



National Farmers' Federation

Submission to the Independent Review into the Security of the National Electricity Market

NFF Member Organisations



CANEGROWERS



NEW SOUTH WALES IRRIGATORS' COUNCIL





The National Farmers' Federation (NFF) is the voice of Australian farmers.

The NFF was established in 1979 as the national peak body representing farmers and more broadly, agriculture across Australia. The NFF's membership comprises all of Australia's major agricultural commodities across the breadth and the length of the supply chain.

Operating under a federated structure, individual farmers join their respective state farm organisation and/or national commodity council. These organisations form the NFF.

The NFF represents Australian agriculture on national and foreign policy issues including workplace relations, trade and natural resource management. Our members complement this work through the delivery of direct 'grass roots' member services as well as state-based policy and commodity-specific interests.

Statistics on Australian Agriculture

Australian agriculture makes an important contribution to Australia's social, economic and environmental fabric.

Social >

There are approximately 132,000 farm businesses in Australia, 99 per cent of which are Australian family owned and operated.

Each Australian farmer produces enough food to feed 600 people, 150 at home and 450 overseas. Australian farms produce around 93 per cent of the total volume of food consumed in Australia.

Economic >

The agricultural sector, at farm-gate, contributes 2.4 per cent to Australia's total Gross Domestic Product (GDP). The gross value of Australian farm production in 2016-17 is forecast at 58.5 billion – a 12 per cent increase from the previous financial year.

Together with vital value-adding processes for food and fibre after it leaves the farm, along with the value of farm input activities, agriculture's contribution to GDP averages out at around 12 per cent (over \$155 billion).

Workplace >

The agriculture, forestry and fishing sector employs approximately 323,000 employees, including owner managers (174,800) and non-managerial employees (148,300).

Seasonal conditions affect the sector's capacity to employ. Permanent employment is the main form of employment in the sector, but more than 40 per cent of the employed workforce is casual.

Approximately 60 per cent of farm businesses are small businesses. More than 50 per cent of farm businesses have no employees at all.

Environmental >

Australian farmers are environmental stewards, owning, managing and caring for 52 per cent of Australia's land mass. Farmers are at the frontline of delivering environmental outcomes on behalf of the Australian community, with 94 per cent of Australian farmers actively undertaking natural resource management.

The NFF was a founding partner of the Landcare movement, which recently celebrated its 20th anniversary.

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Executive Summary

The National Electricity Market is broken and needs to be fixed. A do nothing approach is untenable, and an enduring policy framework is required to provide the electricity sector with certainty for investment. A market-based approach for the electricity generation sector that has the broad scale support from the community, industry and the Parliament would provide a platform for stable and low cost transition.

Electricity use is variable across agriculture depending on industry, intensification of operations, location and structure of the business. Farms that require heating, cooling or irrigation have higher levels of electricity use. In some industries electricity consumption is stable year round, in others there can be significant seasonal variability. For some farmers demand is flexible, providing choice as to when electricity is consumed. For others, demand is often driven by factors beyond individual control, such as streamflow, the weather, and regulations that govern access to water, reducing options for an individual to manage their own demand.

Both reliability and affordability are key for agricultural producers – wholesale price spikes and outages can destroy annual returns for some farmers in the space of a few hours. However, overinvestment to enhance reliability comes at the expense of affordability. Efficient investment in, combined with efficient operation and use of, electricity services is crucial for farmers, other consumers and the wider economy.

1. Introduction

Our vision for Australian agriculture is to become a \$100 billion industry by 2030. The sector is a source of strength in the Australian economy, positioned to capitalise on growing global demand for safe, high quality food and fibre over coming decades.

To achieve our vision, the sector needs regulatory and public policy settings that foster growth and productivity; innovation and ambition. This includes access to affordable and reliable electricity for Australian farmers to maintain the international competitiveness of Australian agriculture.

More than 75% of Australian agriculture produce is exported. Thus being a sector that is very exposed to international markets, agriculture needs to remain globally competitive. Consequently, reliable, affordable and sustainable electricity are a necessary pre-condition to the economic development of agriculture, as well as key to ensuring farm profitability and efficient investment in agriculture

The National Electricity Market is not working for Australian farmers and needs serious reform. The NFF recognises that Australia's generation mix needs to change as existing infrastructure assets reach the end of their useful lives and to meet emissions reduction targets.

The entire Australian community relies on secure, affordable access to electricity and other forms of energy, and the Australian agriculture sector is no different. The current regulatory regime is not serving the interests of users and this is particularly the case for Australian farmers. The regulatory regime needs to be updated to maintain ongoing relevance of the National Electricity Market (NEM) to consumers and to meet future challenges.

