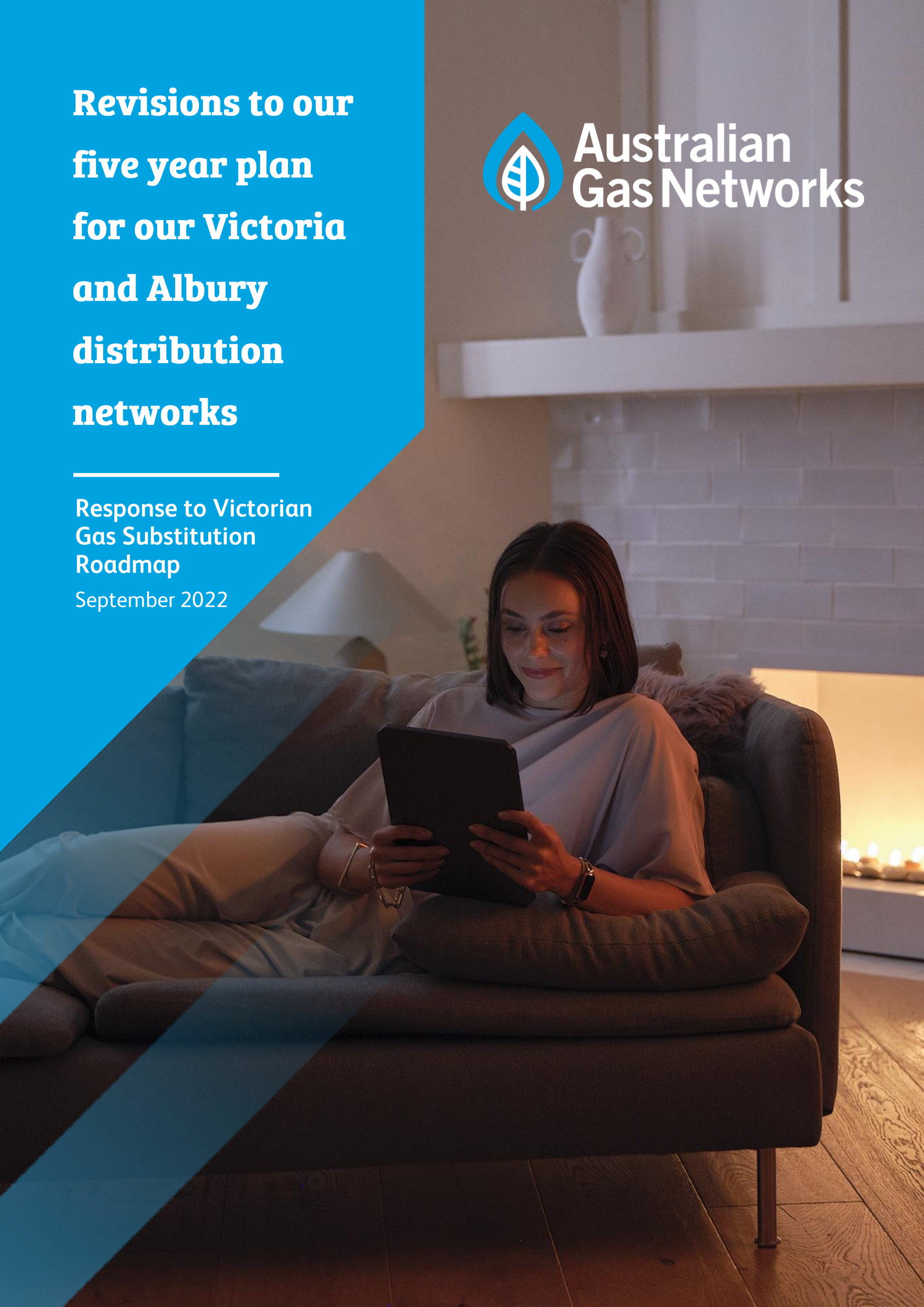


**Revisions to our
five year plan
for our Victoria
and Albury
distribution
networks**

Response to Victorian
Gas Substitution
Roadmap

September 2022



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CEO Foreword

Following the release of the Victorian Gas Substitution Roadmap we are revising our plans for Australian Gas Networks (AGN) Victoria and Albury for the 2023/24 to 2027/28 period.



This document sets out proposed revisions to our Final Plan for the next AA period in response to the Victorian Government's Gas Substitution Roadmap (GSR). The GSR presents significant challenges that will have implications for our business and our customers. This revision sets out how we will deliver safe, affordable and reliable services to our customers taking into account those challenges and the significant and rapid change occurring in the energy sector more broadly.

AGN is part of the Australian Gas Infrastructure Group (AGIG), one of Australia's largest energy infrastructure businesses. Through AGN Victoria and Albury, we serve over 740,000 customers in Victoria and New South Wales, including in the Melbourne CBD, northern, eastern and outer southern areas of metropolitan Melbourne, the Mornington Peninsula, and northern, eastern and south-eastern areas of Victoria and Albury. AGN plays a vital role in delivering safe, reliable, affordable and low emissions energy for our residential, commercial and industrial customers.

In serving our customers, it is our vision to be the leading gas infrastructure business in Australia. We aim to do this by achieving top quartile performance in delivering for customers, being a good employer and being sustainably cost efficient. We are also leading the industry in its transition to a renewable gas future.

The revisions to our Final Plan have been developed with further customer and stakeholder engagement

following the Final Plans that were provided to the AER on 1 July 2022, and the subsequent release of the GSR on 2 July 2022. This has most importantly included further engagement with our Victorian Gas Network Stakeholder Roundtable (VGNSR) and Retailer Reference Group (RRG), as well as with developers and builders throughout Victoria who have an important interest in the GSR.

The revisions to our Final Plan reflect on the feedback received from customers and stakeholders through this process of ongoing engagement. We have continued joint engagement across the three gas distribution businesses in Victoria and Albury (AusNet Services, Multinet Gas Networks (MGN, also part of AGIG) and AGN).

We are proud to note that this joint engagement approach has been shortlisted for an industry award. We believe this approach sets a new benchmark for efficient, robust, inclusive and transparent engagement with customers and stakeholders.

Our Final Plan, presented to the AER in July 2022, was developed against a backdrop of significant policy uncertainty on the future role of our gas networks. While this will continue and evolve over the next AA period, the Victorian Government's GSR outlines its plan for the decarbonisation of the gas sector in meeting its 2030 emissions reduction target and ultimately achieving its legislated target of net zero emissions by 2050.

