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Australian Energy Market Commission
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Dear Mr Pierce

John,

AEMC Draft Report EPR0022: Power of Choice – giving options in the way they use electricity

Ausgrid has been actively participating in the AEMC's Power of Choice review process and welcomes the opportunity to provide input into the proposed reforms to facilitate efficient demand side participation (DSP) that are outlined in the AEMC's Draft Report: *Power of Choice – giving consumers options in the way they use electricity* ("Draft Report").

Ausgrid broadly supports the key themes and principles contained in the AEMC's draft report. In particular, we support the focus of the AEMC's proposed reforms which are aimed at unlocking the benefits of demand side participation (DSP) by:

- enabling consumers to see and access the value of DSP; and
- enabling the market to support consumer choice through better incentives to capture the value of DSP options and through decreasing transaction costs and information barriers.

Whilst generally supportive of the principles underpinning the AEMC's draft recommendations, Ausgrid has sought to provide feedback on aspects of the recommendations which may not lead to the most efficient outcomes or that we consider may require further clarification and consideration. Specifically, we have focused our comments on efficient and flexible price signals, improving distribution network incentives to undertake DSP programs and facilitating consumer and third party participation.

Please find attached to this letter Ausgrid's submission responding to the AEMC's conclusions and questions. We hope that providing this information will assist the AEMC in developing recommendations to the Standing Council on Energy and Resources (SCER) that facilitate efficient DSP and promote the achievement of the National Electricity Objective (NEO).

If you have any queries or wish to discuss this matter in further detail please contact Keith Yates on 9269 4171.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Trevor Armstrong", with a stylized flourish at the end.

TREVOR ARMSTRONG
Chief Operating Officer

1. Key messages

This submission responds to the Australian Energy Market Commission (AEMC)'s Draft Report for the Power of Choice review.

This section outlines Ausgrid's key messages in response to the AEMC's recommendations contained in the Draft Report *Power of choice – giving consumers options in the way they use electricity*. Ausgrid broadly supports the AEMC's two key ways of facilitating efficient DSP in the National Electricity Market (NEM), that is, by:

- Enabling consumers to see and access the value of taking up demand side options; and
- Enabling the market to support consumer choice.

We acknowledge the AEMC's intent that the proposed changes to the existing market and regulatory arrangements are designed to "enable the market to use the demand side [participation (DSP)] to meet consumer needs as efficiently as possible."

In order to meet consumer needs in this regard, it is fundamental that the reforms facilitate greater customer participation and provide customers with the ability to determine the energy services that they want. The regulatory arrangements that are established need to allow for efficient outcomes to be achieved under a broad range of scenarios and not, unintentionally, create barriers to innovation or participation by some parties. The amount of regulatory intervention also needs to be commensurate with the potential value that can be delivered by DSP to the NEM and consumers.

Whilst generally supportive of the key themes and principles contained in the AEMC's draft report, we have identified a number of areas which could benefit from further clarification or consideration.

More detailed responses on the key messages can be found in section 2 of our submission, where we have sought to provide feedback on the AEMC's specific recommendations and questions.

1.1 Efficient and Flexible Price Signal

Transitioning to more cost reflective pricing

- Phasing in cost reflective network pricing is one component of a broader solution to facilitate more DSP in the market.
- Enabling customer choice is appropriate in the context of retail energy and demand side participation (DSP). However, customer choice of tariffs in the context of a monopoly network business with regulated revenue requirements, has a number of ramifications for both price and revenue stability that need to be considered. These are explored in more detail in response to the AEMC's questions.
- Ausgrid has approximately 330,000 residential customers and 65,000 small* business customers on time-based and capacity tariffs. There are a number of implementation and legacy issues associated with mandating reversion to non-time based tariffs and providing customer tariff choice in the network context.
- If a phased approach to transitioning to cost-reflective pricing is adopted in the NEM, clear definition of the bands, transition timeframes and options available to customers is required to minimise the risk of networks (and ultimately customers) bearing inefficient costs and to ensure unmanageable revenue risk is not imposed on distribution businesses.

* Small business customers use less than 40MWh per annum.

- Analysis undertaken by Ausgrid does not support the assumption that low income customers with high energy consumption are not highly responsive to price signals. Rather, our analysis indicates that many can derive significant benefits from time-varying pricing. There is also no consistent correlation between income and energy usage.
- It is important that any refinement and strengthening of distribution pricing principles do not limit tariff flexibility or inadvertently hinder innovative DSP options.

Metering (enabling technology)

- Technology plays a central role in communicating consumption information and price signals to customers. Some level of regulatory mandate on the deployment of enabling technology - such as interval meters (at the level of present Type 5 metering) - is appropriate to support DSP.
- Mandating an interval meter with remote communications capability may prove a costly obligation at this time. It is not clear that net benefits to consumers could be provided in the short to medium term. However, minimum functionality requirements could include an interval meter with an easy upgrade path to remote communication as well as the provision of a real-time customer enablement port. This allows for future installation of communications and interface to other devices.
- While greater competition in the provision of metering services for small consumers may provide some benefits, it could lead to inefficient asset management over the longer term and additional costs. This would mean that the net costs might outweigh the benefits and result in higher costs to consumers over the longer term.
- Market arrangements need to protect investments in enabling technology. Without this, the nature and/or scale of investments in such technology may be inhibited.

1.2 Improving Distribution Network Incentives

- Ausgrid continues to support reform of the current incentive scheme for distribution businesses to undertake efficient DSP projects.
- The design of the incentive scheme needs to avoid becoming too complex to interpret, implement and/or administer – to prevent the scheme itself becoming a barrier to undertaking DSP programs.
- When DSP projects deliver a net cost saving, there needs to be a fair sharing of benefits between distribution businesses and customers.
- There would be benefit in the Rules including the overall objectives of the incentive scheme, and providing more guidance to the AER around details such as possible application mechanisms.
- The criteria for the payment of incentives should be clearly identified in regulatory determinations by the AER. The longer term benefits should be considered in defining the value.
- The recovery of forgone revenue should continue to be included in the incentive scheme to remove any potential disincentive for DSP programs. Its current application should be expanded to cover DSP tariff based projects.
- Ausgrid agrees that it is not appropriate to set broad targets for demand reductions for distribution businesses.

- Separate provisions for an innovation allowance within the incentive scheme are an important component of a functioning scheme. Relying solely on government sources for the funding of DM-related innovation is likely to result in sub-optimal outcomes.
- The Rules need to be clarified to enable the AER to consider potential non-network benefits when assessing the efficiency of network expenditure allowances. Similar provisions need to be available to distributors in developing their regulatory proposals.
- Concerns regarding distribution network businesses owning and operating distributed generation assets can be addressed by appropriate defined ring fencing principles in a national guideline, currently under development by the AER. This will allow distribution network businesses to continue to utilise DG to deliver net benefits to consumers.
- Once any changes are implemented, the market should have time to adjust and transition to the new environment. There should be ongoing monitoring and evaluation of the market.

1.3 Facilitating consumer and third party participation

Facilitating consumer access to (electricity consumption) information

- Cost reflective prices that reward changes in consumer usage behaviour need to be accompanied by consumers having access to their electricity consumption information. All consumers should have a right to access and control the sharing of their energy and metering data in accordance with privacy, security and other consumer protection arrangements.
- Distribution businesses or third parties (who can demonstrate informed consent from a customer) should not be prevented from providing meter data to customers directly.
- The minimum format for metering data should be "raw" data with minimal interpretation, provided electronically. This enables the development of other services or products by service providers.

Roles of parties to engage with consumers

- We support and encourage an ongoing role for distribution network businesses in building consumer energy literacy and engaging directly with consumers to offer DSP network management solutions.
- The annual tariff setting process is a useful opportunity to educate consumers, retailers and other parties on cost reflective pricing.
- Distribution network businesses are in a strong position to operate DSP information programs and deliver DSP products directly to customers over the longer term. Excluding distribution businesses from directly contracting with residential and small consumers to deliver DSP network management services and programs is unlikely to deliver the optimum DSP in the NEM.
- Due to the localised nature of network DSP offerings, and the generally broader nature of retail and third party DSP services, retailer and distributor services are likely to be complementary to, rather than substitutes for, one another.
- The establishment of national ring-fencing guidelines could be the mechanism for ensuring that parties are able to operate in the provision of DSP products or programs under the same market conditions.

2. Response to AEMC recommendations and questions

AEMC DRAFT RECOMMENDATIONS

2.3.1 Timely and accessible energy and metering data to consumers

We propose that changes are made to:

- Chapter 7.7 (a) of the NER to clarify the requirements on a retailer when consumers request access to their energy and metering data. This would include provisions relating to the format and structure of data to be provided; the timeframes for delivery; and fees that can be charged.
- Chapter 7 of the NER to require, at a minimum, a retailer to provide residential and small businesses consumers with information about their electricity consumption load profile. There may be a need to amend the NECF to ensure consistency of arrangements.

2.3.2 Transfer of energy and metering data to authorised consumer agents

- We propose that changes are made to Chapter 7.7 (a) of the NER to enable agents, acting on behalf of consumers, to access consumers' energy and metering data directly from a retailer. This would include requirements on a retailer to provide consumers' energy and metering data to an authorised consumer's agent (third party), following explicit informed consent.

Facilitating consumer access to information

Ausgrid supports the principle that all consumers should have a right to access and control the sharing of their energy and metering data in accordance with privacy, security and other consumer protection arrangements.

