

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

4 May 2012

Dear Mr Pierce

**RE: POWER OF CHOICE REVIEW – GIVING CONSUMERS OPTIONS IN
THE WAY THEY USE ELECTRICITY – DIRECTIONS PAPER**

CitiPower and Powercor Australia (**the Businesses**) welcome the opportunity to comment on the Australian Energy Market Commission's (AEMC) "Power of choice review – giving consumers options in the way they use electricity – Directions Paper" (**Directions Paper**) issued on 23 March 2012.

Background and context

This review of demand side participation (**DSP**) in the National Electricity Market (**NEM**) (**Stage 3 DSP Review**) follows an earlier review (**AEMC Stage 2 DSP Review**), which explicitly focused on assessing whether the National Electricity Rules (**Rules**) are a material barrier to the efficient and effective use of DSP in the NEM. This earlier review recommended that¹:

- "The Rules do not materially bias against the use of DSP in the NEM";
- "A number of aspects of the Rules could be improved to further enhance the efficient participation of the demand side in the NEM"; and
- A further review is needed to "consider the implications of the introduction of smart grid and smart meter technologies in the electricity market".

The purpose of the current Stage 3 DSP Review is to "identify market and regulatory arrangements that enable the participation of supply and demand side options in achieving economically efficient demand/supply balance in the electricity market"². "The key elements requiring further examination specifically relate to the efficient operation of price signals and regulatory arrangements for energy efficiency and demand-side management in promoting efficient DSP in the NEM"³.

¹ MCE terms of reference to the AEMC. Found at:
<http://www.aemc.gov.au/media/docs/MCE%20Terms%20of%20Reference-35e6904a-e39d-4348-8ad5-1a7970af354d-0.pdf>

² Ibid

³ Ibid

Issues

The Businesses support DSP initiatives which improve the efficiency of electricity consumption in order to reduce the cost, or improve the performance, of electricity services where they provide a viable alternative to network solutions (i.e. where they provide the least cost solutions while enabling distribution network service providers (**DNSPs**) to maintain reliability, quality and safety standards). DSP initiatives therefore have the potential to deliver benefits to end consumers through lower distribution prices.

To date, however there has been limited investment by DNSPs in DSP initiatives for a range of reasons. These reasons include:

- The uncertainty about how the AER will treat DSP capital expenditure (**capex**), which is not specifically approved in a DNSP's Distribution Determination. In particular, it is not clear whether the AER will treat DSP capex in the same way as other network related expenditure (such as reinforcement and replacement capex) by including it in the DNSP's regulatory asset base (**RAB**);
- DNSPs are responsible for the s-factor liability arising from any non-performance of non-network solutions even where they are not the proponent of the DSP initiative. The Businesses are of the view risk associated with the Service Target Performance Incentive Scheme should rest with the party best able to manage that risk and in the case of DSP, it is the DSP proponent;
- The short term focus of the Australian Energy Regulator (**AER**) in assessing DNSPs' expenditure, which focuses on "lowering prices" and thereby undermining investment in research and development (**R&D**) and innovative DSP solutions; and
- The reality that the current regulatory arrangements do not incentivise DSP investments where benefits accrue across the supply chain and can not be fully captured by the DNSP.

Attachment 1 of this submission describes the Businesses' preferred positions on each of the issues raised in the Directions Paper. In summary, the Businesses support the following positions to facilitate and promote increased DSP:

- Market mechanisms that enable DNSPs to capture part of the benefits from DSP investment that accrue to the other sectors of the disaggregated supply chain, including the generation, transmission and retail sectors. The current market arrangements do not promote coordination across the supply chain to promote efficient DSP;
- Stronger financial incentives for investing in DSP initiatives, such as embedded generation. Any incentive scheme should, however, be the subject of extensive consultation before being finalised and implemented;
- The Rules enabling DNSPs to be rewarded for investing in innovation and long term R&D;
- The Rules requiring the AER to take a long-term view of investment. This is important because the benefits of investing in DSP (e.g. IT technology

associated with smart grid) may be realised beyond a five year regulatory control period;

- Clarification that demand management capex, spent within period, will be treated in the same manner as network augmentation or replacement capex;
- The roll out of smart meters (noting that in Victoria there is already a mandated distributor led roll-out of smart meters to all households and businesses to be completed by 2013);
- The DSP proponent, rather than the DNSP, being financially responsible for the s-factor liability associated with any resultant non-performance of the DSP initiative;
- Investment in smart meter “supporting technology”, including in-house displays and web portals;
- Cost reflective tariffs and locational pricing signals, as enabled by the installation of smart meters. In Victoria, this would involve the Victorian Government removing its existing moratorium on time of use (**ToU**) tariffs; and
- Provision of information and education to consumers to assist them understand how prices are determined, their energy usage and how to manage their energy consumption better.

