

Review of gas distribution network reference tariff variation mechanism and declining block tariffs

Final decision

October 2023

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1 AER decision

Our decision is to not make sector wide changes to gas distribution pipeline tariff variation mechanisms or tariff structures. Instead, we will consider these issues on a case-by-case basis in the context of individual access arrangement reviews. In this way we can better account for the differing levels of reliance on natural gas as an energy source across different jurisdictional markets, different policy settings applicable in each of those markets, and the views of distributor-specific stakeholders.

We will do this by building consideration of tariff variation mechanisms and tariff structures into the existing reference service proposal assessment, undertaken in advance of each access arrangement review. This approach allows us to signal our views on the form of control (tariff variation mechanism) and tariff issues in time for incorporation into the distributors' access arrangement proposals.

Under this new approach gas distributors will submit to the AER a combined proposal for reference services, tariff variation mechanism and tariff structure 12 months ahead of the access arrangement review. We will publish the proposal, as we currently do for standalone reference service proposals, and call for stakeholder submissions. We will release a non-binding AER decision on the combined service/tariff mechanism/tariff structure proposal within 6 months of its submission to us.

We expect distributors to undertake substantive stakeholder consultation to inform their tariff variation mechanism and tariff structure (and reference service) proposals. Moreover, we anticipate being able to observe that consultation so we may form views on its scope and quality. We will be looking for active consideration by distributors and their stakeholders of how best to balance the efficiency and emissions abatement objectives within the updated National Gas Objective.¹

In respect of our current review of reference tariff variation mechanisms and declining block tariff structures, several stakeholder submissions expressed support for continuing to apply price caps to gas haulage services. This was premised on a view that volume risk should continue to be assigned to distributors rather than to customers. However, there were also dissenting views which called for imposition of revenue caps because the growth paradigm that price caps facilitate for gas distributors is contrary to the achievement of emissions abatement objectives.

On declining block tariffs, assuming the new network tariff structure were passed through in retail offers, several stakeholders expressed concern about the potential disruptive impact on customers of changing to either flat or inclining block tariffs. Residential customers consuming large volumes of gas and with limited ability to reduce their gas reliance, particularly in winter, were raised as a customer cohort experiencing vulnerability. While we agree that under alternative tariff structures there would be winners and losers, those impacts will vary significantly across distributors given the different levels of reliance on gas in those different markets.

For example, a typical residential gas customer in Victoria uses more gas than a typical residential customer in New South Wales, with implications for the likelihood of residential

¹ As set out in section 2 Background.

customers facing higher bills if network tariff structures were changed. We further note that jurisdictional policy is evolving rapidly, giving weight to undertaking case by case assessments rather than trying to find a single approach suitable for all contexts.

Regulated gas distributors and Energy Networks Australia have agreed to our proposal to add the form of control and tariff structure to the ex-ante reference service proposal process.

At this stage we consider a change to the National Gas Rules to give effect to the new approach is not necessary.

We have also progressed directly to a final decision for this review and will forgo a draft decision. In part, this is to reduce administrative burden for stakeholders. Rather than seek additional engagement on universal regulatory settings, we consider further consultation and analysis is best undertaken in respect of distributors and their stakeholders on case-by-case basis for each individual access arrangement review.

Equally, we consider we have a robust understanding of stakeholder views on the matters under consideration through our consultation process. At this point in our review process, we have published an issues paper, held a well-attended on-line public forum, and have received a number of written stakeholder submissions expressing a range of views. It is clear from the differing stakeholder views, that further consultation and analysis is best undertaken in respect of individual distributors and their stakeholders on a case-by-case basis.

We thank stakeholders who provided us with written submissions or attended our online forum. We are particularly grateful to presenters at our forum. We look forward to engaging with you again as we progress through the schedule of access arrangement reviews.

2 Background

The Australian Energy Regulator (AER) works to make all Australian energy consumers better off, now and in the future. We regulate energy networks in all jurisdictions except Western Australia. We set the amount of revenue that network businesses can recover from customers for using these networks.

