Energy Retailers Association of Australia Limited

9 May 2012

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Submitted Online

Dear Sir or Madam

RE: Power of choice – giving consumers options in the way they use electricity, Directions Paper

The Energy Retailers Association of Australia (ERAA) welcomes the opportunity to provide comments on the Power of choice – giving consumers options in the way they use electricity, Directions Paper (the Directions Paper). Previous input by the ERAA for this and other reviews are available on our website.

The ERAA is the peak industry body which represents the core of Australia's energy retail organisations. Membership is comprised of businesses operating in the electricity and gas markets in most Australian states and territories. Collectively, our members provide electricity to more than 98% of customers in the NEM and are the first point of contact for customers of both electricity and gas.

The ERAA would like to congratulate the AEMC for the quality of the Directions Paper, and the approach taken throughout the review process so far. Whilst the ERAA has addressed each consultation question individually, outlined below are four key overarching points from our submission:

1. Demand Side Protection (DSP) is a worthwhile long-term objective. However, achieving the benefits detailed in the Directions Paper will require gradual market transformation where various elements such as a roll out of interval meters, the collection of historical consumption data and the education of an informed customer base need to occur first.
2. Changes to the core principles of market regulation should not be encouraged, although an improvement in some of the existing regulatory arrangements can potentially provide some benefits to increase DSP penetration.
3. Existing roles and responsibilities in the market must be maintained.

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4. The current debates surrounding policy and the regulatory environment within which market participants must operate in creates business uncertainty. This stifles innovation and investments in the market which will potentially delay DSP participation.

The ERAA looks forward to further work with the AEMC during this review process. Should you wish to discuss this matter further please contact me on 02 9241 6556 and I can facilitate such discussions with ERAA member companies.

Yours sincerely

Cameron O'Reilly
Chief Executive Officer
Energy Retailers Association of Australia

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1. Consumer engagement and participation

1.1 Access to energy consumption - load profile data

Question 1: What should be the arrangements for consumers (or third parties acting on their behalf) to access their energy data?

The ERAA considers that the current arrangements for accessing data are adequately provided for in the existing Rules, and do not require amendment. Within the existing market structure this facility already exists for consumers that have installed the appropriate metering technology to facilitate the provision of interval meter data. Furthermore, the National Energy Customer Framework (NECF) provides sufficient scope for consumers to access their data and for this information to be provided to a third party assuming explicit informed consent has been provided for. Retailers are already equipped to provide this information to customers and have the necessary infrastructure to do so effectively and reliably. Retailers are also best able to obtain explicit informed consent from customers for the use of their information. Expansion of consent arrangements could increase customer confusion.

Question 2: Do you consider that there could be a role for an information service provider in the market as a mechanism to provide consumption data to consumers?

The ERAA notes there is currently a consultation being coordinated by the Department of Resources, Energy and Tourism (RET) that examines the potential introduction of an energy information hub (hub) that allows consumers and other interested parties with access to consumption data for various reasons. The ERAA has actively participated in this consultation process. Whist we appreciate that the concept of a hub is still in its initial stage of development, it has been suggested that the data gathered from the energy information hub could, in aggregate form, be used to help set policy direction to address peak demand. This hypothesis assumes that all small and large customers have access to an interval meter – where currently 87.7% and 14.4% of large and small customers' respectively, are on meters that can provide access to accumulation data. Irrespective of this, the ERAA does not understand why such information cannot be obtained from the data currently supplied to AEMO as part of the NEM settlement process. As highlighted in question 1, customers that wish to access their data for whatever intended purpose are able to do this within the existing rules. The ERAA believes that the current arrangements are suitable and will allow the market to determine the most efficient method for providing consumption information.

The ERAA urges policy makers to learn from lessons that occurred in the roll out of smart meters in Victoria. Costs of such a system will need to be recovered from all customers, irrespective as to whether they have an interval meter installed, do not use the system, or use the system sporadically. Whilst policy makers are attempting to address the poor perceptions that smart meters have in Victoria, a hub, as envisaged, will surely extenuate these poor perceptions. Finally, there are significant privacy concerns that need to be managed with respect to the authorisation of parties accessing private information through a hub that needs careful consideration. The ERAA further considers that the development of such an information hub will diminish incentives for

retailers, third parties and ring-fenced distributors from innovating in this field, where these parties will eventually roll out more sophisticated, customised and useful information portals tailored to their customer needs. The development of a national hub will inhibit and conflict with this innovation.

Question 3: Should amendments be made to the current NER clause 7.7 (a) to facilitate consumer access to consumption information? If so, how?

Clause 7.7 of the NER does not require amendment at this time. Clause 7.7(a) (7) in particular is often cited as a barrier to the provision of consumption data (for electricity); however this rule does not prevent an authorised agent that has explicit informed consent by the customer making a request for access to the data and for the retailer (the Financially Responsible Market Participant) to then provide them the data. Whilst some third party providers may be concerned that the format in which data is provided to them may not suit their existing operating models, the ERAA does not support developing policy, or imposing costs on consumers, that caters for emerging operating models that cannot operate in existing market frameworks. This is counter to competition policy and sets a dangerous precedence to changing rules to meet interest of a few at the expense of existing models that coexist within the current regulatory frameworks. As the market develops, and the penetration of interval meter data increases, retailers will adapt to the new market and the provisioning of data in formats that suit both consumers and interested parties that have consent to use this information, will evolve. This occurs in the commercial and industrial market and is considered by some participants to as a competitive advantage in contract negotiations.

1.2 Costs of consumption decisions

Question 4: What information provisions could be put in place to improve awareness of the costs of consumption and the use of particular appliances/equipment, so that the benefits of taking up different DSP options can be realised?

Where new pricing arrangements are justified, there is a need for an effective consumer education and engagement program that communicates the benefits of different DSP options to allow benefits to be realised. The challenge that is now facing the Australian energy market is then how to engage with consumers so that they progress along a spectrum from being uninformed to that of being informed, to engaged, to that of being empowered to make DSP decisions.

