines in Australia. In Western Australia, the NGL and NGR are implemented through the *National Gas Access (WA) Act 2009*. Importantly, the legislative framework for the regulation of gas pipelines in Western Australia does differ in some respects to the legislative framework that applies in other Australian states and territories.

Through the Energy and Climate Change Ministerial Council (ECMC), Australian state and territory Energy Ministers have agreed to various reforms to the national gas regulatory framework. Notably, Energy Ministers have agreed to the following:

- In April 2022, a final package of gas pipeline regulatory amendments aimed at delivering a simpler regulatory framework, including setting out the powers the regulator will have when determining what form of regulation a pipeline should be subject to (i.e. full or light regulation).[11]
- In October 2022, amendments to the National Gas Law and Regulations to extend the national gas regulatory framework to hydrogen blends and renewable gases.[12]
- In May 2023, amendments to the national energy laws to incorporate an emissions reduction objective into the National Electricity Objective, National Gas Objective and National Energy Retail Objective (the national energy objectives) respectively.[13]

Legislative amendments changes to the NGL and NGR may directly affect the ERA's decision on ATCO's access arrangement proposal. As indicated, the regulatory framework for the regulation of gas pipelines in Western Australia is implemented through specific Western Australian legislation: the *National Gas Access (WA) Act 2009*. Amendments to national gas legislation that have passed through the South Australian Parliament must be specifically adopted in Western Australia by ministerial order.

The gas pipeline regulatory amendments to deliver a simpler regulatory framework came into effect in Australia (except Western Australia) on 2 March 2023, with supporting amendments

[11] Department of Climate Change, Energy, the Environment and Water, 'Energy Ministers agree final package of gas pipeline regulatory amendments' (online) (accessed October 2023).

[12] Department of Climate Change, Energy, the Environment and Water, 'Extending the national gas regulatory framework to hydrogen blends and renewable gases' (online) (accessed October 2023).

[13] Department of Climate Change, Energy, the Environment and Water, 'Incorporating an emissions reduction objective into the national energy objectives' (online) (accessed October 2023).

made to the NGR on 16 March 2023.[14] The incorporation of an emissions reduction objective commenced in Australia (except Western Australia) on 21 September 2023.[15] While these amendments have not been adopted in Western Australia at the time of writing this paper, they may be adopted sometime during the review process.

The amendment to extend the national gas regulatory framework to hydrogen blends and renewable gases was endorsed by Energy Ministers in October 2022 but has only recently entered South Australian Parliament.

ATCO's access arrangement proposal has assumed that all three Energy Ministers' agreements (listed above) will be implemented in Western Australia before the ERA's review process is completed.

The ERA will apply the relevant regulatory framework at the time of making each of its decisions (draft and final). The ERA will not speculate on whether legislative amendments will occur, nor will it speculate on the timing for such amendments. However, the ERA does intend to assess ATCO's proposal and separately set out the ERA's considerations directly related to the possible amendments to the regulatory framework in its draft decision. The ERA considers this will allow stakeholders an opportunity to provide comments on the ERA's views (in submissions in response to the draft decision), which will assist the ERA should these regulatory amendments occur between the publication of the draft and final decisions.

2.3 Demand forecasts

Demand forecasts and modelling are a critical area the ERA assesses when considering an access arrangement proposal. Demand forecasts directly affect the levels of capital and operating expenditure needed by the service provider and are a primary input into the revenue model that is used to determine the network tariffs that the service provider can charge.

With an increased focus on renewable energy to achieve lower carbon emission targets, demand for natural gas is expected to decline in the long term. Increasingly compelling and cost-efficient alternatives to natural gas as an energy source for consumers now exist, which further supports an expected decline in gas demand over time. However, currently in Western Australia, the cost of natural gas is still generally viewed as a cost-effective energy source. Maximum residential gas pricing is still set by the Western Australian State Government and there are no government policies prohibiting natural gas connections in new residential areas or when requested by a customer in an existing residential area.[16]

Current natural gas pricing and policy measures in Western Australia mean that the expected demand for natural gas in Western Australia may be somewhat different to the expected demand for natural gas elsewhere in Australia.

[14] South Australian Government Gazette, *Statutes Amendment (National Energy Laws) (Gas Pipelines) Act (commencement) Proclamation 2023,* 2 March 2023, p. 464.

[15] South Australian Government, *Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Act 2023*, 21 September 2023.

[16] Unlike other Australian states and territories. See for example: Australian Capital Territory Government, 'Preventing new gas network connections' (online) (accessed October 2023) and Victorian Government, 'Victoria's Gas Substitution Roadmap' (online) (accessed October 2023).

Questions

4. Considering the medium-to-long term demand for natural gas within Western Australia and the factors that are likely to impact this demand, how do stakeholders consider the outlook for natural gas demand?

ATCO's demand forecasts

ATCO's demand forecast covers both customer consumption and connections. ATCO engaged Core Energy Group (CORE) to provide advice to develop a demand forecast for AA6.[17] The methodologies used by CORE to derive a demand (connections and consumptions) forecast are summarised as follows:

- The consumption forecasts for B1, B2 and B3 customers was based on weather normalised historical consumptions.[18] CORE adopted a weather-normalisation methodology based on AEMO's Effective Degree Day forecasting guidelines. This methodology is consistent with the methodology used for ATCO's AA5 forecasts.
- CORE used bottom-up and top-down approaches in the connection forecast for B3 customers.[19] The bottom-up approach analyses historical trends and major factors which influence gas connections, while the top-down approach utilises forecasts completed by specialist third parties, with a specific focus on dwelling completions.
- The approach adopted by CORE for B1 and B2 connection forecasts is similar to B3, using different drivers.[20] CORE favoured an analysis of historical trends and adjusted the trend based on history to influence the forecast because it did not find a statistically reliable basis for the non-historical trend factors for forecasting purposes.
- CORE derived demand forecasts for A1 and A2 customers by analysing forecasts provided by ATCO from its customer survey and historical demand trends; researching and analysing third-party data; and considering the macro environment (for example, economic activities and government policies) and planned activities by industry sectors for energy reduction in general.[21]
- Most ancillary services (greater than 95 per cent) are related to B3 customers. CORE considered the best forecast approach to forecast ancillary services was to analyse the historical relationship between ancillary services and B3 connections and applying an appropriate factor against forecasted B3 connections.[22]

---

17 ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023 (online) (accessed October 2023).

Attachments 07.002, 07.003, 07.004 and 07.005 contain supporting information and/or models prepared by Core Energy. These attachments are confidential.

18 ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023, section 3.2.

19 ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023, section 3.3.

20 ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023, section 3.4.

21 ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023, section 3.5.

22 ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023, section 8.

The ERA notes that CORE has provided a detailed analysis of historical data in deriving the demand forecast. Although CORE has indicated in its report that qualitative factors, such as economic growth and government policies, were taken into consideration in deriving the demand forecast, the report did not quantify the analysis of these factors and the extent to which the demand forecast was impacted by these factors.

Questions

5. In developing its AA6 demand forecast, has ATCO taken the appropriate analytical approach to assess historical data? How well do stakeholders consider that historical trends will explain demand forecasts in AA6 given future uncertainty in gas use?

2.4 Cost recovery for disconnections

At the residential level, gas disconnections have historically been a temporary measure to facilitate changes to home ownership (including tenancy agreements), home renovations and/or property developments. However, a shift away from fossil fuels toward renewable energy sources (particularly solar), may mean gas disconnections increasingly become a permanent measure with customers having no intention or need to reconnect. That is, residential customers may choose to fully electrify their homes and permanently disconnect from the gas network, or in the case of new builds, not establish a gas connection in the first place.

A permanent gas disconnection (or gas abolishment) involves the physical disconnection of the customer's gas service line from the gas main situated at the property/street boundary, which results in no live gas service pipe left in situ within the property boundary.[23]

For AA6, ATCO has forecast permanent disconnections at levels that are not materially different from AA5 of around 0.25 per cent of B3 connections, noting that there would be some customers who retain their gas connection but have closed their retail account. The outlook for the level of permanent disconnection in Western Australia appears more moderate than the outlook AER considered in its recent Victorian gas distribution network decisions.

The Victorian Government has a clear policy direction to phase out natural gas. As of 1 January 2024, there is a ban on new gas connections. There are also numerous consumer awareness programs and direct incentives to disconnect from gas, such as rebates (cashback offers) for efficient electrical appliances. There may also be other safety related risks associated with gas abolishment in Victoria where gas meters are often situated in the field (garden) and not fixed to the main dwelling like in Western Australia.

The Western Australian Government has not announced any ban of new natural gas connections or phase out of existing natural gas connections.

[23] Whether the inactive gas service pipe is removed from within the property boundary, including from within the residential dwelling itself, would be a decision for the customer (property owner).

ATCO's new permanent disconnection reference service

For AA6, ATCO will offer a new permanent disconnection ancillary reference service based on stakeholder feedback and as previously approved by the ERA.[24] Details of this service are summarised in Table 1.

Table 1: Details of ATCO's permanent disconnection ancillary reference service

Service Characteristics	Details
Name of service	Permanent Disconnection
Description of service[25]	This service is for the permanent disconnection of the property from the GDS, generally by cutting and capping the service pipe at the main, under standard site conditions. This service is only available where there is no meter at the property or for delivery points that previously received the B2 or B3 haulage service and have also sought the "Deregistering a delivery point" service. This service is available to end users, property owners and those authorised on behalf of property owners. Where there is a meter present, the "Deregistering a delivery point" service is also required.
Type of service	Ancillary reference (disconnection) service
Tariff	Tariff is a fixed price structure charged directly to the customer (or their authorised representative), with yearly price revisions in accordance with the tariff variation mechanism. The proposed tariff (Standard Fee) at 1 January 2025 is $1,184.80 (nominal, ex-GST).[26] Other charges that may be payable under the *Permanent Disconnection Contract* (clause 32) include: – Cancellation Fee – Call-Out Fee – Fee for removal of metering equipment
Terms and conditions[27]	Contract terms and conditions for the permanent disconnection service are set out in Annexure G of the Access Arrangement.

ATCO has proposed to recover the full cost of permanent disconnections from customers on a user pays basis. The proposed 'standard fee' charge for 2025 is $1,184.80 (excluding GST), which is payable at the time of application for the service. Other charges may also be payable, including a fee for the removal of metering equipment.

[24] ERA, *Reference service proposal decision: Proposed reference services for the Mid-West and South-West Gas Distribution Systems submitted by ATCO Gas Australia*, 14 November 2022.
The "permanent disconnection service" was previously called the "cut and cap at the main service" in ATCO's reference service proposal.

[25] ATCO, *2025-29 Plan*, 1 September 2023, Table 6.2, p. 79.

[26] ATCO, *2025-29 Plan*, 1 September 2023, Table 16.7.

[27] ATCO, *Access Arrangement for the Mid-West and South-West Gas Distribution Systems - Annexure G: Permanent Disconnection Contract*, 1 September 2023 (online) (accessed October 2023).

Customers seeking the permanent disconnection service will be required to submit an online service application form directly to ATCO via its website, similar to how the existing (non-reference) 'demolition' service is currently administered.[28]

With the introduction of the permanent disconnection service for AA6, there will be two ancillary reference disconnection services: 1) the "deregistering a delivery point" (or "deregistration") service; and 2) the "permanent disconnection" service. Reasons for these different disconnection services, including information for B2 and B3 customers about how to disconnect, are set out in ATCO's proposal:[29]

> The Permanent Disconnection service can only be provided where there is no meter at the property. If there is a meter, the Deregistration service must also be obtained. This can either be sought by the applicant through the retailer, or if necessary, ATCO can contact the retailer for authorisation. Either way, ATCO will charge the retailer for the Deregistration service (it is up to the retailer whether they charge the customer). ATCO can perform the Permanent Disconnection at the same time as the Deregistration.
>
> ATCO charges the Permanent Disconnection reference service tariff upfront to the applicant through the online portal and, if a meter exists, the Deregistration reference service tariff to the retailer.[30]

Questions

6. Is ATCO's proposed permanent disconnection service operationally workable in terms of the provisions set out in the standard service agreement (*Permanent Disconnection Contract*)?
7. Is ATCO's proposed cost of $1,184.80 (ex-GST) for the permanent disconnection service reasonable, noting that other charges may also be payable (such as a fee for the removal of gas metering equipment)?

2.5 Network tariff structures

Subject to requirements under the regulatory framework, a gas network service provider can propose a suitable network tariff structure and associated tariff variation mechanism as part of its access arrangement. Two common tariff structures that a service provider might consider include:

- Flat tariffs: Under a flat tariff structure, customers pay a steady, or flat, rate per unit of gas consumed.
- Block tariffs: Under a block tariff structure, customers pay different rates for defined quantities of gas consumed, with the rates being declining or inclining rates. A declining block tariff would price the first consumption block the highest with subsequent blocks priced progressively lower; an inclining block tariff would price the first consumption block the lowest with subsequent blocks priced progressively higher.

---

28 ATCO, 'Disconnection and removal of gas service form' (online) (accessed October 2023).
ATCO has advised that this current webpage and online form will be updated to reflect the reclassification of the demolition non-reference service to an ancillary reference service, and to incorporate the associated *Permanent Disconnection Contract*.

29 ATCO, *2025-29 Plan*, 1 September 2023, section 6.3.1.1, pp. 80-82.

30 ATCO, *2025-29 Plan*, 1 September 2023, p. 82.

ATCO's current (AA5) and proposed (AA6) tariffs for haulage reference services comprise a fixed charge and declining block usage charge component for each tariff class of customer (A1, A2, B1, B2, B3). Ancillary reference services are charged at a fixed rate for all customers (or at a rate reflecting the cost of the individual service that is provided to a particular customer).[31]

ATCO has proposed only one change to its tariff structures for AA6: the removal of the first tariff band for the B3 usage charge component, which provided the first 1.825 gigajoules of gas at no charge. ATCO also reviewed its fixed charge for B3 customers and lowered this by $19 ($real 2023), to help offset the additional charges that result from the removal of the first (free) tariff band.[32]

As outlined elsewhere in this paper, there are numerous proposed amendments to the regulatory framework that are being considered and/or are progressing through the legislative process to be enacted as law. One such amendment is a change to the national gas objective to incorporate a specific emissions reduction objective. With a requirement to specifically consider emissions reductions, it may be necessary to reconsider the suitability and use of tariff structures, and associated tariff variation mechanisms, that continue to incentivise natural gas usage (such as declining block tariff structures and weighted average price caps).

The AER has commenced a review of gas distribution network tariffs because of stakeholder feedback, the amended national gas objective and policies from some states and territories that incentivise gas customers to switch to electricity.[33] The AER noted that the existing price cap tariff variation mechanisms and declining block tariff structures promote large volumes of gas usage, and this has benefited customers through lower per unit transport costs. The AER expects to conclude its review of tariffs in October 2023.

Questions

8. If the national gas objective is amended in Western Australia to incorporate a specific emissions reduction objective, is ATCO's current and proposed declining block tariff structure consistent with the new objective, and should an alternative tariff structure be considered which may better meet the new objective?
9. Should an alternative tariff variation mechanism to the weighted average price cap be considered if the amended national gas objective to incorporate a specific emissions reduction objective is adopted in Western Australia?

2.6 Investment in renewable gases

The regulatory framework established by the NGL and NGR currently does not support hydrogen and other renewable gases; only natural gas falls under the current framework.[34] Further to proposed legislative reforms to extend the framework to renewable gases, there are specific government strategies and targeted funding that is already enabling the advancement of renewable gases (particularly hydrogen) at a national level. For example:

31 Some ancillary services are individually assessed and quoted for by ATCO.

32 ATCO, *2025-29 Plan*, 1 September 2023, pp. 229-230.

33 AER, 'AER releases issues paper on gas distribution networks tariffs' (online) (accessed October 2023).

34 The *National Gas Access (WA) Act 2009*, which implements the NGL and NGR in Western Australia, does contain a specific provision that extends the regulatory framework to certain pipelines for hauling gas other than natural gas (see section 6A of the Act).

- Australia's national hydrogen strategy "sets a vision for a clean, innovative, safe and competitive hydrogen industry that benefits all Australians [and] aims to position [Australian] industry as a major global player by 2030." [35] The 2019 strategy is currently under review by the Energy and Climate Change Ministerial Council (ECMC) to position Australia "on a path to be a global hydrogen leader by 2023 on both an export basis and for the decarbonisation of Australian industries".[36]
- There have been numerous hydrogen funding opportunities through the Australian Renewable Energy Agency (ARENA) to support the development of hydrogen, such as the $70 million Renewable Hydrogen Deployment Funding Round to help fast track the development of hydrogen in Australia.[37] New ARENA funding opportunities to directly support the development of hydrogen continue to be made available. For example, a Hydrogen R&D Funding Round was announced in April 2023;[38] and in the 2023-24 Federal Budget, the Australian Government announced the establishment of Hydrogen Headstart – a $2 billion revenue support program to support large scale renewable hydrogen.[39]

ATCO's renewable gas delivery strategy involves the purchase of renewable gas as replacement for unaccounted for gas and ensuring the network can accept and transport renewable gases to meet customer demand and achieve emissions reduction objectives. Based on the current state of technology and future learnings, ATCO's current assessment and expectation is that biomethane will be available and will be more cost effective over a shorter timeframe than renewable hydrogen. ATCO still considers however that there will be limitations to the scalability of biomethane.[40] ATCO's modelling also indicates that the cost competitiveness of renewable hydrogen was unlikely to occur before 2030.[41]

The availability and cost of supply of renewable gases will impact customers' demand and the need for ATCO to be able to accept and distribute renewable gases. ATCO has noted that it will continue to assess the supply availability and cost of renewable gases.[42]

Western Australian approach to renewable gases

In response to, and in support of, Australian hydrogen commitments, the Western Australian Government has its own enabling strategies and funding for hydrogen.[43] In 2019 the WA Renewable Hydrogen Strategy was launched and in 2020 the WA Renewable Hydrogen

35 Australian Department of Climate Change, Energy, the Environment and Water, 'Australia's National Hydrogen Strategy' (online) (accessed October 2023).

36 Australian Department of Climate Change, Energy, the Environment and Water, 'Review of the National Hydrogen Strategy' (online) (accessed October 2023).

37 Australian Renewable Energy Agency, 'ARENA opens $70 million hydrogen deployment funding round' (online) (accessed October 2023).
ATCO received a funding allocation from this round of funding for $28.7 million but subsequently decided not to proceed with the project. See: Mark Beyer, 'ATCO scraps hydrogen project', *Business News*, 25 July 2023.

38 Australian Renewable Energy Agency, 'Hydrogen Research and Development Funding Round' (online) (accessed October 2023).

39 Australian Renewable Energy Agency, 'Hydrogen Headstart consultation process now underway' (online) (accessed October 2023).

