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CLEAN ENERGY COUNCIL

Monday, 30 May 2016

Mr Chris Pattas
General Manager, Networks
Australian Energy Regulator
Lodged Electronically: ringfencingguideline2016@aer.gov.au

Dear Mr Pattas,

RE: AER Electricity Ring-Fencing Guideline, preliminary positions paper

The Clean Energy Council is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in solar, wind, energy efficiency, hydro, bioenergy, energy storage, geothermal and marine along with more than 4000 solar installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

Technological change and a growing consumer focus on environmental outcomes has now enabled far more flexibility in consumer preferences. Consumers now have the capability to deploy new energy technologies in the form of solar, storage, demand management, metering and integrated fleet-based control capabilities[1]. These opportunities have emerged from a highly competitive 'energy services' market that are rapidly deploying and innovating with new technologies. The pace of technological change is far faster than regulatory frameworks can keep pace with, as exemplified by the need to update the jurisdictional ring-fencing arrangements.

Innovation is at the heart of deploying, growing and evolving these technologies. In the CEC's view competitive markets will lead to lowest costs to consumers while maximising new energy technology options available to be deployed by them. However, the opportunity competitive markets to thrive and innovate can put at risk where the threat of anti-competitive behaviour is real and the CEC supports the COAG Energy Council's objectives for this review to:

- "*support the development of competitive markets in services which are or should be contestable.*
- *provide clarity and certainty in the market for new investment.*
- *provide a level playing field for all parties providing energy services.*

[1] As provided by Reposit power for example.

- *accelerate innovation and efficient investment*"[2]

In considering these objectives the AER should be mindful that networks perform functions related to the interface between competitive markets and monopoly networks. This interface provides them with the opportunity to display unchecked market power (through information accesed in the course of the regulated business' fulfilling its rule's obligations) and inhibit competition (by restricing fair and equal access to the network) in an environment where ring-fencing is ineffective. As a result regulators must remain ever-vigilant to ensure that regulated monopolies are not acting in this way.

This review is timely given the massive technological change underway. It is also well positioned to promote an electricity market that enables competition and innovation. Regulatory arrangements should not 'pick winners' in terms of business models or technological solutions. In the CEC's view the role of electricity networks as an open-access platform on which technological solutions should be allowed to innovate, thrive and even fail, should be clearly defined through appropriate rules and ring-fencing obligations.

Current risks to competition were not envisaged by ring-fencing arrangements

As demonstrated by numerous energy storage trials underway DNSPs and their shareholders are actively investing now to drive non-regulated cash flows in the future. For the most part they have been drawing on their core strengths to date. This has generally included participating in competitive markets for the operation and construction of network assets or related asset management services[3]. In these cases risks to competition here can arise from:

- Earlier identification of leads for the unregulated division from applications for new connections to the regulated business.
- Cross subsidisation between regulated and unregulated operations in the form of human resources.
- The opportunity to temporally align construction teams between regulated and unregulated works to manage timeline delivery risk for clients of unregulated services.
- Ability for the regulated business to constrain connection approvals for competitors of the unregulated business.

Rather than focus on these aspects the CEC has chosen to focus this submission on more a more recent evolution where affiliated businesses are operating in the 'new energy technology' space. This includes competitive areas such as the installation of solar and battery storage for residential and SME customers[4]. Potential risks include:

[2] AER, Preliminary positions paper, 2016, page 7.

[3] See: http://www.sapowernetworks.com.au/centric/industry/construction_maintenance_services_cams.jsp

[4] See: https://www.powercor.com.au/our-services/solar-and-battery/commercial-sales/

- A DNSP's ability to prioritise connection approvals for the affiliate.
- A relaxing or altering of connection requirements for affiliated businesses.
- Requiring DNSP control of consumer equipment as a connection requirement.
- The ability for a DNSP to identify approachable customers through the analysis of meter data held by the regulated entity.
- Ability for the regulated business to grant certainty of power transfer capability to an affiliated generation business[5] at the detriment of a competing business.

Because connections are defined as negotiated services management of some of these risks do not naturally fall within the current scope of services that the AER can easily ring-fence. As a result the AER may need to consider how these risks should be managed through other means and some solutions are offered in this submission.