We endorse the AEMC's proposed clarification of Chapter 7 of the National Electricity Rules (NER), however we believe that there would be benefit in further clarifying clause 7.7(a) to reflect that a customer is able to access its meter data directly from a distribution business or Meter Data Provider (MDP), should they choose to do so. This would better achieve the AEMC's overarching policy intention, as well as align distribution network service providers' (DNSPs') obligations under Chapter 7 with DNSP obligations to customers under the National Energy Retail Rules (NERR), specifically section 86.¹

The need for clarification is supported by the Australian Energy Regulator (AER) in its compliance bulletin regarding confidentiality requirements for energy, metering and NMI standing data. In its compliance bulletin the AER determined that while end users are entitled to energy and metering data from their metering installation, the NER prescribes that access is to be upon request to the financially responsible market participant (FRMP), who is typically a retailer.² Notwithstanding the policy intent for end users to access their energy data or metering data, the AER considers that, where the FRMP is not a party to the request, DNSPs are currently at risk of contravening the NER by providing end users with access to that data.³ The AER further considered that the act of DNSP's binding home area networks (HANs) or In-home displays (IHDs) to smart meters or customers using DNSP web portals is providing access to energy data in contravention of the NER.

Ausgrid believes that clarification of clause 7.7(a) will help improve the timeliness in which consumers receive their data as well as facilitate consumer choice in data is accessed.

¹ Section 86 of the NERR provides that "a distributor must, on request by a customer or a customer's retailer provide information about the customer's energy consumption or the distributor's charges, but information requested more than once in any 12 month period may be provided subject to a reasonable charge."

² Refer to AER Compliance Bulletin No. 8 – Confidentiality requirements for energy, metering and NMI standing data, p 9.

³ Ibid.

Form of data and timeframes for delivery

Ausgrid agrees with the AEMC's view, that the minimum format for metering data should be "raw" data with minimal interpretation. We believe that prescribing this as a minimum requirement in the NER is a cost effective way of ensuring that customers receive timely access to their data. In our view, the development of more sophisticated analytical presentation is something best left open to the market to develop rather than prescribing in the NER. This will allow market participants to provide a range of product offerings that will enable customers to select the product offering that best suits their individual needs and circumstances.

Whilst Ausgrid's view is that more data in the marketplace is generally preferable, generalised aggregated data may be of little value or misleading to customers given the diversity of individual consumer profiles. We would suggest that if an accumulation meter customer would like more information on their energy usage they should arrange to have their accumulation meter replaced with an interval meter rather than being provided with the net system load profile (NSLP) of their distribution area. This is because NSLP data may be of limited value to the customer given that the data is unlikely to accurately reflect their particular energy usage patterns.⁴

Ausgrid understands that typically retailers intend to be a 'one stop shop' for all their customers' energy related needs. Given that customers' requests for interval data will likely be for the purposes of obtaining third party advice on energy related matters, there may be limited motivation for the retailer to provide interval data in a timely manner. To address this potential issue, we recommend that the AEMC consider including a requirement for retailer's to report their performance in supplying customer's interval data.

Transfer of energy and metering data to authorised consumer agent

Ausgrid supports the AEMC's proposed amendments to Chapter 7 of the NER to allow authorised consumer agents to access consumer energy and metering data on behalf of consumers. However, consistent with our position above, we think that further amendments to Chapter 7.7(a) are required to enable authorised consumer agents to access consumer metering data directly from DNSPs or MDPs.

It is important that any amendment to allow authorised consumer agents to access consumer information should also include clear provisions on how informed consent from the consumer is to be demonstrated.

1. What should be the minimum standard form and structure of energy and metering data supplied to consumers (or their agents)? Should these arrangements differentiate between consumer sectors (i.e. industrial/ commercial and residential)?

As noted above, Ausgrid believes that the minimum form of data should be "raw" data. This may be something basic like a comma separated value (CSV) extract of all interval data, with identifiers for substituted data and a summary showing monthly totals. In our view, further customisation or sophistication in the presentation of data (beyond the network tariff) should be left to the market to develop rather than mandated in the rules.

We note that several standard forms already exist internationally, which may help inform the AEMC's views on appropriate arrangements for the NEM. For instance, the AEMC may consider leveraging the 'Green Button' data standard in the United States.⁵ Leveraging from any existing format such as the 'Green Button' data standard could facilitate access to competitive and innovative products/solutions that are already available in other markets.

⁴ Ausgrid's experience is that individual customer consumption rarely looks like the average NSLP data due to the heterogenic nature of customer's electricity usage.

⁵ See <http://www.greenbuttondata.org/>. Green Button facilitates the flow of interval data. We note that a large number of utilities have signed up and over 80 application vendors have developed/are developing consumer-orientated services.

2. When do you think it is appropriate for a retailer (or responsible party) to charge a fee for supplying energy and metering data to consumers or their agents?

Ausgrid supports the view that consumers should be able to access their consumption data or raw data at no additional cost. Retailers may request a special meter read if the customer wants a tariff analysis and does not want to wait until the next schedule read date (NSRD). Under such circumstances it would be appropriate to charge a fee to recover the additional costs to the DNSP's in supplying the special meter read for the customer.

A fee is also likely to be appropriate where non-standard or more sophisticated data profiles are required or where data is requested more than once over a standard billing period.

AEMC DRAFT RECOMMENDATION

2.3.3 Market information to develop DSP products and services

We propose that changes are made to the NER to require AEMO to publish market information on representative consumer sector load profiles.

Customer load research can be useful information and Ausgrid would support AEMO or any other market participants' research into this area. Raw information can already be used by market participants' for business related purposes including research into DSP. However, without supporting customer information, such as building type and customer type (e.g. business activity or household size), the value of load profiles on their own is diminished.

Previous studies by Ausgrid have shown a large variation in electricity load profiles for individual customers, even within the same customer segment. Generalised or averaged load profile data may be of value in some instances but many DSP products and services are quite specific to certain customer segments where generalised or averaged data across a whole customer segment (e.g. residential versus business) may be of limited value. The ability of AEMO or any other market participant in providing detailed information on various customer segment load profiles may be quite difficult and may involve significant additional costs.

Ausgrid suggests that careful consideration be given to the range of market information options that could be published and the associated costs and benefits prior to this recommendation being implemented.

3. Do you agree that general market information should be published on consumer segment load profiles to inform the development of DSP products and services to consumers?

As previously noted, generalised or averaged data may be little use in developing DSP products and services without additional information. In addition, publishing consumer segment load profiles has the potential to be misleading due to the diversity of individual consumer load profiles and sample bias.

4. Is AEMO the appropriate body to publish such information, or should each DNSP be required to provide such information particularly where data will be at the feeder level where accumulation meters are installed?

If the intended use of the data is for energy service providers to develop product offerings, then Ausgrid's view is that AEMO is the appropriate party to publish such information, as it has all the data and is able to do state and regional comparisons. However, as noted above, our view is that there is limited value in publishing generalised data.

AEMC DRAFT RECOMMENDATION

3.3.1 Energy services to residential and small business consumers

We recommend that the NECF is clarified to make it clear what arrangements apply to third parties providing “DSP energy services”. This should involve establishing criteria either in the NECF or the AER guidelines on retail exemptions. The criteria could include the circumstances where accreditation (or exemptions) of parties is required and the relevant provisions of the NECF that would apply (i.e. marketing rules, and the relevant enforcement and monitoring provisions.

Ausgrid supports the AEMC’s view that the sale of energy services should not be included within the scope of the National Electricity Retail Law (NERL), and further that a clear distinction can be made between services that affect the consumer’s ability to get reliable supply of electricity and those services that provide information on how to manage consumption.⁶

As noted by the AEMC, the National Energy Customer Framework (NECF)’s primary objective relates to the sale and supply of electricity and gas. Therefore, we do not think that it is appropriate to expand the scope of the NECF to include “DSP energy services” which are services primarily aimed at providing information to consumers on how to manage their energy consumption. In Ausgrid’s view, DSP energy services should not be subject to further regulation unless there is a demonstrated need for additional regulation. This is because regulation by its nature is intrusive and increases the cost of providing services.⁷

5. What specific criteria could be used to determine whether elements of the NECF (i.e. marketing code) apply to third parties providing DSP energy services to consumers? That is, beyond Australian Consumer Law?

In clarifying what regulatory arrangements that apply to third parties providing DSP energy services, Ausgrid would strongly urge the AEMC to consider whether there is a need for regulation given existing consumer protection mechanisms under the *Competition and Consumer Act 2010 (Cth)* (CCA)⁸ and *Privacy Act 1988 (Cth)*. In our view, to impose additional regulation where there is no demonstrated need may artificially restrict the level of competition in these emerging markets as compliance costs may create a barrier to market entry.

We note that a wide range of consultants that provide advice to business customers on their energy systems and energy usage are typically small businesses who, under the proposed expansion of the NECF scope, would be forced out of providing DSP advice due to the compliance costs of the NECF. This would be an undesirable outcome and would limit the application and benefits of DSP.

6. What requirements should be in place for these third parties? For example, what should be the form of authorisations/accreditations?

Ausgrid would prefer to keep within Australian Consumer Law provisions for “DSP energy services”. This is because these laws are comprehensive, and we don’t see value in adding additional complexity in this regard.

⁶ AEMC Draft Report: Power of choice- giving consumers options in the way that they use electricity, 6 September 2012, p 37.

⁷ Regulation increases the cost of providing services as it imposes administrative and compliance costs, creates inefficiencies and losses of economies of scale.

⁸ Refer to sections 46 and 50 of the CCA.

AEMC DRAFT RECOMMENDATION

3.3.2 Role of retailers and distribution network businesses - engaging with consumers

We recommend that the NER and NECF are clarified to outline the conditions when a distribution network business can engage directly with consumers to offer DSP network management services. This may involve establishing appropriate guidelines/process for the AER to apply and outlining which elements of the NECF apply.

