



AER: Gas distribution network tariffs review 2023

16 June 2023

To: Australian Energy Regulator

RE: Issues paper – Gas distribution network tariffs review 2023

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Introduction

The Institute for Energy Economics and Financial Analysis (IEEFA) welcomes the opportunity provided by the Australian Energy Regulator (AER) to comment on its Review of Gas Distribution Network Reference Tariff Variation Mechanism and Declining Block Tariffs.¹ We echo the sentiment expressed by the AER's stakeholders, that this review is important in the context of proposed amendments to the National Gas Objective (NGO).

Specific parts of the proposed amendments that are material to the issues discussed here are: the explicit reference to Australia's greenhouse gas emissions targets; and jurisdictional targets that are expected to contribute to reducing Australia's greenhouse gas emissions.²

Although emissions reduction commitments have featured in Australian jurisdictions for some time³, the current conflict between such policies and the existing NGO has created uncertainties for the energy system.

¹ AER. [Review of gas distribution network reference tariff variation mechanism and declining block tariffs: Issues paper for stakeholder feedback](#). May 2023.

² Department of Climate Change, Energy, the Environment and Water (DCCEEW). [Incorporating an emissions reduction objective into the national energy objectives: Information paper](#). May 2023. Page 8.

³ For example, Australia first entered into the Paris Agreement in 2016 ([DCCEEW](#)). The ACT first committed to net zero emissions in 2012 ([ACT ESD 2012; page vii](#)).

An amended NGO will provide greater certainty and will enable the AER to more readily incorporate policy signals into its decisions. This is particularly important for the issues discussed here, as recent policy developments are increasing the likelihood of decreased utilisation of gas distribution networks. Some specific developments include:

- 2050 net zero emissions targets federally and in New South Wales, Queensland, Tasmania, South Australia, Western Australia and the Northern Territory;⁴
- 2045 net zero emissions targets in Victoria⁵ and the Australian Capital Territory (ACT)⁶;
- prohibition of new residential gas connections in the ACT;⁷
- the release of Victoria's Gas Substitution Roadmap;⁸
- introduction of new electrification activities under the Victorian Energy Upgrades scheme, and removal of activities that encouraged purchase of new gas appliances;⁹
- legislation of a 1.5 degree-aligned 2035 emissions reduction target in Victoria¹⁰; and
- the recommendation by Victoria's 2035 target independent expert panel that natural gas use be largely phased out by 2035, with a focus on the built environment.¹¹

This submission responds to the issues around reference tariff variation mechanisms and declining block tariffs in the context of these policy developments, and the proposed amendments to the NGO.

A revenue cap tariff variation mechanism is not in consumers' interests

IEEFA acknowledges the concern that price cap tariff variation mechanisms incentivise distribution networks to increase gas volumes in their networks. However, a revenue cap tariff variation mechanism would be an inappropriate alternative.

There is a material likelihood that utilisation of gas distribution networks will decline in the near term. For example, between the initial proposals and the final decision for the upcoming 2023-28 Access Arrangement period, Victorian distribution networks' forecasts have been steadily downgraded. They now decline over the five-year period in line with the central *1.8°C Orchestrated Step Change* scenario from AEMO's 2023 Gas Statement of Opportunities (GSOO) ([Figure 1](#)). They still sit significantly higher than the *1.5°C Green Energy Exports* scenario, the only GSOO scenario aligned to Victoria's current emissions targets¹². This casts doubt over whether the trend of networks'

⁴ Climateworks Centre. [State and territory climate action: Leading policies and programs in Australia](#). October 2021. Pages 6-7.

⁵ Department of Energy, Environment and Climate Action (DEECA). [Victoria's Climate Action Targets](#). May 2023.

⁶ ACT Climate Choices. [ACT Climate Change Strategy](#). 2019.

⁷ Shane Rattenbury MLA. [ACT reaches milestone preventing new fossil fuel gas connections](#). June 2023.

⁸ DEECA. [Victoria's Gas Substitution Roadmap, 2022](#)

⁹ Engage Victoria. Victorian Energy Upgrades – [Space heating and cooling activities](#) and [Water heating activities](#). 2023.

