WA EXPERT CONSUMER PANEL

SUBMISSION TO THE ERA'S ISSUES PAPER ABOUT ATCO AA6 PROPOSED ACCESS ARRANGEMENT

November 2023

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SUMMARY

The WA Expert Consumer Panel is supported by the State Government's Western Australian Advocacy for Consumers of Energy grant funding to engage in consumer advocacy and contribute to major decision making in the sector.

Network costs are a significant contributor to energy bills. Households and businesses are relying on WA's energy network providers, like ATCO Gas, to deliver a smart and efficient strategy in a time of transformative change. The Expert Consumer Panel looks forward to engaging with the Economic Regulation Authority and ATCO Gas in a constructive way throughout this sixth access arrangement process to achieve this outcome.

Like ATCO, we have assumed that upcoming amendments to the National Gas Laws and National Gas Rules will be adopted in Western Australia prior to the ERA's final decision on the AA6 proposal.[1] Our submission is prepared on the assumption that there will be changes to the WA regulatory framework over the next twelve months to simplify the framework, extend it to renewable gases and incorporate an emissions reduction objective.

We appreciate the ERA's publication of a clear, succinct, plain English Issues Paper to guide our response to ATCO's AA6 proposal. Our submission does not respond to all the questions raised in the issues paper. Instead, we focus on the issues we believe are of most importance when considering whether current and future consumers will pay no more than necessary for safe and reliable gas services.

We agree that regulated entities must deeply understand their customers for their business plans to align with consumers' long-term interests. We acknowledge ATCO's engagement with consumers in developing its proposed access arrangement. However, we do not believe that consumers were presented with all the information they needed to make fully informed judgements. This calls into question the veracity of the evidence gathered via the engagement process and means the ERA should not place weight on it in assessing the access arrangement.

In addition, there are certain aspects of ATCO's proposal which the Expert Consumer Panel considers inconsistent with the long-term interests of consumers.

First, there is insufficient evidence that allowing ATCO to recover from consumers the costs of renewable gas blending will promote efficient investment in and use of services. Our view is that the capital and operating expenditure ATCO has proposed in this regard is non-conforming. It is open to ATCO to include this type of capital expenditure in its speculative capital expenditure account, for recovery from end-users if and when the benefits of the investment become more certain.

Second, our view is that ATCO's forecast of its customer base from 2025 to 2029, and in particular, its forecasts of new connections to and disconnections from the network, are overly optimistic. Even when taking a conservative perspective, the trends in new connections and disconnections are more likely to follow those seen historically than to begin to plateau. Forecast capital and operating expenditure associated with overly optimistic projections of new Greenfields connections should not be rolled into the capital base.

[1] ATCO, *2025-29 Plan*, pp. 14-15.

Third, we consider that accelerating depreciation shifts too much of the risk of asset stranding onto consumers and away from ATCO and its shareholders. We accept that the regulatory framework requires the ERA to allow ATCO a reasonable opportunity to recover the efficient costs it has incurred to date in providing gas services, and that there is precedent for accelerating depreciation or shortening asset lives to achieve this. If the ERA does accept accelerated depreciation in concept, we ask the ERA to allow less depreciation to be accelerated into the early years of the regulatory period compared to what ATCO has proposed. This is because the depreciation schedule proposed by ATCO exacerbates the price shock consumers face from 2024 to 2025.

No accelerated depreciation should be allowed, however, for ATCO's voluntary expansion of the distribution network from now on. Requiring consumers to pay more, sooner, for expanding a network when we know about the risks of asset stranding is inconsistent with promoting efficient investment in and use of gas services.

Finally, we do not believe that ATCO's proposed step increase in tariffs from 2024 to 2025, and the two-tiered usage charge, promote efficient use of the gas distribution network, nor is the latter consistent with meeting emissions reduction targets. We ask the ERA to consider applying a smooth tariff path from 2024 to 2029 and requiring ATCO to adopt a single tiered usage charge, instead – noting that the impact of changes to tariff structures on low-income households should be managed and mitigated. We also ask the ERA to require that more information be provided by ATCO to demonstrate that its ancillary charges, and in particular its disconnection charges, reflect the costs of providing those services.

The rest of our submission sets out evidence to support our positions on these issues, as follows:

- Customer engagement
- Demand forecasts
- Opening capital base
- Projected capital base
- Depreciation
- Operating expenditure
- Reference tariffs

Ultimately, the Expert Consumer Panel does not believe that renewable gases will displace natural gas via blending in the distribution network. We therefore have bigger doubts about the long-term viability of the gas distribution network given the need to phase out fossil fuel use and trend toward electrification. Whilst beyond the scope of this decision, we urge policy makers to begin to consider options for supporting vulnerable consumers to transition if the gas distribution network was to be wound down.

We would be happy to meet with the ERA to discuss our submission further.

Sincerely,

The Expert Consumer Panel

CUSTOMER ENGAGEMENT

We agree that regulated entities must deeply understand their customers for their business plans to align with consumers' long-term interests. We acknowledge ATCO's engagement with consumers in developing AA6, despite there currently being no formal requirement under the WA regulatory framework to do so or principles to guide the approaches taken.

We understand that there is no regulatory role for the ERA to directly assess ATCO's engagement program. However, we have concerns which we believe call into question the veracity of the evidence gathered via the process and in turn the weight it should be given in the ERA's assessment of various aspects of ATCO's proposed access arrangement.

Our view is that ATCO and its consultants have not presented consumers with the full set of information required for them to be able to make fully informed judgements.

For example, consumers were not presented with different options for reducing emissions (e.g. investing more in reducing unaccounted for gas, encouraging higher energy efficiency, purchasing Australian Carbon Credit Units), and the associated costs and benefits. Instead, they were just presented with ATCO's preferred option of renewable gas blending.

We do not believe that consumers were given full information about renewable gas blending either – for example, about the costs and risks of investing in different levels of blending and network coverage and the associated impacts on tariffs; about the impacts of green hydrogen leakage on global warming; or about the need to replace home appliances at green hydrogen blends above 10-20%.

Indeed, ATCO's consultants found, "…the majority of Residents need more information before they're fully confident in hydrogen / biogas blending."[2]

Contracting a consultant to undertake engagement is not sufficient to ensure the results will be impartial or unbiased. We would like to see the ERA playing a more active role in influencing the materials put to consumers, with a view to a more fulsome explanation being provided of the various options available to achieve certain outcomes and the associated trade-offs. Given that customers ultimately fund the engagement, it is important to ensure the processes deliver value for money by providing meaningful and useful insights. We do not support the cost of consumer engagement being rolled into the regulatory cost base if it does not achieve this outcome.

We also note that, while ATCO has acknowledged points the Expert Consumer Panel raised with ATCO in our submission to the *Draft Plan 2025-29*, it has largely dismissed those points and has not made changes in response. This submission therefore re-prosecutes many of the same issues.

Going forward, we need to see a greater willingness from regulated entities to have more open and honest conversations with consumers about the energy transformation and its impacts.[3]

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[2] Kantar Public for ATCO, *Insights Report: AA6 Voice of the Customer*, 2023, p. 28.

[3] Best practice consumer engagement on the energy transition is evolving. Horizon Power's work with the community of Esperance to transition from gas to electricity has lessons for utilities about supporting customers through the transition. Energy Consumers Australia has also published research on the importance of high quality consumer engagement in supporting electrification pathways.

Responses to the ERA's 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?

ATCO provided a suitable number of opportunities for the Expert Consumer Panel to provide input to the development of the access arrangement proposal. This included the opportunity to meet with ATCO as well as to provide written feedback on the draft plan. Regarding the draft plan, some parameters were not included (for example, about accelerated depreciation) and so it was not possible to provide considered views in response. The time provided to review and comment on the draft plan was also quite short (1 month). While ATCO has briefly responded in its submissions to points we raised in our written feedback on the draft plan, it has largely dismissed those points and has not made changes in response.

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

ATCO and its consultants did not present consumers with the full set of information required for them to be able to make fully informed judgements. Their research findings should therefore not be taken to be representative of consumer preferences.

