12 March 2018

Dr Kerry Schott AO Independent Chair Energy Security Board info@esb.org.au;

Dear Dr Schott

Re: National Energy Guarantee

National Irrigators' Council (NIC) is pleased to make the attached submission in response to the Energy Security Board draft design consultation paper in relation to the National Energy Guarantee (Guarantee) for and on behalf of the Agriculture Industries Energy Taskforce* (the Taskforce).

We thank you for your consideration of the issues detailed in this submission.

Yours sincerely

Steve Whan CEO

*Taskforce Members: National Irrigators' Council; NSW Farmers Association; National Farmers' Federation; Cotton Australia; NSW Irrigators' Council, Irrigation Australia Limited; NSW Dairy Connect; CANEGROWERS; Queensland Farmers Federation, Central Irrigation Trust (CIT), Bundaberg Regional Irrigators Group (BRIG), Winemakers Federation of Australia, Australian Pork

ATTACHMENT:

Agriculture Industries Energy Taskforce Submission to Energy Security Board

National Energy Guarantee

Initial comments and concerns

The Agriculture Industries Energy Taskforce¹ (the Taskforce) welcomes the opportunity to make comment as part of the consultation process regarding the National Energy Guarantee (the Guarantee). We acknowledge the effort of the Government to introduce the Guarantee as the start of a way forward in repairing the broken system we currently face in the National Electricity Market (NEM). This will require a multifaceted policy approach to deliver affordable and reliable power for consumers while seeking to lower emissions at least cost.

We welcome the Guarantee as a means of bringing some policy certainty to the energy sector by offering the opportunity for critical bipartisan political support as a vehicle to meet the emissions goals outlined by both the Government and Opposition.

Notwithstanding the specific issues raised in this submission, we broadly support many of the measures emerging from the recommendations of the Chief Scientist, Dr Alan Finkel in 2017, and which have been adopted by the Government.

We do however have concerns regarding elements of the Guarantee. These relate primarily to the risk that the Guarantee might (once again) provide the opportunity for the energy sector to enhance its assets and returns at the expense of consumers. The Guarantee must be a policy that reduces costs to agricultural consumers; it must not provide either an excuse or framework for unnecessary network investments which attract a guaranteed return to network owners, at consumers' expense.

We register our concern at the short period allowed for comments/submissions. The consultation paper was released to the public on 15 February and responses are sought by 8 March 2018. While acknowledging the need to compile feedback in readiness for the next COAG Energy Council meeting in April, for small member based organisations and without the required level of technical expertise, this is an unreasonable request. We note by contrast, the entities seeking feedback are supported by significant staff and expertise. The unreasonable time frame puts consumer organisations at a significant disadvantage.

National Irrigators' Council (NIC), the Taskforce* and its members have provided a large number of submissions over many years on Government related inquiries and reviews on energy/electricity in Australia. We do not seek to go to the detail of the myriad of issues faced by the agriculture sector due to high energy costs, and issues raised in many previous submissions. However, it must be understood that high electricity prices are imposing undue pressure on Australia's food and fibre producing agriculture sector. High energy costs are reducing the agricultural sector's international competitiveness. Guaranteed rates of return are causing massive over investment by network monopolies and otherwise unnecessary on-farm investment as farmers try to take control of their energy costs. According to Professor Garnaut², 'The over investment has been large enough to show up in massive declines in total factor productivity in the utilities sector'. The investments are also reducing the total factor productivity of Australia's energy intensive agricultural sector and wider economy.

Many of Australia's agricultural industries have production processes that rely heavily on power, in particular, irrigators who pump and pressurise water or producers who process, package or

¹ Agriculture Industries Energy Taskforce members: National Irrigators' Council; NSW Farmers Association; National Farmers' Federation; Cotton Australia; NSW Irrigators' Council; NSW Dairy Connect; CANEGROWERS; Queensland Farmers Federation, Central Irrigation Trust (CIT), Bundaberg Regional Irrigators Group (BRIG), Winemakers Federation of Australia, Australian Pork

² Ross Garnaut (2018), 'Australia as an Energy Superpower in a Low-Carbon World', address to the Annual AARES Conference, Adelaide Convention Centre, 7 February.

refrigerate food and fibre products. Australia should have a comparative advantage for those producers – offering reasonably priced power from the grid. The high cost of electricity generated power is resulting in many agriculture industries moving to and/or exploring off grid solutions. These are in some cases diesel and diesel/solar hybrid solutions. Industries are also taking up opportunities offered through the Australian Renewable Energy Agency (ARENA), for example, to power irrigation pumping systems using solar photovoltaic (PV) energy and other approaches such as renewable bioenergy running on biogas from waste streams associated with intensive livestock industries.

Many industries however, are not in a position to move to off grid solutions. For these industries, the most significant impact of the high cost of electricity is producers finding themselves unviable and in the case of <u>irrigated</u> agriculture, making a decision to move out of a particular irrigated crop. Some are choosing to convert their farms from intensive irrigated agriculture to lower value dry land agriculture and sell valuable water to maintain their short term viability.

