

Energy Security Board
c/- COAG Energy Council Secretariat
Department of the Environment and Energy
GPO Box 787
CANBERRA ACT 2601

By email: info@esb.org.au

RAPL – Submission on Draft Detailed Design of the National Energy Guarantee: Consultation Paper

The detailed design of the National Energy Guarantee (NEG) targets two primary functions:

- Provide *Reliable* electricity,
- Help meet the 'Paris' national *Emissions target*

Critically, the design elements of the NEG do not address the core problems behind the high cost of electricity in Australia, and there is no *Price target*. Therefore, the NEG can only be a partial answer to solving the 'energy trilemma'. In this submission the key drivers of high prices are outlined, along with areas where the NEG design may impact these drivers.

Context – National Electricity Market (NEM) Pricing

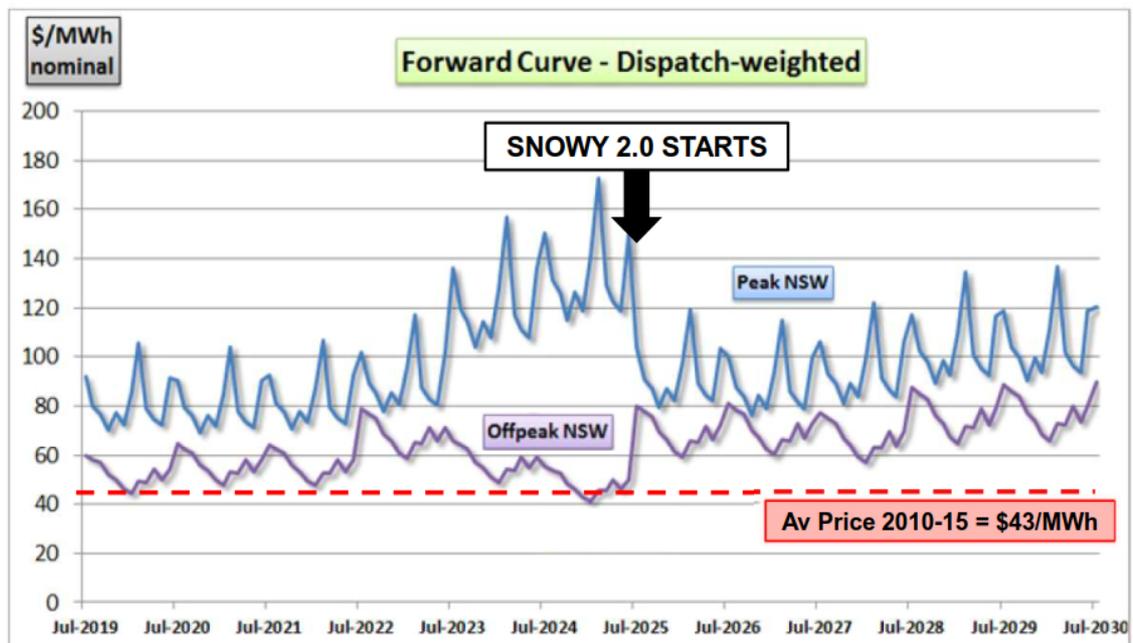
The NEM was designed around an independently-owned dispatchable generation fleet which competed to generate and sell electricity to meet continuous demand. These dispatchable generators contracted fixed prices and volumes to retailers and large consumers. To manage the contract risks generators bid contracted capacity into the NEM at or below their marginal cost of generation to maximise profit. The system provided reliability 'for free' because dispatchable generators had to ensure unit availability to avoid exposure to price extremes (now capped at \$14,200/MWh) and when contracted they could bid negative to ensure they remained online at minimum output levels. Three factors have seriously distorted the original market design:

1. Retailers were allowed to buy generators, creating '*Gentailers*' that maximise profit by increasing the difference between generation cost and retail prices. A few large Gentailers now control much of the base-load generation fleet in the

NEM and their most profitable strategy is to push up wholesale prices to squeeze margins in the more competitive retail market.