Closing

The Businesses would welcome the opportunity to discuss further the issues raised in this submission with the AEMC.

Should you have any further questions in relation to this submission, please do not hesitate to contact Stephanie McDougall, Manager Regulatory Projects, on (03) 9683 4518 or at smcdougall@powercor.com.au.

Yours sincerely



Brent Cleeve
MANAGER REGULATION

ATTACHMENT 1: THE BUSINESSES' DETAILED COMMENTS ON QUESTIONS RAISED IN THE DIRECTIONS PAPER

| <i>Questions posed in Directions Paper</i> | | <i>The Businesses' proposed response</i> |
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| Chapter 4 - Consumer engagement and participation | | |
| Access to energy consumption - load profile data | | |
| 1 | <i>What should be the arrangements for consumers (or third parties acting on their behalf) to access their energy data?</i> | <p>It is important that consumers are aware of the impact of their consumption and demand decisions.</p> <p>The Businesses support in home display equipment and web-portals, which coupled with AMI meters, provide households and businesses with real-time data (captured by the AMI meter) about their energy consumption. This equipment provides consumers with the information they need to better manage their energy consumption patterns and reduce their electricity bills.</p> <p>In Victoria, all households and small businesses will have a smart meter installed by 2013. In order to promote improved consumption and demand decisions the Victorian Government has committed to subsidising in home displays through the Victorian Government's Energy Saver Incentive for the first half of 2012.</p> |
| 2 | <i>Do you consider that there could be a role for an information service provider in the market as a mechanism to provide consumption data to consumers?</i> | <p>Yes, the Businesses consider that there could be a role for third party information providers to provide consumption data to consumers.</p> |

Chapter 4 - Consumer engagement and participation

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| 3 | <i>Should amendments be made to the current NER clause 7.7(a) to facilitate consumer access to consumption information? If so, how?</i> | <p>Yes, the Businesses consider that Rule amendments would be required on the basis that currently the Rules only provide market participants (i.e. DNSPs or retailers) to access to smart meter data and consumption information.</p> <p>The Businesses support Rule amendments which provide for the establishment of a “head of power” to govern third party participation in the market. The Rules should also detail:</p> <ul style="list-style-type: none">• How third parties interact with DNSPs and retailers;• Required qualifications and training of third party providers;• Consumer protection measures;• Privacy requirements;• Dispute management processes; and• Enforcement for non compliances. |
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Costs of consumption decisions

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| 4 | <i>What information provisions could be put in place to improve awareness of the costs of consumption and the use of particular appliances/equipment, so that the benefits of taking up different DSP options can be realised?</i> | <p>Web portals, or in-home display devices, provide consumers with relevant real time information, which can assist them to better understand their energy usage and manage their energy consumption.</p> <p>The introduction of smart meters that measure energy use every half hour, which include a home area network (HAN) interface allow for the connection of the in home display and web portals providing consumers with more detailed energy consumption information.</p> |
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Chapter 5 - Efficient operation of price signals

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| 5 | <i>Should network charges vary by time of use?</i> | <p>ToU tariffs are a key mechanism for encouraging the efficient use of the network as they reflect the economic cost of network provision.</p> <p>ToU tariffs would assist consumers to be informed of the economic cost of their network use through lower prices in off-peak periods compared to peak periods when the network is congested. This would assist consumers make decisions about changing their usage pattern including by investing in more energy efficient household appliances.</p> |
| 6 | <i>Should NSPs charge on a volume or capacity basis?</i> | <p>Other types of cost reflective tariffs that may assist in promoting the efficient use of the network include:</p> <ul style="list-style-type: none"> • Capacity / volume based tariffs; and • Dynamic or critical peak pricing tariffs. <p>Dynamic/ critical peak rebates could also provide signals about economic costs. These would reward consumers with a direct payment for reducing demand below a baseline level during a number of peak time periods, with their prices at other times being unaffected. This contrasts to CPP tariffs where consumers face higher prices during peak time periods in return for lower prices during other periods.</p> <p>DNSPs should have flexibility with respect to their tariff structures subject to satisfying the pricing principles set out in clause 6.18.5 of Chapter 6 of the Rules.</p> <p>Importantly, consumer responsiveness to network DNSPs tariffs is dependent on the extent to which retailers pass through the network price signal being made by DNSPs.</p> |