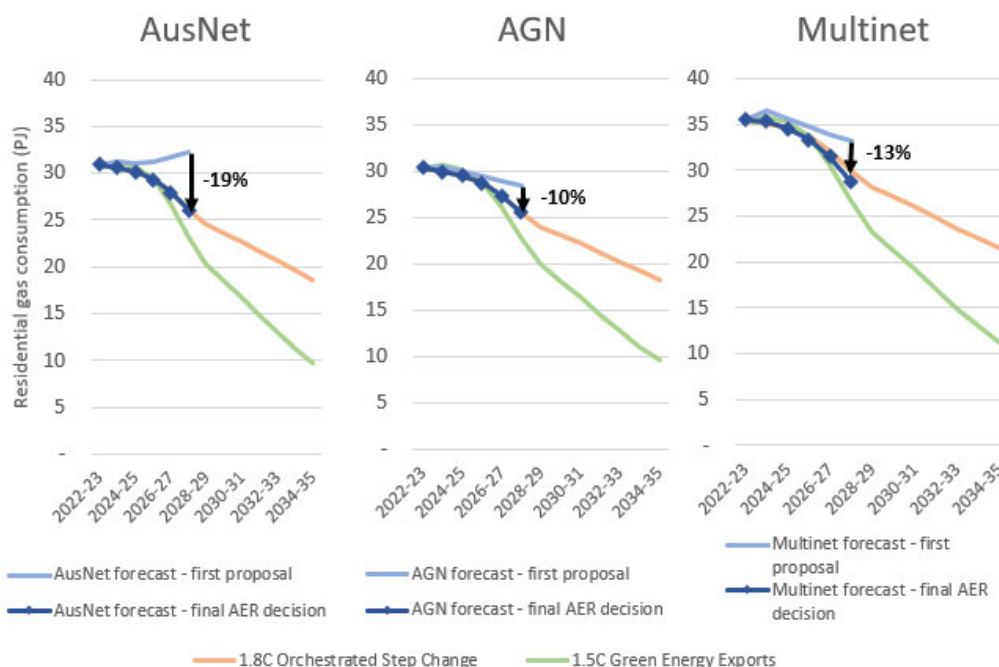
¹⁰ Climateworks Centre. [Submission on Victoria's emissions reduction target for 2035](#). October 2022.

¹¹ Independent Expert Panel for the Victorian 2035 Emissions Reduction Target. [Victoria's 2035 Climate Action Target: Driving Growth and Prosperity](#). March 2023. Page 9.

¹² AEMO. [Draft 2023 Inputs, Assumptions and Scenarios Report, December 2022](#). Page 28.

volumes consistently outperforming forecasts, as highlighted in the AER's issues paper¹³, will continue. Distribution networks will, however, continue to seek to recover the costs of their assets.

Figure 1: Residential volume forecasts for the Victorian gas distribution networks 2023-28



Notes: Final approved residential volume forecasts from the Victorian gas distribution networks' 2023-28 access arrangements period (AusNet¹⁴, AGN¹⁵ and Multinet¹⁶), compared to the forecasts from their initial proposals (AusNet¹⁷, AGN¹⁸ and Multinet¹⁹). Forecasts are plotted alongside trajectories indexed to AEMO's GSOO 1.8 °C Orchestrated Step Change scenario (to which they closely align) and 1.5°C Green Energy Exports²⁰ (which more closely reflects Victoria's emissions targets but implies a steeper decline than networks' forecasts).

Conventionally, the AER approves tariffs that enable distribution networks to recover the costs of their regulated asset base under what's commonly described as the regulatory compact.²¹ The majority of these costs do not decrease in proportion with network utilisation.²²

¹³ AER. [Review of gas distribution network reference tariff variation mechanism and declining block tariffs: Issues paper for stakeholder feedback](#). May 2023. Page 15.

¹⁴ AER. Final decision: [AusNet Gas Services Gas distribution access arrangement 1 July 2023 to 30 June 2028. Attachment 12 – Demand](#). June 2023. Page 4.