Our focus has long been to achieve affordable and reliable energy and specifically, a price of no more than 8 cents for the electrons (R) and 8 cents for the Network (N) component.

We note the Guarantee's apparent lack of adherence to *The Australian Government Guide to Regulation*, which outlines the process for developing a regulatory proposal, including a Regulation Impact Statement (RIS). RISs are required for all decisions made by the Australian Government and its agencies that are likely to have a regulatory impact on businesses, community organisations or individuals, unless the proposed change is a minor or machinery change. Whenever a regulatory change is imposed, there must be an accompanying cost benefit analysis and regulatory impact statement.

A further concern relates to COAG's Competition Principles Agreement, where it is a requirement under Legislation Review. Section 5.(1) states:

The guiding principle is that legislation (including Acts, enactments, Ordinances or regulations) should not restrict competition unless it can be demonstrated that:

- (a) the benefits of the restriction to the community as a whole outweigh the costs; and
- (b) the objectives of the legislation can only be achieved by restricting competition.

National Energy Guarantee draft paper: General observations

The Guarantee is designed to provide certainty for the electricity sector and support investment certainty and 'provide a clear investment signal so the cleanest, cheapest and most reliable generation gets built in the right place at the right time. It can also signal opportunities for demand response which may help reduce the need for costly new generation infrastructure'.

We also note that the Guarantee is 'about addressing reliability and emissions reduction, however, it will not directly address the provision of a range of services including system strength, inertia, ramping and flexibility, which are also required for a secure and reliable system'.

The policy is expected to be finalised in 2018, with the process around the reliability requirement expected to commence in 2019 and the emissions guarantee to be effective by the end of 2020.

We are aware that modelling undertaken by a private consultant for the COAG Energy Council indicated savings of \$120 per year for households from 2020 and potentially larger savings for businesses due to a reduction in wholesale energy prices.

We understand that the initiative is designed to enable the market to encourage renewable energy uptake through technological advances and falling costs, and we know that renewable subsidies to the sector will in time be scrapped.

The Government will mandate a minimum amount of dispatchable energy be generated through sources such as coal and gas in an effort to keep prices down while preventing blackouts. We appreciate the reliability risk as a result of changing characteristics of the generation mix during the process of transition from thermal power generation. The impacts of the supply-demand balance was seen at close range in South Australia in September 2016 and February 2017 where the catastrophic energy failure, due to damage to the grid, showed that Australia's electricity security can be adversely impacted by weather events. It also clearly demonstrated that the renewable capacity in the state was not able to meet the shortfall.

We note the claim that 'where a policy mechanism is effectively integrated and aligned with the design of the NEM, it is likely to lead to a higher degree of investment certainty in the energy market and more availability of contracts. This will reduce pressure on the wholesale electricity market, reduce barriers to entry and result in lower prices for consumers'. It is not clear from the publicly available information how this conclusion is reached. We suggest that the standard RIS process should be applied including the development of a robust economic cost benefit analysis that is made available for scrutiny by consumers. In the absence of such a process and analysis, we are concerned that potential adverse impacts from imposing a substantial new obligation on retailers, and ultimately consumers, may not be identified. It is important that the intervention does not result in higher costs for the industry and higher prices for consumers.

Section 3.7.1 Competitive Markets

Members of the Taskforce have made the point in numerous submissions to other bodies that in reality Australia does not have a competitive electricity market. A key issue arises from the high level of vertical integration on the part of the major generator-retailer companies ("gentailers"). Several experienced observers have raised concerns that the Guarantee will favour vertically integrated gentailers. If so, this would further weaken retail and wholesale market competition that is already clearly inadequate in terms of constraining prices to efficient costs. The design of the scheme should increase <u>not</u> reduce competition. Given that emissions arise from generation, not retailing, the design should ensure vertically integrated operators are not advantaged to the detriment of competition.

Section 4.4 Use of offsets

We support the use of offsets and see no reason why offsets should be limited – as long as they can be independently audited and verified. In particular, we would welcome the opportunity for the agricultural sector to participate in programs creating credits or offsets. Carbon farming enables farmers and land managers to earn carbon credits by storing carbon or reducing greenhouse gas emissions on the land. These credits can then be sold to others, including businesses, who seek to offset their emissions. The initiative has the added benefit of encouraging sustainable farming. By maintaining certainty through clear and consistent principles and mechanisms, the agriculture sector is able to participate in the use of offsets.

Section 5 Reliability Gap

Our key concern sits within the reliability requirement (Chapter 5), where the Guarantee involves a requirement on retailers to enter contracts related to dispatchable resources. This reliability requirement would make clearer the value of being dispatchable, both on the supply and demand side.

While we appreciate that maintaining an adequate level of dispatchable resources is fundamental for the secure and reliable operation of the power system, we are concerned this requirement on retailers will ultimately result in additional costs being passed on to consumers.

