



Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Via the website:
www.aemc.gov.au

17 July 2017

Dear Sir / Madam;

Re: Submission to Consultation Paper: National Electricity Amendment (Alternatives to grid-supplied network services) Rule 2017

Summary

- Cotton Australia, NSW Irrigators' Council (NSWIC) and the Queensland Farmers' Federation (QFF) support mechanisms that encourage alternative, non-capital network solutions.
- We do not support the National Electricity Amendment (Alternatives to grid-supplied network services) Rules 2017 as we believe that this may result in benefits disproportionately shared by networks and consumers.
- We believe that innovation and alternatives to grid supplied energy could be partially driven by the review and reforms to the demand management incentive scheme (DMIS) and demand management innovation allowance (DMIA) that are currently underway.
- The rule change proposal by Western Power has however highlighted a range of challenges in the transition to more distributed energy supply, including the question of liability, consumer protection and ownership of future microgrids/stand-alone power systems.
- It is noted that there are potentially synergistic/overlapping initiatives:
 - For example, the Australian Energy Regulator's (AER) DMIS which aims to provide Distribution Network Service Providers with an incentive to undertake efficient expenditure on relevant non-network options relating to demand management (DM). In theory, this could include off-grid electricity supply opportunities particularly for areas with an identified need on the network (augmentation or replacement). The DM is essentially the act of modifying the drivers of the network usage to remove a network constraint at peak.
 - While the DMIA could be utilised to fund pilot studies and proof of concept, noting that funding is limited. However, to be eligible DM projects must have the potential to reduce long-term network costs as well as demonstrate innovation. Projects may be non-network options.



Cotton Australia, NSWIC and QFF appreciate the opportunity to comment on the Australian Energy Market Commission's (AEMC) consultation paper *National Electricity Amendment (Alternatives to grid-supplied network services) Rules 2017*.

We have not addressed all questions in the consultation paper as they require a level of information that is not accessible to electricity consumers or representative bodies and will require specific input from the distribution businesses in the National Electricity Market (DNSP and TNSP).

While our organisations support solutions that provide non-capital network services, we believe that these options can be achieved through reforms to the existing DMIS and DMIA payment structure. However, this outcome can only be realised if the DMIS and DMIA are amended such that they provide adequate incentives for the networks to pursue non-capital network services. We also note the relationship between these mechanisms and other sources of funding such as those available through ARENA. The allocation of funding is dependent on whether the demand management solution is categorised as 'innovative' or 'proven'.

We note that the AER is considering submitting a rule change to allow for the immediate application of the DMIS and DMIA for all distributors (rather than at the end of the regulatory period). This would prevent long delays for some jurisdictions and allow distributors to make investment decisions with certainty. We understand however that a final decision by the AER has not yet been made.

Given the potential of the DMIS and DMIA to enable non-capital network solutions, our organisations encourage amendments to the scheme and mechanism, and support the AER in its application of the rule change to expedite the introduction of these schemes at the earliest opportunity.

We need immediate change which will benefit consumers and are deeply concerned about the extended timeframes associated with current rule changes overall.

We urge the AEMC to encourage an accelerated review of the DMIS and DMIA with a focus to provide a mechanism that would enable non-capital network solutions. We also encourage the AEMC to consider the consumer protection, liability and ownership issues that Western Power's rule change proposal has highlighted. In the meantime, we urge the AEMC to consider withholding a decision on the Western Power rule change until there is greater certainty around DMIS and DMIA, and any decisions that are made around the future structure of the electricity network."

Organisation's approach to alternatives to grid-supplied network

The current network costs (associated with significant past capital investment by the DNSP) as well as the current network tariff reform in NSW and Queensland have severely impacted irrigators' profitability and caused perverse operational outcomes for irrigation businesses. The level of prices and the structure of tariffs is leading irrigators to turn to alternative energy sources – moving them away from grid supply – or forcing them to shut down their high energy reliant irrigation equipment.