The GSR prioritises electrification of gas over the next decade, which will affect our plans for the next AA period. The overarching strategy of the GSR is to incentivise electrification through a mix of incentives, policy and regulatory change. These measures are intended to reduce natural gas demand and emissions going forward, particularly in the residential segment. The driver is said to be to enable natural gas to be freed up for the commercial and industrial segments which are more difficult to transition away from natural gas.

The GSR also recognises the importance of considering options such as hydrogen and biomethane. It supports regulating renewable gases to develop a nationally consistent legal framework to ensure cost recovery. It also notes Government is considering a renewable gas scheme, and renewable gas targets, to help drive investment in gas substitution and guide transition planning. These measures will be essential if

Victoria is to achieve a low cost and efficient transition to net-zero emissions.

Our Board has endorsed a low carbon strategy that includes targets to deliver at least a 10% renewable gas blend across our distribution networks by 2030, and a stretch target to achieve the full decarbonisation of our distribution networks by 2040, or by 2050 at the latest. These targets align with government policy.

Given the measures to incentivise electrification in the GSR, it is clear our gas distribution network now faces significant challenges. We are also experiencing continued negative sentiment around gas, developers announcing full electric developments and homeowners increasingly choosing to electrify when they renovate/rebuild.

We maintain several complementary actions proposed in our Final Plan which will ensure a smooth transition to net zero, such as small amounts of expenditure to prepare the network for hydrogen and a renewable gas communication and education program. We consider the GSR further highlights the prudence of these actions.

We have also maintained a small number of important initiatives supported by our customers and stakeholders. These include:

- Investment to improve our customer communications through a range of digital channels; and

- Investing in a Priority Service Program.

These proposed revisions to our Final Plan respond to the GSR in a way that is consistent with the feedback we received from stakeholders. Prior to the release of the GSR, stakeholders indicated that the uncertainty of the policy positions of the Victorian Government made it difficult to form a view on the Final Plans submitted on 1 July and that stakeholders were at a 'holding point' rather than a 'landing point'. We also received feedback that there was a tension between accelerating depreciation and at the same time continuing to grow the network, including through our network augmentation program.

In response to the GSR, we have:

- Reduced demand;
- Reduced growth capex and augmentation;
- Made minor changes to our meter and service replacement programs; and
- Made modest changes to our accelerated depreciation proposal.

Overall, the revisions to our Final Plan to reflect the impact of the GSR result in an upfront price cut of 3% (after inflation) on 1 July 2023. This compares to the 10% cut proposed in the original submission on 1 July.

We are however proposing to change our price path by providing a deeper price cut on

1 July 2023 of 6% (after inflation) followed by price increases of 2% plus CPI for the remaining 4 years. This will see the price path more closely align with the impact of the GSR over time.

Our objective of delivering price stability and ensuring a smooth transition to net zero remains a priority. We consider this package of revisions to our Final Plan to be consistent with our stakeholder feedback and is capable of acceptance.

These revisions to our Final Plan will now be reviewed by the Australian Energy Regulator (AER) along with our initial Final Plans. The AER's review includes a stakeholder consultation process which I strongly encourage our customers and stakeholders to participate in to ensure we provide the services that our customers value.

Craig de Laine

Chief Executive Officer



Stable prices

↓ 6%

from 1 July 2023
(after inflation)

The Victorian Government's release of the Gas Substitution Roadmap has resulted in us revising the Final Plan submitted 1 July 2022

In response to the Roadmap we have:

- Lowered forecast gas demand
- Lowered growth capex
- Reduced augmentation capex
- Increased depreciation

Price Change



Customers told us affordability is important. We are pleased that we can still propose a reduction to our tariffs from 1 July 2023

Keeping options open



Supports long term interests of customers, price stability and cost competitiveness of the network to provide energy choice for customers

Safety focus



Maintain strong leak performance and continue to monitor performance and condition of mains

Future focus



Investing in no regrets actions and renewable gas communications to prepare the network for a decarbonised future

Customer focus



- New digital customer services
- Priority Service Program

Efficient incentives



Opex and Capex Efficiency Schemes

1 Background

On 1 July 2022, we submitted our Final Plan for our Victoria and Albury natural gas distribution networks for the five-year period 1 July 2023 to 30 June 2028. Otherwise known as an Access Arrangement Proposal, the Final Plan contains our proposed reference services and terms and conditions under which a customer can gain access to the AGN Victorian and Albury gas distribution network.

This includes:

- the services offered and provided to our customers;
- the price paid for those services; and
- the non-price terms under which access will be provided.

Our objective was (and remains) to submit a Final Plan which:

- ✓ Delivers for current and future customers.
- ✓ Is underpinned by effective stakeholder engagement.
- ✓ Is capable of being accepted by our customers and stakeholders.

To support this objective, the Final Plan was informed and shaped by feedback received through an extensive customer and stakeholder engagement program. This joint engagement approach has been shortlisted for an industry award.

We recognise our plan was developed during a time of significant policy uncertainty on the future role of our gas networks. While there was support for much of the Final Plan, stakeholders and retailers found it challenging to form an overall view on whether the plan was capable of acceptance due to:

- Victorian policy uncertainty, particularly in relation to the Gas Substitution Roadmap (which had not been released); and
- Uncertainty in energy markets created by a challenging political and economic environment nationally and globally.

The uncertainty led stakeholders to consider our Final Plan as 'a holding point rather than a landing point'.

On 2 July 2022, the Victorian Government published its Gas Substitution Roadmap, which outlines its plan for the decarbonisation of the gas sector in meeting its 2030 emissions reduction target and ultimately achieving its legislated target of net zero emissions by 2050. The implications of the GSR now provides clarity that electrification, through a mix of incentives, policy and regulatory change, particularly in the residential sector, will be a priority for the Victorian Government in the next decade, which has implications for our customers and the plans we submitted on 1 July. On this basis we have updated our Final Plan.

This Overview document outlines revisions to our Final Plan in response to the GSR. It also sets out the ongoing engagement we are undertaking to work with the AER, customers and stakeholders on the impacts of these revisions and the approach to incorporate these revisions in the AA review process.

2 Our response to the GSR

The Victorian Government released its Gas Substitution Roadmap (GSR) on 2 July 2022, the day after we submitted our Final Plan to the AER. The GSR is one part of the Victorian Government's pathway to achieving emissions reduction targets in 2030 and net-zero emissions by 2050.

