



APGA Submission to the National Energy Guarantee Draft Design Consultation Paper

Introduction

The Australian Pipelines and Gas Association (APGA) welcomes the opportunity to respond to the Energy Security Board's (ESB) Draft Design Consultation Paper on a National Energy Guarantee (NEG).

APGA is the peak body representing Australasia's pipeline infrastructure, with a focus on natural gas transmission, but also including transportation of other products. Our members include owners, operators, engineering companies, constructors and suppliers of pipeline products and services.

APGA's members build, own and operate the gas transmission infrastructure connecting the disparate gas supply basins and demand centres of Australia, offering a wide range of services to gas producers, retailers and users. The replacement value of Australia's gas transmission infrastructure is estimated to be \$50 billion. The level of energy it delivers is also significant – with 640PJ delivered to East Coast users alone – equivalent to the entire Australian power system.

APGA has an active interest in the ESB's process to design a National Energy Guarantee. While a significant proportion of the draft paper is primarily of relevance to electricity retailers rather than gas transmission service providers, the overall design of the NEG has potentially significant implications for the wider gas sector in terms of future gas demand. APGA's comments will therefore be limited to overarching policy points and those aspects of the draft design consultation paper with direct implications for gas industry participants.

Overview

APGA supports the objective of the NEG to bring together energy and climate policy in order to "encourage new investment in clean and low emissions technologies while allowing the electricity system to continue to operate reliably". APGA is a strong supporter of initiatives that encourage the deployment of commercially viable clean energy technologies and the decarbonisation of Australia's energy system in ways that don't compromise system security and affordability. APGA is optimistic that the NEG can be a positive development in this regard.

APGA's key priority is that the high-level design of the NEG creates a mechanism that is both practical and effective. In keeping with this priority, APGA considers that the design of the NEG should allow for full recognition and utilisation of the strong and positive contribution that gas can make in terms of providing electricity retailers with additional practical, cost effective options for ensuring compliance with both the emissions and the reliability requirements.

APGA also strongly supports the stated intention in the draft consultation paper to facilitate a stable policy environment. In our view, the policy uncertainty over the past few years has been a key disincentive to industry to make the necessary investments in energy infrastructure both for lower emissions energy sources and increased facilities for power system reliability. A well designed and well managed NEG could make a significant difference in this regard.

Emissions Requirement

Natural gas can make a significant contribution to the proposed NEG emissions requirement. This is because the carbon intensity of natural gas is significantly less than that of any other fossil fuel energy source, especially coal. Electricity generated using natural gas leads to around one-third the carbon emissions per GJ than that generated using brown coal, and around half the emissions per GJ than that generated using black coal. With the proportion of Australia's electricity generated from coal standing at around 74%, this leaves a lot of scope for reducing emissions by switching from coal to gas.

With natural gas having such potential as a source of lower-emissions energy (compared to BAU), it is critical that the NEG is structured in a way that allows retailers to accurately assess and report the types of generation used for all of the electricity they sell. This will ensure that market incentives for maximising lower emission sources of energy are maximised. However, APGA notes that the NEG as currently conceived presents some barriers to ensuring that natural gas fired generation is accounted for – and therefore incentivised – accurately and fairly.

Specifically, APGA questions the effectiveness of the design relating to the calculation of emissions per MWh (sections 3.2.3 - 3.3.3). Section 3.3.1 on contracts that specify a generation source looks good, but sections 3.3.2 and 3.3.3 on contracts that specify emissions per MWh, and contracts that specify neither emissions per MWh nor a generation source are a little more problematic. Section 3.3.3 on contracts that specify neither emissions nor a generation source is particularly vague - techniques such as relying on NEM region averages actually incentivise high emissions energy sources as these would be diluted by the lower emissions sources without giving any actual recognition to those sources. In such a scenario the incentive to purchase electricity generated from natural gas instead of coal is largely negated. This is not only unfair to the gas sector, but could reduce the effectiveness of the entire NEG.

APGA acknowledges the desire expressed in the draft design discussion paper for providing flexibility in how retailers meet the emissions requirement in order to minimise occurrences of non-compliance by electricity retailers and to reduce the costs of the NEG for retailers and their customers. This in itself is a laudable goal. However, the current proposal for achieving this goal may only serve to reduce the effectiveness and economic efficiency of the NEG by reducing incentives to specifically seek out lower emissions energy sources from the full range of market options.

A useful alternative approach that may be worthy of further analysis could be a certification scheme or something similar. This would at least allow for an audit trail to be established that would enable retail electricity sales to be explicitly linked to their generation source. In this way market incentives could be properly aligned in accordance with the relative emission intensities of the various sources of electricity generation. Renewable energy sources would still rank well ahead of natural gas, but natural gas would also get appropriate recognition relative to other, higher intensity, energy sources.

Reliability Requirement

Natural gas can make a strong contribution to the NEG reliability requirement as well as the emission requirement. Gas-fired power plants provide a continuously available, fully dispatchable source of electricity. In addition, gas-fired generation is flexible and available in a variety of technologies ranging from long duration baseload plants to short term peaking plants and even shorter-interval 'fast peakers'. This flexibility makes gas-fired generation compatible with, and complementary to, variable renewable sources of energy such as wind and solar.

In terms of the design of the reliability requirement APGA is cautiously optimistic about the framework set out in the draft discussion paper.

- With regard to the question on how far ahead the reliability gap should be forecast, in APGA's view it should be sufficiently long to allow for additional infrastructure to be commissioned in response to a forecast shortfall. A dual forecasting period of 2-years (short-term) and 10 years (long-term) in alignment with the existing two-year forecast horizon of the MTPASA and the 10-year horizon for the Electricity Statement of Opportunities would appear to be the most practical and efficient option.
- With regard to the types of contracts that should be considered eligible for the purposes of the reliability requirement, APGA would like to note the importance of maintaining depth in the electricity retail market and avoiding further consolidation of the market around 2-3 large generator-retailers. For this reason, although there is some appeal to the idea that eligible contracts should be liked to physical generation capacity, this would be detrimental to smaller retailers that don't have their own generation assets. This means that other financial instruments such as swaps and caps that are already traded on the OTC and ASX markets will still be required and should remain eligible.

Conclusion

APGA has an active interest in the ESB process to design a National Energy Guarantee. Our key priority is that the eventual design of the NEG leads to the development of a mechanism that is both practical and effective. APGA considers that the design of the NEG should allow for full recognition and utilisation of the strong and positive contribution that gas can make in terms of providing electricity retailers with additional practical, cost effective options for ensuring compliance with both the emissions and the reliability requirements.

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