



Submission to the Essential Services Commission

Gas Distribution System Code of Practice – Review 2023

Prepared for Bass Coast Climate Action Network (BCCAN)

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1 May 2023

We thank you for the opportunity to contribute to the review of the Code of Practice for the Gas Distribution System. Cited as Essential Services Commission, *Gas Distribution System Code of Practice review: Issues Paper*, 21 March 2023.

Background. Bass Coast Climate Action Network (BCCAN) is a local not-for-profit organisation of Bass Coast residents of diverse ages and backgrounds who are concerned about the climate emergency. We work to educate ourselves and members of our local community about its causes and the required responses, and actively encourage all three levels of government to adopt the policy changes that are now urgently needed to ensure a safe climate future.

BCCAN successfully lobbied via a petition of 1,100 signatures for the Bass Coast Shire Council to declare a Climate Emergency. This led to the Bass Coast Shire developing and formally adopting a Bass Coast Climate Action Plan.

Contribution Acknowledgement. *Points in this submission that I have researched and particularly wish to draw to your attention are in this font.* Other points were developed with, or borrowed from, people preparing submissions for other climate groups. We acknowledge in particular the work by Jim Crosthwaite and the Darebin Climate Action Now (DCAN) group.

Key Points:

Our key points are:

- The scope of the review should explicitly refer to the emission reduction target of 75% by 2030 of the Victorian Government.
- It is important to focus on the distributors' obligations as Victoria moves off gas.
- New connections should be charged at full market price and the fees for disconnections abolished. Making the connection cost explicit and upfront will make it clearer that gas connections are now discretionary and voluntary.

- Clarify that Distributors have an obligation to take greenhouse gas emission reporting and mitigation seriously. You can't manage what you don't measure. Distributors (& the ESC) need to get a better handle on what the fugitive emissions really are so that they can be managed and reduced. The ESC needs to actively manage the distributors to reduce their fugitive emissions in a protected monopoly.
- Surveys of leaks are required. Leak maps should be publicly published and regularly updated. Aerial methane surveys from light planes are now commercially available in Victoria. This will allow rapid identification of high leak zones. Results from these surveys should be made promptly available to the EPA.
- Reduce the 'metering' portion of UAFG by enabling moving to 'zonal' use of HHV through increased data-logging.

Comments against each section and set of questions follow.

Scope of ESC review

1. Overall, do you support the scope of our proposed review of the code?
2. Are the proposed criteria in our assessment framework appropriate?

BCCAN comments (per DCAN)

- The emphasis in the review on distributor obligations is very important as Victoria moves off gas. Distributors need to be given strong signals from the ESC that the Code will align with Government targets and the Roadmap, as well as community expectations
- The scope of the review should explicitly refer to the emission reduction target of 75% by 2030 of the Victorian Government. The assessment criteria (pp.13-14) should explicitly include this.
- We welcome the statement that ESC seeks to “remove barriers to the aims of the Roadmap in the code, and to align it with the expectations and long-term interests of Victorian consumers.”
- The expectations of Victorian consumers are increasingly aligned with government policy on gas substitution, as expressed in the *Roadmap*. A [recent survey](#) by the Australia Institute and Newgate found 55% of people across Australia have a positive view of electrifying their homes. This will surely grow as electrification gathers pace, and the awareness of its benefits grows.
- In making the above points, we take the scope of the review to be
 - a. “... to improve clarity and remove any regulatory duplication, so that the obligations on gas distributors are clear and enforceable.”
 - b. To address “existing obligations that may not be aligned with current community expectations, government policies, and updated national regulations.” P.15
- With a focus on the key issues of
 - a. distributor obligations to connect new customers and inform customers of changes to the gas mix,
 - b. metering requirements and customer obligations p.15

Gas connections

3. Do you consider the current connections framework for gas retail customers appropriate? Why or why not?
4. What options should we consider when reviewing the connections framework for gas retail customers?

BCCAN comments

- The current framework is not appropriate. Those wishing to be connected should pay at market rates, as for electricity connections, and not be subsidised by the whole gas customer base. Free connections and being required to pay for disconnection is inherently wrong – particularly when customers have not and are not being informed of disconnection charges when they join the network.