Consumer preferences when it comes to gas and electrification is one area of inconsistency. Energy Consumers Australia has recently found an uptick in the proportion of gas consumers that are planning to electrify, from 16% in 2021 to 22% in 2023.[4] As the organisation that represents consumers nationally, its position is that governments should stop gas connections for new homes and develop a clear plan to electrify existing households and small businesses. In Victoria, consumer research about gas saw a 13-percentage point increase (from 44% to 57%) in the number of Victorians supporting ending expansion of the gas network once they were informed of facts about gas.[5] In WA, Horizon Power's work in Esperance to transition from gas to electricity has lessons about the different choices consumers make when fully informed about context and options.

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?

ATCO and its consultants did not present consumers with the full set of information required for them to be able to make fully informed judgements. This calls into question the veracity of the evidence and in turn the weight the ERA should give it when assessing ATCO's proposed additional expenditure and higher tariffs.

Further commentary on the findings of ATCO's customer research is included throughout this submission where relevant.

[4] Energy Consumers Australia, 'End gas connections and help consumers save $2,250 a year', October 2023.

[5] For example, that it produces greenhouse gases which contribute to climate change. Quantum Market Research for Infrastructure Victoria, *Gas Infrastructure Community Sentiment*, July 2021.

DEMAND FORECASTS

ATCO's forecast for small use (B3) customers is the product of forecast connection numbers and demand per connection. Whilst ATCO expects demand per connection to decline over the period of the access arrangement,[6] it expects its customer base to grow at 1.1% p.a. The growth in its customer base accounts for both disconnections and new connections, meaning ATCO expects more customers to connect to its network than to disconnect from it.

For Greenfields new connections, ATCO uses Housing Industry of Australia information on housing commencements to forecast WA dwelling completions and then applies a 'network penetration rate'. ATCO says the "network penetration rate is based on historical actual penetration and trends, which has been adjusted for additional factors expected to influence future connections, not reflected in historical trends."[7]

We think the forecast network penetration rate ATCO has applied is overly optimistic.

ATCO's consultants, Core Energy, find that the network penetration rate declined each year from 2013 until the COVID-19 pandemic,[8] despite gas being a cheaper alternative to electricity for Western Australians over the period. Core Energy says, "The fall in penetration rate is largely a function of an increase in 100% electrified homes vs dual fuel and a growth of dwelling activity in areas outside the MWSWGDS network area."[9] Despite this, Core Energy forecasts a relatively flat penetration rate over the period of the access arrangement.

Our view is that the forecast trend in the network penetration rate should instead follow a declining trend.

Core Energy also finds there has been an increasing rate of disconnections, saying that, "…the average rate of disconnections has increased significantly beyond 2015 (prior to COVID impacted years) from an average close to 2,000 before end 2015 and closer to 3,500 in the period to 2020."[10] Notwithstanding this, Core Energy forecasts a flat rate of disconnections as a proportion of opening connections for the period of the access agreement. It says, "During AA6 the number of disconnections is expected to rise but not at the trajectories seen between 2009 and 2020 and not to the levels experienced in 2018 or 2020."[11] It does not explain why it holds this view.

Our view is that the forecast trend in disconnections should follow an increasing trend, rather than flatten as forecast by Core Energy.

We think our position on connections and disconnections is valid given the following developments which will further accelerate trends already seen over the past two decades:

- The National Construction Code has introduced the requirement for new dwellings to have a seven-star energy efficiency rating. Gas heating appliances do not have a

[6] ATCO says declining consumption is due to "…improved gas appliance efficiency, improved dwelling energy efficiency, changes in consumer behaviour and price response along with trend in substitution away from gas heating to Reverse-Cycle air-conditioning and some substitution toward solar water heating." ATCO, *Plan 2025-29*, 2023, p. 91.
[7] Ibid., p. 90.
[8] Core Energy, *Gas Demand Forecast*, 2023, p. 26.
[9] Ibid., p. 27.
[10] Ibid., p. 28.
[11] Ibid., p. 32.

seven-star series available, so gas heating would need to combine with solar facilities to meet the new rating. This is expected to cause some developers and customers to choose 100% electrification. In Western Australia, the requirement comes into effect for new homes from 1 October 2025.

- Some State and Local Governments around Australia have started introducing, or are considering introducing, bans on new small use gas connections. Whilst such a policy is not under consideration in WA at this time, trends in other jurisdictions have the potential to cause WA consumers to reconsider their choices when it comes to being 100% electrified homes versus dual fuel.
- More consumers are beginning to actively consider whether they will stay connected to the gas network. Energy Consumers Australia has found that about one in four Western Australians have given some or serious thought to cancelling their gas supply and converting their home to running on electricity only.[12] ATCO's own *Voice of the Customer* engagement program found that nearly one in five residents *did not* intend to keep their gas stove and hot water unit for the next 5 to 10 years.[13]

Core Energy acknowledges the trend toward electrification, citing recommendations from the 2023 *Every Building Counts* report about how electrification decarbonises dwellings.[14]

Responses to the ERA's 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?

Growth in ATCO's customer base is likely to be lower than forecast by ATCO. Given the introduction of the new National Construction Code and an increasing focus by consumers on emissions reduction and whether to convert their homes to electricity only, we expect the rate of new connections to slow further and disconnections to continue to accelerate.

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?

It is not possible for us to comment on whether an appropriate analytical approach has been taken by Core Energy, as there is a lack of transparency over how it has converted historic trends into forecasts. In any event, we expect the rate of new connections to slow further and disconnections to continue to accelerate, relative to historical trends.

[12] Energy Consumers Australia, *Behaviour Survey – October 2022*, 'How people use energy'. Responses to: "Some Australian households have recently been cancelling their gas supply and converting their home to running on electricity only. Which of the following best describes you?"

[13] Kantar Public for ATCO, *Insights Report: AA6 Voice of the Customer*, 2023, p. 5.

[14] The recommendations it cites include phasing out the sale of gas appliances; a retrofitting program; and focussing on skills and resources and technological advancement to support large scale electrification. Core Energy, *Gas Demand Forecasts,* 2023, p. 33.

OPENING CAPITAL BASE

HYDROGEN BLENDING PILOT PROJECT

ATCO proposes to roll into its capital base $0.4 million spent on the first stage of its hydrogen blending initiative. ATCO notes most of the capital investment in the project was provided by a Department of Jobs, Tourism, Science, and Innovation grant, and that it is only seeking the recovery of expenditure net of the government grant ($0.4 million).

The Expert Consumer Panel considers that this is not conforming capital expenditure, and therefore that it should not be added to the opening capital base.

In assessing ATCO's AA5 submission, the ERA did not specifically consider capital expenditure on the first stage of ATCO's hydrogen blending initiative under Rule 79 because ATCO did not propose it as part of the projected capital base. Instead, ATCO proposed to recover expenditure like that on the hydrogen blending initiative through a "Network Innovation Scheme".[15] The ERA did not accept the Network Innovation Scheme, in part because the costs and risks of projects funded under the scheme would be borne entirely by consumers, while the distribution of the benefits (including how they would be shared with consumers) was not clear.[16]

Our view is that this issue also arises in considering whether to include the expenditure in the opening capital base. Doing so would mean that the costs of the initiative are borne entirely by ATCO's customers (as well as taxpayers). In effect, ATCO will have borne no risk in undertaking the project. Setting this precedent has the potential to encourage excessive risk taking by ATCO, and in turn, inefficient investment.

Further, ATCO has not demonstrated how the expenditure conforms with Rule 79. For example, it has not shown that the overall economic value of the $0.4 million expenditure is positive; or that the present value of the expected incremental revenue to be generated because of the expenditure exceeds the present value of the capital expenditure.

At the time it assessed ATCO's AA5 submission, the ERA highlighted that the regulatory framework allows for expenditure on innovation to be included in a "speculative capital expenditure account", to be recovered after such time it can be demonstrated the capital expenditure conforms with Rule 79. The ERA said it "considered that rule 84 provides an additional avenue for service providers to be compensated for expenditure which was speculative investment."[17] We agree with this and suggest that ATCO should have included the expenditure in the speculative capital expenditure account at that time.

[15] ERA, *Final decision on proposed revisions to the Mid-West and South-West Gas Distribution Systems access arrangement for 2020 to 2024*, 2019, pp. 388 – 391.
[16] Ibid., p. 394.
[17] Ibid., p. 396.

Responses to the ERA's 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?

We do not think that ATCO's proposed investment to allow renewable gases in its network is either appropriate or timely.