7. Do you agree that existing rules and guidelines should be amended to clearly outline the circumstances when distribution businesses are able to directly contract with residential and small consumers to deliver DSP network management services/programs?

Ausgrid does not believe that restrictions should be placed on distribution businesses directly contracting with residential and small consumers to deliver DSP network management services and programs. That is, we believe that distribution businesses should have the option to operate in the same environment and under the same market conditions as retailers and third party providers. The reasons for this are:

1. Genuine choice for consumers will be best served by allowing all businesses with capability and expertise to operate freely in the space. It will be to the detriment of customers to reduce competition.
2. Distributors are likely to have different motivations from retailers for pursuing some DSP activities. For example, distributors may have a localised interest in pursuing the reduction of use at peak demand times.
3. The aim should be to implement DSP in the most efficient way possible. There are certain circumstances in which retailer driven DSP activities may not deliver an efficient level of DSP, such as in cases where load reduction is required in a concentrated geographic location. In these circumstances it would be logistically inefficient to try to work with multiple retailers to cover all customers in the area. A more holistic approach, delivered directly by the distributor, would ensure both consistency of information and a greater ability to achieve desirable load reduction outcomes.
4. Distributors are best placed to identify where DSP activities are a priority for network reasons in the short, medium, and long term.
5. Distributors already seek to work with retailers or third parties where this is the most cost efficient option.

It may be that some clarification of existing guidelines is needed to ensure that all parties are able to operate under the same market conditions. This would include clarifying appropriate restrictions on cross subsidies, customer protection and ring fencing. We note that issues around ring fencing are already being addressed by the AER's review of ring fencing guidelines.

As outlined above, we believe that DNSPs are in a strong position to run DSP information programs and deliver DSP products directly to customers. We do not agree with the AEMC's recommendation to clarify conditions and potentially limit opportunities where DNSPs can engage directly with consumers. We note that the AEMC may have formed this position based on a misunderstanding regarding DNSPs' experience in delivering DSP activities and concerns raised by retailers.⁹

⁹ AEMC Draft Report: Power of choice- giving consumers options in the way that they use electricity, 6 September 2012, pp 39- 41.

It is incorrect to assume that DNSPs prefer to facilitate the delivery of DSP by contracting with retailers or third parties.¹⁰ DNSPs preference is to deliver DSP according to the most efficient and cost effective means. Our experience is that we have often pursued a direct to customers approach. This is because:

- it has been more cost efficient to delivery DSP directly to consumers as currently third party DSP providers tend to be rare and are typically small providers lacking in experience;
- there has been a lack of interest from retailers to deliver DNSP DSP - only two retailers have enrolled in our demand management register of interested parties and to date we have not received a response from retailers to any of our DM options¹¹; and
- retailers have less incentive to pass through DNSP DSP incentives.¹²

As noted above, Ausgrid's preference is to deliver DSP by the most cost effective means. Prescribing that DNSPs must deliver DSP through retailers or third parties is likely to restrict rather than facilitate increased DSP, reduce competition in the market, hinder consumer choice and stifle innovation. Care should be taken to distinguish between concerns regarding unfair competition and efforts to limit competition in the market to the detriment of consumer choice.

AEMC DRAFT RECOMMENDATION

4.3.1 Functional Specification of meters in the NER

We recommend that a new minimum functionality specification is included into the NER for all future new meters installed for residential and small businesses consumers. That specification should include, interval read capability and remote communications.

7 (sic). Should the minimum functionality specification for meters be limited to only those functions required to record interval consumption and have remote communication? Alternatively, should the minimum functionality include some, or all, of the additional functions specified in the SMI Minimum Functionality Specification?

Ausgrid notes the AEMC's view that interval metering is required to support Demand Side Participation (DSP) as this provides the underlying metering capability for customers to manage their energy use in response to DSP products and price signals.

Ausgrid has approximately 600,000 interval meters in its network area and has undertaken a number of trials, such as the Strategic Pricing Study, to investigate the potential cost savings from dynamic tariffs. It is important to note that the responses received from our trials were achieved without remote communications. Whilst Ausgrid is currently trialling dynamic prices with remote communications, as part of the Smart Grid Smart City program, there is currently no evidence demonstrating that remote communications adds to the benefits of dynamic prices.

Consequently, Ausgrid considers that it would not be prudent to mandate remote communications as a minimum functionality until it can be demonstrated that the benefits of having remote communications outweighs the associated costs.¹³ We suggest that further analysis of the costs and benefits of meters with remote communications be undertaken and an assessment of the expected consumer uptake performed prior to mandating remote communications as a minimum functionality.

¹⁰ Ibid, p 41.

¹¹ For example in FY2007/08 Ausgrid introduced a residential Time of Use (TOU) tariff with a substantial incentive to encourage retailer involvement. Despite the substantial value of the incentive (over \$240 per customer over three years) and the substantial promotion of the tariff in Ausgrid retailer forums, no retailers took up the offer.

¹² DNSP's have a strong incentive to implement DSP as reducing peak capacity growth is a cost driver for DNSP. Retailers have different cost drivers and have a fundamental interest in customers maintaining their energy use to secure revenue.

¹³ Whilst communications costs are reducing, it is still more expensive than manually read interval metering.

Given the current lack of evidence to support mandating remote communication¹⁴, Ausgrid considers that any mandate of minimum metering capability in the NER to support DSP should extend only to interval meters. In our view, the issue of whether interval meters should have remote communications should be determined by whether there is a positive business case to support such functionality rather than being mandated in the NER. We note that under the current market arrangements (where remote communications can be justified), retailers are already able to install interval meters with remote communications (Type 4) in a non AMI jurisdictions.¹⁵

The efficient uptake of DSP requires flexible metering capability, time based tariffs (both from retail and network businesses) and the enablement of consumer choice through real-time usage feedback and accurate historical interval data. We suggest the AEMC considers including the following minimum functional specifications for metering to support these requirements:

- **safe operation;**
- **accuracy of energy management and registration for operating conditions;**
- **security of data access** – must be maintained at the appropriate levels to ensure privacy but within operating expenditure constraints;
- **standardisation** – selecting and maintaining an international standard (IEC) for metering hardware and metering communications protocol, such as Cosem/DLMS,
- **interval metering data** - 200 days of 30 minute kWh data with optical probe reading at speeds of 90 days of data in less than 35 seconds, to ensure broad market application, cost effective entry level for interval metering and a disaster recovery option for communications enabled metering. This is equivalent to existing requirements for Type 5 meters in the NEM;
- **real-time customer enablement port** - similar to the P1 port described in the Dutch Smart Meter standard. This low cost hardware port would publish metering variables (instantaneous energy register read, for example). Such a standard, universal interface would enable convenient interface to future, market funded real-time feedback technology (Home Display - IHD - or Home Area Network – HAN) without meter modification, and
- **communications upgrade port** – this port would allow for the convenient retro-fit of any future communications device without having to incur costs associated with meter replacement.

These suggested specifications are discussed in more detail in Appendix 1.

As noted above, we do not consider it appropriate to specify remote communications as a minimum functionality requirement as there is not sufficient evidence to demonstrate that the benefits of having such functionality outweigh the costs at the current time. However, there is benefit in ensuring that meters installed now have a technology upgrade path consistent with communications capability in the future given the costs involved in including this capability now are incremental.

For this reason, we suggest that if the AEMC proceeds with interval metering functionality, it considers adopting a specification for a communications upgrade port, as this will assist in ensuring that communication devices are able to be added at a later stage if and when there is a positive business case for doing so. Adopting this approach is likely to lead to less expensive metering costs in the long run as it avoids the need for large-scale meter replacement, particularly given the asset life of a meter is approximately 15 years (for electronic meters).

Meters with these capabilities are currently available and are being used in Europe. It is anticipated that the incremental cost of the real-time customer enablement port would be small as there is a minimal amount of hardware involved in providing the capability.

¹⁴ For instance, is there any evidence to support that daily remote reading achieves a better outcome for the customer or is a quarterly manual (local) read sufficient to provide the seasonal consumption patterns, given the difference in costs between the two approaches? Has the AEMC undertaken any studies to support remote reading and the expected customer take up?

¹⁵ This arrangement is typically limited to point-to-point communications solutions (such as the public 2G/3G/4G mobile communications carriers) and may be more expensive than concentrated based private communication systems (mesh radio, power line carrier) typically used in mass roll-out.

AEMC DRAFT RECOMMENDATIONS

4.3.2 When should metering infrastructure be installed?

We recommend that:

- the installation of meters consistent with the proposed minimum functionality specification to be required in certain situations (e.g. refurbishment, new connections, replacements).
- Such metering must also be installed on an accelerated basis for large residential and small business consumers whose annual consumption is above a defined threshold.

AEMC DRAFT RECOMMENDATIONS

4.3.3 Arrangements to support commercial investment in metering technology

- Reforms to the current metering arrangements are necessary to promote investment in better metering technology and promote consumer choice. We put forward a model where metering services are open to competition and can be provided to residential and small business consumers by any approved metering service provider.
- If new arrangements are implemented, then we advise that governments should consider removing the possibility of a mandated roll-out of smart meters.

8. **Does the separation of the provision of metering services from retail energy contracts remove the need for meter churn when a consumer changes retailer? Does this cause any unforeseen difficulties or create any material risk? Are there any alternative approaches to reducing the need for meter churn?**

Ausgrid supports the objectives of customer choice and metering technology that facilitates that choice. However, we think further consideration need to be given to the issues of whether opening the market for types 5-7 metering services to competition will achieve these objectives, and the extent to which this approach is cost-effective.