The ERAA does not support more regulation in this area. To date, consumer awareness of the costs of consumption and use of appliances has been addressed in several consultations, including the Australian Energy Regulator's (AER) consultation on price disclosure. The ERAA also notes that certain progress is already being made to build on consumer awareness. As example, the AER's price comparator website www.energymadeeasy.gov.au will provide information on costs and use of appliances, as will other government websites, such as the Department of Climate Change and Energy Efficiency's site www.livinggreener.gov.au. Many energy retailers also already provide this information.

As time of use tariffs become more widespread we can also expect retailers to more actively promote energy saving suggestions and information to best make use of the opportunities available to shift load. For example, information portals showing customer consumption and cost in a clear and easily understood manner are an example of services that can be provided by energy retailers.

Retailers, as well as third parties, should be left to develop product offerings in response to customer needs. Prescribing tariff structures or standardised formats and terminology will stifle innovation and lead to a reversion in some states to price regulation.

2. Efficient operation of price signals

2.1 Network pricing and incentives

Question 5: Should network charges vary by time of use? and Question 7: What changes are needed to market conditions to facilitate more cost-reflective network pricing?

The ERAA supports network charges varying by time of use, but not a mandatory tariff reassignment for small customers, or a requirement for retailers to pass through, network costs with a flat retail overlay.

We agree that distributors should be incentivised to minimise avoidable network augmentation, and that pricing structures which encourage load shifting is part of this solution. Regulation needs to ensure that network tariffs are cost-reflective so that the right price signals are being sent. However, we do not support more onerous rules around distribution price structures if the logical conclusion is that retailers are to pass through network price signals with a flat retail overlay. As the risk managers for the energy value chain – and the ones who ultimately bear the cost of mismanaging this risk – retailers have a right to price as required to manage risk externalities, whether this is for network or wholesale market considerations. A competitive market this will also provide the most sustainable outcomes for the energy system as a whole.

Question 6: Should NSPs charge on a volume or capacity basis?

It will take some time before retailers and consumers are able to market, accept and understand capacity-based pricing. In a recent analysis done by IBM, IBM highlights that something as simple as understanding the basic units consumers being charged, or the definition of renewable energy, was lacking in at least a third of consumers. Moving into complex concepts such as TOU tariffs or smart meters, it was estimated that 50-60% of respondents were not knowledgeable of what they actually meant.[1]

[1] Influences, perceptions, knowledge and expectations of the new energy consumer. (IBM 2011)

While demand-based tariffs are common among large customers, there are numerous educational challenges to overcome to explain the impact and effect of such pricing structures in relation to smaller customers. Furthermore, the interaction of demand-based pricing and energy (wholesale market) price signals requires further consideration if such network pricing were to be applied at scale to mass market electricity customers. As any change in a customer's underlying tariff will require a customer's explicit informed consent, retailers are best suited within the existing market structure to obtain such consent.

2.2 Retail pricing and incentives

Question 8: Do retailers have the right incentives to pass through appropriate wholesale costs and network charges to consumers?

Retailers have a right and a responsibility to manage pricing according to the various risk parameters that they operate in. As risk managers in competitive wholesale and retail markets retailers are well placed to provide for efficient outcomes. Whether these efficient outcomes are deemed as "appropriate" is a matter for policy debate, but we question how any more appropriate decisions could be made in this space without disrupting and potentially damaging existing market mechanisms that currently create consumer benefit. The ERAA would oppose any policy changes which would result in a net reduction to consumer benefit.

In the absence of significant numbers of interval meters, passing through wholesale and network pricing impacts is limited to net system load profiles assigned to a particular customer segment. As the number of remotely read interval (or smart) meters increases, the incentive to offer time-varying price structures that more closely match the peak and off peak behaviour of the wholesale energy market, as well as the capacity constraints of distribution businesses, will evolve.

Question 9: Do retailers have an incentive to minimise the costs of their customers' consumption?

Various stakeholders argue that retailers currently do not have an incentive to minimise the costs of their customers' consumption. The ERAA argues that this is a simplistic and inaccurate representation of retailers' operating model, as competition in the market does not allow this to occur. Customers are either actively seeking out most cost effective arrangements or retailers are actively promoting their products to attract or retain customers.

Activity in all markets will intensify as customers become more knowledgeable of the energy market, fuelled by rising energy prices and with the introduction of new technologies enabled by smart metering infrastructure such as in home displays, energy portals and devices enabled via a customer's home area network (HAN). This same activity will fuel the provisioning of DSP services as this product matures. As noted by the AEMC "where competition is effective in retail markets...competitors at the retail level would be able to gain a competitive advantage by

contracting for DSP in order to hedge against wholesale price spikes, and pass on these cost savings to their retail customers".[2] If not, they are at risk of losing those customers.

2.3 Cost-reflective tariffs

Question 10: Would a tariff with a fixed, variable and network LRMC element as described in section 5.8 closely reflect the costs of supplying electricity?

Whilst the ERAA supports the assumptions provided for in section 5.8, these assumptions have wide-ranging implications, not only for the electricity industry in transitioning to such a reformed tariff arrangement, but they also may impact complementary goods and services, such as valuations in the property market. Over time though, the penetration of time-of-use products to reflect network constraints will develop within the market. The penetration of these products will eventually increase substantially as long as retailers are involved in the process. As noted in the Directions Paper the retailer's principle role in the market is to act as an agent for consumers in contracting for energy services and packaging them to meet consumers' requirements. As the key interface between consumers and the rest of the supply chain, the retailer's contract with consumers can offer both the means for consumers to participate in DSP where they wish to, and a route by which consumers can be compensated for those DSP actions".[3]

Question 11: What are the restrictions on retailers offering such a tariff?

There are several key restrictions on retailers offering such a tariff to end use customers including elements of retail price regulation and the penetration of interval meters in the small consumer market.

