

11 October 2012

Australian Energy Market Commission

PO Box A2449

Sydney South NSW 1235

Submission to the Power of Choice - Stage 3 DSP Review

Energetics welcomes this opportunity to make a submission to the AEMC in regard to the Power of Choice - Stage 3 DSP Review. We are a specialist management consultancy with over 28 years experience in energy and carbon management. Energetics delivers measurable outcomes to address key business needs in areas including mitigating climate change risk, meeting compliance obligations, identifying and developing business opportunities, identifying and managing demand side response opportunities, reducing costs and improving productivity. We have a national multi-disciplinary team of over 110 professionals in five offices across Australia.

Within our submission, we have addressed the following five priority action areas covered in the draft report:

- a. Enabling technology (metering).
- b. Facilitating consumer access to electricity consumption information.
- c. DSP in wholesale markets.
- d. Efficient and flexible pricing options.
- e. Energy efficiency measures and policies

Enabling technology (metering)

Energetics firmly believes that a fully efficient electricity market requires the widespread deployment of smart meters and the ready availability of meter data to customers. Access to accurate and timely information will improve the quality of customer choice beyond the expected emergence of dynamic and innovative electricity retail services and products. Such advanced metering infrastructure will also assist in the rolling out of demand bidding programmes and better manage the impact of embedded generators. We therefore fully support the AEMC's recommendations and draw the Commission's attention to a study carried out by Energetics for the



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Department of Climate Change and Energy Efficiency¹. In this study we also recommended that State and Territory planning laws be changed to require the installation of smart meters whenever substantial building work is done on a dwelling.

Facilitating consumer access to electricity consumption information

Energetics supports changes to the NER to require retailers to disclose additional energy and metering data to customers. We are concerned however, that retailers may not see the disclosure of this information to be in their best interests and put up barriers to make it difficult for customers to obtain their own energy and metering data. Energetics would prefer that, subject to the establishment and application of standards to ensure privacy controls, customers are able to retrieve their own meter data with a suitable mobile phone or computer. This will facilitate the development of applications for mobile devices by third parties that will give customers access to their own data without involving the retailer or meter data agent. We would welcome the regulator establishing open standards that provide an appropriate level of inter-operability and communication.

Demand Side Participation in wholesale markets

Energetics believes that demand-side resources, such as voluntary curtailable load control, can be highly effective at reducing volatility in the wholesale market. Given the existing multiple barriers to the provision of demand response in the NEM, we support recommendations by AEMC to allow customers seeking DSP to compete directly with generators in the wholesale market. In particular, we support NER changes that will see the emergence of businesses who seek to facilitate such participation in the wholesale market as these businesses will have a commercial incentive to see successful implementation of DSP. This is not currently the case, as retailers generally have limited interest in demand response. In particular, the largest retailers are vertically integrated - they own generation plants as well as providing retail services and therefore manage their spot price risks internally. The implementation of such demand bidding mechanisms will also favour the emergence of more network support and interruptible supply contracts between customers and network service providers. Energetics view such network support options as very cost effective ways of deferring network augmentation in localised constrained network areas.

Efficient and flexible pricing options

Introducing more economically efficient pricing options is central to improving the utilisation of the electricity network and justifying investment in an advanced metering infrastructure. Many jurisdictions overseas have successfully implemented time-of-use tariffs that pass cost signals onto consumers in a way that tempers the growth in peak demand. Energetics believes that similar approaches should be considered in Australia for all customers, beyond the pilot programs successfully implemented by a

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¹ "Energetics - Inclusion of energy generation in building energy efficiency standards", available from http://www.climatechange.gov.au/en/publications/nbf/inclusion-of-energy-generation-in-building-energy-efficiency-standards.aspx.



number of domestic distribution network service providers. We also particularly favour critical peak pricing coupled with enabling technologies that allow control and firm dispatching curtailable loads (e.g. direct load control of air-conditioning units).

To this end, we support the recommendation that consumers be exposed to a timevarying network tariff component. However, Energetics would prefer that all medium and small electricity consumers be required to opt-out of time-varying tariffs. Further, the options recommended by AEMC are a good first step towards a more rational pricing system which includes critical peak pricing.

We note that there is a reluctance to expose consumers to tariff structures that result in less resourced households being penalised. In consideration of this we note that:

- less resourced households are currently being penalised anyway through higher prices; and
- there are other mechanisms available to government to compensate less resourced households and these mechanisms do not lead to a distortion of the electricity market.

An effective transitional strategy towards more cost reflective pricing options may well need some degree of bill protection but there is a need to clearly communicate the rationale and long-term goal of these changes to customers. Energetics expresses its concern that a large part of the residential customer base does not currently understand that their increasing load profile (e.g. increasing penetration and use of energy intensive appliances and equipment) is among the reasons why power prices have been rising rapidly over the last few years (as illustrated by the results of the survey conducted by the consumer advocacy Choice presented during the public forum organised by the AEMC earlier this month). There is a risk that most residential customers will not see the opportunity for them to reduce their electricity bill through the adoption of a cost-reflective tariff option and to change their consumption pattern. The implementation of an advanced metering infrastructure will not bear its full benefit and there will be limited market pull for more innovative retail products and services. There is a need to engage more openly with customers and to raise their awareness about the underlying drivers of the current price trends and ways to harness savings opportunities. Providing a consumer with both timely access to electricity consumption information and in-home displays, are part of this education process, whereas protecting consumers from the true cost of the electricity supply chain could be detrimental.

Energy efficiency measures and policies

Energetics' experience shows that designing an energy efficiency or demand management scheme or program with multiple objectives is challenging as it tends to generate complex trade-offs which can weaken the effectiveness and cost efficiency of the overall scheme or program. Energy efficiency and distributed generation have a role in peak demand reduction but measures must be targeted because of the spatial and temporal characteristics of the demand peaks. To be cost-effective, programs targeting peak demand reduction need to consider the localised and time specific nature of peak demand (i.e. it is area-specific not broad-based across a network), as

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well as the coincidence of energy conservation and distributed generation measures with system peak demand and distribution area peak demand. These elements need to be fully considered for a national energy savings initiative in order to assess the feasibility and cost effectiveness of targeting, incentivising and evaluating the impact of specific energy efficiency measures intended to reduce peak demand.

Thank you for giving us the opportunity to contribute to this Inquiry. We look forward to reading the report to be released in November.

Yours sincerely

Tony Cooper

Chief Executive Officer

Energetics Pty Ltd