Metering is a long-term asset management task that requires compliance with a wide range of regulatory obligations. Metering assets present particular asset management challenges as they are characterised by high populations that are widely dispersed. Currently, for interval (type 5) and accumulation (Type 6) meters, DNSPs undertake metering activities based around minimising the whole-of-life costs of metering assets and amortising these over a 15 year period (for an electronic meter). These activities include procurement, logistics, in-service sample testing, customer requested meter testing, reactive maintenance, performance monitoring, decommissioning and replacement.

Ausgrid's view is that for types 5-7 metering services, there are significant efficiencies associated with economies of scale, along with broader network, consumer and market benefits that would be compromised if the market for these metering services was opened to increased competition. A move to a contestable meter provision model has the potential to create structural inefficiencies and increase the cost of metering services (the cost of which is ultimately passed through to the consumer). For example under a contestable model, regulatory functions would be dispersed across the NEM resulting in higher total maintenance costs (in conducting the tasks identified above) due to a loss of economies of scale and duplication of systems across different metering providers for a given area.¹⁶

¹⁶ In the case of a Type 4 meter, every Type 4 meter must be tested every five years unless an asset management strategy which meets the intent of Schedule S7.3 of the NERs is achieved and the strategy approved by AEMO.

Under a contestable model, metering inefficiencies are also likely to be exacerbated by the potential for higher meter churn, as individual meters are replaced at an accelerated rate, before the end of their operating life. This results in higher costs as additional labour costs are incurred in early replacement of the meters¹⁷ and assets are not optimised to their maximum asset life.

The AEMC's proposal to separate the provision of metering service from the retail energy contract could potentially reduce some of the drivers of meter churn; however appropriate contractual frameworks would need to be implemented to govern this newly separated service, potentially increasing complexity and costs. The customer could potentially enter into two separate contracts; one for the provision of energy (with the retailer) and one for meter provision and maintenance. We suggest the following issues as a minimum would need to be considered if such a model was to be adopted;

- the appropriate contractual framework for managing relationships between customers, retailers, third party DSP providers and DNSPs. The contractual arrangements would need to reflect an appropriate allocation of risk and responsibilities for energy provision and metering provision and maintenance between the various parties;
- who bears the costs of the existing fees associated with meter churn and any impacts on innovation, competition and efficiency arising from those costs being borne by customers;
- whether there needs to be a 'Meter Provider of Last Resort';
- the broader impacts of adopting a contestable model upon existing contestability arrangements in NSW;
- costs associated with the churn of an AMI meter in particular and whether it is intended that the exit fees of the previous metering provider are to be passed on to customers. We note that this has the potential to significantly increase the costs associated with a contestable AMI roll-out¹⁸;
- the cost impacts on DNSPs associated with meter data and meter data processing arising from increased contestability in the types 5-7 metering services market; and
- whether the benefits exceed the costs.

Regardless of the model adopted, Ausgrid considers that an essential element of a market structure designed to support investment in metering technology is that it protects the benefits of the investment once it occurs. That is, once a market participant (whether they be a DNSP or third party) commits to a rollout of more advanced meters and installs such a meter, market arrangements need to protect the broader benefits of the technology/innovation provided by the investment.

Without such arrangements, there may be a disincentive for businesses to pursue any long term asset management strategies, due to the risk of equipment being removed before the end of its asset life. This may give rise to perverse outcomes, as under such arrangements businesses would have an incentive to install equipment with shorter return on investment periods. This would result in higher meter churn rates and higher metering costs over the long run. We would argue that such a scenario is highly undesirable and would be inconsistent with the National Electricity Objective.

¹⁷ The loss in economies of scale from not having a franchise area means that the labour costs for metering are spread over a smaller customer base.

¹⁸ If the consumer changes retailer then the new retailer would be required to: 1) ensure that there was a suitable meter and data service at the consumer's premises, which would mean honouring any existing meter arrangements the consumer has entered into or installing a new meter (including paying any exit fees if there is an existing metering installation); and 2) reimburse the meter service provider and data service provider for the costs of the metering services, recovering these costs from the consumer.

9. Are there sufficient potential metering services providers to facilitate a contestable roll out of AMI? Does the proposed model mitigate all the material risks of a contestable roll out? If not, should a monopoly roll out be adopted?

Adequacy of metering service providers

Ausgrid is not in a position to comment on whether there is an adequate number of metering service providers to facilitate a contestable roll out of AMI. However to date, we note that no party in the value chain within NSW has been able to develop a business case to deploy smart meters. Consequently, it could be inferred from this that it is highly unlikely that a third party (who does not have inherent access to the benefits of other parties in the value chain) would be able to assemble such a business case.

'Contestable' meter and data provision model

In NSW, the Accredited Service Provider (ASP) scheme provides a competitive framework for customers to arrange new or modified connections to a NSW DNSP's network. One of the categories of accreditation is level 2 category 4, which allows for these service providers to install Type 5 and Type 6 whole current (up to 100A) metering at a customer's premises. This metering installation work is primarily driven by the building industry and customers directly organising new and renovated housing and the work is generally done at the same time the service mains and other electrical works are performed¹⁹.

A contestable roll out of metering would impact this category of the ASP scheme, effectively displacing it, as the current NER framework only allows AEMO accredited Metering Provider Category B (MPB) to install metering capable of remote acquisition of metering data.²⁰ There are currently over 1,200 businesses registered in NSW in this category of the ASP scheme. There will also be new interface issues and costs associated with coordinating the works performed by the Level 2 Category 4 ASPs and AEMO accredited MPBs.²¹ These costs will be borne by customers.

While greater competition in the provision of metering services for small consumers may provide some benefits, additional costs are likely to result due to a loss of economies of scale and less efficient asset management over the longer term. This would mean that the net costs might outweigh the benefits and result in higher costs to consumers over the longer term.

Ausgrid considers that metering is integrally linked to the distribution network as it is a vehicle for network strategies around demand management, network innovation, investment expenditure and pricing that together are more likely to deliver the greatest possible benefit in the long term interests of consumers and maximises the long term economic welfare of consumers, consistent with the National Electricity Objective.²²

It is also worth noting that in NSW there are already contestable components of metering for type 5-7 services, whilst the responsibility for the metering installation remains with the DNSP.²³

We consider that it would be more efficient to roll out AMI under a monopoly approach as meter provision has the characteristics of a monopoly (essential) service. In our view, such an approach would be more efficient from an installation and operation perspective due to economies of scale in rolling out metering to universal franchise areas and the adoption of long term asset management strategies.²⁴ The present responsibility distinction between Type 4 and 5/6 is not a barrier to

¹⁹ Currently in NSW, the electrical contractor and/or ASP arrange all of the service mains and metering connection or upgrade

²⁰ <http://www.aemo.com.au/Electricity/Policies-and-Procedures/Retail-and-Metering/Metering-Service-Provider-Accreditation-and-Registration-Procedure>

²¹ Currently in NSW, the electrical contractor and/or ASP arrange all of the service mains and metering connection or upgrade

²² See National Electricity Law, section 7.

²³ In NSW, Accredited Service Providers install and upgrade meters at the customer premises.

²⁴ Cost effective communication systems such as mesh radio and power-line carrier are most effective with a monopoly roll-out. Competitive tendering in combination with economies of scales also ensures cost effective meter procurement. In addition, under a monopoly approach meters are more likely to be optimised for their maximum operation life as they are attached to the electricity network for a long period of time.

upgrading of metering installations. Outside of the Victorian AMI derogation (that finishes in December 2013) any customer can have Type 4 metering installed by a third party. Ausgrid's customers have had access to interval meters at no additional cost and installed contestably since 2004.²⁵

Ausgrid proposes that the benefits of the proposed contestable model are carefully considered against the costs and loss of efficiencies from undertaking such an approach. For instance, the AEMC's proposed approach create inefficiencies in maintaining efficient route scheduling with the remaining current type 5 and 6 metering reading processes. Currently, DNSPs are able to obtain economies of scale from sourcing their meter reading services under competitive tender arrangements and from planning metering routes to maximise efficiencies. Multiple retailers with multiple meter data service providers in a network area would lead to inefficiencies in metering services as meter reading routes would be duplicated. In addition, DNSPs may experience a reduction in their procurement efficiency as a result of a loss in economies in scale.²⁶

In the current regulated environment, there are synergies between metering data provider services by network service providers and network billing requirements, which creates network efficiencies. In a contestable market, the network would need to obtain the meter data reads from the retailer's meter data service provider and would still need to process that data for network billing purposes. Consequently, the current regime avoids the need for double handling of data which would be extensive in a mass market scenario.

In addition, a proliferation of metering service providers, many of whom may be inexperienced, may degrade the quality of meter data leading to higher back office costs. A vital element of metering related services is the quality of both standing data (details of the metering installation) and the ongoing meter readings. Poor data quality of either of these components can result in substantial down-stream costs. For example, low data quality relating to the metering installation can lead to a retailer's failure to process billing leading to billing delays and excessive 'catch up' bills. It is also important to note that metering service providers will not have an incentive to maximise outgoing data quality as they will not bear the down-stream costs.

Under the contestable model there is also a risk of individual retail roll-outs that co-exist with other retail roll-outs not being interoperable or interchange-able. Meter functionality introduced by one retailer may differ from another. When a customer churns a retailer, the services offered by a second retailer cannot be delivered with the meter installed by the first retailer. In this case, metering equipment would need to be replaced. This scenario could increase the risk of meter churn which in turn would increase metering costs (which are ultimately passed on to consumers). Conversely, this may assist retailers in their retention strategies and limit competition in the market, as the cost of replacing a meter may create a disincentive for consumers to change retailers.