Chapter 5 - Efficient operation of price signals

Network pricing and incentives

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| 7 | <i>What changes are needed to market conditions to facilitate more cost-reflective network pricing?</i> | <p>The potential availability of tariff structures discussed in response to questions 5 and 6 require smart meter installation. As discussed in response to question 17, in Victoria, the Government has mandated the roll out of smart meters to all households and businesses by 2013.</p> <p>The current Victorian Government moratorium on the implementation of ToU tariffs would need to be removed in order for the benefits of cost reflective tariffs to be realised. This moratorium is in place until the end of 2013 and the Businesses understand that the Victorian Government will then undertake an annual review of the merits of retaining or lifting the moratorium after that date.</p> <p>As noted above, consumer responsiveness to network tariffs is dependent on the extent that retailers pass through the network price signals from DNSPs.</p> |
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Retail pricing and incentives

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| 8 | <i>Do retailers have the right incentives to pass through appropriate wholesale costs and network charges to customers?</i> | <p>Victoria does not regulate retail prices however most other jurisdictions do.</p> <p>If a retailer chooses to structure its prices differently to the wholesale energy costs and underlying network tariffs, there would be a risk that the two may be misaligned and the retailer would not cover its costs. Where a retailer builds a risk premium into its pricing, it potentially exposes itself to being undercut by a retailer who is prepared to take a greater commercial risk. To this end, even in an unregulated market, it is expected that retailers will structure their prices to reflect the network tariffs they pay.</p> <p>Because a consumer's final bill is determined by the structure of the retail tariff rather than the network tariff, if the retail tariff does not reflect the underlying "cost reflective" network charge then the cost reflective network pricing does not completely flow through to consumers and the potential demand response will be muted and the DSP benefits will be reduced.</p> <p>To this end, the Businesses consider that:</p> <ul style="list-style-type: none"> • Any regulatory constraints preventing retailers passing on network tariffs, in the same form as they are levied by DNSPs, should be removed as they inhibit informed choice; and • Retailers should be required to show the "unbundled" network tariff on a consumer's final bill. |
| 9 | <i>Do retailers have an incentive to minimise the costs of their customers' consumption?</i> | <p>The Businesses do not own a retail business and so are not in a position to comment. However, retailers operate in a competitive market and presumably have an incentive to set attractive prices for current and potential consumers. As a consequence they also presumably have an incentive to minimise costs.</p> |

Chapter 5 - Efficient operation of price signals

Cost reflective tariffs

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| 10 | <p><i>Would a tariff with a fixed, variable and network LRMC element as described in section 5.8 closely reflect the costs of supplying electricity?</i></p> | <p>As noted in the response to question 5, DNSPs are best placed to develop efficient tariff structures that reflect the nature of their customer base. Therefore, subject to satisfying the pricing principles under the Rules, DNSPs should have full flexibility with respect to developing their tariff structures.</p> <p>The pricing principles set out under the Rules already require DNSPs to take into account the long run marginal cost (LRMC) for the service when developing their tariffs. The purpose of this requirement is to ensure that prices signal to consumers the forward-looking costs of expanding (providing an increment in) capacity including the capital and operating costs. This ensures that at times when demand is at or near capacity levels, prices should signal the costs of expanding capacity rather than the short run marginal costs, which do not include capital related costs.</p> <p>The Businesses support LRMC as a principle rather than a tariff design component because allocating the LRMC costs of a shared network requires a high degree of averaging. Allocating the resultant “average costs” to tariffs will not provide a more efficient price signal and will result in greater cross subsidies.</p> <p>The pricing principles also require that tariffs are cost-reflective, free from cross-subsidy, equitable, simple and efficient.</p> |
| 11 | <p><i>What are the restrictions on retailers offering such a tariff?</i></p> | <p>Refer to the Businesses’ response to question 10.</p> |

