

Submission

8 March 2018

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

Email: info@esb.org.au

Dear Sir/Madam

Re: National Energy Guarantee: Draft Design Consultation Paper (15 February 2018)

The Queensland Farmers' Federation (QFF) is the united voice of intensive agriculture in Queensland. It is a federation that represents the interests of peak state and national agriculture industry organisations, which in turn collectively represent more than 13,000 primary producers across the state. QFF engages in a broad range of economic, social, environmental and regional issues of strategic importance to the productivity, sustainability and growth of the agricultural sector. QFF's mission is to secure a strong and sustainable future for Queensland farmers by representing the common interests of our member organisations:

- CANEGROWERS
- Cotton Australia
- Growcom
- Nursery & Garden Industry Queensland (NGIQ)
- Queensland Chicken Growers Association (QCGA)
- Queensland Dairyfarmers' Organisation (QDO)
- Burdekin River Irrigation Area Irrigators Ltd (BRIA)
- Central Downs Irrigators Ltd (CDIL)
- Bundaberg Regional Irrigators Group (BRIG)
- Flower Association
- Pioneer Valley Water Cooperative Ltd (PV Water)
- Pork Queensland Inc.
- Queensland Chicken Meat Council (QCMC)
- Queensland United Egg Producers (QUEP).

QFF welcomes the opportunity to provide comment on the National Energy Guarantee: Draft Design Consultation Paper (the NEG). QFF provides this submission without prejudice to any additional submission provided by our members or individual farmers.





Background

Energy is on the mind of all business directors with 58 per cent of Australian Directors rating energy policy and pricing as the biggest issue of 2018, ahead of taxation reform and infrastructure development¹. These findings have been mirrored by the World Economic Forum survey, where the number one largest risk identified by Australian respondents was energy price-shock, with two-thirds of the executives identifying this as being one of their top five concerns².

Nowhere else in the world has there been so much focus on energy or, more specifically, energy price as in Australia. High energy prices are the number one issue Australian directors want federal and state governments to tackle and the current and historical impasses and inactions of all political parties has undoubtedly held sensible policy, necessary regulatory reform and energy innovation back.

Electricity prices in Australia are higher than overseas jurisdictions³, disadvantaging commodity exports on the global market and leaving Australian agricultural producers heavily trade-exposed. For example, as Queensland's electricity costs rise the viability of intensive agriculture is being eroded.

Electricity in Queensland is not internationally tradable like the price of oil. Therefore, businesses which are exporters or competing with imported goods are disadvantaged as electricity prices rise versus their competitors. We are already seeing trends of energy-intensive industries moving off-shore, reducing operations and workforce, or simply closing. The rise in the electricity service price has had a negative effect on many other industries, particularly those that rely on electricity inputs, experience high import competition and produce homogeneous products.

Queensland agriculture is the second largest user of water and has the second largest number of irrigated agricultural businesses in Australia. Considering sources of agricultural water, Queensland is the second largest user of groundwater and largest user recycled/recaptured water resources. The amount of energy, and therefore the financial cost, of using these sources of agricultural water is higher than using surface waters.

Irrigation electricity tariffs in Queensland have risen a minimum of 136 per cent over the past decade, and for some more than 200 per cent, while CPI has increased by just 24 per cent over the same period. Post 2020, these specific 'non-cost reflective' (transitional) irrigation and small business tariffs will be withdrawn in Queensland. Farming businesses already struggling to cope with unsustainable electricity price increases will be unable to continue operation when this occurs.

At the end of 2016, there were about 42,000 regional businesses currently on eight different tariffs classified as transitional or obsolete. About 17,400 of these connections are for farming and irrigation purposes^{4 5}.

The impacts of rising electricity prices are clearly eroding Queensland's irrigation sector, with a growing number of primary producers switching to dryland farming practices as the price of electricity has already become unsustainable for many businesses. Electricity costs are resulting in a steady decline in the number of irrigation businesses as well as reduced productivity across the sector.

¹ see AICD Director Sentiment Index, Second Half 2017, Ipsos Connect, <u>https://aicd.companydirectors.com.au/advocacy/research/director-sentiment-index-second-half-2017</u>

² see WEF's Global Risk Report 2018, <u>http://reports.weforum.org/global-risks-2018/</u>

³ CME (2012). Electricity Prices in Australia: An International Comparison. A Report to the Energy Users Association of Australia. Carbon and Energy Markets, March 2012

⁴ Queensland Productivity Commission. (2016). Electricity Pricing Inquiry 2016. Chapter 10: Rural and Regional Industries – Transitional and Obsolete Tariffs.

⁵ Queensland Government (2016), Queensland Government response to the Queensland Productivity Commission Electricity Pricing Inquiry, November 2016.



Farmers are modifying their practices to adjust to water availability and climatic conditions as above average temperatures and dry conditions in Queensland persist, along with increasing high prices for water and the electricity to pump that water. These are critical factors not only in water use and crop selection, but also in the 'decision to plant'. This includes 'selling off' water allocations to recoup costs rather than cropping in a potentially 'bad year'.