40 ATCO, *Plan 2023-29: Attachment 03.004A Renewable Gas Delivery Strategy*, September 2023, p. 12.

41 ATCO, *Plan 2023-29: Attachment 03.004A Renewable Gas Delivery Strategy*, September 2023, p. 35.

42 ATCO, *Plan 2023-29: Attachment 03.004A Renewable Gas Delivery Strategy*, September 2023, p. 12.

43 Western Australian Government, 'The Western Australian renewable hydrogen industry' (online) (accessed October 2023).

Roadmap was released. On 19 September 2023, the Western Australian Government announced a review of its hydrogen strategy.[44]

A bill to introduce proposed climate legislation to the Western Australian Parliament is anticipated in late 2023. The legislation will "set out the State Government's goal of net zero emissions by 2050, establish requirements for the setting of interim targets for future periods" and will, among other things, "drive investment in clean energy infrastructure and technologies and position the state to become a clean energy powerhouse".[45]

While the Western Australian Government continues to focus on transitioning to cleaner energy sources, including renewable gases, it has been reported that there is no current intention for Western Australia to follow the Victorian Government's decision to ban new gas connections from 2024.[46] It is expected that Western Australian gas networks will continue to supply natural gas to existing and new customers while investment in hydrogen continues.

ATCO's hydrogen blending pilot program

In AA5, as the first stage of its hydrogen blending initiative, ATCO invested in a project to design and construct a blending facility to enable up to 10 per cent renewable hydrogen from its Clean Energy Innovation Hub (CEIH) to be blended into a discrete area of the network (2,700 residential and small commercial customers in the suburbs of Glen Iris, Treeby and Calleya). This pilot project facilitated a trial of hydrogen blending into the gas network, with the aim of increasing blends and moving towards a partially decarbonised gas network in line with Western Australia's Renewable Hydrogen Strategy. Most of the capital investment for this project was provided by a Department of Jobs, Tourism, Science and Innovation (JTSI) grant, with ATCO investing the remaining capital needed. ATCO is seeking to recover its portion of the investment, being $0.4 million (despite hydrogen not falling under the regulatory framework, which currently only applies to natural gas).[47]

ATCO's proposal for renewable gases

For AA6, ATCO's proposal for renewable gases and associated expenditure falls under various categories as outlined below. ATCO wants to invest $26.4 million (real dollars, $17.9 million in capital and $8.5 million in operating expenditure).[48] In support of its proposal, ATCO provided its Renewable Gas Delivery Strategy, which details a program of works for AA6 to purchase renewable gas as replacement unaccounted for gas and enable renewable gases to be transported through the network to assist with greenhouse gas emission reduction targets.[49] ATCO considers that the strategy directly supports its target to reduce net emissions within its operational control (scope 1 emissions) to 30 per cent below 2020 levels by 2030.[50]

---

44 Western Australian Government media statement, 19 September 2023, Hon. Bill Johnston 'Consultation opens for Renewable Hydrogen Strategy refresh' (online) (accessed October 2023).

45 Western Australian Government, 'Climate change legislation' (online) (accessed October 2023).

46 See for example: Josh Zimmerman, 1 August 2023, 'Rodger Cook rules out WA following Victoria in banning reticulated gas connections to new homes from 2024', *The West Australian* (online) (accessed October 2023); and Duncan Evans, 1 August 2023, ' WA Premier confirms gas in the mix for residential energy in his state', *The Australian* (online) (accessed October 2023).

47 ATCO, *2025-29 Plan*, 1 September 2023, pp. 73-74.

48 The operating expenditure includes the $1.2 million Opex SaaS adjustment in Table 3.

49 ATCO, *2025-29 Plan - Attachment 03.004A: Renewable Gas Delivery Strategy*, 1 September 2023 (online) (accessed October 2023).

50 ATCO, *2025-29 Plan - Attachment 03.003: ATCO Gas Australia Sustainability Strategy*, 1 September 2023. (online) (accessed October 2023).

Asset performance and safety expenditure

ATCO's 'enabling renewable gas' program ($15.5 million, real dollars) includes capital expenditure to ensure the network can accept and distribute renewable gases (Table 2). This includes:

- Renewable gas injections ($14.3 million, real dollars)
  - Construct six gate stations to inject around 100-200 TJ of renewable gas per site per year into the network, with two stations in 2025 and one per year over the remaining years of AA6.
- Network blending control systems ($0.6 million, real dollars)
  - Expenditure for interconnection management controls to ensure a system accurately measures delivered energy in the network with dynamic renewable gas blends. This will support the accurate billing of energy delivered from the network.
- Meter changes for hydrogen blending ($0.6 million, real dollars)
  - Replacement of a small proportion of metering assets in parts of the network where renewable gas blending will occur.

Table 2: ATCO AA6 forecast capital expenditure: Enabling renewable gas ($million real as at 31 December 2023)

Projects	2025	2026	2027	2028	2029	Total
Renewable gas injection	3.8	2.6	2.6	2.7	2.7	14.3
Network blending control systems	0.6	-	-	-	-	0.6
Meter changes for hydrogen blending	0.1	0.1	0.1	0.1	0.1	0.6
Total	**4.5**	**2.7**	**2.7**	**2.8**	**2.8**	**15.5**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 10.12.

ATCO considers that its 'enabling renewable gas' program aligns with government climate objectives and with good industry practice for reducing greenhouse emissions. Further, it considers that the $15.5 million investment delivers an overall positive economic value by reducing unaccounted for gas costs in the long term, reducing environmental emissions, providing greater energy choice for customers and enabling solutions for industry to reduce scope 1 emissions, and that the investment is required for Australia to meet its obligations under the *Climate Change Act 2022* to reduce emissions by 43 per cent below 2005 levels by 2030.[51]

IT sustainability programs expenditure

ATCO's IT expenditure to introduce renewable gases includes the following (Table 3).[52]

- Energy regulator reporting amendments ($1.4 million, real dollars)
  - Introducing renewable gas, associated higher heating value (HHV) changes, and injection point locations will require measurement system changes. ATCO's billing

[51] ATCO, *2025-29 Plan*, 1 September 2023, p. 163.

[52] ATCO, *2025-29 Plan*, 1 September 2023, p. 185.

systems and reporting to the Australian Energy Market Operator must be adjusted. This project will review, scope and implement changes to address these changes.

- System modelling amendments ($1.8 million, real dollars)
  - The proposed addition of gas injection points will alter the flow of gases through the system, and the change to HHV will require new billing zones to be defined. New modelling tools will be needed to validate the billing zones or the consequence areas of these changes. This project will review, scope and implement changes to the existing modelling system to address these changes.
- Sustainability reporting system ($0.5 million, real dollars).
  - ATCO is required to address governmental and national greenhouse and energy reporting requirements. This project will collate required environmental inputs and reports for various agencies with ongoing operational support.

Table 3 ATCO AA6 forecast capital expenditure: IT Sustainability Programs ($million real as at 31 December 2023)

Projects	2025	2026	2027	2028	2029	Total
IT Sustainability programs						
Energy regulator reporting amendments	0.9	0.1	0.1	0.1	0.1	1.4
Network modelling amendments	1.6	0.1	0.1	0.1	0.1	1.8
Sustainability Reporting System	0.1	0.1	0.1	0.1	0.1	0.5
Total (capex and opex)	**2.5**	**0.3**	**0.3**	**0.3**	**0.3**	**3.6**
less SaaS adjustment (opex)	*- 0.8*	*- 0.1*	*- 0.1*	*- 0.1*	*- 0.1*	*- 1.2*
Total (capex)	**1.8**	**0.2**	**0.2**	**0.2**	**0.2**	**2.5**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 10.23.

Notes: Software as a Service (SaaS)

Enabling renewable gases operating expenditure

ATCO has forecast $7.3 million (real dollars) in operating expenditure to deliver its capital projects to enable renewable gases (Table 4). The projects and associated operating expenditures are:[53]

- Renewable gas injection points ($1.5 million, real dollars)
  - To support the new renewable gas injection points, $1.5 million is proposed for operation and maintenance activities. These activities include inspection labour, replacement parts, calibration of gas chromatographs, meters and regulators, control systems to shut off supply, and telemetry for billing and reporting purposes.
- Sustainability reporting system ($0.4 million, real dollars)
  - ATCO will incur new licencing fees and running costs for sustainability reporting system software.

[53] ATCO, *2025-29 Plan*, 1 September 2023, pp. 113-117.

- Industry and community consultation program ($3.7 million, real dollars)
  - This consultation program aims to work with stakeholders to discuss and provide feedback on issues related to renewable gas development, production and utilisation. The program will also, among other things, identify and engage in community consultation with impacted areas around the potential benefits and implications of renewable gas blending.
- Renewable gas supporting programs ($1.7 million, real dollars)
  - To support ATCO's Sustainability Strategy, ATCO's Renewable Gas Delivery Strategy highlights several supporting areas to enable the transportation of renewable gas. Additional operating expenditure to support the distribution of renewable gases includes:
    - Renewable Gas Compatibility and Safety ($0.7 million): ATCO will complete one-off projects to review the compatibility of renewable gas infrastructure and ensure compliance with its safety obligations.
    - Renewable Gas Injection Point Security and Compliance ($1.0 million): ATCO proposes ongoing investment to enable the safe and secure operation of its injection points, designed in a standardised way with the appropriate security and remote monitoring, blending control and safety systems employed.

Table 4 ATCO AA6 forecast operating expenditure: Enabling renewable gases step change ($million real as at 31 December 2023)

Projects	2025	2026	2027	2028	2029	Total
Renewable gas injection points	0.1	0.2	0.3	0.4	0.5	1.5
Sustainability reporting system	0.1	0.1	0.1	0.1	0.1	0.4
Industry and community consultation program	0.7	0.8	0.7	0.8	0.7	3.7
Renewable gas supporting programs	0.5	0.5	0.3	0.2	0.2	1.7
Total	**1.4**	**1.5**	**1.5**	**1.4**	**1.5**	**7.3**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 9.8.

Stakeholder engagement on renewable gases

Stakeholder responses to ATCO on its expenditure for renewable gases were mixed.

- During initial consultation on the future role of gas, stakeholders sought further clarity on the impact of gas scenarios on tariffs, raised concerns about the costs of investing in hydrogen blending on residential customers (households), and questioned whether Western Australia was big enough for a bio-methane market.[54]
- Customer survey responses indicated support for renewable gases. Gas from renewable sources was ranked as the number one priority in terms of investments, with 54 per cent of respondents considering it to be of highest personal priority (followed by gas mains replacement at 16 per cent). Of the remaining five non-price attributes tested in ATCO's choice model (online survey), customers were willing to pay the most to

[54] ATCO, *2025-29 Plan*, 1 September 2023, Table 3.1.

introduce gas from renewable sources into the network (up to 12 per cent more on their bill for a 15 per cent gas blend from renewable sources).[55]

- ATCO reported that gas retailers were genuinely interested in sustainability projects, in particular hydrogen blending. There is varied support for hydrogen blending, with retailers citing pre-requisite conditions that should be met before changing the whole network to facilitate hydrogen. The prerequisite conditions involve feasibility studies to understand the economic benefits, the future demand for gas and legislative support before recovering costs from customers. Retailers also desired more information about ATCO's progress to deliver a clear message to their customers.[56]

Questions

10. Is ATCO's proposed investment to allow renewable gases in its network appropriate and timely, having regard to the government policies and climate targets applicable in Western Australia, and gas users' emissions requirements and cost expectations?
11. Is there user demand for renewable gases now and into the future? Further, given the availability and cost of supplying renewable gas will influence customers' demand, how should ATCO manage uncertain customer demand in its timing of its renewable gas expenditure?
12. In considering the emissions reductions outcomes from ATCO's renewable gas proposals, what factors are relevant to the ERA in understanding the net reduction to emissions?

2.7 Accelerated depreciation

ATCO's AA6 proposal has included $80 million ($real 2023) for accelerated depreciation due to the uncertainty of the future of gas and the use of the gas distribution network. This represents 23 per cent of the increase in proposed AA6 revenue.

Depreciation allocates the cost of an asset over its useful life. The ERA includes an amount for depreciation of the regulatory asset base (RAB) in ATCO's total revenue, which allows for the recovery of past approved efficient investments in the network. In past access arrangements, regulatory depreciation was calculated through the straight-line depreciation of the real RAB (asset values do not include the effect of inflation) and separately adjusted for indexation of the RAB for inflation. This method allows consumers to pay the same real dollar amount of depreciation each year over the life of the asset.

Since ATCO's last access arrangement, technology and policy developments have created increasing levels of uncertainty around the future of distributed natural gas. These developments have included:

- The introduction of federal, state and corporate targets and policies to drive emissions reduction targets over time.
- Improvements in electrical appliances and technologies that can be used as substitutes for natural gas usage.

55 ATCO, *2025-29 Plan*, 1 September 2023, p. 38.

56 ATCO, *2025-29 Plan*, 1 September 2023, p. 36.

In AA6, ATCO has proposed to bring forward an amount of depreciation to recognise the risk that under possible future scenarios its distribution gas pipeline network may have a reduced useful life. This accelerated depreciation provides for more depreciation in the earlier years of an asset's life and less depreciation in the later years of the asset's life (compared to a constant real depreciation method). ATCO contends that, consistent with the NGL, this provides it with a reasonable opportunity to recover its previously approved efficient investments, while maximising consumers' utilisation of the network and minimising possible adverse future price effects on consumers if demand for gas declines.

The ERA notes that while accelerated depreciation was mentioned in ATCO's April 2023 Draft Plan and its consultation, there was no depreciation adjustment amount made available for comment at that time. ATCO's access arrangement proposal represents the first time that detail on accelerated depreciation and an amount has been disclosed for AA6. Details on ATCO's proposed accelerated depreciation and relevant questions are set out as follows.

Regulatory depreciation

The NGL provides for a ***return on*** efficient capital investments in assets that are required to provide regulated services, as well as the ***return of*** capital over their economic lives. The return on capital covers funding costs, while the return of capital or regulatory depreciation covers the recovery of capital. Both these factors provide the necessary incentives for investors to allocate capital to regulated assets, who may not otherwise invest if they could not ever recover their invested capital and its associated funding costs.

The choice of the regulatory depreciation method alters the speed of capital being returned to investors, along with how current and future consumers pay for the return of capital. That is, the depreciation schedule or profile determines the amount of capital recovered from consumers over time. Traditionally, Australian regulators have used straight-line depreciation methods. This means that the same real depreciation amount is recovered each year. This contrasts with depreciation schedules that may recover more (or less) depreciation in the earlier years of the asset's life and less (or more) depreciation in the later years.

There are serval sections of the NGL that are relevant to determining regulatory depreciation including:

- The national gas objective requires that the depreciation schedule should be used to create prices that promote the efficient usage of the network, including recognising the long term interest of consumers.[57]
- The revenue and pricing principles provides additional guidance on economic regulation and pricing, including that:[58]
  - A service provider should be provided a reasonable opportunity to recover at least efficient costs, including the recovery of its RAB.
  - A regulator should have regard to the economic costs and risks of potential under- and over-investments in a pipeline, including potential investment signals that may lead to under-investment and its effect on the provision of service to future consumers.
  - A regulator should have regard to the economic costs and risk of the potential for under- and over-utilisation of a pipeline, including potential price signals that are

[57] NGL, section 23. The national gas objective is 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.

[58] NGL, section 24.

sent to consumers overtime that may adversely affect the network's utilisation.

Under rule 89(1) of the NGR, the depreciation schedule is also guided by the following principles to provide depreciation such: that reference tariffs will vary, over time, in a way to promotes efficient usage of the network; to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset; and that there can be no double (or greater) recovery of invested capital.

ATCO's consideration on the future of gas

ATCO's proposal recognises that gas distribution networks are operating in a period of change due to technological, social and market changes due to the energy transition.[59] These changes potentially raise uncertainty as to the role of gas networks in the future where decarbonisation is pursued by governments and consumers. These changes and developments are unlikely to have been anticipated by gas networks or customers when they made their respective investments in pipelines or appliances.

ATCO highlighted that State and Federal government policies have the potential to affect its business.[60] Broad decarbonisation policies could see gas consumers on the gas network move away from the use of gas to reduce emissions. ATCO has stated that decarbonisation could also result in a future for renewable gases, such as biomethane or renewable hydrogen.[61] Further, ATCO stated that the gas distribution network will continue to play a key role in the transition regardless of what fuel source is used in the network.[62] Additional discussion regarding renewable gases is provided in section 2.6 of this paper.

In 2021, the ERA considered the increased uncertainty of gas networks in its decision on the DBNGP transmission pipeline. At that time, the ERA considered that there was a likelihood that the usage of the DBNGP transmission pipeline would decline over time due to technological and policy change, and accepted DBP's proposed reduction in economic life of the pipeline. In its proposal, DBP did not seek a change to the depreciation profile.[63] Other economic regulators such as the AER have explored the regulation of gas networks under uncertainty.[64] In its review, the AER expressed a preference for using accelerated depreciation to manage depreciation and has recently allowed it for the Victorian gas distribution network service providers.[65]

ATCO's four scenarios for the future of gas

ATCO conducted a future of gas study to evaluate potential scenarios that might arise in the future with different market, technological and government policy settings. Given the level of future uncertainty, ATCO conducted a scenario analysis to consider multiple plausible future states of its gas distribution network over the next 50 years.[66]

---

59 ATCO, *2025-29 Plan*, Section 3: the future role of gas, 1 September 2023, pp. 16-17.

60 For example, the 43% below 2005 emissions by 2030 target, net zero emissions policy by 2050 and the Safeguard Mechanism.

61 ATCO, *2025-29 Plan*, 1 September 2023, p. 16.

62 ATCO, *2025-29 Plan*, 1 September 2023, pp. 19-21.

63 ERA, *Final decision on proposed revisions to the Dampier to Bunbury Natural Gas Pipeline access arrangement 2021 to 2025*, April 2021, pp. 313-357.

64 AER, *Information Paper: Regulating gas pipelines under uncertainty*, November 2021.

65 AER, *Final decision: Australian Gas Networks (Victoria & Albury) Gas distribution access arrangement*, June 2023, p. 8.

66 Scenario analysis is a process of examining and evaluating possible events or scenarios that could take place in the future and predicting the various feasible results or possible outcomes. Scenario analysis is commonly used to help model uncertain futures.

ATCO's scenario analysis included an examination of the number of distributed gas consumers, the volume of gas usage on the distribution network and the effect of changing levels of usage on regulated tariffs over time. ATCO, with its consultants, developed four scenarios that explored how the conditions for the Western Australian electricity and gas industry would develop under various market, policy, environmental and industrial assumptions.[67] Given the high level of future uncertainty, ATCO considered that at present there is no one future that is more certain and it has not assigned probabilities or likelihoods of any scenario occurring.

1. **Gas Retained**: Natural gas demand is in line with medium-term expectations, with limited gas load electrification and limited uptake of renewable gases. This results in natural gas being used as a "transition fuel" to support renewable generation, enabled by lower carbon capture costs due to technological learning.

2. **Energy Hybrid**: Technical learning rates for renewable gases and electrification develop at a similar pace resulting in some customers electing to electrify and some remaining on the gas network. Both renewable gases and electricity become viable alternatives to natural gas, resulting in an even split of customers pursuing either electricity or gas.

3. **Electricity Dominates**: Government policy and technological changes are such that there is increased electrification and switching from gas to electricity. This results in sustained reductions in gas demand in terms of customers and volumes, though there are some volumes sold beyond 2050.