Chapter 5 - Efficient operation of price signals

Potential for price signals to promote DSP

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| 12 | <i>Can efficient levels of DSP be achieved without cost-reflective prices?</i> | <p>Cost reflective pricing is a key, but not the only, mechanism for encouraging DSP.</p> <p>Consumer education is also important because in order for consumers to respond to cost reflective prices they need to understand how prices are determined and how they impact on their bill. This is important to assist consumers to make permanent changes in their network usage, such as investing in more energy efficient appliances, installing better housing insulation, or installing power factor correction devices such as capacitor banks. Assisting consumers to understand energy prices may involve the following (already undertaken by DNSPs):</p> <ul style="list-style-type: none">• Publishing the pricing proposal and statement of expected price trends,• Stakeholder engagement; and• Providing reliable information about actions they can take to reduce energy consumption costs. <p>Other mechanisms important to promoting DSP uptake include:</p> <ul style="list-style-type: none">• Power factor correction⁴;• Load management:<ul style="list-style-type: none">○ Direct load management whereby the DNSP controls customer's equipment, such as air-conditioning units or pool pumps;○ Voluntary load control whereby a DNSP pays (or discounts) the consumer to curtail energy consumption during peak periods.• Embedded generation – contract payment to generators connected directly to the distribution network to inject energy into the network close to consumers' load to provide network support (if required) and / or additional generating capacity during periods of peak demand. This can reduce, defer or avoid the need for network augmentations. |
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⁴ Improvements in a customer's power factor closer to unity (i.e. 1) to reduce the total electricity current carried by the electricity distribution network and consequently reduce network utilisation and line losses. Accordingly, power factor correction results in more efficient distribution of electricity and requires less infrastructure while leaving energy consumption of appliances unaffected.

Chapter 5 - Efficient operation of price signals

Market conditions required for DSP

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| 13 | <i>What other market conditions need to change to enable cost-reflective prices? Will the benefits from improving the cost reflectivity of price signals outweigh the costs of the actions to improve them?</i> | Refer to the Businesses' response to question 12. |
| 14 | <i>Are changes to the current regulatory arrangements required to provide stronger incentives on NSPs and/or retailers to align price with cost?</i> | <p>The current regulatory framework provides DNSPs with adequate flexibility to develop cost reflective tariffs to recover their network costs.</p> <p>As noted in response to question 10, if a retailer chooses to structure its prices differently to the wholesale energy costs and underlying network tariffs, there would be a risk that the two may be misaligned and the retailer would not cover its costs. Where a retailer builds a risk premium into its pricing, it potentially exposes itself to being undercut by a retailer who is prepared to take a greater commercial risk. To this end, even in an unregulated market, it is expected that retailers will structure their prices to reflect the network tariffs they pay.</p> |

Chapter 6 - Technology and system capability

Supporting efficient investment decisions in DSP technology

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| 15 | <i>Are there any practical additional mechanisms that could help alleviate the barriers to consumers investing in DSP technology?</i> | <p>The following could assist consumers better understand and manage their energy use:</p> <ul style="list-style-type: none">• The roll out of interval meters;• Cost reflective tariffs;• In home displays and/or web portals;• Education on appliance energy consumption;• Smart appliances; and• Smart meter load limiting devices that warn consumers when they reach certain levels of consumption/utilisation. |
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Chapter 6 - Technology and system capability

Commercial driven investment in DSP technology

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| 17 | <i>What amendments to the metering arrangements in the NEM are required to facilitate commercial investment in metering technology which supports time sensitive tariffs?</i> | <p>In Victoria, the Government has mandated a distributor roll out of AMI meters to all households and businesses by 2013. AMI meters have many capabilities that the accumulation meters do not have. Smart meters will have the ability to:</p> <ul style="list-style-type: none">• Record electricity consumption by the half hour;• Be remotely read so a meter reader does not need to physically visit the premises;• Provide greater detail around consumption data;• Enable remote electricity connection, such as when a consumer moves into a new home; and• Help DNSPs to detect and locate outages and restore supply more quickly. <p>The Businesses note that the Victorian Government has indicated its intention to not renew the existing derogation to Chapter 7 of the Rules, which provides DNSPs with exclusivity for meter provision, installation and maintenance and for remote data collection and communication until 2013.</p> <p>The Businesses consider that any decision to not renew the derogation should be subject to a net benefits assessment and should satisfy the National Electricity Objective (NEO)⁵. This is critical to promoting investment certainty and the long term interests of electricity consumers with respect to price, quality, reliability, safety and security.</p> |
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Consumer choice in metering capability