- The current system of free connections effectively incentivise gas when an all electric home is cheaper to run and has reduced emissions. Charging for disconnections is a hindrance to electrification.
- If abolishment charges are to be allowed, then they should only be allowed for new connections where the customer has been informed of the charge prior to the connection is agreed to.

Information about changes in the type of gas supplied

5. *Do you agree with the introduction of obligations to provide information to customers about changes in the type of gas supplied?*

6. *Are there other options to introducing equivalent obligations proposed for the National Energy Retail Rules that we should consider?*

BCCAN comments (per DCAN)

- The Code can be later amended if the Victorian Government makes regulatory decisions about new gases that differ from the Code.
- New gases will be introduced across networks incrementally (as is happening in the Wodonga region). The Code should specify that an obligation on each gas distributor that requires public consultation in each area before plans are put in place.
- Each customer should be informed directly by post, not only electronically, about pending changes. The proposed change should also be prominent on the gas bill prior to the change, and included thereafter on all gas bills. We are concerned that the AEMC recommended change allows wriggle room for gas distributors and retailers to avoid their responsibilities to provide full transparency and timely information.

Metering obligations

7. *Should we remove the overlap of metering obligations in the code and in Part 19 of the National Gas Rules?*

8. *What options to the regulation of metering requirements for non-declared distribution systems should we consider?*

BCCAN comments

- In general removing regulatory overlap and assuring national consistency is a good thing. So in general we support these approaches. However the National Gas Rules do not reference Victoria's Emissions Reduction Legislation, and there are some details to be worked through.

In a previous submission to the ESC, detailed technical suggestions were made regarding improving the metering obligations to support zonal HHV measurement and to reduce the uncertainty in estimating UAFG. (Reducing UAFG uncertainty is critical to enabling reduction of actual methane emissions.)

In summary:

- Reduce the 'metering' portion of UAFG by enabling moving to 'zonal' use of HHV through increased data-logging. As gas increasingly comes from multiple sources then UAFG metering errors will increase if the system continues to rely on a single statewide HHV. Increased UAFG metering errors will obfuscate fugitive emissions. Reducing UAFG metering errors will make the fugitive emissions easier to "see" and also isolate.
- Metering requirements should include regular surveys monitoring gas temperatures at customer meters. Replacement of the LP network with HP networks over the years is increasing the measurement portion of UAFG as the gas is being delivered at a lower temperature (and hence higher energy) than that assumed at billing because of the cooling effect of pressure reduction from the HP mains closer to the customer's meter. A comprehensive study monitoring gas temperatures at customer meters would determine the magnitude of this element of UAFG.

Customer obligations

9. *Do you consider that the current arrangements for deemed distribution contracts and customer obligations results in uncertainty for customers and industry that is burdensome or harmful?*

10. *Should we include customer obligations and prohibitions in the code?*

BCCAN comments

- BCCAN has no direct interest in these questions.

Removing duplication with other regulatory instruments

11. *Do you have any views on the removal of Part D of Schedule 1 from the code?*

BCCAN comments

- BCCAN takes no exception, provided that this change will allow the ESC & AEMO to agree 'zones' which group like customers together and that AEMO will monitor and declare flow weighted average HHV values for each zone. This must be supported both by increased deployment of data-loggers to support different HHVs across zones and by transparent and timely access by the public to the gas quality information used to determine such HHVs.

12. *Do you have any views on the removal of Schedule 3 from the code?*

BCCAN comments

- No real issue other than Schedule 3 contains no reference to GHG emissions. The ISO 14064 standard provides governments, businesses, regions and other organisations with a set of tools for programs to quantify, monitor, report and verify GHG emissions. So rather than having Schedule 3 be used for 'technical' standards which are covered by the national gas code, perhaps schedule 3 could be used to reference ISO 14064 to support ESC's need to bolster compliance with Victoria's Emission Reduction legislation.

