























26 March 2019

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Dear Ms Al Shallah

AEMC review of the regulatory frameworks for Stand-Alone Power Systems – Priority 2

The Agriculture Energy Taskforce¹ (the Taskforce) appreciates the opportunity to provide comments on the consultation paper regarding the AEMC review of the Regulatory Frameworks for Stand-Alone Power Systems – Priority 2.

We note the two priority areas of work being considered by the AEMC:

- Priority 1: focusing on distribution network service provider (DNSP) led stand-alone power systems (SAPS).
 - Under Priority 1, the AEMC will develop a mechanism that will form part of the national regulatory arrangements to facilitate the transition of customers currently supplied by a DNSP to a stand-alone power system that is provided by a party other than a DNSP, such as a developer or community group.
- Priority 2: focusing on third party SAPS {(or a party that is considered be any party that is not the customer's local distribution network service provider (LNSP)}.

Background

The Taskforce was formed in 2014 as part of a collective effort by a group of peak agriculture bodies, to draw attention to the impacts of the high cost of energy for Australia's highly efficient and productive agriculture sector. High energy costs are impeding Australia's transition from a 'mining boom' to a 'dining boom'. The Australian Farm Institute notes: Australian industry - including agriculture - is rapidly becoming uncompetitive against countries with cheaper and more reliable power. 2

Australia's agricultural industries play a significant role as economic drivers in local economies, providing flow on benefits to the national economy. Industries include cotton, rice, sugar, wine,

¹ National Irrigators' Council, NSW Irrigators' Council, NSW Farmers, Cotton Australia, National Farmers' Federation, Bundaberg Regional Irrigators Group, Central Irrigation Trust (SA), CANEGROWERS, Dairy Connect, Queensland Farmers Federation, Australian Pork Limited, Pioneer Valley Water, Australian Dairy Farmers.

² Australian Farm Institute: The impacts of energy costs on the agriculture sector, August 2018

almonds, horticulture and dairy. Energy use across the agriculture sector is variable, dependent upon the industry and the intensification of operations at various times. Energy is used for pumping irrigation water, pasteurisation, cool rooms, processing plants and moving products. Operations that require heating, cooling or irrigation have higher levels of electricity use. Some industries have stable electricity consumption year round, while in others there is seasonal variability.

The high cost of energy for the agriculture sector sits starkly against the backdrop of the excessive profits of regulated electricity and gas businesses.

Australian farmers and agriculture industries are embracing technology to enhance production and operational efficiencies, and increasingly farmers are adopting renewable energy solutions to manage unsustainable electricity prices, off-set unavoidable peak demand charges and working to decarbonise the 'energy mix'.

Agriculture contributes \$60 billion dollars to Australia's economy and, based on its current trajectory, the agricultural industry is forecast to grow to \$84 billion by 2030 (ABS 2017). However, electricity has increasingly become a significant input factor in Australia's food and fibre production, impacting the ability to remain internationally competitive while utilising modern, water-efficient irrigation equipment.

Clean Energy Finance Corporation (CEFC)³ data shows a progressive commitment among Australian farmers to invest in energy efficiency and renewable energy technologies. In the last three years, farmers have taken up loan incentives offered by the CEFC, spending over \$100 million on 417 on grid and 20 off grid solar power projects, more than any other single sector. These projects were also on average larger than other sectors, with loans almost seven times the average at over \$250,000. Moreover, farmers took additional loans with the CEFC to the value of \$100 million during this time, to improve the energy efficiency of farm buildings and production systems.

Key messages

The key objective of the Taskforce is to bring Australia back to the lower quartile against international comparison with other high income OECD countries. The Taskforce recommends:

- A medium to long term price capped at 8 cents per kilowatt-hour for the electrons (R) and a similar ceiling of 8 cents per kilowatt-hour for the network (N).
- A rule change via the Australian Energy Market Commission (AEMC) to enable the AER to
 optimise an electricity network's regulated asset base (RAB) similar to the pre-2006 NEM
 rules that required the regulator to optimise the transmission and distribution network
 regulated asset base/s.
- A national food and fibre tariff model/s.
- Fundamental reform of the National Electricity Market (NEM) to address the lack of genuine competition, the operation of the contract bidding process and a market where consumers' interests are fairly represented.
- Stability and certainty in national energy policy to allow investment.

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³ The Clean Energy Finance Corporation (CEFC) is responsible for investing \$10 billion in clean energy projects on behalf of the Australian Government to assist lower Australia's carbon emissions by investing in renewable energy, energy efficiency and low emissions technologies.

General comments

The transformation occurring across the energy sector, in conjunction with the recent and imminent closure of coal fired power stations, represents a dynamic environment across the NEM. Emerging technologies, deregulation and policy framework changes occurring through various government related reforms, while providing consumers with flexibility and new opportunities, can represent a confusing landscape for consumers who do not have the required level of knowledge and/or are unable to be proactive in procuring their energy needs.

Against this dynamic background of deregulation and retail price competition, Taskforce members across all states in the NEM are actively working to pursue the most suitable energy policy, regulatory frameworks and cost effective energy systems and solutions that meet the needs of their respective industries and their members on the ground.

The falling costs of renewable generation and batteries represents a decrease in the costs of providing off-grid electricity supply, and in some areas off-grid supply may now be less costly than standard supply. We recognise too, the potential benefits such as improved reliability for remote customers and reduced carbon footprint. We are also aware that the relatively few customers currently receiving supply from a SAPS can largely be attributed to factors that include limitations in the regulatory frameworks and the embryonic nature of the SAPS industry.