Renewable gas blending for small use customers is just one of many options that can be pursued to meet Western Australia and Australia's emissions reduction targets, and it is unlikely to be the most cost-effective one. This is why Government policies are not contemplating renewable gas blending for small use customers as being a priority use for green hydrogen.

Further, there is currently an unacceptably high level of uncertainty around the risks, costs and benefits to small use customers of renewable gas blending, making it impossible to conclude that it is appropriate for small use customers to fund it.

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?

Given the costs and risks associated with renewable gas blending, we do not believe there will be demand from small users for renewable gases.

However, if ATCO wishes to pursue blending for meeting small use customer demand, it needs to take more time to firm up the costs and risks of doing so. For hydrogen, this includes the costs of different hydrogen blend rates, for different geographic coverage areas, the necessary changes to household appliances at higher hydrogen blends and the costs caused by the leakage of hydrogen itself. Indeed, ATCO's consultant Acil Allen dismisses a 'Hydrogen Future' scenario, given the size of capital expenditure required to allow the gas network to carry 100 per cent hydrogen. For biogas, more time is needed to resolve some of the uncertainty around volumes of supply (including whether blending it into the gas distribution network is a better use for it than other uses) and price. For both gases, more exploration of the public health and safety risks is also required.

Once there is more certainty over these issues, ATCO would be able to present small use customers with more robust information about the effect of the investments on tariffs, as well as other costs and risks, allowing consumers to make considered judgements about the price quality trade-offs they are making.

As noted, the regulatory framework contemplates the use of speculative capital expenditure accounts for dealing with circumstances like these.

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?

The ERA needs to consider the emissions reduction achieved by different rates of blending; and the costs of achieving those levels of blending. This will allow the ERA to understand the cost per unit of emissions reduction and to compare that unit cost with alternative ways to reduce emissions.

The ability to scale a solution should also be considered in this context. Once hydrogen blending rates reach 10-20%, household equipment needs to be replaced. Under section of 9 of the *Gas Standards Act 1972*, ATCO would be responsible for covering the costs for appliance modification or replacement;[18]

but we question whether these costs would ultimately end up being rolled into the regulatory cost base and in turn, should be included in any analysis of costs and benefits.

The ERA also needs to consider the leakage rates associated with the production, storage and transportation of hydrogen. Hydrogen leakage is a potentially significant contributor to global warming. There are estimates that hydrogen when released to the atmosphere has a global warming potential of 11.6 ± 2.8 (one standard deviation) over 100 years, compared to carbon dioxide having a global warming potential of 1.0.[19]

Our responses to these questions also apply to ATCO's projected capital expenditure and operating expenditure on enabling renewable gases.

[18] Section 9 of the *Gas Standards Act 1972* sets out that that if ATCO was to propose a change in gas specifications and the Minister believed that "if the alteration is effected, all or any of the consumers' installations to which the gas is supplied will require modification or replacement by reason of the alteration", the Minister must not approve the alteration unless ATCO has, at its own expense, undertaken the modification or replacement of consumers' installations.

[19] Sand, M. et al, 'A multi-model assessment of the Global Warming Potential of hydrogen', *Communications Earth & Environment*, 2023.

PROJECTED CAPITAL BASE

ENABLING RENEWABLE GAS

ATCO proposes $15.5 million capital expenditure on enabling renewable gas, specifically to:

- Build two gate stations to inject the amount of renewable gas needed for ATCO to replace 20% of its unaccounted for gas.
- Build four gate stations to inject the amount of renewable gas needed to "address customer demand".[20]
- Deliver network blending control systems.
- Replace metering assets in parts of the network where renewable gas blending will occur.

The Expert Consumer Panel considers that the proposed capital expenditure is not conforming capital expenditure, for the following reasons:

- It is not yet sufficiently certain that expenditure on renewable gas blending technology will be incurred by prudent service providers acting efficiently, or that its adoption will become accepted good industry practice.
- The expenditure is not justifiable under any of the grounds listed in rule 79(2).

We suggest ATCO instead considers including this expenditure in the speculative capital expenditure account it has proposed in Part 10 of its Access Arrangement. As noted above, under Rule 84, this account would allow for the addition of non-conforming capital expenditure to a notional fund which would be adjusted annually at the allowed rate of return (but which would not be recovered through a surcharge on users or a capital contribution). If at any time the expenditure in the account meets the conforming capital criteria, the relevant portion of the expenditure can be included in the capital base at the start of the next access arrangement period.

We acknowledge that ATCO wishes to contribute to the global exploration of the role renewable gas blending can play in reducing emissions and commend its commitment to reduce emissions and assist its customers to do so as well. However, these are not sufficient justifications for this expenditure to be considered conforming under the rules. Including it in the capital base would mean that the costs and risks of the investment are borne entirely by consumers — irrespective of whether the project delivers the uncertain benefits it is hoped to deliver, consumers bear all the costs. This puts at risk consumers' efficient use of gas services. It also encourages excessive risk taking by ATCO and therefore inefficient investment.

[20] ATCO, *2025-29 Plan*, 2023, p. 164.

RENEWABLE GAS BLENDING IS STILL AT A PILOT AND TRIAL STAGE

To be conforming, capital expenditure must be expenditure that would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.

Our view is that renewable gas blending is still at a pilot and trial stage — it is therefore not yet sufficiently certain that expenditure on the technology will be incurred by prudent service providers acting efficiently, or that its adoption will become accepted good industry practice.

Around the world, whether renewable gas blending is technically feasible, prudent and efficient, and whether it should become accepted industry practice, is under active consideration. For example, the UK Government has just started consulting on the case for hydrogen blending into gas distribution networks.[21] The US Government is undertaking research and development to address technical barriers to blending hydrogen in gas pipelines.[22]

Renewable gas blending is also still at a pilot and trial stage in Australia. ATCO lists four other gas distribution networks in Australia that are "transitioning to renewable gases."[23] However, of these:

- The Australian Gas Infrastructure Group's Hydrogen Park South Australia is the only network currently delivering blended hydrogen to households.

- Jemena's Malabar Biomethane Injection Plant is the only network currently delivering blended biomethane to households.

Both projects have been supported by Government grant funding and service a small number of consumers, reflecting their trial / pilot nature. The other two projects cited by ATCO have not yet started operating; are also supported by grant funding and are of a small scale. The service provider for both projects is the Australian Gas Infrastructure Group.

Indeed, in its recent proposed access arrangement, Ausnet removed from its projected capital expenditure $11.2 million of spend on its 'future of gas' project, saying:

> *"Having listened carefully to the concerns of our customers and stakeholders, we have reduced our capex forecast…While that project would have allowed us to undertake some preparatory hydrogen capability work, we have removed it as we recognise the level of uncertainty surrounding the future of gas and that we may be able to leverage lessons from other networks and jurisdictions who are transitioning to the new energy future ahead of us.*[24]

Whilst the Australian Gas Infrastructure Group, Jemena and ATCO's trials and pilot projects are demonstrating the technical feasibility of renewable gas blending, whether its broader roll-out is prudent and efficient is yet to be proven. In fact, some studies have found that

[21] UK Department for Energy Security & Net Zero, *Hydrogen Blending into GB Gas Distribution Networks: A consultation to further assess the case for hydrogen blending and lead options for its implementation, if enabled*, 2023.
[22] US Office of Energy Efficiency and Renewable Energy, *HyBlend: Opportunities for Hydrogen Blending in Natural Gas Pipelines*, 2022.
[23] ATCO, *2025-29 Plan*, 2023, p. 163.
[24] Ausnet, *Our gas network proposal 2024 – 2028*, 2022, p. 11.

broad scale hydrogen blending in gas distribution networks is *not* efficient. For example, the Fraunhofer Institute for Energy Economics and Energy System Technology concludes:[25]

> *"…blending, even at low percentages, constitutes a sub-optimal pathway for the deployment of hydrogen and should be avoided in favour of policy instruments, which can deliver hydrogen to specific sectors. Doing so would avoid lock in risks, generate greater GHG savings for the investments made and avoid added costs being put on all gas consumers."*

Similarly, the Energy Innovation Policy & Technology think tank finds that:[26]

> *"… research shows these projects would increase consumer costs, exacerbate air pollution, and cause safety risks while minimally reducing greenhouse gases…State utility regulators and policymakers should require a high burden of proof from utilities to demonstrate the scalability, cost-effectiveness, and environmental justice impacts of any hydrogen proposal."*