The National Gas Law and Rules (NGL and NGR) provide the regulatory framework governing gas transmission and distribution networks. Our work under this framework is guided by the National Gas Objective (NGO²):

The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to—

- (a) price, quality, safety, reliability and security of supply of natural gas; and
- (b) the achievement of targets set by a participating jurisdiction—
 - (i) for reducing Australia's greenhouse gas emissions; or
 - (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

Our review relates to the gas transportation (haulage) service provided by gas distribution network service providers (distributors). This decision paper is the last step in our review of:

- weighted average price caps (reference tariff variation mechanism) which regulate the revenues distributors receive for providing reference haulage services
- declining block tariffs which set the parameters for how customers are billed for reference haulage services.

We are considering whether to continue to approve these elements of existing gas distribution access arrangements or whether changes are required.

We are undertaking this review because of stakeholder feedback in the context of our recent gas distribution access arrangement determinations, the recent amendment to the National Gas Objective incorporating an emissions reduction objective from 21 November 2023, and the establishment by some states and territories of policies encouraging gas customers to switch to electricity.

We think it is appropriate to review these elements of gas distribution networks for consistency with policy settings at Commonwealth and jurisdictional levels.

On 5 May 2023 we released an issues paper *Review of gas distribution network reference tariff variation mechanism and declining block tariffs* (issues paper). Our issues paper sought stakeholder views on the merits of retaining or changing the elements being reviewed.

We also held an online public forum on 8 June 2023, chaired by AER Deputy Chair Jim Cox and attended by around 80 people. Our forum included presentations by AER staff, the

² This includes the latest amendment to the NGO which received royal assent on 21 September 2023. The amended NGO comes into effect on 21 November 2023.

Energy Networks Association, the Brotherhood of St Laurence, the Public Interest Advocacy Centre and Lighter Footprints.

In response, we received 19 written submissions from stakeholders including regulated gas distributors, energy retailers, consumer and environmental advocates, and independent analysts. Our issues paper, stakeholder submissions and slide packs used by presenters at our online forum are available at the AER website.³

This decision paper should be read in conjunction with our issues paper released on 5 May 2023. In the following sections of this paper we set out, for the reader's convenience, key messages from our issues paper.

³ AER - Gas distribution network tariffs review 2023 – Stakeholder workshop 1 - June 2023; Brotherhood of St Laurence - Gas distribution network tariffs review 2023 – Stakeholder workshop 1 - June 2023; Energy Networks Australia (ENA) - Gas distribution network tariffs review 2023 – Stakeholder workshop 1 - June 2023; Lighter Footprints - Gas distribution network tariffs review 2023 – Stakeholder workshop 1 - June 2023; Public Interest Advocacy Centre (PIAC) / Brotherhood of St Laurence - Gas distribution network tariffs review 2023 – Stakeholder workshop 1 - June 2023; <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/gas-distribution-network-tariffs-review-2023>

3 Tariff variation mechanisms

This section summarises what we said about tariff variation mechanisms (or forms of control) in our issues paper, describes stakeholder views expressed to us in submissions and sets out our consideration of the issue incorporating stakeholder views.

3.1 What we said

Our issues paper noted that the National Gas Rules describe several options for tariff variation mechanisms, but in practice the options for haulage services are price caps, revenue caps, or hybrids of the two.

Important features of the *weighted average price cap tariff variation mechanism* for our review are that it places volume risk with distributors and allows distributors to retain all revenues they earn. This means any under or over recoveries of revenue against forecast/target revenue are borne by, or retained by, the distributor. These features of price caps incentivise distributors to grow the volume of gas carried by their networks. In contrast, the *revenue cap tariff variation mechanism* places volume risk with customers and does not allow networks to retain all revenues they earn above the approved revenue. In this way revenue caps avoid incentivising distributors to grow gas volumes.

