

Submission to the AEMC on its Issues Paper “Power of Choice – giving consumers options in the way they use electricity” (July 2011)

Date 26th August 2011





Introduction

This document is Wesfarmers' submission to the AEMC in response to its July 2011 issues paper "Power of Choice – giving consumers options in the way they use electricity". We appreciate the opportunity to respond to the issues paper and we are pleased to be able to contribute our views in this submission.

Wesfarmers and many other entities in Australia understand that electricity demand, and in particular peak demand, is growing and that the new investment required to meet this demand will invariably lead to cost increases in electricity prices. As we have already seen significant increases in electricity prices recently due to increasing network costs, renewable energy scheme costs and an impending carbon pricing scheme, we are keen to see changes to the market and regulatory arrangements across the electricity supply chain that will enable greater demand side participation (DSP) in the National Electricity Market (NEM) that may assist with limiting new investment and hence limit associated price increases.

We consider that the AEMC has an important role to play in promoting productivity in Australia's electricity and gas industry, a role that we are keen to see the AEMC pursue with vigour to ensure, to the extent possible, equitable outcomes for all participants in Australia's energy markets.

This submission begins within a brief introduction to Wesfarmers and why Australia's energy market outcomes matter to us. This is followed by responses to applicable questions from the list of questions provided in the issues paper. Finally we provide closing comments on the paper.

About Wesfarmers and our interest in the AEMC's issues paper

Wesfarmers is a major diversified Australian public company. Our businesses span a wide cross-section of the Australian economy including retailing (where our businesses include the Coles group, Bunnings, Kmart, Target, Officeworks and Blackwoods), insurance, resources (largely coal mining) and industrial operations in energy processing and marketing, chemicals and fertilizers and industrial and safety supplies. Our annual revenue in 2010/2011 was approximately \$55 Billion, we have more than 500,000 shareholders and provide direct employment to approximately 195,000 Australians.

We currently spend over \$340m buying electricity for our retail and industrial businesses each year. While this may be a small portion of our total cost of sales, this belies its strategic significance to us and to our customers. Our retail businesses all operate in very competitive environments where supply chain efficiency and cost reduction is a continual challenge. Significant rises in the cost of doing business, such as we have seen in recent years for electricity, puts pressure on these businesses. The rising price of electricity also affects our suppliers, amongst them many of Australia's farmers, food producers and many small product and service providers. Our customers will ultimately have to bear higher prices for the goods that we provide if our internal efficiency gains are unable to keep pace with external cost increases. The AEMC will be well aware of the acute sensitivity in Australia to cost of living pressures in general, and rising electricity prices in particular.

Due to our large electricity costs and the projected increases in coming years, a number of our businesses have invested significant amounts of capital into energy efficiency measures to reduce electricity consumption and further investment in future years is planned and budgeted for.

Energy efficiency is an important consideration for all of our businesses to reduce our consumption and costs however we realise that is only one of the DSP options that can improve the efficiency of the electricity market and a major discussion in our submission will be in relation to the cost effective deployment of embedded standby generation at times of peak demand in the NEM.

Responses to specific questions raised in the issues paper

Chapter 3 Methodology and assessment

1. Chapter 3 outlines our approach to identifying “market and regulatory arrangements that enable the participation of both supply and demand side options in achieving an economically efficient demand/supply balance in the electricity market.” Do you agree with our approach?

Wesfarmers understands that the approach identified above comes from the Ministerial Council on Energy (MCE) Terms of Reference for the DSP review and is consistent with the National Electricity Objective (NEO) as stated in the National Electricity Law (NEL). Wesfarmers agree with this approach as to get a truly workable solution both supply and demand side options need to be considered and there are some regulatory changes that need to be made to allow the market forces to come into play.

2. How should the benefits of DSP be measured? Can they be accurately quantified?

Some measures of the benefits of DSP could include:

- Deferred investment in new generation and network capacity
- Demand reductions achieved on peak demand days by consumers engaging in DSP

The accurate measurement of the benefits of DSP is complex depending on the nature of the DSP option employed and whether one is looking at the micro or macro level; i.e. an impact at an individual site or meter or an overall impact on the load on the NEM.

3. What are appropriate discount rates to apply to DSP investments for the various parties across the supply chain?

Varying parties will have their own appropriate discount rates that they will apply to their DSP investments and one rate for all would not be applicable. Depending on competing capital requirements with organisations from time to time there may be different rates that apply from one project to another project at differing times.

4. Are there other issues which we should consider in our assessment process and criteria?

No specific comment to add

Chapter 4 Consumer participation and DSP opportunities

5. What are considered the drivers behind why consumers may choose to change their electricity consumption patterns? Please provide examples or evidence where appropriate.