The GSR focuses on electrification as the primary means of achieving emissions reductions in the residential sector over the next decade. It outlines a range of measures that incentivise electrification and at the same time removes existing measures that incentivise the installation of natural gas appliances – even when these would result in lower emissions.

Despite the significant focus on electrification over the next decade, the GSR noted Government “will consider establishing a renewable gas scheme, and renewable gas targets” and will report back in 2023 on proposals. The GSR further noted alternatives to “fossil gas” need to be taken up “including blending in the network” of renewable gases like hydrogen and biomethane alongside “effective market frameworks...for cost recovery”.

Renewable gases and their role in the network continue to receive support, but in the near term governments clear focus is on relieving cost of living pressures, and in response to potential shortfalls of natural gas, freeing up gas for industrial users.

The GSR reduces the uncertainty by making clear the intent of the Victorian Government to focus on electrification, particularly for residential customers, over the next five years. Figure 2.1 below outlines each of the measures from the Roadmap, the impacts and our response to these, including key revisions to our Final Plan.

While the GSR provides additional information over the next five to ten years, it also gives rise to increased risk and uncertainty about the role of the gas networks in the energy transition over the longer term. Our revisions therefore focus on adjusting our demand forecasts and our capex proposal, while increasing our accelerated depreciation proposals.

Figure 2.1: Summary of GSR impacts and our revisions to our Final Plan

GSR Measures	Impact	Our response
<p>Victorian Energy Upgrades Increased rebates for electric appliances Phase out rebates for gas appliances by 2023</p> <p>Solar Homes Rebates for hot water, solar PVs and batteries</p> <p>7 Star Homes Program</p> <p>Victoria Planning Provisions to be changed to remove gas connection requirements for new residential subdivisions</p>	<p>Greater uptake of reverse cycle air-conditioning and electric heat-pump hot water systems</p> <p>More new homes and subdivisions going “all-electric”</p>	<p>Drivers of demand</p> <ul style="list-style-type: none"> • Loss of existing residential connections • Reduction in new residential connections • Lower consumption per connection for residential and commercial <p>Expenditure</p> <ul style="list-style-type: none"> • Lower growth capex • Lower augmentation capex • Minor reductions to meter and service replacement capex • Lower opex trend and productivity growth <p>Future of gas</p> <ul style="list-style-type: none"> • Increased risk and uncertainty about the role of the gas networks in the energy transition over the longer term • Increase to accelerated depreciation

3 Customer and stakeholder engagement

3.1 Our engagement program

We have undertaken extensive customer and stakeholder engagement to understand, and respond to, their needs. Together with AusNet and Multinet Gas in Victoria, we have been running this engagement jointly for almost two years.

Understanding and addressing the policy and different perspectives on the future of gas has been a key part of our engagement program. In addition, many customers and stakeholders have views on a preferred future of gas and balancing these positions along with our own needs and priorities has been a significant challenge.

We knew that conversations on the future of gas would be of critical interest to customers and stakeholders. Overall, customers and stakeholders understand the challenge of balancing our needs to recover the capital we have invested in our gas networks, connect customers, and maintain safety and reliability of the network while also looking to adapt our business to a low carbon future.

When we submitted our Final Plan on 1 July 2022, we had customer support for our Final Plan. Customers told us they expect AGN to be exploring ways to decarbonise the gas network and educating them about it, they were also highly satisfied with current levels of safety and reliability and expect this to be maintained whilst keeping an eye on costs.

Many stakeholders, however, found it difficult to form a view on whether our plans were capable of acceptance given the policy uncertainty and the potential for change once policy direction became clearer. Stakeholders were keen to see the release of the Victorian GSR and our response to this direction, some describing the situation as being in a 'holding point, rather than a landing point' when it comes to acceptance of our Final Plans.

As outlined above, the Victorian Government published its GSR shortly after we provided our Final Plans to the AER. Following this, we promptly developed and undertook a series of targeted engagement activities on the GSR and its impact to our Final Plans, all whilst seeking to unpack and model these impacts ourselves. The below sections outline the GSR specific engagement we have undertaken, the feedback received, and how we are responding in our revised Final Plan.

3.2 GSR specific engagement

In the two months since the Victorian Government released its GSR, we have held dedicated meetings with members of the Victorian Gas Network Stakeholder Roundtable (VGNSR) and Retailer Reference Group (RRG). We have also engaged with the developer and home builder sector via an industry forum and several one-on-one meetings to better understand how they have interpreted and intend to implement the GSR.

The activities we have undertaken are described in Table 3.1.

Table 3.1: Engagement activities undertaken on the GSR

Activity	Date	Description
Joint VGNSR and RRG meeting #11	10 August, 2022	<p>In this meeting, AGN, AusNet, MGN and members of the VGNSR and RRG discussed:</p> <ul style="list-style-type: none"> • How we are interpreting the GSR • Discussed the anticipated the (early) impact of the GSR on our proposals • Updated our regulatory timeline, and engagement plan.
AusNet Developer Survey	Distributed by AusNet in w/c 15 August	<p>We prepared and circulated a survey to members of AusNet’s Greenfield Developer Consultative Committee. The focus of the survey was to understand whether developers were planning to connect gas to their developments in the next 5 years, and their reasons for this. A total of 27 developers and consultants completed the survey.</p>
AusNet Developer Industry Forum	24 August, 2022	<p>AusNet has a well-established Greenfield Developer Consultative Committee, which is a requirement for their electricity distribution network in Victoria. We leveraged this existing community, along with our connections in the sector, to hold a dedicated Forum focused on the future of gas.</p> <p>There were more than 135 attendees at this Forum, designed to provide the development industry with an understanding of:</p> <ul style="list-style-type: none"> • The current environment for gas, including key policy and standards changes for the energy mix in new homes • What we are hearing about how the supply chain is responding to the changes, and where uncertainties and challenges persist, and validate this with developers • Renewable gases, and what the industry is doing to prepare for them
Joint Deep dive #1 with members of the VGNSR and RRG	26 August, 2022	<p>This was the first deep-dive workshop as part of our post-lodgement engagement. The focus of the first deep dive was to:</p> <ul style="list-style-type: none"> • Provide a summary of feedback we’ve received on the GSR from our recent engagement and research activities • Provide an overview of the changes being made to our Final Plans, and seek stakeholder’s input on these changes • Update members on the refined regulatory timeline and proposed engagement
1:1 meetings with Victorian Developers	Ongoing	<p>AGN, MGN and AusNet have been holding dedicated discussions with Developers operating within Victoria to understand how they are interpreting the GSR and</p>