Energy market reform has resulted in governments introducing competition, privatisation and deregulation of parts of the energy industry. Utility companies have now been separated into discrete companies responsible for generation, transmission, distribution and retailing. The final stage of deregulation is the phasing out of regulated energy retail tariffs. Without the removal of price regulation the espoused full benefits of smart meters will be difficult to realise.

Under the Amended Australian Energy Market Agreement (2006) the Council of Australian Governments (COAG) agreed to phase-out retail energy price regulation per jurisdiction where competition is found to be effective by the Australian Energy Market Commission (AEMC). With the exception of Victoria, every State and Territory government is yet to phase out regulated retail prices. Retail price regulation is inefficient; it stifles product innovation, impedes price and service competition, and prevents the full range of benefits resulting from competition from being realised. Competition offers the best form of protection to consumers, not setting retail price caps.

[2] AEMC (2012). Power of choice – giving consumers options in the way they uses electricity, p152.

[3] AEMC (2012). Power of choice – giving consumers options in the way they uses electricity, p149.

Victoria phased out regulated retail prices on 1 January 2009 following the advice of the AEMC that competition was effective. Since then, competition has developed strongly; offering customers more diverse and innovative energy products, and consumers can save on their power bills by shopping around.[4] Victoria's market is the most active in the world, with switching rates being consistently greater than 25%. This is substantially more than other markets in the National Electricity Market (NEM) which have not yet deregulated retail energy prices.[5] Furthermore, the Victorian market has the least concentrated market share in Australia, where non-incumbent retailers have been able to secure one quarter of the market.[6]

State and Territory regulators around the country have indicated that as the energy industry transitions to a low-carbon future, setting cost-reflective (as they are required under their terms of reference) regulated retail tariffs is becoming increasingly difficult. Setting inaccurate tariffs could be detrimental to both energy retailers and consumers. If prices are set too high, consumers could pay too much for energy, although competition from market contracts could mitigate this risk. If prices are set too low, retailers will be unable to recover costs and may discontinue operating in the market. Furthermore, there are documented dangers of price discounting to households when actual price rises are later applied.[7] The best way forward to mitigate these challenges is to promote strong competition in the retail energy market and to deregulate retail energy prices.

Once all states commit to the deregulation of retail prices then this will facilitate the transitioning of customers onto Time of Use (TOU) tariffs that will shift consumption to lower cost time periods. This of course assumes that all customers also transition onto interval meters, the second restriction on retailers offering effective TOU tariffs.

One of the benefits of interval meters is to better reflect the changing cost pressures on distribution businesses (i.e. TOU network tariffs). Once a customer has an interval meter installed, a transitionary period should then apply to allow customers to test various retail tariff offerings that incorporate these network prices. During this transitionary period customers should have the flexibility of moving from a TOU tariff, back to flat tariff arrangements, allowing for reversions in underlying network tariffs that support retail tariffs. Coupled with allowing for reversions during the transitionary period, policy makers should consider using the current weighted average price control measures that apply to network companies, as a means of slowly transitioning all customers onto network TOU tariffs over an extended period of time. The other concern (not so much restriction) that retailers may have is dealing with price shock. Thought would need to be given.

[4] Essential Services Commission 2009, Energy Retailers – Comparative Performance Report 2009-09, Summary of Findings, December 2009.

[5] VaasaETT 2010, World Energy Retail Market Ranking Report – 5th Editions, VaasaETT Global Energy Think-Tank, December 2010.

[6] Murray. L. and J. Range, 16 Dec 2010, *Price row rages over $5.3bn power sell-off,* Australian Financial Review.

[7] Simshauser, P., Nelson, T. and Doan, T. (2011), *The Boomerang Paradox, Part I: how a nation's wealth is creating fuel poverty*, The Electricity Journal, 24(1): p72-91.

2.4 Potential for price signals to promote DSP

Question 12: Can efficient levels of DSP be achieved without cost-reflective prices?

Whilst the full benefits of DSP would be achieved through cost reflective pricing, some efficiency gains could be achieved through associated DSP measures. This could include education and information about how customers can manage their energy use and the benefits to the customer of doing. However, the ERAA highlights that the impact of action taken to shift consumption, or replace appliances, might be diluted if this cannot be reflected in a customer's bill, due to the lack of interval meter data.

2.5 Market conditions required for DSP

Question 13: What other market conditions need to change to enable cost-reflective prices? Will the benefits from improving the cost reflectivity of price signals outweigh the costs of the actions to improve them?

The ERAA strongly agrees with the AEMC's view that customers must have the capability to respond to the price signals they receive and be informed about how their choices affect their final energy bill. As noted in question 11, price deregulation and an increased penetration of interval meter data needs to occur first. The market, rather than regulatory intervention, will then develop products that ensure any benefit accrued outweighs any potential cost.

Question 14: Are changes to the current regulatory arrangements required to provide stronger incentives on NSPs and/or retailers to align price with cost?

As noted in question 11, removing or diluting the impact that price regulation has in the setting of retail tariffs, and the eventual transfer of all customers on to interval meter data, will provide sufficient incentives for retailers to align price with cost.

3. Technology and system capability

3.1 Supporting efficient investment decisions in DSP technology

Question 15: Are there any practical additional mechanisms that could help alleviate the barriers to consumer investing in DSP technology?

Whilst there are various barriers noted in the directions paper that prevent consumers investing in DSP technology, the following four factors are amongst others that can enable uptake and alleviate some of these barriers:

- Information on the relative benefits and costs of them doing so
- Assistance with the upfront cost of the investment in DSP technology

- Clarity of their rights and obligations with respect to DSP
- Ability to capture the benefits of investing in DSP.

Question 16: What should be the role of intermediaries such as ESCOs in addressing the barriers to efficient consumer investment and what factors could be impeding the development of these parties?