The benefits of a more streamlined delivery of energy services are well recognised. And we do not disagree that a nationally consistent framework is necessary to enable distributors to develop off-grid supply arrangements for existing customers or new connections where efficient - as identified in the *Finkel Review into the Future Security of the National Electricity Market* and the ACCC report following the *inquiry into retail electricity pricing*.

We acknowledge that some form of regulation supports assurance to consumers about the quality of the service/product and an assurance about price efficiency of that product. However, as the AEMC examines how to maintain consumer protections and ensure customers receive the same level of services as previously, we strongly caution against the imposition of additional costs associated with unwarranted and unnecessary regulation in the move to stand-alone systems.

We note the various models of electricity supply for customers – that is supply via:

- the interconnected grid which the AEMC refers to as "standard supply"
- an embedded network, which in turn is connected to the interconnected grid
- a micro-grid isolated from the interconnected grid
- an individual power system (IPS), which only provides electricity to the customer in question

The Taskforce submits the following **general points and observations**:

- Where the consumers have been forcibly been moved onto a SAP system, the consumer should not have to carry the risk of a potential negative price dispersion from available NEM prices. This could be achieved by synthetically indexing the cost for the SAP to retail market offers, with networks bearing the risk of any price dispersion.
- Consumers should be given choice. In the case of a forced migration to a SAP, consumers should be given the opportunity to elect whether they want to be indexed to NEM prices, or elect to pay the predictable cost of the SAP (depreciation and maintenance). Some customers may find value in the predictability of this cost.
- In establishing a regulatory framework for SAPs, we expect that the AEMC clearly identify and quantify the creation of value of having a retailer involved in the SAP, and whether this

- outweighs the costs. Under a SAP, one of the primary roles of the retailer is removed; smoothing and de-risking consumer exposure to volatile wholesale markets.
- The Taskforce urges a value-based approach to reliability standards for SAPs. SAPs provide
 the opportunity to 'right size" the trade-off between cost and reliability for end-users. The
 identification and delivery of this consumer preference must be a primary and overarching
 principle in the roll out of SAPs.
- Protections for safety of the design of the system are conditionally supported, but must be
 confined only to what is deemed to be necessary protections. It is assumed that SAPs must
 meet existing safety standards; there must be very strong justification for imposing a new or
 higher standard of safety on SAPs, particularly where that might apply to existing installations.
- Regulation must be kept proportionate and we note AEMC is considering what number of customers, for example, might be included in the regulatory framework, for example;
 - Over 100 customers, or
 - o Fewer than 500 customers.
- Two types of fringe-of-grid micro grids might be considered:
 - Unregulated Micro grids an islanded fringe-of-grid community operated by a third party under jurisdictional arrangements where there exists a commercial business case for the third party to provide such a service under prevailing tariffs.
 - Regulated Micro grids an islanded fringe-of-grid micro grid community operated either by a regulated entity or **third party** where the micro grid represents a lower cost solution from an economic perspective.
 - We note there are currently no national economic regulation provisions for third party SAPs.
 - For third party access and connection, for those seeking to join a pre-existing third party system, it would be expected that negotiation would occur between the new customer and the third party, not unlike a DNSP led grid; in the case of any augmentation required to meet the need of the new customer, costs should be negotiated between the parties; alternatively, there may well be spare capacity which enables new customers to join.
 - As the consultation paper notes, in terms of competition issues, it may be that in some situations, one supplier rather than two or more, is best placed to provide a service more efficiently. In the case of third party SAPs, it may be economically more efficient for one party only to supply the entire SAPs, including the generation assets, network assets and metering assets, or certain parts of the SAPs (eg network assets).
 - In a third party context, we strongly advocate that regulation be minimal.
 - Third parties must be required to gain consent from customers before transitioning those customers to SAPs, and similarly with full disclosure regarding supply, operational costs and risks.
- There must be no regulatory retrospectivity in relation to capturing existing micro grids.
- In the case of DNSPs moving to SAPs, it should be a mandatory requirement that the DNSP
 make public a customer engagement strategy that reflects full disclosure in relation to supply,
 full operational costs and any potential risks.

It would be expected that SAP customers have access to a certain level of reliability standards and consumer protection, if not at the same level as grid-supplied customers.

The consultation paper notes: 'A third-party SAPS provider may be unwilling to attain allocative or productive efficiency to the extent that it perceives a risk of asset stranding and an inability to retrieve the costs of any such stranded assets from customers:

- The third party may not attain productive efficiency such as from cheaper generation alternatives both in front of and behind a SAPS customer's meter if it perceives a risk of stranding of its existing generation assets.
- Similarly, the third party may be unwilling to attain allocative efficiency such as via allowing for third parties to enter and offer differentiated tariffs and/or products to its customers if this could strand either its generation or retailing assets (for example, billing systems)'.

The Taskforce expects significant consideration of this matter, where the move to SAPs might result in a risk of stranded assets. It would be a perverse outcome if DNSPs were (overly) compensated for what they might claim as 'efficiency losses' when they already gain considerable financial benefit from the regulated asset base (RAB) and weighted average cost of capital (WACC) weightings under the current rate of return instrument.

This was demonstrated by Sapere Research Group, in an Analysis of the Rate of Return data published by the AER ⁴ which showed that there was 'ample evidence that actual electricity costs, profits and typical retail prices across the NEM substantially exceed economically efficient levels. And we know that the 2018 ACCC review of Retail Electricity Pricing inquiry (Restoring electricity affordability & Australia's competitive advantage) found that RABs for networks in NSW, ACT and Queensland networks (both distribution and transmission) should be optimised (reduced).

The Taskforce commends these comments to you.

Yours sincerely

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⁴ Sapere Research Group: Regulated Australian Electricity Networks - Analysis of rate of return data published by the Australian Energy Regulator, Simon Orme & Dr James Swanson, October 2018