The WA Government also says that using renewable hydrogen for domestic, low and medium heating is anticipated to be a low priority. In its consultation paper about refreshing the State's Renewable Hydrogen Strategy, it notes expected constrained green hydrogen supply, and says that, "Western Australia's public and private sectors should prioritise the highest impact end-uses of renewable hydrogen, to ensure resources are used effectively and benefits are maximised."[27] It says the State is prioritising end-uses by applying an adapted 'Clean Hydrogen Ladder.' According to this framework, different end-uses have different viability and feasibility: the framework categorises using renewable hydrogen for domestic, low and medium heating as "low anticipated use".[28] Whilst the consultation paper proposes several uses for renewable hydrogen in decarbonising the State, blending it into the gas distribution network for household consumption is not one of them.[29]

Another reason why green hydrogen blending may not become accepted good industry practice is due to leakage rates in the production, storage and transportation of hydrogen, which are a potentially significant contributor to global warming. There are estimates that hydrogen when released to the atmosphere has a global warming potential of 11.6 ± 2.8 (one standard deviation) over 100 years, compared to carbon dioxide having a global warming potential of 1.0.[30]

Based on the above, we do not consider there is yet sufficient evidence that renewable gas blending technologies will become accepted good industry practice and adopted by

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[25] Fraunhofer Institute for Energy Economics and Energy System Technology, *The use, limitations and cost of hydrogen blending in the European gas grid at the transport and distribution level*, January 2022, p. 9.

[26] Energy Innovation Policy & Technology, *Assessing The Viability Of Hydrogen Proposals: Considerations For State Utility Regulators And Policymakers*, March 2022.

[27] WA Government, *Western Australia Renewable Hydrogen Strategy Refresh: Stakeholder Consultation Paper 2023*, p. 26.

[28] Ibid., p. 18.

[29] Ibid., p. 26. In contrast, the 2019 Renewable Hydrogen Strategy included hydrogen blending in the gas network as an area of strategic focus, setting a goal that renewable hydrogen would be distributed in a WA gas network by 2022. In its consultation paper about refreshing the strategy, the WA Government highlights ATCO's renewable hydrogen blend trial in Cockburn as evidence this goal has been achieved.

[30] Sand, M. et al, 'A multi-model assessment of the Global Warming Potential of hydrogen', *Communications Earth & Environment*, 2023.

prudent service providers acting efficiently to achieve the lowest sustainable cost of providing services.

THE EXPENDITURE IS NOT JUSTIFIABLE UNDER THE GROUNDS LISTED IN RULE 79(2)

Under rule 79(2) capital expenditure is justifiable if it meets one of the following:

- The overall economic value of the expenditure is positive; or
- The present value of the expected incremental revenue to be generated because of the expenditure exceeds the present value of the capital expenditure; or
- The capital expenditure is necessary to:
  - maintain and improve the safety of services; or
  - maintain the integrity of services; or
  - comply with a regulatory obligation or requirement; or
  - maintain the service provider's capacity to meet levels of demand for services existing at the time the capital expenditure is incurred (as distinct from projected demand that is dependent on an expansion of pipeline capacity).

Our view is that ATCO's proposed capital expenditure on enabling renewable gas does not meet any of these tests.

CAPEX TO ENABLE REPLACING 20% OF UAFG WITH RENEWABLE GAS

We understand that ATCO is proposing capital expenditure aimed at reducing its scope 1 emissions, which largely come from unaccounted for gas. ATCO would build two injection points to enable it to replace up to 20% of its UAFG by purchasing renewable gas, and would continue to make up the remaining 80% by purchasing natural gas. ATCO assumes it will purchase a combination of renewable gases, depending on what is available and most cost effective at the time.[31]

ATCO appears to argue that the overall economic value of this capital expenditure is positive, because the ongoing cost of replacing the UAFG by instead purchasing gas plus Australian Carbon Credit Units would be higher than the cost of the proposed capital investment plus the ongoing cost of purchasing renewable gas.[32] ATCO says it has provided "simplified economic modelling relating to Net Present Values" in its Renewable Gas Delivery Strategy to support this.[33] We have the following concerns with the analysis ATCO has provided in that document:

- Using non-confidential data provided throughout ATCO's submissions, we have not been able to replicate an outcome whereby the cost of replacing the UAFG by purchasing gas plus ACCUs would be higher than the capital and operating expenditure on the injection points plus the cost of purchasing renewable gas. (See our analysis at Appendix A to this submission.) Instead, the cost of addressing UAFG in the UAFG

[31] ATCO, *Renewable Gas Delivery Strategy,* 2023.
[32] ATCO, 2025-29 *Plan*, 2023, p. 163; ATCO, *Renewable Gas Delivery Strategy,* 2023, p. 14. ATCO says that the 'base case' is to replace all its UAFG with gas and to *not* purchase Australian Carbon Credit Units. It does, however, acknowledge that this would not result in any reduction in emissions. ATCO, *Renewable Gas Delivery Strategy,* 2023, p. 34.
[33] ATCO, *2025-29 Plan*, 2023, p. 163.

Forecast and Strategy – $30,771,992, excluding the capital and operating costs of injection points[34] – is comparable to our estimate of the cost of replacing UAFG by purchasing gas and ACCUs ($32,743,773). For the cost *including* injection point capital and operating expenditure to be *lower* than the gas plus ACCU option, that expenditure would need to be less than about $2 million. But ATCO is proposing to spend $4.5 million in capital expenditure on the injection points in 2025 alone.[35]

- ATCO says renewable hydrogen is unlikely to be cost competitive with biomethane before 2030, so it will be more cost-effective to use just biomethane.[36] However, it also says that there may be limited supplies of biomethane.[37] It says that if there is no or limited renewable gas supply then it would instead purchase ACCUs to offset the emissions from 20% of the unaccounted for gas.[38] In our view, this seems a very likely scenario, and one which ATCO needs to quantify: that is, the scenario whereby the capex and the opex on the injection points is incurred, but ATCO continues to need to purchase 100% natural gas to replace UAFG, plus ACCUs.

- There appears to be a very high degree of uncertainty over the forecasts of the values of the inputs ATCO has used in its analysis, even over just the five-year period of the access arrangement. This is the case in terms of the volume, type and price of renewable gas it will purchase and when,[39] and whether and if so when it will need to purchase ACCUs and their price.[40] Ultimately, there must also be a very high degree of uncertainty as to whether the overall economic value of the capital expenditure is positive, and an even higher degree of uncertainty over the longer term.[41]

ATCO further argues that the economic value of the capital expenditure is inherently more positive because — by replacing 20% of UAFG with renewable gas — it reduces emissions.[42] However, as ATCO says, if it did not undertake the capital expenditure, it could purchase ACCUs to offset the equivalent amount of emissions.[43] ATCO says: "…the use of offsets is generally not as effective in reducing or offsetting emissions..."[44] ATCO has not substantiated

[34] ATCO, *UAFG Forecast and Strategy,* 2023, p. 16.
[35] ATCO, *2025-2029 Plan*, 2023, p. 164.
[36] ATCO, *Renewable Gas Delivery Strategy,* 2023, pp. 35 & 40.
[37] Ibid., p. 40.
[38] Ibid., p. 13.
[39] For example, in ATCO's *2025-29 Plan*, it says it will replace "all or a portion" of UAFG with renewable gases (p. 26). In its *Renewable Gas Delivery Strategy* and its *UAFG Forecast and Strategy*, it says it will replace 20% (by TJ) of UAFG with renewable gases. In terms of the type of renewable gas, in the *Renewable Gas Delivery Strategy*, ATCO says biomethane is the most cost-effective renewable gas (p. 14, p. 35) and that the timeframe to inject biomethane will be significantly shorter than for green hydrogen (p. 39). On the other hand, in the *UAFG Forecast and Strategy* and other places in the *Renewable Gas Delivery Strategy* (e.g., pp. 5, 13, 35 & 51), it assumes it purchases a mix of green hydrogen and biomethane.
[40] ATCO, *Renewable Gas Delivery Strategy,* 2023, pp. 5, 13 & 40.
[41] The time over which ATCO believes positive economic value will be delivered is unclear. In its cost-benefit analysis on p. 39 of the *Renewable Gas Delivery Strategy*, ATCO says injection point costs will be split over the UAFG contract period of five years. Its levelized abatement cost analysis on p. 51 of the same document assumes a ten-year period for the analysis. In the *2025-29 Plan*, ATCO proposes a 40-year economic asset life for gate stations.
[42] ATCO, *2025-2029 Plan*, 2023, p. 163; ATCO, *Renewable Gas Delivery Strategy,* 2023, p. 14.
[43] ATCO, *Renewable Gas Delivery Strategy,* 2023, p. 14.
[44] Ibid.

its view that the ACCU system is less effective in reducing Australia's net emissions compared to renewable gas blending.

