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The Honourable Lily D'Ambrosio
Minister for Energy, Environment and Climate Change
Minister for Solar Homes
Submitted electronically: engage.vic.gov.au

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Dear Minister,

AGL appreciates the opportunity to provide comments on the Victorian Government's Gas Substitution Roadmap Consultation Paper. AGL as Australia's largest electricity generator and developer of renewable technologies supports the Victorian Government's ambitions to achieve net zero emissions by 2050. The acceleration of the energy transition will continue to be guided by evolving trends in customer needs, community expectations, and emerging technologies. Customers will continue to seek affordable energy prices but will be increasingly focussed on greater choice about their own energy production and consumption, as well as reducing their carbon footprint. New technologies will drive down costs of new forms of low-emissions energy and storage, leading to a system characterised by greater distribution, variability, and flexibility. While these evolving trends present enormous opportunities to benefit consumers and reduce emissions, the changing energy mix will require complementary adjustments to maintain grid reliability and stability, as well as affordability for vulnerable customers.

We welcome the Victorian Government's focus on early planning for the longer-term decarbonisation of the gas sector but note that to guide and accelerate the energy transition reforms should optimise the shared value between businesses and customers, leverage private sector investment where possible, and support Australia's economy by minimising household energy expenses.

While reforms should incentivise investment in new energy resources, they must also retain value in existing assets to deliver the best outcomes for energy customers and Victoria's economy. As the consultation paper has noted gas produced in Australia is used for residential and commercial space heating, cooking and hot water, industrial process heating and chemical feedstock in manufacturing, in gas powered generation and is also exported. Not all these applications have an obvious substitution pathway, for example industrial processes and gas-powered generation cannot easily substitute hydrogen as feedstock in their processes. There are health and safety, gas specification, asset integrity issues, burner configurations and metering considerations just to name a few.

There needs to be comprehensive cost benefit analysis undertaken for each segment of users for each pathway to fully appreciate the availability of options and any possible policy framework required to underpin a switch from natural gas. Consequently, AGL believes that key issue 1, 2 and 3 will require a staged approach to ensure that adequate consideration is taken for each pathway and once that has been established then the consideration of possible solutions for key issues 4,5 and 6 can occur.

We also provide further feedback on some of the key issues identified in the following Attachment.

Yours sincerely,
Elizabeth Molyneux
General Manager, Policy and Market Regulation



ATTACHMENT

Key Issue 1: Maintaining electricity reliability with new sources of demand: The development of coherent and achievable policies on the decarbonisation of gas of must be underpinned by proposals that ensure affordable and reliable electricity supply during Australia's energy transition. This requires not only adequate supply in the short-term, but robust structures to maintain reliability and security and clear guideposts for the very substantial private sector investment that is required within Australia's energy sector over the next few decades.

This can be achieved with a package centred around the following principles

1. flexible approaches to retaining value from aging thermal plants by not restricting options for plant operation prior to exit. This includes further exploration of ways for gas fired generation to transition to lower or zero-emissions options using hydrogen or other alternatives.
2. new competitive frameworks for distributed energy resources (DER) to maximise customer participation in the energy transition and drive private investment in energy infrastructure that provides shared value to businesses, DER owners, and the broader community.
3. development of new markets for essential security services to maintain the security of the grid with a changing generation mix.

Further information about these principles can be found in AGL's submission to the Energy Security Board's Post-2025 Options Paper.¹

Key Issue Two: Transitioning to more sustainable gaseous fuels with minimal disruption to end-users:

As noted earlier many classes of users do not have an obvious substitution method and AGL sees a role for gas powered generation in the short to medium term to ensure that transition maintains system security and ensures reliability of supply. Any pathway that includes the conversion of either gas distribution/transmission networks and end-users will require increased transparency from network and distribution providers regarding the planning processes and strategies for the integration of electric vehicles, hydrogen production, injection, and transmission to ensure the integration proceeds without great impact to end-users.