Activity	Date	Description
		<p>whether they intend to continue connecting to the gas network.</p> <p>To date, across all networks we've had meetings with members of AusNet's Developer Consultative Committee, Dennis Family Homes, Parklea Developments and Frasers Property Group.</p>
1:1 meetings with Victorian Home Building Sector	Ongoing	<p>AGN, MGN and AusNet have been holding dedicated discussions with members of the Home Building sector in Victoria to understand how they are interpreting the GSR and how they intend to action/meet the GSR, the 7-star rating requirement.</p> <p>To date, across all networks we've had meetings with the Housing Industry Association, UDIA, Green Building Council Australia, Design Matters Australia, Henley Homes and NatHERS.</p>
1:1 meetings with members of the VGNSR	Ongoing	All networks have also been holding dedicated meetings with VGNSR members, such as GAMMA, to understand the impacts of the GSR on their customers and members.

3.3 Customer and stakeholder feedback

The table below outlines the feedback we have received from different customer and stakeholder groups on the GSR in general, and our proposed response to the GSR in this revised Final Plan. We will continue conversations with these groups as part of post-lodgement engagement.

Table 3.2: Summary of feedback from customer and stakeholder groups

Group	What we heard
Customer advocates and Retailers	<ul style="list-style-type: none"> • Stakeholders asked whether we were revising our mains replacement and renewable gas education programs in light of the GSR. • Stakeholders questioned whether we were reconsidering hydrogen readiness expenditures, given the strong push towards electrification under the GSR. • Stakeholders wondered how our demand forecast compared to the AEMO forecast. • Stakeholders observed that the 7-star rating requirement of the GSR biases customer choice towards electrification, given the difficulty outlined in achieving this with gas appliances. • Stakeholders commented they expected changes to the 7-star new home would take at least 12-months to filter through. • Stakeholders asked whether we were starting to see any changes (slow down) in new connection rates this year. • Stakeholders challenged us to think carefully about disconnections and how we charge for them. They are keen to engage further on this. • Some stakeholders acknowledged the equity issue that may arise if customers begin disconnecting from the network at scale. • Stakeholders wondered what impact the GSR might have on large gas users, specifically those connected to the VTR. • Stakeholders were keen to understand <ul style="list-style-type: none"> • The assumptions underlying our accelerated depreciation modelling, particularly around the cost of hydrogen and whether we have assumed that it will be competitive with renewable electricity. • The assumptions in our demand modelling and explaining the differences between our demand modelling and the modelling in the Roadmap and the “step change” scenario in AEMO’s GSOO. • What happens in the regulatory period should we need to revise (up or down) our demand forecasts. • What our plans mean for different customer segments, particularly commercial and large industrial customers. • How we are accounting for emission charges.
Developer Industry	<ul style="list-style-type: none"> • For developments underway and with permits, most developers are still planning to reticulate gas. • For new developments, many are thinking about going all-electric and some are committing to do this. • Data from AusNet’s developer survey suggested that in the next 5 years: 39% plan to reticulate all/most of their sites, 11% plan to reticulate half or less sites, 4% don’t plan to reticulate any sites at all, and 37% don’t know yet. • There is significant uncertainty among more than a third of developers as to whether they will reticulate gas to developments or not.

Group	What we heard
	<ul style="list-style-type: none"> Some developers plan to continue connecting gas until they are told otherwise by government or home buyers. When considering the future of gas, developers are concerned about: <ul style="list-style-type: none"> The ease/difficulty of getting permits/finance under increasing sustainable development obligations Costs to install dual fuel versus all electric State government policies/preferences including the impact of the ongoing narrative on natural gas Capacity of the electricity system.
Home Building Industry	<ul style="list-style-type: none"> Home builders are responsible for compliance with standards and have significant influence on appliance selection. There is very high awareness of new whole-of-home energy budget and the 7-star requirements. Home builders are in the process of preparing compliant standard plans for their products, but they want time to transition. For many volume builders, major changes to plans are required. Significant work undertaken on all-electric options across the sector. Volume sector is highly motivated by minimising build cost (less concerned about running cost).

3.4 Ongoing engagement plans

Stakeholder have been complimentary of the extensiveness of the engagement we have undertaken on the GSR. We will continue to engage with our customers and stakeholders for the remainder of 2022. Specifically, we a proposing to continue the deep-dive series already underway with the VGNSR and RRG focusing on how we are responding to the Roadmap. We are also anticipating that further areas might emerge from an engagement perspective once the AER releases its Draft Decision in November. We will ensure that our engagement activities are fit-for-purpose depending on the topic of discussion.

Our ongoing engagement will focus on:

- Any changes to our operating environment that need to be considered in our plans for the upcoming regulatory period
- Feedback received from the AER in their Draft Decision
- Responding to the feedback from customers and stakeholders on our Final Plan and this revision (see Table 3.2 for details).



4 Revisions to our Final Plan

Table 4.1 below summarises the key revisions to our Final Plan to reflect the impacts of and our response to the measures in the GSR. In particular, we have made revisions to the future of gas, operating expenditure, capital expenditure, capital base, incentives, demand and revenue and prices.

As noted above, a strong theme in the feedback we received from stakeholders as we developed our Final Plan was that the policy uncertainty at the time made it difficult for stakeholders to form a view on our plans. Some stakeholders also considered there was a tension between our proposals to accelerate depreciation and some aspects of our capex, such as growth capex and augmentation.

The revisions we have made to our Final Plans in response to the GSR (set out below) take into account and address this feedback. We consider our revised Final Plan now aligns with stakeholder feedback capable of acceptance by our customers and stakeholders. We will continue to explore this with stakeholders through our engagement following submission of this addendum, which is to be read alongside our Final Plan.

