

AUSTRALIAN ELECTRICITY MARKET FACES UNCERTAINTY

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The Australian electricity market faces much uncertainty as to what the future will bring.

Having previously proposed and abandoned a carbon trading scheme that would have been implemented some years earlier, the Australian government introduced a carbon pricing scheme on 1 July 2012. While this ended the previous ongoing speculation as to whether the tax would indeed be implemented, a change of national government may still cause the scheme to be abandoned or changed in coming years. The carbon price started at \$23 a tonne in 2012-13. In the next two years, it will rise in line with inflation, and from 1 July 2015 will no longer be fixed by the Australian government but set by the market. The floor price in 2015-16 will be \$15, but this is looking expensive compared to world pricing, so may be subject to review even without change of government.

Australia is comprised of six states and two territories. The six jurisdictions of the "eastern seaboard" together form a National Electricity Market (NEM), but even within the NEM much of the policy and decision making has been jurisdictional rather than national, with some significant differences between the jurisdictional approaches. For example, only Victoria has chosen to remove retail price regulation for all electricity customers, and only Victoria is rolling out smart metering to all customers. Where retail price regulation remains, the approaches to determining regulated prices differ between jurisdictions, and they also change over time. Some jurisdictions have privatized the distribution businesses; in other jurisdictions they remain state-owned. Feed-in tariffs for solar PV generation have also differed between the jurisdictions – some net and some gross – and have also varied over time.

Some progress has been made towards standardization of network regulation with the establishment of the Australian Energy Regulator (AER) and the Australian Energy Market Commission (AEMC). A National Energy Customer Framework (NECF) was intended to be implemented on 1 July 2012. This would standardize many aspects of the laws, regulations and rules that govern the retail electricity and gas markets – though not retail pricing, which would still remain jurisdictional. But implementation of the NECF has also been delayed. As at 1 July 2012, the NECF was only adopted by two jurisdictions, with uncertainty regarding when other jurisdictions would follow.

In the previous absence of a national carbon pricing scheme, jurisdictional governments introduced various state and territorial schemes aimed at greenhouse gas abatement, promotion of renewable sources for electricity generation, and energy efficiency measures. Many of these still remain in place, alongside national schemes that have also changed in character and detail since they were first implemented.

Besides the risks and costs that result from legislative and regulatory inconsistencies and uncertainty, the industry is also facing the fact that Australian energy consumption is declining, while peak energy usage is continuing to grow. The peak energy growth causes costs to increase, because of the need to build generation and network capacity to meet peak demands, while the declining energy usage

means that those increased costs have to be spread across fewer units of consumption, thus putting further upward pressure on prices.

Price rises cause hardship to vulnerable consumers, and it is widely recognized that spiralling energy costs are not good for the economy, and are unsustainable in the long term. The overall efficiency of electricity usage is not helped by the lack of demand side participation. Most consumers do not appreciate the differences in costs between electricity usage at different times, and they lack the incentives and the information that would give them the capability to change their electricity usage behaviour and to benefit as a result.

Customer engagement has always been challenging for the electricity industry, for a variety of reasons. This is notwithstanding very positive outcomes from many trials of innovative pricing in Australia and internationally, which have shown that consumers do respond to price signals when they are given the capability and incentives to respond.

Etrog Consulting has been advising various parties in regard to the potential implications of the introduction of plug-in electric vehicles in Australia. Unmanaged charging could lead to inefficient outcomes, further straining peak electricity usage if there is significant uptake. But with the right incentives, electric vehicles may provide opportunities for more efficient usage, based on smart charging or managed charging, to make use of otherwise unused generation and network capacity. In the longer term, the storage capabilities on electric vehicles may assist in increasing efficiencies and increasing system security and reliability. New business models may emerge for electric vehicle service providers, and energy service companies more generally, to promote new and innovative demand side participation opportunities.

Many of the pricing initiatives that could be implemented would be facilitated by smart metering – through both the granularity of interval (half-hourly) demand recording, and through signalling using the communications capabilities of smart metering. The necessity to improve the efficiency of electricity usage may provide a stimulus for further rollout of smart metering and smart grid applications in Australia. We also look forward to seeing more moves to national consistency and demand side participation in Australia's electricity markets. ■



ABOUT THE AUTHOR

David Prins is a highly experienced consultant and project manager, with extensive international consulting experience and expertise in legal, regulatory and commercial issues. He has a keen understanding and twenty-two years of practical experience spanning four continents, specializing in the application of effective regulation and competition in electricity and gas industries.

ABOUT THE COMPANY

Etrog Consulting is a specialist consultancy in energy and utilities, with particular expertise in the interaction of regulation and competition. Its clients include energy market participants, governments and regulators, consumer representatives, and vendors who would like to improve their understanding of energy and utility markets.

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