Energy Networks Australia submission to ATCO 2020 to 2024 Access Arrangement Draft Decision

Response to Draft Decision

10 July 2019

Energy Networks Australia

Contents

Energy Networks Australia www.energynetworks.com.au
Unit 5, Level 12, 385 Bourke Street Melbourne VIC 3000
P: +61 3 9103 0400 **E:** info@energynetworks.com.au
Energy Networks Association T/A Energy Networks Australia
ABN: 75 106 735 406

Key messages

- Significant negative consequences associated with the proposal to retrospectively disallow 15.2 per cent of capital expenditure do not appear to have been adequately considered in the Draft Decision. These include decreased investor confidence, delaying of the mains replacement program and reduced operational workforce mobility.
- In an increasingly decarbonised future, gas networks have a role to play in providing low-carbon energy supply. Gas networks should be provided the opportunity to pursue and invest in innovative technologies to prepare for the future, especially where customers supported such innovation expenditure.
- The regulatory sandbox framework and a scheme which incentivises innovation similar to the Demand Management Innovation Scheme or Demand Management Innovation Allowance should apply to ATCO and other gas networks.
- Under the current regulatory approach, if the risk-free rate continues to decline to historic lows then there is substantial risk of the National Gas Objective and associated Revenue and Pricing Principles not being achieved. This reinforces a need for the ERAWA to fully satisfy itself across the entire building block elements that the Access Arrangement arising from any regulatory revisions clearly satisfies the Revenue and Pricing Principles
- 2018 actual operational expenditure should be used as the base year for determining operating expenditure allowances in the 2020-24 Access Arrangement. 2018 is the most recently available year of actual data.

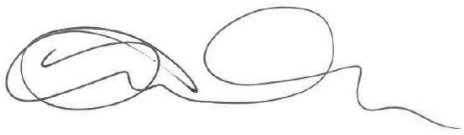
Energy Networks Australia is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

Energy Networks Australia appreciates the opportunity to comment on the Draft Decision for ATCO's 2020 to 2024 Access Arrangement.

Further detail on our key messages is provided in the following sections.

If you have any question or would like to discuss the content of this submission, please contact Chris Gilbert on 03 9103 0409 or cgilbert@energynetworks.com.au

Sincerely



Tamatha Smith

A/Chief Executive Officer

Capital expenditure disallowance

The Economic Regulatory Authority Western Australia (ERAWA) is of the view that $75.5m of capital expenditure (CAPEX) during ATCO's current access arrangement, July 2014 to December 2019, is non-conforming under rule 79 of the National Gas Rules (NGR). This equates to 15.2 per cent of total CAPEX and represents a different order of magnitude to the 0.7 per cent of deemed non-conforming CAPEX in the 2010-14 Access Arrangement.

The primary reason given for the disallowance is that the ERAWA does not believe that ATCO provided adequate information to justify how their CAPEX was prudent and efficient under rule 79(1) and rule 79(2) of the NGR.

Energy Networks Australia is concerned that the ERAWA has not properly considered the consequences of retrospective CAPEX disallowances on customer outcomes, investor confidence and the associated long-term financeability of the energy industry.

Specific areas of concern in relation to ERAWA's disallowances are discussed in more detail below.

Conforming capital expenditure on mains replacements

The ERAWA has deemed $16.7m of CAPEX for replacing unprotected metallic mains and an undisclosed amount for replacement of odd size steel mains as non-conforming.

The decision was made primarily on the basis that the ERAWA believes ATCO did not adequately explain how the additional expenditure satisfied the conforming CAPEX criteria under rule 79(1)(a)[1] and rule 79(2)(c)(i) and (ii)[2].

Energy Networks Australia believes that the evidence provided in ATCO's revised proposal should be sufficient for the ERA to reach the view that capital expenditure on unprotected metallic mains, odd size steel mains and replacement of PVC mains and services is conforming.