If the AEMC still forms the view that the benefits under a contestable model outweighs the associated costs of adopting such an approach, Ausgrid believes that further clarification and/or consideration is required in relation to the following aspects:

- Network benefits - if networks were to rollout AMI for other network benefits and a current retailers metering did not provide the network benefits of the networks AMI meter, is the AEMC's intention that the network can replace the retailers meter so long as the meter satisfies the retailers needs?
- Precedence - In the event that the distributor's and retailer's meters do not suit each others requirements, will the distributors or the retailer's requirements take precedence? In such a situation, does the AEMC envisage that an exit fee would be applicable?
- Meter Provider of Last Resort - the contestable arrangements do not oblige the continuation of metering at all sites. Consideration needs to be given to establishing a metering provider

²⁵ Ausgrid has approximately 600,000 interval meters in its network area.

²⁶ NSW DNSPs procure meters under strategic supply agreements entered in as a result of competitive tender arrangements. The network service providers' economies of scale in relation to purchasing arrangements for meters, in combination with competitive tendering arrangements mean that meter hardware costs are procured at an efficient level. Consequently, a loss of economies in meter procurement will result in an increase in the cost of providing meters.

of last resort in circumstance where a contestable metering contract expires or is not renewed. Where a customer opts out of AMI we consider that there should be a requirement to revert the metering back to Type 5 under the LNSP.

- Data Quality programme – the AEMC needs to ensure that the potential down-stream meter data quality issues do not undermine the financial or technical operation of the NEM. To safeguard against this issue would most likely involve mandating automated data quality checks on outgoing data from each business providing contestable metering services.
- Unbundling metering costs from DUoS – unbundling metering costs will be problematic and will impose significant administrative burden on DNSPs, as it is difficult to identify and distinguish assets used to provide metering services from assets in the regulatory asset base (RAB) for standard control services.²⁷ This is because some assets can serve more than one function across the business (only one of which is metering). For example, metering data and other IT systems are an integral part of metering services; however these assets provide other services such as data for energy forecasts, customer management and planning processes.

10. What should the exit fee be when a consumer upgrades its meter from one provided by the local distribution business? Is the proposed fixed 30% of the cost of a replaced meter appropriate?

The meter churn cost (i.e. the accelerated depreciation of metering equipment) is variable, depending on the circumstances, the type of meter being removed, the age of the meter and the general age profile of the remaining installed base of meters. Costs of this type are currently accommodated through DUoS charges that seek to recover the metering costs on a long term basis taking into account efficient, best practice long term asset management.

Any mechanism that is put in place needs to ensure that DNSPs are able to recover costs associated with the meter retirement.

11. Does the option of a government mandating an AMI roll out within its jurisdiction act as a strong disincentive to a commercial roll out? Should the ability for these governments to mandate an AMI roll out be removed from the NEL?

Government mandates of AMI rollout recognise that the benefits of AMI accrue across the electricity supply chain and those overall benefits outweigh the costs. Similarly, other participants will undertake investments in automated metering technology when a positive business case can be demonstrated (that is, the benefits outweigh the costs in that portion of the supply chain).

We note that there are several possible models for the deployment of advanced metering and related technology and the ability for any of these models should not be precluded.

AEMC DRAFT RECOMMENDATION

5.3 Demand response mechanism

We recommend a demand response mechanism that pays demand resources via the wholesale electricity market is introduced. Under this mechanism, consumers participating in the wholesale market can make the decision to continue consumption, or reduce their consumption by a certain amount for which they would be paid the prevailing spot price.

Ausgrid supports greater DSP in the market. Consequently, we support the principle of a demand response mechanism and note the potential for such a mechanism to capture additional demand side

²⁷ See NSW DNSPs' response to the AER's preliminary framework and approach paper, 17 August 2012, pp 15- 18.

benefits in the generation market. Whilst Ausgrid has not provided a specific response to the AEMC's questions on this issue (Questions 12 to 14), we have provided some general comments below.

This approach would encourage greater participation from Demand Side Aggregators. This would be advantageous because it would offer a path by which network support payments could be included as part of the offering to consumers, leading to lower net costs for delivery of network DSP. Demand Side Aggregators should include distribution network rebates in their offering to consumers.

Ausgrid urges the AEMC to consider a DSP market structure where the Demand Side Aggregators bears the risk of differences between expected and actual demand reduction. Ausgrid's experience with prototyping baseline algorithms and discussions with US utilities indicates that formulating accurate baselines are significantly more difficult to do at the customer level than presented in the AEMC's Draft Report. Inaccurate baselines dilute the economic efficiency of DSP as it results in cross subsidisation, whereby some participants are overpaid for minimal energy usage reduction by those that achieved high energy usage reductions.

AEMC DRAFT RECOMMENDATION

6.6.1 Demand forecasting

- **We recommend that the NER is amended to clarify AEMO's role in developing both long and short term demand forecasts, including estimating DSP, for the purpose of providing accurate price signals to the market over various time frames including pre-dispatch.**
- **To achieve clarity in this regard, the existing rules associated with specific reporting obligations may need to be rationalised to remove any ambiguity regarding their information gathering powers.**

Additional information for the market is a positive step and should be encouraged. Accurate forecasts of demand and price in the wholesale market are likely to encourage greater participation from the demand side.

15. How should AEMO's powers be expanded to improve demand forecasting? Should retailers and other market participants be obliged to provide information regarding DSP capabilities? Will non-obligatory requirements achieve the desired accuracy in reporting requirements?

Ausgrid's preference would be for non-obligatory requirements. If the AEMC is considering imposing obligations, we would urge the AEMC to first undertake a cost benefit assessment to ensure that the costs incurred by market participants is outweighed by the benefit of more accurate demand forecasting.

We believe that DNSPs would be more than happy to provide their expectations on DSP capability without having an explicit obligation, provided that the data requirements were not too onerous.

16. In what ways can AEMO improve its survey questions regarding DSP capabilities? How often should AEMO be required to update its expectations on DSP capabilities in the NEM?

Ausgrid does not have any recommendations on improving AEMO's survey questions on DSP capabilities. For the types of DSP programs conducted by DNSPs (i.e. targeting network congestion), an annual survey is considered to be appropriate. Ausgrid welcomes the opportunity to continue to work cooperatively with AEMO to improve data collection and forecasting processes.

17. Would a pre-dispatch that includes active and price-responsive DSP improve decision making processes for C&I users and aggregators? If not, do you have any other suggestions for improving the ability for AEMO to accurately forecast demand?

In relation to enhanced forecast accuracy, Ausgrid notes a number of innovative approaches that AEMO could consider:

- **The incorporation of broadly based real time data** - US transport operators have recently begun traffic monitoring/forecasting by dealing with telecommunication providers to observe the rate of mobile phones connecting with mobile phone towers along a given transport route. AEMO could investigate the potential for forms of real time electronic data that reflect household occupancy (a driver of peak demand) to improve forecasting. Possible data sources would be aggregations of mobile phones in their home location, wired internet and home phone traffic volumes, TV rating information (which reveal the total number of people watching television at home) etc.
- **The use of competitions to optimize forecasting performance** – a number of international and Australian government agencies have utilized a competition format to ensure world-class forecasting outcomes.²⁸

AEMC DRAFT RECOMMENDATION

5.7.1 Creating new category of market participant

We recommend creating a new category of market participant in the NER that will allow for the unbundling of all non-energy services from the sale and supply of electricity.

15. (sic). Do you agree that a new category of market participant should be established for the provision of non-energy services?

No comment.

16. (sic) What types of issues should be considered when developing the registration process, such as eligibility, obligations and liabilities?

Any new category of market participant should be subject to Rule consultation. Moreover, registration as a participant should come with appropriate prudential requirements.

17. (sic) What metering arrangements need to change to implement this mechanism?

No comment.

AEMC DRAFT RECOMMENDATION

6.3.2 Building consumer confidence through education

We recommend that governments and industry work together to educate consumers and provide them with the information they need to understand both the system wide benefits and potential individual gains from time varying tariffs.

Ausgrid supports this recommendation in principle, pending more information about the cost and funding implications of future activities.

²⁸ An example can be found at <http://www.kaggle.com/c/RTA>

Ausgrid has a proven track record in the provision of educational information to customers, with channels including the Ausgrid website, brochures, an Energy Efficiency Centre, and specialist energy efficiency team, along with a bank of customer research which has assisted with our educational activities. We believe that a cohesive and coordinated approach between governments and industry will be beneficial in assisting customers.

AEMC DRAFT RECOMMENDATION

6.3.3 Managing the impacts on vulnerable consumers

To manage the impacts on vulnerable consumers we recommend that:

- **Arrangements are put in place for consumers, which may a limited capacity to respond, to remain on a retail tariff which has a flat network component, and would have the option to choose a time varying tariff.**
- **Government programs target advice and assistance to these consumers to help manage their consumption.**
- **Governments review their energy concession schemes so that they are appropriately targeted.**

Ausgrid supports targeting advice and financial assistance schemes to vulnerable customers. However, we believe that the provision of assistance is a policy issue for government and is best dealt with outside the market setting, as this allows for more targeted and effective action. Administering eligibility for flat tariffs based on vulnerability will impose costs on retailers and network businesses that can be avoided simply by increasing targeted assistance measures.

Ausgrid's experience is that many people classified as vulnerable, are actually relatively able to contribute to DSP. It may be a disservice to 'protect' them from time varying prices which would allow them to benefit from their participation.