Disconnections and reconnections

13. *Are any clarifications needed in relation to disconnection and reconnection obligations?*

BCCAN comments

- The current gas abolishment method is actually less safe than a cheaper approach. The current approach that is deemed to be 'safest' is to remove the gas line from the property back to the nearby main distribution pipe. This is expensive as it often involves digging up the road etc. Importantly, in order to dig up and remove the property line, it must first be sealed off from the main. So abolishment is currently a 3 step process.
 1. Disconnect house and remove meter at property end.
 2. Disconnect property line from the upstream distribution main.
 3. Remove the property line back to the distribution main connection point.

In a standalone sense, completing all 3 steps is 'cleanest' and avoids confusion. The problem is that by requiring step 3 (which is expensive as it can involve considerable trenching), people are avoiding step 2, and this is systemically less safe for Victorians. This leads to unsafe situations where people artificially disconnect (by telling the gas retailer they're moving house) and thus avoiding on-going fees. Renovations, landscaping etc result in about 3000 instances a year of 'hits' on live gas lines left by just doing Step 1. The current regulations are driving this behaviour. Regulations that financially reward less safe behaviour are dangerous. Instead the abolishment fee should just cover the costs of steps 1 & 2. This should substantially lower the cost of abolishment.

- There should also be recognition in the abolishment fee approach that whole streets may wish to disconnect within a short (12 month) time frame. In that case the approach should be to apply step 1 at each house in turn and then finally disconnect that street using step 2 at a single point.
This of course will be dependent on network topology. So if customers wish to reduce their

abolishment fee by “bulk buying”, they’ll need access to the network topology to understand which clusters of customers can be disconnected in this way. The code should require distributors to provide this information, perhaps via local Council planners.

- Customers, both residential and business, should be able to exit the gas system easily - in line with Victoria’s emissions reduction target. Charges for disconnection and abolishment should reflect this.
- Alternatives for customers need to be found that do not require paying nearly \$1,000 for ‘service abolishment – residential’ as proposed by AGN, Multinet and Ausnet as part of their Access Arrangements.

Guaranteed Service Levels

14. Should we specify clearer timeframes for when Guaranteed Service Levels payments must be made?

BCCAN comments (per DCAN)

- Yes, prompt payment is essential to ensure that distributors do not profit from delay. There are a growing number of households struggling financially. They deserve prompt payment. Low income people are more likely to struggle for a host of reasons with making a complaint about delay. Their rights should be clear.
- This is also important to help ensure that service levels are maintained during the retirement of the gas system.

Distribution connected facilities

15. Are there any further consequential changes to the code required due to the recent amendments to the National Gas Rules relating to distribution connected facilities?

BCCAN comments (per DCAN)

- It is not enough to simply make changes that facilitate the NGR Rules that are aimed at supporting introduction of hydrogen and biogases into the distribution system.
- This is a major change that shifts responsibility away from the ESC to national gas market authorities.
- ESC should ensure that it retains a role in the injection of hydrogen and other blended gases.
- At minimum, ESC should require gas distributors, to report in a publicly accessible way, information about gas quantity and composition entering the system at each ‘injection point’ and leaving it at each ‘transfer point’.

Unaccounted for gas benchmarks

16. What factors should we account for when considering our role in the framework for setting unaccounted for gas benchmarks in Victoria?

BCCAN comments (per DCAN)

We summarise here points from our previous submission, and re-emphasise this issue in the context of Victoria’s emission reduction targets. We also urge ESC to measure gas leaks behind the gas meter, and address distributor obligations for accounting for (in gas bills and reporting) and addressing these leaks in the code:

- **Effects of methane emissions.** ESC should not rely on measurements of methane over 100 years. When the release of methane is measured over 20 years, it has a warming effect that is 80+ times higher than CO₂. (Methane lasts about 12 years in the atmosphere. Addressing methane leakage is an IPCC endorsed priority for mitigating climate change.)
- **Extent of methane leaks as a component of UAFG calculations.** Fugitive leaks account for 40% or more of UAFG. If the quantity of fugitive leaks is multiplied by their warming effect

over 20 years, we hazard a guess that emissions from CH4 leaks are approaching all the CO2 emissions from gas use by domestic and industrial consumers in Victoria.

