



8 March 2018

Dr Kerry Schott AO
Independent Chair
Energy Security Board (ESB)
Email: info@esb.org.au

NATIONAL ENERGY GUARANTEE (NEG) DRAFT DESIGN CONSULTATION PAPER

Dear Dr Schott

Gas Energy Australia (GEA) welcomes the opportunity to comment on the ESB's NEG Draft Design Consultation Paper and is keen to engage with the ESB and assist where it can.

By way of background, GEA is the national peak industry body for the bulk of the downstream gaseous fuels industry, including Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG). Our members include a range of businesses in the gaseous fuel supply chain from major companies to small businesses that are refiners and suppliers, fuel marketers and transporters, vehicle and equipment manufacturers and vehicle converters.

Improving energy security and reliability

GEA understands the Consultation Paper's focus on the operation and reliability of the National Electricity Market (NEM), especially in light of the disruptions to electricity supply in South Australia in 2016. Nevertheless, GEA draws some comfort from the fact that the NEG is an energy guarantee not an electricity guarantee. Indeed, GEA supports a whole-of-market approach to meeting Australia's energy needs that takes into account all energy sources not just electricity from the NEM.

GEA welcomes the ESB's assurance in its Consultation Paper Fact Pack that the NEG will not favour centralised generation over decentralised generation and local energy trading. We also welcome the ESB's assurance that the NEG will be designed to make opportunities for lower cost, lower emission, dispatchable solutions, and that decentralised energy resources will all be part of the mix of solutions to help meet reliability and emissions guarantee in the future.

Gas Energy Australia regards the best approach to improving Australia's energy security is to diversify supply and increase the range and capacity of low emission energy sources produced and readily available in Australia. Government policy regarding energy should be about ensuring that the best lower emitting and lower polluting technology is available for each particular job. Indeed, the most cost-effective solutions to increasing the security of the NEM may lie outside the NEM.

A diversified range of energy sources, including gas, can contribute to Australia's future energy security in a cost-effective way. In particular, increased use of various forms of distributed energy resources by households and businesses would help to reduce disruptions and pressure on the NEM.

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In contrast to centralised electricity generating facilities such as coal and gas fired power stations, hydroelectric dams and large-scale wind farms, all of which typically require electricity to be transmitted over long distances, distributed energy is decentralised, modular and located close to the energy need it meets. Examples of distributed energy resources include roof top solar water heaters and photo-voltaic panels, off-grid diesel and gas electricity generators and gas, both natural gas and LPG used in homes or businesses to heat water, cook or provide warmth.

Increased use of distributed energy such as gaseous fuels as a stationary energy source can delay or postpone indefinitely the significant costs of expanding or upgrading electricity and natural gas grids as well as reduce the strain on the electricity grid during peak load periods.

The flexibility of gaseous fuels also strengthens energy resilience. Gaseous fuels can be transported by tanker to essentially create virtual pipelines of energy without the capital expense of fixed energy infrastructure which has been the main driver of the significant increases in electricity prices over recent years.

Not only will any increase in the use of gaseous fuels for distributed energy reduce the pressure on the electricity grid, but the backup systems for gaseous fuels production provides for flexible emergency responses to short-term energy shortages. For example, in response to natural disasters, gaseous fuels can be delivered long before poles, wires and pipelines can be repaired. And LNG has been used to restore natural gas supplies to regional centres where pipeline gas supplies have been disrupted.

Moreover, the ability afforded by distributed energy resources for some regional communities to go off-grid would reduce the number of powerlines that cross bushfire prone areas. This would reduce the incidence of power lines starting bushfires as well as increase the security of energy supply to regional areas.

Notwithstanding the desirability of preventing incidents such as the South Australian blackouts, it is important to understand broader energy reliability trends. In this context, it is worth noting that the House of Representatives Standing Committee on the Environment and Energy, during its 2017 inquiry into modernising Australia's electricity grid, heard evidence that while electricity costs have increased over the past 10 years, reliability has improved and that excluding major weather events, customers who previously experienced an average of two interruptions a year now experience one interruption each year.

Reducing emissions

The NEG has the potential to address current poor coordination of national energy and climate change policies, thus reducing the chilling effect this has had on investment in electricity generation. GEA supports the technology-neutral approach embodied in the NEG and notes the 2015 Energy White Paper highlighted the risks and higher costs of prematurely forcing new technologies in the energy market through policy interventions.

GEA considers policy certainty and equal treatment of all technology options to be essential in ensuring that timely and cost-effective investment occurs in the electricity sector. Policy certainty is paramount to

encouraging investment. Investment is unlikely to occur if there is a perception that government policy might change after each election.

GEA notes that gaseous fuels are up to 25 per cent cleaner than other high emitting fuels and their greater use can contribute to the national commitment to reduce carbon emissions.