Finally, ATCO has not compared the economic value of the capital expenditure on the injection points with that which could be generated if that expenditure was instead allocated to more traditional methods of reducing UAFG and scope 1 emissions, like mains replacement and enhancements in finding and eliminating leaks. It could be that the emissions reduction efficiency of doing so is higher than for renewable gas blending.

CAPEX TO MEET CUSTOMER DEMAND FOR RENEWABLE GAS

We understand that ATCO is also proposing capital expenditure aimed at reducing its scope 3 emissions, which come from its customers, by enabling renewable gases to be injected and distributed through the network to meet customer demand.[45] ATCO will build four injection points to enable this. It says the renewable gas it will purchase for this purpose will depend on availability of supply, customer demand and the ability of the network to safely accept the gas.[46]

ATCO appears to argue that the overall economic value of this capital expenditure is positive because greater choice is provided to energy customers and because it enables solutions for industry to reduce their Scope 1 emissions.[47]

However, ATCO has not substantiated the case for this capital expenditure with any form of cost-benefit analysis, instead suggesting this type of analysis will happen in the future:

> *"In support of ATCO's objective to reduce the emissions intensity of energy supplied in a cost-effective manner, a cost comparison for emissions reduction via conversion to full electrification or via procurement of carbon credits verses renewable gas procurement, is being conducted – similar to the cost/benefit analysis conducted by ATCO for UAFG replacement."*[48]

> *"…ATCO has calculated the levelised abatement cost of purchasing renewable gas compared to carbon offsets, to allow ATCO to assess customer intent/demand for renewable gases to address their own emissions reduction targets and assist ATCO's assessment of whether customers are likely to purchase offsets or renewable gas and the amount of demand for renewable gas to be distributed. This will further allow ATCO to assess gas consumers' willingness to pay for the required infrastructure and ensure that ATCO's expenditure is in the long-term interests of the consumers."*[49]

The method applied to calculate the levelized cost of carbon abatement in Appendix G of the *Renewable Gas Delivery Strategy* is not sufficiently transparent to allow us to comment on whether a robust approach has been taken, and in turn, whether the analysis supports capital expenditure on injection points having a positive economic value.

[45] Ibid., pp. 15-16.
[46] Ibid., p. 5.
[47] ATCO, *2025-2029 Plan*, 2023, p. 163.
[48] ATCO, *Renewable Gas Delivery Strategy,* 2023, p. 15.
[49] Ibid., p. 20.

OTHER ISSUES

ATCO has not demonstrated that the present value of the expected incremental revenue to be generated by either of the projects exceeds the present value of the capital expenditure. While ATCO has found consumers are willing to pay 12% more on average for 15% renewable gas, and 20% more for 50% renewable gas,[50] it does not say how much more they are willing to pay for blends of 2%, 5% or 10%, all of which are what is proposed to be achieved over the period of this access arrangement.[51] ATCO also does not demonstrate how consumers' incremental willingness to pay for 15% and 50% blends compares to how much more consumers would *actually* have to pay to fund the expenditure needed to achieve these blends.[52] It is disappointing that ATCO has not sought to use the experience from its renewable hydrogen blending trial in Cockburn to provide a more robust quantification of consumers' willingness to pay.

ATCO has also not, in any of its analysis, accounted for the potential leakage of green hydrogen itself and how ATCO would address or offset the subsequent emissions. Due to green hydrogen's smaller molecule size its leakage rate can be expected to be much higher than that of natural gas.

Finally, in regard to whether the expenditure is necessary for safety, integrity, compliance or to meet demand, the Australian Energy Market Commission (AEMC) has recently said that, "A voluntary transition to another gas is not expected to be justifiable on any of these grounds."[53]

We agree with this — capital expenditure undertaken voluntarily by ATCO to test the efficacy of transitioning to renewable gas blending is not *necessary* for safety, integrity, to comply with regulatory obligations or to meet demand. No Government (Australian or Western Australian) has mandated renewable gas blending into gas distribution networks for any of these purposes, including to meet Australia's obligations under the *Climate Change Act 2022* to reduce emissions by 43% below 2005 levels by 2030.[54]

In its recent decisions on the proposed access arrangements for Victorian and NSW gas distribution networks, the AER rejected proposed capital expenditure on renewable gas blending readiness, saying:

> *"…a safety case is not sufficient to justify expenditure on hydrogen readiness where a service provider has voluntarily decided to introduce hydrogen into its network. The expenditure would need to pass a positive economic benefits test to be conforming capex. [AGN/MGN] has not, at this stage, provided evidence that the proposed expenditure meets such a test. Given this, we do*

[50] ATCO, *Renewable Gas Delivery Strategy,* 2023, p. 32.
[51] Ibid. While Kantar Public's report for ATCO says, "Participants found the $3 cost for sustainability investment to be reasonable..." (*Insights Report: AA6 Voice of the Customer*, p. 83) it is not clear that participants were told that this would fund just six injection points and deliver low levels of blending, as opposed to the whole network gaining access to renewable gas at higher levels of blend.
[52] As noted by Kantar Public, "…willingness-to-pay (WTP) results measure the maximum dollar benefit customers would receive from ongoing improvements in specific attributes. These values should be included in a cost-benefit analysis that considers ATCO's costs for implementing a program such as shifting to 15% renewable gas." Kantar Public for ATCO, *Insights Report: AA6 Voice of the Customer*, 2023, p. 51.
[53] AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases – Final report*, 2022, p. 29.
[54] ATCO argues the proposed capital expenditure is "required" for Australia to meet its obligations under the *Climate Change Act 2022*. ATCO, *2025-29 Plan*, 2023, p. 163.

not consider [AGN's/MGN's] proposed [$10 million / $9 million] of hydrogen readiness capex is conforming and have excluded this from our alternative estimate."[55]

Like the AER, we do not consider ATCO's proposed capital expenditure is necessary for safety, integrity, regulatory compliance or to meet demand; nor do we consider that ATCO has provided sufficiently robust analysis and evidence to be satisfied that it passes a positive economic benefits test. Our view is therefore that the capital expenditure is not conforming.

NEW CUSTOMER CONNECTIONS

ATCO proposes $157.4 million in capital expenditure on customer initiated new connections.[56] It says most of this is to connect customers in new subdivisions bordering existing areas of the network, with the forecast volume of new connections underpinned by Core Energy's demand forecasts.

As discussed in the demand forecast section, we think the volume of new B3 customer connections proposed by ATCO is too high. A more realistic forecast would lower the amount of capital expenditure on new B3 customer connections.

We also think the disconnection rate ATCO has used in its Net Present Value analysis is too low. The disconnection rate has been increasing over time and will likely continue to do so. Even if ATCO's highest assumption of a 0.54% disconnection rate[57] were an acceptable estimate for AA6, it is unlikely to be so for the subsequent five-year period.

We would like to see the Net Present Value analysis for new B3 customer connections revised using more realistic inputs before we are convinced the associated capital expenditure meets the test in rule 79(2)(b). At this stage, we do not think the proposed capital expenditure is conforming.

We acknowledge that ATCO's Distribution Licence requires it to offer to connect certain residential customers within its licence area under certain conditions,[58] and that this requirement means capital expenditure associated with these new connections conforms to rule 79(2).