Regardless of the tariff variation mechanism, we use a building block approach to determine a gas distributor's revenue requirement for each year of an access arrangement period. Haulage tariffs are determined by dividing the distributor's annual revenue requirement (regulated revenue targets we determine) by forecast gas volumes. The larger the forecast volumes the lower the per unit haulage tariff. Lower forecast volumes equate to higher haulage tariffs.

Under price caps, gas distributors have, over the last 10 years, consistently earned more revenue than our determinations have targeted because actual gas volumes have been higher than the forecasts we have used to determine haulage tariffs.

3.2 What we heard

Most stakeholder submissions did not support moving from price caps to revenue caps because the existing assignment of volume risk to distributors was seen as appropriate and preferable to assigning volume risk to customers. Some stakeholders also noted that the policy context for these considerations is dynamic and likely to undergo further change, warranting a cautious approach to changing tariff variation mechanisms.

For example, Darebin Climate Action Now⁴ and the Brotherhood of St Laurence⁵ submitted that revenue caps would inappropriately shift risk away from distributors in a declining market. Red-Lumo Energy⁶ also submitted concern about the transfer of volume risk to consumers and that price caps should be retained until the policy landscape becomes clearer. The Brotherhood of St. Laurence and Darebin Climate Action Now also submitted support for retaining price caps.

⁴ *Darebin Climate Action Now - Gas distribution network tariffs review - Submission - June 2023*

⁵ *Brotherhood of St Laurence - Gas distribution network tariffs review 2023 - Submission - June 2023*

⁶ *Red Energy & Lumo Energy - Gas distribution network tariffs review 2023 - Submission - June 2023*

Cambridge Economic Policy Associates⁷ submitted that retaining price caps offers customers protection against potential future price rises. Similarly, the Institute for Energy Economics and Financial Analysis⁸, while expressing concern about incentivising growth in gas volumes, submitted support for price caps because revenue caps would impose more immediate bill impacts on customers in a declining market. The Public Interest Advocacy Centre⁹ submitted in favour of retaining price caps as a consumer safeguard.

Several distributors submitted support for hybrid tariff variation mechanisms that merge features of both price caps and revenue caps. For example, Evoenergy¹⁰ submitted that price caps may not be consistent with government emissions reduction objectives and expressed support for a hybrid cap-and-collar tariff variation mechanism.

The Australian Gas Infrastructure Group¹¹ submitted that further analysis would be required before any changes are made to the existing price caps. However, subject to that analysis being undertaken it noted that cap-and-collar hybrids could provide for benefit/cost sharing between a distributor and customers. Jemena Gas Networks¹² also submitted that a hybrid cap and collar tariff variation mechanism should be considered.

In contrast, Lighter Footprints¹³ submitted support for moving to revenue cap regulation. Lighter Footprints argued that revenue caps would facilitate lower bills and remove the existing incentive for gas distributors to grow volumes with commensurate environmental benefits.

Without expressing a strong preference, EnergyAustralia¹⁴ submitted that price caps provide gas distributors with opportunity to 'game' revenue determinations to earn excess revenues. However, EnergyAustralia also noted that a drawback of revenue cap regulation would be greater price volatility.

The Australian Energy Council¹⁵ submitted doubt about the efficacy of moving away from price caps in mitigating the risk of asset stranding or achieving environmental goals. It suggested that, should changes be determined, they should be implemented methodically to prevent disruptive shocks to consumers and to facilitate an orderly transition from gas.

Energy Networks Australia submitted that a 'one size fits all' approach is unnecessary and that distributors and the AER should engage with these issues via individual access arrangement reviews. It also noted that gas demand is increasingly difficult to forecast, giving further weight to a case-by-case approach in preference to sector wide reforms.

