Submission regarding AER Draft Decision regarding AGN Access Arrangements 2023 to 2028

By email to AGNVIC2023@aer.gov.au

Due by 24/2/23 PERSONAL SUBMISSION – I approve publication of this submission

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22 February 2023

Overview of submission

This submission focuses on issues associated with disconnection of consumers from the gas grid, which is emerging as a major issue as Victoria and other states and territories progress towards a zero emission future. It also includes some discussion of aspects of the transition we face.

I worked for the Gas & Fuel corporation in the early 1980s, then for the Victorian government's energy department until 1991, leading introduction of a range of energy efficiency programs. Since then I have worked on a range of energy efficiency and climate response programs, projects and policy development across all sectors of the economy.

Key messages

Key messages in this submission regarding disconnection from gas are:

- **Individual consumers should not pay for disconnection: the costs should be spread across all gas and electricity consumers** to avoid equity impacts and creation of barriers to change for individual consumers, and in recognition that numbers of gas consumers are much smaller than numbers of electricity consumers, especially in some states and distribution networks. We are dealing with a fundamental energy transition, not just a shift from gas. This has recently been acknowledged by energy ministers.
- **Research should be urgently pursued to identify innovative least cost, safe solutions for disconnection, including factors such as damage to roads and carbon costs.** My understanding is that the oil refinery industry and others (eg PlugCo | What Is The Inflatable Pipe Plug - Bing video) have methods of blocking pipes without physical removal. Alternatively, modern sensors may allow accurate identification of the connection and 'micro' methods of blocking gas pipes to consumers that minimise damage to roads. I expect that researchers may come up with other approaches as well. The aim should be to achieve a safe situation that avoids risk of future gas leaks on the consumer side of the gas system. There should be no need to remove the consumer-side pipes. I gather that plugging consumer pipes has been used as a short-term measure: the issue is that research is needed to develop an approach that will last until local area disconnection occurs. **If all Australia's small consumers disconnect, the present approach would be a multi-billion dollar program, so it is well worth investing in research to reduce this cost while achieving safety goals.** Until this research is completed, the lowest cost option, possibly leaving meters in place or just removing meters and placing appropriate signage and public education, should be adopted.

- **Mechanisms should be put in place to ensure that individual consumers are not exploited** by contractors.
- **The need for urgent reduction in greenhouse gas emissions and the costs of delay must be factored into decisions.**
- **The assumption that consumers should bear the cost of disconnection should be questioned. I**t is reasonable for businesses to accept risk of loss of customers, and network operators have made handsome profits for many years.
- Allocation of funds for new consumer connections should be further reduced below the proposed $166 million for AGN, given that climate science supports urgent reduction of emissions, so new gas connections should be discouraged.

The evolving context

The Victorian government among others has adopted increasingly ambitious carbon emission reduction targets in recent years. Given the urgency of climate action, it is likely that the level of ambition will continue to increase, and that consumers will take voluntary action beyond government commitments.

It is important to recognise the extreme urgency of emission reduction. The driver of global heating is the concentration of greenhouse gases in the atmosphere. At present, this is over 500 parts per million (including all major greenhouse gases, not just CO2) compared with under 280ppm in pre-industrial times. The IPCC considers cumulative emissions to be a key indicator: cutting emissions today has a much bigger cumulative effect than action taken in 10 years. So pressure to cut emissions fast will increase as impacts of extreme events become more common and more extreme.