There may be a role for intermediaries in the market as information providers or energy efficiency equipment providers. However, it is important to ensure that the market determines what they pay in the energy industry going forward. To this end, a level playing field for the provision of DSP services must be a key objective. In our submission to DRET's Issues Policy Paper 2 on Smart Metering Protection and Safety review the ERAA made the following key points about third parties (or intermediaries).[8]

In the ERAA's view, consumer law is not adequate to protect consumers from activities generated by third parties. The ERAA supports the view that third parties should be captured by some form of NECF retailer authorisation. We can anticipate significant consumer confusion if this does not happen, particularly as third parties will have different and complex business models and no consistency in how they bill or communicate with the consumer. The methods that these entities use to recover debt, to manage insolvency and to address complaints will similarly be left open. As uptake of third party energy services increases, the costs of managing this environment will be felt by existing market participants who will be referred to when there are problems. Additionally, regulatory, policy and political staff across the jurisdictions will similarly have to solve consumer problems with no common understanding of how third parties can or should engage with the market and no clear means of meeting consumer expectations.

The ERAA believes there is a need for a comprehensive review of third party responsibilities to consumers and an examination of how third parties can be brought under the NECF efficiently and effectively. This should involve a clearer definition under the NECF of what retailing energy is, as discussed below. It also probably requires the NECF to be amended to provide specific authorisations for certain service provider types. The key questions that should drive how we assess third parties relate to how the end user sees the service relationship and what rights they would expect compared to basic energy use. It may be that the best result is a series of policy criteria and questions that lead to the (consistent) application of specific retail authorisations for third parties of certain types.

We would support the AEMC (or any other party) taking the lead in this area, in consultation with state jurisdictions. To not do this would risk revisiting the same policy issues for every business model that arises across the smart metering, DSP and electric vehicle policy space, with associated risk of unintended consequences from a fragmented approach.

The ERAA believes that the overriding consumer protection principle should remain, in that regulatory frameworks should reflect community expectations about how consumers are supplied with an essential service. In our view, "sale of electricity" (or energy more broadly) is no longer an adequate test of whether retail licensing or authorisation is required. The concept should instead

[8] ERAA (2012). Submission to National Smart Meter Consumer Protections and Pricing Draft Policy Paper Two.

shift to sale of *energy services*, which includes sale of energy and sale of energy management service such as interruptions to energy supply (under direct load control or supply capacity control, for example), ongoing use of a consumer's meter data, as well as direct billing the consumer under contract.

More precisely, where sale of kilowatt hours or other energy units is not relevant, we believe that third party (and distributor) service offerings should be judged on four criteria, where it is assumed that the third party will have access to a customer's consumption information:

1. If the product or service is marketed in competition with other services, and specific information needs to be provided at the point of sale to ensure informed consent.
2. If the consumer receives ongoing service under contract.
3. If supply to the property/appliance can be controlled or disconnected, including by charging technology.
4. If the consumer is billed or compensated directly from the service provider.

If the above activities occur in conjunction, we believe that some form of retail licence or NECF authorisation is required. To avoid doubt, this means that distributors also would not be able to undertake these activities without such an authorisation.

3.2 Commercial driven investment in DSP technology

Question 17: What amendments to the metering arrangements in the NEM are required to facilitate commercial investment in metering technology which supports time sensitive tariffs?

Retailers support implementation of smart metering. However, the provision of smart metering should be undertaken under a framework that supports competition and facilitates customer choice. The opposing outcome where monopoly segments of the market are given exclusive rights to the roll out of contestable infrastructure means that customers are not necessarily provided this service at least cost and may restrict the range of products and services provided through the infrastructure. Monopoly business should not control smart grid enablers, such as smart meters, as well as smart grids as this entrenches the use of proprietary technology and related anti-competitive effects in downstream retail markets. This is particularly important given the key role smart meters play balancing supply and demand through price signals and providing consumer benefits.

In October 2010 the ERAA issued a position paper, *'The competition policy issues related to smart meter infrastructure and smart meter infrastructure services'*[9], which outlined a series of policy recommendations for the deployment and use of AMI in the NEM. In that paper the ERAA emphasised that:

- Information technology is fundamental to the operation of the NEM. As the Australian Energy Market Operator (AEMO) has stated: "sophisticated information technology systems underpin the operation of the NEM. The systems balance supply with demand, maintain reserve requirements, select which components of the power system operate at

[9] ERAA, 2010. Position Paper on Competition Policy Issues in the Smart Meter Program.

any one time, determine and spot price, and thereby facilitate the financial settlement of the physical market"[10].

Metering is a critical element of this entire information technology system. When the NEM commenced in December 1998 three main types of meters existed. These were:

- Meter Type 1-4: These record energy use on a half-hourly basis and send those readings to a central database on a daily basis. They are remotely read interval meters.
- Meter Type 5: These record energy use on a half-hourly basis but are physically read in situ by Readers on a routine basis (varying from monthly to quarterly). They are locally read interval meters.
- Meter Type 6: These record energy consumed from one reading to the next and are physically read in situ by Readers. These are Accumulation Meters.

At the time the NEM began, almost all residential customers were equipped with Accumulation Meters (Type 6) and were billed quarterly on flat tariffs. For the purposes of market settlement and retail contestability, the energy consumed by accumulation meters is converted into an interval profile based on sample interval meters.

Since then retailers have been installing locally read interval meters (Type 5) for new customers because this enables retailers to match the purchase price and sale of energy for peak and off peak periods and provide customers with prices that reflect the true cost of energy supply.

The installation of remotely read interval meters (Type 1-4) has historically been affected by the general structure of metering services and associated use of system charges. Under this structure metering services in all cases were provided by distributors. These services included the provision of meters, meter reading and meter maintenance.

The costs of these services have been hidden in general system charges to an extent that where a Type 4 meter was installed for a customer, that customer would pay for the new Type 4 meter and associated costs as well as the legacy Type 5 or 6 meter costs. This cost structure is something that business customers dealing directly with distributors could afford. However this cost structure is an impediment to the take up of Type 4 meters by small business or household customers who are generally the customers of retailers. Accordingly it has rarely been cost effective for retailers to invest in Type 4 meter roll out.