For example, Ausgrid's (then EnergyAustralia) Strategic Pricing Study (SPS) revealed that low income customers, who volunteered to participate in trial, actually responded better to price signalling than other income ranges in the trial. Households with low incomes and larger energy usage revealed an extraordinary ability to respond to time-varying prices. As seen in the table below, consumers with annual incomes between \$25,000 and \$41,200 reduced their energy usage by an average of 41 per cent (text in blue in the table below) in response to Ausgrid's price signalling, compared to higher income households who responded on average between 12 and 27 per cent. These outcomes are summarised in the table below.²⁹

Should the AEMC decide to proceed with banding customers based on consumption, then the banding process should maximise the stability of the number of customers in each band by ensuring that a single year's consumption outside a customer's existing band is not sufficient for the customer to move to another band. The customer's consumption should remain in a particular band for two or more consecutive years to warrant being moved to it. Failure to adopt this approach will lead to excessive costs in customer interaction and movement, as well as driving revenue gyrations for retailers and network businesses.

²⁹ Total sample size was 265. Please note that these figures relate to dynamic events called across a range of scenarios and thus best illustrate relative responses rather than its absolute values expected in a particular network scenario.

Table 1: Annual household energy consumption

Annual Household income band (\$)	Annual household energy consumption (MWh)			
	2-5.4	5.4-9	9-40	Average
25,000	-32%	-37%	-54%	-41%
41,200	-23%	-38%	-62%	-41%
65,100	-4%	-15%	-17%	-12%
96,000	-30%	-34%	-16%	-27%
150,000	-14%	-25%	-33%	-24%
Average	-21%	-30%	-36%	

AEMC DRAFT RECOMMENDATION

6.3.5 Phasing in time varying pricing

The transition to better price signals in the NEM should be done in a gradual phased approach. We propose that this can be achieved through:

- **Focusing only on introducing time varying prices for the network tariff component of consumer bills. Retailers would be free to decide how to include the relevant network tariff into their retail offers; and**
- **Segmenting residential and small business consumers into three different consumption bands and applying time varying network tariffs in different ways. This would work as:**
 - **For large consumers (band 1), the relevant network tariff component of the retail price must be time varying. This would require these consumers to have a meter that can be read on an interval basis.**
 - **Medium to large consumers (band 2) with an interval meter would transition to a retail price which includes a time varying network tariff component. These consumers would have the option of a flat network tariff.**
 - **Small to medium consumers (band 3) would remain on a flat network tariff. These consumers would have the option to select a retail offer which includes a time varying network tariff, if they so choose.**

18. Do stakeholders agree with our approach for phasing in cost-reflective pricing? If not, how can the policy be improved to transition to cost-reflective pricing?

Ausgrid agrees with the AEMC that tariff reform is likely to benefit customers in the long-run as the cost savings from avoiding or deferring network augmentation costs are passed through to customers in the form of lower (than otherwise) network tariffs. It is important that the AEMC also recognise the tariff reforms will also enhance economic welfare in other ways, as summarised below:

- improving network utilisation by encouraging customers to use the network outside of congestion periods, and

- ensuring that common network costs will be recovered in a less distortionary manner by shifting the recovery of these costs from energy consumption towards more stable demand-based charges and to a lesser extent fixed charges.

However, the AEMC proposed implementation of more cost reflective pricing (through a three-band structure) is likely to be problematic in practice. Residential customers have a surprisingly high variance in their own annual consumption (an average of 23% standard deviation across years for the same premise). In other words, a customer's annual consumption can vary significantly from year to year. It would be possible for some customer sites to be eligible to be classified as band 1 in one year and band 3 the next year (depending on the relevant thresholds). As assignment by DNSPs of customers to a different tariff (where that assignment is initiated by the DNSP) can only occur in accordance with the annual pricing proposal, frequent movement of customers between the tariff bands would be difficult to administer and manage.

Ausgrid also has legacy issues to consider as currently, approximately 330,000 residential customers and 65,000 small business customers are on a Time of Use (TOU) tariff. Each time meters are upgraded or replaced customers are assigned their existing tariff (either IBT or TOU). The implementation of new consumption bands which dictate different default tariffs according to the customer's level of consumption will give rise to uncertainty in the market in relation to tariff treatment of existing customers. This will have an adverse impact on economic welfare gains, to the extent that the uncertainty over their tariff undermines the customer's long-term respond to cost reflective price signals by distorting investment decisions (i.e. upgrade of appliances) that relate to their use of the network.

The draft recommendation above outlines a segmented customer split, but does not explain in detail how the transition to cost reflective pricing will occur and the relevant timeframes. The AEMC notes that the transition to time varying prices should focus on large residential and small business customers³⁰ on the basis that:

- the higher consumption volume of larger consumers means any adjustments at the margin will have a greater incremental impact on system costs; and
- consumers on lower incomes and other consumer groups who may not have the ability to respond to time varying prices are likely to be below the defined threshold for large consumers and can avoid time based pricing.

As noted above in response to section 6.3.3, there is evidence to suggest that consumers on low incomes are capable of responding to time basing pricing and have the ability to benefit price signalling. Ausgrid also notes substantial analysis by Deloitte for the Victorian Department of Primary Industries³¹ which supports this conclusion. In section 8.3 of their report Deloitte noted the following:

'... our analysis suggests that, on average, if vulnerable people elect to take up Flexible Pricing, they will be better off than they are currently in that their total electricity bills over a year will be lower. Following this, if they also respond to the incentives created by shifting or lowering their peak consumption in response to the price incentives, our analysis concludes that on average they will face even lower electricity bills over the year.'

19. Have we identified the main issues with transitioning to cost reflective pricing? If not, what other issues need to be considered?

Ausgrid fully supports the principle of enabling customer choice and considers customer choice to be appropriate in the context of retail energy and demand side participation (DSP). However, customer choice of tariffs in the context of a monopoly network business with regulated revenue requirements has a number of ramifications for both price and revenue stability that are worth considering.

³⁰ Ibid, p 100.

³¹ <http://www.dpi.vic.gov.au/smart-meters/publications/reports-and-consultations/advanced-metering-infrastructure-customer-impacts-study-stage-2>

The AEMC recognises that “Even under voluntary arrangements, those [customers] that remain on the regulated flat retail tariff may over time see higher bills...Those consumers who voluntarily seek out time varying prices will likely be those with better load profiles (as they have the most to gain) while those with peakier profiles are likely to remain on the regulated flat tariff. Hence, the cost of serving these remaining customers will likely rise, placing upward pricing pressure on the regulated flat retail tariff”.³²

Ausgrid agrees with the above analysis but reiterates that while it is appropriate for flat tariff prices for costly ‘peaky’ customers to rise, they should not be subsidised by customers who are on flat tariffs simply because they don’t yet have an interval meter.

The above scenarios underscore some of the issues associated with having alternative tariff choices in the network context. These issues are likely to be further complicated by having a phased approach to how the relevant customer segments (and options for tariff choice) change over time in the transition to cost-reflective pricing. We note that unless the bands are accurately and clearly defined, the process risks disenfranchising some customer groups (for example, low income, high energy usage customers who could benefit most from TOU pricing at the network level).³³

Ausgrid considers that the most effective means of managing the needs of vulnerable customers is through targeted government assistance, and believes that networks should deploy time based pricing based on consideration of their own interval metering deployment timeframes.

20. How should consumption thresholds be determined?

Ausgrid has provided an answer to this question in the material above.

AEMC DRAFT RECOMMENDATION

6.3.6 Strengthening arrangements for network tariffs

We recommend that:

- **The distribution network pricing rules in the NER are amended so that distribution network businesses have sufficient guidance to set efficient and flexible network tariff structures that support DSP.**
- **A new provision is included in the rules which require distribution network businesses to consult with consumer groups and retailers on their proposed tariff structures each year.**

21. We seek stakeholder comments on appropriate pricing principles for distribution businesses and the appropriate time period for stakeholder consultation on distribution network pricing proposals.

Ausgrid believes that there is no need to amend the pricing principles in the NER, but recognises that there may be merit in the AER being more proactive in assisting DNSPs to apply these principles in practice. For example, this assistance could take the form of the AER releasing guidelines on what the AER believe to be an appropriate methodology for the calculation of Long Run Marginal Cost, Avoidable Cost and Standalone Cost. It would also be helpful to DNSPs for the AER to provide guidance on how to recover network common costs from retailers in a manner that causes the least distortion to efficient network usage patterns. We envisage that any assistance from the AER in this respect would be by way of non-binding guidelines rather than through increased regulatory intervention.

³² AEMC Draft Report: Power of choice- giving consumers options in the way that they use electricity, 6 September 2012, 94.

³³ Refer to Table 1.

Pricing principles, as well as being considered individually, need to be considered holistically so as to ensure that in combination, they continue to provide Network businesses with sufficient discretion to appropriately manage their revenue and risks. In an uncertain volume environment, it is important that the NER continues to provide DNSPs with discretion in the area of tariff reform given the need to balance commercial, economic and equity objectives when setting network tariffs.

In terms of consultation with retailers and consumers on pricing proposals, we note that the Independent Pricing and Regulatory Tribunal (IPART) in its separate 12 September 2012 Rule Change proposal, has proposed changes to annual network price setting arrangements in chapters 6 and 6A of the NER. One of the changes is to allow greater consultation on retail price changes through amending the timeframes in the NER. Ausgrid broadly supports this in principle³⁴ and will be responding to the Rule change proposal, in line with the AEMC's Rule change consultation timeframes. As this issue is already being addressed via a separate rule change proposal we do not think that it is necessary for it to be addressed as part of the suite of reforms under the AEMC's Power of Choice Review.