4. **Hydrogen Future**: Government policy and technological changes are such that rapid renewable gas development leads to low electrification and low customer switching from gas to electricity. This results in strong domestic gas demand, with renewable gases allowing for existing infrastructure to be re-used with hydrogen as the replacement fuel. However, this involves increased capital expenditure on the gas distribution network and consumer appliances as they need to be upgraded for hydrogen carriage and usage.

Each scenario is made up of many underlying long-term assumptions. Any one assumption may affect the results materially. ATCO has not presented a sensitivity analysis of the models' underlying assumptions to identify the assumptions that may be most significant.[68] The results of the scenarios are presented in ATCO's access arrangement information (2025-25 Plan).[69,70]

As is illustrated in Figure 2, future gas demand does change materially between the scenarios. The Energy Hybrid and Gas Retained scenarios produce slightly growing gas volumes overtime. Gas volumes materially reduce under the Electricity Dominates scenario.

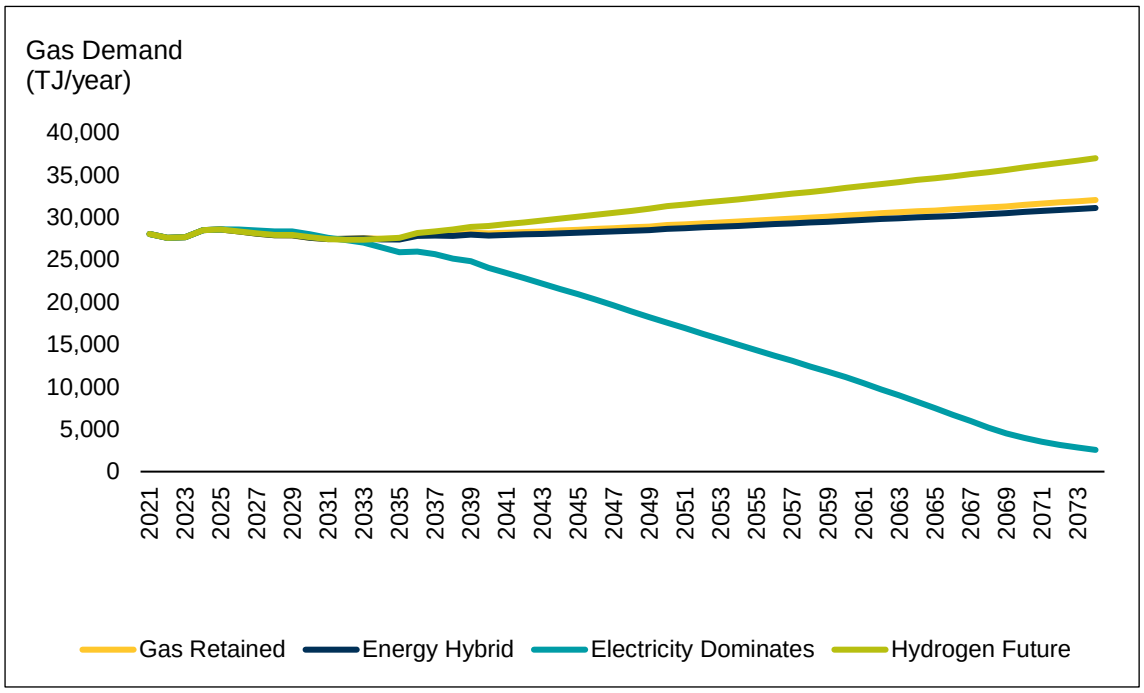
67 ATCO, *2025-29 Plan*, 1 September 2023, pp. 21-23.

68 Sensitivity analysis is a tool used in modelling to analyse how different values separately affect a model's outcome.

69 ATCO, *2025-29 Plan*, 1 September 2023, p. 24.

70 ATCO, *2025-29 Plan - Attachment 03.002: Future of Gas Report*, 1 September 2023.

Figure 2: Gas volume demand forecasts under future scenarios



Source: ERA analysis; ATCO, 2025-29 Plan.

The scenarios' forecast gas volumes and the utilisation of the network do have a flow on effect to the network tariffs. Reducing gas volumes over time has the effect of increasing network tariffs. The unadjusted network tariffs (i.e. not including accelerated depreciation) of each scenario are provided in Figure 3.

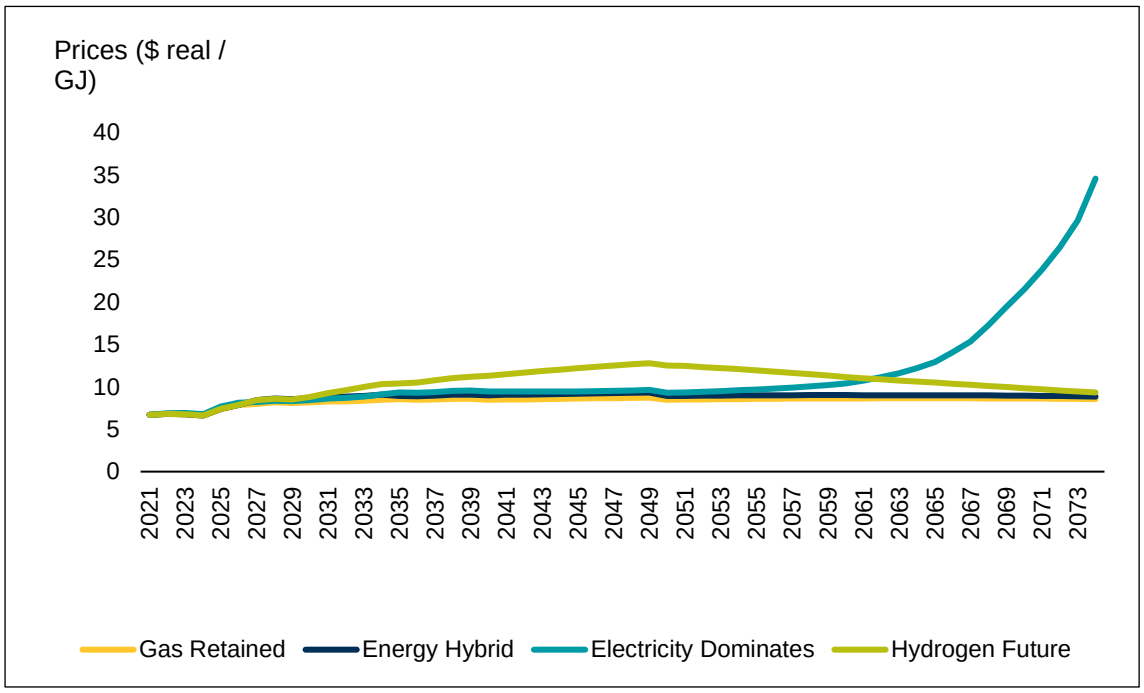
Under the Energy Hybrid and Gas Retained scenarios, real distributed gas tariffs remain relatively constant. However, under the Electricity Dominates scenario real distributed gas tariffs would materially increase over time.

ATCO considered that the scenario analysis supported the following conclusions:[71]

- All scenarios indicate at least partial utilisation of the distribution network, which implies that efficient expenditure and investment in the network is necessary.
- Accelerated depreciation can be used to maintain stable long-term prices for consumers and this promotes the efficient utilisation of the network over time.

[71] ATCO, *2025-29 Plan*, 1 September 2023, pp. 24-25.

Figure 3: Unadjusted distributed gas network tariffs under future scenarios



Source: ERA analysis; ATCO, 2025-29 Plan.

The ERA notes that asset stranding does not occur in the majority of scenarios as proposed by ATCO, as the gas distribution network remains viable in all but the Electricity Dominates scenario.

Questions

13. Are the underlying long-term assumptions used for ATCO's scenario analysis appropriate? If not, which assumptions are more relevant?
14. Which of ATCO's "future of gas" scenarios is more probable than others and why?

ATCO's accelerated depreciation proposal

ATCO's accelerated depreciation proposal does not change the economic life of its assets. Rather it changes the profile of asset recovery such that it is no longer a straight-line depreciation profile; it brings forward depreciation that it would have charged in the future to current periods without reducing the economic life of ATCO's network.[72]

ATCO has proposed $80 million ($ real 2023) in accelerated depreciation in AA6, which is approximately five per cent of its RAB. For AA6, this is over and above the amount based on the traditional straight-line depreciation approach to asset recovery. This proposed accelerated depreciation would in turn reduce the amount of depreciation that network consumers would have to pay in the future over the life of the pipeline. ATCO's proposed depreciation is presented in Table 5.

[72] Over the life of the asset ATCO recovers the same amount of depreciation under both the standard straight-line depreciation method and its proposed accelerated depreciation method.

Table 5: ATCO's proposed forecast depreciation for AA6 ($ million, nominal)

	2025	2026	2027	2028	2029	Total
Straight-line depreciation	65.4	77.8	80.5	82.7	84.0	**390.4**
Accelerated depreciation	17.0	17.4	17.9	18.4	18.8	**89.4**
Less: Indexation on opening capital base	(44.2)	(45.8)	(47.2)	(48.6)	(50.1)	**(235.9)**
Regulatory depreciation	**38.2**	**49.4**	**51.1**	**52.4**	**52.8**	**243.9**

Source: ERA analysis; ATCO, 2025-29 Plan, p. 215.

ATCO stated that accelerated depreciation would be an "effective way to maintain [its] network obligations while sustaining long-term price stability for our customers".[73] Further, ATCO cited that uncertainties regarding the energy transition necessitated the bringing forward of this amount for equity reasons due to the intergenerational impact of an energy transition on prices.[74] Intergenerational equity considerations arise when the customer base changes due to technological or policy factors. For example, if the customer base declines over time due to these factors, then the remaining customers would disproportionately bear the burden of providing ATCO's revenue.[75]

ATCO stated that it has proposed an accelerated depreciation amount that will allow for stable long-term real prices for customers, which will promote efficient network utilisation over time. That is, the proposed approach utilises the gas distribution network more than it would otherwise be through time.

If actual demand is higher than what was expected under the accelerated depreciation proposal, this risks consumers paying more than necessary ahead of time. This could potentially harm current consumers by reducing welfare and reduced economic efficiency through intertemporal distortions in consumption. However, if accelerated depreciation was not provided and demand does decline, which results in ATCO's capital base being unrecoverable, then this would result in asset stranding for ATCO and reduce incentives for the efficient operation of and investment in ATCO's network. Further, future consumers might be harmed by price shocks as network costs are spread over a smaller customer base and their investments in gas appliances may be stranded.

ATCO's consultants, ACIL-Allen, did not recommend changing asset lives as this assumes that linear depreciation is appropriate in an environment where market changes could result in non-linear outcomes. However, ACIL-Allen did suggest that asset life shortening is implicit in the accelerated deprecation method.[76]

[73] ATCO, *2025-29 Plan*, 1 September 2023, pp. viii, xii.

[74] ATCO, *2025-29 Plan*, 1 September 2023, p. 25.

[75] ATCO, *2025-29 Plan*, 1 September 2023, p. 24.

[76] ATCO, *2025-29 Plan: Attachment 03.002 Future of Gas Report*, September 2023, p. vi.

Questions

15. Should ATCO be able to receive some accelerated depreciation during AA6 and for what reasons?
16. In an environment of uncertainty and with a plausible scenario that utilises the distribution gas pipeline less in the future, does the current straight-line depreciation schedule still provide a reasonable opportunity for ATCO to recover costs?
17. In an environment of possible reducing gas volumes, does the accelerated depreciation proposal promote intergenerational equity as advanced by ATCO?
18. Is targeting a stable long-term levelised price per gigajoule over the life of the pipeline in the long-term interest of consumers?
19. How should the outcomes of the "future of gas" scenarios be interpreted where customer numbers and gas demand are increasing instead of declining? Should accelerated depreciation be provided in such scenarios?
20. With increasing uncertainty, should the economic lives of ATCO's assets remain unchanged? Is it sufficient to adjust the depreciation schedule to account for uncertainty? Should the economic lives for new assets be different to existing assets?

ATCO engaged ACIL-Allen to provide advice and modelling for its accelerated depreciation proposal.[77] ACIL-Allen's modelling approach, as adopted by ATCO, can be summarised as follows:

1. **Underlying long term assumptions**: Used long-term inputs and parameters from ATCO and other public sources to develop each of the four scenarios. This included such things as appliance costs and lives, electricity and gas prices, growth in number of households, household discount rates, and consumer switching decisions curves.

2. **Customer switching decision and customer numbers**: Calculated expected customer numbers based on the relative total cost of ownership to consumers of gas and electricity appliances under the scenarios. If the costs of electricity appliances are cheaper, consumers are more likely to move away from gas. Customer switching choices apply to two separate customer groups:

    a. **Existing customers:** Existing customers have to replace their gas appliances every 15 years, so every year 1/15 of customers make a decision whether to stay on gas or change to electrical appliances.

    b. **New customers:** Based on assumed customer growth numbers, new household and commercial customers make decisions on whether to connect their new premises to gas or solely utilise electricity.

3. **Customer volumes and unadjusted tariffs over time:** Calculates expected gas volume demand and resulting unadjusted tariffs per gigajoule over the entire forecast period.

4. **Stabilise tariffs and sculpted depreciation profile:** Using expected gas volumes, determined a levelised price per gigajoule over the forecast period that is constant/flat in real terms. Then sculpted the depreciation profile required to implement the stable price.

[77] ATCO, *2025-29 Plan: Attachment 03.002 Future of Gas Report*, September 2023.

5. **Acceleration depreciation calculation:** Calculates required accelerated depreciation as the difference in the sculpted depreciation profile and the straight line profile.

The results of ACIL-Allen's accelerated depreciation modelling are presented in Table 6. ACIL-Allen recommended an accelerated depreciation amount of $120 million for AA6, which was determined by taking the mid-point between the Gas Retained and Electricity Dominates scenarios. The Hydrogen Future scenario was discarded because it was an outlier, given the size of capital expenditure required to allow the gas network to carry 100 per cent hydrogen.

Table 6: ACIL-Allen accelerated deprecation approach by scenario ($million, real)

	Gas Retained	Energy Hybrid	Electricity Dominates	Hydrogen Future
Accelerated depreciation amount	$78	$104	$161	$340
ACIL-Allen recommendation	The average of Gas Retained ($78m) and Electricity Dominates ($161m) for an estimate of ~$120m			Disregard as outlier

Source: ACIL-Allen.

ATCO commissioned Incenta to evaluate the ACIL-Allen models and provide further advice regarding the economic and regulatory justification for accelerated depreciation.[78] Incenta stated that:

- Targeting a stable levelised price over time is likely to provide ATCO with a reasonable opportunity to recover its costs.
- Targeting a stable levelised price is also likely to promote the efficient utilisation of the gas network over time, as levelised prices may result in greater lifetime demand and utilisation when compared to having volatile prices that may increase over time.
- It may be more appropriate to target a levelised price for each customer class rather than ACIL-Allen's approach of targeting a global price that pools all customers together.
- The avoidance of asset stranding should be prioritised, which occurs under Electricity Dominates and necessitates actions now.
- Given the current market environment has resulted in a large increase in the rate of return that places upward pressure on current network tariffs, it is prudent to moderate accelerated depreciation where this does not add substantially to asset stranding.
- Continuing to connect customers can reduce asset stranding by reducing the average cost per consumer which may promote gas price competitiveness relative to other fuel sources, as well as preserving the options for renewable gases. New customers are only connected where the connection leads to greater network benefits compared to the connection cost.

Incenta advised that under its levelised price targeting approach the accelerated depreciation amounts changed to those provided in Table 7.

[78] ATCO, *2025-29 Plan: Attachment 11.001 Regulatory Depreciation for AA6*, September 2023.

Table 7: Incenta accelerated deprecation approach by scenario ($million, real)

	Gas Retained	Energy Hybrid	Electricity Dominates	Hydrogen Future
Accelerated depreciation amount	$41	$73	$168	$269
Incenta recommendation	Half of Electricity Dominates ($168m) for an estimate of ~$80m, which is approximately consistent with the Energy Hybrid scenario			Disregard as outlier

Source: Incenta

ATCO considered the analysis provided by both ACIL-Allen and Incenta and submitted that accelerated depreciation could be provided on the following basis:[79]

- If each scenario was plausible, then any brought-forward depreciation path could be considered to be reasonable.
- ACIL-Allen's recommendation as a least "no-regrets" approach to choose a depreciation path that is consistent with as many scenarios as possible, which results in accelerated depreciation of $120 million over AA6.
- A lesser amount of $80 million that would minimise the cost impact of the transition for customers in the short term and avoids the risk of much higher future price increases.

ATCO proposed accelerated depreciation totalling $80 million ($ real 2023) for the AA6 period, which is incurred evenly at approximately $16 million per year over the AA6 period.

Questions

21. Given the multiple plausible "future of gas" scenarios with varying outcomes, what method could be used to determine an amount for accelerated depreciation? For example, taking the scenario with the highest accelerated depreciation, averaging all scenarios, or taking the mid-point between selected scenarios.
22. Should the level of the proposed tariff increase excluding accelerated depreciation affect the ERA's consideration of accelerated depreciation?

2.8 Rate of return and inflation

Changing economic and financial conditions are outside the control of both ATCO and the ERA yet are important factors in determining ATCO's cost of capital and inflation of the capital base and drive a large change in proposed revenue.

Higher levels of inflation increase the value of the AA5 asset base, which leads to revenue that is 18 per cent above the level of AA5, and updated rates of return account for 38 per cent of the change of AA6 revenue.

[79] ATCO, *2025-29 Plan*, 1 September 2023, p. 25.

The rate of return provides service providers with the funding to pay interest on loans and give a return on equity to investors. The rate of return is expressed as a weighted average cost of capital (WACC).

A gas rate of return instrument is required under the NGL.[80] The gas instrument sets out the methods the ERA and service providers will use to estimate the allowed rate of return and value of imputation credits for gas transmission and distribution service providers.

The ERA published the current 2022 gas instrument on 16 December 2022.[81] On 12 September 2023, the rate of return instrument was amended due to the cessation of the Reserve Bank of Australia's (RBA) F16 statistical table.[82] The amended instrument applies to this current review of ATCO's access arrangement.

ATCO's proposed rate of return and inflation

ATCO's rate of return and inflation estimates are consistent with the methods detailed in the gas rate of return instrument.

ATCO's proposed WACC and inflation are materially higher than those in AA5 due to changes in market conditions that have increased the cost of finance over the past few years.

ATCO has proposed an average nominal post-tax WACC of 7.33 per cent for the AA6 period, compared with 4.16 per cent approved in AA5.[83] ATCO has estimated inflation of 2.66 per cent for the AA6 period,[84] compared with 1.14 per cent that was approved in AA5.[85]

ATCO has used placeholder values for the average of the 20 trading days to 30 June 2023 for its proposed WACC calculation. These placeholders will be replaced with the most current values closer to the time of the ERA's final decision. ATCO must nominate an averaging period in advance, which must be close and prior to an access arrangement determination. The nominated averaging period will affect various rate of return parameters that are calculated using market data.