- As the projects were often undertaken at the same time as other co-located projects, the total combined expenditure incurred is lower than would otherwise have been incurred if ATCO had to perform these replacements on two separate occasions. ATCO has avoided the additional costs of transporting equipment and labour to and from the site and the costs to customers in the form of disruptions, a loss of gas supply and access inconveniences.
- Bringing forward project replacements scheduled for the near future to align with other co-located current projects is likely to deliver to lowest sustainable cost of service given customer needs when there are efficiency and other service gains to be had from undertaking the projects at the same

[1] Rule 79(1)(a) – (1) Conforming capital expenditure is capital expenditure that conforms with the following criteria: (a) the capital expenditure must be such as 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

[2] Rule 79(2)(c)(i) and (ii) - (2) Capital expenditure is justifiable if: (c) the capital expenditure is necessary: (i) to maintain and improve the safety of services; or (ii) to maintain the integrity of services

time. The decision by ATCO has reduced the overall cost of the mains replacement program and the associated customer burden of a further service disruption.

For these reasons, Energy Networks Australia believes rules 79(1)(a) and79(2)(a) [3] have been satisfied and the expenditure should be considered as conforming.

Efficiency implications and incentives of ERAWA approach

As well as the risk and investment implications from a large CAPEX write-down, there are also more immediate and short-term consequences related to mains replacement and remobilisation of the operational workforce.

Some ongoing mains replacement work has yet to be completed and our understanding is ATCO has postponed replacements that do not pose an immediate and material safety or operational integrity risk on the basis that the CAPEX which would otherwise have been included in the Regulatory Asset Base will not be incorporated.

The consequence of this foreseeable business response to an unexpected ex post regulatory intervention is that efficient and timely investment in pipelines and other infrastructure to maintain and future-proof the gas network will not occur. Under normal circumstances, prudent expenditure in the gas network would be carried out, delivering value to the community and gas users. Instead, elements of the mains replacement program could be pushed back several months, delaying necessary and otherwise beneficial investment for the community and gas users including lower leakage rates, reduced maintenance unit cost rates and avoiding the cost and disruption to residents and businesses from repeat street works.

This avoidable regulatory risk has the potential to lead to the perverse impact of higher costs to customers. For example, it is possible that project related operational staff and specialist third party contractor personnel will likely be stood down temporarily and are likely to seek other employment opportunities in lieu of ATCO or ATCO contractors. It is likely that a large number, if not a majority of operational workers may no longer be available for reintroduction into the operational workforce by the time the mains replacement program recommences as they will have found alternate employment.

The associated costs of sourcing and re-training the required number of staff and specialist contractor personnel are potentially large and should be materially considered, especially given that $2.9m of disallowed CAPEX is associated with the Jandakot warehouse and training centre. The cost of unanticipated regulatory disallowance could thus be a disruption to ATCO's efficient planned business operation and employment arrangements which may lead to a perverse result of higher than efficient operating expenditure (OPEX) costs being borne by customers.

Risks are rising, returns are falling

Risk is one of the primary considerations of investors when they are deciding where to invest their capital. Traditionally, investments with low risk levels have low expected returns and investments with higher risk levels have higher expected returns.

[3] Rule 79(2)(a) - (2) Capital expenditure is justifiable if: (a) the overall economic value of the expenditure is positive

The impact of disallowing a large portion of ATCO's 2015-19 CAPEX is a significant increase in potentially realised investor risk coinciding with a large decrease in expected returns. The overall effect of the Draft Decision is to impose a higher level of regulatory and investor risk with respect to ATCO's gas network operations at a time when the need for innovation and energy solutions in network infrastructure has never been higher.

It should be noted that investor confidence has already been unsettled by recent regulatory reviews and risks for network businesses have been rising as a consequence:

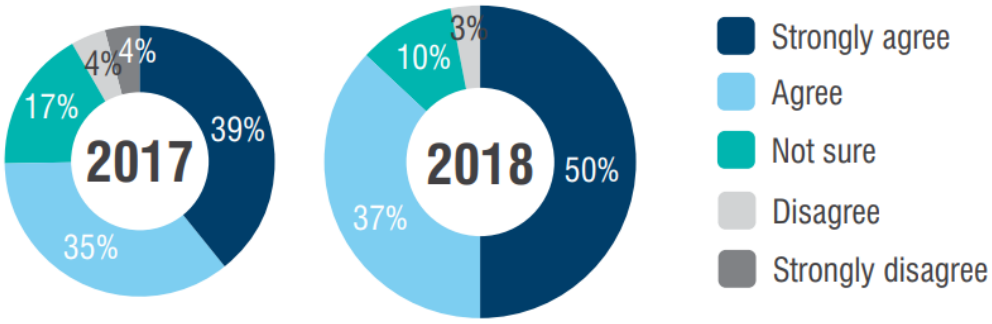
- The ERAWA's *Gas Rate of Return Guidelines Review* and the Australian Energy Regulator's (AER's) *Rate of Return Guideline Review* both materially reduced the allowed returns to network businesses from their invested capital.
- The *Regulatory Tax Approach Review* reduced the benchmark regulatory tax allocated to businesses, resulting in further effective lowering of returns from invested capital.