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| 18 | <i>Are the current arrangements sufficient to facilitate a consumer's decision to install their own meter as a revenue meter? If not, what changes to the current arrangements are required?</i> | Refer to the Businesses response to question 17. |
| 19 | <i>Are any amendments to the arrangements required to encourage either the network businesses or retailers to invest in metering capability in order to support DSP options?</i> | |

⁵ Under the National Electricity Law (NEL)

Chapter 6 - Technology and system capability

Optimising the value of technology and system capability

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| 20 | <p><i>Are there aspects to the arrangements regarding the integration of DSP technologies into energy networks that require further consideration under this review?</i></p> | <p>While the Businesses support the connection of embedded generation to their distribution systems, they are constrained in approving many of these applications because of increased:</p> <ul style="list-style-type: none">• Risks of the Businesses reaching technical limitations on their distribution systems known as fault level limitations;• Limitations on existing rural distribution system infrastructure resulting in potential high cost connections, limited connections or the connections not proceeding at all; and• Unwillingness of embedded generation proponents to meet the costs of rectifying these network constraints. <p>In order to reliably, safely and securely facilitate the future connection of embedded generation the Businesses can:</p> <ul style="list-style-type: none">• Require the proponents to ensure that their generation unit will not adversely impact on the technical requirements. This requirement would impose significant additional costs on the proponents, which could result in the project not being financially viable and therefore prevent it from proceeding; or• Augment or replace its existing distribution system equipment to safely and securely allow increased connection of embedded generation in areas of the distribution systems that are being pushed towards their design limits. The DNSPs should be able to recover these costs through its Regulatory Proposal. <p>The second option noted above would facilitate “open access” for embedded generation customers. The cost of network investment required to facilitate “open access” could be recovered from embedded generators seeking parallel connection to the network with name plate ratings above 100kW through a per kW charge. This charge would relate to investment to ensure compliance with applicable network standards following connection rather than the conveyance or transfer of electricity to embedded generators.</p> <p>Alternatively, the proponents may operate independently of the distribution system. However, this could affect and limit the benefit such a project may have.</p> <p>The Businesses note that integration of embedded generation into the distribution network is consistent with the move towards a “smart grid” future. The physical components of “smart grid” include:</p> <ul style="list-style-type: none">• Large scale renewable energy sources;• Advanced telecommunications and information technology applications such as meters, sensors, digital controls to automate, monitor and control the two-way flow of electricity;• Small scale embedded renewable energy sources; and• “Smart” appliances in the home. |
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Chapter 7 - Supply chain interactions

Distribution of DSP impacts across the supply chain

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| 21 | <p><i>Can you provide a practical example of a DSP option which could deliver a net benefit to the market and also to the various parts of a supply chain? What are the reasons for such opportunities not being captured today?</i></p> | <p>Advanced Metering Infrastructure (AMI) roll out is an example of DSP investment that delivers net benefit to the market (i.e. benefits accrue across the supply chain).</p> <p>This was recognised by the Victorian Government, which intervened to ensure that:</p> <ul style="list-style-type: none"> • The investment was undertaken by the sector that was best placed to undertake the investment – i.e. the distribution sector; and • DNSPs could recover the full costs of this investment in recognition that benefits from this investment accrue to all sectors of the supply chain. |
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Co-ordination across the supply chain

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| 22 | <p><i>How do the current market arrangements promote co-ordination across the supply chain to promote efficient DSP? What potential improvements should be considered?</i></p> | <p>The current market arrangements do not promote coordination across the supply change to promote efficient DSP.</p> <p>Under the current market structure (vertical disaggregation between sectors), each sector of the supply chain assesses the risks and cost-benefit of investment in DSP from their own perspective only, albeit that benefits from the investment may accrue to other sectors of the supply chain.</p> <p>The Businesses support the following as the most effective way of driving investment in DSP by DNSPs:</p> <ul style="list-style-type: none"> • A financial incentive approach to promoting greater uptake of DSP rather than through regulatory obligations. As discussed below, the Businesses support incentive regulation, however consider that any proposed incentive scheme should be the subject of extensive consultation before being finalised and implemented; • Rewarding innovation and R&D; and • The AER and the Rules adopting a long-term view of investment. This is important because the benefits of investment in DSP (i.e. IT technology associated with smart grid) may be realised beyond the five year regulatory control period. |
| 23 | <p><i>Do you consider that there is inconsistency between how the wholesale and market sectors value DSP impacts? If so, is this a material problem to be addressed?</i></p> | <p>Refer to response for question 23.</p> |