2. The Mandatory Renewable Energy Target (MRET) subsidised the construction of intermittent renewable energy generation from wind and solar. Importantly, retailers are the liable parties under this scheme, further increasing their control of generation through ownership or via offtake contracts. As retailers buy energy from the NEM they are able to bid semi-dispatchable renewable generation at a must-run price (e.g. \$1,000/MWh). Once sufficient renewables are built this strategy can force independent dispatchable generation off-line during temporary renewable gluts¹. Such 'market-forced' outages make it very risky for existing base-load dispatchable generation to contract long-term to customers to maintain financial viability, forcing closure and replacement by high-cost open-cycle gas generation.
3. The experience of the short-lived carbon tax, the MRET, the (above) NEM dysfunction, and the risk of further Government interventions have made it too risky for investors to build new, high-efficiency coal or gas generation to compete with existing base load generation even though the NEM wholesale price is high.

A key outcome of the above three factors is a wholesale electricity price that is no longer internationally competitive for industry and hurts domestic consumers. e.g. The recent Snowy 2.0 project modelling provides a likely wholesale pricing scenario under the NEG with no new low-cost dispatchable generation built:



These forecast prices are well above the 2010 to 2015 average (which included two years with a carbon tax). At the Snowy 2.0 forecast prices many Australian energy-intensive industries will be forced to close, shifting jobs and emissions overseas.

¹ In South Australia wind gluts led to the closure of the Northern Power Station, and the SA region now requires permanent bureaucratic market intervention to ensure minimum levels of dispatchable generation are kept online at all times to provide system reliability.

Concerns – Likely Impact of NEG on NEM Pricing

The NEG in its current form cannot return the NEM pricing to internationally competitive levels because it does not fully address the three market distortions outlined above.

1. The NEG is likely to increase the market power of *Gentailers* because they become responsible to meet both reliability and emissions targets, and *Gentailers* have a fundamental market advantage over independent retailers that don't own or control dispatchable low-cost generation assets. *Gentailers* will be able to select the optimal mix of firm contracts and caps from their dispatchable generation portfolio to meet their reliability and emissions requirements under the NEG. Independent generators will also be disadvantaged as they must depend on regularly rolling over short contracts with small independent retailers to ensure they can bid to dispatch and remain viable.
2. A key flaw in the design of the NEG is that it hands *Gentailers* effective control of even more intermittent renewable generation than already achieved under the MRET. During renewable gluts *Gentailers* can bid to maximise semi-dispatchable renewables generation whilst keeping their in-house generation on-line at minimum output levels. This ability to ensure minimum dispatch of their own low-cost base load generation to contract and reliably firm renewable generation provides a permanent competitive advantage to *Gentailers* over independent retailers when underwriting new intermittent renewable generation.

Must-run bidding of semi-dispatchable renewables will eventually recreate the South Australia scenario in other regions, where the minimum dispatchable generation retained on-line is set by bureaucratic fiat – rather than a market solution to encourage investor confidence.

3. The NEG does attempt to provide policy certainty through to 2030 to inform investment decisions. Unfortunately, without corresponding political certainty regarding future emissions targets, other carbon policies and NEM bidding rules the environment will remain too-risky for new investors in low-cost dispatchable generation. Consequently, more high-cost open-cycle gas or storage will be built to firm renewables, pushing up electricity prices. Government may be the only entity that can underwrite new low-cost dispatchable generation in this environment.

Conclusion

On its own the NEG is unlikely to put sufficient downward pressure on electricity prices to achieve internationally competitive outcomes. In making retailers responsible for meeting emission and reliability targets the NEG will increase the control that retailers (particularly *Gentailers*) already have of renewable generation and further undermine competition in the NEM. By definition, the imposition of the emissions trajectory to meet the Paris target must also put upward pressure on electricity prices.

To regain internationally competitive pricing in Australia the NEG needs to be implemented in concert with Government interventions in the market (as contemplated by the ACCC in its review of electricity pricing) that ensure the construction of modern, low marginal cost dispatchable generation which will compete for NEM dispatch and contracts with Gentalers, provide system reliability, and reduce emissions through flexible operations and the displacement of emissions from older coal-fired generation.

RUSAL Australia would be pleased to have an opportunity to expand on its views on these issues. This is particularly important for the company as it considers its future investment profile and planning for Australia.

Yours faithfully



John Hannagan
Chairman
RUSAL Australia

cc:

Hon. Scott Morrison
Hon. Josh Frydenberg