Queensland is experiencing increasing climate variability and currently around 70 per cent of the state is drought declared. We must therefore address electricity prices for irrigation, processing, animal welfare etc. if we are to ensure economic sustainability for Queensland's intensive agricultural sector, and take advantage of agricultural expansion opportunities that will realise increased exports and to ensure future food security.

In response to price increases, farming businesses, including irrigators, have been installing energy efficiency measures and renewable energy and, in many cases, simply reducing demand. Much of these gains however, have been diminished by the increasing electricity costs; whilst simply reducing demand has also come at a cost either through reduced productivity or farmers simply choosing not to plant a crop.

Many farmers are now weighing-up options to 'switch-off' efficient irrigation technologies or leave the grid, taking opportunities in advancing technologies and their reducing costs. However, due to irrigation demands, through to the need for continuous power to refrigerate produce or maintain animal welfare, some have already installed hybrids of renewables and new diesel generation as they transition key infrastructure off grid. While diesel presents an attractive option, given its relatively low-cost and high-reliability, there is future uncertainty on how diesel may be impacted by Australia's obligation to manage carbon. This also leaves a legacy for those customers who are unable to leave the grid and may have to pay increasing costs into the future, thus compounding negative outcomes.

Queensland Specific Issues

The ACCC's Retail Electricity Pricing Inquiry: Preliminary Report, tabled in October 2017, stated that 'Australia has an electricity affordability problem' and that 'price increases over the past ten years are putting Australian businesses and consumers under unacceptable pressure'.

The ACCC report concluded that 'network costs were proportionally more significant in Queensland (and NSW) than other states' and 'network revenue increased the most in Queensland (and NSW), peaking respectively at 200 per cent (in 2015) and 190 per cent (in 2013) relative to 2006 revenues'.

Furthermore, Queensland and South Australian customers experienced a continuous increase in network costs from 2007-08 to 2014-15 while between 2015-16 and 2016-17, NEM spot prices increased by 60 per cent in Queensland (which was the highest increase).

In its report, the ACCC also noted the effect that large generators can have on a market, illustrating the Queensland Government's direction to state-owned Stanwell Corporation in June 2017 to offer more capacity in the NEM and alter its bidding strategies to put downwards pressure on wholesale prices. In 2016-17, 37 per cent of electricity dispatched in Queensland was generated by Stanwell Corporation. The intervention achieved immediate impacts in the market. Before the direction to Stanwell Corporation, futures contracts for the 2017-18 summer months in Queensland were trading at around \$120 per MWh. Following the direction to Stanwell Corporation, those futures prices dropped to around \$100 per MWh and have remained consistent since.

QFF acknowledges that the continuation of 30-minute settlement periods contributes to this potential for higher prices and reduced competition (NEG draft paper, page 13, paragraph 8). The technology



exists to move immediately to a shorter settlement time, yet the AEMO has accepted the recommendations of certain stakeholders to delay introduction of five-minute settlements until 2022.

NEG Draft Paper

QFF notes that the draft design consultation paper was released on 15 February with the deadline for submissions on 8 March 2018 (only 14 working days later). The paper is technical in nature with some elements of the content requiring complex analysis. As such, QFF does not have the capacity to comment on all elements of the content, and is concerned that some critical areas of the scheme design still lack critical detail.

QFF understands that the policy is proposed to be finalised in 2018, with the reliability guarantee expected to become effective by the end of 2019 and the emissions guarantee expected to become effective by the end of 2020. Also, that federal legislation is not required, rather the states will be consulted at COAG Energy Council meetings to seek approval for the policy. This may be difficult, given the lack of coordinated policy between the states and the history of 'politics over power' seen to date.

The 'reliability and emission' guarantees will be placed upon retailers who will be required to purchase a specified proportion of their energy needs from dispatchable sources (for example, coal, gas, batteries and pumped hydro), whilst simultaneously requiring that a specific emissions threshold is maintained (and therefore requiring energy from renewable sources). Importantly, under the NEG it will be the decision of retailers to decide the energy mix that they procure, provided that the guarantees are met.

QFF is unconvinced that the 'obligation on retailers' (to ensure that the energy they purchase meets emission reduction targets for the electricity sector and to meet dispatchability requirements by region') will achieve cost-effective reliability and questions the process/methodology for accurately 'determining reliability requirements for each region across the whole power system'. Theoretically, any retailer would seek to introduce new reliable power into its portfolio at the lowest possible cost which would deliver the lowest possible prices for consumers. The threshold at which the reliability obligation is set however, will significantly influence retailer behaviour.

The draft design paper also notes that cost savings "...can ultimately be passed on to consumers". How will the legitimate cost savings be calculated, verified and ultimately passed onto consumers in a timely manner?

QFF notes that neither of the guarantee targets (for reliability or emissions) have been provided in the draft design paper. Therefore, QFF is unable to comment on what this will mean in practice and the resultant impact on Queensland's (or Australia's) energy generation mix. These targets are critical given under ambitious reliability targets may hinder new investment while overly risk adverse reliability guarantee targets may lead to excessive obligations placed upon retailers, and inadvertently drive up costs for consumers.