Table 4.1: Summary of revisions to our Final Plan in response to the GSR

Topic	AGN Response to GSR	AGN Comment
Future of gas	Modify	We are increasing our proposed accelerated depreciation by \$31 million to \$175 million. This reflects 9% of the RAB and remains in line with depreciation in the current period. We have included additional modelling and a GSR scenario. Further information is detailed in Attachment 6.6.
Services	Modify	We have proposed one new ancillary reference service and one new non-reference services in response to increasing disconnections expected following the GSR. Further information is detailed in Section 4.2.
Operating expenditure	Modify	We maintain most aspects of our Final Plan proposed opex. We have updated the trend applied to our base year costs to reflect changes in output growth associated with updated demand and new connection numbers and removal/reduction of the productivity factor. We have also updated for the most recent inflation forecasts. Further information is detailed in Attachment 8.7.
Capital expenditure	Modify	We have modified our growth, augmentation, meter replacement and telemetry programs associated with updated demand and new connection numbers in the next AA period. Further information is detailed in Attachment 9.15.
Capital base	Modify	We have reflected updated capex forecasts and the most recent inflation forecasts. Further information is detailed in Attachment 10.1.

Topic	AGN Response to GSR	AGN Comment
Financing costs	Modify	We have not made any changes to the rate of return included in our Final Plan. We have updated tax calculations to reflect other responses to the GSR. This has been reflecting in our modelling in Attachment 1.5A.
Incentives	Modify	We have not made any changes to the opex EBSS. We have proposed further exclusions to the capex CESS for Augmentation capex. Further information is detailed in Attachment 12.2.
Demand	Modify	We have updated our demand forecast in response to the incentives and policy measures for electrification in the GSR. Further information is detailed in Attachment 13.4.
Revenue and pricing	Modify	Further information is detailed in Attachment 14.3.
Network access	No change	We have not made any changes to Network Access from our Final Plan.

4.1 Future of gas

As noted above, the GSR was considered by many stakeholders to be an important source of ongoing uncertainty as we submitted our Final Plan. Following the release of the GSR we have revisited our Future of Gas scenarios to ascertain whether the GSR would cause us to change our view on what was proposed in the Final Plan regarding accelerated depreciation.

Specifically, using what we know from the GSR, we have reshaped our “Electric Dreams” scenario, adjusting it to reflect so far as possible the policies, prices and demand outcomes envisioned in the GSR. In particular, we have considered the implications of Victoria adopting changes to the NCC, including minimum 7-star ratings for new homes and other policy changes that affect new connections. More detail on how we have used information from the GSR to reshape our scenarios and our conclusions is included in Attachment 6.6.

We use this GSR scenario in our revisions to the Final Plan to test different depreciation proposals and ascertain the impacts they have.

The GSR provides clarity that electrification, through a mix of incentives, policy and regulatory change, particularly in the residential sector, will be a priority for the Victorian Government in the next decade. It also outlines some policy initiatives that will have an impact in the next AA period. Therefore, it is important to note the GSR and the GSR scenario we have developed do not supersede the scenarios in our Final Plan. Rather this forms an additional feasible outcome for our future which we explore in our revisions.

Based on this revised scenario analysis, we believe our risk profile has increased as a result of the GSR and we should increase our depreciation in response.

We have used the modelling framework to test different depreciation proposals and ascertain the impacts they have (Attachments 6.5(1)A, 6.5(2)A and 6.6). We tested accelerated depreciation of \$175 million for AGN, compared to \$144 million in our Final Plan. Depreciation at these levels, together with the other revisions we have made to our Final Plan in response to the GSR, result in a price decrease of around 1% (nominal) compared to the current period.

Testing higher levels of accelerated depreciation in our model shows that we are still far from any kind of “speed limit” where the long run interests of consumers would be adversely impacted by accelerated depreciation. Based on the analysis presented in Attachments 6.5(1)A, 6.5(2)A and 6.6, we have confidence that higher levels would be reasonable and in the long-term interests of consumers.

However, our objective of maintaining stable prices for customers remains a priority and we recognise the importance of this for customers as the energy sector transitions. Accordingly, our proposal in response to the GSR is to increase accelerated depreciation by a modest amount. This approach takes further small steps towards addressing the risks we and our customers face as we transition to net zero, while balancing the benefit of maintaining stable prices.

For AGN, our revised proposal is for \$175 million of accelerated depreciation (approximately 9% of AGN’s RAB), compared to \$144 million in the Final Plan (approximately 7% of the RAB).

4.2 Services

Our Final Plan incorporated those reference services approved by the AER in November 2021 following the submission of our Reference Services Proposal. As part of this revision we are proposing to add one additional ancillary reference services and one non-reference service:

- Ancillary reference service: ‘service abolishment – residential’; and
- Non-reference service: ‘service abolishment – industrial and commercial’.
- We are also proposing to make changes to the definitions of two existing ancillary reference services:
- Disconnection; and
- Meter removal.
- These additions are highlighted in the attached Access Arrangement mark-up.

As outlined above, the GSR focuses on electrification as the primary means of achieving emissions reductions in the residential sector over the next decade and outlines a range of measures in support of this goal. Our demand forecast has in turn been revised to account for these developments and shows an increase in the number of expected disconnections from our network (see Section 4.7).

We currently offer disconnection and meter removal services as ancillary reference services; however, these services do not account for the complete removal (abolishment) of infrastructure associated with an individual gas connection.

Given the forecast increase in disconnections and the prioritisation given to electrification by the Victorian government, we expect more customers may wish to fully abolish their gas connection in the future. We are therefore proposing to add a service abolishment service for both residential and industrial and commercial customers. These new services are important to maintain the safety and integrity of the network with increasing numbers of disconnections.

A disconnection or meter removal should only be treated as temporary cessation of supply service (such as disconnection for debt). Where the cessation of supply is intended to be more permanent, service abolishment will be necessary. We are therefore also proposing amendments to the service descriptions for ‘disconnection’ and ‘meter removal’ to ensure that the correct service is being provided.

4.2.1 Regulatory framework

The reference services included in an AA proposal must be consistent with the AER’s reference service proposal decision, which in November 2021 did not include ‘service abolishment – residential’ as an ancillary reference service or ‘service abolishment – industrial and commercial’ as a specific non-reference service. New reference services can be added after the reference proposal decision where there is a

'material change in circumstances'.¹ We believe the GSR represents such a material change for the reasons outlined above and in Section 5.7 on Demand.