⁷ *Cambridge Economic Policy Associates Ltd - Gas distribution network tariffs review - Submission - June 2023*

⁸ *Institute for Energy Economics and Financial Analysis - Gas distribution network tariffs review 2023 - Submission - June 2023*

⁹ *Public Interest Advocacy Centre - Gas distribution network tariffs review - Submission - June 2023*

¹⁰ *Evoenergy - Gas distribution network tariffs review - Submission - June 2023*

¹¹ *Australian Gas Infrastructure Group - Gas distribution network tariffs review 2023 - Submission - June 2023*

¹² *Jemena Gas Networks - Gas distribution network tariffs review - Submission - June 2023*

¹³ *Lighter Footprints - Gas distribution network tariffs review 2023 - Submission - June 2023*

¹⁴ *EnergyAustralia - Gas distribution network tariffs review - Submission - June 2023*

¹⁵ *Australian Energy Council - Gas distribution network tariffs review - Submission - June 2023*

3.3 Our considerations

We note the broad stakeholder concern with potential moves away from weighted average price cap tariff variation mechanisms. While environmental objectives are important, assignment of volume risk was seen by most stakeholders as an issue that should be given significant weight in determining regulatory settings.

Hybrid tariff variation mechanisms

We note also the interest amongst gas distributors in hybrid tariff variation mechanisms, such as ‘cap and collar’ approaches. We understand that these would work like price cap tariff variation mechanisms within a defined range of actual gas volumes compared to forecast volumes.

For example, where actual volumes are within X% of forecast volumes in a given year, no adjustments would be made to haulage tariffs in future years. Conversely, if actual volumes are X% higher (or lower) than forecast volumes in a given year, haulage tariffs in future years would be reduced (or raised) to ensure distributor revenues remain close to the targets we determined.

These regulatory options warrant consideration on a case-by-case basis.

Assignment of volume risk under price caps

It is important to note that gas distributors have a regulatory pathway to manage their volume risk under price cap regulation. Under cl. 65 of the National Gas Rules distributors may submit to us an application to vary an approved access arrangement. A driver of an access arrangement reopener application could be actual gas volumes being lower than the forecasts we used to determine a distributor’s target revenues. Distributors may use cl. 65 to seek a new revenue determination based on lower volume forecasts for the remaining years of the access arrangement period. Subject to our assessment, this would have the effect of raising haulage tariffs in future years.

Customers do not have the same opportunity to re-open an approved access arrangement if actual volumes are higher than forecast. The National Gas Rules do not provide an equivalent regulatory pathway for customers, nor the AER, to reduce haulage tariffs to ensure customers pay no more than necessary under price caps.

‘Cap and collar’ tariff variation mechanisms are one potential way of mitigating this price risk faced by customers under price cap regulation. However, subject to design of the hybrid tariff variation mechanism, it would also absolve distributors of their volume risk.

The policy context is dynamic

In 2022 the Australian Capital Territory announced its policy to prohibit certain categories of new gas connections, including for residential customers. During the course of our review, the Victorian government announced an equivalent policy. Both policies are expected to take effect by 1 January 2024, if not sooner in the case of the ACT.

These are significant developments for our consideration of tariff variation mechanism proposals in the jurisdictions where these policies are being enacted. These policies to mitigate further growth in distribution networks in those jurisdictions can be seen as addressing the incentive properties of price cap regulation. That is, they will counteract price cap incentives for distributors to grow volumes, at least in respect of new connections if not

in terms of demand by customers at existing connections. In this sense, these new jurisdictional policies weaken the case for changing from price caps to alternative tariff variation mechanisms.

More broadly, the policy context for our gas network determinations is evidently now subject to change. Sometimes rapid change. Policy settings which seemed appropriate in the past or in the present, may soon appear inappropriate or unnecessary in future. We will weigh these considerations in the context of individual access arrangement proposals.

4 Distribution tariff structures

This section summarises what we said about distribution tariff structures in our issues paper, describes stakeholder views expressed to us in submissions, and sets out our consideration of the issue incorporating stakeholder views.

4.1 What we said

Our issues paper noted that gas distribution network haulage tariffs are currently dominated by declining block structures where the haulage price for the first 'block' of gas transported (consumed by a customer) is set higher than the price for subsequent blocks. The most obvious alternatives to declining block tariffs are flat tariffs and inclining block tariffs. Both would entail significant change to the way distributors charge for haulage services.