Governments are keen to speed up the roll out of interval metering because this is considered to support anticipated net benefits to consumers such as time of use (TOU) tariffs, critical peak pricing (CPP), and other demand management benefits. Interval metering is also considered necessary to support improved network load control now that cost recovery is guaranteed to the network.

The Role of Smart Metering in Particular

Smart metering includes interval metering. Smart metering have additional functionalities for consumer benefit and load control purposes. For example, smart meters can:

[10] AEMO, 2010. Guideline to the NEM.

- Support two way communication with residential and business customers by collecting and displaying real time use data;
- Enable supply to the customer to be remotely controlled. This includes remote connection and communication and control of specific appliances via the Home Area Network (HAN) for demand response and management purposes;
- Remotely control and monitor the loads imposed by hot water, air conditioners, and pool pumps;
- Quickly assess customer power supply and restoration issues during forced distribution network outages.

While smart meters are considered to support better demand response and management outcomes and deliver greater operational savings, the current structure of the NEM and segregation of distribution and retail activities makes it complex to quantify how the benefits of smart meters will be captured by customers, distributors, and retailers. This creates a disincentive for any party to solely invest in smart meter roll out. To overcome this issue and speed up smart meter roll out, governments consider that an appropriate approach is to mandate a roll out on a cost recovery basis. To achieve this, the MCE has determined that distributors should be solely responsible for the roll out. This decision was based solely on an assessment that, for the purposes of cost recovery, a roll out by distributors represented the most efficient option.

In the view of the ERAA, the potential adverse impacts of this approach on competition in the retail market, the long term impact on the structure of the retail market, and incentives for distributors to improve services and innovate have not been seriously considered by the MCE.

This view is reflected in the recent review of Part 10 of the New Zealand Electricity Industry Participation Code 2010, where the Electricity Authority (Authority) deemed that the New Zealand metering services market is workably competitive. The Authority further commented that "A regulatory intervention at this stage would likely hamper the efficient development and operation of the metering services market by diminishing the commercial and competitive incentives for the efficient provision of metering data and services. The Authority considers that commercial negotiations currently represent the most efficient approach for participants in the metering services market to obtain access to metering data and services for the long-term benefit of customers". In a market where it is projected that up to 1.5 million advanced meters will be deployed by 2015, the Authority further stated that this investment "has occurred without regulatory intervention and without customers bearing the direct cost of the deployment".[11] The ERAA supports the Authority's recommendations.

Technology and Retail Contestability

There are about 7.7 million retail customers in the NEM. Chapter 7 of the National Electricity Rules (NER) provides the framework for managing metering in relation to these customers. Chapter 7 of the NER promotes three broad markets relevant to retail activity. Each of these is relevant when considering arrangements to structure the future SMI and SMIS markets.

[11] http://www.ea.govt.nz/our-work/programmes/priority-projects/part-10-review

(a) Market for meter provision, installation and maintenance

Under Rule 7.2.1 of the NER a Responsible Person is a person responsible for the provision, installation and maintenance of a meter.

Rule 7.2.2 allows generators, distributors and retailers to be the Responsible Person and operate in this market in relation to Meter Types 1-4 (remotely read interval meters). The Rule enables retailers to provide, install and maintain remotely read interval meters or appoint distributors as agents for this purpose.

The capacity of retailers to be directly involved in this market for remotely read interval meters has a number of positive impacts for retail market competition:

- It encourages the development, trial and deployment of different and competitive meter technologies to improve customer services.
- It reduces the risk that the retail market will become reliant on one or few proprietary technologies which may increase barriers to entry for new market participants or reduce the capacity of existing participants to compete in new market segments.
- It provides a commercial platform for retailers to invest in the roll out and management of SMI and SMIS, including the provision of connection and load management services which have traditionally been exclusive to distributors.

Accordingly, arrangements that provide distributors with an exclusive role in the provision, installation and maintenance of any remotely read meters (whether interval or smart meters) substantially reduce competition in this market and are inconsistent with the current operation and objectives of the NER.

Rule 7.2.3 (a) (2) of the NER restricts the role of the Responsible Person to distributors in relation to Meter Type 5 and 6 (in situ interval and accumulation meters). This restriction exists because of the legacy of distributors' historic and ongoing control of old style distribution infrastructure and the resultant view that it is simpler for distributors to manage meter roll out. This restriction is not based on any other public policy consideration and therefore it is possible to subject meter roll out to a competitive framework.

Control over Meter Type 5 and 6 contributes to the market power of distributors in the NEM because these meters remain predominantly used by customers. Exclusive control of remotely read metering (whether interval or smart metering) will add to this market power and increase the risks to competition in the retail market.

(b) Market for remote data collection and communication

As the NER enables various market participants to be the Responsible Person in relation to the control of remotely read interval meters it promotes competition in the downstream market for direct data collection and communication services from and to customers.

In the NEM, most household and business customers have a direct relationship with a retailer. This includes billing information and services and education and advice about energy efficiency to encourage demand responses and management.

The introduction of smart meters will provide new opportunities for retailers to collect and disseminate real time data and information for a range of purposes including:

- Service and product design and packaging.
- Customer billing.
- Cost recovery.
- Market settlement.
- Load and risk management.
- Demand response and management.

Another major function/purpose of smart meters is to enable greater differentiation in the pricing of services to customers as well as the creation of opportunities for multi-service billing such as bills for electricity, gas, water and home area network services. Greater choice promotes consumer welfare and is a major outcome that is sought from deregulated retail markets.

Encouraging these activities is essential to promote competition and innovation and to constrain the market power of distributors in the retail market, where they choose to participate in it. Exclusive control of SMI and SMIS by distributors or the use of exclusive control by distributors for competitive advantage in the SMIS market is at odds with these objectives and conducive to a substantial lessening of competition.