In addition to the above battery storage creates new challenges where they are deployed 'on the grid' by a network. Batteries can offer a range of services above network support and a means to ring-fence these raises new complexities that require further consideration.

The remainder of this submission addresses each of the AER's questions.

Question 1: What aspects of current jurisdictional ring-fencing arrangements have or have not worked well?

The dramatic cost reductions of solar PV equipment and installation practices has led to Australia hosting the highest solar PV installation rate in the world while nurturing a highly competitive and growing market for innovative embedded generation, demand side management, storage and aggregation technologies.

Because this evolution has been occurring under the current approach to ring-fence energy and monopoly network services this should remain a fundamental component of future ring-fencing. The CEC's view is that the fundamental approach to separating monopoly and competitive markets has been a key contributor to the growth in a highly competitive energy services market which is in turn leading to dramatic technological change and further innovation.

In addition, because it is where physical flows are monetised for both parties a customer's metering point is the natural delineation between network and energy services. Making this distinction will continue to enable energy services businesses to competitively price and provide appropriate solutions to customer choices, while giving networks an opportunity to design appropriate economic signals for customers through tariffs that shape consumer behaviour. These signals are the expected outcome of the tariff reform processes.

[5] Through favourable negotiation under clause 5.5 of the National Electricity Rules.

Beyond this fundamental approach of the separation of natural monopoly networks and 'energy services' the CEC questions the effectiveness of the current regime. For example, the openness in promoting unregulated services through regulated channels (such as DNSP websites) creates an expectation that unregulated capabilities are generally promoted through regulated business activities (connection negotiations for example). Additionally, the numerous energy storage trials already underway are assumedly establishing a significant knowledge base from which those DNSPs involved would be looking to grow unregulated cash flows.

Question 2: Do you consider these objectives discussed in section 2.1 adequately reflect the harm ring-fencing is seeking to avoid and the benefits of an even playing field?

The AER's draft objectives for the guideline are:

> *1: avoid the anti-competitive effects of cross-subsidies between the contestable and non-contestable activities offered by an DNSP that would adversely affect markets for contestable services or the efficient provision of regulated services*
>
> *2: avoid discriminatory interactions between the contestable and non-contestable services offered by an DNSP that would adversely affect markets for contestable services or the efficient provision of regulated services*
>
> *3: avoid providing a preferred or related party with an unfair advantage in offering contestable service that stem from information acquired in providing a regulated service*
>
> *4: in achieving the first three objectives, promote an even playing field that may encourage market entry.*

The CEC also understands that the National Electricity Rules allow for established practices to implement ring-fencing (legal, accounting and functional separation, along with restrictions around information flows and staff sharing[6]), but does not provide the AER with authority to impose 'structural separation' between regulated and contestable parts of a network business.

The CEC agrees that the stated objectives are broad enough to reflect the harm that ring-fencing is seeking to avoid but queries the importance of the National Electricity Objective in the development of appropriate ring-fencing. The CEC's view is that, in achieving these objectives, the guideline must place the benefits of preventing barriers to competition (qualitative and long term) ahead of the costs of complying with ring-fencing regulations (quantitative and immediate). That is, the long-term interest of consumers will be met where harms to their choices being met competitively can be avoided.

[6] AER, Preliminary positions paper, 2016, page 14.

As noted below, the costs of compliance only arise in circumstances where a regulated network has made a conscious decision to expand its unregulated business. Under these circumstances the network's shareholders should bear all of the compliance costs. The AER should focus on creating an effective ring-fencing guideline that places potential risks to competition at a far higher value than costs of compliance that DNSPs elect to be faced with. This approach obviates the need for a material cost-benefit assessment.

It also appears that the tools that the AER can deploy may not be effective to manage emergent risks to competition. The following sections describe how monopoly network businesses are granted significant degrees of freedom to impede competition through the quasi-regulatory powers granted to them by the National Electricity Rules' current connection procedures (discussed below).

Question 3: Do you agree with the service classification approach to ring-fencing which is discussed in section 3.3? Is there a better alternative?