The anticipated impact of these reviews is to decrease the willingness of investors to invest in the Australian energy industry. Lower levels of investment, or higher regulatory risk premium arising from these reviews, are likely to result in less capital being available for innovative projects with the potential to enhance dynamic efficiency, impeding businesses' achievement of long-term customer benefits.

An Infrastructure Partnerships Australia report, "Australian Infrastructure Investment Report 2018" (IPA Report), provides empirical evidence that investor confidence in the Australian energy sector is weaker than the past and falling. The survey comprises 33 Australian and international investors who together collectively own or manage about $380 billion worth of infrastructure assets globally.

The IPA report outlines that 87 per cent of survey participants said the Australian energy sector is 'full of uncertainty' in 2018, compared with the 74 per cent who responded similarly in 2017.

Figure 1 - Uncertainty in the Australian energy sector[4]

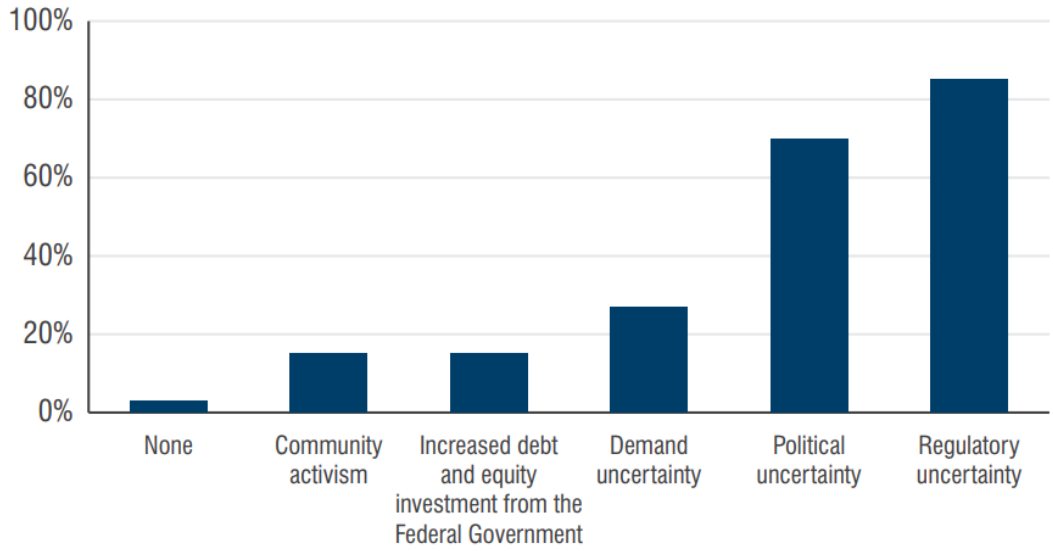


Whilst 90 per cent of respondents in 2018 reported that they are 'highly likely' to invest in Australian infrastructure assets in the next two to three years, up from 70 per cent in 2017, energy infrastructure assets have fallen from the third most preferred investment in 2015 to the eleventh preferred in 2018. Only non-renewable energy generation i.e. coal is less favoured.

[4] Infrastructure Partnerships Australia, *Australian Infrastructure Investment Report 2018*, p. 17

Investors are favouring investments in Australian infrastructure assets at record rates yet are turned off investing in energy infrastructure due to increased uncertainty. The two overwhelming reasons for lack of investment in the energy sector are political and regulatory uncertainty.