ATCO's proposed changes to the WACC, consistent with the gas rate of return instrument, are set out in Table 8. This table compares ATCO's AA6 proposal with the AA5 final decision. ATCO's proposal increases revenues from return on assets by approximately $132 million compared to the AA5 final decision.

80 NGL, section 30D, 30E.

81 ERA, *Notice – 2022 gas rate of return instrument review: Publication of final gas instrument and explanatory statement*, 16 December 2022 (online) (accessed October 2023).

82 ERA, *2022 final gas rate of return instrument*, 16 December 2022 (Amended 12 September 2023), p. 16 and p. 22.

83 ATCO, *2025-29 Plan*, 1 September 2023, p. 233.

84 ATCO, *2025-29 Plan*, 1 September 2023, p. 215.

85 ERA, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020-2024 – Submitted by ATCO Gas Australia*, 15 November 2019, p. 296.

Table 8: ATCO's rate of return estimate

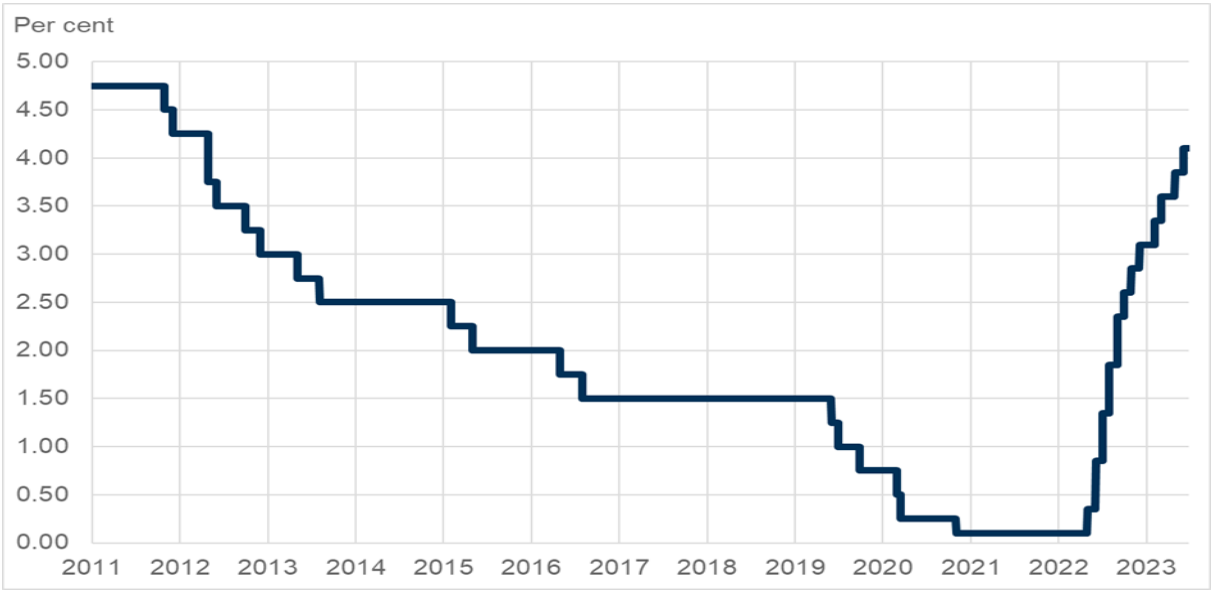
Component	ATCO AA6 proposal	Approved AA5
Forecast inflation	2.66	1.14
Cost of equity (%)	8.24	5.02
Cost of debt (%)	6.58	3.45
Nominal after-tax WACC (%)	7.33	4.16
Average regulated asset base over regulatory period ($m)	1,626.4	1,593.8
Total WACC revenue ($m)	**369.5**	**237.6**

Source: ERA analysis; ATCO, 2025-29 Plan, p. 215.

Economic and financial conditions have changed significantly since the ERA's AA5 final decision in November 2019.

- The risk free rate has been volatile and uncertain as the economy recovers from the COVID-19 pandemic, and there is uncertainty around central bank monetary policy given the emergence of inflation.
- Inflationary expectations in the market have increased, with central banks conducting monetary policy operations to meet inflation targeting mandates. Other shocks such as the conflict in Ukraine have added to uncertainty of the inflationary environment, along with contributing to global supply shortages which affects prices.
- The RBA has been progressively increasing the cash rate since May 2022. These monetary policy changes are illustrated in Figure 4.

Figure 4: Reserve Bank of Australia cash rate target



Source: ERA analysis based on Reserve Bank of Australia F1 statistical tables.

Increases in inflation and interest rates have led to a large increase in target revenue from ATCO's last access arrangement and are responsible for the largest increase in proposed revenue.

ATCO noted that the proposed rate of return materially affected its cost of service and distribution charges for AA6 and would likely vary following future movements in the risk-free rate.[86]

2.9 Revenue and price paths

The gas regulatory framework contains revenue and pricing principles, which establish a framework for the construction of reference tariffs.[87] Fundamental to this framework is the requirement for the price control in an access arrangement to enable the service provider to earn sufficient revenue to cover its efficient costs of providing reference services, including a return on investment commensurate with the commercial risks involved.

ATCO's proposed revenue

ATCO is seeking target revenue of $1,298 million ($ real 2023) for the AA6 period, which is $343 million (36 per cent) higher than the AA5 period. Table 9 shows a breakdown of the proposed target revenue and a comparison with the AA5 approved revenue.[88]

Table 9: Comparison of AA5 and AA6 target revenue building blocks ($million real at 31 December 2023)

	AA5 approved revenue	AA6 proposed revenue	Difference ($m)
Operating expenditure	377.89	455.92	78.03
Depreciation	325.38	348.70	23.31
Accelerated depreciation	0.00	80.00	80.00
Return on asset	237.59	369.49	131.90
Return on working capital	4.80	12.02	7.21
Tax	8.83	31.55	22.73
Total (unsmoothed)	**954.49**	**1,297.68**	**343.19**

Source: ATCO Gas Tariff Model; ERA AA5 ATCO Gas Tariff Model revenue calculation.

The increase in the proposed distribution charges over AA6 compared to AA5 is largely driven by the increase of inflation from 2019 to 2023, return on asset and accelerated depreciation. Figure 5 shows that real revenue increases as a result of:

- High levels of inflation increasing the value of the AA5 asset base (18 per cent of AA5 revenue).
- An increase in the rate of return to account for current market conditions (38 per cent of the change of AA6 revenue).

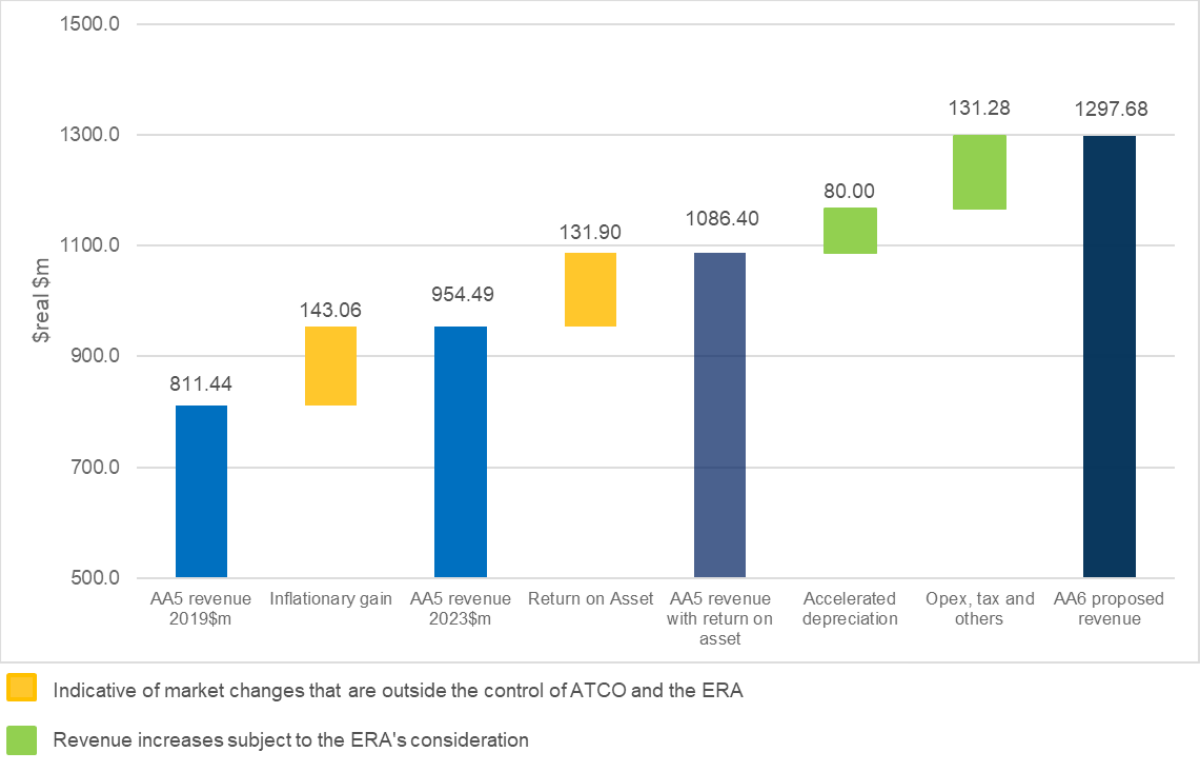
86 ATCO, *2025-29 Plan*, 1 September 2023, p. 213.

87 The revenue and pricing principles are set out in section 24 of the NGL.

88 Based on unsmoothed revenues and ATCO's modelled inflation.

- The inclusion of accelerated depreciation due to uncertainty surrounding the future of gas (23 per cent of the change of AA6 revenue).
- The sum of changes to operating expenditure, depreciation and taxes (38 per cent of the change of AA6 revenue).

Figure 5: Change in revenue (unsmoothed) from AA5 to AA6, by building block ($million real at 31 December 2023)



Source: ATCO Gas Tariff Model; ERA AA5 ATCO Gas Tariff Model Revenue Calculation.

ATCO's proposed price paths

ATCO's proposed material increase in target revenue for AA6 flows through to increases in tariffs. For reference tariffs, ATCO proposed a step increase in 2025 followed by constant real prices from 2026 to 2029. That is, in 2025 there is a large increase in tariffs followed by annual increases for inflation. Figure 8 summarises the average customer bill outcomes for each tariff class over the AA6 period.

With respect to the residential B3 tariff, the average annual distribution charge for an average residential (B3) customer will increase by $78 (approximately $1.50 per week), from $199 in 2024 to $277 in 2025 (as shown in Figure 6).[89] ATCO noted that if retailers fully pass on this increase, this would represent an increase of 12 per cent on an annual retail gas bill at the gazetted retail price.[90]

ATCO acknowledged that the increase to the distribution charges may concern its customers.[91] ATCO stated that the proposed price path provides stability for its customers and aligns its costs with revenue to provide efficient incentives for the use of and investment in the gas distribution network. Consequently, ATCO placed primary weight to smoothing

89 ATCO, *2025-29 Plan*, 1 September 2023, p. 236 and p. 238.

90 ATCO, *2025-29 Plan*, 1 September 2023, p. 237.

91 ATCO, *2025-29 Plan*, 1 September 2023, p. viii.

tariffs within the AA6 period, while keeping the final year divergence of smoothed revenue and unsmoothed revenues as low as possible. Adjusting tariff revenue to the approximate cost of service helps ATCO to send efficient price signals to customers and make the efficient use of and investment in the gas network.[92]

Figure 6: ATCO average customer bill outcomes summary

Source: ATCO, 2025-29 Plan, Figure 16.4.

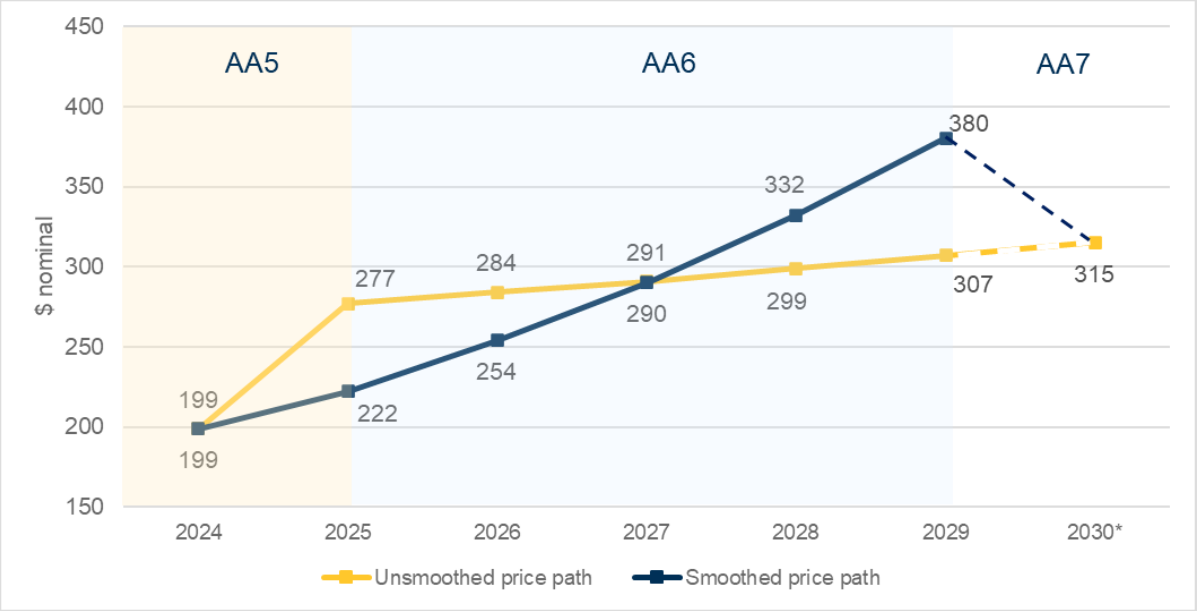
ATCO considered that deferring the recovery of the cost of service to later years in AA6 increases the amount paid by consumers over the AA6 period. For example, adopting equal price increases in each year of AA6 would add $22 to the gas distribution charge for a B3 customer with average usage over the AA6 period. In addition, ATCO noted that the proposed price path keeps the difference in cost of service and expected tariff revenue within

92 ATCO, *2025-29 Plan*, 1 September 2023, p. 232.

three per cent of the cost of service at the end of the AA6 period and reduces the potential for price shock in the transition from AA6 to AA7.[93]

Figure 7 provides an illustrative comparison of the difference between ATCO's proposed unsmoothed price path with a smoothed price path. The smoothed price path maintains constant real price increases in each year of the AA6 period, while the unsmoothed price path has a step increase in prices in 2025, followed by constant real price increases for the remaining four years of AA6.

Figure 7: ERA illustrative comparison of smoothed and unsmoothed prices over time



Source: ERA analysis; ATCO, 2025-29 Plan, p. 238.

** Indicative 2030 number ($315) based on ATCO's AA6 continuing to AA7 with the current inflation forecast. AA7 numbers will be subject to future access arrangement submissions.*

As illustrated in Figure 7, both price path options come with trade-offs. These trade-offs are set out in Table 10. The two price path options for AA6 represent two 'bookend' possibilities, with more alternative price paths available that lie between these two options.

Table 10: Advantages and disadvantages of unsmoothed and smooth tariff path approaches

Advantages	Disadvantages
Unsmoothed tariff path approach (as proposed by ATCO)	
• More accurately reflect efficient costs. • Avoids step change between the next access arrangement (AA7). • Maintains real prices over the remaining four years of AA6 (prices increase by inflation per annum). • Provides the lowest nominal price at the end of AA6.	• Highest initial increase in 2025.

[93] ATCO, *2025-29 Plan*, 1 September 2023, p. 235.

Advantages	Disadvantages
Smoothed tariff path approach	
• Lowest initial increase in 2025. • Provides constant real price increases across the five years.	• Leads to higher nominal prices at the end of AA6. • Does not accurately reflect efficient costs. • Provides higher ongoing increases. • May lead to a step change for the next access arrangement (AA7).

The ERA considers the effects on customers and retailers when determining the price path, in particular for small use customers.[94]

The ERA notes that ATCO's stakeholder review provided customer feedback on the AA6 tariffs, including on consumer preferences when balancing upfront and ongoing tariff increases.[95] ATCO considered that its proposed revenue path balanced the longer-term interests of consumers with the short-term price charges.

The ERA seeks submissions from stakeholders on ATCO's proposed price path, including views on the magnitude of the proposed increase in 2025 and the impact of this proposed step change on price stability for the remaining AA6 years.

Questions

23. What are stakeholder views on ATCO's proposed AA6 price path, including the impact of the proposed step change on price stability over the AA6 period?
24. Noting ATCO's proposed $78 increase to the annual average distribution network bill for the average residential (B3) customer, is the magnitude of the increase a concern to retailers and residential customers? Do other (larger) customers have concerns on the magnitude of tariff increases for them?

94 *National Gas Access (WA) (Local Provisions) Regulations 2009,* regulation 7. Small use customers are defined as gas users consuming less than one terajoule (TJ) per year in regulation 4.

95 ATCO, *2025-29 Plan*, 1 September 2023, pp. 227-228.

Appendix 1 List of Tables

Appendix 2 List of Figures

Appendix 3 Abbreviations

AA5	Fifth access arrangement period (1 Jan 2020 to 31 Dec 2024)
AA6	Sixth access arrangement period (1 Jan 2025 to 31 Dec 2029)
AAI	Access Arrangement Information
ARENA	Australian Renewable Energy Agency
ATCO	ATCO Gas Australia Pty Ltd
BST	base-step-trend (method)
capex	Capital expenditure
CORE	Core Energy Consulting
ECMC	Energy and Climate Change Ministerial Council
GDS	Gas Distribution Systems
HHV	Higher Heating Value
IT	Information Technology
JTSI	Department of Jobs, Tourism, Science and Innovation
KPIs	Key Performance Indicators
NGL	National Gas Law
NGR	National Gas Rules
NMIS	Network Management Information System
opex	Operating expenditure
RAB	Regulatory Asset Base
RBA	Reserve Bank of Australia
TSA	Template Service Agreement
UAFG	Unaccounted for Gas
WACC	Weighted Average Cost of Capital

Appendix 4 Summary of questions for comment

Note: The questions listed below are asked throughout this paper as part of the ERA's consideration of key issues. Interested parties are encouraged to consider these questions when making their submissions, in addition to providing comments on any other matters related to ATCO's access arrangement proposal.

ATCO's stakeholder engagement

1. Did ATCO provide reasonable opportunities for stakeholders to provide input into the development of its access arrangement proposal? Where stakeholders provided comments/feedback to ATCO, did ATCO give due consideration to and adequately address the comments/feedback?

2. How representative are ATCO's customer research findings and are they consistent with stakeholders' understanding of customer preferences?

3. Do stakeholders agree with ATCO's use of the customer research findings in its proposal, and in particular ATCO's use of specific findings from its Voice of Customer Survey to support its additional expenditure and/or higher tariffs?

4. Considering the medium-to-long term demand for natural gas within Western Australia and the factors that are likely to impact this demand, how do stakeholders consider the outlook for natural gas demand?