Australia's electricity sector is undergoing transformational change as older electricity generation, transmission and distribution assets reach the end of their useful lives over coming decades. The current transition is occurring as a result of compounding policy distortions across all elements of the NEM and the network is no longer serving the needs of end users.

A coordinated national strategy for emissions reduction and electricity market reform is necessary to provide certainty and to ensure access to affordable and reliable sources of electricity. To ensure that Australian agriculture and downstream value adding sectors remain internationally competitive, it is essential that the policy levers of government work cohesively to these objectives to ensure the most efficient plan for change is adopted.

2. How do we ensure the NEM meets the needs of all consumers, including residential, large scale industrial and vulnerable consumers?

At present, policy distortions and ineffective regulation, not consumer preferences, have been the predominant drivers of change throughout the NEM. There are underlying structural issues in the NEM that need to be resolved. The National Electricity Rules (NER) produce price outcomes that unreasonably favour distribution network service providers at the expense of users in the revenue determination process, and incentivises them to challenge the decisions of the regulator.

It is crucial to ensure that the NEM serves the needs of all end users, including SMEs and farmers and readily facilitates their choices as to how and when they source their electricity needs. The replacement of ageing electricity generation infrastructure and meeting Australia's international commitments will require a substantial transformation in that sector and billions of dollars' worth of investment. The current suite of Federal, State and Territory policies are distorting and compromising the entire NEM, hampering that transition and driving inefficient investment.

To fix the currently broken NEM, electricity policy and regulation need to be coordinated nationally. It is crucial for the agricultural sector to ensure that electricity regulators are adequately resourced and empowered to meet the needs of end users and ensure that the owners of generation, transmission and distribution assets are kept accountable.

Case Study: Essential Energy and Ergon Energy tariff changes in regional NSW and Queensland

- Changes to the National Electricity Rules (NER) in November 2014 required Essential Energy and Ergon Energy, which service regional customers in NSW and Queensland respectively, to propose tariff structures “which better reflect the costs incurred by distribution networks driven by customer decisions to use electricity at specific times or locations”.
- Whilst many farmers are moving to solar driven pumps, for some the battery technology is not yet available at sufficient scale, or the economics of investing in solar on farm do not yet stack up. NSW Farmers Association is actively assisting through the development of a solar battery calculator, but in the meantime those who use large amounts of energy and cannot change their peak period usage (due to growing or seasonal conditions) will feel the impacts of these tariff changes.
- The impacts may force some growers out of business or indeed to inefficient and poor environmental solutions (e.g. diesel).
- Many growers have difficulty estimating the impacts to their bottom line and some now need to change the meters they are using in order to be billed, but we are expecting bill shock to hit parts of regional Australia as a result.
- A vegetable grower for a well known Australian brand is uncertain whether he will be able to continue servicing those contracts.
- At the same time as these tariffs are being imposed, the owner of the infrastructure (the state government) has an interest in continuing dividends from the business. This, in combination with what is arguably some over-investment in the infrastructure (required by regulation), means the meat in the sandwich is consumers.
- New South Wales Irrigators’ Council and Cotton Australia modelled the impacts of Ergon Energy moving towards cost reflective tariffs on irrigators in the St George district in Queensland.
- Based on that analysis, implementation of demand tariffs on irrigators in St George will increase electricity bills between 200% and 300%.
- In one example, an irrigator who currently is on Tariff 62 (with an associated bill of \$150,000 per year) would be forced to pay \$450,000 under the new tariff arrangements despite no alteration in his electricity use. Such an exponential increase in input costs cannot be absorbed by cotton producer or any agricultural business in a similar circumstance.

3. What role should the electricity sector play in meeting Australia's emissions reduction targets?

The energy generation sector needs to be capable of meeting both current and future emissions reduction obligations at the lowest cost to enable farm businesses to remain competitive in the global market. Emissions reduction policies must be coordinated nationally to ensure that reliability, affordability and the international competitiveness of both Australian Farmers and the value chain are not compromised.

Under the current settings, the Renewable Energy Target (RET) distorts the generation sector through opaque cross-subsidies from consumers and non-renewable generators to renewable generators. The RET was designed as a transition policy, but has by default become the core policy lever to reduce emissions in the electricity sector by favouring particular types of generation technology.