In order to avoid a mass exodus of consumers from the electricity grid, our organisations have championed the consideration of two options:

- a) providing regulatory powers to the AER to review and potentially write off inefficient or under-utilised infrastructure assets; and
- b) explore non-capital alternatives like demand management, distributed energy generation systems, stand-alone energy supply systems or other new technologies that could provide reliable and more cost-effective energy supply to regional areas.

Better management of network assets and consumer demand to postpone or avoid future capital investment will be key to mitigate an expanding regulated asset base and concurrently future cost impacts on consumers.

While it seems feasible to have more distributed energy generation, micro-grids and stand-alone power systems (as per the Electricity Network Transformation Roadmap developed by Energy Networks Australia and CSIRO), the vast number of rule change requests and regulatory reviews suggest that there is considerable uncertainty as to how the operations and regulatory framework may need to change to accommodate these new technologies and move towards distributed energy generation and energy storage. In addition, we urge the AEMC to consider the issue of consumer protection – in particular around liability issues for power outages and ownership and pricing. We urge caution around the introduction of significant amendments to the National Electricity Rules prior to there being any clarity around all possible avenues (and current incentive schemes) that would enable a transition to a more modern electricity grid.

The current status of alternatives to grid-based investments

The advancement of renewable energy generation and energy storage systems is progressing independently of a comprehensive Federal-State strategic plan or regulatory framework that would enable a smooth and potentially beneficial integration/transition of these technologies in the National Electricity Market. Since the catastrophic energy failure experience in South Australia in September 2016 and February 2017, both Federal and State Governments have initiated reviews and inquiries that are aimed at addressing Australia's energy challenges, including how to combat the energy trilemma of security, affordability, and lower emissions.

With the release of the Final Report on the Independent Review into the Future Security of the National Electricity Market¹, the initial report from the NSW Energy Security Taskforce² and further outstanding reports from the House of Representative Inquiry into modernising Australia's electricity grid³ and the Australian Competition and Consumer Commissions' Inquiry into electricity supply and

¹ <http://www.environment.gov.au/energy/publications/electricity-market-final-report>

² http://www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0016/105280/170505-Initial-Energy-Security-Taskforce-Report_FINAL-SIGNED.pdf

³ http://www.aph.gov.au/Parliamentary_Business/Committees/House/Environment_and_Energy/modernelectricitygrid



prices⁴, there are ample recommendation for amendments to the National Electricity Market, including its governance arrangements and regulatory framework. We eagerly await a united Federal

and State Government response to these Reviews which we hope will provide the catalyst for a planned response to future electricity network delivery.

We believe that a clear and viable transition pathway that provides a stable and coordinated approach will be required to modernise the national electricity grid towards a system that includes more distributed generation, stand-alone individual power systems, microgrids and energy storage systems. Use of these technologies would be conditional and based on the assumption that these technologies provide greater energy security at lower cost.

While the grid remains a key part of the electricity supply system, it must adapt to accommodate new forms of electricity supply and consumption. This will require further innovation to enable the growing range of new technologies and services with the capacity to incorporate variable renewable electricity into Australia. It will also require comprehensive network planning, operation, and a fit-for-purpose regulatory and governance frameworks that enables the integration of distributed energy generators and microgrids.

Background to the proposed rule change

Overlap with existing regulatory mechanisms

The proposed rule change request being led by Western Power has significant overlap with the existing regulatory schemes aimed at driving innovation and avoiding capital expenditure.

The AER has developed incentive schemes (i.e. DMIS, DMIA, capital expenditure sharing scheme, efficiency benefit sharing scheme) in response to the AEMC's Power of Choice review in 2012. The review was particularly targeted at assessing how the National Electricity Market can 'better support efficient demand-side participation' – thereby providing incentives for the distribution and transmission businesses to find the **least cost alternatives to fulfil their regulatory obligation and provide electricity to consumers**.