5. In developing its AA6 demand forecast, has ATCO taken the appropriate analytical approach to assess historical data? How well do stakeholders consider that historical trends will explain demand forecasts in AA6 given future uncertainty in gas use?

6. Is ATCO's proposed permanent disconnection service operationally workable in terms of the provisions set out in the standard service agreement (*Permanent Disconnection Contract*)?

7. Is ATCO's proposed cost of $1,184.80 (ex-GST) for the permanent disconnection service reasonable, noting that other charges may also be payable (such as a fee for the removal of gas metering equipment)?

8. If the national gas objective is amended in Western Australia to incorporate a specific emissions reduction objective, is ATCO's current and proposed declining block tariff structure consistent with the new objective, and should an alternative tariff structure be considered which may better meet the new objective?

9. Should an alternative tariff variation mechanism to the weighted average price cap be considered if the amended national gas objective to incorporate a specific emissions reduction objective is adopted in Western Australia?

10. Is ATCO's proposed investment to allow renewable gases in its network appropriate and timely, having regard to the government policies and climate targets applicable in Western Australia, and gas users' emissions requirements and cost expectations?

11. Is there user demand for renewable gases now and into the future? Further, given the availability and cost of supplying renewable gas will influence customers' demand, how should ATCO manage uncertain customer demand in its timing of its renewable gas expenditure?

12. In considering the emissions reductions outcomes from ATCO's renewable gas proposals, what factors are relevant to the ERA in understanding the net reduction to emissions?

13. Are the underlying long-term assumptions used for ATCO's scenario analysis appropriate? If not, which assumptions are more relevant?

14. Which of ATCO's "future of gas" scenarios is more probable than others and why?

15. Should ATCO be able to receive some accelerated depreciation during AA6 and for what reasons?

16. In an environment of uncertainty and with a plausible scenario that utilises the distribution gas pipeline less in the future, does the current straight-line depreciation schedule still provide a reasonable opportunity for ATCO to recover costs?

17. In an environment of possible reducing gas volumes, does the accelerated depreciation proposal promote intergenerational equity as advanced by ATCO?

18. Is targeting a stable long-term levelised price per gigajoule over the life of the pipeline in the long-term interest of consumers?

19. How should the outcomes of the "future of gas" scenarios be interpreted where customer numbers and gas demand are increasing instead of declining? Should accelerated depreciation be provided in such scenarios?

20. With increasing uncertainty, should the economic lives of ATCO's assets remain unchanged? Is it sufficient to adjust the depreciation schedule to account for uncertainty? Should the economic lives for new assets be different to existing assets?

21. Given the multiple plausible "future of gas" scenarios with varying outcomes, what method could be used to determine an amount for accelerated depreciation? For example, taking the scenario with the highest accelerated depreciation, averaging all scenarios, or taking the mid-point between selected scenarios.

22. Should the level of the proposed tariff increase excluding accelerated depreciation affect the ERA's consideration of accelerated depreciation?

23. What are stakeholder views on ATCO's proposed AA6 price path, including the impact of the proposed step change on price stability over the AA6 period?

24. Noting ATCO's proposed $78 increase to the annual average distribution network bill for the average residential (B3) customer, is the magnitude of the increase a concern to retailers and residential customers? Do other (larger) customers have concerns on the magnitude of tariff increases for them?

Appendix 5 Regulatory framework and timeframes

Regulatory framework

The National Gas Law (NGL) and National Gas Rules (NGR), as enacted by the *National Gas (South Australia) Act 2008*, establish the legislative framework for the independent regulation of certain gas pipelines in Australia.[96] The *National Gas Access (WA) Act 2009* implements the NGL and NGR in Western Australia.[97]

The legislative framework for the regulation of gas pipelines includes a central objective, being the national gas objective, which is:

> … 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.[98]

Under the legislative framework, the ERA is responsible for regulating third party access to gas pipelines in Western Australia. ATCO's gas distribution pipeline is one of three regulated pipelines that require an access arrangement to be approved by the ERA under the legislative framework.[99]

An access arrangement provides details of the terms and conditions, including prices, for the provision of pipeline services to a third party to transport and/or receive gas. Once approved, the access arrangement may serve as a benchmark for negotiating access to pipeline services that are offered by means of the regulated pipeline.

As the service provider, ATCO is responsible for developing and proposing a relevant access arrangement for its distribution pipeline. As the regulator, the ERA is responsible for assessing the proposed access arrangement against the legislative requirements set out in the NGL and NGR and approving a compliant access arrangement.

In addition to the NGL and NGR, the ERA considers the legislative requirements set out in the *National Gas Access (WA) (Local Provisions) Regulations 2009* that apply to distribution pipelines in Western Australia. These Regulations provide for the ERA to consider the impact of tariffs on small use customers and retailers when assessing ATCO's proposed access arrangement.[100]

Access arrangement requirements

The NGR sets out the required content for an access arrangement proposal, including additional requirements relating to the calculation of depreciation and revenue equalisation.[101] These requirements are summarised in Figure 8.

---

96 Extracts of the NGR that are referenced in this document are provided in Appendix 5 for information.

97 The NGL as implemented in Western Australia is set out as a note in the *National Gas Access (WA) Act 2009*. This note does not form part of the Act but shows the text that applies as the *National Gas Access (Western Australia) Law*. In this paper, references to the "NGL" are references to the Western Australian National Gas Access Law text, unless otherwise specified.

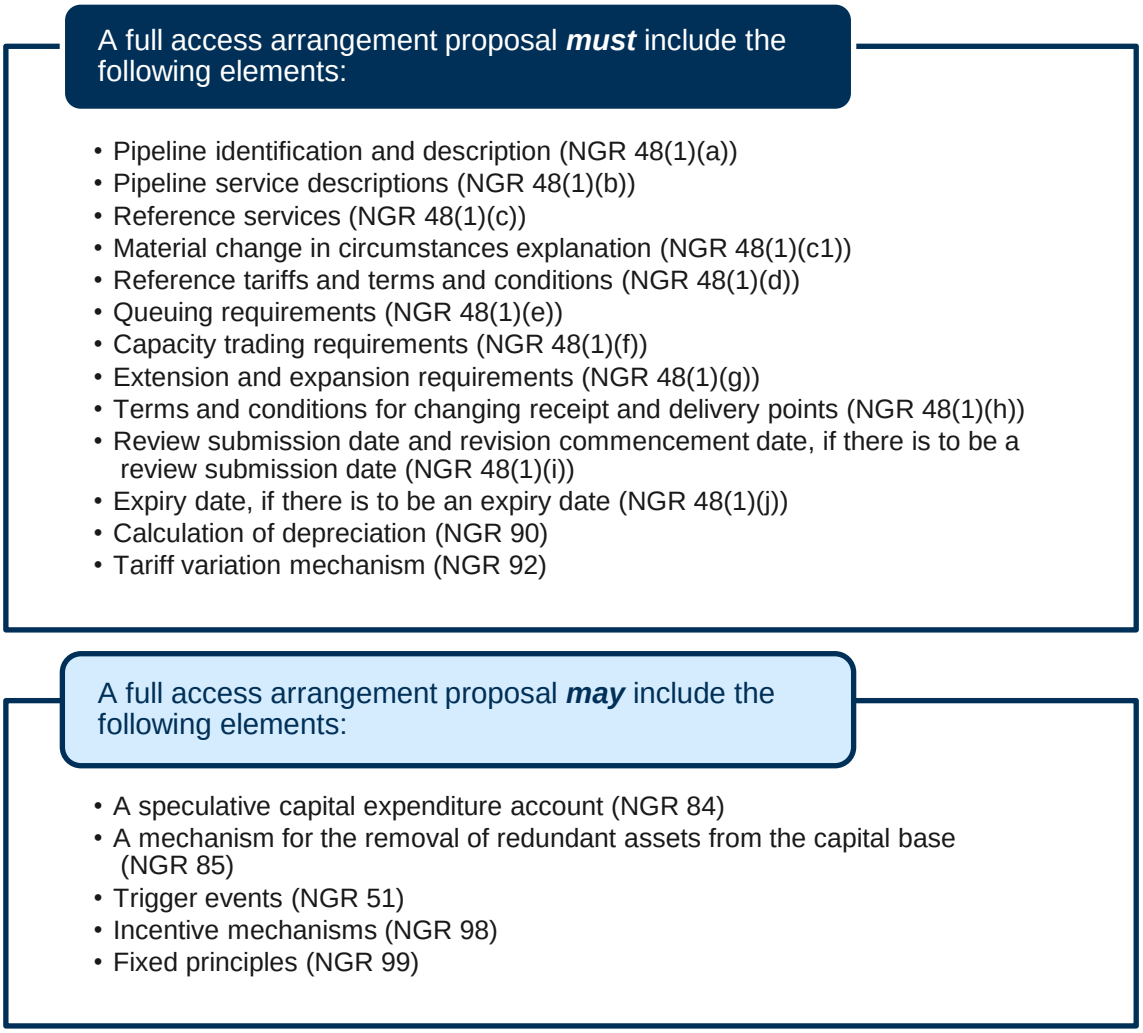
98 NGL, section 23.

99 The other pipelines which require an approved access arrangement in Western Australia are the Dampier to Bunbury Natural Gas Pipeline and the Goldfields Gas Pipeline, which are both transmission pipelines.

100 *National Gas Access (WA) (Local Provisions) Regulations 2009*, regulation 7.

101 NGR, rules 48, 90 and 92.

Figure 8: Required content of an access arrangement proposal



Source: ERA, Gas Access Arrangement Guideline, 25 July 2022, Figure 12.

Access arrangement information (AAI) must accompany the access arrangement proposal, along with any other documentation that the service provider chooses to submit to support its proposal. AAI is information that is reasonably necessary for users and prospective users to understand the background to the proposal and the basis and derivation of its various elements.[102] There are specific requirements for AAI relevant to price and revenue regulation,[103] which are summarised in Figure 9.

The NGR also provides for the following general requirements for all financial information:[104]

- All financial information must be provided on a nominal or real basis, or some other recognised basis for dealing with the effects of inflation.
- All information in the nature of a forecast or estimate must be supported with a statement explaining it. A forecast or estimate must be arrived at on a reasonable basis and must represent the best forecast or estimate possible.

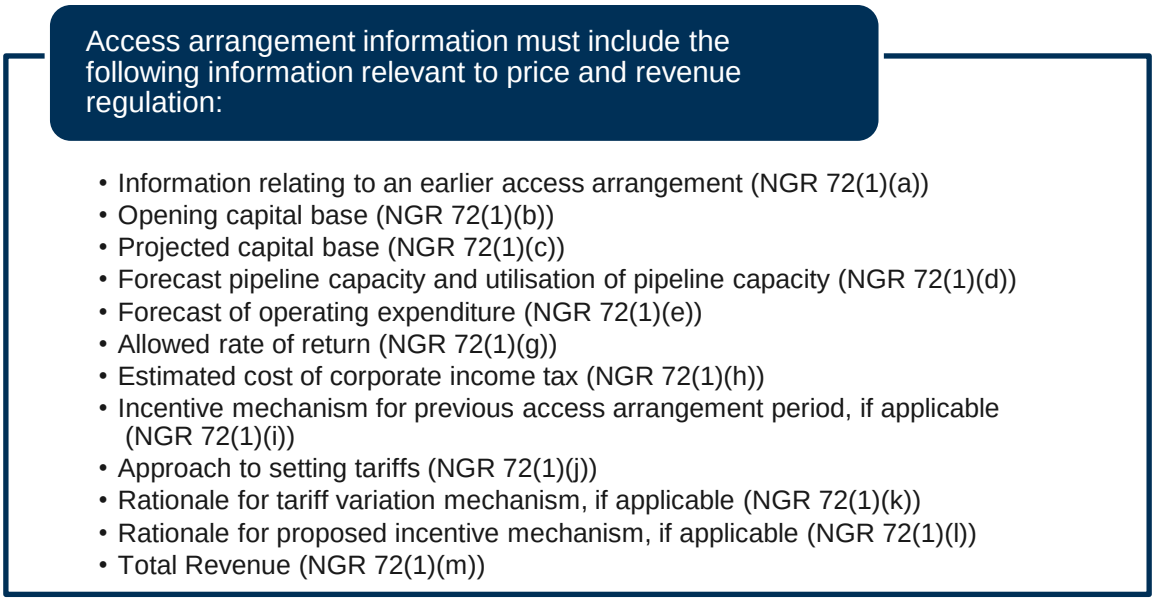
102 NGR, rule 48.

103 NGR, rule 72.

104 NGR, rules 73, 74, 75, respectively.

- Information that is of the nature of an extrapolation or inference must be supported by the primary information on which the extrapolation or inference is based.

Figure 9: Requirements for access arrangement information relevant to price and revenue regulation



Source: ERA, Gas Access Arrangement Guideline, 25 July 2022, Figure 13.

Review process and timeframes

There are two key stages involved in the assessment process for an access arrangement:

- Stage A: Reference service proposal submission and assessment.
- Stage B: Access arrangement proposal submission and assessment.

Reference service proposal

The NGR requires the service provider to submit a reference service proposal to the ERA 12 months before submitting an access arrangement proposal.[105] The reference service proposal is focused on identifying the full range of pipeline services that can be offered by means of the pipeline and determining which of these services should be specified as a reference service under the access arrangement.

A "reference service" is a pipeline service that has a reference tariff that is set (approved) by the regulator under the access arrangement framework, with the reference tariff being the price that a pipeline operator can charge its customers.

[105] NGR, rule 47A(3).

On 14 November 2022, the ERA approved the reference services set out in ATCO's reference service proposal.[106] The ERA's decision and all related documents are published on the ERA website.

In its access arrangement proposal, ATCO has now set out its proposed terms, conditions and prices for the approved reference services, along with proposed revisions to other access arrangement provisions.[107]

Access arrangement proposal and timeframes

On 1 September 2023, ATCO submitted its access arrangement proposal for the next access arrangement period, 1 January 2025 to 31 December 2029 (AA6). The ERA will assess the proposal in accordance with the provisions of the gas regulatory framework.

In most cases, individual processes within the review are subject to legislated timeframes. These timeframes may change over the course of the review, to the extent the legislation allows, depending on the circumstances at the time.

The ERA undertakes public consultation as part of its decision-making process when assessing ATCO's access arrangement proposal. The ERA will conduct two rounds of consultation and invite written submissions from interested parties:[108]

- First round consultation: after receipt and publication of ATCO's proposal, with the submission period being at least 20 business days.
- Second round consultation: after publication of the ERA's draft decision, with the submission period comprising two separate sub-periods:
  - A period (the "revision period") for ATCO to submit a revised proposal in response to the draft decision, which must be at least 30 business days.
  - A period for interested parties to make submissions on the ERA's draft decision and ATCO's revised access arrangement proposal, which must be at least 20 business days after the revision period.

Further to the specified consultation processes to facilitate written submissions, the NGR provides for a hearing (public forum) on the ERA's draft decision to be held.[109] The ERA may choose to hold a hearing on its own initiative, or in response to an interested party making a request for one. Under the NGR's provisions, the ERA can decline a request for a hearing if it has reasons to do so.[110]

While not required under the legislative framework, the ERA generally publishes an issues paper to facilitate stakeholder engagement during the early stages of an access arrangement

---

106 ERA, *Reference service proposal decision – Proposed reference services for the Mid-West and South-West Gas Distribution Systems submitted by ATCO Gas Australia*, 14 November 2022 (online) (accessed October 2023).

107 Rules 48(1)(c) and (c1) of the NGR allow ATCO to specify different reference services in its access arrangement proposal if there has been a material change in circumstances since the ERA's reference service proposal decision.

108 NGR, rules 58 and 59.

109 NGR, rule 61.

110 A request for a hearing must be made in accordance with rule 61(2). The ERA may refuse the request for a hearing if it has reasons to do so and subject to it providing written reasons to the applicant in accordance with rule 61(3).

review. An issues paper (such as this paper) aims to highlight the key areas of interest, with comments being sought on specific matters.

Table 11 sets out the timeframe for the review of ATCO's access arrangement proposal, including indicative dates for future stages.

Table 11: Timeframes for the review of ATCO's access arrangement proposal

Review process stage	Legislated timeframe [Note1]	Actual date (Indicative date)
Stage A: Reference service proposal (completed)		
ATCO reference service proposal submitted to ERA	12 months prior to the review submission date for the access arrangement	1 September 2022
Public consultation on ATCO's proposal	A period of at least 15 business days	15 September to 10 October 2022
ERA reference service proposal decision published	No later than 6 months prior to the review submission date for the access arrangement	14 November 2022
Stage B: Access arrangement proposal (in progress)		
ATCO access arrangement proposal submitted to ERA	By the review submission date in the current access arrangement	1 September 2023
Initiating notice published by ERA to notify of ATCO's proposal	As soon as practicable after receipt of proposal (a delay of up to 30 business days is allowed if the ERA finds the proposal to be deficient and requires ATCO to correct the deficiency)	18 September 2023
Public consultation (1st round) on ATCO's proposal	A period of least 20 business days after publication of initiating notice	18 September to 27 November 2023
ERA issues paper published	Not applicable	24 October 2023
ERA draft decision published	No legislated timeframe	(April/May 2024)
Hearing about the ERA draft decision (if, requested by a person and/or provided by ERA)	If a hearing is to be requested by a person, the request must be made within 10 business days after the publication of the draft decision	To be advised if requested/provided
Revision period for ATCO to submit a revised proposal in response to the ERA draft decision	A period of at least 30 business days after publication of the draft decision	(May/June 2024)
Public consultation (2nd round) on ERA draft decision and ATCO's revised proposal	A period of at least 20 business days from the end of ATCO's revision period	(July 2024)

Review process stage	Legislated timeframe [Note1]	Actual date (Indicative date)
ERA final decision published	Within 8 months from the receipt of ATCO's access arrangement proposal, with an extension of up to an additional 2 months (i.e. 10 months in total)	(November 2024)
Access arrangement start date	Date specified in the final decision (or otherwise 10 business days after the date of the final decision)	(1 January 2025)

Note 1: When calculating time elapsed the NGR provides that certain time periods ('stop-the-clock' periods) can be disregarded (see rule 11).

Appendix 6 Summary of ATCO's proposal

ATCO's proposed revisions to the access arrangement for the Mid-West and South-West GDS are detailed in its *2025-29 Plan* (also referred to as ATCO's Access Arrangement Information or AAI).[111] Subject to the ERA's approval, the proposed revisions will apply for the sixth access arrangement period: 1 January 2025 to 31 December 2029 (AA6).

ATCO summarised the main highlights of its proposal as follows.