AEMC DRAFT RECOMMENDATION

6.3.7 Addressing risks for retailers under cost reflective pricing

We recommend that once a residential and small business consumer has a meter with interval read capability, that consumer's consumption should be settled in the wholesale market using the interval data and not the net system load profile. This will be the case irrespective of whether the consumer has reverted to a flat retail tariff.

Ausgrid supports measures aimed at facilitating effective price signals. We see the move towards settling in the wholesale market based on interval data as complimentary to retailers passing through network price signals.

AEMC DRAFT RECOMMENDATION

7.3.1 Potential return for network businesses implementing DSP projects

We recommend that the AER considers reforming the application of the current demand management and embedded generation connection incentive scheme to provide an appropriate return for DSP projects which deliver a net cost saving to consumers. We have put forward principles and two mechanisms for how this could be achieved.

Ausgrid strongly supports this recommendation. As noted by the AEMC, DNSPs play an important role in facilitating DSP. Ausgrid believes that DNSP's should be incentivised to implement DSP projects, with broad market benefits to be shared between DNSPs and customers.

22. Would it be beneficial to include reference to the suggested mechanisms and provide more guidance and an overall objective in the Rules governing the demand management incentive scheme?

Yes, however we believe the proposed guidance is too high level and potentially too complex. One of the issues with previous mechanisms, such as the NSW D-factor, is the complexity of the mechanism which has acted as a barrier to greater uptake. This can have the effect of dulling the effectiveness of the mechanism because participants find it difficult to understand and respond to rationally. It can also lead to confused messages to industry that with limited management time may ignore opportunities because of the need to invest too much time and effort into understanding the how the mechanism operates.

³⁴ Ausgrid particularly supports the proposal that transmission charges be published by 15 March each year.

Both Ausgrid and the ENA have identified that simplicity should be a key guiding principle of any incentive mechanism.

We have provided recommendations on the guiding principles of the incentive scheme in previous submissions to the Power of Choice Review. In summary, we believe the scheme should be:

- *Economically efficient* – the design should consider both allocative and dynamic efficiency.
- *Equitable* – incentive levels should be set to ensure a fair sharing of benefits between networks and customers.
- *Simple* – the incentive design should be easy to understand, implement and administer for all market participants (e.g. payable in proportion to demand reductions reasonably claimed by the DNSP and denominated in \$/kW or kVA).
- *Effective* – achieving a material change in the amount of economic DSP available and operating in the market.

In addition, *certainty* is also an important consideration to ensure the effectiveness of the scheme. The criteria for incentives should be clearly identified in the determination for the payment of incentives, and benefits over the longer term (beyond the current regulatory period) considered in defining the value. In our recent submission to the AER on the Demand Management & Embedded Generation Connection Incentive Scheme (DMECGIS), we outlined our views on what we considered to be an appropriate structure for a demand management incentive scheme. Appendix 2 sets out our views on an appropriate demand incentive mechanism.

23. Should separate provisions for an innovation allowance be included into the rules? Given that the costs of the allowance would be borne by electricity consumers, is it more appropriate for such innovation to be funded through government programs?

Ausgrid agrees that a separate provision for an innovation allowance should be included in the rules. As noted by the AEMC, there appears to be some confusion regarding the application of the existing demand management incentive scheme with the innovation allowance included in the scheme. Providing a separate provision for an innovation would help to address this issue and would also reflect the differing objectives of the two schemes.³⁵

We do not think that it would be appropriate to fund the DMIA solely through government programs. In our view, the existence of alternate funding from governments for innovation programs is evidence that the community sees value in this activity and that the amount provided for under the DMIA is inadequate. However, government sourced funding is often sub-optimal as it pursues a range of politically determined objectives, many of which are not aligned sufficiently with the needs of DNSPs.

In a competitive market, innovation would be funded by companies who had the opportunity to secure monopoly returns for a period from these developments. The interests of consumers dictate that the learning from DNSP development of DSP opportunities should be disseminated freely, and regulators ensure that monopoly returns are not secured by individual businesses. In this environment an innovation scheme similar to the currently applied DMIA would be appropriate, but with higher values in some cases.

Ausgrid has a current DMIA allocation of \$1m per year in the current regulatory period. Taking into account the size of DNSP revenues and the potential for development of future DM opportunities, we believe that the DMIA allowance should be increased to reflect the size and opportunity for available DSP across the NEM³⁶. Increasing the DMIA to a more viable level will enable DNSP's to consider wider market benefits under the proposed Regulatory Investment Test – Distribution (RIT-D) as well as cover initiatives not included at the time of the distribution determination.

It should also be recognised that the DM Incentive Scheme provisions were recently amended to include innovation in the connection of embedded generation. Growing penetration of smaller generators will

³⁵ The DMIA is an 'innovation' fund whereas the D-factor is an 'incentive' mechanism.

³⁶ Scaled proportionately by revenue or capital spend, a DMIA for Ausgrid should be at least \$10-15 million.

prove challenging for networks not designed with this function in mind and there is a growing need to find better technical and commercial answers to this challenge. This expansion of the scope of the innovation component also suggests an increased allowance may be necessary.

24. Should the provisions for a demand management incentive scheme be included in the regulatory framework for transmission businesses?

A demand management incentive scheme is most applicable to DNSPs as they are closer to customers, but at some level it would also be relevant to have a similar regulatory framework for transmission businesses. Compared to DNSPs, transmission business typically have longer project development times and a lower number of projects, which would mean less need for in-period mechanisms. However similar principles should generally apply.

AEMC DRAFT RECOMMENDATION

7.3.2 Network tariff structure influencing incentive to do DSP

We recommend a combination of two approaches to mitigate the problem of network profits being linked to actual volume. Firstly, the pricing principles in Chapter 6 of the NER need to be amended to provide greater guidance on how network businesses should set their tariffs to reflect their costs. Secondly, we recommend that the AER considers expanding the current application of the foregone revenue component of the demand management incentive scheme to cover DSP tariff based projects as well.

25. What amendments are required to the current distribution pricing principles as set out in clause 6.18.4 of the national electricity rules?

As discussed above, Ausgrid supports the AER providing more guidance to DNSPs on the how to apply the pricing principles in the NER in practice, We do not consider that there is a need to amend the pricing principles to achieve this outcome if the AER takes a more proactive role in issuing guidelines to the industry particularly in terms of the most appropriate methodology for a DNSP to adopt to calculate Long-Run Marginal Cost, Avoidable Cost and Standalone Cost.

Section 7.3.4 – Target Obligation on Network Businesses

The AEMC has considered a range of options for placing targets for DSP levels on network businesses and concluded that this is not appropriate. Ausgrid supports this conclusion as our own investigations of such options over the past two years has reached the same conclusion. We concluded that the only reasonable and practical basis for measurement of DSP outcomes is on a project by project basis, as higher level measures are too volatile to be helpful. This fits with the current AEMC incentive proposals.

Changes to the regulatory and distribution planning framework that are already in train will achieve many of the same objectives. Our strong view is that the preferable approach is to ensure that DSP participation, where it is in the economic interest of consumers, is also in the private interest of the network.

The AER reset process already requires DNSPs to demonstrate efficiency in their capex program, including the consideration of non-network alternatives. In Ausgrid's case this means we will be proposing an economically efficient level of targeted demand management initiatives as part of our investment program. This effectively constitutes a level of "target" DSP that is appropriate for the circumstances of the DNSP. It also means that under delivery would represent an (internalised) penalty assuming the allowed revenue was only sufficient to support the more efficient demand side alternative.

Within period, the new RIT-D and associated transparency, consultation and process requirements add a requirement to consider market benefits that will improve the likelihood that the "socially optimal" solution will be identified. Incentives are still needed to ensure that the DNSP cannot be worse off by

implementing an option that is the economically most efficient, and this is an important element of the AEMC outcomes.

It should be remembered that current mechanisms under the "incentive scheme", with the exception of the NSW D factor, are not incentives at all. The best a DNSP can hope for is to be no worse off. In this situation it is not surprising that some DNSPs have not been enthusiastic about embracing DSP. A change to this situation is the most important element of reform to encourage greater use of DSP by networks.

AEMC DRAFT RECOMMENDATION

7.3.5 Providing clarity and flexibility for DSP related expenditure

a) Inclusion of market benefits into the AER regulatory expenditure reset assessment

We recommend that the NER is clarified to enable the AER to consider potential non-network benefits when assessing the efficiency of network expenditure allowances.

Ausgrid strongly agrees with the AEMC's recommendation. We believe that it is important that these be available to DNSPs in developing proposals, not just as a general requirement for the AER to consider. This should be identified in the framework and approach so there is clear basis for proposals and evaluations, including the range of market benefits to be assessed, independent valuations of these benefits, and methodologies for including these benefits in the assessment of efficient DSP related expenditure.

Ausgrid considers that foreseeable short term DM as part of the efficient capital and operating expenditure should be included within the regulatory period as well as longer term DM strategy expenditure primarily directed at efficient outcomes in future regulatory periods. It is important to note that pricing initiatives aimed at shifting demand are also part of the regulatory reset process. Both the DNSP business case for supporting short and long term DM and the regulated revenues should reflect the benefits to the whole value chain from the DM activity.

As noted in previous a submission³⁷, an independent valuation of market benefits, particularly in the wholesale energy market would be beneficial to all participants. It would limit the review the AER undertakes to the DNSP business case itself rather than necessitate a debate about the appropriate values of non-DNSP benefits.