¹⁵ AER. Final decision: [Australian Gas Networks \(Victoria & Albury\) Gas distribution access arrangement 1 July 2023 to 30 June 2028. Attachment 12 – Demand](#). June 2023. Page 4.

¹⁶ AER. Final decision: [Multinet Gas Networks gas distribution access arrangement 1 July 2023 to 30 June 2028. Attachment 12 – Demand](#). June 2023. Page 4.

¹⁷ Ausnet Services. [Gas access arrangement review 2024-28 proposal](#). July 2022. Page 54.

¹⁸ Australian Gas Networks. [Five year plan for our Victoria and Albury distribution networks](#). July 2022. Page 129.

¹⁹ Multinet Gas Networks. [Five year plan for our Victorian distribution network](#). July 2022. Page 131.

²⁰ AEMO. [Forecasting portal](#) – GSOO 2023 – Residential and Commercial – Orchestrated Step Change & Green Energy Exports.

²¹ For example, AusNet Services. [Gas access arrangement review 2024-28 proposal](#), July 2022. Page 24.

²² AER [Regulating gas pipelines under uncertainty](#). November 2021. Page 26.

Under a scenario where gas volumes and utilised connections significantly decrease, upholding the regulatory compact would require customers who remain on the network to shoulder increasing costs. Two possible consequences of this are:

- It becomes less financially attractive for households to maintain their gas connection. Households that can electrify are more likely to do so. This would accelerate the number of customers leaving the network, and the costs passed on to remaining customers.
- Households that do not have the agency to electrify (for instance, renters or households without access to finance) are forced to remain on the network and pay higher costs.

This scenario is what the AER and others describe as the ‘utility death spiral’ or ‘gas death spiral’.

It is worth noting that under the National Gas Rules (NGR), gas networks are not guaranteed the ability to fully recover all of their costs. Provisions exist in the NGR for capital redundancy – that enable the AER to make decisions around assets that cease to contribute to service delivery, and how such costs should be shared between networks and users.²³

There is no tariff variation mechanism that provides a method for avoiding or completely mitigating the risks of the gas death spiral. However, a revenue cap mechanism may accelerate the spiral, as volume reductions would lead to more immediate cost impacts on consumers.

The appropriate assignment of risk is critical in choosing a tariff variation mechanism, and we agree with the AER’s point in the Issues paper that: “In the case of gas distribution network volumes, distributors are better placed to manage volume risk than individual customers.”

Additional risk is already being transferred to consumers via allowances for accelerated depreciation of regulated assets (more than \$330 million has already been approved for Victorian distribution networks), and abolishment fees (\$220 per abolishment approved in Victoria plus \$602 to \$730 to be socialised across all tariffs).²⁴ A revenue cap tariff variation mechanism would transfer even greater risk onto customers. This is inconsistent with the NGO’s goal to promote efficient investment, operation and use of natural gas for the long-term interests of consumers.

The risk allocation under a weighted average price cap approach is preferable to a revenue cap approach, and provides some certainty to consumers on the price increases they can expect over a five-year access arrangement period. However, it is still critical to ensure that the price change approved at the start of each access arrangement period, and the annual price increases approved during the arrangement period, represent a fair balance of risk between consumers and networks. As residential gas volumes decrease, networks may face increasing pressures to propose price rises that are greater than what has historically been approved.

Any decision made by the AER should consider broader, long-term solutions for managing the price risks faced by consumers. This should focus on the appropriate allocation of stranded asset risks

²³ AEMC. [National Gas Rules. 85 – Capital redundancy](#).

²⁴ AER. Final Decisions – Gas distribution access arrangement 1 July 2023 to 20 June 2028 for [AusNet Services \(page 28\)](#), [Multinet Gas Networks \(page 29\)](#) and [Australian Gas Networks \(Victoria & Albury\) \(page 27\)](#). June 2023.

between consumers and networks, and provide certainty in any cases where the regulatory compact with networks must be compromised to stay aligned with the NGO.