> **2025-29 Plan Highlights**
>
> - Our Haulage reference services remain unchanged from AA5 and are proposed as reference services for AA6. Our AA6 Ancillary reference services will remain mostly unchanged, with the addition of the previous non-reference service, 'Permanent disconnection' (referred to as 'Cut and cap service pipe at the main' in our Reference Services Proposal).
> - Our average customer base is forecast to grow at 1.1% pa. with consumption per customer forecast to decline, resulting in overall forecast consumption decreasing at 0.8% pa. during AA6.
> - [We have] selected 11 key performance indicators (KPIs) that align with our strategic pillars of safety, reliability, affordability, and sustainability.
> - Our AA6 operational expenditure (opex) forecast is $456 million, compared to the ERA's AA5 Final Decision of $379 million. The increase from AA5 is primarily due to a shift in how information technology (IT) expenditure is accounted for, a greater focus on sustainability initiatives, and our new 'Permanent Disconnection' service.
> - We are proposing to invest $466 million of capital over AA6, which is $16.7 million (3.5%) below the ERA's AA5 Final Decision of $483 million. Major programs include network expansion, mains replacement, meter replacement, and sustainability initiatives.
> - We have an important responsibility to address the risks of uncertainty that are part of the energy transition. We also need to take action to reasonably future-proof the gas network and ensure that it is a competitive and sustainable part of a low-emissions energy system for generations to come. This is a long-term evolution to support the wider decarbonisation effort. In AA6, we are proposing a modest amount of accelerated depreciation of $80M (or 5% of the [regulatory asset base]) of our long lived assets. This approach is designed to smooth the intergenerational impact of a transition from a traditional natural gas-based network to a renewable gas-ready network of the future and ensures consideration of the gas network as a cost-effective energy provider into the future.[112]

Customer engagement

To develop its proposal, ATCO undertook an engagement program with a range of stakeholders. Stakeholders included: residential customers; large commercial and industrial customers; builders and developers; peak bodies; and gas retailers.

---

111 ATCO, *2025-29 Plan*, 1 September 2023 (online) (accessed October 2023).
ATCO's 2025-29 Plan is also referred to as ATCO's Access Arrangement Information (AAI), which together with the Access Arrangement document make up its access arrangement revision proposal.

112 ATCO, *2025-29 Plan*, 1 September 2023, pp. xi-xii.

ATCO's engagement program covered multiple stages, including the release of a draft plan for consultation.[113] See Chapter 4 (pages 28 to 44) of ATCO's 2025-29 Plan for detailed information on ATCO's customer and stakeholder engagement.

Customer (stakeholder) engagement is a key area for consideration (see section 2.1 of this paper).

Regulatory framework and future of gas

ATCO has noted prospective amendments to the regulatory framework for gas. Its AA6 proposal has been prepared assuming that the following amendments will be adopted in Western Australia before the ERA makes its final decision:[114]

- The final package of gas pipeline regulatory amendments, which are in effect elsewhere in Australia, will be incorporated into the Western Australian regulatory framework.
- The extension of the regulatory framework to include renewable gases, including hydrogen, synthetic methane and biomethane (and blends of these gases).
- The incorporation of an emissions reduction objective into the national gas objective.

Changes to the regulatory framework for gas is a key area for consideration (see section 2.2 of this paper).

ATCO has also considered the effects of Australia's commitment to reduce emissions and the impact this will have on Australian gas networks. ATCO believes "the gas network will have an essential and continuing role in supporting the future energy transition, be it with natural gas, biomethane, hydrogen, or other renewable gases".[115]

To develop and refine its investment forecasts for AA6, ATCO considered four future scenarios for the Western Australian energy sector: "hydrogen future", "electricity dominates", "energy hybrid", and "gas retained".[116]

See Chapter 3 (pages 16 to 27) of ATCO's 2025-29 Plan for detailed information on ATCO's considerations of the future role of gas.

Investment in renewable gases is a key area for consideration (see section 2.6 of this paper).

113 ATCO, *2025-29 Draft Plan*, 18 April 2023.

114 ATCO, *2025-29 Plan*, 1 September 2023, pp. 14-15.

115 ATCO, *2025-29 Plan*, 1 September 2023, p. xi.

116 ATCO, *2025-29 Plan*, 1 September 2023, p. 23.

AA6 Tariffs

ATCO has retained its existing tariff classes for AA6. ATCO's tariff structures also remain largely unchanged, with one amendment to reduce the B3 (residential) tariff structure from three usage bands to two bands.

ATCO has highlighted that increases in the debt and equity risk-free rates has had a material effect on ATCO's proposed tariffs for AA6. ATCO has noted that it has calculated its rate of return in accordance with the ERA's rate of return instrument. In addition, the current inflationary environment has also had a material effect on ATCO's proposed tariffs for AA6.

ATCO has calculated a $78 tariff increase for an average residential "B3" customer (with average consumption):

> For an average residential (B3) customer, the average annual distribution charge will increase by $78 between 2024 and 2025 ($1.50 per week). If retailers fully pass on this increase, this represents an increase of 12% on an annual retail gas bill at the gazetted retail price. The effects of inflation and the regulatory rate of return represent around 63% of the proposed increase.[117]

See Chapter 12 (pages 213 to 215) of ATCO's 2025-29 Plan for detailed information on the rate of return, and Chapter 16 (pages 226 to 241) for detailed information on ATCO's reference tariffs.

Revenue and price paths are key areas for consideration (see section 2.9 of this paper).

Past expenditure performance

ATCO has detailed its operating and capital expenditures for the current (AA5) access arrangement period (1 January 2020 to 31 December 2024) in Chapter 5 of its 2025-29 Plan (pages 45 to 74). A summary of these expenditures is provided as follows.

Operating expenditure

ATCO's forecast of total operating expenditure for AA5 is $355.9 million, which is $22.0 million less than the $377.9 million approved in the ERA's final decision for AA5 (Table 12). ATCO has provided explanations for the expenditure variances for each category of operating expenditure in its proposal.[118]

[117] ATCO, *2025-29 Plan*, 1 September 2023, p. xii.

[118] ATCO, *2025-29 Plan*, 1 September 2023, section 5.6, pp. 50-54.

Table 12: ATCO AA5 operating expenditure by category ($million real as at 31 Dec 2023)

Category	2020	2021	2022	2023 (forecast)	2024 (forecast)	Total AA5		
						Actual	ERA approved	% variance
Network	32.2	35.5	36.3	35.6	35.2	174.7	197.7	-12%
Corporate	20.1	19.2	24.6	25.3	24.2	113.5	92.8	22%
Information Technology	7.8	8.8	4.7	5.7	4.8	31.9	41.7	-24%
Unaccounted for Gas (UAFG)	2.7	3.8	3.3	4.2	4.1	18.1	25.8	-30%
Ancillary Services	1.6	0.9	0.9	0.8	0.8	5.1	19.9	-75%
[redacted]								
Total	**64.4**	**76.0**	**74.7**	**71.2**	**69.0**	**355.9**	**377.9**	**-6%**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 5.4.

Capital expenditure

ATCO's forecast of total capital expenditure for AA5 is $413.7 million, which is $68.8 million less than the $482.5 million approved in the ERA's final decision for AA5 (Table 13). ATCO has provided explanations for the expenditure variances (by cost driver) in its proposal.[119]

In summary, ATCO has largely attributed the lower than forecast expenditure amount to the COVID-19 pandemic and industry resource constraints. Despite this, ATCO said it delivered on the investment programs necessary to maintain the safe and efficient operation of its network and facilitate growth.

ATCO further submitted that all its AA5 capital expenditure satisfies the criteria set out in the NGR (rule 79) to be assessed as conforming capital expenditure.

[119] ATCO, *2025-29 Plan*, 1 September 2023, section 5.7, pp. 54-74.

Table 13: ATCO AA5 capital expenditure by cost driver ($million real as at 31 Dec 2023)

Cost driver	2020	2021	2022	2023 (forecast)	2024 (forecast)	Total AA5		
						Actual	ERA approved	% variance
Network Sustaining	**37.7**	**41.9**	**43.7**	**42.7**	**48.4**	**214.4**	**242.6**	**-12%**
Asset replacement	32.3	37.9	38.9	38.5	41.7	189.3	222.2	-15%
Asset performance & safety	5.4	4.0	4.9	4.1	6.7	25.1	20.4	23%
Network Growth	**26.5**	**30.1**	**30.2**	**29.1**	**27.1**	**143.0**	**171.5**	**-17%**
Customer initiated	26.4	28.8	30.2	29.1	27.1	141.5	169.6	-17%
Demand related	0.2	1.3	0.0	0.0	0.0	1.5	1.9	-22%
Information Technology	**2.9**	**8.2**	**7.6**	**9.5**	**6.4**	**34.6**	**41.0**	**-15%**
Structures and Equipment	**4.8**	**3.8**	**3.4**	**3.5**	**6.0**	**21.6**	**27.4**	**-21%**
Equity Raising Costs	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0%**
Total	**71.9**	**84.0**	**85.0**	**84.7**	**88.0**	**413.7**	**482.5**	**-14%**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 5.5.

Pipeline services

ATCO's proposed reference services for AA6 are materially consistent with the ERA's final decision on ATCO's reference service proposal.[120]

ATCO's reference services for AA6 are summarised in Table 14. The reference services are grouped into two categories:

- **Haulage Reference Services:** For the transportation of gas to residential, commercial, and industrial customers. Haulage reference services are used by all users of the GDS, and all gas delivered through our network is delivered under these services. These services cover the full range of activities involved in receiving, transporting, and delivering gas to our customers.
- **Ancillary Reference Services:** Non-haulage pipeline services that are predominantly used by retailers in conjunction with providing a haulage service.[121]

Detailed descriptions for each reference service are set out in Chapter 6 of ATCO's 2025-29 Plan (pages 76 to 82).

120 ATCO has amended the names of some reference services.

121 ATCO, *2025-29 Plan*, 1 September 2023, p. 76.

Table 14: ATCO reference services for AA6

Reference service	Summary of service
Haulage reference services	
A1	Service to deliver gas to major industrial customers using 35 TJ or more of gas per year, at high or medium pressures.
A2	Service to deliver gas to large customers using between 10 TJ or more but less than 35 TJ of gas per year, at high or medium pressures.
B1	Service to deliver gas to medium sized customers using less than 10 TJ of gas per year, at high or medium pressures.
B2	Service to deliver gas to small-use customers with a standard meter with capacity from 12m^3/h to less than 18 m^3/h, typically commercial or large residential, supplied at medium or low pressures.
B3	Service to deliver gas to small-use customers with a standard meter capacity less than 12m^3/h, typically residential or small business customers, supplied at medium or low pressures.
Ancillary reference services	
Disconnection services for retailer credit control	
Applying a Meter Lock	Service to attach a lock to the valve that comprises part of the standard delivery facilities to prevent gas from being received at the delivery point. Available at delivery points receiving the B2 or B3 haulage service.
Disconnecting a Delivery Point[122]	Service to physically disconnect a delivery point to prevent gas from being delivered to the delivery point. Available at delivery points receiving the B2 or B3 haulage service.
Reconnection services for retailer credit control	
Removing a Meter Lock	Service to remove the lock that was applied to a valve comprising part of the standard delivery facilities to prevent gas from being received at the delivery point. Available at delivery points receiving the B2 or B3 haulage service.
Reconnecting a Delivery Point[123]	Service to reconnect a delivery point to allow gas to be delivered to the delivery point. Available at delivery points receiving the B2 or B3 haulage service.

122 Previously called the “Remove Regulator” service in ATCO’s reference service proposal.

123 Previously called the “Re-install Regulator” service in ATCO’s reference service proposal.

Reference service	Summary of service
Disconnection services	
Deregistering a Delivery Point (or "Deregistration")	Service to permanently deregister a delivery point by: i) removing the delivery point (as per the Retail Market Procedures); ii) removing the delivery point from the Delivery Point Register; and iii) for delivery points receiving the B2 or B3 haulage service, removing the meter (where considered necessary). For delivery points receiving the A1, A2 or B1 haulage service, removal of the meter set is a separate non-reference service ("Remove meter set and make safe service").
Permanent Disconnection[124]	Service for end users and property owners (including authorised representatives), to permanently disconnect a property from the gas network, by cutting and capping the service pipe at the main, under standard site conditions. Service only available where there is no meter at the property, or for delivery points that previously received the B2 or B3 haulage service and have also sought the "Deregistering a delivery point" service.
Meter reading services	
Special Read	Service to request a special read on a basic gas meter. Available at delivery points receiving the B1, B2 or B3 haulage service.

Demand forecast

ATCO's demand forecast is set out in Chapter 7 of its 2025-29 Plan (pages 83 to 94). For AA6, the number of customers is forecast to grow at 1.1 per cent per annum. Consumption per customer is forecast to decline, with overall forecast consumption decreasing at 0.8 per cent per annum.[125]

The demand forecasts shown in Table 15 relate to ATCO's haulage reference services. ATCO's demand forecasts for ancillary reference services are shown in Table 16. ATCO submitted that "ancillary services across all categories relate mainly to B3 customers, and as a result, the forecast level of ancillary services is correlated to the forecast growth in B3 customers".[126]

Demand forecasting is a key area for consideration (see section 2.3 of this paper).

[124] Previously called the "Cut and Cap Service Pipe at the Main" service in ATCO's reference service proposal.

[125] ATCO, *2025-29 Plan*, 1 September 2023, p. 83.

[126] ATCO, *2025-29 Plan*, 1 September 2023, p. 92.

Table 15: ATCO AA6 demand forecast for haulage reference services

Tariff class	2024	2025	2026	2027	2028	2029	CAGR*
A1 Tariff							
Average customer base	76	76	76	76	76	76	0.00%
Demand (TJ)	15,048	15,221	14,973	14,950	14,884	14,841	-0.28%
A2 Tariff							
Average customer base	105	105	105	105	105	105	0.10%
Demand (TJ)	1,912	1,933	1,920	1,916	1,911	1,906	-0.06%
B1 Tariff							
Average customer base	2,055	2,114	2,175	2,238	2,303	2,370	2.90%
Demand (TJ)	2,070	2,050	2,030	2,010	1,990	1,971	-0.97%
B2 Tariff							
Average customer base	12,899	13,145	13,395	13,649	13,909	14,173	1.90%
Demand (TJ)	1,277	1,273	1,269	1,265	1,261	1,258	-0.30%
B3 Tariff							
Average customer base	779,503	786,470	794,293	803,215	812,819	822,736	1.09%
Demand (TJ)	9,787	9,575	9,389	9,220	9,070	8,937	-1.76%
Totals							
Average customer base (number)	**794,637**	**801,909**	**810,043**	**819,283**	**829,211**	**839,460**	**1.10%**
Demand (TJ)	**30,094**	**30,062**	**29,589**	**29,367**	**29,112**	**28,915**	**-0.80%**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 7.6.

*Note: *Compound Annual Growth Rate (CAGR)*

Table 16: ATCO AA6 demand forecast for ancillary reference services

Ancillary service	2024	2025	2026	2027	2028	2029	CAGR*
Applying a meter lock	6,024	8,651	8,737	8,835	8,941	9,050	8.50%
Removing a meter lock	5,457	8,454	8,544	8,645	8,750	8,857	10.20%
Deregistering a delivery point	3,477	3,508	3,543	3,582	3,625	3,669	1.10%
Disconnecting a delivery point	2,423	3,696	3,733	3,775	3,820	3,867	9.80%
Reconnecting a delivery point	1,678	3,067	3,098	3,133	3,170	3,209	13.80%
Permanent disconnection	1,379	1,671	2,047	2,120	2,180	2,217	5.80%
Special meter read	101,335	102,241	103,258	104,418	105,666	106,956	1.10%

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 7.7.

*Note: *Compound Annual Growth Rate (CAGR)*

Demand forecast method

ATCO engaged Core Energy Group (CORE) to provide an expert gas demand forecast for AA6. In relation to this demand forecast, ATCO submitted:

> The gas demand forecast was developed consistent with AA5 methodology adjusting for the ERA's comments, changes in circumstances, including the impact of COVID-19 and the changing Government policy stance regarding [greenhouse gas] emissions, including future gas use. The gas demand forecast has been developed using regression models that forecast the number of connections by tariff class (A1 to B3) and determine the expected average consumption per connection in each tariff class. The A1 and A2 …
>
> Our forecast is based on actual data up to and including 2022. In relation to gas demand forecasting, 2020 and 2021 were not typical years for demand, primarily due to the impacts of COVID-19 that affected commercial and residential consumption. The COVID-19 years (2020-2021) have been excluded from our historical data set in developing our gas demand forecast.
>
> The CORE forecast method is a transparent approach, including a demand forecast model that examines all factors that could affect normalised demand. CORE took reasonable steps to ensure the approach to deriving the demand forecast complies with Part 9, Division 2 of the NGR.
>
> We have continued to normalise the effect of weather on demand using an Effective Degree Day (EDD) method as adopted in AA5. The EDD method results in historical demand being 'normalised', making it comparable to forecast demand, which assumes no weather impact. The EDD method …[127]

[127] ATCO, *2025-29 Plan*, 1 September 2023, pp. 85-86.

A detailed description of the demand forecast method is provided in CORE's *Gas Demand Forecast* report.[128]

Forecast expenditure

ATCO has detailed its forecast operating and capital expenditures for AA6 in Chapter 9 (pages 108 to 139) and Chapter 10 (pages 140 to 202) of its 2025-29 Plan, respectively. A summary of these forecast expenditures is provided as follows.

Forecast operating expenditure

ATCO has forecast $455.9 million of operating expenditure for AA6, which is $78 million higher than the $378 million that was approved in the ERA's final decision for AA5 (Table 17).

Table 17: ATCO AA6 forecast operating expenditure by category ($million real as at 31 December 2023)

Opex category	2025	2026	2027	2028	2029	Total
Network / Corporate / IT	74.1	84.4	85.3	77.5	76.8	398.1
Unaccounted for gas	5.8	5.8	6.1	6.2	6.8	30.8
Ancillary	4.9	5.4	5.5	5.6	5.7	27.1
Total	**84.8**	**95.6**	**96.9**	**89.3**	**89.3**	**455.9**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 9.1.

ATCO submitted that it "developed its operating forecasts on a reasonable basis, based on the best available information" using either a base-step-trend (BST) or specific forecast method (Table 18).

- The BST method, which involves establishing an efficient base year to which adjustments are made to account for step-changes in recurrent and non-recurrent (one-off) expenditure, and changes in output growth and cost inputs.
- Specific forecasts use volume-based activities multiplied by a unit rate to calculate total annual expenditure. ATCO has applied specific forecasts to 'unaccounted for gas' (UAFG) and 'ancillary services' as it considers that this method represents a better and more reasonable forecast than the BST method for these two categories of operating expenditure.

[128] ATCO, *2025-29 Plan - Attachment 07.001: Core Energy – Gas Demand Forecast*, 1 September 2023 (online) (accessed October 2023).

Table 18: ATCO AA6 forecast operating expenditure ($million real as at 31 December 2023)

Forecast opex	2025	2026	2027	2028	2029	Total
Base year opex	62.5	62.5	62.5	62.5	62.5	312.6
Step changes	9.0	18.1	18.0	9.6	7.9	62.6
Input cost escalation	1.4	2.1	2.7	2.9	3.3	12.4
Output growth escalation	1.2	1.6	2.1	2.5	3.1	10.4
Unaccounted for gas	5.8	5.8	6.1	6.2	6.8	30.8
Ancillary services	4.9	5.4	5.5	5.6	5.7	27.1
Total	**84.8**	**95.6**	**96.9**	**89.3**	**89.3**	**455.9**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 9.2.