- **Targets and data collection.** Current UAFG targets are too weak to have any significant effect on reducing fugitive emissions. Either the targets should be dramatically tightened, or separate mandatory targets should be established for fugitive emissions.
- ESC should commit to ongoing review of the targets and independently collecting evidence about the actual level of fugitive emissions. Given the imperative of monitoring fugitive emissions, active sampling based on sound statistical practice is required. The Revealed Cost method adopted by ESC to allocate costs between gas retailers and distributors for UAFG is not designed to do this, and so needs to be modified or replaced.

Civil penalty requirements

17. What factors should we consider when assessing whether or not to assign obligations in the code as civil penalty requirements?

BCCAN comments (per DCAN)

- Civil penalties should be broadened to apply to breaches of the code relating to ‘... the operation of distribution systems, metering, connections and disconnections’
- Strong penalties should apply across these obligations - especially to avoid unanticipated actions by distributors in the face of a declining customer base and government policies favouring electrification and growing numbers of customers wishing to leave the gas network.

Compliance and performance reporting

18. Do you have any views on our proposed approach in relation to compliance and performance reporting obligations?

BCCAN comments (per DCAN)

- We support the approach, noting the new enforcement framework established in 2021 with “potential for infringement notices, enforceable undertakings and civil litigation. Remedies available as part of civil litigation may include monetary penalties, as well as compliance orders, injunctions, enforceable undertakings, and adverse costs orders.”

Consequential changes

19. Can you identify any other changes we may need to make as a consequence of remaking the Gas Distribution System Code of Practice?

20. Are there any other issues we should consider as part of this review?

BCCAN comments (per DCAN)

- **Review scope - interruptions to supply.** The scope of this review of the Code does not explicitly include obligations of distributors for planned and unplanned interruptions of supply. The current Code covers this extensively, and Schedule 1 includes penalties for breaches of the Code. This matter should be part of the Review to ensure that Distributor’s obligations during a wind-down of the gas system are clear. Penalties need to be strong enough to ensure compliance.
- **Retirement of the gas network over time.** The retirement of the gas network should be anticipated by ESC as part of this review. The likely responsibilities of ESC in ensuring that it occurs in a way that is orderly, rapid and equitable should be identified, and as appropriate, incorporated into the code.
- **Burden of responsibility.** Gas companies have the resources to apply uniform approaches to issues concerning customers. Customers by and large act on behalf of a single households. There is thus huge information asymmetry at play. The code should be reviewed in this light.
- Energy customers, especially vulnerable ones, are burdened by issues that could be more easily addressed if the code is explicit on the obligations of distributors.
- The review of the code should take account of feedback during the community sector round-tables conducted by ESC. Media releases about these round tables highlight the big issues for customers.

- Many customers of gas companies are tenants. The review of the code should account for specific problems that tenants face if landlords are not responsive to their needs.
- **Targets and monitoring - addition of hydrogen to gas blends.** It is well-known that higher pressure will be required to deliver hydrogen blends in Victoria's current pipeline network. We anticipate that leakage will be enormous if hydrogen is introduced without a massive infrastructure upgrade. The potential introduction of hydrogen reinforces the need for clear targets and independent monitoring, specifically relating to fugitive emissions rather than UAFG as a whole.

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Background.

I am a retired chemical engineer. I worked for a major oil company for 37 years. After starting at a refinery in Adelaide then worked in Melbourne, New Zealand, the USA and Europe. My career involved roles covering the Asia Pacific and the company's global refining interests.

Of particular relevance to this submission is that I was for a time the Energy Team Lead at a Victorian refinery. This involved detailed energy analysis of a complex fuel system that included gaseous fuels (mainly methane and hydrogen) from a mix of sources including "Class A" gas from the Victorian fossil gas system. In that role I used techniques very similar to the UAFG component breakdown that has previously been done for the ESC and the gas distribution companies by Asset Integrity Australasia.

In addition I led the preparation of that refinery's first submission to the National Greenhouse gas Emissions Reporting System (NGERS) of the site's greenhouse gas emissions. I was also involved in reviews of some of the subsequent submissions.