Figure 2 - Factors limiting investor interest in the energy sector[5]



> *"Participants explained that frequent changes to Australia's national energy policy and a range of regulatory and market interventions has had a real and enduring impact on their willingness to invest in energy assets."*[6]

One investor is explicitly quoted as saying:

> *"Around the transmission and distribution space there are big concerns about the policy changes over the last couple of years. Things like the removal of Limited Merits Review, the rate of return review, and talk of writing off Regulated Asset Bases, elements which are sacrosanct to the fundamentals of investing in these sectors are currently coming under question. It makes people really pause for thought, not just about that sector but the broader theme of investing in Australia."*[7]

Investors are clearly signalling a concern with the direction and growth of new regulatory risks, in part due to recent regulatory decisions.

Importantly, the survey was undertaken prior to the Final Decisions for the *Rate of Return Guideline* and *Regulatory Tax Approach Review*. Each of these reviews will only have further decreased investor confidence.

The likely impacts of retrospective disallowances on the future cost of capital and customer outcomes must be considered. This is particularly the case due to the scale and circumstances of the retrospective

[5] Infrastructure Partnerships Australia, *Australian Infrastructure Investment Report 2018*, p. 17

[6] Infrastructure Partnerships Australia, *Australian Infrastructure Investment Report 2018*, p. 2

[7] Infrastructure Partnerships Australia, *Australian Infrastructure Investment Report 2018*, p. 17

disallowance proposed, which is not comparable to any similar decision under the AER's application of the National Gas Regime.

Energy Networks Australia believes it is important not to create a perverse incentive where investors objectively prefer to invest in one jurisdictional regulatory framework over another. This Draft Decision risks leading to unintended and unequal investment incentives applying solely on the basis of whether gas network investments are proposed to be made in Western Australia, or any other Australian jurisdiction.

As risks for investors rise, the cost of financing will increase for new and existing investments since the regulatory treatment of past capital investment is the best objective information available to investors on how current investments are likely to be treated over their lives[8]. The Independent Review into the Future Security of the National Electricity Market captures these concerns, stating:

> *"Compulsory write-downs are problematic. Writing down the asset values would increase creditors' perceptions of risk, resulting in a higher Weighted Average Cost of Capital for future projects or refinancing, leading to potentially higher costs for consumers over all."*[9]

The same considerations apply to a retrospective write down of capital expenditure made within the current regulatory period. Over time, increased costs to finance arising from avoidable regulatory risk are passed on to customers or investment is reduced.

Energy Networks Australia strongly advocates for the ERAWA to consider the impacts of increased investor risk in the context of long-term outcomes for customers. Increasing investor risk poses material costs on service providers and consequently has long-term negative implications for end-use customers.

[8] Fitch Ratings, *Australian Utilities: Face Near Term Pressures*, 18 March 2014 and see also Stern, March 2013, p. 18-19, and Engel et al *Finance and Public-Private Partnerships,* Paper for Reserve Bank 2014 Conference Financial flows and infrastructure financing, March 2014, p. 6

[9] Hydrogen Strategy Group, *The Independent Review into the Future Security of the National Electricity Market, Blueprint for the Future,* 2017, p. 136

The evolving future of gas networks and ATCO's role in customer innovation

Gas networks have a future role to play

In an increasingly decarbonised future, gas networks have a role to play in providing low-carbon energy supply, firming intermittent renewable generation and storing excess renewable electricity as hydrogen through electrolysis. There are many innovative trials being undertaken by gas networks around the country to explore these possibilities and deliver long-term customer benefits.

Energy Networks Australia co-authored the *Gas Vision 2050* publication which outlines our vision:

> "for Australia to turn its gas resources into products and services that will enhance national prosperity while achieving carbon neutrality."[10]

The publication shows that the gas industry is on a journey of active decarbonisation and is well placed to provide reliable and secure energy as well as cost-effective carbon reductions by 2050 across the entire economy. Gas provides more than 6.5 million Australian households with 44 per cent of Australia's household energy while only producing 13 per cent of household greenhouse gas emissions.[11]

Energy Networks Australia's publication, *Decarbonising Australia's gas networks*, found that there are a variety of gas decarbonisation options that are likely to be cost competitive with electrification over the long-term, including hydrogen production through electrolysis. It also found that gas networks can be utilised to store electricity by electrolysis to produce hydrogen, potentially improving the utilisation and integration of variable renewable generation. The report recommended a high priority be given to research and testing to understand the maximum level of hydrogen that can be safely injected into the Australian gas network without jeopardising the safe operation of appliances.[12]

The Hydrogen Strategy Group, chaired by Dr Alan Finkel, published modelling by the Australian Gas Infrastructure Group and Deloitte in their report *Hydrogen for Australia's Future* which assessed the cost of two pathways for energy decarbonisation in Victoria.

