

4 December 2015



Manager Energy Projects
Operations and Programs Branch
New South Wales Department of Industry – Division of Resources and Energy
Via email: energysavings.scheme@industry.nsw.gov.au

Australian Gas Networks Limited (AGN) is one of Australia's largest natural gas distribution companies. AGN owns approximately 23,000 kilometres of natural gas distribution networks and 1,100 kilometres of transmission pipelines, serving over 1.2 million consumers in New South Wales, South Australia, Victoria, Queensland and the Northern Territory.

AGN's New South Wales (NSW) gas distribution network originates from the Albury Gas Company followed by the more recent acquisition of the Wagga Wagga natural gas distribution network. Today, we facilitate the safe and reliable supply of distributed natural gas to approximately 55,000 customers in NSW.

AGN welcomes the opportunity to make a submission to the NSW Department of Industry (the Department) regarding the "*New South Wales Energy Savings Scheme - Rule Change Amendments - Consultation Paper*" (the Paper). AGN understands that the Department will consider the responses to the consultation in order to facilitate changes to the Energy Savings Scheme (ESS) that result in the:

- Inclusion of natural gas;
- Extension of the ESS through to 2025; and
- Introduction of a regional network factor to the ESS.

As outlined in our submission attached to this letter, distributed natural gas is a low cost, low carbon energy choice for NSW. Our network delivers safe and reliable energy that is a fraction of the carbon intensity of NSW mains electricity. Furthermore, the availability of natural gas provides a more diversified energy mix, thereby increasing the security of energy supply to customers.

Importantly, there are multiple opportunities for AGN's NSW gas distribution network to evolve beyond providing supply to traditional appliances in existing supply areas, which would result in additional carbon savings as well as efficiencies for existing customers. These initiatives are explained further in our submission.

AGN thanks the Department for the opportunity to comment on the Paper. Please contact either Kristin Raman (08 8418 1117) or myself (08 8418 1129) should you wish to discuss our submission further.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Craig de Laine', with a stylized flourish at the end.

Craig de Laine
General Manager – Regulation



Detailed Response to “NSW Energy Savings Scheme - Rule Change Amendments - Consultation Paper”

Background

Natural gas has long played an important role in the energy mix for NSW (and Australia), driven by its favourable characteristics of being an abundant local resource which is low cost, low carbon intensity and a preferred energy source for cooking and heating. These characteristics continue to make natural gas an important part of NSW's future energy mix. More specifically, distributed natural gas:

- Provides reliable, base load energy supply to homes and businesses with our customers experiencing, on average, an unplanned supply interruption of less than one hour every 40 years (which is significantly more reliable than the electricity network).
- Is base load in the nature of its supply, and as such, is an important complement to the more intermittent nature of renewable energy sources.
- Delivers energy which is less than one quarter the carbon intensity of mains electricity in NSW.¹ Even at times of increasing renewable energy generation, as long as fossil fuels remain part of the electricity generation mix, distributed natural gas will continue to be preferential in terms of carbon emissions. AGN notes that there are further opportunities to reduce emissions associated with distributed natural gas through the injection of renewable gas (biogas).
- Offers a cost-effective solution to consumers, as in many locations, gas prices are stable or falling². This reflects the significant reduction in network charges, which account for around 50% of the retail gas price.³ It is anticipated that these reductions are expected to offset forecast increases in wholesale gas costs.⁴
- Can help to mitigate peak electricity demand, limiting the need for further costly investment in the electricity network, helping to minimise electricity prices. For example, the Energy Networks Association (ENA) estimates that infrastructure required for peak electricity demand is used for the equivalent of four or five days per year, with one network alone indicating that augmentation for peak demand cost \$11 billion.⁵
- Represents the more efficient utilisation of historic investment in natural gas networks by consumers, which in-turn will lead to lower prices to consumers.
- Is an essential input to certain commercial and industrial applications.
- Is evolving past the traditional uses of heating (homes and water) and cooking to transport, gas-powered air conditioning, gas dryers and distributed generation.
- Provides diversity and balance in energy supply, which is vital for ensuring the ongoing energy security for NSW homes and businesses.
- Supports jobs growth and economic investment in the NSW economy, through the utilisation of the state's natural resources.

¹ Page 13 and 19, “National Greenhouse Account Factors”, Department of Environment, December 2014(Update). This number has been calculated based on 51.2kg CO₂-e/GJ emission factor of natural gas nationally (pg. 13) and 0.86kg CO₂-e/kWh emission factor of mains electricity in NSW (pg. 19).

² For example, in NSW over the next five years, Jemena's NSW customers will see an average saving of \$118 per year due to a 34% reduction in network charges, whilst in South Australia, we (AGN) have proposed an 11% reduction in residential network charges in 2016 equivalent to a \$46 saving on the annual bill.

³ Jemena Gas Networks, “Customer Overview: Jemena's Five Year Plan”, June 2014, page 4.

⁴ Jemena Gas Networks, “Response to the AER's draft decision & revised proposal”, 27 February 2015, page xxi.

⁵ ENA 2014, “Electricity prices and networks costs”.



Introduction

AGN is strongly supportive of the Department's development of the ESS, which will result in the incorporation of distributed natural gas into the ESS.