Reference services can be introduced after having regard to the reference service factors, which in summary are:

- the actual and forecast demand for the service;
- the extent to which there is a substitute for the service;
- the feasibility of allocating costs to the service; and
- the services' usefulness in supporting access negotiations.²

We expect demand for these services to increase and while the existing disconnection service might serve as a useful substitute today, the safety of the network and the prioritisation of electrification by the Victorian Government suggest it no longer serves as a substitute moving forward. Having regard to the reference service factors we therefore propose 'service abolishment – residential' be included in the AA as ancillary reference services. This also aligns with the service offered by Ausnet. 'Service abolishment – industrial and commercial' is added as a non-reference service for the time being.

The proposed changes to the AA Document (attached to these revisions to the Final Plan) include the proposed changes needed to incorporate these services.

4.3 Opex

Our revised opex, excluding ancillary reference services (ARS) and debt raising costs (DRC), is \$473 million. This is broadly consistent with our Final Plan, with much of our opex proposal largely unchanged. We have however:

- updated the half year 2023 allowance input, consistent with our Revised Variation Proposal which responds to the AER's Draft Decision on the six month extension (see our Revised Variation Proposal);
 - made a change to the application of CPI in the capex model (see section 5.4), which sees a small reduction in our capex to opex activities of \$0.4 million; and
 - flowed GSR demand impacts through to the calculation of the trend which results in lower output growth and reduced productivity growth (from 0.4% pa to zero).
- Our GSR Response opex is summarised in Table 4.2 below. The sections below discuss the changes from our Final Plan.

¹ NGR 48(1)(b)

² NGR 47A(15)

Table 4.2: Revised opex forecast (\$million, 2022/23)

	Final Plan	GSR Response	Drivers
Base year opex	381.7	393.6	✓ Updated half year 2023 allowance for Revised Variation Proposal
Change in capitalisation of some overheads	37.7	37.7	✓ No change
Step change (renewable comms)	3.0	3.0	✓ No change
Step change (cyber uplift)	6.9	6.9	✓ No change
Capex to opex activities	16.3	15.9	✓ Change to application of CPI in the capex model
Trend	18.3	10.7	✓ No change to real labour cost escalation ✓ Lower output growth ✓ Reduced productivity growth
Priority Service Program	5.0	5.0	✓ No change
Total opex excluding ARS & DRC	468.9	472.7	
Ancillary reference services (ARS)	20.6	20.6	✓ New ARS for disconnection at the main. No volumes or costs have been forecast for this new service in this response.
Debt raising costs	5.0	5.0	✓ No change
Total opex forecast	494.5	498.3	

4.3.1 Base year opex

We have updated the half year 2023 opex allowance consistent with the updated value in our Revised Variation Proposal (see section 1.3.2 of our Revised Variation Proposal). The half year 2023 opex allowance is used to trend forward actual base year opex from calendar year 2021 to financial year 2023/24. The slightly higher value of the half year 2023 opex allowance, on account of more recent and higher CPI, sees an increase in the base year opex of around \$2.4 million, equating to a total \$11.9 million increase in opex over the next AA period.

4.3.2 Capex to opex activities

We have incorporated a change to the application of CPI between June 2021 and June 2023 in our capex model in line with discussions with the AER following submission of our Final Plan. This change reduces the value of our capex to opex activities (the cost of which are calculated in our capex model before being excluded from our total capex and included as a step change in our opex) by \$0.4 million.

4.3.3 Trend

We have flowed GSR demand impacts through to the calculation of the opex trend which results in lower output growth and reduced productivity growth (from 0.4% pa to zero). Together, these changes reduce the trend component of opex by \$7.6 million, to \$10.7 million over the next AA period.

The two components of trend which we have updated in our GSR response are discussed below.

Output growth

The reduction in output growth flows from the change in average net connections and average network length over each year of the next AA period. Both have reduced compared to our Final Plan as a result of the GSR. The average movement in net connections over the period is -0.8% pa (compared to 1.4% pa in our Final Plan). The average movement in network length over the period is 1.0% pa (compared to 1.4% pa in our Final Plan). The revised output growth measures are summarised in Table 4.3 below and overall see slightly positive output growth until 2025/26, followed by negative output growth in the last two years of the period.

Table 4.3: Calculation of the output growth factor

Category	Weight	2023/24	2024/25	2025/26	2026/27	2027/28
Customer numbers	50.6%	0.52%	-0.05%	-0.63%	-1.50%	-2.29%
Network length (km)	49.4%	1.06%	1.31%	1.10%	0.87%	0.64%
Weighted output growth factor		0.78%	0.62%	0.22%	-0.33%	-0.84%

Productivity growth

In our Final Plan we applied annual productivity growth of 0.4% per annum which was consistent with the Final Decision for the AGN South Australian distribution network and higher than the average forecast opex productivity growth factor of 0.2% per annum found in ACIL Allen's study (see Attachment 8.6 of our Final Plan).

The ramifications of the GSR mean that in these revisions we are now applying an opex productivity growth factor of zero.

Overall, this approach reflects the decrease in gas customers and gas consumption, particularly residential, we are now forecasting as a result of the GSR. These declines mean that the scope for productivity improvements in opex is significantly reduced. We can see this is the case for the productivity growth attributed to returns to scale in ACIL's study, where negative values were calculated for the Multinet network – which was forecasting a small decline in net customers, and lower increase in network length over the period – compared to AGN and Ausnet.

We also expect this would be the case for the productivity growth attributed to the operating environment – which looks at relative changes in RAB and customer density. With changes in RAB for the most part outstripped by negative changes in customer density in our GSR Response, we would expect to see a lower, or even negative, forecast for the productivity growth attributed to the operating environment over the next AA period.

The standard approach adopted by the AER has been to calculate the recommended opex productivity growth factor based only on the rate of technical change. However, we note in some circumstances the AER has considered including further factors in productivity growth forecasts. We consider the GSR is a significant enough change for our business, that it is appropriate to consider productivity growth attributed to returns to scale and operating environment, as well as productivity growth attributed to

technological change. Taking all of these elements into account, we consider a productivity growth forecast of zero over the next AA period is appropriate.

It is also worth noting that a productivity growth factor of zero is consistent with the ERA’s reasoning for the Dampier Bunbury Pipeline, ATCO and Goldfields Gas Pipeline access arrangement decisions made in early 2021 and late 2019.

Table 4.4 below shows the calculation of output growth net of productivity growth in our GSR Response.

