ENA REGULATION SEMINAR 2016

Wednesday 3 August 2016 State Library of Queensland, Brisbane "Redrawing the boundaries between regulation and competition in new energy services markets" AEMC Senior Director, Transmission and Distribution Networks Richard Owens

Good afternoon and thank you for inviting the AEMC to speak on such a topical issue.

Apologies for the fact that most of you were no doubt expecting to hear from John Pierce rather than me. Unfortunately John is attending Matt Zema's funeral in Melbourne today, which he obviously couldn't miss given how devastating Matt's death was for many of us.

A century ago, a safe and reliable source of energy was the wonder of the world. Today consumers take it as given and our economy relies on it.

Now, once again, another energy revolution is happening, in renewables, in storage, in information management services, and in the increasingly multidirectional flow of energy.

What's new in this latest chapter of the energy story is that technological change is allowing consumers to choose how their energy is delivered and used. Technology is enabling a devolution of decision making with consumers increasingly driving the development of the sector through the choices they're making.

Electricity networks are very much on the front line of this shift and this is reflected in the work the ENA is doing in their Electricity Network Transformation Roadmap. Importantly, the Roadmap is taking a very deliberate customer-centred approach, recognising that ultimately, it's consumers exercising their growing energy choice – and not the technologies themselves – that are driving the transformation.

With recent events in South Australia, we are seeing a high level of interest in the transformation of our electricity system and, in particular, the implications of higher levels of renewables, both grid scale and distributed, on wholesale energy prices and power system security.

As we know, these are not new – or unforseen – challenges. However, as our Chairman John Pierce noted last week at the Clean Energy Summit, much of the current debate is still inwardly focused – and all about industry. It should instead be going beyond renewables alone, because the change we're seeing in the market is increasingly led by consumers, and the focus should be enabling consumers to make the choices that are best for them so they have greater control over how they source, manage and use their electricity.

To that end, much of the AEMC's efforts over the past few years have been in providing more opportunities for consumers to make informed choices. Whenever possible, we start from the premise that the best judges of what's in consumers' interests are consumers

themselves. And where there are barriers or constraints to consumers exercising their choices, our preference is to address those barriers to choice rather than use regulatory instruments to impose technology-based solutions on consumers. Importantly, we do not try to pick winners.

The reforms flowing from the AEMC's Power of Choice review have laid the foundations for an energy system that is positioned to deploy new technologies in response to the choices consumers make. This is why we have focused on changes such as network pricing reform. We all know networks have been preparing for the introduction of cost-reflective pricing from 1 July 2017, with the tariffs that have been proposed in the current tariff structure statement process being just the first tentative step in a journey towards truly cost-reflective network prices that better reflect the consumption choices of individual consumers.

Another example is our competition in metering reforms, where we have opened up metering services to competition. The focus of the metering rule change was not the meters themselves or promoting consumer choice in metering technology. It's about advanced meters as an enabler for new products and services that can deliver benefits for consumers.

The metering reforms were also the first significant example of a reconsideration of where to draw the line between services that are competitive and services that should be regulated. A decade ago it was simply assumed that metering for residential customers was a monopoly service that could only be provided by the DNSP and therefore needed to be regulated. But our recent rule change showed that there is no reason for that to be the case, and instead network businesses, retailers and independent metering businesses should all be able to compete to provide metering services on an unregulated basis.

But if network businesses want to be involved in the competitive metering space, they must comply with the AER's ring-fencing requirements.

So why do we need ring-fencing for network businesses that want to compete in the provision of competitive services like advanced metering?

To answer that question, you first need to be clear about the purpose of ring-fencing. It's not just about avoiding cross-subsidies between regulated and non-regulated services. That's important, but it's just part of the broader aim of facilitating the development of a competitive energy services market. In the customer-centred future that we envisage for the energy market, the long-term interests of consumers will be best served by retailers and other energy service providers innovating and experimenting to offer products and services that consumers value.

That objective requires effective ring-fencing that means that network businesses can't discriminate between their network business or related entities and third party service providers. The AER is currently implementing ring-fencing through the new national distribution ring-fencing guidelines, which I'm confident will go a long way towards achieving this objective.