[55] AER, *Draft Decision Australian Gas Networks (Victoria and Albury) Access Arrangement 2023 to 2028 — Attachment 5 Capital expenditure*, 2022, pp. 16-17 and AER, *Draft Decision Multinet Gas Networks Access Arrangement 2023 to 2028 — Attachment 5 Capital expenditure*, 2022, p. 20.
[56] 274 new B1 connections; 1,239 new B2 connections; and 66,265 new B3 connections.
[57] On page 176 of the *2025-29 Plan*, ATCO says it assumes the disconnection rate will be 0.54% after ten years; on page 177 it says it assumes a disconnection rate of 0.37%.
[58] Only when connections require 20 metres or less of service pipe and only where the gas main is so located that it is practicable in accordance with good industry practice to connect the relevant premises to the main. See pages 11 and 12 of ATCO's Gas Distribution Licence.

DEPRECIATION

ATCO proposes to accelerate depreciation in response to the uncertainty of the energy transition. It proposes to bring forward $16 million of depreciation in each year of the access arrangement, which is about a 23% uplift on the deprecation that would be recovered through straight line depreciation alone.

We consider that accelerating depreciation shifts too much of the risk of asset stranding onto consumers and away from ATCO and its shareholders.

If the ERA was to accept accelerated depreciation of existing assets in concept, we recommend that less of ATCO's proposed depreciation be brought forward into the earlier years of the access arrangement and more of it be recovered in the latter years, to facilitate a smoother transition in tariffs from 2024 to 2025. We are concerned that ATCO's proposed schedule of depreciation exacerbates the price shock consumers will face from 2024 to 2025 ($78, or a 12% increase, on an annual retail gas bill at the gazetted retail price).

As the AER said in its recent decisions on the access arrangements for Australian Gas Networks and Multinet Gas Networks:[59]

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

Under no circumstances do we support accelerated depreciation being applied to assets that ATCO **voluntarily** chooses to invest in from now.

In particular, if ATCO voluntarily chooses to expand new customer connections by expanding the network, it should not be allowed to accelerate the depreciation of those assets.[60] ATCO's own analysis shows that capital expenditure on new customer connections is Net Present Value positive over both a 25- and 50-year period.[61] If this is true, then there is no need to accelerate depreciating the assets. And if expanding the network is not Net Present Value positive now or in the future, then the associated capital expenditure is unlikely to be conforming and it should not be included in the regulatory asset base in the first place.

We are especially concerned that allowing ATCO to accelerate recovering the costs of expanding the network would in fact encourage it to overinvest in expanding the network (compared to a standard straight line depreciation schedule), to capitalise on the prospect of earning higher regulated revenues, sooner.

[59] AER, *Final decision Australian Gas Networks (Victoria & Albury) Gas distribution access arrangement 1 July 2023 to 30 June 2028 — Attachment 4 Regulatory depreciation*, 2023, p. 8.
[60] We recognise ATCO must offer to connect residential customers requiring 20m or less of service pipe and where the main is located such that it is practicable to connect to it.
[61] ATCO, *2025-29 Plan*, 2023, p. 177.

Responses to the ERA's questions

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

The Expert Consumer Panel is substantially less optimistic than ATCO about the potential for renewable gases to displace natural gas via blending in the distribution network. We therefore have bigger doubts about the long-term viability of the gas distribution network given the need to phase out fossil fuel use and trends toward electrification. Our view is therefore that the 'electricity dominates' scenario is most probable.

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

Accelerating depreciation shifts too much of the risk of asset stranding onto consumers and away from ATCO and its shareholders.

If the ERA accepts accelerated depreciation in concept, we recommend that less of ATCO's proposed depreciation be brought forward into the earlier years of the access arrangement and more of it be recovered in the latter years, to facilitate a smoother transition in tariffs from 2024 to 2025.

ATCO should **not** able to accelerate depreciation of assets associated with future voluntary expansion of the network.

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?

This question would need to be answered by modelling the possible outcomes. We have not been able to undertake this type of modelling in preparing this submission.

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

We do not believe that ATCO's proposed accelerated deprecation is driven by intergenerational equity considerations. If achieving intergenerational equity was a major driver of ATCO's revenue proposal, there are other ways it could achieve this objective. For example, ATCO's shareholders could take on more of the risk of asset stranding by writing down the value of the assets.

We note that, while vulnerable consumers will face the highest barriers to disconnecting from the gas network – and so are at greatest risk of escalating prices when other consumers disconnect – there are other policy levers that can be used to address this equity issue (e.g. direct subsidies to support electrification).

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

Targeting a stable long-term levelised price per gigajoule over the life of the pipeline is not necessarily in the long-term interests of consumers.

If the levelised price did not allow ATCO to recover its efficiently incurred costs, this could put its ability to operate the network safely and reliably at risk. A price that is 'too low' could also cause households to consume too much gas, which would be at odds with emissions reduction objectives.

A price that allowed ATCO to over-recover its efficiently incurred costs would similarly not encourage efficient investment in or use of the network, but in different ways.

Having said this, we do consider that avoiding sharp one-off increases in tariffs (like that proposed by ATCO from 2024 to 2025) is in the long-term interests 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?

Based on information available today, our view is that these scenarios are unlikely. If information becomes available in the future which points to these scenarios becoming a reality, accelerated depreciation would clearly be inappropriate.

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?

If the ERA accepts accelerated depreciation of existing assets, their economic asset lives should not be shortened as well. Like our position that accelerated depreciation should not be applied to assets that ATCO voluntarily chooses to invest in from now, the economic lives of these assets should not be shortened relative to those of existing assets. Doing so could encourage ATCO to overinvest in expanding the network, at a time when we know about the risks of these assets being stranded in the future.

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.

As noted above, we are not convinced at ACIL Allen and Icenta's assumption that a stable long-term levelised price per gigajoule over the life of the pipeline is in the long-term interest of consumers. Adopting a different price path would change the profile of the depreciation that is 'sculpted' in each scenario. The ERA should explore how changing this aspect of the methodology affects depreciation before simply working with the numbers proposed by ATCO.

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

The ERA should consider the effect accelerating deprecation has on the tariff increase from 2024 to 2025. We recommend that less of ATCO's proposed accelerated depreciation be brought forward into the earlier years of the access arrangement and more of it be recovered in the latter years of the access arrangement, to help facilitate a smoother transition in tariffs from 2024 to 2025.

OPERATING EXPENDITURE

ENABLING RENEWABLE GASES

ATCO proposes $7.3 million in operating expenditure associated with its investment in enabling renewable gases. This consists of:

- $1.5 million associated with renewable gas injection points
- $0.4 million for sustainability reporting system software
- $3.7 million on an Industry and Community Consultation Program
- $1.7 million for Renewable Gas Supporting Programs

ATCO argues the expenditure is necessary to ensure its activities are consistent with "good industry practice", including meeting the emissions reduction targets set out in its Sustainability Strategy and "regulatory compliance", including reporting requirements under the National Greenhouse and Energy Reporting scheme.[62]

We agree that the proposed spending on new licensing fees and running costs for ATCO's new Sustainability Reporting System meets the test for inclusion in ATCO's forecast operating expenditure.

However, we do not consider the remaining proposed operating expenditure associated with enabling renewable gases to be that which would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

As set out earlier in this submission, we do not consider capital expenditure on blending renewable gases to yet be accepted good industry practice — we also hold this view in relation to ATCO's proposed operating expenditure for its new renewable gas injection points ($1.5 million) and its Renewable Gas Supporting Program ($1.7 million). Additionally, we consider that one of the projects proposed in the Renewable Gas Supporting Program – the desktop feasibility study analysis of the technical, economic, environmental, and social aspects of increasing hydrogen blends from 10-20%% to higher proportions – cannot be accepted under the regulatory framework. This is because the regulatory framework (even when amended) does not cover higher than 10-20% blends of renewable gases.

We do not consider the proposed operating expenditure on the renewable gases Industry and Community Consultation Program to be that which would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice. We note the AER recently did not accept similar proposals from Australian Gas Networks and Multinet Gas Networks.[63] Given the current high level of uncertainty over many aspects of renewable gas blending, it is difficult to envisage how ATCO could provide the education and information to the community that it says it will. In any event, if ATCO wishes to undertake these types of activities, our view is that they are more akin to marketing and

[62] ATCO, *2025-29 Plan*, 2023, p. 113.
[63] For reasons why the AER rejected this proposed operating expenditure see AER, *Draft Decision Multinet Gas Networks Access Arrangement 2023 to 2028 — Attachment 6 Operating expenditure*, 2022, pp. 27 – 29.

business development activities, and should therefore be funded from the base amount of the corporate operating expenditure category.