A distributor that controls the SMI and SMIS will be in a position to collect extensive data about customer usage. That type of data is a major source of market power because it enables the holder of that data to target customers in a way that is not possible for other who do not have access to the same full data-set. Telstra's dominant market power was attributable for a long time partly to this information advantage. As a result of its full access to customer calling patterns, Telstra could target particular classes of customers with pricing options calculated to appeal to them. Telstra's Flexi plans exploited this advantage because only Telstra had all the information necessary to be able to create plans geared to different groups of customers with different particular calling patterns.

(c) Market for in situ data collection

Under Rule 7.2.3 (a) (2) of the NER distributors control the collection of data from Meter Types 5 and 6, which require to be physically read. This approach has been adopted because of a view that the legacy role of distributors makes it more efficient for them to undertake in situ data collection. However there is no other public policy reason to prevent this activity from being competitive.

3.3 Consumer choice in metering capability

Question 18: Are the current arrangements sufficient to facilitate a consumer's decision to install their own meter as a revenue meter? If not, what changes to the current arrangements are required?

Current arrangements are not sufficient to facilitate customer choice because of the legislative protections distributors receive in the market for small customers, as noted in Question 17. As a result, there is little choice over the type of meter and metering services that the customer receives.

Retailers are able to deliver smart metering technologies to small customers. The model for how this would operate already exists in the large customer market where retailers engage with meter providers and meter data providers to provide customers with competitively priced metering solutions. This model addresses any perceived issues such as managing meter churn in a contestable market.

Question 19: Are any amendments to the arrangements required to encourage either the network businesses or retailers in invest in metering capability in order to support DSP options?

The Victorian Government has mandated the deployment of AMI for all customers who consume less than 160MWh per annum and provided distributors with the exclusive role in AMI implementation and management. This has been supported by the MCE. This has occurred without any expectation to return to the roles or principles that underpin competition in the NEM, by inhibiting access to AMI and SMIS controlled by distributors, no clear B2B rules to govern the relationship between retailers and distributors and without appropriate controls and protections for consumers for the use of metering and associated services. As such the ERAA supports that a key amendment would be the removal of any derogations from Chapter 7 of the National Electricity Rules.

3.4 Optimising the value of technology and system capability

Question 20: Are there aspects to the arrangements regarding the integration of DSP technologies into energy networks that requires further consideration under this review?

The ERAA strongly supports these following principles in regards to the integration of any new technology within the market.

For customers

- New technology should deliver real customer benefits that support the NEM.
- With any new technology customer education and information are essential to empower customers to use technology for demand management and cost reduction.

- Customers must be asked for explicit informed consent to receive any product or service and the privacy of their data must be protected.

For competition
Adherence to National Competition Policy including separation of natural monopoly and contestable activities, application of competitive neutrality to pricing and provision of third party access to metering to promote competition.

Development of industry standards for all participants
There should be agreed standards governing B2B relationships, customer interfaces, and sales and marketing activities.

Interoperability and open access arrangements
Policies should promote connectivity between technology types and services supported by technology and open access arrangements.

4. Supply chain interactions

4.1 Distribution of DSP impacts across the supply chain

Question 21: Can you provide a practical example of a DSP option which could deliver a net benefit to the market and also to the various parts of a supply chain. What are the reasons for such opportunities not being captured today?

Short-term load curtailment or DSP can be used as a cheaper alternative to a peaking derivative instrument purchased by a retailer. The same curtailment can be used as capacity on the network to assist with keeping the lights on or deferring capital on a substation upgrade. This curtailment could also be used to assist with frequency control, where revenue is gained from the FCAS market. There are some examples of a DSP provider participating in a retail and network program. The main reason why it rarely occurs is because there are very little active DSP programs running in the NEM, and therefore capturing revenue for DSP is very difficult.

4.2 Co-ordination across the supply chain

Question 22: How do the current market arrangements promote co-ordination across the supply chain to promote efficient DSP? What potential improvements should be considered?

There is limited co-ordination between the different supply industry participants as current market arrangements do not promote co-ordination.

Aggregators actively promote separation to maximise revenues from the same DSP participant. The Reserve mechanism does not allow participation in any other DSP program and therefore actively works against co-ordination.

However co-ordination is not really a major aspect for the promotion of DSP. As long as there are price signals for potential participants then it creates a market that will eventually develop coordination.

Question 23: Do you consider that there is inconsistency between how the wholesale and market sectors value DSP impacts? If so, is this a material problem to be addressed?

Please refer to question 3.

4.3 Effectiveness of the supply chain at capturing efficient DSP opportunities

Question 24: Can market mechanisms be improved to facilitate supply chain interactions for efficient DSP? If so, what options should be considered by this review and what considerations should be taken into account?

The ERAA supports the notion that there is great potential for DSP across the supply chain. Supply chain interactions are not a major impact to the efficient use of DSP. The review should note that the rules currently provide scope for shaping prices to incentivise participation. A lack of action in this area is not because of supply chain interactions.

4.4 Role of cost reflective pricing

Question 25: Would fully cost-reflective price signals enable the supply chain to act in a co-ordinated manner towards efficient DSP opportunities or would additional amendments be needed?

Full cost-reflective price signals may provide opportunities for the supply chain to act in a coordinated manner, but this will require the consumer and all participants to place similar value upon the various types of price signals. For example, price signals such as wholesale pricing will be beneficial to retailers, but maybe of limited value to consumers (especially those with flat or step tariffs). Variable network charges that are reflective of retail charges will be of value to DNSPs, retailers and consumers. However, variable network charges that are not reflected in the final tariff will provide limited value to the participants of the value chain.

Question 26: Would applying a network tariff scheme, similar to Orion's approach, be effective in the NEM?

Network pricing will have a direct effect on retailers as opposed to consumers as they are responsible for DNSP's charges. As such, the effectiveness of dynamic network pricing on consumer consumption behaviour will require all retailers to align that network pricing structure with the retail market price structure. However, such pricing structure may not be commercially

feasible for smaller retailers or new market entrants. Potentially, this may create a situation where dynamic network pricing is offset by non-dynamic retail pricing. Because of this buffer, consumers may not see the benefits of dynamic pricing, especially if they consent to remain on flat tariffs.