Ausgrid suggests valuation of upstream benefits could be undertaken by an independent party and reviewed periodically in a similar fashion to the way the WACC is reviewed every five years by the AER. This deemed value of upstream DSP benefits would streamline assessment of DM options for networks and regulators alike and not only lead to more DM projects being undertaken, would allow businesses to plan DM projects with confidence that can be included in its regulatory proposal.

AEMC DRAFT RECOMMENDATION

7.3.5 Providing clarity and flexibility for DSP related expenditure

b) Managing volatility in DSP expenditure

We recommend that the NER is amended to include the ability for distribution network businesses to have extra flexibility in their annual tariff setting process to reflect changing DSP costs.

³⁷ See Ausgrid's response to the AEMC's DSP 3 Issues Paper, 16 September 2011, pp22, 29 -30.

Ausgrid supports this recommendation. We agree that DSP costs can be more difficult to forecast compared to supply side infrastructure costs. However, as experience with DSP programs increases and the design of these types of programs are refined, we anticipate that over time the forecasting of costs will improve and volatility will decrease.

AEMC DRAFT RECOMMENDATION

7.3.5 Providing clarity and flexibility for DSP related expenditure

c) Clarifying treatment of DSP operating expenditure at regulatory resets

We propose that a new rule is introduced in the NER that provides distribution network businesses with more certainty on how DSP expenditure incurred in a regulatory period (but which is not included in the approved allowance) will be treated in future regulatory determinations.

Ausgrid supports this recommendation.

AEMC DRAFT RECOMMENDATION

7.3.5 Providing clarity and flexibility for DSP related expenditure

d) Temporary exemption from the Service Target Performance Incentive Scheme

We propose that the NER is changed to permit the AER to grant temporary exemption from reliability service standards for specific DSP pilots/trials.

Ausgrid agrees with this recommendation in principle. We would support the exemption being on application and to be related only to DSP trials, as opposed to commercially driven DSP.

AEMC DRAFT RECOMMENDATION

7.3.5 Providing clarity and flexibility for DSP related expenditure

e) Ability of DNSPs to own and operate DG

We recommend that the AER should give consideration to the benefits of allowing distribution network businesses to own and operate DG assets when developing the national consistent ring fencing guidelines for these businesses.

Ausgrid strongly supports this recommendation. We have extensively utilised distributed generation to deliver net benefits to consumers, where it has proven to be more cost effective than paying customers for access to their existing generation. It is also important to note that in utilising distributed generation for network support purposes, Ausgrid has chosen to lease rather than own our generation assets, thereby avoiding the need for these assets to be rolled into Ausgrid's regulatory asset base (RAB). This aligns with the temporary nature of network support and ensures the delivery of greater net benefits to consumers.

As noted in our submission and in response to recommendation 3.3.2, we do not believe that it is appropriate to ring fence activities undertaken for network support purposes. Ring fencing should only apply when a DNSP is engaging in a competitive market and is in a position to unfairly influence the market or gain an unfair advantage.

Whilst DNSPs owned or operated distributed generation can sell energy to the market, it cannot set the market price if used for network support purposes. If the primary purpose is network support, then income from selling into the market can be treated as an offset to the DNSP's cost for the network support. It would only be considered as unregulated income if the primary purpose is not network support.

AEMC DRAFT RECOMMENDATION

7.3.5 Providing clarity and flexibility for DSP related expenditure

f) Feed in tariffs and value of export from DG units

We consider that SCER should, in developing a national approach to feed in tariffs, take into account the value of time varying feed in tariffs to encourage owners of DG to maximise the export of their energy during peak demand periods

Ausgrid supports this suggestion.

AEMC DRAFT RECOMMENDATION

8.3.1 Alternative approaches to facilitate efficient DSP

The recommendations are a package of integrated reforms for the market. If implemented, the market should have time to adjust and transition to the new environment. There should be ongoing monitoring and evaluation of the market for the desired outcomes to be achieved. We therefore do not consider that additional regulatory mechanisms beyond those recommended in this report are needed for the market at this time.

Ausgrid supports this conclusion.

Appendix 1 – Suggested functional specifications and other considerations

Outlined below are the minimum base line requirements we consider necessary in order to facilitate greater levels of DSP in the NEM.

Safe operation of metering equipment should be the first minimum functionality requirement.

Accuracy of energy measurement and registration for the operating conditions should be the next requirement.

Security of data access must be maintained at the appropriate levels to ensure privacy and confidentiality requirements are met within opex constraints.

Standardisation – Selecting and maintaining an international standard (IEC) for metering hardware and metering communications protocol, such as Cosem/DLMS.

Interval metering data to the Type 5 metering level (200 days of 30 minute kWh data with optical probe reading at speeds of 90 days of data in less than 35 seconds) should be maintained as a base level functionality to allow for broad market application. This base capability also supports interval data for market settlement and provides the tools for measuring (and rewarding) demand side participation through cost reflective tariffs.

Real-Time Customer Enablement Port should be part of the minimum functionality. This port should be a specified, physical terminal (RJ11, RJ45) on the meter that publishes metering variables (instantaneous energy register read, for example) in a standard, published, communications protocol at regular time intervals (1s, 10s). This approach pre-provisions all meters with the same customer enablement capability at a very low incremental hardware capital cost and remains available and operational for the life of the meter. As a one-way publishing port, security is not compromised. The application of the port can be as broad or as limited as the market desires. In some circumstances, the port may be never used. A second circumstance, the port may be interfaced to a customer funded zigbee dongle allowing a customer to install an In Home Display (IHD) to monitor usage in real time. In a third circumstance, the port may be interfaced to a retailer funded Home Area Network (HAN) system where the metering variables are combined with retailer pricing information for a more interactive retailer product. This technology can be used to alleviate the use of remote communication, as the customer could access real time data via the customer port rather than relying on historic daily reads which are only accessible after the fact.

Communications Upgrade Port should be part of the minimum functionality. This port would allow for the convenient retro-fit of any future communications device when the business case allows for the installation and maintenance of this component. The port would need to include provision for power supply to ensure no additional equipment is required at installation and ideally, access to mains power to enable all communications media, including power-line carrier communications in the future.

Other Consideration for Communications

The use of a cost effective communication method of interrogating the meter must also be considered along with the current NER definition of a Telecommunication Network³⁸. Clarity around the interpretation of this requirement may have pronounced effect on the option available and the associated costs. In Ausgrid's opinion this requirement requires that any private communications network used to retrieve metering data must be approved by AEMO.

³⁸ A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by AEMO for the *remote acquisition of metering data*.

Other considerations

Overarching principles

In specifying the minimum functionality definition for interval meters, Ausgrid suggests the AEMC considers the following overarching principles:

- describe requirements in a non prescriptive way (where appropriate) in order to maintain focus on the outcomes rather than the method;
- describe areas where interfaces between parties are required using established standards and protocols;
- take into account existing NEM metering architecture and best practice systems engineering principles;
- encourage simplicity, robustness, standardisation, ease of installation and maintenance to ensure efficiency in the long term.

Defining functional objectives

Further, we suggest that it would be helpful to specify the functional objectives that the AEMC is seeking to achieve with metering. For instance, if the objective is to enhance customer choice through increased frequency of metering data access or customer billing with real data, mandating this frequency – such as monthly billing – would drive the most efficient technology, whether that be remote communications or manual reading.

Appendix 2 – Proposed structure of a demand management incentive scheme

Proposal for a Simplified D-Factor

We agree with the AEMC that DNSPs should be allowed to earn a share of additional market benefits in generation and transmission sectors when implementing DSP projects.

We propose that a proportion of these market benefits be provided to DNSPs as an ex-post incentive in addition to the annual revenue requirement. The incentive amount would be determined by multiplying:

- 1) The kVA reduction achieved by the DSP project,
- 2) The deemed value of the unpriced externalities in the generation and transmission sectors resulting from the DSP project (based on long run marginal cost of augmentation), and
- 3) The benefit sharing proportion (i.e. level of incentive).

Level of Incentive

The report proposes that the incentive be capped at 11% of the net market benefits. We would note that the guidance for this incentive cap was derived from a review of US programs targeted primarily at broad energy reductions rather than peak demand reductions. The US market in energy efficiency and demand management has been active for a number of decades and the maturity of the market and different objectives are key determinants in the 11% value.

It is our view that the immature DSP market in Australia and lack of significant progress to date warrants no incentive cap is placed to create a barrier to the development of a healthy DSP market. In fact, we would argue that any DSP project with a positive net market benefit should proceed as this would, by definition, be a more efficient solution. The establishment of a cap would discourage DSP projects with a low net positive market benefit and severely limit innovation.

Furthermore, the deferral value of network investment and DSP costs can vary considerably by location and customer type. In order to achieve an efficient level of DSP, it will be necessary to implement a range of DSP programs across any network area with the program mix varying in relation to the mix of customer types. This approach will be critical to maximising savings in network investment and is likely to result in low positive market benefits in selected network areas.

We propose that the incentive to the DNSP be established at 30% of net market benefits with 70% to be retained by customers. As the DSP market matures and the reliability of DSP solutions firms, the incentive can be reduced.

Foregone Revenue

The recovery of forgone revenue should continue to be included as an ex-post inclusion in the incentive scheme to remove any potential disincentive for DSP initiatives.

Setting of Targets

We agree with AEMC that it is not appropriate to set targets for demand reductions by DNSPs. Each of the suggested factors has high natural volatility making them unsuitable for externally observed indicators. In addition, network DM is often focused on specific localised constraints and not general problems across the whole network. We therefore propose that DM be evaluated on a project by project basis rather than any broad indicator.