UNACCOUNTED FOR GAS

We commend ATCO for continuing to reduce its unaccounted for gas beyond its KPIs through projects like mains replacement and enhancements in finding and eliminating leaks, and for maintaining its high performance against its peers.

We also appreciate the clear explanation in the UAFG Forecast and Strategy document about how its UAFG operating expenditure forecast has been developed.

We acknowledge the forecast will be revised following an upcoming tender process.

Nonetheless, and as set out earlier in this submission, we are concerned about the extent of uncertainty over how much of each type of renewable gas will be purchased and when, its price, and whether ACCUs will also be needed.

We therefore cannot agree that the renewable gas purchase element of ATCO's UAFG Forecast and Strategy reflects operating expenditure that would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

REFERENCE TARIFFS

The revenue and pricing principles set out in section 24 of the National Gas Law, which provide a framework for the construction of reference tariffs, broadly say that:

- A service provider should be provided with a reasonable opportunity to recover at least the efficient costs incurred in providing reference services.
- A service provider should be provided with incentives to promote efficient investment in, provision of and use of the pipeline and its services.
- A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.
- Regard should be had to the economic costs and risks associated with a service provider's potential under and over investment and under and over utilisation of the pipeline.

Similarly, the national gas objective is to promote efficient investment in, and efficient operation and use of, natural gas services. Expected amendments will add that this is now also in respect to achieving targets for reducing Australia's greenhouse gas emissions.

We are concerned that ATCO's reference tariff proposal is not consistent with this last objective and the pricing principles in the following areas:

- The increase in tariffs from 2024 to 2025 ($78, or a 12% increase, on an annual retail gas bill at the gazetted retail price) will not promote efficient use of the network — other tariff paths could promote efficient use, whilst at the same time not compromising meeting the other pricing principles and objectives of the national gas law.
- In encouraging higher volumes of consumption of gas (and in turn more greenhouse gas emissions), the proposed declining block tariff structure is inconsistent with the new limb of the national gas objective to achieve targets for reducing Australia's emissions.
- There is a lack of clarity over the extent to which disconnection charges reflect the efficient costs of providing the services, and in turn whether those charges promote efficient use of the services.

TARIFF PATH

ATCO proposes a relatively large increase in tariffs from 2024 to 2025, and then no further real tariff increase throughout AA6. ATCO did not consult with customers or consumers on preferences between and impacts of this and alternative tariff paths through its *Voice of the Customer* engagement program, which seems a missed opportunity.

The increase in tariffs from 2024 to 2025, if passed on to consumers, has the potential to drive them off the network sooner and in higher numbers than if a smoother transition was adopted. The risk is heightened given that current abnormally high levels of inflation and

interest rates are expected to affect consumers until late 2025.[64] These two things combined could accelerate customers disconnecting from the network throughout 2025 and see consumers — particularly vulnerable ones — left connected to the network facing even more rapidly increasing prices than otherwise to recover the fixed costs of the network. We do not think this outcome reflects efficient use of the network.

A tariff path which smoothly increases tariffs from 2024 to 2029 would lessen the risk of this occurring. This is especially the case given the more optimistic outlook for inflation and interest rates in the latter years of the access arrangement, which should offset the pressure higher gas prices place on household budgets at that time.

We acknowledge that retail gas prices for residential customers are regulated by the WA Government, meaning that, if regulated retail prices are not changed to accommodate changes in ATCO's tariffs, it is retailers' margins that are compromised. However, as the ERA says in its Issues Paper, "many of these [residential and some small business] customers have switched to competitive tariffs offering discounts and ATCO's proposed network tariffs may affect the level of these discounts in the future."[65]

The ERA has previously rejected proposals to make large and sudden changes to gas distribution tariffs, favouring a smooth tariff path between access arrangements.[66] We see no reason to depart from this position for this access arrangement.

The tariff path should of course still be set to enable ATCO to recover at least the efficient costs incurred in providing reference services (including an appropriate rate of return), to encourage it to continue to invest in and provide services over the network.

Responses to the ERA's 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?

The increase in tariffs from 2024 to 2025, if passed on to consumers, has the potential to drive them off the network sooner and in higher numbers than if a smoother transition was adopted. A tariff path which smoothly increases tariffs from 2024 to 2029 would lessen the risk of this occurring.

[64] In its August Statement on Monetary Policy, the RBA forecasts inflation to be back within the 2-3 per cent target range in late 2025, and expects the cash rate to decline to 3¼ per cent by the end of 2025. RBA, Statement on Monetary Policy, August 2023, pp. 1 & 65.
[65] ERA, *Proposed revisions to the access arrangement for the Mid-West and South-West Gas Distribution Systems – Issues paper*, p. 3.
[66] In assessing AA3, the ERA said it is "…preferable, wherever practicable, to determine reference tariffs with a smooth tariff path, including between access arrangements, rather than a tariff path which has significant and sudden changes in tariffs during and at the end of the access arrangement period." ERA, *Final decision on WAGN's Revisions Proposal to the access arrangement for the Mid-West and South-West Gas Distribution Systems*, 2011, p. 129. In assessing AA4, it said, "The Authority considers that the moving from the current B3 standing charge of $70.98 to $99.63 in one year will have a significant impact on small use customers and retailers. As a result, the Authority has decided to implement the increased standing charge gradually from 2015 to 2019." ERA, *Draft Decision on Proposed Revisions to the Access Arrangement for the Mid-West and South-West Gas Distribution System*, 2013, p. 271.

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?

We are concerned that increasing the annual average bill by $78 at a time of abnormally high levels of inflation and interest rates could accelerate customers disconnecting from the network throughout 2025.

Over the long term this could see consumers — particularly vulnerable ones — that are left connected to the network facing even more rapidly increasing prices than otherwise to recover the fixed costs of the network. We do not think this outcome reflects efficient use of the network.

TARIFF STRUCTURES – DECLINING BLOCK TARIFFS

Declining block tariff structures have historically been used to encourage gas distributors to grow the volume of gas carried by their networks and customers to consume larger volumes of gas. This has benefited gas customers because fixed transport costs have been recovered by distribution networks from a larger volume of throughput, meaning customer pay lower per unit transport costs.

However, as noted, the national gas objective is going to be amended to incorporate an emissions reduction objective. Assuming this is also adopted in WA, the ERA must balance achieving emissions reduction with the other elements of the national gas objective. ATCO recognises this in other parts of its submission, heavily using the need to meet emissions reduction targets to justify its proposed expenditure on enabling renewable gases.[67]

Our view is that tariff structures that encourage more use of gas are inconsistent with the new national gas objective, as well as the priority areas ATCO has set out in its Sustainability Strategy, in particular, to reduce net emissions.[68]

Instead, a flat tariff structure, whereby customers pay a steady, or flat, rate per unit of gas consumed, would be consistent with the new national gas objective. This is because customers would no longer be encouraged to consume larger volumes of gas. (We note that our views in this section assume that retailers match ATCO's tariff structure.)

Under a flat tariff structure, customers consuming relatively small volumes of gas would be likely to benefit from being switched to flat tariffs compared to remaining on declining block tariffs, whereas customers consuming relatively large volumes of gas could be worse off under flat tariffs compared to declining block tariffs. Any change to tariff structures should be implemented in such a way as to protect customers experiencing vulnerability or energy bill stress.

ATCO notes that its use of a two-band tariff structure is "understood by customers and supported by regulatory precedent in gas distribution networks".[69]

[67] See for example, ATCO, *2025-29 Plan*, 2023, pp. 18-19; 25-26.
[68] Ibid., p. 12.
[69] Ibid., p. 230.

However, in the same way as ATCO's decision to move from a three-band usage charge to a two-band usage charge simplifies the tariff structure for consumers, so would moving from a two-band usage charge to a single usage charge.

Further, we note that the Australian Energy Regulator has recently said it will be reconsidering the regulatory precedent about declining block tariff structures for gas distribution networks on a case-by-case basis.[70] It also says it expects distributors to substantively engage on the issue with stakeholders, and that it will be looking for active consideration by distributors and their stakeholders about how best to balance efficiency and new emissions abatement objectives.

We acknowledge changing the tariff structure would create one-off additional administrative costs for ATCO, and for retailers if they choose to change as well, associated with making changes to internal systems (e.g. for billing). However, over the long term, these costs would be far outweighed by the benefits of reduced emissions that come with a tariff structure that no longer encourages more consumption of gas.