Reliability

QFF notes that the subject of reliability has been elevated due to the unprecedented events from South Australia in 2017. We are cautious of any 'knee-jerk' responses specifically to address reliability which may come at the expense of 'gold-plating' generation capacity. That said, QFF is supportive of the Finkel recommendation which requires existing plants to give three years notice prior to closure, which appears a sensible measure to provide the necessary mechanisms that investment in replacement dispatchable generation assets will be made in sufficient time to meet demand. Although it is worth noting, that approvals and permitting for 'traditional' (gas and coal) generation plants often takes much longer than three years, while large scale renewables, particularly solar in Queensland have significantly shorter approval periods (only months).



Theoretically, any retailer would seek to introduce new reliable power into its portfolio at the lowest possible cost. This should drive the lowest possible prices for consumers, and the threshold at which the reliability obligation is set will influence retailer behaviour.

Can the ESB be confident that having a role for retailers is the best approach for ensuring reliability and that this will not increase costs to consumers? Can the ESB demonstrate that the current system where it is left to the market and then AEMO picks up what the market does not provide based on their forecasts is not working? AEMO is well qualified to do that, evenly spreading costs.

It would appear that under the NEG, AEMO is going to have a significant task in forecasting the reliability gap and then responding in a way that minimises distortion in the market. Retailers are also going to have large internal compliance costs.

Releasing the details around the guarantee thresholds needs to be a priority so that the market can assess the resultant impacts. Imposing more complex regulations on established energy retailers can risk stifling innovation and act as a barrier to new entrants to the electricity retail market (and other markets) which is a particular concern in regional Queensland where a monopoly retail situation exists. During the public forum on the NEG on 26 February 2018, other consumer advocate groups articulated concerns that the NEG may entrench the position of the existing large vertically integrated gentailers, while small retailers will have large administrative compliance costs. The significant barriers to entry for new retailers and access to generation resources not controlled by the major retailers will ccompound these concerns.

There appears to be undue focus on the intermittency of wind farms (for example, page 38) within the draft paper. The NEG must consider a 'reliability track record index' or appropriate mechanism to recognise the potential for generators to be 'unavailable' under certain conditions, particularly if they are approaching the end of their serviceable life. For example, a factor could be applied to a coal-fired generator if it has any unscheduled outages in the previous two years. Each unscheduled outage may reduce its reliability factor by, approximately 10 per cent.

QFF also believes that a retailer should be able to contract Demand Response or storage to increase their reliability.

Emissions

While QFF welcomes joined up policy integrating energy and climate change, we are concerned about the NEG's ability to achieve the required targets under the Paris Agreement. QFF notes the government's decision not to pursue the Clean Energy Target (CET) as recommended by the Finkel review. Instead, it is seeking to focus on reliability, while giving 'due consideration' to Australia's commitments under the Paris Agreement. The emissions guarantee must continue to encourage continued investment in renewable energy.

According to the Carbon Market Institute, Australia's emission projections in 2017 were 554 million tonnes and the emissions projections show that, at 2030, total emissions in the Australian economy will be 570 million tonnes. That is 4.5 per cent below 2005 levels, but an increase on 2017 falling outside the 26-28 per cent reduction required and emissions in 2030 are projected to grow by 3.5 per cent above 2020 levels. (Under the Paris Agreement, Australia has committed to reduce its carbon emissions by 26-28 per cent below 2005 levels by 2030). On current government estimates, emissions need to fall by 868-934 Mt CO2-e in cumulative emissions reductions between 2021 and 2030.

A lot of focus in Australia is on the electricity sector as the major contributor. The design of the NEG will be critical to determine the key policy question of how much of the abatement task out to 2030 and beyond will be taken up by the electricity sector. Whatever the decision it will then clarify the abatement burden on the other sectors, including agriculture.



QFF is mindful that the intensive agricultural sector is going to be left to do much of the 'heavy lifting' if the design of the NEG does not produce the intended emission reductions required for the electricity sector and the emission reductions required to meet the Paris Agreement.

With so many uncertainties concerning how carbon will be priced and what targets will be imposed on the agricultural sector, it is difficult for our sector to model climate scenarios, calibrate climate risk strategies and account for possible future carbon liabilities. The sector needs clear, long term policy to integrate and invest in any mandated emission reductions.

The NEG does not provide these certainties and QFF's concern is that the lack of inaction now, the shorter the timeframe for implementation increasing the burden, cost and climate risk in the future; will ultimately push farm indebtedness to unsustainable levels.

QFF therefore requests further clarification into the design of the emissions framework within the NEG so that the other impacted sectors can adequately plan meeting their emission obligations with clear policies which clarify where Australia's emissions reductions are going to be met. The NEG must acknowledge that states and territories through COAG may pursue greater action in the absence of ambitious Commonwealth targets.

QFF is ultimately concerned that the NEG may be costly to implement, administer and regulate/validate, and that these costs will be passed on to consumers. We must ensure that the NEG does not create another round of capex and associated gold plating to improve reliability which, in the main, is already higher than it needs to be across much of the NEM.

If there are any queries regarding this submission, please contact Dr Georgina Davis at georgina@qff.org.au

Yours sincerely

Travis Tobin Chief Executive Officer