The AER should create ring-fencing arrangements that are principled in avoiding harm to competition so the approach to ring-fence all services that are not direct (standard and alternative control) control services is also supported and is an appropriate framework to work from. However, the CEC believes that the emergence of affiliated businesses engaged in embedded generation, battery storage and related activities creates new risks to competition.

These risks are a result of the interface between affiliated businesses and negotiated services offered by the monopoly network. As negotiated services are not considered under the proposed approach, the CEC does not believe that simply drawing a line between direct control regulated services and all other services is sufficient to manage this risk.

The CEC understands that the preference "option 3" is to incorporate the guideline into the existing regulatory processes, namely the 5 yearly determinations. The AER should also consider how rapidly the electricity industry is changing. The pace of change will require this review to create a guideline that is either sufficiently flexible to incorporate changing market conditions in between regulatory determinations, or sufficiently robust to predict possible future risks to competition that may arise between determinations. Option 3 appears to be closer to the latter.

Arguably, a more adaptive approach would incorporate elements of Option 1 within Option 3 and the AER should consider this. For example it may be appropriate for the AER to make a determination to exclude networks from services other than network support provided by energy storage and embedded generation, where other services (energy, ancillary services etc) should only be accesed by competitive markets.

Additionally, the AER's preference to rely on a waiver-based approach is supported by the CEC, although a more appropriate waiver regime is recommended below. DNSPs have far more resources than consumers so are better equipped to demonstrate why they require a waiver to undertake an activity that should be ring-fenced otherwise. This approach would

also ensure that the AER has vision of potentially increasing risks to competition as the market evolves over time.

Question 4: Does the proposed approach to ring-fencing adequately deal with the prospects for development of the contestable market for DER?

While the AER has considered the application of services from distributed energy resources (DER) and embedded generation[7] under the condition where an DNSP wishes to deploy these technologies to support the network, the interaction between the the regulated roles of DNSPs and competitive markets needs considered further.

Grid connection approvals

As noted previously, the quasi-regulatory powers granted to DNSPs for approving the connection of DER are inappropriate in an environment where DNSPs and their affiliated businesses are involved in deploying DER. The National Electricity Rules' connections framework as set out in Chapter 5 clearly describes that the basis for gaining a connection agreement (which is the point at which a connection is approved) is that of negotiation. However, the lack of prescription and opacity created by rules that promote 'negotiated' outcomes provide NSPs with significant degrees of freedom to inhibit efficient connection approvals or impose unreasonable connection terms for competitors to an affiliate. Potential risks include:

- A DNSP's ability to prioritise connection approvals for the affiliate.
- A relaxing or altering of connection requirements for affiliated businesses.
- Requiring DNSP control of consumer equipment as a connection requirement.
- The ability for a DNSP to identify approachable customers through the analysis of meter data held by the regulated entity.
- Ability for the regulated business to grant certainty of power transfer capability to an affiliated generation business[8] at the detriment of a competing business.

The main contributors to this issue include:

1. The standards development framework for non-registered embedded generator connections is self-regulated. Significant divergences can be found in requirements for connection that can in some instances prevent projects from proceeding on a cost basis alone[9].

[7] DER is undefined. The CEC means any generator connected to a distribution network, including small scale 'distributed' energy resources and generation.

[8] Through favourable negotiation under clause 5.5 of the National Electricity Rules.

[9] See: http://fpdi.cleanenergycouncil.org.au/reports/inverter-energy-system-connection-standards.html

2. Although all embedded generation connections are intended to be rules-based, the process places far more weight on the relationship between the generator proponent and a DNSP, allowing significant freedom for a DNSP to arbitrarily preference one connection application over another.

The CEC appreciates that, as they are currently treated as negotiated services, connection services cannot be easily ring-fenced. This issue however, is one that has significant potential to impede competitive development of a market for DER and embedded generation generally. Examples of options to manage this risk could include:

1. Eliminate the scope of negotiation by transferring connection services to a standard or alternative control service, requiring the AER to prescribe DNSP obligations, connection procedures and costs.
2. Preventing a ring-fenced business from operating within the geographical area that the DNSP's licence extends to covers.
3. Restrict the scope for subjective decision-making and create clearly defined DNSP approval procedures and reporting requirements, including defined connection agreement terms and enhanced transparency and consistency of connection requirements.

