Laying out strategic priorities for the National Electricity Market

Address by Australian Energy Market Commission Chairman Mr John Pierce AO
Australian Energy Week, 11 May 2018, Melbourne Australia

Thank you Minister, colleagues on the panel, ladies and gentlemen.

We're all familiar with the technological revolutions that have changed our world: steam; the age of science and mass production; the digital revolution; and now . . . the internet of things . . . artificial intelligence.

What do they have in common?

They disrupt the status quo.

In every case, some<u>one</u> or some<u>thing</u> triggered innovation.

Edison of course . . . the first large-scale AC hydro power plant of 1895 designed by Edison's acolyte Nikola Tesla . . . to Elon Musk and everyone in between.

And what are the lessons that we learn from these disruptors? That businesses come and go. Technologies come and go.

Indeed it is this very process that economists…always a cheerful lot…sometimes refer to as "creative destruction," that is, the fundamental driver of lasting economic growth and progress.

So here we are . . . looking to seize the latest opportunities – from changing energy technology.

What that means is the structure of the energy sector will change along with the way capital is employed and businesses are organised.

This is what always happens when economic growth is driven by technological progress.

This process is of course not without its problems.

In order to manage we need effective institutional and governance arrangements – with regulatory and policy frameworks that put consumers first . . . deliver required protections . . . and then get out of the way of innovation and competition. Because that's what delivers the services we want at lowest cost.

One of the virtues of workably competitive markets in our current circumstances is their ability to sift through the new ideas, technologies and business models to find the ones that best serve consumers' interests.

I want to talk about four areas where the Commission is addressing challenges facing the national electricity market in this time of transitional change:

- The first is the positive power of retail disruption

- The second is using factfulness, a term I'll explain later, to cut the cost of wholesale market transformation

- The third is the need to define and understand the change the market is going through so we can look forward with a clear perspective

- and finally, the need to stay the course on reliability reform for the sake of Australian consumers.

First, the positive power of disruption.

For some time the Commission has tracked electricity market trends through two annual reports – which after half a dozen years represent the most extensive body of longitudinal research on retail prices and competition.

Next month we release the 2018 review of retail energy competition. Six months later it will be followed by the annual price trends report. I have to say I take no pleasure in re-reading past volumes of this work and noting how prescient much of it has been.

Keith Orchison put his finger on it this week in his 'power post' when he described the context for this year's Australian Energy Week as "the best of times and the worst of times."

In a similar vein, the 2017 competition review talked about a "two-speed market." On one hand, research showed consumers felt they had more choices to manage their energy use and bills – a definite trend flowing from the new retailers entering the market with new business models, more varied products and better priced deals.

Consumers were also optimistic about opportunities linked to new technology:
- 20% of consumers surveyed had solar panels
- 21% said they were likely to adopt battery storage in the next two years
- 18% said they were likely to take up a home energy management system in the next two years.

But while competition can drive innovation and new choices for consumers in the retail market – those benefits have been put at risk.

Why?

1. Well first, retailers are still too slow in building awareness of the cost savings, concessions, hardship schemes and other essential information that would help consumers pick the offer or product that's right for them. Consumer awareness of the government's energy-made-easy power-bill comparison website remains unacceptably low.

2. Second, because of the undermining effect in recent years of rising costs in the wholesale market which are driving retail prices up.

These two oil slicks are still spreading under the wheels of market transformation.

Staying with consumers for a minute – I've been thinking for some time that we need more disruptive leadership in energy retail.

As I said, technologies and businesses come and go and change. Remember, Origin sprang from the demerger of Boral Limited, a brick and construction company; ERM started out building gas plants and then got into retail; Alinta was a major player in Australia's west, now it's moved back east and is giving local retailers a run for their money. A couple of years ago who had heard of Powershop, Greensync or Flow Power?

Industry structures and technology will change.

If incumbents get complacent, others are more than willing to have a go at doing a better job for customers . . . as long as regulation doesn't get in their way.

The impetus for change is strong. We've been talking about the acceleration of consumer-led market transformation since we started our power of choice work program in 2012. This redesigned framework helped families and businesses choose new ways to use electricity and manage their bills.

The right foundations for change are in place. The dynamic processes we need are underway. It's a critical time for market participants to step up.

What you want in the market today is experimentation – and offers of new products and technologies that work for consumers – but what do we see?

Continuing confusion around retail price offerings means most consumers don't grasp the opportunities on offer. Yet innovation in pricing and new products **is** starting to happen. New energy entrepreneurs and traditional energy retailers **are** starting to rise to the challenge.

But progress is at the margins, and not fast enough for consumers wanting to take action to reduce their energy bills.

Just over a week ago the Commission started work on a joint rule request from Minister Frydenberg and NSW Energy Minister Don Harwin. It would require retailers to notify customers in advance if their energy prices are going to increase. This is the fifth initiative from ministers since the Australian Government's round table with energy retailers last year to help deliver more affordable energy for consumers . . . thank you Minister.

We've already made another rule in the ministerial consumer protection package. Since 1 February retailers must give consumers advance warnings to shop around before their energy discounts finish.

Also underway is the ministerial request which seeks to stop retail energy discounting on inflated base rates that can leave customers worse off. And there are two more on the table relating to maximum timeframes for meter installations and improving the accuracy of energy bills by allowing customers to have electricity or gas bills based on their own reading of the meter.

It's important to have rule requests like these so the power system can respond without affecting the ability of competition to deliver.

But ours is a notoriously complex business. It wasn't long ago that the UK introduced regulation to restrict the number of retail deals on offer to make their system simpler. Simple yes, but lots of people ended up paying more. It would be simpler to have a one size fits all system for, say, mortgages. A fixed rate mortgage for everyone – how would that go?