4.5 Co-ordination across the supply chain

Question 27: What are your views on possible approaches to achieving co-ordination across the market participants in the supply chain?

The ERAA supports a market based approach rather than a regulatory approach to achieving market coordination across participants in the supply chain. This is dependent on ensuring that sufficient incentives are provided that ensures effective DSP is initiated.

4.6 Value of DSP benefits to the market

Question 28: What should be the approach to quantify the value of DSP options?

There is a significant level of uncertainty around the ability to quantify and value the impacts of DSP projects/options, particularly where assessments are being made between the values of individual projects. Given there is the potential for competing projects it would suggest that standardised common methods of assessment are required.

A set of key common critical elements that make up a efficient and successful DSP project need to be identified and used as the basis for assessing the viability of a project, with a key assessment criteria being the impact or benefit that it has to end use customers.

4.7 Methods to forecast the impacts of DSP option

Question 29: Should standardised, common methods to forecast the impacts of DSP be developed? Is there a need for common approaches between network and operational planning?

As stated in Question 28, given the potential for competing DSP projects/options it would suggest the there is a need for a standardised, common method of assessment. The ERAA cautions such an approach, as standardising the methods in which DSP are assessed and delivered to the market may result in a bias towards a particular approach that stifles product innovation. If the overriding aim is to have a mix of projects in order to optimise the positive impacts of DSP a standardised approach may not be deemed effective. The challenge then is how to value unique elements of a particular approach so as to allow for wider consideration against other alternates.

4.8 Single actor option

Question 30: If the required co-ordination across the supply chain cannot be achieved, should a market participant be assign with the responsibility to procure DSP options? If so, what issues need to be considered in the design of such an approach?

ERAA does not believe a "single actor" framework would be a positive development in this review. Due to the broad nature of DSP in the NEM, there are many forms of potential DSP opportunities where different market participants will be best placed to realise them (be they distributors, retailers, aggregators, transmission operators, or others). Creating an overarching "single actor" framework will only limit the capability of the market to respond to DSP opportunities. As much as possible, the market needs to be allowed to identify and develop the most beneficial DSP opportunities. In the end, the only "single actor" for all DSP opportunities is the customer – it is critical they are empowered to realise the most beneficial DSP opportunities that exist in the marketplace.

This position does not preclude further initiatives like the Demand Management Incentive Scheme for distributors or transmission providers. The ERAA supports that such activities are essential to ensuring that the elements of the electricity supply chain, that by market nature are considered natural monopolies, fully maximise the DSP market opportunity, using the available channels that they have (be it the intermediaries, third parties or retailers). As previously highlighted, the ERAA strongly advocates that where the DSP opportunity resides within the contestable retail market that both distribution and transmission business operate are subjected to the same conditions as those detailed in Question 16. Where the DSP opportunity lies within the competitive market, then the policy setting should provide market participants the opportunity to identify the DSP opportunity without regulatory intervention. This assumes that the requirements detailed in Question 16 are maintained.

The ERAA cautions using referencing to DSP schemes that have been developed in the United States. The market in the United States allows for "single actor" DSP initiatives to be more readily adopted due to the aggregated nature of market participants. This is much more difficult to achieve in the NEM as a result of the disaggregation of the market that occurred in the 1990's, as noted in our response to Question 42.

5. Wholesale and ancillary services markets

5.1 Load forecasting incorporating DSP

Question 31: Should there be additional obligations on market participants to provide information to AEMO regarding DSP capability?

The dispatch engine requires demand and supply information to calculate prices (forecast, dispatch and spot). In order for DSP actions to impact on the setting of prices, information on DSP actions needs to be included in the calculation of prices – otherwise the potential benefits of lower

prices to consumers will not be realised. This is even more important when prices are expected to be high, as there is significant sensitivity in prices to small changes in load or generation (and this is where the bulk of the benefits of down ward price pressure are located). The ERAA is unable to see how any benefit for the long term interest of the consumer can be accrued without provision of information to AEMO.

There may be a case to consider that a minimum threshold should apply prior to the provision of real time information to AEMO (similar to the 5 and 30 MW requirements for generators). It also does not necessarily follow that bids are required as they are for generation – but any information provided would need to give the same effect to ensuring a transparent pricing process in the NEM.

5.2 Becoming a registered participant for DSP

Question 32: Are there issues relating to the costs and processes for becoming a registered participant in the NEM that require to be considered further in this review? If so, why?

Costs and processes for becoming a registered participant should be transparent and non-discriminatory to all participants. Costs should be allocated on the basis of the work needed to process applications to become registered participants (and AEMO are doing this at present to a reasonable extent).

It would be worthwhile to review the amount of information required to register as a participant against the costs of providing and processing the information – more so in the case where it does not provide any reasonable benefits in providing that information.

5.3 The role of aggregators in wholesale markets

Question 33: What issues should be considered regarding the role of aggregators in the NEM? Should there be a new category of market participant for aggregators?

The ERAA supports any changes that make the market more efficient including the introduction of new participant's categories. However we are cautious about parties "free-riding" off the obligations of existing participants. Any new participant category should be required to comply with the rules (as per any other participant) and not impose any costs on existing participants (especially transaction costs).

5.4 Access to short term financial contract markets

Question 34: How effective are current financial contracts markets at providing a hedge against price risk for DSP options?

It would appear that the availability of current financial products are considerably cheaper and provided higher levels of reliability compared to the often non-firm DSP options. Therefore, it is

cheaper for a participant to purchase a cap or option product to manage high price risk than to invest directly in a DSP solution. This is appropriate as one of the functions of financial markets is to transfer risk to parties that are better able to manage those risks. In the current environment it would appear that supply side options are more efficient that demand side options – resulting in lower overall costs to consumers.

5.5 Remuneration for providing DSP in the wholesale market

Question 35: Given the discussion regarding the appropriate payment to DSP resources in the NEM, are there any other issues that should be considered by the Commission in regard to this matter? Are there any potential improvements to existing processes and other means to better facilitate DSP into the wholesale market that require consideration?

