

06 July 2018

Mr James White

Assistant Secretary
Clean Energy Branch
Department of the Environment and Energy
GPO Box 787
CANBERRA ACT 2601

Via email: NationalEnergyGuarantee@environment.gov.au

Dear Mr White

National Energy Guarantee - Draft Detailed Design Consultation Paper, Commonwealth Elements

Energy Networks Australia welcomes the opportunity to provide a submission responding to the Australian Government's 'Draft Detailed Design for Consultation' paper (the Paper) for the National Energy Guarantee (the Guarantee), released 15 June 2018.

Energy Networks Australia is the national industry body representing businesses operating Australia's electricity transmission and distribution and gas distribution networks. Member businesses provide energy to virtually every household and business in Australia.

Energy Networks Australia is supportive of the progress made by the Government and the Energy Security Board in developing the Guarantee. Energy Networks Australia and its members recognise the importance of system reliability, security and affordability for all consumers.

Our key points are:

1. Integration of energy and climate policy

Energy Networks Australia supports the integration of energy and climate policy as a way to deliver on Australia's emission reduction goals while maintaining a secure and reliable supply of electricity.

2. Clarity of emission trajectory

The Energy Security Board Paper sets the Government's target for 2030, and the proposed approach to extending the target beyond this date.

Energy Networks Australia supports an emission trajectory that is developed as part of the Guarantee. This would provide a clear signal to the energy industry and drive the required investment in new generation, transmission or demand management infrastructure.

The trajectory should provide a quantum of emissions reduction and a timeframe for those reductions, as well as interim targets if needed. The energy industry's assets are typically long-lived so longer term targets, to 2050 and beyond, will facilitate least cost investment decisions. Making the appropriate level of investment to meet the required emission trajectory will provide the least cost pathway to meeting the emission requirements and minimising bills for customers.

Ensuring investment in the best mix of new energy infrastructure can no longer be based solely on reliability, system security and economic efficiency criteria, but now also requires a stable and long term target for carbon reduction, as well as interim targets. Industry needs to understand how carbon reductions will be implemented as this will influence investment decisions for energy infrastructure, much of which is capital intensive and will be operational for decades – often past 2050.

Energy Networks Australia supports the Guarantee providing additional clarity around the long-term emission trajectory. Agreement on these targets would improve investor confidence in the energy sector.

The electricity sector also acknowledges that it has an intricate relationship with the manufacturing, industrial and energy-intensive industries that will also be required to reduce emissions as part of Australia's national emissions targets, and so an integrated approach to lowest cost emissions reduction across all sectors is required.

3. Energy Networks Australia carbon policy position

Energy Networks Australia supports adopting a technology- neutral approach to the emissions requirement of the Guarantee to provide the lowest price impact to customers. Analysis by Jacobs (2016)¹ found that a technology neutral framework could achieve the 2030 abatement target at the lowest cost compared with other policy settings, resulting in an average electricity cost saving of \$216 per annum over the 2020 to 2030 decade.

Generators should maintain the flexibility of their generation sources as long as they can achieve the emissions and reliability requirements.

Energy Networks Australia welcomes the technology neutral approach in the draft detailed design. To ensure customer benefits, the Guarantee's design does not include any technology specific targets. The generation solutions could involve: gas, electricity transmission, network options, diverse renewables (technological and geographical); pumped hydro storage, co- and tri-generation, batteries, power to gas hydrogen storage, concentrated solar thermal generation or gas-fired generation supported by carbon capture and storage (CCS) technology and demand management.

Energy Networks Australia supports the generation and emissions allocation approach described in the Energy Security Board Paper (p 20). This approach allows emission

¹ Jacobs (2016), *Australia's Climate Policy Options – Modelling of Alternate Policy Scenarios (for Energy Networks Australia)*, available from www.energynetworks.com.au

reductions to be achieved by providing flexibility for retailers to contract across a range of generators to meet the overall emissions requirement.

4. External offsets

The Consultation Paper seeks views on whether external offsets can be used to meet the carbon emissions component of the Guarantee. In considering the use of offsets the Government should consider how the three principles of energy affordability, efficient investment and competition are balanced.

Commonly, carbon emission offsets occur in the agricultural and forestry sectors or through fuel switching, while the Guarantee focuses on the electricity sector. As such, including offsets introduces additional complexity to the Guarantee as it expands the scope of the Guarantee to include additional sectors. Energy Networks Australia supports a national and integrated approach to carbon reductions.

Historically, many offsets are available on the international market. It is unclear how the potential international markets for offsets will develop as other countries also continue on their decarbonising journey,

Offsets may offer opportunities to make parts of the Guarantee more affordable to customers, however the use of offsets may limit encouragement for domestic investment in new generation technologies.

Nevertheless, as the Guarantee is technology neutral, it should consider all types of generation that are able to meet both the emissions and reliability requirements. For example, this could include renewable solar PV combined with pumped hydro, natural gas or coal with carbon capture and storage or offsets.

Energy Networks Australia recommends that the use of offsets needs to be considered in terms of broader economy attempts to meet climate targets.

Finally, Energy Networks Australia supports a national and integrated approach to carbon reductions. As such, noting that our West Australian and Northern Territory network utilities are based outside the NEM, more detail on how the NEG will apply to those regions, including guiding principles and design elements, would be useful to understand.

Please do not hesitate to contact Dr Dennis Van Puyvelde – Head of Gas on 02 6272 1548 or dvanpuyvelde@energynetworks.com.au if you would like further information.

Yours sincerely,



Tamatha Smith

A/Chief Executive Officer