- The first pathway, the 'full electrification case', analyses replacing all natural gas consumption with electricity generated from renewable sources via a replacement of gas appliances with electric appliances and ultimately, decommissioning the gas networks.
- The second pathway, the 'hydrogen conversion case', analyses conversion of existing natural gas appliances and distribution networks to transport hydrogen produced through electrolysis, utilising electricity generated from renewable sources.

[10] Multiple authors, *Gas Vision 2050: Reliable, secure energy and cost-effective carbon reduction*, p. 3

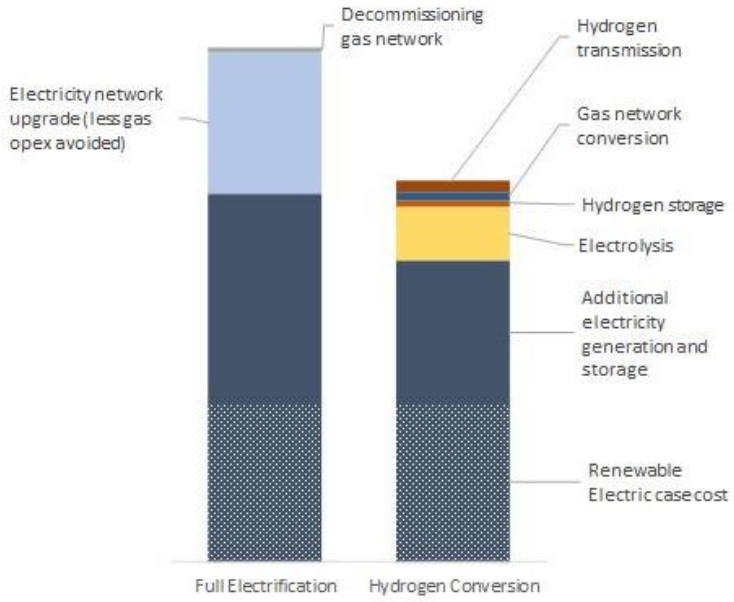
[11] Multiple authors, *Gas Vision 2050: Reliable, secure energy and cost-effective carbon reduction*, p. 3

[12] Deloitte Access Economics, *Decarbonising Australia's gas distribution networks*, 2017, p. 92.

» The base case under each of these pathways is for the existing electricity sector to also be decarbonised.[13]

The analysis found that the second pathway focusing on hydrogen and electrolysis is 40 per cent less expensive than the full electrification pathway. This is predominately due to the fact that peak electricity demand is lower under the second pathway and costly upgrades to the electricity network are avoided. The gas network acts in a firming capacity to provide necessary energy supply in peak periods and makes use of excess renewables during periods of high renewable electricity generation.

Figure 3 - AGIG analysis and Deloitte energy market model



Higher levels of decarbonisation will depend on proven technology which can be demonstrated in the near future and then widely deployed for large-scale decarbonisation thereafter.[14] Hydrogen is one of the key technologies which requires development in order to drive progress towards future decarbonisation in gas networks. Opportunities for hydrogen innovation are being taken advantage of right now and gas networks are on the front foot preparing for the future.

Some current project trials include:

» *Hydrogen Park SA* - a hydrogen demonstration plant that will produce hydrogen from renewable energy is being built in Adelaide's Tonsley innovation district. The $11.4 million project uses renewable electricity to produce hydrogen via electrolysis which will then be injected into the local gas distribution network.[15] This project makes use of the excess renewable generation experienced

[13] Australian Gas Infrastructure Group, *Using hydrogen to decarbonise natural gas consumption in Victoria is 40% less expensive than full electrification*,

[14] Multiple Authors, *Gas Vision 2050: Reliable, secure energy and cost-effective carbon reduction*, p. 9

[15] *Australian-first, $11.4 million hydrogen demonstration plant to be built in Adelaide*, Retrieved from https://www.australiangasnetworks.com.au/our-business/about-us/media-releases/australian-first-hydrogen-pilot-plant-to-be-built-in-adelaide

in the middle of the day in South Australia while also utilising the benefits of renewable hydrogen and the local gas network for storage and distribution. This facility will provide important field-tested results for how hydrogen interacts with gas networks and end-use appliances and is an important step towards future decarbonisation.