Although all options require consideration the CEC's view is that the third option is a reasonable approach and would establish a reasonable platform for a competitive market to operate with greater visibility and efficiency. This option would require clear standards for connection, defined connection terms and assessment procedures that are established with the goal of reducing degrees of freedom that DNSPs currently have the liberty of.

In addition the CEC does not support the premise that connection assessments are inherently tied to a DNSPs monopoly services and are therefore strictly negotiated services. For example the connection of a new load would not require the DNSP to undertake the same detailed assessment of the connection and deploy resources to approve the connection. Connection approvals could be undertaken by suitably qualified personnel in a competitive environment and audited on the appropriate basis. Alternative arrangements such as this would be appropriate to restrict degrees of freedom in connection approvals.

Control of consumer equipment

Irrespective of the intent of the National Electricity Rules the conditions for connection of AS4777 compliant equipment (micro-embedded generators) are assumed to be non-negotiable minimum access standards. Storage projects should be considered in the same way. DNSPs have significant degrees of freedom to set requirements to connect and individual customers do not have the knowledge and market power needed to negotiate a less onerous outcome. Regardless, individual negotiation on the standards for the connection of each micro-embedded generator is unlikely to be consistent with the National Electricity Objective (NEO) and the NER should ensure that these terms are reasonable to ensure the long-term interests of consumers.

The CEC is concerned that DNSPs may gain implicit control of the value from DER or storage through onerous connection regimes that can require control of dispatch. The revised AS4777 standard's demand response modes (DRM) significantly enhance a DNSP's powers. In the most basic form this standard requires an inverter to allow the DNSP to prevent electricity generation. Additional demand response modes give wide-ranging control to the DNSP if required under the connection agreement.

Even if these demand-response modes are utilised for short periods of time this could have significant financial impacts for customers. For example, with the network tariff reform process moving the NEM towards peak demand-based Distribution Use of System pricing, a DNSP would only have to exert a short-term DRM influence to have a significant impact on revenues. DNSP Tariff Structure Statements include demand components for residential customers that are based on 15 or 30 minutes of peak demand during each month.

As noted previously it is appropriate for the role of economic signals provided by a DNSP to be structurally removed from the deployment of physical equipment behind the meter. Where a DNSP wishes to control consumer equipment this should only be done under a contract that compensates the customer appropriately. The AER should consider the amendments to the National Electricity Rules that would ensure this outcome[10].

Disaggregating services from battery storage

The challenges for ring-fencing are accentuated where a network is deploying storage on a network support basis. Should these devices provide standard control network support services and be included in the Regulated Asset Base the other services they could deliver (energy and ancillary services for example) would still be best placed in competitive markets.

A transparent process that allows competitive access to these services must be put in place to ensure affiliates of DNSPs are not favoured.

Question 5: Are there other ring-fencing obligations we should impose on NSPs that provide services into contestable markets?

The CEC supports the proposed obligations along with consideration of the below. Creating ring-fencing obligations that clearly separate regulated and contestable services will be critical to promoting competitive markets where they exist, and reduce the costs of regulatory processes. However, as noted already, concerns arise from the interfaces between a ring-fenced entity and the regulated business.

The AER also needs to consider:

- The additional risks to competition already outlined under Question 4 in this submission.

[10] The CEC provided some options in our submission to the AEMC's Storage Integration Review.

- A limitation on the cross-promotion of unregulated services in the information portals of the regulated business (e.g. websites or other material). Promoting a ring-fenced entity through these channels creates a competitive advantage that should be managed by the ring-fencing guidelines.
- Defining terms such clarifying the extent of separation referred to by '*separate legal entity*'.

The CEC does not believe that these restrictions would have any impact on a DNSP's ability to meet its regulated monopoly obligations.

Question 6: What costs would be incurred in meeting these obligations?

As the costs of complying with the ring-fencing obligations are only created when the regulated business seeks to provide services that need to be ring-fenced, their magnitude and allocation is somewhat artificial.

Costs borne by a regulated network business as a result of complying with the ring-fencing guideline should be considered costs of doing business as a monopoly network service provider, or its parent company, that has *elected* to expand unregulated future cash flows. Competitive markets deliver cost savings that benefit consumers and these benefits are far more important than costs of compliance with ring-fencing requirements, which are borne by a limited number of regulated businesses.