The main drivers for changes to electricity consumption patterns are the varying rates for peak, shoulder (where applicable) and off-peak electricity use and also for trying to minimising the maximum demand achieved by a site to reduce maximum demand and capacity demand charges to a site. Whilst these factors can be considered potential drivers to shift electricity consumption from peak times if possible, it is worth noting that due to the nature of the operation of a number of the Wesfarmers businesses this shift will not always be possible. For example the main electricity consumption for a Coles supermarket is for refrigeration and air-conditioning and the consumption of these two items is very temperature dependant. As a result of this temperature dependency and the critical nature of food safety, maintaining refrigerated food within safe temperature ranges, on days of high temperatures and maximum demand in the NEM, a Coles supermarket will often reach or approach maximum demand conditions and there is little or no opportunity for DSP such as peak shifting due to the food safety requirement.

6. Chapter 4 lists some plausible DSP options that are currently used or could be used by consumers. Are there any other plausible DSP options currently used by consumers that have not been identified? Please provide description of measures and examples, where available.

One item that seems to have been missed in the issues paper is a discussion around Power Factor Correction and how poor power factor is a drain on the NEM; additional capacity is required in the generation mix and transmission and distribution networks to provide the power required at the end use; with improved power factor efficiency gains in the system can be made. In tariffs that have a kVA demand tariff; consumers are incentivised to improve their power factor to reduce their peak demand charges by improving their power factor.

7. Are there any DSP options that are currently available to consumers, but are not commonly used? If so, what are they, and why are they not commonly used (i.e. what are the barriers to their uptake)? Please provide examples and evidence if available.

The use of standby generation for peak shifting or for export back into the grid at times of peak demand on the NEM is available however there does not seem to be the correct price incentives to use this capacity in both peak shifting or export modes.

Peak shifting can decrease the maximum demand charges applied to a site, but depending on the electricity profile of the site, the seasonality of the load and the structure of the demand charges in the tariff, the incentive to deploy the generation would need to be considered on a case by case basis.

Synchronisation of embedded generators requires a much greater level of technical connection design and as such the capital investment cost is greater; it is also worth noting that each distribution company has a slightly different technical design requirement and this makes it difficult to standardise on design across a number of sites in different distribution networks. With the cost of infrastructure to synchronise the generators, and the cost to run the generators; the incentive payments available to the embedded generator owners and operators is currently not great enough to encourage the use of the generators in DSP.

8. Are there other DSP options that are not currently available to consumers, but could be available if currently available technologies, processes or information were employed (or employed more effectively) in the electricity (or a related) market?

No specific comment to add

Chapter 5 Market conditions required for efficient DSP outcomes

9. What are considered the relevant market conditions to facilitate and promote consumer take up of cost effective DSP?

Electricity rules that are open and transparent for all parties in the market that will be involved in DSP. If market rules are changed to make the market a fairer and more transparent playing field for all there will be a greater uptake of DSP from both sides of the market.

10 Are there any specific market conditions which may need to be in place to enable third parties to facilitate consumer decision making and capture the value of flexible demand? Please provide examples and evidence as appropriate.

No specific comment to add

11. What market conditions (technologies, processes, tariff structures, information etc) are needed, that are not currently employed in the electricity market, to make other DSP options available to consumers?

Changing the rules, which are too complex, to allow greater market participation in DSP. The market should be technology neutral so that all DSP options can be considered and the least cost options chosen to suit the particular situation.

Pricing

12. Do you consider retail tariffs currently reflect the costs to a retailer of supplying consumers with electricity?

No specific comment to add

13. Are any changes needed to retail price regulation to facilitate and promote take up of DSP?

No specific comment to add

14. Do the charges to retailers for use of transmission networks reflect the value of that use?

Wesfarmers has been active (both in our own capacity and also through the Energy Users Association of Australia (EUAA)) in requesting the Australian Energy Regulator (AER) and AEMC to change the National Electricity Rules and National Electricity Law in regards to the regulatory process for transmission networks to set their revenue streams. We believe that revenues requested by a number of transmission networks recently have not truly reflected actual cost and have caused significant increases in transmission prices to end users. We do not wish to elaborate on this point in this issues paper; but rather draw your attention to the fact we have been active for rule changes through other mechanisms.

Our concern is that whilst the transmission networks can continue to extract large revenue streams to invest in their networks; there is no real incentive for them to work with consumers to use DSP as a means of deferring investment in their networks. The two items seem diametrically opposed; hence the need for rule changes to also better facilitate DSP.

15. Do the charges to retailers for use of distribution networks reflect the value of that use?

Refer to Q14 above; a similar answer in relation to distribution networks as for transmission networks.

16. Do all consumer groups, including vulnerable consumers benefit from having cost reflective prices in place? If not, are any special provisions required to protect certain classes of consumers?