- *Fyshwick ACT* - Evoenergy and the Canberra Institute of Technology have partnered to build a first-of-its-kind hydrogen test facility. Founded on principles of reliability, dependability and trust, the facility will be the first in the country to test 100 per cent hydrogen on existing materials and equipment in preparation for use in the gas distribution network. Testing the impact of introducing hydrogen to the network as it stands today will provide understanding of any modifications or replacement which are required for hydrogen's use in the network.[16]
- ***Western Sydney NSW*** – Jemena and the Australian Renewable Agency have partnered to develop a $15 million trial which aims to supply green gas to homes in Jemena's network. The facility will use international technology to convert solar and wind power into hydrogen gas and will be capable of powering approximately 250 homes. The project aims to demonstrate how existing gas pipeline technology can store excess renewable energy for weeks and months, making it more efficient than batteries which can only store excess renewable energy for minutes or hours.[17]

These projects are just three of many around the country which are exploring the possibilities of hydrogen and providing the industry with key learnings in pursuit of large-scale decarbonisation of the gas network. Most Energy Networks Australia gas distribution members, as well as government agencies, are pursuing hydrogen opportunities and for good reason. The COAG Energy Council has established the Hydrogen Working Group to develop a national hydrogen strategy because Australian, state and territory governments agree that hydrogen presents an opportunity for Australia to lead in the emerging global market for low and zero emissions energy.

Energy Networks Australia notes that in Western Australia the WA Government has established a Renewable Hydrogen Council, in recognition of WA's potential for the development of a renewable hydrogen industry and support of transitioning to a lower emissions future. Energy Networks Australia is also aware of the development and interest in domestic hydrogen roadmaps alongside international case studies which point to the increasingly important role of gas distribution businesses in the hydrogen economy supply chain.

Like electricity networks, gas networks understand that one of the most important steps their business can be taking is preparing for and investing in a low-carbon, customer-centric future.

ATCO's innovation for customers

ATCO faces similar technological developments as other gas networks and are likewise taking the opportunity to be on the front foot and prepare for the future. Delivering the future services that customers will want requires expenditure on research and development in the present. Although gas network businesses face similar future trajectories, the ability and extent of different businesses to employ new technologies will vary due to different systems, processes and operational environments within each business. That's why it's important for each business to understand how the emergence of

[16] *Hydrogen test facility*, Retrieved from https://www.evoenergy.com.au/emerging-technology/hydrogen-test-facility

[17] *Welcome to Jemena's Power to Gas Trial*, Retrieved from http://jemena.com.au/about/innovation/project-h2go

new technologies will integrate with their business and to undertake early research into how the integration would be best facilitated.

ATCO has partnered with the Australian Renewable Energy Agency to build the Clean Energy Innovation Hub. The leading research and development facility is scheduled to be completed by the end of July 2019 and will lead research and development to explore the practicality of blending and replacing natural gas with hydrogen at a city-wide scale across a municipality. The site will comprise 1003 solar panels capable of generating 300kW of power, storing up to 400 kWh of energy in batteries, and an electrolyser fully integrated into a commercial scale Hybrid Energy Microgrid System.

The project coincides with ATCO's Voice of the Customer program where ATCO engaged with customers and sought their views and preferences for the 2020-24 Access Arrangement. Both residential and commercial customer segments supported ATCO's innovation program (including the research into clean energy options) and saw innovation as a path to creating future jobs.

There was unanimous support among the residential customer segment to see the Clean Energy Innovation Hub continue. This feedback has been incorporated into ATCO's 2020-24 proposal, with ATCO's major initiatives including the Clean Energy Innovation Hub being designed in the long-term interests of customers, providing low-carbon energy supply, firming intermittent electric renewable generation and storing excess renewable electricity as hydrogen using electrolysis. These initiatives increase the utilisation of both the gas and electricity networks and reduce the long-term costs to customers. Gas networks play a critical role in delivering low cost and highly reliable energy to businesses, households and vulnerable customers. ATCO's Clean Energy Innovation Hub, along with other similar projects, has demonstrated the continued role of gas networks in a carbon constrained future and that ongoing utilisation of this asset can deliver long term value to all consumers.