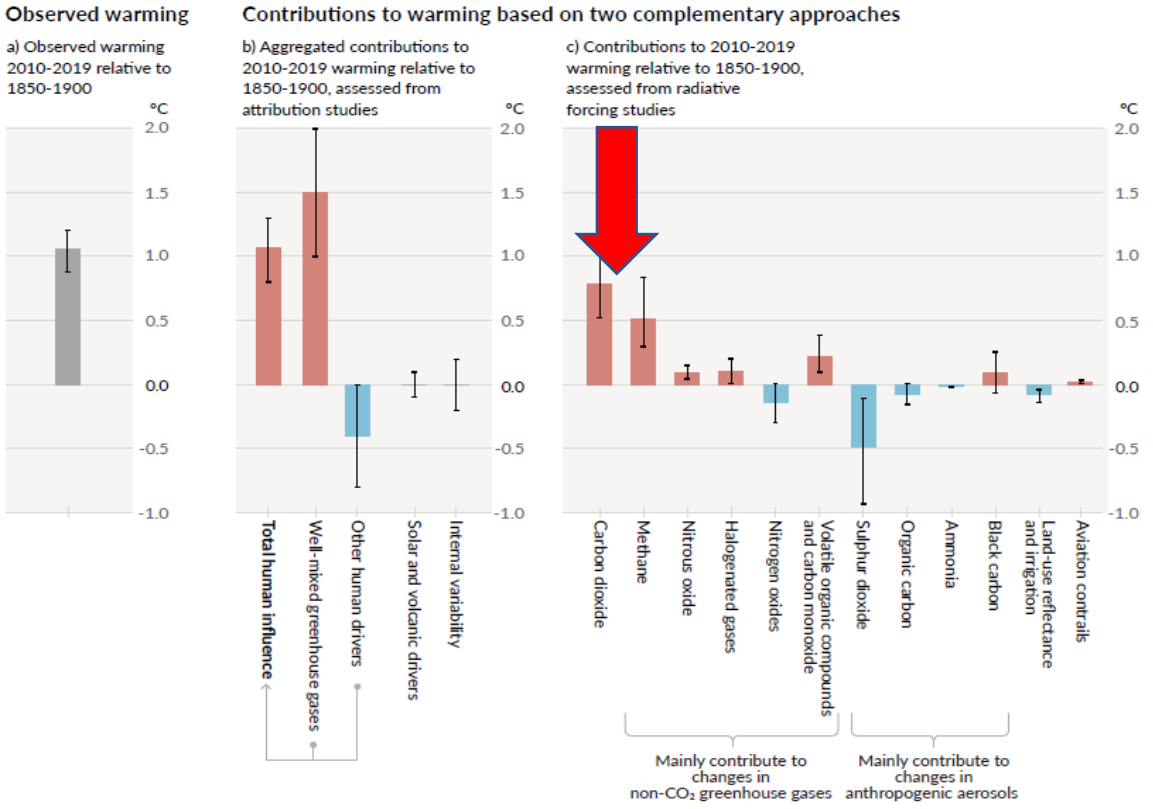

Figure SPM.2: Assessed contributions to observed warming in 2010–2019 relative to 1850–1900.

The short term warming effect of methane leakage is also much more significant than accounting using 100 year Global Warming Potentials suggests. As shown above, IPCC (Summary for Policy Makers AR6 WGIII) found that real world contribution to global heating of methane over the past decade was two-thirds as much as from CO2, despite its much lower atmospheric concentration: this will increase pressure to reduce all sources of methane, including the gas industry. There are significant uncertainties about the scale of methane leakage from gas supply, including a lack of data on leaks behind the meter, which are additional to leakage from production and within low pressure networks.

For southern Australia, emerging shortfalls in winter gas supply will impact on consumer gas prices, which will drive reduction in winter gas consumption. This may happen much faster than expected: Victorian households already own over 2 million reverse cycle air conditioners, but many don't realise that they can provide heating and offer cheaper heating than gas already, while 7-star homes need much less heating but do need cooling – so more homes will install reverse cycle air conditioners. So gas demand may fall faster than actual disconnections, and new homes may shift from gas faster than expected.

The role of AER and its draft recommendations

In its Draft Decision, AER (p.vii) considers

• whether this pipeline service should be price regulated [which it accepts], and if so

• the efficient price for the regulated service, and

• whether the costs should be socialised across all (or a class of) consumers or recovered from individual consumers requesting it.

It also notes that 'The most equitable solution to this question warrants further debate'.

AER has decided to keep open the two cost recovery approaches [individual consumers or socialised across the consumer base] so that AGN and consumer input can be considered. It has accepted AGN's estimated cost of disconnection of $950 as 'reasonable'.

AER also accepts application of accelerated depreciation due to the uncertainties of the rate of reduction in gas demand. It also notes the uncertainty of future hydrogen distribution via networks.

Further AER notes that safety issues are the responsibility of Energy Safe Victoria – which I understand does not consider costs in its assessment. It is not clearly stated, but it seems that AER would abide by ESC's judgement, regardless of the economic efficiency of the solution favoured by ESC.

Issues emerging from AER's interpretation of its role

The subservience to ESC's 'safety only' approach seems to be a potentially problematic situation: in other cases, such as removal of potentially dangerous gas heaters, consideration has been given to practical transition paths.

As noted earlier, if AGN's proposed approach is applied across Australia, this is potentially a multi-billion dollar issue.

AER assumes that socialising costs would only be spread among ongoing gas consumers and that this financial burden would fall on a declining number of consumers, exacerbating equity problems, though it would avoid creation of a potential barrier to disconnecting. **My proposal that the costs be spread over all gas and electricity consumers would resolve this concern. The need for broader**

consideration of the overall energy market including consumers has been demonstrated by energy ministers and through the recent consultation on a National Energy Performance Strategy.

The AER see the future potential for hydrogen to be distributed as 'uncertain at this time'. It seems extremely unlikely. Even if hydrogen achieved similar prices to today's gas prices, numerous studies suggest it could not compete with electricity at a household scale. I also see that the ESC has concerns about safety risks regarding hydrogen in gas transmission systems. And delay in reducing gas use makes a substantial contribution to cumulative greenhouse gas emissions. Nevertheless, my suggestion that methods of blocking gas pipes be developed and applied would mean the pipes could be safely left in place in case they were eventually required.

AER assumes that the costs of disconnecting should be carried by consumers. Normal business practice is that a business carries the risk of loss of customers, and must deal with any issues associated with under-utilised assets when they leave. It is not obvious why gas network operators should be exempted from common practice. If individual consumers are required to pay a high price for disconnection, some may be motivated to find ways of avoiding this cost, potentially increasing safety risks.

Conclusion

It is crucial that technological innovation in methods of disconnecting gas supply are pursued, and that barriers to shifting to renewable electricity be minimised while equity issues are addressed. My proposals would achieve these outcomes.