Importantly, network tariffs are faced by energy retailers who package their network costs with their other costs to offer customers retail tariff structures of their choosing. Much of the discussion of network tariff structures in stakeholder submissions was premised on an assumption that retailers are, and would continue to, pass through to customers the network tariff structure. This is not a given, as we discuss in section 4.3 below.

To the extent that network tariff structures are, and would be in future, passed through to customers, flat tariffs would be considerably less complex than current tariff structures as customers pay a steady, or flat, rate per unit of gas transported (consumed by a customer). Customers consuming relatively small volumes of gas would be expected to benefit from flat tariffs compared to being on declining block tariffs. Customers consuming relatively large volumes of gas would be expected to be worse off compared to declining block tariffs.

Inclining block tariffs would in principle be no more or less complex than declining block tariff structures. Under inclining block tariffs the first consumption block would be priced lowest with subsequent blocks priced progressively higher. Small volume customers would, in principle, be even better off compared to either declining block tariffs or flat tariffs. Large volume customers on the other hand would, in principle, be even worse off than under either declining block tariffs or flat tariffs.

4.2 What we heard

Stakeholder submissions expressed a range of views on tariff structures. While there was majority support for retaining declining block network tariffs, several stakeholders submitted support for moving to alternative tariff structures.

For example, the Brotherhood of St Laurence¹⁶ submitted that, assuming pass through in retail offers, flat network tariffs would be preferable, subject to addressing any negative impacts on customers experiencing vulnerability or energy bill stress. AGL¹⁷ submitted support for a transition to flat network tariffs over time through incremental reductions in the variances between declining tariff blocks. Darebin Climate Action Now¹⁸ submitted support

¹⁶ *Brotherhood of St Laurence - Gas distribution network tariffs review 2023 - Submission - June 2023*

¹⁷ *AGL Energy - Gas distribution network tariffs review 2023 - Submission - June 2023*

¹⁸ *Darebin Climate Action Now - Gas distribution network tariffs review - Submission - June 2023*

for moving to inclining block tariffs, provided that adequate protection is extended to low-income customers.

A number of stakeholders expressed concern for low income customers or customers otherwise experiencing vulnerability in the event of changes to declining block tariff structures – assuming pass through by retailers. For example, ActewAGL¹⁹ submitted support for retaining declining block tariff structures because of the high proportion of low-income households among high gas usage customers and their limited ability to reduce their gas consumption. Similarly, the Public Interest Advocacy Centre²⁰ expressed concern about the negative impacts on high volume customers experiencing vulnerability if distributors were to switch to either flat or inclining tariff structures. In that context it expressed support for retaining existing tariff structures. Lighter Footprints²¹ also submitted that it did not support moving away from declining block tariffs because the change may have negligible impact on gas consumption but drive higher bills for small customers with significant gas usage.

In contrast, the Institute for Energy Economics and Financial Analysis²² submitted that declining block tariffs are inconsistent with amendments to the National Gas Objective and either alternative tariff structure, flat or inclining, would be preferable. However, it also commented that retailers may choose not to pass through different network price signals.

The Australian Gas Infrastructure Group²³ submitted that any change to tariff structures should be carefully considered and supported by analysis. It also noted that retailers may choose not to pass through a new network tariff structure, but if they do there is high risk of unintended consequences.

Jemena Gas Networks²⁴ expressed concern about the potential for customers to experience either windfall gains or losses from changing tariff structures and that a cautious approach is appropriate. Similarly, Red-Lumo Energy²⁵ supported retaining declining block tariffs until the policy landscape becomes clearer.

Several stakeholders noted that declining block tariffs are efficient because gas distribution network costs are largely fixed (or residual) rather than varying with demand (marginal). It is therefore appropriate for distributors to recover most of their costs through charges that are insensitive to demand, equating to higher tariffs for the first blocks of consumption under declining block tariff structures. By extension, alternative tariff structures would be less reflective of the way gas network costs are incurred. Evoenergy²⁶, Cambridge Economic Policy Associates²⁷ and Dr Ron Ben-David²⁸, for example, made this point.