It is the view of our respective organisations that both the distribution and transmission businesses have yet to fully embrace and apply these incentive mechanisms – an observation that is deeply troubling our organisations in the context of the proposed rule change. This was exemplified in the Networks NSW Determination process. Essential Energy, the network which impacts our NSW members, proposed to spend \$2.8 billion on capital expenditure over the five-year period 2014–2019. It is worth noting that in 2012–2013, Essential Energy claimed a demand management allowance of \$976,000 – a mere fraction of the amount spent on capital expenditure. Networks across the National Electricity Networks have adopted a similar approach, devoting significantly more time and effort on

⁴ <https://www.accc.gov.au/regulated-infrastructure/energy/electricity-supply-prices-inquiry>



a bigger network than managing network costs. At this point, the regulatory framework appears to incentivise DNSP and TNSP to favour supply side solutions over demand side solutions – suggesting that the current incentive mechanisms are not working effectively.

Significant underutilisation of these regulatory incentive schemes has led to their review prior to the next regulatory determinations for the distribution and transmission networks. Recommendations for review and reform of these schemes have been highlighted including:

- Serves as a bridge between the current regulatory framework and a framework more focused on efficient pricing of network services
- Strengthens measures for distributors to pursue DM while building robust compliance mechanisms to deliver value to consumers/network users
- Application of a cost-multiplier to DM projects which is efficient and based on modelling to be a “reasonable on average” figure
- DM acts as to modify the drivers of network usage to remove a network constraint at peak.

We anticipate that the reforms to the schemes will be finalised soon. We believe that these mechanisms may indeed render the proposed rule change obsolete and further may avoid exploitation by the networks, whereby non-capital network alternatives can be included in the regulated asset base and generate a return. Western Power’s proposed amendments to the definition of network services appears to be an attempt by the DNSPs to have customers pay for the network structural adjustment in a situation where the market is already transitioning away from vertically integrated national electricity market.

Assessment of competition for alternative generation

In respect to the risk of potential exploitation of monopolistic powers, we seek clarification on the interaction between the proposed rule change request and the 2016 ring-fencing guidelines (including the pass-through applications) which we understand are designed to separate the competitive and regulated parts of the network business to protect the long-term interest of consumers. As we understand the ring-fencing guidelines are designed to ensure that monopoly providers in one part of the electricity supply chain should not be able to leverage their advantage by being able to provide services in other parts of the supply chain. We urge the AEMC to also assess:

- a) the current level of competition
- b) if there is sufficient competition in the markets to allow for other businesses to offer distributed or off-grid energy solutions e.g. Gentailers
- c) assess whether market or regulatory failure is responsible for current levels of competition⁵.

This assessment could potentially be combined with the Council of Australian Government Energy Council request that seeks to promote the development of competitive markets for new technologies that are capable of providing services in both contestable and regulated markets under Chapter 6 of the National Electricity Rules as it relates to the classification of distribution services.

Interaction with existing rule change proposals

⁵ In line with the Australian Competition and Consumer Commission on its review of electricity supply and price inquiry.



Our organisations seek further clarity around the interaction between the current rule change proposal for Western Power and the current NER, related rule changes (i.e. on contestability of energy services by the AER), state specific reliability standards and ongoing reviews by the AEMC on the regulatory arrangements for embedded networks under the Retail Law/Rules and the distribution market model. The AER rule change request is of particular interest to us as it outlines one of our main concerns with the current proposed rule change by Western Power – the potential for monopoly exploitation by the DNSPs and restrictions on the DNSPs to earn a regulated rate of return on demand response activities or assets that are located on customers’ side of the meter.

We support the AER’s proposal to consider lowering the threshold for the regulatory investment test that will apply this mechanism more extensively to distribution businesses’ investment decisions.

Concluding remarks

Our organisations are uniformly supportive of ‘least cost investment, technology-neutrality and service-based economic regulation’ of our national electricity networks. We have significant concerns regarding a ‘distributor-led transition from grid supply to off-grid supply’. We do not support the current rule change which we believe ascribes disproportionate benefits to investment in alternative generation sources to the networks. Our organisations support the reform, review and implementation of the DMIS and DMIA that will achieve the same outcomes and result in a fairer distribution of benefits for consumers.

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