The detailed design of the Guarantee must address the risk of the wholesale markets being over-contracted relative to likely forward demand and breaching the current NEM reliability threshold. This reflects the following issues:

- Firstly, generation constraints are responsible for only a fraction of total consumer supply
 outages. For example, the outage in Victoria earlier this year was due to network problems not
 generation constraints.
- Secondly, there is substantial variation in the security value of different types of generation. This
 is partly recognised in the WA capacity market via its Relevant Level Methodology (RLM) set out
 in Appendix 9 of the WEM market rules. In the NEM context, an analogue to the RLM would be
 required and should recognise the fact that ageing thermal generators do not offer secure
 resources during extreme heatwaves when annual maximum demand is likely to occur.

This reflects the fact these facilities typically were not designed to operate at extreme ambient temperatures. In recognition of this, generators would understandably be reluctant to make forward physical contractual commitments given uncertainty over plant availability at the critical period. This could result in a significant portion of plant not being contracted in advance and giving rise to an apparent Guarantee shortfall.

At present, any capacity that is held in reserve relative to forward commitments, is available for dispatch through the spot market. If, however, a Guarantee shortfall has been declared, and new capacity has to be contracted, there would be an increase in total capacity and cost. At the same time, generators may not be able to obtain spot revenue from dispatching uncontracted capacity through spot markets.

• Thirdly, to the extent the Guarantee further transfers demand volume risk from suppliers to consumers, it would inefficiently raise wholesale costs overall. This is evident in some capacity market designs, most notably the WA wholesale electricity market, where there has been substantial excess generation capacity which has led to substantially higher than efficient wholesale prices almost of the entire period the capacity market design has been in place. This is recognised in the fact the WA government is currently seeking to modify the capacity market design and pricing process.³

Taking these two points together, there appears to be a significant risk that the Guarantee restrictions on wholesale competition could transfer additional risks to consumers and increase total wholesale market costs. It is important that these risks and issues are identified and remedied in the context of a proper RIS process.

• Fourthly, the additional data processing requirements of the Guarantee are likely to be substantial. This will place additional informational requirements compared with existing retailer and generator trading systems, which are largely confined to financial aspects and do not specify the physical capacity that would deliver energy and capacity in each price region for every trading interval. We understand that along with the additional physical data aspects, there is also a requirement to match forecast demand and capacity across all the counterparties for the entire NEM. This would be tantamount to developing a centralised system for forward contractual and physical commitment data across the entire NEM. There would be a substantial cost in establishing and maintaining such a centralised data system. It is important that these costs are not simply passed on to consumers.

It is important that the Guarantee does not result in the creation of another round of CAPEX to improve reliability. Our long held concern is that the 'reliability bar' in the NEM has resulted in unjustified infrastructure charges being passed on to consumers, in particular for consumers in rural areas where there is no network congestion.

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³ http://www.treasury.wa.gov.au/Public-Utilities-Office/Industry-reform/Wholesale-Electricity-Market-Improvements/

It appears that the mechanism proposed to meet any reliability gap will offer an opportunity for infrastructure owners to bid in and use the process to justify expenditure on new investment. Our concern is the opportunity for network monopolies to scam the deeply flawed regulatory pricing framework by offering network enhancements as a solution that simply increase costs and earn a guaranteed return on a larger regulated asset base.

Section 6 Governance of the Guarantee

While we are not philosophically opposed to the proposed mechanisms for implementing and administering the rules, we would put on record an ongoing concern with the lack of capacity for the market governance bodies to appropriately respond to consumer concerns. It is our experience through a range of submissions to various bodies that the market bodies are generally run and dominated by energy industry 'insiders'. They make it difficult for consumer representative bodies who don't 'talk their language', added to which, the rules tend to favour owners over consumers. It is important that governance structures are introduced that require regulators to focus more strongly on consumers' interests. As well as designing sound rules, it is important that the Board overseeing their administration include appropriately qualified consumer representatives.

Conclusion

Because Australia's electricity market is not competitive and market rules are heavily skewed in favour of infrastructure owners, electricity costs faced by consumers are driven by the quality of regulation not by the efficient costs of delivering the service. The current regulated pricing framework rewards over-investment and inflated cost structures.

The Guarantee adds another federal layer of regulation to an already poorly regulated and operating market. The additional regulation will bring with it new compliance costs and risks increasing both network costs and the size of the regulated asset base. It is important that:

- the economy-wide costs and benefits of the Guarantee regulatory structures are properly considered (the benefits must outweigh the costs);
- · compliance costs are minimised; and
- the Guarantee does not further reduce competition.

High energy prices and costs flowing from a flawed regulatory framework are encouraging irrigators across the country to move to other less efficient energy solutions in an effort to contain their costs. It is important that the Guarantee takes a system-wide perspective and does not encourage further wasteful investment either 'in front of' or 'behind' the meter.