

Australian Energy Market Commission

## SPEECH BY CHIEF EXECUTIVE PAUL SMITH AT WORLD FORUM ON ENERGY REGULATION

Australia's work to encourage demand side participation and the implementation of the Power of Choice review

28 May 2015

## Check against delivery

Good morning.

I want to thank our hosts, including the Energy Market Regulatory Authority of Turkey, for hosting such an important event and for inviting me to be part of this panel discussion on demand side impacts on energy markets.

I will provide some insights into how Australia has approached trying to make sure that consumers of electricity are able to make decisions about when and how much electricity to consume, in a way that reflects the value they place on consuming compared to the costs of providing electricity to them.

We have approached these issues not from a perspective that any particular technology, form of supply, or way to reduce demand is inherently superior, but instead to focus on trying to create a framework that will allow consumers, with their own preferences, to drive the outcomes. In our view, putting consumers in charge is the best way to be confident that outcomes will best reflect what consumers want.

This work has been particularly important in Australia because of how rapidly the sector has developed and changed in recent years, including:

• Solar PV on residential premises growing from very few to around 1.4 million in five years.

- Demand supplied by the grid being flat or falling across the market over the same period.
- Full retail contestability across most of the market, with evidence of effective competition in most parts of the market, and Governments increasingly removing retail price regulation.
- Technology starting to impact on the market. The State of Victoria has rolled out smart meters to all consumers under a Government mandated program.

But before talking about this, and the work we've done over the last three years in Australia to provide a framework for efficient demand side participation, I'd like to begin with some brief context about the Australian National Electricity Market.

Our market:

- Is the largest interconnected electricity grid in the world spanning more than 5,000km.
- Serves around 19 million people more than 80 per cent of the Australian population.
- Is an energy only wholesale electricity market, with a spot market that includes all large generators and retailers, and a relatively liquid financial hedge contract market for participants to manage the risk in a sometimes volatile spot market.
- And our network companies like most are monopoly owned, although we are currently bringing some parts of the network into the competitive space specifically metering services. I'll come back to that later.

The Australian Energy Market Commission, itself, is part of a trinity of energy market institutions; the other two are responsible for economic regulation and compliance with the rules we make (AER) and operating the market (AEMO).

The Australian Energy Market Commission is an independent agency, with two roles:

- Making the rules for the national electricity, gas and retail markets.
- Undertaking reviews and providing advice to all Australian governments through the Council of Australian Governments Energy Council, on energy market issues.

And in making the Rules and providing advice to Governments, the Commission is guided by principal objectives for electricity, gas and retail, which are all formulated in a similar way, which is:

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to – price, quality, safety, reliability, and security of supply of electricity; and the reliability, safety and security of the national electricity system.

Implicit in this objective are:

- What is efficient?
- And what is in the long term interest of consumers?

The temptation in the face of rapid change with falling demand, technological change, and the increasingly sophisticated demands of consumers, is that regulators try to get control, try to manufacture efficient outcomes and try to engineer outcomes in the long term interest of consumers.

For example, some countries have looked to reintroduce capacity market mechanisms to deal with the problem of big generators struggling to compete in a market with falling demand and more efficient plant.

Others have looked to pay for a facilitated market exit for inefficient plant.

So the temptation is to intervene.

In Australia, we have and are taking a different approach.

We think there is one person who best knows how to the answer the question: what is in the long term interest of consumers – well actually there are about 19 million of them in Australia – consumers themselves.

Consumers, making consumption choices in a workably competitive market, are already driving the transformation of the market by themselves:

- The modern consumer is demanding smart energy solutions which are personalised, convenient and integrated into their existing technologies, such as smart phones. And this is challenging the very notion of what constitutes a 'retailer'
- Consumer demands are also driving innovation in retail energy products.

Retailers are increasingly pressured by customers to abandon charging exit fees: based on our latest research around half of all market offers in our two biggest jurisdictions – Victoria and New South Wales – do not have exit fees.

Two of the big three retailers offer fixed price contracts, responding to a significant portion of customers that value price certainty.

And large energy users are being increasingly sophisticated in their negotiation of supply arrangements.

Confronted with the increasingly complex and diverse demands of consumers we asked ourselves: how do we support the consumer driven transformation of energy markets?