Chapter 7 - Supply chain interactions

Effectiveness of the supply chain at capturing efficient DSP opportunities

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| 24 | <i>Can market mechanisms be improved to facilitate supply chain interactions for efficient DSP? If so, what options should be considered by this review and what considerations should be taken into account?</i> | The Businesses support market mechanisms that enable the full benefits of managing peak demand to be realised across the disaggregated supply chain. |
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Role of cost reflective pricing

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| 25 | <i>Would fully cost-reflective price signals enable the supply chain to act in a co-ordinated manner towards efficient DSP opportunities or would additional amendments be needed?</i> | <p>Peak demand at any point in the supply chain drives the long term cost of the infrastructure required. Accordingly there are potential benefits to all sectors of the supply chain from cost-reflective price signals, to the extent that consumers respond by reducing their demand in peak periods, albeit that these benefits may not be perfectly correlated across all sectors⁶:</p> <ul style="list-style-type: none"> • Generation – A reduction in peak demand would reduce the requirement for additional investment in peaking plant, increase the utilisation of the existing portfolio and more broadly change the load shape into the future, which can change the number and types of plants needed to meet the forecast load; • Transmission networks – Over the longer term, a reduction in peak demand would defer or avoidance network expansion investment, leading to a lower overall cost of energy supply; • Distribution networks – Reduction in peak demand could enable DNSPs to defer or avoid network expansion investment over the longer term; and • Retail – DSP can substitute for contract cover, which can be useful at times when the contract market is tight. The potential economic value to be gained at the retail level from DSP initiatives essentially arises from the reduced costs of the risk management in circumstances where the underlying risks themselves have declined due to lower or more predictable wholesale market price volatility. <p>Under the National Electricity Customer Framework (NECF) only retailers may offer tariffs directly to small customers. Therefore, all cost reflective tariff offers must be made by the retailer, not the DNSP. However, DNSPs may offer a rebate or cash payment directly to customers, for reducing their demand during peak times with no effect on tariffs.</p> |
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⁶ There is a weak correlation between peak usage on the distribution network (locational constraints) and energy market peaks. However, the correlation is stronger at a transmission level where locational peak usage is aggregated over a wider geographical area than for distribution. Peak price events in the wholesale market are often driven by interconnector or transmission congestion rather than peaks in energy consumption.

| Chapter 7 - Supply chain interactions | | |
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| Co-ordination across the supply chain | | |
| 27 | <i>What are your views on possible approaches to achieving co-ordination across the market participants in the supply chain?</i> | Refer to the Businesses' response to question 8. |
| Value of DSP benefits to the market | | |
| 30 | <i>What should be the approach to quantify the value of DSP options?</i> | <p>As the supply side of the National Electricity Market is vertically disaggregated, each sector generally only considers the economic benefits from undertaking DSP that would accrue to them rather than the entire value chain benefit.</p> <p>The Businesses currently value of DSP options based on network deferral savings that they would achieve and the DSP option would be chosen where it provides the least cost solution while maintaining reliability, quality and safety standards.</p> |
| Methods to forecast the impacts of DSP option | | |
| 29 | <i>Should standardised, common methods to forecast the impacts of DSP be developed? Is there a need for common approaches between network and operational planning?</i> | <p>Each sector of the supply chain will value DSP options differently depending on the benefit that accrues specifically to them.</p> <p>DNSPs should have flexibility to determine how they measure the impact of DSP investment.</p> |
| Single actor option | | |
| 30 | <i>If the required co-ordination across the supply chain cannot be achieved, should a market participant be assigned with the responsibility to procure DSP options? If so, what issues need to be considered in the design of such an approach?</i> | <p>This should be addressed on a case by case basis as:</p> <ul style="list-style-type: none"> • In some cases (e.g. AMI rollout in Victoria), limited to instances of market failure, it may be appropriate for DSP investment to be assigned to a specific sector; and • In all other cases, DSP investment should be left to the market to resolve. |

Chapter 9 – Networks

Profit incentives on network businesses

36 *Do you consider that the current regulatory arrangements could prevent network businesses from pursuing efficient DSP projects, which could contribute to achieving a more economically efficient demand/supply balance in the electricity market?*

As noted, the vertically disaggregated nature of the NEM means no one sector of the supply chain can capture the full benefits of DSP.