In addition to ring-fencing, the regulatory framework also needs to support this objective through a range of other measures including:

- providing clarity around which services are regulated and which are not;
- creating incentives for the efficient investment in, and use of, assets such as storage that can provide both regulated and non-regulated services, so that the full value is obtained from those assets;
- having robust cost-allocation and shared asset regimes for circumstances where a network asset is used partly to deliver a regulated service and partly to deliver a non-regulated service; and
- having strong efficiency and investment tests that require and incentivise networks to procure services from the competitive market where it is more efficient to do so rather than investing in the assets to provide those services using regulated revenues and rolling them into the RAB.

The rules already contain a lot of these features, and we are expecting to receive a rule change request from the COAG Energy Council later this month proposing enhancements to some of these measures based on the recommendations from our Integration of Energy Storage Report. I also understand that other stakeholders are working on potential rule changes in this area and I encourage them to submit them soon so that we can consider and consult on all of the proposals in a coordinated fashion.

Our preference for competition over regulation and our desire for a clear separation between the regulated and competitive sectors isn't just an issue of ideology. It reflects our concerns about the potential damage to the long-term interests of consumers from a lack of such separation.

To give the issue some context, I thought it would be useful to work through a few examples of current issues that illustrate why a lack of an effective separation between regulated and competitive services could prevent the emergence of a strong, competitive energy services market and could mean that customers miss out on the benefits that competition can bring them in terms of increased innovation and choice and lower long-term prices.

There are four current examples I'll use to illustrate these concerns:

1. The first example is battery storage.

The AEMC made a number of recommendations in the Storage report we released in December last year. Our analysis focused on storage as an example to shine a light on potential regulatory issues that could apply to a range of technologies, in particular technologies that can be used to provide both regulated and competitive services. While many of the specific functions that storage performs are not new, it's the potential for storage to generate multiple value streams for multiple players – including consumers, networks and generators – that makes it so interesting.

One of the key issues we considered was "who should control the storage device when it's behind the meter"? Should it be the consumer, the energy services company, the retailer or the network business?

In a consumer-controlled model, we'd see consumers themselves buying batteries directly, along with optimising software so the battery can store power at times of low prices or store power from the consumer's solar system, and then discharge at times of high prices. Or an energy-service company could manage the device on the consumer's behalf.

A retailer-controlled model could see retailers providing storage services to consumers through an arrangement where the consumer effectively gets a cheaper electricity price while the retailer controls the device to hedge against wholesale and distribution prices.

Under either model, the retailer or an aggregator on the consumer's behalf could also sell services to network businesses to allow them to use the battery at certain times for network support.

All of these models are compatible with the idea of a competitive energy services sector.

Then there's the network-controlled model. One example is where the network owns the storage asset behind the meter and socialises some or all of the cost across all customers on the basis that the battery is helping provide regulated network services.

Our concern is that network-controlled storage is likely to act as a barrier to the other models. For example, how could a retailer or energy service company compete on price if the network can smear some or all of the costs across all consumers in the state but the retailer or ESCO has to recover the full cost from the individual consumer? And would networks have an incentive to do things like make connections for competing providers onerous and costly if they have a business interest in providing network-controlled storage?

Although networks may rightly argue that using storage in this way enables them to operate the network more efficiently, this model would damage the development of a competitive energy services sector, which gives consumers the best opportunity to decide which product or service best suits them.

To be clear, we believe network businesses should be able to buy storage services from competitive providers or ring-fenced affiliates where it is more efficient than network augmentation and other demand management options to meet network requirements, or where it can help networks maintain the stability of the grid. The rules already allow this, and have incentives for network businesses to implement non-network solutions, including the use of storage.

2. To help illustrate that this issue isn't just about storage, my next example is micro grids and stand-alone power systems. The AEMC is currently doing some research and thinking on this issue, as we see it as a significant emerging issue where there appear to be gaps in the current regulatory framework at the Electricity Law and Retail Law level.