Energy Networks Australia notes that in its revised proposal, ATCO has accepted the ERAWA's required amendment to remove the Network Innovation Scheme. The scheme would have incentivised investment in innovative technologies and put ATCO in a position to improve its services and better respond to customer choice.

Energy Networks Australia firmly believes that network businesses, including ATCO, should be provided incentives to be on the leading edge of network innovation, putting themselves in a position to cater to customers' needs. Unfortunately, a number of gas distribution businesses have had their proposed innovation incentive schemes rejected by regulatory agencies in a manner that may harm the long-term interests of current and future consumers.

Decisions to reject innovation schemes locally mean that Australian gas distribution customers are likely to see comparatively worse long-term customer outcomes compared with overseas customers. The Office of Gas and Electricity Markets in the UK administers the Gas Network Innovation Allowance scheme to:

> "provide additional funding to kick start a cultural change where Network Licensees establish the ethos, internal structures and third party contracts that facilitate innovation as part of business as usual."[18]

The Innovation scheme comprises three parts:

[18] Office of Gas and Electricity Markets, *Gas Network Innovation Allowance Governance Document*, 2017, p. 4.

- A network Innovation Allowance (NIA) to fund smaller innovation projects that will deliver benefits to customers as part of a licensee's price control settlement.
- A Network Innovation Competition (NIC) to fund selected flagship innovative projects that would deliver low carbon and environmental benefits to customers.
- An Innovation Roll-out Mechanism to fund the roll-out of proven innovations which will contribute to the development of a low carbon energy sector or broader environmental benefits.[19]

Overseas businesses are being encouraged to pursue innovation opportunities to derive long-term customer benefits. ATCO should similarly be encouraged, not penalised, for pursuing hydrogen opportunities and attempting to understand what impacts the future fuel will have on its business and customers.

The repercussions of these rejections will not be felt today, but they may have a large impact on the ability of networks to provide the services customers have said they want. They will also impede networks' ability to pursue and deliver the sustainable long-term benefits of supplying low-carbon energy, firming intermittent electric renewable generation and storing excess renewable electricity as hydrogen through electrolysis. These longer-term problems are unlikely to be solved using only the technology and solutions immediately available today. Policy makers and regulators should provide effective long-term signals and incentives that ensure continued investment in, and utilisation of, these assets in the long-term interests of energy consumers.

DMIS and the regulatory sandbox framework should apply to ATCO

Energy Networks Australia supports gas networks having access to a scheme that incentivises innovation for the purposes of improved customer outcomes. Existing mechanisms suited for adoption by gas distribution businesses are the Demand Management Innovation Allowance (DMIA) and Demand Management Incentive Scheme (DMIS). These AER-led mechanisms provide electricity distributors with an annual allowance or incentive to undertake projects focused on developing solutions to emerging challenges.

In the case of the DMIA and DMIS, the emerging challenge is demand management. Gas networks have similar emerging challenges in the development of renewable gasses and pipeline technology to ensure that the long-term safety of the network is not jeopardised. A scheme similar to the DMIS or DMIA which targets pipeline technology and integration with renewable gases is likely to be broadly utilised and may provide substantial benefits to customers.

Additionally, and especially in the absence of any innovation incentive scheme, Energy Networks Australia also supports the inclusion of a regulatory sandbox framework for gas distribution businesses. Projects initiated under a regulatory sandbox can trial innovative technologies, business models, products or services under relaxed regulatory requirements. The sandbox framework will encourage necessary innovation projects in preparation for future technologies and the capital backing to fund them. Projects

[19] Office of Gas and Electricity Markets, *Gas Network Innovation Allowance Governance Document*, 2017, p. 4

are usually bound to a smaller-scale on a time-limited basis for the purposes of demonstrating feasibility in a broader framework.

Regulatory uncertainty is one of the larger barriers to investing in innovative technologies. The inclusion of a regulatory sandbox framework will reduce regulatory uncertainty and will make it more viable to invest in innovative projects which have the possibility to create long-term benefits for customers.