The Businesses consider that the following regulatory arrangements place both obligations and incentives on DNSPs to consider non-network options when engaging in further investment in their networks. These include:

- The Chapter 6 Rules;
- The AER’s demand management incentive scheme (**DMIS**)
- The Regulatory Investment Test – Distribution (**RIT-D**)

Further, in Victoria DNSPs also publish an annual planning report “Distribution System Planning Report” (**DSPR**). This provides an opportunity for interested parties to express interest to the Businesses about non-network alternatives. In particular, the DSPR:

- Provides a description of feasible options for meeting forecast demand and network constraints including opportunities for embedded generation and demand management where possible;
- Identifies and describes the preferred options for meeting forecast demand including the estimated project cost; and
- Invites proponents of non-network solutions to respond to the DSPR.

Despite this, DNSPs only undertake DSP projects where they are viable. As noted, DNSPs can only capture part of the benefit of DSP – there is currently no way for DNSPs to capture benefit accruing to the other sectors of the supply chain. DNSPs’ investment is constrained to the extent that there is uncertainty about what expenditure the AER will approve and roll into the DNSP’s RAB.

| Chapter 9 – Networks | | |
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| 37 | <i>What options for reforming the current regulatory arrangements should be explored under the next stage of the review?</i> | <p>Changes that would facilitate DSP uptake include:</p> <ul style="list-style-type: none"> • DSP proponents, rather than DNSP, taking on s-factor liability. This is because the performance of a non-network solution that is provided by a proponent other than the DNSP is not within the DNSPs control and therefore DNSPs should suffer no liability under the STPIS for non-performance; • The AER and the Rules rewarding DNSPs for investment in innovation and R&D; • The AER and the Rules adopting a long-term view of investment. This is important because the benefits of investment in DSP (i.e. IT technology associated with smart grid) may be realised beyond the five year regulatory control period; • The introduction of greater financial incentives to promoting uptake of DSP. This is discussed in response to question 47 below; and • Removing the Victorian Government’s moratorium on ToU tariffs. |
| 38 | <i>Do the current arrangements need to clarify distribution network businesses’ involvement in distributed generation and if so, how?</i> | The AER should clarify that demand management capex spent within-period, but which has not been approved in the price review process, will be included in the RAB. This would ensure that demand management capex is treated in the same way as network augmentation or replacement capex. |
| Research into estimating potential demand reduction of non-contracted DSP | | |
| 39 | <i>How should network businesses estimate the potential demand impacts associated with DSP? Should there be consistency in approach across the business and should arrangements provide guidance on how to do such estimation?</i> | DNSPs would only take into account demand impacts from DSP initiatives that have been undertaken where the DSP initiative has resulted in demonstrated firm load over a period of time. |
| 40 | <i>What should be the framework for recognising the impacts of DSP in the forecasting methodologies used during the regulatory revenue determination process?</i> | |
| Exemption from Service Standard Incentive Schemes | | |
| 41 | <i>Is it appropriate for network businesses to be exempt from the service standard incentive scheme during the initial development phase of DSP projects? What factors need to be taken into consideration in designing such an exemption?</i> | DSP projects typically offer lower reliability than network options. As noted in response to question 37 above, the performance of a non-network solution that is provided by a proponent other than the DNSP is not within the DNSPs control and therefore the DNSP should not suffer liability under the STPIS for non-performance. |

Chapter 9 – Networks

Engagement with consumers

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| 42 | Should network businesses play a greater role in informing consumers about the potential benefits from DSP and various DSP products? If so, how should they do so? | The Businesses support information provision to consumers. As noted in response to question 36 the regulatory arrangements place both obligations and incentives on DNSPs to consider and consult on non-network options when engaging in further investment in their networks. |
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Chapter 11 - Distributed generation