A number of network businesses have said that in remote parts of their networks, when a line reaches the end of its life, it's likely to be more efficient not to replace the line but to instead serve the customers through a micro grid or stand-alone power system. I agree that this approach should be allowed as it could have significant cost savings for consumers, as well as reliability and bushfire reduction benefits in certain areas.

However, major issues arise regarding which services become regulated and which remain competitive. The proposal that was put to me recently by one network business was that it should be able to disconnect customers at the end of long rural lines and instead supply them using a stand-alone power system of solar, storage and a diesel generator. That idea has a lot of merit, but does it necessarily flow that, as proposed by the DNSP, the network business should become a regulated monopoly supplier of not only the network service but also the solar panels, storage unit and diesel generator and even deliver the customer's diesel on a regulated monopoly basis? Or should some of those services be provided to the customer on a competitive basis? Or if that's not possible, should the network business be required to procure the inputs to this service from the competitive market rather than own the assets itself?

3. A third example is sharing staff and equipment.

In their submissions to the AER's current ring-fencing guidelines process, several network businesses argue that they should be able to use under-utilised field staff and trucks etc from their regulated business to provide competitive services, on the basis that cost-allocation will allow them to reduce regulated charges and also provide the competitive service more cheaply than if they had to have stand-alone staff and equipment for each of the regulated service and the competitive service.

This is probably the best example of the tension inherent in this issue, as networks are right that in the short term this will lead to lower prices for consumers of both regulated and competitive services.

But will it mean that competition never emerges in markets for new services, as no one else will be able to compete with the network business' prices? In the long term, is that likely to result in less choice and higher prices for competitive services?

4. I'll finish with an example about marketing of competitive products. I am aware of one network business that is currently advertising solar and battery services on the website for its regulated DNSP activities.

The advertising is next to the "electrical faults and emergency" numbers. It's above the "connect your power" information, which you need to click on if you want to buy solar or storage from any other company and connect it to the network. If a customer wanting to have solar or batteries purchased from a competitor clicks on the "Connect your power – solar and other generation" link to find out how to get the panels connected to the grid, they get more advertising for purchasing panels and batteries from the network business.

Does all of this risk undermining a level playing field for the provision of competitive storage and solar services? Will consumers be led to believe that they will get additional benefits by purchasing these services from their DNSP, for example a quicker and easier connection process? Would the network business agree to provide similar free advertising on its website to unrelated competitive providers?

These examples illustrate why the Commission is concerned that allowing regulated entities to enter competitive markets is unlikely to support the development of a competitive energy services market. The ability to leverage regulated revenues, information asymmetries and the ability to discriminate in areas like connection processes would give regulated entities an unfair competitive advantage.

Being clear about where regulated networks can play and where they can only compete through a ring-fenced affiliate is not to suggest that the AEMC does not recognise that the integration of distributed energy resources is a key challenge – and opportunity – for network businesses as they seek to maintain grid stability while also reducing network costs.

The last thing I want is an outcome where the regulatory framework makes it too hard for networks to innovate and use new technologies as a lower cost alternative to building poles and wires. I've spent much of the last few years at the AEMC working on rule changes that are designed to incentivise networks to do the exact opposite of that.

The analysis being undertaken through the ENA Network Transformation Roadmap project in this area, including consideration of the future directions for electricity policy and regulation, is useful initiative and I've enjoyed the opportunity to participate in several of the workshops so far.

The AEMC is also continuing its technology work program and one of our main projects looks at how the role of distribution networks may need to evolve to enable consumers, service providers and network operators to optimise the value of distributed energy resources. This is currently an internal research project but we will be engaging publically towards the end of the year, resources allowing. We also expect to shortly receive terms of reference from the COAG Energy Council for a new annual monitoring and review project on the effectiveness of the electricity network regulation regime in responding to increased uptake of decentralised energy supply.

All of these different work streams are important if Australia is to capture the significant value that a consumer-led transformation of the energy sector can bring. Many jurisdictions are grappling with these same questions and no-one has all the answers yet. Many voices and ideas need to be heard on these topics if we're to deliver resilient and robust responses. The AEMC looks forward to being involved in this journey with you.

Thank you.