Due and careful consideration needs to be given about the treatment of underutilised/stranded assets that could occur as part of this transition. Specifically, networks need to provide clear direction and information around what market solution is needed to fix a problem so market participants can then determine the most efficient solution to address the problem. This is framed as focusing on the solution required rather than the problem because market participants may determine in providing a solution how they can also provide additional value streams to maximise efficiencies and potential opportunities around that problem. For example, if a X sized battery is needed to address a solar soak issue, then this might present different opportunities from a network constraint issue, and further may be solved by a third party providing a blended solution, such as VPP batteries with a front of the meter battery. In addition, networks need to be transparent with the modelling used for their solution to ensure that any modelling used can be like for like or if an alternative model is used, it can be distinguished and why it has been employed.

¹ <https://thehub.agl.com.au/articles/2021/06/agls-submission-on-the-energy-security-boards-post-2025-market-design-options-paper>



Key issue three: Maintaining the reliability, affordability, and safety of gas supply:

It is not possible for AGL to canvass and discuss all options, programs and regimes required to offer reliability, affordability, and safe gas supply to end users and customer however there are several safety considerations that need to be evaluated further with respect to higher concentrations of non-methane gas throughout the existing gas transmission and distribution networks. For example, on pipeline, network, and metering infrastructure, and end-use appliances and equipment. While it is at least likely that hydrogen systems could be developed in a safe manner, the cost of doing so across the supply chain may prove to be prohibitively expensive when compared to the use cases; alternate options such as pursuing electrification of existing gas use cases or transporting gas through non-pipeline infrastructure may therefore prove to be a more efficient and affordable outcome for customers. Once there is clarity on the direction to be followed or which combination of pathway(s) is chosen then there can be a more robust discussion of how to address these three principles for that course of action.

Key issue six: Transitioning the Victorian economy efficiently and equitably:

AGL supports the principle that every Victorian should be supported through the energy transition. We also recommend, where possible, existing programs should be used to support this transition. For example, the Victorian Energy Upgrade Scheme (VEU) would provide a good framework to assist and support the roll out of products and services that align with the electrification strategy. Further, the Government should use the upcoming review of VEU to transition the program to a broader energy productivity scheme that would support the roll-out of behind the meter products and services, such as solar, batteries and EVs and associated orchestration services. An energy productivity scheme will support not only energy efficiency (i.e., reducing kilo watt hours consumed per appliance) but also shifting energy to more efficient times of the day (i.e., re-charging EVs in the evening, rewarding solar flexibility programs for minimum demand events etc).

Further, the Government should consider how its energy concession, solar and solar/rebate schemes can be adjusted to ensure appropriate incentives and compensation as offered to consumers to support them with the transition. Finally, many vulnerable and hardship customers reside in public or private rental premises and there is an opportunity for the Government to seek out partnership arrangements with the private and community sectors to help customers in these properties transition. For example, AGL's recent announcement to join St Vincent de Paul Society Victoria to install solar and power St Vincent De Paul shops in Victoria, is a good example of how a partnership can support the electrification strategy and ensure access for all. AGL will be completing 91 solar installations, generating 1992 mega-watt hours (MWh) of energy annually, the equivalent generation of more than 415 average Australian homes.

AGL encourages the government to seek out competitive based solutions that not only allow customers to reap the benefits of lower energy bills from investing in solar, batteries and EVs; but also rewards their offering of DER services to provide wider network and wholesale market system benefits.

In conclusion as the consultation paper notes Victoria has the highest national level of gas reticulation and residential gas use but this presents an opportunity to capture low-cost energy efficiency and electrification opportunities and take bold, innovative action to embrace the opportunities. The best pathway to net zero emissions is unknown at this stage but will likely occur through a combination of these technologies and coordinated government action that will be influenced by consumer choices, technology costs and advancements in lower emission technologies. AGL believes that the primary avenue for decarbonisation of the Victorian gas sector will be determined by these forces and will be supported by the other pathways in achieving the net zero goal.

Please contact further questions on this submission.