Risk-free rate falling to record lows

Energy Networks Australia's submission to the 2018 rate of return guideline, and other elements of the guideline review, discussed the relationship between low risk-free rates and future required returns on equity. Energy Networks Australia's submissions set out extensive evidence to support the proposition that the market risk premium required by investors increases as the risk-free rate from Government bond yields declines. This information was also submitted to the ERAWA.[20]

The rate of return guideline was finalised by the ERAWA in December 2018 on the basis of all available information at the time. Since then, the risk-free rate from five-year Government bond yields has fallen to a record low. At the time of ATCO's revised proposal, the risk-free rate on five-year Government bonds sat at just 1.3 per cent, much lower than the rate of 2.1 per cent calculated during the rate of return guideline review.

Energy Networks Australia agrees with ATCO's comments in their 2020-24 revised proposal:

> *The key question is whether real world commercial equity investors currently require a return on equity lower than at any other time in recorded history. Unless the ERAWA is confident about that, it could not be satisfied that its approach to the allowed return on equity in the 2018 Guideline will contribute to the NGO to the greatest degree in the current market conditions.*
>
> *If it is the case that equity investors in a workably competitive market would require a return of more than 5.5% in order to invest in the benchmark efficient entity, the ERAWA's regulatory allowance clearly does not contribute to the achievement of the NGO because it will be insufficient to attract the investment.*[21]

Given considerable evidence suggests – and other regulators' practice takes into account – that as the risk-free rate declines, the market risk premium required by investors increases, Energy Networks Australia is of the view that if the risk-free rate continues to decline beyond the rate assessed in the rate of return review with no increase in the market risk premium, then the National Gas Objective and associated Revenue and Pricing Principles are not being achieved as ATCO is not being provided with a reasonable opportunity to recover its efficient costs.

During the rate of return guideline process, Energy Networks Australia advocated for the rate of return guideline instrument to be re-opened as required if there was a material change in market conditions

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[20] Energy Networks Australia, *Draft Rate of Return Guidelines 2018*, 2018

[21] ATCO, *2020-24 Revised Plan, Access Arrangement Information for ATCO's Mid-West and South-West Gas distribution system*, June 2019, p. 203.

during network business' regulatory periods.[22] It is unfortunate that the final rate of return guideline does not incorporate a mechanism to deal with material changes in market conditions as they occur. If it did, appropriate modifications could potentially be made to account for much lower than expected interest rates.

In the absence of such a mechanism, further inconsistencies between market conditions during the finalisation of each rate of return guideline instrument and actual market conditions at the time of network business' Access Arrangements or Determinations may arise. This reinforces a need for the ERAWA to fully satisfy itself across the entire building block elements that the resulting proposed Access Arrangement best promotes the NGO and satisfies the Revenue and Pricing Principles.

Operating expenditure base year

The ERAWA nominated 2017 as the base year to determine ATCO's 2020-24 OPEX allowance given that the ERAWA deemed 2019's forecast OPEX as unsuitable. ATCO in its revised proposal suggests using newly-released 2018 actual OPEX figures as the base year to determine its efficient OPEX allowances for 2020-24.

Energy Networks Australia agrees with using ATCO's 2018 actual OPEX as the base year for determining OPEX allowances for 2020-24. The most recent actual expenditure figures are a better representation of expected future costs than forecasts are. For example, actual mains replacement CAPEX during 2015-19 on metallic mains was higher than expected due to unforeseen meterage costs at the time of forecasting. This forecasting used historic records which did not accurately represent future conditions. ATCO's 2018 OPEX is in line with previous years within the 2015-19 Access Arrangement, especially after adjusting for growth in customer numbers during 2016 and 2017.

ATCO also introduced more granular forms of cost reporting from 1 January 2018 and thus 2018 costs more likely represent ATCO's future efficient OPEX costs. Using the latest available year of actual expenditure data and removing any non-recurrent expenditure is a standard approach to determining OPEX allowances and is consistent with approaches used with other regulators.

[22] Energy Networks Australia, *National Electricity Law And National Gas Law Amendment Package: Creating a binding rate of return instrument*, Response to COAG Energy Council Senior Committee of Officials, April 2018, p. 13.