That said, GEA also notes the Australian Government's 2017 Review of Climate Change Policies released in December 2017 found that Australia is currently on track to better its 2020 target of reducing emissions by 5 per cent below 2000 levels and meet its longer term 2030 target of reducing emissions by 26 to 28 per cent below 2005 levels.

Increasing affordability

While electricity reliability might have improved and Australia might be on track to meet its emissions reduction targets, there is no doubt that there has been a significant decline in energy affordability over recent years.

In October 2017, the Australian Competition and Consumer Commission (ACCC) published a preliminary report into the electricity market highlighting significant concerns about the operation of the NEM. "It's no great secret that Australia has an electricity affordability problem. What's clear from our report is that price increases over the past 10 years are putting Australian businesses and consumers under unacceptable pressure," ACCC Chairman Rod Sims said.

The ACCC did identify renewable energy only schemes as a significant contributor to the decline in energy affordability over the last decade. The technology-neutral approach embodied in the NEG should help reduce the costs of reducing emissions. For example, a recent report by the Bureau of Resources and Energy Economics noted that gaseous fuels have one of the lower long-term costs of production of all alternative fuels out to 2050. Accordingly, it is critical that low emission gaseous fuels are part of future emissions reduction strategies if energy costs are to be contained.

But the main cause of higher customer bills identified by the ACCC was the significant increase in network costs, the so called 'gold plating' of the electricity network's poles and wires.

GEA acknowledges that changes have been, and continue to be made to the regulatory framework, in particular the National Electricity Rules (NERs), governing the NEM to reduce incentives to over-invest in infrastructure. While these regulatory changes have increased opportunities for non-network providers and distributed energy, the rules and regulations remain very complicated and represent a barrier for potential new suppliers.

For example, while the NERs have been changed to allow non-network participants to compete for contracts, these changes and the NERs in general are difficult to navigate. GEA has also been advised that the infrastructure investment approvals processes still do not require network providers to assess possible cost savings from going off-grid and the initial reports assessing such investments are prepared by incumbent network providers.

We have also been advised that small energy service providers wishing to deliver small-scale energy solutions are subject to the same prudential capital requirements as large network providers.

As a result, GEA is concerned that the Rules and their application still restrict the ability of small suppliers of distributed energy resources to offer innovative cost-effective alternatives to network based electricity supplies.

If energy affordability is to be improved, the NEG and associated changes to the NERs need to actively encourage the provision of distributed energy solutions by third parties to reduce network demand, as well as increase competition and innovation.

In its 2018-19 Pre-Budget Submission, GEA emphasised the role that gaseous fuels can play in increasing energy security, including the security of the NEM, and reducing emissions at a lower cost than large-scale network-based solutions, especially in regional and remote areas. In particular, GEA called on the Federal Government to:

- commit to reforming the current regulatory barriers that exist to the uptake of distributed energy resources; and
- establish a pilot program in conjunction with the gaseous fuels industry – along with State and Territory Governments - to convert off-grid or fringe communities to the use of reliable cleaner fuels including gas and gas hybrids - which will provide greater energy security for these communities and deliver considerable environmental benefits.

GEA's 2018-19 Pre-Budget Submission can be found at: <http://www.cleanercheaperfuels.com.au/>

GEA has also engaged ACIL Allen Consulting to advise on how current and likely future rules and regulations affecting distributed energy might be reformed to remove obstacles to the growth of distributed energy resources in Australia. GEA is willing to share this advice with the ESB.

Conclusions

The growing shift to distributed energy and the rise of the prosumer will continue to impact the Australian energy market in the future, with more consumers looking for options to reduce their energy costs while maintaining reliability, which in some cases will include reducing reliance on the NEM.

It is important that new technologies and energy sources are embraced while transitioning to a low emissions future. This needs to include technologies which exist outside the NEM. All forms of energy, including gaseous fuels, must be examined on an equal footing. Gaseous fuels have an important role to play in the transition from the more traditional sources of electricity to the new environment of lower emissions.

Finally, it is critical that the NEG and the NERs do not create or preserve artificial regulatory barriers that prevent consumers accessing more affordable energy sources outside the NEM.

Recommendations

When designing the NEG and associated changes to the NERs, GEA urges the ESB to:

- give increasing energy affordability higher priority than appears to be evident in the NEG Draft Design Consultation Paper;
- consider options to increase NEM security such as distributed energy resources, including gaseous fuels, that lie outside the NEM and not lock itself into particular NEM-based solutions; and
- actively encourage the provision of distributed energy solutions by third parties to reduce network demand, as well as increase competition and innovation.

We would be more than happy to discuss these issues with the ESB and look forward to working with it on the further development of the NEG and ultimately the delivery of more affordable, reliable and sustainable energy to Australians.

Yours sincerely

A handwritten signature in black ink, appearing to read "John Griffiths", with a long horizontal flourish extending to the right.

John Griffiths

Chief Executive Officer