But there are areas where retailers can find inspiration.

The telco market has been deregulated for 20 years in retail price regulation. If you count the period of managed competition in mobile phones, it's been deregulated for 24 years. Yes, that's very much longer than any of the electricity regions have been deregulated across the states and territories.

Nonetheless, what disrupted that market was Vodafone, which leapfrogged its competition by importing simple plans from overseas and it was game on – giving consumers better deals.

What the electricity retail market needs is a disruptor like Vodafone – to cut the complexity away from retail offers, and make bills easier to understand and compare.

Of course the uptake of technology innovation has been dramatically faster in the telco world – but putting that difference aside, consumers have been very clear, for some time, on what they want and need.

The industry cannot let them down. Our competition review will have more to say on that in a few weeks.

Number two – factfulness and wholesale market recovery.

Have you come across factfulness? I have for a long time followed the work of Swedish statistician Hans Rosling. His last book *Factfulness, why things are better than you think* -- was published posthumously in April.

He says the mental picture in most westerners' heads today is that the world is getting worse. He calls it the "overdramatic" world view – and misleading.

The facts say different. Hans concludes the facts of change reveal room for optimism about innovation and mankind's ability to solve problems.

That resonates with me – especially because energy is a highly complex, deeply interconnected area -- so we need to avoid ideological stances and silver bullets -- to focus on the facts of economic and engineering realities.

In examining issues that are important to the future of the NEM, we have focused particularly on the growing level of intermittent power in the system – and the need to manage the system differently if we want to keep the lights on.

We started this work in advance of the South Australian blackout, and all the market bodies have been working together to make the system stronger, including:

- new rules on managing the rate of change of power system frequency by requiring minimum inertia levels
- managing power system fault levels by maintaining minimum system strength levels to keep the system stable and
- improving guidelines for generating system models to give AEMO and networks the data to efficiently plan and operate the system.

Now there are folk who think just saying intermittent generation won't affect system security makes it so. The market bodies are united in dealing with the facts of change. And the fact is that while technological disruption will throw up problems; it also brings with it innovation that will help us come up with solutions.

We have a plan in place and we are working with our colleagues at the AER and AEMO to change the way we manage the power system.

At all times we are focused on considering precisely *how* that transition should occur while keeping the lights on and consumer costs reined in – bearing in mind the more costs you put into the system, the more burden there is on consumers.

We are working through the Energy Security Board, with AEMO and the Australian Energy Regulator to facilitate the shift from a centralised fossil-fuel driven network to one dominated in the future by a decentralised, increasingly intermittent system.

Which brings me to number three: defining and understanding that change.

Defining and understanding the change so we can look forward with a clear perspective has never been more important.

The AEMC's annual residential electricity price trends review that I mentioned earlier, has reported a roller-coaster effect for energy consumers that is unacceptable, and needs to be addressed by restoring the integrity of price signals in the market.

The power price rollercoaster is being driven by the changing mix of generation, with the proportion of weather-driven power supply rising fast and the closure of ageing coal stations. The failure to agree a mechanism that integrates energy and emissions reduction policy has broken the links that make the market work.

Appropriate investment signals, risk allocation and risk management tools are critical in achieving sufficient and timely investment in the technologies necessary to maintain reliability, security of supply and competition in the retail market.

The efficacy of the price signal is critical to market participants making efficient decisions. This is because short-term dispatch and long-term investment decisions are driven by derivative prices in the wholesale contract market. If this market is influenced by external factors, such as subsidies for particular technologies that are financed by mechanisms outside the NEM, the ability of price signals to coordinate investment and divestment decisions in ways that achieve reliable, secure and least cost supply is undermined.

So our final priority is the national energy guarantee and staying the course on reliability reform.

The national energy guarantee, guided by my colleague Dr Schott, is all about shifting energy policy back to its true focus – the consumer.

It aims to meet emissions reduction commitments set by our governments without putting cost burdens on households and the Australian economy that could be avoided with better co-ordination and more efficient practices.

We're focused on creating the right investment climate for energy market transformation – and the national energy guarantee is central to that objective. A policy that can integrate emissions and energy policy and deliver transformation, at least cost to consumers, is very compelling.

It's critical that the nation stay the course on that reform – to provide a mechanism which can adjust to change, whatever the future may bring at the lowest cost possible.

For us staying the course also means:

- providing governments with the most sophisticated data-driven advice possible to support their decision-making
- identifying least-cost solutions to key market transition challenges – and that list is a long one including responding to:
  - world leading levels of renewable energy penetration
  - renewable energy zones and connections
  - consumer driven demand response in all its forms
  - the rise of micro-grids
  - smart metering and IT communication challenges
  - addressing changing patterns of power usage including electric vehicles
  - creating a market that can deliver energy at affordable prices and allow Australia to meet its global emission abatement agreements.
  - <u>all just the tip of the iceberg</u>.

At the AEMC we address the here and now through new rules and look to the future through our reviews.

Another key piece of work due in June is the annual networks regulation review which explores options for the grid of the future.

It's looking at how to support continued uptake of distributed energy resources like solar PV, battery storage and 'smart' household appliances that respond to changes in electricity prices.

The COAG Energy Council asked us to undertake this annual monitoring - recognising the importance of providing early warning of market developments that may need to be addressed by changes to the National Electricity Law or Rules.

The energy sector has been in transition before. We got through it with cooperation and clear policy objectives – after all, the national energy governance arrangements were introduced by governments in the first place to address a need for investment and manage the development of a market.

It wasn't easy then. It won't be easy now. It won't happen overnight – but we will be guided by the long-term interests of consumers, analysis, and optimism.

Let's stay the course.

Ends
Check against delivery