Importantly, the change in tariff structure should be implemented in such a way as to ensure that the overall revenue recovered from tariffs does not change. This will provide ATCO a reasonable opportunity to recover its efficient costs, including a return commensurate with the risks it faces.

Responses to the ERA's 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?*

A declining block tariff structure is not consistent with achieving emissions reduction objectives. A flat tariff structure – or even an inclining block tariff structure – would better meet emissions reduction objectives. However, it is our preference that a flat tariff be introduced, due to its simplicity benefits over an inclining black tariff structure.

DISCONNECTION TARIFFS

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. ATCO notes that other charges may also be payable, including a fee for the removal of metering equipment, as well as the 'Deregistering a delivery point' $130.49 fee if the connection point is still registered.

While we support 'Permanent disconnection' inclusion as a reference service, the tariff for this ancillary service does seem very high relative to the 'Disconnect' ancillary service, at nine times the price.

ATCO has described in general, qualitative terms the costs that are recovered through ancillary services tariffs, and set out the forecast operating expenditure on the different types

[70] AER, *Review of gas distribution network reference tariff variation mechanism and declining block tariffs: final decision*, October 2023.

of disconnection services, but it has not provided enough information to enable us to understand why the cost of providing each disconnection service varies so much.

We are therefore not confident that the tariff reflects the different costs of providing the services, and in turn, provides price signals that promote efficient investment in and utilisation of the network.

Further, we question why if a set fee is charged by ATCO, a retailer is then able to also charge their customer a fee for the removal of metering equipment.[71] Consideration should be given to removing this from ATCO's proposed permanent disconnection contract if reasonable reasons for allowing it cannot be provided.

It is important that ATCO makes clear to customers the total costs and service descriptions of the different services available for ceasing to use gas (e.g. permanent disconnection, or turning off supply at the meter with the connection and meter remaining in place, and any other options).

We also question if the piecemeal approach of permanently removing customers from a connection point on request is the most efficient use of resources, or if approaches such as permanently disconnecting households on a street-by-street (or other) basis as a section of the network is in need of replacement could greatly reduce permanent disconnection costs.

We note the AER has recently allowed for some of the costs of permanent disconnection to be rolled into the broader regulatory cost base, to lower the tariff for permanent disconnection services.[72] We understand that this decision has been driven by a desire to encourage permanent disconnection over temporary disconnection, due to safety risks associated with temporary disconnection. The ERA should confirm that these safety risks do not exist for ATCO's distribution network.

Responses to the ERA's questions

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)?

The tariff for the permanent disconnection service does seem very high relative to the service option for disconnection that is not permanent. There is insufficient information for us to be able to definitively comment on whether the difference in prices appropriately reflects differences in the costs of providing each service.

In noting the above, our view is that the full charge for a particular ancillary service should reflect the costs of providing it – there should not be additional charges levied. In particular, a retailer should not be able to charge an additional fee for the removal of metering equipment. References to this should be removed from the permanent disconnection contract. We also query why a 'Deregistering a delivery point' fee of $130.49 is required on top of the permanent disconnection service.

[71] See clause of 4 of ANNEXURE G PERMANENT DISCONNECTION CONTRACT MWSWGDS AA6.
[72] AER, 'AER decision supports Victorian gas consumers in energy transition', 2 June 2023.

FIXED PRINCIPLES

We do not support the inclusion of ATCO's proposed fixed principle about emissions reduction and renewable gases.

As raised earlier in our submission, we do not consider ATCO's proposed expenditure on renewable gas readiness to be conforming expenditure. Our view on this matter is consistent under both the currently regulatory framework, and the amended regulatory framework. As suggested earlier in this submission, ATCO could include the proposed capital expenditure in its speculative capital expenditure account; if the expenditure comes to meet the conforming capital criteria, the relevant portion of the expenditure can be rolled into the capital base at that time.

We do however acknowledge the uncertainty ATCO (and the ERA in determining efficient costs) is having to grapple with and encourage the WA Government to make clear its intentions about whether the national changes will be adopted in WA as a matter of urgency, as well finalise the Sectoral Emissions Reduction Strategies and the refreshed Renewable Hydrogen Strategy.

APPENDIX A: NET PRESENT VALUE ANALYSIS – UAFG REPLACEMENT OPTIONS

	2025	2026	2027	2028	2029	Total	
Base case							
Gas inflow (est.) (TJ)	30563	30077	29850	29645	29394		Calculated
Gas consumed (TJ)	30052	29575	29355	29155	28911		ATCO, *UAFG Forecast and Strategy* , p. 14
% UAFG	1.67%	1.67%	1.66%	1.65%	1.64%		ATCO, *UAFG Forecast and Strategy* , p. 14
Volume UAFG (est.) (TJ)	511	502	495	490	483		Calculated
Check % UAFG	1.67%	1.67%	1.66%	1.65%	1.64%		
Unit price replacement gas ($/GJ)	$ 11	$ 11	$ 12	$ 12	$ 14		ATCO, *Renewable Gas Delivery Strategy* , p. 39
Volume of UAFG for which ACCUs will be purchased	102	100	99	98	97		Calculated, assuming emissions from 20% of UAFG will be offset
Volume of that UAFG which is fugitive emissions	38	37	37	37	36		Calculated, using the rate of fugitive emissions taken from ATCO, *Renewable Gas Delivery Strategy* , p. 51, and ATCO, *UAFG Forecast and Strategy,* p. 9
Associated volume Co2e (tonnes) & ACCUs	15595	15320	15107	14954	14741		Calculated, using the tonnes of GHG per unit of fugitive emissions taken from ATCO, *Renewable Gas Delivery Strategy* , p. 51
Unit price ACCUs	$ 30	$ 35	$ 40	$ 45	$ 50		ATCO, *UAFG Forecast and Strategy* , p. 39
Cost replacement gas	$ 5,621,000	$ 5,522,000	$ 5,940,000	$ 5,880,000	$ 6,762,000		
Cost ACCUs	$ 467,854	$ 536,216	$ 604,273	$ 672,941	$ 737,030		
Annual cost	$ 6,088,854.12	$ 6,058,216.37	$ 6,544,273.43	$ 6,552,940.86	$ 7,499,030.47	$ 32,743,315	
NPV	$ 26,427,988						Discount rate as per ATCO Gas Tariff Model WACC
Investment case							
Volume UAFG (est.) (TJ)	511	502	495	490	483		Calculated
Volume replacement gas (TJ)	409	402	396	392	386		Calculated, assuming 80% of UAFG will be replaced by gas, per ATCO, *Renewable Gas Delivery Strategy, p* . 5.
Unit price replacement gas ($/GJ)	$ 11	$ 11	$ 12	$ 12	$ 14		ATCO, *Renewable Gas Delivery Strategy* , p. 39
Volume renewable gas (TJ)	102	100	99	98	97		Calculated, assuming 20% of UAFG will be replaced by gas, per ATCO, *Renewable Gas Delivery Strategy, p* . 5.
Unit price renewable gas ($/GJ)	$ 14	$ 13	$ 12	$ 11	$ 10		ATCO, *Renewable Gas Delivery Strategy* , p. 40; 2029 price taken from p. 10 of this document: https://arena.gov.au/assets/2021/11/australia-bioenergy-
Capital cost (two injection points only) ($million)	$ 4.50	$ 0.10	$ 0.10	$ 0.10	$ 0.10		ATCO, *2025-29 Plan,* p 164
Operating cost (pro-rated for two injection points only) ($million)	$ 0.50	$ 0.53	$ 0.52	$ 0.46	$ 0.47		ATCO, *2025-29 Plan,* pp 113 - 117
Cost replacement gas	$ 4,496,800	$ 4,417,600	$ 4,752,000	$ 4,704,000	$ 5,409,600		
Cost renewable gas	$ 1,430,800	$ 1,305,200	$ 1,188,000	$ 1,078,000	$ 946,680		
Capital and operating cost	$ 5,000,000	$ 633,333	$ 616,667	$ 560,000	$ 566,667		
Annual cost	$ 10,927,600	$ 6,356,133	$ 6,556,667	$ 6,342,000	$ 6,922,947	$ 37,105,347	
NPV	$ 30,641,494						