Forecast capital expenditure

ATCO has proposed to invest $465.8 million of capital expenditure during AA6, which is $16.7 million less than the $482.5 million approved in the ERA's final decision for AA5, and $52.8 million higher than ATCO's projected actual capital expenditure for AA5 (Table 19).

Table 19: ATCO AA6 forecast capital expenditure by investment driver ($million real as at 31 December 2023)

Category	2025	2026	2027	2028	2029	Total
Network Sustaining	**58.2**	**53.1**	**55.3**	**52.7**	**52.2**	**271.6**
Asset Replacement	45.1	41.9	43.7	42.0	41.3	214.0
Asset Performance and Safety	13.1	11.2	11.7	10.7	10.9	57.6
Network Growth	**27.3**	**30.2**	**32.2**	**33.5**	**34.2**	**157.4**
Customer Initiated	27.3	30.2	32.2	33.5	34.2	157.4
Demand Related	-	-	-	-	-	-
Information Technology	**4.0**	**3.7**	**2.7**	**1.9**	**0.7**	**13.0**
Structures and Equipment	**6.3**	**6.9**	**2.8**	**3.8**	**4.2**	**23.9**
Total	**95.8**	**93.8**	**93.0**	**91.9**	**91.3**	**465.8**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 10.1.

Major capital programs of work include network expansion, mains replacement, meter replacement, and sustainability initiatives. In support of its AA6 capital expenditure forecast, ATCO submitted:

> Major contributors to the AA6 [capital expenditure] forecasts are a return to a normal activity level following the COVID-19 pandemic, the addition of our sustainability initiatives, and the increase in the real cost of labour and materials due to constrained global supply chains and competition with the mining sector and state infrastructure projects for resources.[129]

ATCO used a 'bottom-up' forecasting approach to determine its forecasts for each capital expenditure investment driver. ATCO's forecasts are based on available information, except for its forecasts related to the proposed changes to extend the national gas regulatory framework to include hydrogen and renewable gases. ATCO has assumed that these regulatory changes will be enacted in Western Australia before the ERA's final decision is due.[130]

Capital base and total revenue

Opening and projected capital base

ATCO has set out its calculation of the capital base for AA6 in Chapter 11 (pages 203 to 212) of its 2025-29 Plan. ATCO has calculated the opening and projected capital base values for AA6 using the roll forward methods as set out in rules 77 and 78 of the NGR, respectively.

The opening capital base for AA6 (at 1 January 2025) is $1,605.4 million (shown in Table 20 as the closing capital base for 2024).

The projected capital base is shown in Table 21. At the end of AA6 (at 31 December 2029), the capital base will be valued at $1,642.5 million.

In calculating the projected capital base for AA6, ATCO has investigated options to change the depreciation profiles of its gas distribution assets in response to the uncertainties surrounding the future of gas. ATCO has proposed to bring forward $80 million of depreciation to AA6.

In support of its proposal to accelerate some depreciation, ATCO referred to the AER's November 2021 Information Paper that "recognised the uncertainty in the economic lives of gas distribution assets, with [the] preferred response being to use accelerated depreciation to manage the uncertainty".[131]

Accelerated depreciation is a key area for consideration (see section 2.7 of this paper).

[129] ATCO, *2025-29 Plan*, 1 September 2023, p. 141.

[130] ATCO, *2025-29 Plan*, 1 September 2023, p. 140.

[131] ATCO, *2025-29 Plan*, 1 September 2023, p. 207.

Table 20: ATCO AA6 opening capital base ($million real as at 31 December 2023)

	2019	2020	2021	2022	2023	2024
Opening capital base 2019 before adjustment	1,499.2					
Benefit from the difference between the estimated and actual 2019 capex	-1.4					
Opening capital base	1,497.8	1,518.8	1,535.8	1,554.2	1,571.9	1,588.3
Capex (net)	84.6	71.9	84.0	85.0	84.7	88.0
Depreciation	-62.6	-54.3	-65.1	-66.8	-68.3	-71.0
Asset disposals	-1.0	-0.7	-0.6	-0.4	0.0	0.0
Closing capital base	**1,518.8**	**1,535.8**	**1,554.2**	**1,571.9**	**1,588.3**	**1,605.4**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 11.2.

Table 21: ATCO AA6 projected capital base ($million real as at 31 December 2023)

	2025	2026	2027	2028	2029
Opening capital base	1,605.4	1,623.5	1,629.8	1,634.7	1,638.5
Capex (net)	95.8	93.8	93.0	91.9	91.3
Depreciation - straight line	-61.7	-71.5	-72.0	-72.1	-71.3
Depreciation – accelerated	-16.0	-16.0	-16.0	-16.0	-16.0
Asset disposals	0.0	0.0	0.0	0.0	0.0
Closing capital base	**1,623.5**	**1,629.8**	**1,634.7**	**1,638.5**	**1,642.5**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 11.3.

Rate of return, gamma and taxation

ATCO's rate of return calculation for AA6 is detailed in Chapter 12 (pages 213 to 215) of its 2025-29 Plan, with information on gamma (the value of imputation credits) and taxation set out in Chapter 13 (pages 216 to 219).

ATCO has estimated a rate of return of 7.33 per cent (nominal after tax) and noted that the rate of return will be updated using up-to-date market parameters when the ERA makes its final decision. The rate or return must be calculated using the approach set out in the ERA's *2022 Rate of Return Instrument*.[132]

ATCO has estimated its cost of tax over AA6 to be $31.6 million ($ real 2023) using a corporate tax rate of 30 per cent.

[132] ERA, '2022 Gas Rate of Return Instrument' (online) (accessed October 2023).

ATCO has adopted the value of imputation credits (gamma) from the ERA's *2022 Rate of Return Instrument*, being 0.5.

The rate of return and inflation are key factors that affect the calculation of reference tariffs (see section 2.8 of this paper).

Working capital

In determining its total revenue requirement, ATCO includes a return on working capital. Details of ATCO's working capital calculation are provided in Chapter 14 (pages 220 to 222) of its 2025-29 Plan.

ATCO has submitted that while working capital has been calculated in accordance with the method in the ERA's final decision revenue model for AA5, the parameters used in the calculation have been updated to reflect current working capital requirements for AA6.

Total revenue

ATCO's total revenue requirement for AA6 is $1,452 million (nominal), compared to $840 million (nominal) for AA5. ATCO has attributed the required 73 per cent revenue increase to rising inflation, the increased rate of return and accelerated depreciation.

In calculating total revenue requirement, ATCO applied the building block approach on a post-tax basis. The building block components and associated values are shown in Table 22.

Table 22: ATCO total revenue requirement for AA6 ($million nominal)

Building block	2025	2026	2027	2028	2029	Total
Forecast opex	89.9	104.0	108.3	102.4	105.1	509.8
Return of the projected capital base	65.4	77.8	80.5	82.7	84.0	390.4
Less inflationary gain in return on assets	-44.2	-45.8	-47.2	-48.6	-50.1	-235.9
Accelerated depreciation	17.0	17.4	17.9	18.4	18.8	89.4
Return on the projected capital base	121.5	126.1	130.0	133.8	137.7	649.1
Return on working capital	1.7	2.6	3.0	3.1	3.1	13.5
Tax payable	10.8	14.3	14.7	15.2	15.7	70.7
Less value of imputation credits	-5.4	-7.1	-7.4	-7.6	-7.8	-35.4
Total Revenue (unsmoothed)	**256.7**	**289.3**	**299.7**	**299.4**	**306.6**	**1,451.7**

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 15.2.

Reference tariffs

ATCO has provided information about its proposed reference tariffs for AA6 in Chapter 16 (pages 226 to 241) of its 2025-29 Plan, while Chapter 17 (pages 242 to 243) provides information on the proposed reference tariff variation mechanism that will operate to vary the reference tariffs each year during the access arrangement period.

Reference tariffs

ATCO has proposed to retain the current (AA5) gas haulage tariff classes for AA6, as well as the current tariff structures for the A1, A2, B1 and B2 tariffs. The B3 tariff structure will be changed to remove the first tariff band that provides the first 1.825 GJ of gas at no charge. In support of this amendment, ATCO submitted:

> … the benefits of this proposed change include:
>
> - Adopting two, rather than three, bands will make the B3 tariff structure more consistent with retail gas tariff structures.
> - Simplifying the tariff structure will reduce the likelihood of forecasting error.
> - Removing this tariff band reduces the level of other B3 tariff usage bands because our approach has been to ensure that the revenue recovered from B3 tariff charges does not change as a result of adopting two usage bands.
> - At the average AA6 consumption level of 11.5 gigajoules, there is approximately a $5 reduction in the consumer's bill by removing the no charge for the first 1.825 gigajoules.
>
> After conducting a reasonableness check of the fixed costs of providing the B3 service, the B3 standing charge was reduced by $19 ($real 2023) compared to what it would have been had a flat percentage increase similar to other tariff increases been applied. This reduction offsets the additional charges for the first 1.825 GJ.[133]

Network tariff structures are a key area for consideration (see section 2.5 of this paper).

The tariff structures for haulage reference services are comprised of a fixed (standing) charge and usage charge component. ATCO has claimed that "this tariff structure design provides efficient price signals to customers regarding their network usage":

- Usage charges in the second usage band reflect costs placed on the network by additional usage. The lower charges in the second usage band help reduce charges in the peak winter period when daily gas consumption increases. We propose to continue a two-band usage tariff structure that is understood by customers and supported by regulatory precedent in gas distribution networks.
- Fixed charges are set to recover the cost of service not recovered via the usage charges. Using fixed charges recovers this 'residual revenue' and minimises the distortion to price signals.[134]

[133] ATCO, *2025-29 Plan*, 1 September 2023, p. 230.

[134] ATCO, *2025-29 Plan*, 1 September 2023, p. 230.

Additionally, ATCO submitted that:

> The A1 tariff structure (typically industrial customers) also includes demand charges. These demand charges reflect the direct effects that these customers can have on network requirements. The A1 tariffs are based on the 'maximum usage of that customer at any point in time', measured as gigajoules per hour (GJ/h) (capacity-based prices). Demand-based prices encourage a smoother usage profile rather than a 'peaky' profile. Smoother profiles lead to lower network costs and higher network utilisation, as network capacity does not have to meet short-term usage peaks.[135]

For ancillary reference services, ATCO has retained a fixed price structure, with the rates to be charged reflecting the forecast cost of providing the applicable service. ATCO submitted:

> … ancillary services are charged at the same rate to all customers within the relevant tariff classes. Rates charged reflect the costs of providing the service. It is anticipated that the contract with a third-party service provider for special meter read, apply meter lock, and remove meter lock will be re-negotiated before the ERA's Draft Decision. We will use the outcomes of this market process to update our forecast costs and prices for ancillary services in response to the ERA's Draft Decision.[136]

Cost recovery for disconnections is a key area for consideration (see section 2.4 of this paper).

ATCO has detailed the process and considerations to establish the AA6 charging parameters in a separate report: *Tariff Setting Method*.[137] The outcome of ATCO's tariff setting process and considerations results in a step-change in prices on 1 January 2025, followed by annual increases consistent with inflation.

ATCO's indicative prices for its haulage and ancillary reference services over the access arrangement period (2025 to 2029) are shown in Table 23 and Table 24, respectively.

Actual prices charged in each year will most likely be different to these indicative prices due to the operation of the tariff variation mechanism, which allows prices to change due to differences between forecast and actual inflation, an annual update for the cost of debt and cost pass through events.

135 ATCO, *2025-29 Plan*, 1 September 2023, p. 230.

136 ATCO, *2025-29 Plan*, 1 September 2023, p. 231.

137 ATCO, *2025-29 Plan – Attachment 16.002: Tariff Setting Method*, 1 September 2023 (online) (accessed October 2023).

Table 23: ATCO proposed haulage reference service tariffs for AA6 ($nominal, ex-GST)

Charging parameter	2025	2026	2027	2028	2029
Reference tariff A1					
Standing charge	56,750.79	58,262.41	59,814.29	61,407.50	63,043.15
Demand charge					
First 10 km	239.19	245.56	252.10	258.82	265.71
Distance > 10 km	125.90	129.25	132.69	136.23	139.86
Usage charge					
First 10 km	0.05059	0.05194	0.05333	0.05475	0.05620
Distance > 10 km	0.02549	0.02617	0.02687	0.02758	0.02832
Reference tariff A2					
Standing charge	31,399.15	32,235.50	33,094.12	33,975.62	34,880.59
First 10 TJ	3.05	3.13	3.22	3.30	3.39
Volume > 10 TJ	1.61	1.65	1.70	1.74	1.79
Reference tariff B1					
Standing charge	1,587.55	1,629.84	1,673.25	1,717.82	1,763.58
First 5 TJ	6.03	6.19	6.36	6.53	6.70
Volume > 5 TJ	5.18	5.32	5.46	5.61	5.76
Reference tariff B2					
Standing charge	427.35	438.73	450.42	462.42	474.73
First 100 GJ	9.51	9.76	10.02	10.29	10.56
Volume > 100 GJ	7.08	7.27	7.46	7.66	7.87
Reference tariff B3					
Standing charge	178.04	182.78	187.65	192.65	197.78
First 9.855 GJ	8.78	9.01	9.25	9.50	9.75
Volume > 9.855 GJ	7.26	7.45	7.65	7.86	8.07

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 16.5.

Table 24: ATCO proposed ancillary reference service tariffs for AA6 ($nominal, ex-GST)

ANCILLARY SERVICE	2025	2026	2027	2028	2029
Applying a meter lock	51.87	53.25	54.67	56.13	57.62
Removing a meter lock	21.38	21.95	22.54	23.14	23.75
Deregistering a delivery point	138.32	142.01	145.79	149.67	153.66
Disconnecting a delivery point	130.52	133.99	137.56	141.23	144.99
Reconnecting a delivery point	180.44	185.24	190.18	195.24	200.44
Permanent disconnection	1,184.80	1,216.36	1,248.76	1,282.02	1,316.17
Special meter reading	10.66	10.94	11.23	11.53	11.84

Source: ATCO, 2025-29 Plan, 1 September 2023, Table 16.7.

Tariff variation mechanism

ATCO will use a weighted average price cap tariff variation mechanism for AA6, which constrains the overall average movement in haulage reference services from one year to the next (as contemplated by rule 97(2)(b) of the NGR). This form of tariff variation mechanism applies to the current (AA5) access arrangement for all tariff classes, except for the B3 standing charge. For AA6, ATCO proposes that the mechanism will apply to all tariff classes and all tariff components, including the B3 standing charge, "which now reflects the fixed cost of the service".[138]

ATCO's price cap tariff variation mechanism allows for the recovery of costs for 'cost pass through events', which are defined events that incur costs that cannot be (and have not been) reasonably forecast; are beyond the control of ATCO; and relate to the provision of reference services. ATCO has proposed to include a new cost pass through event to address the uncertainties surrounding the adoption of legislative changes to the gas regulatory framework in Western Australia. ATCO has summarised the proposed cost pass through events that will apply for AA6 as follows:

- [Higher heating value] and gate point costs related to new gas inflows to the network.
- Any costs relating to a change in law or tax change.
- Any costs associated with a tax or fee imposed under a law related to [greenhouse gas] emissions.
- Any costs incurred as a result of, or in anticipation of, a change in law or the NGR related to [greenhouse gas] emissions or extending the regulatory environment to the transport of gases not currently covered by the NGL.[139]

[138] ATCO, *2025-29 Plan*, 1 September 2023, p. 242.

[139] ATCO, *2025-29 Plan*, 1 September 2023, p. 243.

Terms and conditions

ATCO has made some amendments to the Template Service Agreement (TSA), which specifies the terms and conditions on which ATCO provides haulage reference services. A summary of the proposed amendments is provided in Table 25.

In addition to amending the TSA, ATCO has proposed a new standard agreement (the Permanent Disconnection Agreement) to set out the terms and conditions for the permanent disconnection service, which will be offered as an ancillary reference service and be directly available to end-use customers in AA6. The disconnection agreement seeks to establish the following key terms of service:

- An applicant may only seek the permanent disconnection service where it:
  - is the owner of the relevant property; or has the express written authorisation of the property owner; and
  - the retail account has been closed.
- Any meter located on the property will need to be removed by ATCO either prior to or at the time of ATCO performing the permanent disconnection. Where necessary, ATCO will request authorisation from the retailer for this meter removal service and will charge the retailer for this service (Deregistering a Delivery Point Reference Service).[140]

Chapter 20 (pages 250 to 254) of ATCO's 2025-29 Plan provides reasons for ATCO's amendments to the TSA and further explains the new disconnection agreement. Both the TSA and Permanent Disconnection Agreement form part of the access arrangement (Annexures F[141] and G[142], respectively) and are available on the ERA website.

Table 25: ATCO proposed amendments to the Template Service Agreement

Amendment	Summary of Amendment
Hydrogen and renewable gases updates	Various amendments to facilitate the potential introduction of hydrogen and other gases, including changes to: • Include a new clause 5.8 (Receipt Points for Other Gases) • Amend the defined term "Gas" While these proposed amendments envisage legislative reforms coming into effect in Western Australia, ATCO considers that the TSA remains fit for purpose in the event these reforms do not eventuate.
Changing market conditions	New clause 7.8 (Cyber Security) to impose obligations on each party to ensure its information technology systems have protections, consistent with good industry practice, to guard against unauthorised access and malicious attacks.
Updates to reflect actual operations	Amendments to clause 6.9 (Odorisation) to reflect actual operations (ATCO does not odorise gas nor does it have the facilities to do so).

140 ATCO, *2025-29 Plan*, 1 September 2023, p. 251.

141 ATCO, *Access Arrangement for the Mid-West and South-West Gas Distribution Systems - Annexure F: Template Service Agreement*, 1 September 2023.

142 ATCO, *Access Arrangement for the Mid-West and South-West Gas Distribution Systems - Annexure G: Permanent Disconnection Contract*, 1 September 2023.

Amendment	Summary of Amendment
Security	Amendments to clause 16.2 (Security for performance) to clarify the intent of the provisions, including changes to: • Insert a new clause 16.3 (Security Bond – Specific Provisions) to deal with cash deposits as a form of security. • Insert a new clause 16.4 (PPSA) to deal with obligations under the *Personal Properties Security Act* (under the Act, ATCO is required to register its interest in any cash deposits it holds on the PPSA register).
Other amendments	Other miscellaneous amendments to the TSA include amendments to: • Better define some terms used within the agreement. • Improve drafting and readability. • Explain and/or provide for existing policies and processes.[143]

Other access arrangement provisions

Key performance indicators

While there is no requirement to report on key performance indicators (KPIs), ATCO has included this information in Chapter 8 (pages 95 to 107) of its 2025-29 Plan. ATCO has selected 11 KPIs that align with its four strategic pillars (safety, reliability, affordability, sustainability) to report against. These indicators are the same indicators reported on in AA5, with the addition of a new sustainability indicator to report on carbon emissions.[144]

Incentive mechanisms

The current (AA5) access arrangement does not contain any incentive mechanisms. ATCO has not proposed to include any new incentive mechanisms for AA6 and has provided reasoning for its decision in Chapter 18 (pages 245 and 246) of its 2025-29 Plan.