Table 4.4: Calculation of output growth net of productivity growth

Category	2023/24	2024/25	2025/26	2026/27	2027/28
Weighted output growth factor	0.78%	0.62%	0.22%	-0.33%	-0.84%
Annual productivity	0.00%	0.00%	0.00%	0.00%	0.00%
Annual output growth net of productivity	0.78%	0.62%	0.22%	-0.33%	-0.84%

4.4 Capex

Our GSR Response capex is \$434 million. This is \$97 million (or 18%) lower than our Final Plan. In particular, we have:

- Reduced growth capex in line with lower forecast new connections to our network over the next AA period as a result of the GSR (-\$57 million);
- Reduced augmentation capex reflecting lower forecast new connections to our network, as well as increasing disconnections from our network over the next AA period as a result of the GSR (-\$21 million);
- Minor reductions to meter replacement and reactive service replacements reflecting the impacts of increasing disconnections from our network over the next AA period as a result of the GSR (-\$3 million); and
- a change to the application of CPI between June 2021 and June 2023 in line with discussions with the AER following submission of our Final Plan (-\$16 million).

All other aspects of our Final Plan capex remain unchanged. Our GSR Response capex is summarised in Table 4.5 below. For more information on the changes from our Final Plan, please see Attachment 9.15 – GSR Revisions to Capital Expenditure and Attachment 9.11A – Addendum to Augmentation Business Cases.

Table 4.5: Comparison of our revisions to capex for the next AA period with the Final Plan (\$ million, 2022/23)

	Final Plan	GSR Response**	Key drivers
Mains Replacement	30.9*	29.5	<ul style="list-style-type: none"> GSR has no impact on safety and integrity drivers for small HP steel proactive replacement program Additional existing customer disconnections see minor reductions to reactive service replacements
Growth Assets	229.4	166.1	<ul style="list-style-type: none"> Significant reduction in the forecast number of new residential connections
IT	77.5	74.9	<ul style="list-style-type: none"> GSR has no impact on the integrity and customer service drivers for our IT program
Meter Replacement	42.0	39.8	<ul style="list-style-type: none"> Additional existing customer disconnections see minor reduction to meter replacements
Augmentation	80.4	57.8	<ul style="list-style-type: none"> Combination of reduced new residential connections growth and additional existing customer disconnections sees some proposed augmentations no longer required within the next AA period
Telemetry	4.6	4.5	<ul style="list-style-type: none"> No change in scope of work, however we have identified five fringe point monitoring sites that were growth driven that would no longer be required. We have replaced these with the next five highest priority sites, which are coverage driven.
Other assets	38.5*	37.0	<ul style="list-style-type: none"> GSR has no impact on the safety and integrity drivers of our other capex
Escalation	4.8	4.0	<ul style="list-style-type: none"> Lower escalation on account of lower capex
Overheads	23.3	20.7	<ul style="list-style-type: none"> Lower overheads on account of lower capex
Total	531.4	434.3	

*Note we have updated our Final Plan capex to move \$1.8 million which was misclassified in Other assets, which should have been in Mains Replacement.

**Our GSR Response capex also incorporates a change to the application of CPI between June 2021 and June 2023 in line with discussions with the AER following submission of our Final Plan. This change reduces the Final Plan capex by around \$16 million.

4.5 Capital Base

We have adjusted the capital base presented in our Final Plan in July 2022 to reflect revisions throughout this document in response to the Victorian Government's GSR. Our revised estimate is that the value of our capital base will grow from around \$2.0 billion to \$2.2 billion over the next AA period.

For more information on the changes to our Capital Base, please see Attachment 10.1 GSR Response Capital Base.

4.6 Incentives

Our GSR Response on incentives remains largely unchanged from our Final Plan. We are however proposing a minor change to the operation of the contingent CESS compared to that proposed in our Final Plan, to exclude augmentation capex from the operation of the scheme.

As highlighted in our GSR Response on capex above, the GSR impacts on new connection growth and existing customer disconnections have the largest effect on our growth and network augmentation capex. The changes to our augmentation capex are particularly sensitive to how these play out over the next AA period.

Consistent with the reasons new connections capex is excluded from the scheme, the augmentation capex too, is largely impacted by customer behaviour. Excluding this capex from the operation of the CESS is an appropriate way within the regulatory framework to balance our needs to be able to recover our efficient costs, customer interests in terms of lowest possible costs and the administrative burden of in period changes.

For AGN, augmentation capex makes up 14% of our total proposed capex in the next AA period, and therefore the incentive for us to incur efficient capex is not materially dampened.

4.7 Demand

The Victorian Government's GSR was released on 2 July 2022. As described above it maps out the strategy for Victoria's gas sector towards net zero emissions by 2050 and contains several measures which will reduce gas demand, particularly in the Residential and Commercial sectors.

We have revised our Final Plan demand forecast to reflect the likely impacts of the Gas Substitution Roadmap. More detail on the revisions to our demand forecast are included in Attachment 13.4.

In the next AA period we expect demand in our Residential segment to fall by 5.3% per annum and in the Commercial segment to fall by 1.0% per annum. The industrial forecast remains unchanged from our Final Plan.

These declines are driven by several policy measures in the GSR including:

- Expansion of the Victorian Energy Upgrades (VEU) scheme with enhanced incentives to switch to electric appliances;
- Phasing out rebates for natural gas appliances by the end of 2023;
- Changes to Victoria Planning Provisions in 2022 to remove the requirement for new housing developments to be connected to gas; and
- Adopting the 7-Star Standard for new home construction in the new National Construction Code (NCC) which takes account of home energy appliances in addition to the thermal shell of the building.

These measures will drive a reduction in natural gas demand including lower consumption per connection and lower connections growth. focus on near term electrification The GSR significantly changes the

outlook for gas demand in Victoria over the next five-year period, and brings our updated demand forecast more into alignment AEMO's Step Change scenario, albeit remaining more conservative.

Our demand forecast has also been revised to reflect recent customer sentiment including recent falls in net connections, by 12% in 2021/22. These are driven by costs (for energy and building generally) as well as emissions.

The long-term trend we observe in consumption per connection will accelerate as measures outlined in the GSR take effect and this is reflected in our revised demand forecast which shows 5-year annual growth of -4.1% versus -1.3% in our Final Plan shown in Table 4.6 and Table 4.7.