¹⁹ ActewAGL Retail - Gas distribution network tariffs review 2023 - Submission - June 2023

²⁰ Public Interest Advocacy Centre - Gas distribution network tariffs review - Submission - June 2023

²¹ Lighter Footprints - Gas distribution network tariffs review 2023 - Submission - June 2023

²² Institute for Energy Economics and Financial Analysis - Gas distribution network tariffs review 2023 - Submission - June 2023

²³ Australian Gas Infrastructure Group - Gas distribution network tariffs review 2023 - Submission - June 2023

²⁴ Jemena Gas Networks - Gas distribution network tariffs review - Submission - June 2023

²⁵ Red Energy & Lumo Energy - Gas distribution network tariffs review 2023 - Submission - June 2023

²⁶ Evoenergy - Gas distribution network tariffs review - Submission - June 2023

²⁷ Cambridge Economic Policy Associates Ltd - Gas distribution network tariffs review - Submission - June 2023

²⁸ Ron Ben-David - Gas distribution network tariffs review - Submission - June 2023

Dr Ben-David also noted that changing tariff structures, assuming pass through by retailers, would have distributive and therefore equity impacts. He further commented that decisions on such matters should be made by governments rather than economic regulators.

Alan Pears²⁹ submitted that retailer responses to any change in network tariff structures will determine customer impacts. He noted that retail offers currently appear to differ across states and territories, leading to questions about the range of retail pricing strategies and therefore to uncertainty about customer impacts arising from changes to network tariffs. He further commented that tariff design should be considered in the context of specific goals and the broader energy sector rather than just gas networks.

4.3 Our considerations

We note several themes in stakeholder submissions on declining network tariffs and alternative tariff structures. Building on those themes we can also make some observations of natural gas markets that are relevant to our review. We discuss these below.

Impacts of tariff structure changes on low income customers

There are widely held stakeholder concerns about the potential impact of network tariff structure changes on low income but high gas consumption residential customers, assuming retailer pass through of network tariff changes. We share those concerns. However, we also expect that in most cases, particularly outside Victoria, the proportion of residential customers made worse off by moving to flat or inclining tariff structures would be relatively small.

Residential customers consuming low to moderate volumes of gas would be better off under any tariff structure other than the existing declining block structures. Even in Victoria, where the typical gas customer uses significantly more gas than in other jurisdictions, many residential customers would be better off on alternative tariff structures, if retailers pass them through in retail offers to customers.

The context for these considerations is materially different in Victoria than in other jurisdictions because the average residential gas customer in Victoria consumes around one third more natural gas annually as equivalent customers in the Australian Capital Territory and more than double that of New South Wales and South Australian customers. The average per annum consumption for a 4 person household by state:

- Victoria – around 56,798 MJ per annum.³⁰
- Australian Capital Territory – around 43,558 MJ per annum.³¹
- New South Wales – around 24,160 MJ per annum.³²
- South Australia – around 22,750 MJ per annum.³³

There is of course a range of different levels of consumption amongst residential customers in each jurisdiction, including outliers significantly different to the average. Determining the

²⁹ Alan Pears - Gas distribution network tariffs review - Submission - June 2023

³⁰ Frontier Economics, *Residential energy consumption benchmarks*, December 2020, p.53.

³¹ Frontier Economics, *Residential energy consumption benchmarks*, December 2020, p.58.

³² Frontier Economics, *Residential energy consumption benchmarks*, December 2020, p.55.

³³ Frontier Economics, *Residential energy consumption benchmarks*, December 2020, p.57.

number, or proportion, of residential customers made better or worse off by a change in tariff structure requires analysis at the level of individual gas distribution networks.

Commercial and industrial customers that consume larger volumes of gas than residential customers are more likely to experience negative bill impacts from changes to tariff structures, subject to retailers passing network price signals through. The individual customer impacts would require assessment on a case-by-case basis.

Declining block tariffs may be economically efficient for gas distributors

In our view, there is an efficiency argument in favour of declining block tariffs but it is not as clear-cut as some stakeholders suggested in submissions.