In 2012, the Australian Energy Market Commission released its review of demand side participation in Australia – the Power of Choice report.

It started with the premise that efficient markets are characterised by effective participation of both the supply and demand sides of the equation.

To properly participate in the market, people need information; they need tools; they need to have the chance to be engaged; and they need the price they pay for energy to reflect the cost of supplying them, as individuals.

Two of the specific market reforms that aim to achieve that are:

- Introduction of cost reflective network pricing
- Breaking the monopoly on metering services and opening that part of the supply chain to competition.

Around 50 per cent of an average Australian electricity bill is the cost of maintaining and upgrading the regulated transmission and distribution network. That is pretty high by international standards and reflects in part our relatively low population density, but also the provision of a generally very reliable supply.

Getting clear price signals for consumers to respond to therefore relies quite heavily on having cost reflective network pricing in Australia.

Under the price structures that have operated in Australia to date, energy users paid the same network price for usage even if the costs of such usage vary by location and time, regardless of how or when they are using power.

Effectively network prices over-recovered revenue for off-peak use of the network and under-recovered for peak use.

Analysis undertaken for the Commission highlighted the type of perverse outcomes we see under the old rules.

For example, a consumer using an average size north facing solar PV system will save themselves about \$200 a year in network charges compared with a similar consumer without solar.

Because most of the solar energy is generated at non-peak times, it reduces the network's costs by \$80, leaving other consumers to make up the \$120 shortfall through higher charges.

The same consumer could reduce network costs considerably by facing their panels west, generating more energy at peak times when it is most needed.

But under the existing network pricing arrangements, the consumer has no incentive to do so as they benefit more by generating more total energy throughout the day. In this example, some consumers are paying more than it costs to provide services to them, while others are paying less.

And there is no incentive to change.

The new arrangements we're putting in place will see more efficient price signals emerge, removing cross subsidisation and giving energy users the information they need to decide what technologies might work best for them to manage usage, and help reduce their energy costs.

The new arrangements have started to take effect and we are seeing a move to more efficient tariff structures.

For example, the distribution businesses in Victoria have proposed to move from their current flat energy tariffs to peak demand tariffs for all residential customers in the next regulatory period. Under these tariffs, approximately 40% of network charges will relate to households' maximum demand during the peak period of each month.

Ultimately this is about sending price signals to consumers about the costs of using the network at different times and locations so that they can make efficient consumption and investment decisions.

With new and evolving technology having an ever greater influence on consumers' energy decisions these price signals are becoming more important day by day.

Of course, in order to respond to efficient price signals, consumers need tools – like metering services.

In Australia, we've looked to break the monopoly on metering services in Australia with a rule change that brings competition to the metering services industry.

A set of reforms include a rule change to promote competition in metering and related services; an open access and common communication standards framework for smart meters; and arrangements to allow multiple trading relationships at the consumer's connection point.

The competition in metering rule change really is the "key" to unlocking the full value and benefit of consumer participation in energy markets.

Like a mobile phone or a pay TV box, advanced meters are currently an important piece of the physical infrastructure that enables consumers to use a service they value.

It is a tool that can help consumers monitor, manage and adjust their electricity consumption and, importantly, capture the value of doing so, if they so choose.

Opening up the metering space to competition will allow consumers to benefit from a wider range of energy services and demand-side products.

Tools to respond to time-of-use pricing, off-peak charging of electric vehicles, faster retailer switching and more efficient notification of system faults to network operators.

And we intend a market led approach, meaning investment in metering services will be driven by consumers choosing products and services they value at a price they are willing to pay.

This will enable consumer choice to drive investment in metering technology.

We are confronted by similar circumstances as many other developed countries – falling electricity demand, the increasing role of renewable energy, and the evolution of a sophisticated energy services and technology industry.

But rather than trying to engineer outcomes with mechanisms like capacity markets or paid market exit, we're unashamedly trusting in the decisions of consumers to drive market development, and facilitating that through targeted regulatory reform, and by supporting a flexible market which is capable of responding to change and capable of responding to consumer demand.

## ENDS

Paul Smith Chief Executive Australian Energy Market Commission

Check against delivery