4.7.1 Comparison of our Revised Demand Forecast with our Final Plan

Table 4.6: Final Plan Demand Forecast, 1 July 2022 Submission (\$ million, 2022/23)

Final Plan	2023/24	2024/25	2025/26	2026/27	2027/28
Residential demand					
Average Connections (no.)	735,439	745,796	757,320	768,573	779,844
Consumption per connection (GJ)	41.49	40.19	38.98	37.64	36.45
Demand (TJ)	30,517	29,976	29,520	28,927	28,429
Commercial demand					
Average Connections (no.)	23,718	23,315	23,439	23,565	23,691
Consumption per connection (GJ)	350.2	352.5	354.8	356.2	357.7
Demand (TJ)	8,305	8,217	8,317	8,394	8,473

Table 4.7: Revised Final Plan Demand Forecast September 2022 (\$ million, 2022/23)

Revised Final Plan	2023/24	2024/25	2025/26	2026/27	2027/28
Residential demand					
Average Connections (no.)	728,707	728,758	723,883	712,638	695,820
Consumption per connection (GJ)	41.2	39.6	38.1	36.5	35.0
Demand (TJ)	29,988	28,886	27,584	26,007	24,388
Commercial demand					
Connections (no.)	23,718	23,315	23,439	23,565	23,691
Consumption per connection (GJ)	346.8	343.5	340.3	337.0	333.8
Demand (TJ)	8,225	8,009	7,976	7,942	7,909

For more information on the changes to Demand in our GSR Response, please see Attachment 13.4 GSR Response Demand and Attachment 13.1A Core GSR Response Revised Demand Forecast.

4.8 Revenue and Prices

Overall, the revisions to our Final Plan to reflect the impact of the GSR result in an upfront price cut of 3% (after inflation) on 1 July 2023. This compares to the 10% cut proposed in the original submission on 1 July.

We are however proposing to change our price path by providing a deeper price cut on 1 July 2023 of 6% (after inflation) followed by price increases of 2% plus CPI for the remaining 4 years. This will see the price path more closely align with the impact of the GSR over time.

Our total revenue in our GSR Response is \$1,170 million (\$2022/23) which is lower than our Final Plan. The key drivers of revenue and price in our GSR Response compared to our Final Plan are:

- Lower forecast of gas demand;
- Lower growth capex;
- Reduced augmentation capex; and
- Increased depreciation.

For more detail on our revenue and prices, please see Attachment 14.3 GSR Response Revenue and Pricing.

5 Next steps

After receiving these revisions to our Final Plan, the AER will make them available for public consultation with submissions due on 30 September 2022. Customers and other stakeholders are encouraged to participate in this process. The AER is expected to make a Draft Decision on our plans before the end of 2022 including further opportunities to respond before a Final Decision in the first half of 2023.

Throughout this process we continue to engage with our customers and stakeholders and welcome any feedback, which can be provided:

- online at gasmatters.agig.com.au
- by mail
- in person

Contact information is provided on the back cover of this document.

6 Structure of the revisions to our Final Plan

The structure of revisions to our Final Plan is outlined in Attachment 1.3A. It has been structured to include the following:

- all of the documents provided to the AER in the July 2022 Final Plan, which is referred to as our Final Plan (for the purposes of brevity and clarity, these documents are not attached to this submission of revisions to our Final Plan as they have already been provided to the AER); and
- further documents which provide additional information, or modify the Final Plan, all of which are attachments to our Final Plan.
- More specifically, the structure of the revisions to our Final Plan consists of:
- this Overview, which includes a CEO Foreword, an overview of key areas, and a list of new attachments;
 - the Document Map (Attachment 1.3A) reflects our Final Plan with the addition of new attachments developed as part of the revisions to our Final Plan (these new documents are highlighted in green); and
- attachments to the revisions to our Final Plan:
 - more detail on the key revisions to our Final Plan are set out in new attachments to the Final Plan and prefaced with the words 'Revisions to Final Plan' in the title;
 - all information contained in these attachments supersedes information previously provided in our Final Plan to the extent that there is any conflict.

Unless otherwise stated, information presented in the revisions to our Final Plan is in dollars of 2022/23 unless otherwise stated.

7 Glossary

Glossary			
AA	Access Arrangement	HIA	Housing Industry Association
ACQ	Annual Contract Quantities	HSE	Health Safety Environment
AER	Australian Energy Regulator	HyP	Hydrogen Park
AGIG	Australian Gas Infrastructure Group	I&C	Industrial and Commercial (customers)
AGN	Australian Gas Networks	KPI	Key Performance Indicator
AHC	Australian Hydrogen Centre	LPG	Liquid Petroleum Gas
AMP	Asset Management Plan	MDQ	Maximum Daily Quantity
AMS	Asset Management Strategy	MGN	Multinet Gas Networks
ARENA	Australian Renewable Energy Agency	Next AA period	2023/24 to 2027/28
ARS	Ancillary Reference Service	NGL	National Gas Law
capex	Capital Expenditure	NGR	National Gas Rules
CBD	Central Business District	opex	Operating Expenditure
Current AA period	2018 to 2022	RBA	Reserve Bank of Australia
DP	Delivery Point	RRG	Retailer Reference Group
EBSS	Efficiency Benefit Sharing Scheme	SL CAPM	Sharpe-Lintner Capital Asset Pricing Model
EDD	Effective Degree Day	TAB	Tax Asset Base
ESCV	Essential Services Commission of Victoria	TJ	Terajoule/s
ESV	Energy Safe Victoria	VGNSR	Victorian Gas Networks Stakeholder Roundtable
FFO	Funds from operations		
GDB	Gas Distribution Business		
GJ	Gigajoule/s		
GSP	Gross State Product		
GSR	Gas Substitution Roadmap		

8 List of attachments

- 1.3A Revisions to Final Plan GSR Response Document Map
- 1.4A GSR Response Confidentiality Claims
- 1.5A GSR Response PTRM
- 1.6A GSR Response Roll Forward Model
- 1.7A GSR Response Depreciation Model
- 6.5A(1) GSR Response Consumer Choice Model
- 6.5A(2) GSR Response Building Block Model
- 6.6 GSR Response Future of Gas
- 8.1A GSR Response Opex forecast model
- 9.3A GSR Response Capex Model
- 9.11A GSR Response Addendum to Augmentation Business Cases
- 9.15 GSR Response Capital Expenditure
- 10.1 GSR Response Capital Base
- 13.1A GSR Response Gas Demand Forecast
- 13.2A GSR Response Demand Forecast Model
- 13.4 GSR Response Demand
- 13.5 Voice of Consumer Report
- 14.3 GSR Response Revenue and Pricing
- GSR Response Updated Access Arrangement



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