Fixed principles

Fixed principles provide certainty that specific access arrangement principles will remain the same (fixed) for a set period of time. For AA6, ATCO has proposed to:

- Extend the fixed principles that support the cost pass through mechanism.
- Add a new fixed principle to ensure costs incurred during AA6 to implement emissions reduction strategies and prepare the network for the introduction of other gases (in anticipation of future legislative amendments) will be recoverable.

The proposed fixed principles are set out in Part 11 of the access arrangement, and ATCO has provided reasoning for them in Chapter 19 (pages 247 to 249) of its 2025-29 Plan.

143 ATCO, *2025-29 Plan*, 1 September 2023, pp. 252-254 (section 20.5.5 Other Changes).

144 ATCO, *2025-29 Plan*, 1 September 2023, Table 8.2, pp. 97-98.

Policies and non-tariff components

ATCO has proposed amendments to some policies and non-tariff components of the access arrangement. Details of the proposed amendments are set out in Chapter 21 (pages 255 to 257) of ATCO's 2025-29 Plan.

- Application procedures
  - The application procedure detailed in Part 5 the access arrangement sets out the process to be followed when a prospective user seeks access to a pipeline service and submits an application to ATCO. While ATCO has submitted that the application procedure is unchanged from AA5, ATCO has made various drafting amendments to improve readability.
- Capacity trading requirements
  - The capacity trading requirements detailed in Part 6 of the access arrangement provide for the transfer of capacity to a third party, with the terms and conditions for the transfer of contracted capacity for a reference service set out in clause 14 of the TSA. While Part 6 of the access arrangement is unchanged from AA5, there are some proposed changes to clause 14 of the TSA.
- Extension and expansion requirements
  - The extension and expansion requirements are detailed in Part 7 of the access arrangement. The requirements confirm whether the access arrangement will apply to incremental services to be provided as a result of an extension to, or expansion of the capacity of, the GDS, and deal with the effect on tariffs.
  - The current (AA5) extension and expansion requirements include an annual reporting obligation whereby ATCO must notify the ERA of all pipeline extensions/expansions. ATCO has proposed to remove this reporting obligation from the access arrangement as it expects to include this information as part of the separate annual reporting obligations established under a Regulatory Information Notice.
- Changing receipt and delivery points
  - Provisions for changing receipt and delivery points are set out in Part 8 of the access arrangement, with associated terms and conditions set out in clause 5 of the TSA. While ATCO has submitted that it has not made any changes to the current (AA5) provisions in the access arrangement, it has sought to clarify that new receipt points, or physical gate points, may only be added to the network if there is a legally enforceable interconnection agreement in place between ATCO and the party operating the facilities directly upstream of the receipt or physical gate point.
  - ATCO has also sought to clarify (with new clauses in the TSA) that the process for constructing new delivery points and associated costs will be priced in accordance with applicable laws.
- Supplier curtailment methodology
  - For AA6, ATCO has proposed to include a new supplier curtailment methodology in the access arrangement (Annexure I) on the basis that it will be required once the regulatory framework is amended for renewable gases. The actual circumstances where ATCO may curtail the injection of gas, and the process to be followed, are set out in the TSA (clause 8). These TSA provisions for curtailment remain unchanged from the current (AA5) provisions.

- Review submission and revision commencement dates
  - ATCO has proposed a five year period for AA6: 1 January 2025 to 31 December 2029. The proposed review submission date for the next access arrangement period (AA7) is 1 September 2028, with the expected revision commencement date being 1 January 2030.

A copy of the proposed access arrangement for AA6, showing ATCO's proposed amendments to it (as marked-ups), is available on the ERA website.

Appendix 7 National Gas Rules

The National Gas Law (NGL) and National Gas Rules (NGR) establish the framework for the economic regulation of gas pipelines. In Western Australia, the NGL and NGR are implemented by the *National Gas Access (WA) Act 2009*.

The following extracts of the NGR, as they apply in Western Australia, are provided for information only to assist the reader of this paper.

11 Calculation of time

(1) If the Law fixes a time limit within which a decision maker must make a decision on a proposal, then for the purpose of calculating elapsed time, any of the following periods is, if the decision-maker so decides, to be disregarded:

(a) any period allowed the proponent for correction or revision of the proposal;

(b) any period taken by the proponent or any other person to provide information, relevant to the decision maker's decision on the proposal, in response to a notice or requirement issued or made by the decision maker under the Law;

(c) any period allowed for public submissions on the proposal or on a draft decision on the proposal;

(d) any period allowed for submissions on a proposal by the [ERA] to disclose confidential information, any period then taken by the [ERA] to consider the submissions and decide whether to disclose the information, and any period occupied by a review of the decision;

(e) the period between commencement and conclusion of court proceedings to determine questions arising from the proposal or the decision maker's handling of the proposal.

(2) The decision-maker must:

(a) give notice of a decision under this rule to the proponent; and

(b) publish notice of the decision on its website.

…

47A Reference services

(1) A service provider in respect of a full regulation pipeline must, whenever required to do so under subrule (3), submit to the [ERA] a reference service proposal in respect of a forthcoming full access arrangement proposal that:

(a) identifies the pipeline and includes a reference to a website at which a description of the pipeline can be inspected;

(b) sets out a list of all the pipeline services that the service provider can reasonably provide on the pipeline and a description of those pipeline services having regard to the characteristics in subrule (2);

(c) from the list referred to in subrule (1)(b), identifies at least one of those pipeline services that the service provider proposes to specify as reference services having regard to the reference service factors including any supporting information required by the [ERA]; and

(d) if the service provider has engaged with pipeline users and end users in developing its reference service proposal, describes any feedback

received from those users about which pipeline services should be specified as reference services.

(2) A pipeline service is to be treated as distinct from another pipeline service having regard to the characteristics of different pipeline services, including:

(a) the service type (for example, forward haul, backhaul, connection, park and loan);

(b) the priority of the service relative to other pipeline services of the same type; and

(c) the receipt and delivery points.

(3) A service provider in respect of a full regulation pipeline must submit a reference service proposal to the [ERA]:

(a) no later than 12 months prior to the review submission date for the access arrangement; or

(b) if no access arrangement applies, in accordance with rule 46.

(4) If the [ERA] considers that the reference service proposal does not comply, in any respect, with a requirement of the Rules, the [ERA] may notify the service provider that it requires resubmission of the reference service proposal, and in doing so, must:

(a) state why, and in what respects, the [ERA] considers the reference service proposal to be non-compliant; and

(b) state a date by which the service provider is required to resubmit the amended reference service proposal.

(5) If a service provider fails to submit a reference service proposal where required to do so under these Rules by the date that is 11 months prior to the review submission date, the [ERA] must itself propose a reference service proposal for the relevant pipeline.

(6) As soon as practicable after:

(a) receiving a reference service proposal from the service provider under subrule (3) that the [ERA] does not consider needs resubmission under subrule (4);

(b) receiving the resubmitted reference service proposal under subrule (4); or

(c) proposing a reference service proposal under subrule (5), the [ERA] must publish:

(d) the reference service proposal; and

(e) an invitation for written submissions on the reference service proposal (which must be for a period of at least 15 business days after the publication of the reference service proposal).

(7) Any person may make written submissions to the [ERA] on the reference service proposal, or the issues within the proposal including, without limitation, whether the reference service proposal should specify other services as reference services.

(8) Following receipt of submissions under subrule (7), the [ERA] may, at its discretion, undertake further consultation on the reference service proposal.

(9) No later than 6 months prior to the review submission date for the access arrangement, the [ERA] must make a reference service proposal decision and give a copy of the decision to the service provider and publish its decision, together with its reasons for the decision, on its website.

(10) A reference service proposal decision is a decision to approve, or to refuse to approve, a reference service proposal.

(11) If, in a reference service proposal decision, the [ERA] refuses to approve a reference service proposal the [ERA] must revise the reference service proposal having regard to:

(a) the matters that these rules require a reference service proposal to include; and

(b) the service provider's reference service proposal; and

(c) the [ERA's] reasons for refusing to approve that proposal, and give a copy of the revised reference service proposal to the service provider and publish the revised reference service proposal on its website.

(12) If the [ERA] publishes a revised reference service proposal under subrule (11) it must as soon as practicable after publishing the revised proposal make a reference service proposal decision to give effect to the revised reference service proposal.

(13) In making its reference service proposal decision, the [ERA] must have regard to:

(a) the reference service factors;

(b) submissions made in response to its invitation under subrule (7) (within the time allowed in the invitation);

(c) where applicable, any feedback the service provider has received from pipeline users and end users, as described in accordance with subrule (1)(d); and

(d) any other matters the [ERA] considers relevant.

(14) In deciding whether or not a pipeline service should be specified as a reference service, the [ERA] must have regard to the reference service factors.

(15) The reference service factors are:

(a) actual and forecast demand for the pipeline service and the number of prospective users of the service;

(b) the extent to which the pipeline service is substitutable with another pipeline service to be specified as a reference service;

(c) the feasibility of allocating costs to the pipeline service;

(d) the usefulness of specifying the pipeline service as a reference service in supporting access negotiations and dispute resolution for other pipeline services, such that:

(i) reference services serve as a point of reference from which pipeline services that are not reference services can be assessed by a user or prospective user for the purpose of negotiating access to those other pipeline services;

(ii) a reference tariff serves as a benchmark for the price of pipeline services that are not reference services; and

(iii) reference service terms and conditions serve as a benchmark for the terms and conditions of pipeline services that are not reference services;

(e) the likely regulatory cost for all parties (including the [ERA], users, prospective users and the service provider) in specifying the pipeline service as a reference service.

48 Requirements for full access arrangement (and full access arrangement proposal)

(1) A full access arrangement must:

(a) identify the pipeline to which the access arrangement relates and include a reference to a website at which a description of the pipeline can be inspected; and

(b) describe all of the pipeline services that the service provider can reasonably provide on the pipeline, which must be consistent with the [ERA's] reference service proposal decision under rule 47A, unless there has been a material change in circumstances; and

(c) specify the reference services, which must be consistent with the [ERA's] reference service proposal decision under rule 47A, unless there has been a material change in circumstances; and

(c1) if the information provided under subrules (1)(b) or (1)(c) is different to the [ERA's] reference service proposal decision under rule 47A, describe the material change in circumstances that necessitated the change having regard to the reference service factors; and

(d) specify for each reference service:

(i) the reference tariff; and

(ii) the other terms and conditions on which each reference service will be provided; and

(e) if the access arrangement is to contain queuing requirements – set out the queuing requirements; and

Note:

Queuing requirements are necessary if the access arrangement is for a transmission pipeline but, if the pipeline is a distribution pipeline, queuing requirements are not necessary unless the [ERA] has given prior notification of the need to include queuing requirements (See rule 103).

(f) set out the capacity trading requirements; and

(g) set out the extension and expansion requirements; and

(h) state the terms and conditions for changing receipt and delivery points; and

(i) if there is to be a review submission date – state the review submission date and the revision commencement date; and

Note:

A full access arrangement must contain a review submission date and a revision commencement date unless it is a voluntary access arrangement – See rule 49.

(j) if there is to be an expiry date – state the expiry date.

Note:

A full access arrangement may contain an expiry date if it is a voluntary access arrangement (but not otherwise) – See rule 49.

(2) This rule extends to an access arrangement proposal consisting of a proposed full access arrangement.

…

51 Acceleration of review submission date

(1) The review submission date fixed in an access arrangement advances to an earlier date if:

(a) the access arrangement provides for acceleration of the review submission date on the occurrence of a trigger event; and

(b) the trigger event occurs; and

(c) the review submission date determined, in accordance with the access arrangement, by reference to the trigger event, is earlier than the fixed date.

(2) A trigger event may consist of any significant circumstance or conjunction of circumstances.

Examples:

1 A re-direction of the flow of natural gas through the pipeline.

2 A competing source of natural gas becomes available to customers served by the pipeline.

3 A significant extension, expansion or interconnection occurs.

(3) The [ERA] may require the inclusion in an access arrangement of trigger events and may specify the nature of the trigger events to be included.

…

72 Specific requirements for access arrangement information relevant to price and revenue regulation

(1) The access arrangement information for a full access arrangement proposal (other than an access arrangement variation proposal) must include the following:

(a) if the access arrangement period commences at the end of an earlier access arrangement period:

(i) capital expenditure (by asset class) over the earlier access arrangement period; and

(ii) operating expenditure (by category) over the earlier access arrangement period; and

(iii) usage of the pipeline over the earlier access arrangement period showing:

(A) for a distribution pipeline, minimum, maximum and average demand and, for a transmission pipeline, minimum, maximum and average demand for each receipt or delivery point; and

(B) for a distribution pipeline, customer numbers in total and by tariff class and, for a transmission pipeline, user numbers for each receipt or delivery point;

(b) how the capital base is arrived at and, if the access arrangement period commences at the end of an earlier access arrangement period, a demonstration of how the capital base increased or diminished over the previous access arrangement period;

(c) the projected capital base over the access arrangement period, including:

(i) a forecast of conforming capital expenditure for the period and the basis for the forecast; and

(ii) a forecast of depreciation for the period including a demonstration of how the forecast is derived on the basis of the proposed depreciation method;

(d) to the extent it is practicable to forecast pipeline capacity and utilisation of pipeline capacity over the access arrangement period, a forecast of pipeline capacity and utilisation of pipeline capacity over that period and the basis on which the forecast has been derived;

(e) a forecast of operating expenditure over the access arrangement period and the basis on which the forecast has been derived;

(f) [Deleted];

(g) the allowed rate of return for each regulatory year of the access arrangement period;

(h) the estimated cost of corporate income tax calculated in accordance with rule 87A, including the allowed imputation credits referred to in that rule;

(i) if an incentive mechanism operated for the previous access arrangement period—the proposed carry-over of increments for efficiency gains or decrements for efficiency losses in the previous access arrangement period and a demonstration of how allowance is to be made for any such increments or decrements;

(j) the proposed approach to the setting of tariffs including:

(i) the suggested basis of reference tariffs, including the method used to allocate costs and a demonstration of the relationship between costs and tariffs; and

(ii) a description of any pricing principles employed but not otherwise disclosed under this rule;

(k) the service provider's rationale for any proposed reference tariff variation mechanism;

(l) the service provider's rationale for any proposed incentive mechanism;

(m) the total revenue to be derived from pipeline services for each regulatory year of the access arrangement period.

(2) The access arrangement information for an access arrangement variation proposal related to a full access arrangement must include so much of the above information as is relevant to the proposal.

(3) Where the [ERA] has published financial models under rule 75A, the access arrangement information for a full access arrangement proposal must be provided using the financial models.

73 Basis on which financial information is to be provided

(1) Financial information must be provided on:

(a) a nominal basis; or

(b) a real basis; or

(c) some other recognised basis for dealing with the effects of inflation.

(2) The basis on which financial information is provided must be stated in the access arrangement information.

(3) All financial information must be provided, and all calculations made, on the same basis and using any applicable financial models published by the [ERA] under these Rules.

74 Forecasts and estimates

(1) Information in the nature of a forecast or estimate must be supported by a statement of the basis of the forecast or estimate.

(2) A forecast or estimate:

(a) must be arrived at on a reasonable basis; and

(b) must represent the best forecast or estimate possible in the circumstances.

75 Inferred or derivative information

Information in the nature of an extrapolation or inference must be supported by the primary information on which the extrapolation or inference is based.

…

84 Speculative capital expenditure account

(1) A full access arrangement may provide that the amount of non-conforming capital expenditure, to the extent that it is not to be recovered through a surcharge on users or a capital contribution, is to be added to a notional fund (the speculative capital expenditure account).

(2) The balance of the speculative capital expenditure account must be adjusted annually by applying to the balance a rate that is the same as the allowed rate of return for the regulatory year in which the adjustment is made.

(3) If at any time the type or volume of services changes so that capital expenditure that did not, when made, comply with the new capital expenditure criteria becomes compliant, the relevant portion of the speculative capital expenditure account (including the return referable to that portion of the account) is to be withdrawn from the account and rolled into the capital base as at the commencement of the next access arrangement period.

85 Capital redundancy

(1) A full access arrangement may include (and the [ERA] may require it to include) a mechanism to ensure that assets that cease to contribute in any way to the delivery of pipeline services (redundant assets) are removed from the capital base.

(2) A reduction of the capital base in accordance with such a mechanism may only take effect from the commencement of the first access arrangement period to follow the inclusion of the mechanism in the access arrangement or the commencement of a later access arrangement period.

(3) An applicable access arrangement may include a mechanism for sharing costs associated with a decline in demand for pipeline services between the service provider and users.

(4) Before requiring or approving a mechanism under this rule, the [ERA] must take into account the uncertainty such a mechanism would cause and the effect the uncertainty would have on the service provider, users and prospective users.

…

90 Calculation of depreciation for rolling forward capital base from one access arrangement period to the next

(1) A full access arrangement must contain provisions governing the calculation of depreciation for establishing the opening capital base for the next access arrangement period after the one to which the access arrangement currently relates.

(2) The provisions must resolve whether depreciation of the capital base is to be based on forecast or actual capital expenditure.

…

92 Revenue equalisation

(1) A full access arrangement must include a mechanism (a reference tariff variation mechanism) for variation of a reference tariff over the course of an access arrangement period.

(2) Except to the extent that subrule (3) applies, the reference tariff variation mechanism must be designed to equalise (in terms of present values):

(a) forecast revenue from reference services for the access arrangement period; and

(b) the portion of total revenue allocated to reference services for the access arrangement period.

(3) If there is an interval between a revision commencement date stated in a full access arrangement and the date on which revisions to the access arrangement actually commence (the interval of delay):

(a) reference tariffs, as in force at the end of the previous access arrangement period, must continue without variation for the interval of delay; but

(b) the operation of this subrule must be taken into account in fixing reference tariffs for the new access arrangement period, such that there may be an adjustment for any under-recovery or over-recovery by the service provider as a result of the continuation of reference tariffs from the previous access arrangement period during the interval of delay.

(4) For the avoidance of doubt, once the revisions to an access arrangement actually commence the access arrangement period to which the revised access arrangement applies includes the interval of delay.

…

98 Incentive mechanism

(1) A full access arrangement may include (and the [ERA] may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.

(2) An incentive mechanism may provide for carrying over increments for efficiency gains and decrements for losses of efficiency from one access arrangement period to the next.

(3) An incentive mechanism must be consistent with the revenue and pricing principles.

99 Fixed principles

(1) A full access arrangement may include a principle declared in the access arrangement to be fixed for a stated period.

(2) A principle may be fixed for a period extending over 2 or more access arrangement periods.

(3) A fixed principle approved before the commencement of these rules, or approved by the [ERA] under these rules, is binding on the [ERA] and the service provider for the period for which the principle is fixed.

(4) However:

(a) the [ERA] may vary or revoke a fixed principle at any time with the service provider's consent; and

(b) if a rule is inconsistent with a fixed principle, the rule operates to the exclusion of the fixed principle.