The 2020 RET has been legislated by and enjoys the bipartisan support of the Commonwealth Parliament. NFF recognises that retention of the RET provides certainty to investors in renewable energy as we transition to a market mechanism. But this should not be used as an excuse for not transitioning to a more efficient and cost-effective market-based mechanism by 2020. It is crucial to recognise that innovation and the adoption of new technologies will be key to meeting emissions reduction goals at the lowest cost. Australia's emissions reduction policies should not un-necessarily distort the electricity market in favour of particular technologies to deliver the full benefits of innovation.

A different generation mix may also be required to achieve internationally agreed emissions reduction goals. Innovation will continue to drive change in the way that electricity is generated and managed to meet consumer requirements. Government policy must not favour specific technologies, but rather enable the technologies to compete on their merits. NFF recognises the need for a smooth transition to a market based system and judges that Australia must move from a policy environment layered in policy distortions and subsidies to one that is market-based.

4. What are the barriers to investment in the electricity sector?

NFF considers there is a lack of incentives for an efficient level of investment in transmission and distribution assets, regardless of ownership. It needs to be ensured that the weighted average cost of capital is regularly reviewed to accurately reflect the cost of finance faced by network operators and the position of a natural monopoly that they hold.

Additionally, the risk premiums calculated in the formula for Weighted Average Cost of Capital do not appropriately reflect the natural monopoly enjoyed by Distribution Network Service Providers (DNSPs). A solution to this could be to reduce the incentives and ability for DNSPs to challenge regulatory decisions.

At present, reliability standards do not strike a balance between shared risk across all end users and individual users' risk management choices and strategies, resulting in "gold-plated" and often underutilised infrastructure. It is critical to ensure that assets that are not used or not useful

are excluded from regulated asset bases, so that electricity network operators do not pass risks on to end users.

5. Is there a role for technologies at consumers' premises in improving energy security and reliability?

NFF strongly supports research into, development and adoption of new generation and storage technologies, including both centralised and decentralised generation. Further research would enable flexibility to support a greater role for decentralised generation. Part of a future decentralised energy system would be self-sufficiency in generation and storage capacity on-farm, promoting improvements in on-farm energy efficiency.

6. How can we improve the supply of gas for electricity generation to contribute to reliability and security?

Reform of Australia's energy market to manage the transition to lower emissions generation will inevitably put pressure on State and Territory Governments to expand the supply of onshore gas. The NFF supports the view that agricultural land should be used for agricultural production and is of the view that any discussion on land use must consider the importance of agricultural land. The long term success of the agriculture sector will be dependent on our continued access to the land and water resources on which we rely. Agricultural land is a valuable resource that all levels of government should preserve for the future prosperity of our sector and our nation.

The current restrictions on unconventional gas developments in many jurisdictions reflect community concerns of the risks of irreversible damage to agricultural land and to groundwater resources. The restrictions are symptomatic of the lack of confidence that the community has in the way that onshore gas activities are currently regulated.

The land and water resources on which the agriculture sector relies must not be compromised, and state and territory regulation of the gas industry must be framed around the best available scientific information, including our ability to understand the cumulative impacts of developments.

Farmers must have the right to reasonably say yes or no as to what happens on their land. This right provides a more level negotiating table – over the terms, conditions and recompense associated with land access.

Given the national imperative to ensure the supply of affordable and reliable electricity to households and businesses, in NFF's view it is a clear requirement of the Commonwealth Government to invest in science, information and monitoring to help inform the regulation of the onshore gas sector. There is an opportunity for the Commonwealth Government to focus its efforts and investments in providing the quality science that is required to underpin the robust, state-based regulation of gas.

There is also an opportunity to build on the legacy of the past investments made by Governments in the Bioregional Assessments Programme for Coal Mining and Coal Seam Gas. This includes

ensuring that the data sets and groundwater models become more useful tools for planning and regulation. There is an opportunity to expand the BA model to other unconventional gas resources, including tight and shale gas.

While NFF supports the state-based regulation of the gas industry, the model of providing transparent, independent expert scientific advice to regulators (currently restricted to coal mining and coal seam gas) should be extended more broadly to all unconventional onshore gas.

7. How can we ensure that the competitive retail markets are effective and consumers are paying no more than necessary for electricity?

A competitive retail electricity market is crucial to ensuring that farmers have a choice of electricity provider and to thus buy electricity at the lowest cost. At present, the electricity market in regional and rural Australia does not have adequate competition at the retail level, leading to high electricity prices in the bush.

Electricity tariffs offered by retail electricity providers do not reflect that a large proportion of the agricultural industries does not have the ability to shift demand in response to tariffs during peak times when they need, for example, to irrigate crops or run cool rooms during harvest. For this reason, it is critical to ensure that tariffs are set transparently and fairly and are tailored to suit the needs of agricultural businesses.