Declining block tariff structures are inconsistent with the NGO updates, but the alternatives pose challenges

IEEFA agrees with stakeholder feedback to the AER that declining block tariff structures are inconsistent with future amendments to the NGO. Continued use of these structures creates a conflict for consumers, who will simultaneously be incentivised to use more gas, while experiencing government policies that disincentivise or restrict gas consumption.

This conflict is already a reality for many consumers. Many Victorians are currently on declining block tariff structures that make it attractive for them to remain on gas; however, they will soon be incentivised to transition from gas to electricity under the Victorian Energy Upgrades program.²⁵ As an additional conflict, distribution networks in Victoria and New South Wales are currently offering cash rebates to customers who install new gas connections or switch their electric appliances to gas appliances.²⁶

In a future where gas network volumes are decreasing and there is potential for a 'gas death spiral' to occur, customers who stay on gas based on these conflicting incentives will face a disproportionate exposure to gas networks' stranded asset risks.

IEEFA believes the two alternative tariff structures proposed by the AER are in principle preferable to the declining block structure. They send truer cost-reflective signals to consumers that moving away from gas is the most economical option, and to networks that investing in expansion is risky. These signals would align to government policy and an amended NGO. However, careful regulatory design would be needed to overcome their flaws.

An inclining block tariff structure that disincentivises greater gas consumption would be most consistent with the amended NGO. In practice, meeting states' net zero targets requires a pace of electrification that is above a standard end-of-life replacement schedule, and therefore financial incentives to electrify are beneficial. However, this option has several challenges:

- Consumers rarely behave economically rationally with respect to total energy system costs. Like declining block tariff structures, inclining block tariff structures are complex to apply to household decision-making. This could diminish their intended benefits.
- An inclining block tariff structure can be inequitable for low-income high energy consumers. This exacerbates problems for households who already face daily trade-offs between energy costs, health or basic necessities.²⁷

²⁵ Engage Victoria. Victorian Energy Upgrades – [Space heating and cooling activities](#) and [Water heating activities](#). 2023.

²⁶ For example: Multinet. [Rebate offers](#). 2023; AGN. [Rebates and offers for you](#). 2023; Jemena. [Cash Back Offers](#). 2023.

²⁷ A [recent study by Better Renting](#) found that renters' homes over a winter period were already below the World Health Organization's recommended minimum temperatures more than 75% of the time (page 1). Similarly a [report by the Climate Council](#) revealed that renters are making trade-offs between basic home comfort and other necessities (page 4).

- Tariff structures that disincentivise gas consumption are not in the commercial interests of distribution networks. If the AER does not also enforce specific requirements for the ‘slope’ of such structures, distributors may choose to simply provide flat structures.

A flat tariff structure provides a weaker disincentive for gas consumption than an inclining block structure. However, it does remove the current incentive to increase gas consumption. It also has the advantage of being simpler for consumers to understand, and for networks to forecast their likely revenue over the course of an access arrangement. Its key disadvantages are:

- It does not provide a ‘lever’ to adjust the incentive to decarbonise, as in an inclining block structure, and will not be as strong as an incentive as this structure.
- It may result in unfair cost increases to consumers who cannot reasonably control their natural gas consumption without compromising basic needs. This could lead to similar equity issues as in the inclining block structure.

The likely real impact of any change in tariff structures should also be considered, after they are passed through energy retailers. Retailers’ tariff structures are not regulated in the same way as distribution tariffs. They have a greater level of flexibility to reallocate distribution costs to different parts of the price structures they offer to consumers, in order to present an attractive product. It is not within retailers’ commercial interests to offer their customers products that disincentivise high energy use. Therefore the impact of decisions made to distribution network tariffs on consumer costs could be muted.

In this submission IEEFA has not provided a specific recommendation on a preferable tariff variation mechanism. Instead we highlight that, while the alternatives to a declining block structure proposed by the AER have their merits, they would need to be designed carefully. They may also require accompanying legislation to ensure that they achieve the desired objective while minimising unacceptable impacts on consumers.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute’s mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

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