Question 7: Should assets sharing be restricted between regulated services and contestable service provision?

The ability for human resources to be shared across the regulated and ring-fenced entities creates a significant challenge for efficient regulation. This practice would make it extremely difficult to control the effectiveness of ring-fencing, particularly in relation to obligations that restrict information flows and cross-subsidies between the two entities.

As it is not clear how the effectiveness of training, procedures or protocols could be measured by the AER the CEC supports the proposed objective to prevent the practice of sharing resources between regulated and ring-fenced entities.

Question 8: Do the factors set out above reflect the issues we should consider in deciding whether to grant a ring-fencing waiver?

While the CEC understands that waivers might provide guidance to DNSPs, the need for them in an environment where ring-fencing obligations are robust is questionable. The CEC's view is that waivers should be considered on a case-by-case basis and should apply to any activity that is clearly outside of clearly defined ring-fencing obligations.

In the first instance this approach will enable the AER to work with DNSP's to calibrate waivers to their particular needs. Removing the 'guiding' factors would also remove the ability for DNSPs to easily tailor waiver proposals to meet the AER's expectations, when other business motives that may benefit unregulated operations could exist.

Additional consideration of the waiver arrangements should be for a DNSP to demonstration of the extent of the economic signals that the DNSP has applied to encourage a response from a contestable market. For example, the extent to which a DNSP has already run a tender that has not received a sufficient response and why this approach has not been effective.

Question 9: In which circumstances should the customers of ring-fenced services and not customers of the DNSP's services in general pay the additional costs of complying with ring-fencing obligations?

As highlighted by Synergies for Energy Networks Association there is growing interest in DNSPs entering into competitive markets and the risks of increasing costs of regulatory compliance are real:

> "*The extent to which a particular set of rules supports competitive neutrality and non-discrimination might then depend upon, or be calibrated against, the extent to which a particular network business's choices raise or lower policing costs and the risks of anti-competitive behaviour"…"The form of regulation is calibrated to the reasonable choices of the market participants. The essential step in calibrating the design for any or all of these combinations is to balance policing costs and potential benefits*"[11]

A situation where consumers are paying to enable a regulated business or its parent to expand its unregulated cash flows is untenable. Where a DNSP elects to participate in a ring-fenced activity the costs to comply with the ring-fencing rules should be prevented from being passed through to consumers. Costs to expand a business in this way are solely the decision of the executive and should only ever be borne by the shareholders of the regulated entity.

The Synergies report highlights that allowing these costs to be passed through to consumers could enable regulatory capture by placing increasing regulatory compliance cost pressures on the AER with an aim to force a relaxing of ring-fencing rules reducing the effectiveness of the regime. Such opportunities should not be made available.

Question 10: How else could the AER minimise the administrative cost of ring-fencing while maintaining the integrity of its approach?

The CEC believes that, given the stated objectives and above cost allocation methodology, costs of compliance with ring-fencing should already be minimised. The benefits of competitive markets will far outweigh these costs of a limited number of regulated networks complying with appropriate regulation.

[11] Synergies for Energy Networks Association, *Applying the Hilmer Principles on economic regulation to changing energy markets*, 2016, page 7.

Question 11: Is it reasonable for the AER to consider these transitional arrangements to the new ring-fencing guideline?

Investments in non-regulated activities made by regulated networks were done so with the potential risk of regulatory intervention and should not be protected by future ring-fencing arrangements. These investments should be subject to a timeline of say 6 months to transition to new ring-fencing arrangements. This should also include interim reporting of progress of the transition such that competitive providers have transparency of the status of the competitive market.

All DNSP investments made from the date of publication of the guideline should be subject to it. This approach will avoid an investment 'rush' to impede efficient transition to the new arrangements.

Question 12: How can we ensure ring-fencing compliance is robust and effective without imposing excessive costs that may ultimately be borne by consumers?

The CEC supports the proposed approach to annual reporting and the investigation of a penalty regime that could be applied. As noted previously compliance costs should be borne by a DNSP's shareholders, not consumers. Penalties should be viewed in the same way. This may require amendments to the National Electricity Rules.