DNSP Incentives schemes for DG

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| 47 | What incentives should be provided to DNSPs to ensure that they support DG projects? Is there merit in the proposal for DG proponents to pay DNSPs a fee-for-service to connect a DG installation? If so, how should this proposal be applied? | <p>The Businesses support the introduction of higher powered financial incentives to promote greater uptake of DSP, such as connection of embedded generation.</p> <p>The Businesses consider, however, that any proposed incentive scheme should be the subject of extensive consultation before it is finalised and implemented. The Businesses note that SP AusNet and other DNSPs have proposed incentive schemes in their responses to the AEMC's Issues Paper on current Stage 3 DSP Review.</p> |
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Metering and settlement arrangements for DG

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| 49 | <i>Are amendments to the current market arrangements required to facilitate DSP contracts which enable the DSP provider to sell its services to any party? If so, what amendments are appropriate?</i> | <p>The installation of smart meters enables third parties to also offer services directly to consumers. Smart meters enable customers to contract with their retailer, DNSP, or a third party DSP aggregator to reduce their demand for the purposes of mitigating network capacity constraints, or to avoid energy purchases from the wholesale pool during price spikes.</p> <p>Refer also to the response to question 3.</p> |
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Chapter 11 - Distributed generation

Maximising the export value of DG to address peak demand

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Should there be supplementary provisions to the arrangements governing feed in tariff payments to encourage such consumers who have micro generation units to maximise their export at times that enable deferment of network augmentation? If so, what are possible options to achieve this?

Feed-in-tariffs are currently the subject of review in the context of the Federal Government's Clean Energy Legislative package.

If feed-in-tariffs are to be retained then the Businesses support the use of market-based gross metered pricing for the following reasons.

The network component of a customer's bill predominantly relates to the sunk costs of providing the physical assets to deliver electricity. Small scale generation does not necessarily alleviate the need for investment in the network because:

- It may not provide a "firm" alternative; and
- DNSPs increasingly need to undertake deep network augmentation to facilitate the connection of small scale generation due to capacity constraints.

Accordingly, there is generally not a significant deferment of network investment (and associated reduction in network investment during a regulatory control period) arising from increased investment in small scale generation to the customer base.

Under a 'net metered' feed-in-tariff scheme, a small scale generator is able to shift a portion of costs to non-generating customers through reduced network charges that are eventually recovered from non-generating customers.

By contrast, under a gross metering approach the customer is required to contribute to network costs for the times they are drawing supply from the network. This approach eliminates cross-subsidies as the customer is required to contribute to network costs for the times they are drawing supply from the network. In limited circumstances, gross metering may involve replacement of meters. If this is the case, the costs would be marginal compared to the cross subsidy inherent in net feed-in-tariff.

Chapter 12 - Energy efficiency regulatory measures that integrate with or impact on the NEM

Energy efficiency policies and measures that impact on, or integrate with, the NEM

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| 51 | <i>What do you consider is the role for regulatory energy efficiency policies and measures in the context of facilitating uptake of cost effective DSP in the electricity market?</i> | <p>The Businesses support energy efficiency and other environmental policies, however note that they are complementary to, rather than part of, DSP. This is because they lack the flexibility in locational and timing signals to deliver the most cost effective DSP responses, which are targeted towards the constrained areas of networks at the right time to appropriately capture network infrastructure cost savings benefits.</p> <p>Energy efficiency policies should sit outside the economic regulatory framework for distribution network services.</p> |
| 52 | <i>In your view, do consumers consider energy efficiency measures separately to DSP, or do they consider all actions as part of managing consumption and hence controlling electricity costs?</i> | <p>Energy efficiency may not necessarily lead to better peak demand outcomes as discussed in response to question 51. The Businesses consider that it is unlikely that consumers fully understand the difference in effect of energy efficiency and DSP measures.</p> <p>The Businesses support consumer education in relation to the difference between energy efficiency policies and schemes as distinct from policies and incentives focused directly on peak network demand.</p> |
| 53 | <i>What are the elements for a best practice model or approach for energy efficiency policy to facilitate efficient investment in, and use of, DSP in the electricity market?</i> | <p>The Businesses support, in principle, the premise that energy efficiency policies have the ability to complement DSP measures in contributing to greenhouse gas (GHG) emission reduction outcomes, creating infrastructure cost savings and delivering downstream cost benefits to consumers. However, when adopted at the national level they can only be considered as a complementary and secondary approach to achieving cost-effective DSP outcomes.</p> <p>Energy efficiency policies should sit outside the economic regulatory framework for distribution network services.</p> |