No specific comment to add

Information

17. To what extent do consumers understand how they can reduce their electricity bill? What information do consumers need in order to increase their understanding of how they can reduce and manage their electricity consumption and hence bills?

No specific comment to add

18. What issues are associated with provision of existing information in the market? Are there arrangements that could improve delivery of such information? If so, how and by whom?

No specific comment to add

19. Could better information be provided to consumers regarding the actual consumption of individual appliances and pieces of equipment? If so, what information could be provided and in what form?

No specific comment to add

Pricing options, products and consumer incentives

20. Are retailer and distributor business models supportive of DSP?

We can't comment on the business models of business other than own, but as noted earlier the rules need to be changed to make business models supportive of DSP.

21. What incentives are likely to encourage research and development of other parties to promote efficient DSP?

No specific comment to add

22. Are there any regulatory, cultural or organisational barriers that affect take up of DSP opportunities?

No specific comment to add

23. What form of commercial contracts/clauses are required for facilitating and promoting efficient DSP?

There needs to be greater financial incentive for all parties concerned to promote DSP. It is possible that standard DSP clauses might be useful for smaller users to provide some guidance for their decision making.

Incentives to invest and access to capital

24. Are there specific issues associated with investment in infrastructure needed for consumers to take up DSP opportunities?

No specific comment to add

25. Do you consider that the issue of split or misaligned incentives has prevented efficient investment in DSP from taking place?

No specific comment to add

26. What are potential measures for addressing any issues associated with split or misaligned incentives?

No specific comment to add

27. Are there specific issues concerning ease of access to capital for consumers and other parties?

No specific comment to add

Technology and system capability

28. What are the significant energy market challenges in optimising the value of technology and system capability to facilitate an efficient level of DSP?

No specific comment to add

29. Do current technology, metering and control devices support DSP? If not, why not, and what are considered some of the issues?

Varying technologies exist for DSP and it can be left to the market to determine the better price option for a particular application of DSP for a particular situation.

30. How can issues relating to weak and/or split incentives be addressed to ensure that the benefits of smart grid technologies are aligned and felt across the electricity supply chain, including by consumers?

No specific comment to add

31. How can pricing signals/tariff arrangements be made complementary with smart grid technologies to facilitate efficient DSP in the NEM?

No specific comment to add

32. In maximising the value of technologies, such as smart grids for DSP, what are the issues relating to consumer protection and privacy?

No specific comment to add

Chapter 6 Market and regulatory arrangements

33. To what extent do parties have appropriate incentives to put in place the systems, technologies, information flows etc that facilitate efficient DSP?

No specific comment to add

34. Are there aspects of the NEL or the Rules which prevent parties taking actions that would otherwise allow for more efficient levels of DSP?

There seem to be different sets of technical parameters required for each different transmission and distribution networks in terms of the electrical connection required for synchronisation to the grid for generators. A consistent set of rules and design parameters would allow us to come up with a design that could be approved and rolled out nationally rather than on a case by case basis; that delays the process and does not allow for the full uptake of DSP as it may otherwise with a consistent set of rules and design conditions.

35. Are there market failures which mean regulation is needed in some areas to ensure appropriate market conditions are in place?

No specific comment to add

Chapter 7 Energy efficiency measures and policies

36. What energy efficiency policies and schemes should be considered as part of this Review, i.e. as impacting on, or seeking to integrate with the NEM?

With a pending carbon price that is expected to further drive activity in the energy efficiency field, we would like to see other Federal and State based programs phased out to ease the regulatory burden on organisations and let the market drive the activities.

37. To what extent can energy efficiency policies and schemes be adopted as options for enhancing the efficiency of DSP in the NEM? What are the strengths and limitations of energy efficiency policies as a DSP option compared to other options?

No specific comment to add

38. To what extent do existing retailer obligation schemes facilitate efficient choices by consumers in their electricity use? Are there aspects of those schemes that facilitate efficient consumption choices more than others? If so, please explain.

No specific comment to add

Closing comments.

We trust that these comments are of value to the AEMC in this important DSP review. We look forward to the Directions Paper in November and will remain an active participant in the review.

Wesfarmers is aware that there are a number of complex issues in relation to DSP and not all of our thoughts can be conveyed in detail in this submission and as such we would welcome the opportunity to talk with the AEMC further about our submission.

Should you wish to contact us further please do not hesitate to contact Cameron Schuster, Sustainability Manager, Wesfarmers (CSchuster@wesfarmers.com.au or 08 0893274423) or Paul Lang, Environment Manager, Coles (paul.lang@coles.com.au or 03 9829 3110)

**Cameron Schuster,
Sustainability Manager, Wesfarmers Limited**

26 August 2011