AGN is supportive of the proposed rule changes to accommodate the addition of natural gas to the ESS. However, AGN questions whether the primary objective of the ESS should instead be *emissions* reduction and not energy reduction, consistent with the key objective of the:

- National Emissions Reduction Fund (ERF); and
- Victorian Energy Efficiency Target scheme (VEET).

This change in objective would appear to be consistent with other proposed changes to the ESS as the Department has also stated that it will not reward an energy reduction activity that results in net increases in greenhouse gas emissions, even if energy reduction is achieved.

*"To ensure that the ESS continues to be consistent with all of the objects of the Act, the NSW Government is proposing fuel switching projects that result in a net increase in greenhouse gas emissions would not be eligible."*⁶

In addition to the above, AGN considers that another key consideration for the Department is to work with the relevant bodies in other states, to ensure consistency across state-based emissions reduction schemes and to ensure that carbon abatement policies are adopted in the most efficient manner possible.

Discussion

As outlined above, AGN supports an emissions based objective for the ESS (rather than an energy reduction objective) on the basis that emissions reduction is the key driver behind the implementation of the ESS and that it ensures consistency with similar schemes in other jurisdictions. Although this is a point of difference, AGN supports the other work of the Department, and the ESS more generally.

Key items relating to the proposed changes that AGN would like to comment on are listed below.

- **Harmonisation**

Throughout the consultation process significant emphasis was placed on harmonising the ESS with other state and federal schemes. AGN supports harmonisation with a view to ensuring a more efficient and consistent emissions reduction framework nationally, as well as minimising compliance costs in businesses with operations spanning across state jurisdictions (such as AGN).

AGN supports the extension of the ESS to 2025 and notes that this timeframe provides ample opportunity to pursue harmonisation with other schemes (such as the VEET and ERF).

⁶ Department of Industry, "NSW Energy Savings Scheme – Rule Change Amendments", April 2015, page 5.



- **Peak Electricity and Carbon Emissions**

AGN is supportive of the approach in relation to peak demand on electricity networks. The Department has expressed concern with ESS activities that could increase peak electricity demand and consider that these activities should be subject to limited reward under the ESS:

“Scenario 2 in Table 19, where a consumer is replacing inefficient gas space heating with high efficiency electrical space heating could have perverse impacts in terms of increased peak demand for electricity.

If the ESS is expanded to cover gas, the ESS Rule may need to limit access to financial incentives for some fuel switching activities to mitigate the risks of increased peak demand. This could include limiting eligibility to:

- *Air to air heat pumps which only provide heating rather than reverse cycle air conditioners which could be used in summer for space cooling*
- *Products fitted with a demand response mechanism that enables network service operators to switch them off during peak events.”⁷*

The capacity of electricity networks to supply electricity during peak periods is a key driver of costs borne by customers. Any measures to mitigate peak energy demand will therefore have a key influence on easing the cost of living pressures of NSW energy consumers.

As such, consistent with our earlier comments on the ESS objective AGN cautions the Department in relation to potentially rewarding technologies that reduce energy consumption, whilst maintaining (or even increasing) peak demand on electricity networks.

- **Co-Generation and Tri-Generation**

AGN supports the addition of co-generation and tri-generation to the ESS under the conditions prescribed and considers that this addition will encourage further uptake of these technologies, thereby lowering the quantity of emissions generated.

- **Certificate ‘Double Dipping’**

AGN supports the approach of excluding activities or appliances that are already provided with incentives under other government schemes from the ESS.

- **Single Certificate**

AGN is pleased that the ESS will see a single energy certificate issued. AGN considers that other approaches may have resulted in increased complexity, whilst maintaining low levels of liquidity.

- **Certificate Trading Transparency**

AGN encourages the Department to increase the transparency and availability of ESS data to encourage greater uptake and participation in the ESS.

Although some information is available from market based sources, AGN encourages the Department to continue to review the type and amount of information available, with a view to increasing and improving information as required.

⁷ Department of Industry, “Review of the NSW Energy Savings Scheme – Part 2: Options Paper”, April 2015, page 65.



- **Regional Factor**

AGN supports the Department's inclusion of a regional factor in order to facilitate broader appeal of the ESS and to acknowledge the higher cost of electricity delivery to regional areas. AGN's operations extend into Victoria and are subject to the VEET scheme, where regional factors are also a feature of the ESS.

- **Methods**

In principle, AGN supports the proposals in the paper concerning amendments to schemes/methods such as the National Australian Built Environment Rating System (NABERS), Aggregated Baseline methods, Home Energy Efficiency Retrofit (HEERs), and the Project Impact Assessment with Measurement and Verification (PIAM&V) to allow the inclusion of natural gas in the ESS.

However, AGN will continue to monitor and review the actual performance of these schemes/methods, to assess how the 'actual' performance of the schemes reconciles against the 'intended' performance.

- **Major Scheme Review**

AGN supports the proposed review of the ESS operation every three years. However, AGN also considers it prudent to allow for more frequent intervention if exceptional circumstances require it and encourages the Department to introduce a mechanism that can be used to trigger such a review, if necessary.

- **Baseline**

AGN agrees that if a Baseline Energy Model is being used, then measurements completed should be based on data that is considered to be reflective of current business circumstances. As such, AGN encourages the Department to review the data used to establish the Baseline Energy Model, no more than ten years before the claiming period.