Some stakeholders commented that declining block tariffs are efficient for gas distribution networks where most costs are fixed. In this view, high charges for early blocks of consumption are equivalent to high fixed charges that reflect in price signals the way gas networks incur their costs in practice. These stakeholders considered that alternative tariff structures would be a step away from cost reflectivity in respect of tariff design. We acknowledge this position but consider it is more nuanced in two respects.

First, the updated National Gas Objective's new emissions reduction objective which requires that we, and gas distributors, account for emissions when considering network tariff structures. This could lead to alternative tariff structures being considered efficient, not only declining block tariffs.

Second, declining block tariff structures are volume tariffs which, assuming retailer pass through, see customers billed for each unit of gas consumed. This is not directly equivalent to a high fixed charge, or even to a demand charge which bases customer bills on maximum consumption within a specified period. Demand charges are a feature of many network tariffs currently, but not for small customers. Rather, demand charges are typically a feature of network tariffs for large commercial and industrial gas customers.

Retail gas tariffs do not mirror gas network tariff structures

We have observed that retail gas tariffs typically have a 'V' shape. That is, the first block of consumption is priced relatively high, the second block is priced relatively low, and the third and final block is priced relatively high once again. This V structure to retail tariffs does not reflect the declining block structure of network tariffs.

It is unclear how changes in the network tariff structures would impact on retail gas tariffs. It is possible that changes at the network level may not be passed through to the customer at all, at least not in terms of retail tariff structure. Retailers may retain their existing V shared retail tariff structures but undertake some rebalancing within their tariff 'blocks' to broadly reflect the direction, up or down, of network tariff changes.

What this means for network tariff changes is debateable. On one hand, if retail gas tariffs are non-responsive to network tariff structure changes, it can be argued that network tariffs can be restructured because the risk of adverse customer impacts is low, or at least non-specific. On the other hand, non-responsive retail gas tariffs may undermine the case for change because environmental goals would not be advanced if markets do not respond to network tariff reforms.

If we compare gas network pricing to electricity distribution network pricing, the National Electricity Rules require network tariffs to become more cost reflective without explicitly considering how retailers may respond. Further, the electricity network tariff reform program is given effect even in regions of Australia subject to retail price regulation where new network tariff structures are not passed through in retail offers.

This does not mean that gas distribution tariffs should also be reformed, if warranted, without regard for what the retail sector may do with new network price signals. The customer experience is a critical input to tariff design and assessment for both the gas and electricity network sectors. Rather, we raise the electricity tariff reform example to make the point that upstream tariff reforms can be justified even if existing downstream tariff structures do not reflect network price signals – yet. That is, there may be a case for upstream reforms to drive retail changes over time, or to drive other types of retailer response, even if the structure of retail tariffs are not amended in the short term.

Analysis of customer responsiveness to prices is needed to underpin tariff changes

Some stakeholders have noted that environmental outcomes associated with tariff structure changes depend on the responsiveness of demand to price changes across different market segments. We agree, although we note the degree of customer insight into their own retail tariff structure is perhaps questionable, particularly amongst the small customer tariff class.

While in principle, assuming retailer pass through, moving from declining to flat or inclining tariffs would lower prices for small gas volume customers and raise prices for large volume customers, customer demand may be less responsive to tariff structure changes than a pure economic analysis would suggest. Small customers may respond to lower prices in general by increasing their gas consumption, rather than in response to a change in the structure of their retail tariff.

Any such increase in consumption by customers with small consumption profiles may be larger than any reduction in gas consumption by large customers who would face higher prices under flat or inclining tariff structures. Demand elasticities of the two market segments, and the volume of gas consumed by those segments, require assessment to inform expectations of environmental outcomes from tariff changes.

As with other issues raised through our review, we consider these market dynamics require assessment at the jurisdictional or even regional level and warrant deeper engagement with distributor-specific stakeholders. This is best undertaken in the context of individual access arrangement reviews.