Any payments in principle should be consistent with the market design. Some parties may advocate for a change to market design to incorporate capacity payments, as this will facilitate payments to DSP providers. But the market design needs to reflect outcomes relating to security of supply margins. At this time there is no evidence of a market design failure of the energy-only market.

In the case that the AEMC does decide that there are benefits to making "side payments" to DSP to facilitate DSP entry, then a clear cost of this externality should be articulated as well as costs recovered from the beneficiaries of the DSP supply.

6. Networks

6.1 Profit incentives on network businesses

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

The current regulatory framework does incentivise a network business to engage in DSP projects. However, incentivising a monopoly businesses with a regulated capital that is demonstrated by demand increases and caveats associated with the cost impost on customers is not an effective incentive in any situation. Where overall performance is measured against operational performance that is the result of capital spend, and where capital spend is the result of regulatory approval, there is no incentive to defer that spending where there are mechanisms for avoiding liability.

Technology implementation costs and operational expenditure for projects life spans, poses an interesting paradigm. Distributors need short term solutions for demand constraints to defer augmentation, however socialising DSM programs and obtaining consent from consumers in

affected areas would be time consuming and costly. The ERAA recommends that such consent be obtained by retailers, whom have built systems and operating models to obtain such consent.

Question 37: What options for reforming the current regulatory arrangements should be explored under the next stage of the review?

There are a number of options for reform, short term such as price signalling or direct load control, however the number of options for efficient projects are limited by consumer protection frameworks that inhibit the use of these options in a timely manner to achieve their full potential.

Price signalling, for example, is reliant on the signal being provided to the consumer allowing for an appropriate response, however, the signal is reliant on the bills which are currently expected to be issued on a quarterly basis within the regulatory framework. This makes the signal less effective because the onus is then on the consumer to identify the behaviour in excess of three months after the potential event.

Signalling can be achieved in other ways such as SMS, email and or other forms of notice, however the message becomes inconsistent between the demand and supply sides of the market if the responsibility is placed on the incorrect party (such as distributor messaging for network constraint when there are no generation capacity constraints or vice versa).

Question 38: Do the current arrangements need to clarify distribution network businesses' involvement in distributed generation and if so, how?

Using the assumption that the generators referred to are less than 30MW, there are certain points of clarity that are required to ensure that connections are facilitated with the appropriate planning, augmentation and connection issues.

Firstly, distributed generation falls into multiple categories, with non-market and or non-registered being of the greatest concern. Therefore, distributed generation is complicated by the lack of information conveyed between the generator and AEMO in real time. As stated in 5.1, price is influenced by demand and supply factors which depend on the availability of information which in the case of distributed generation is not always available in real time therefore is likely not to factor in all of the relevant information.

Secondly, outside of the connection and purchase arrangements some factors are not defined in all cases. In some instances the liability is the responsibility of the local retailer to purchase generated electricity in the absence of a Power Purchase Agreement (PPA).

In the absence of an appropriate framework, the only solution is to establish a minimum level of generation capacity that requires information to be provided to AEMO for non-registered and non-market generators and establish a standardised PPA for those below that threshold, excluding those that fall within jurisdictional generation programs.

6.2 Research into estimating potential demand reduction of non-contracted DSP

Question 39: How should network businesses estimate the potential demand impacts associated with DSP? Should there be consistency in approach across the business and should arrangements provide guidance on how to do such estimation?

Innovation, as opposed to consistency, should be the key driver for DSP because each business case will be premised on different technology, different timeframes, different demands and different market characteristics to make it a sound commercial proposition. For example, in estimating any potential demand side impacts, network businesses need to consider, however not limited to, such things as:

- The impact on forecast capital investment and opex.
- Any impacts on load controls.
- Potential impacts on consumer costs.
- The impact that the DSP might have on network safety and stability, including locational issues.
- Whether there is demand for the product and the channels to deliver this product to market. The ERAA strongly advocates that any market products should be developed in tandem with retailers, as the gateway to consumers.

Question 40: What should be the framework for recognising the impacts of DSP in the forecasting methodologies used during the regulatory revenue determination process?

The ERAA supports consistency in the assessment and forecast of potential demand impacts of DSP. Firm DSP (such as contracts for load control) is relatively easy to account for, but non-firm DSP (such as customers responding to time of use products, including critical peak pricing) is more problematic. As such, the ERAA would consider that forecasting methodologies may only account for firm DSP for the regulatory revenue determination process as non-firm DSP is highly variable, unpredictable and difficult to forecast accurately. This is particular to accounting for the risk that non-firm DSP will be efficiently incorporated into investment decisions.

6.3 Exemption from Service Standard Incentive Schemes

Question 41: Is it appropriate for network businesses to be exempt from the service standard incentive scheme during the initial development phase of DSP projects? What factors need to be taken into consideration in designing such an exemption?

The ERAA does not support this. Network businesses should not be awarded exemptions during the initial development phase. A better approach would be to phase in incremental stages of standards, to enable the network businesses to develop and improve processes and compliance obligations.

6.4 Engagement with consumers

Question 42: Should network businesses play a greater role in informing consumers about the potential benefits from DSP and various DSP products? If so, how should they do so?

The ERAA is concerned that the AEMC is considering reviewing roles and responsibilities in the market to facilitate DSP. The roles and responsibilities of participants in the energy market have evolved over time and have been clearly established for many years.

The commitment of Australian Governments to a National Energy Market (NEM) was born almost twenty years ago in 1991 and precedes their commitment to the National Competition Policy (NCP) in 1995. However NCP delivered later principles to guide future electricity reform.

Understanding this commitment is important to appreciate the position and concerns of the ERAA on potential competition policy issues that may arise should network businesses be allowed to offer various DSP products direct to consumers.

In July 1991, State and Territory Governments took the first step towards electricity market reform by agreeing to establish the National Grid Management Council (NGMC). The NGMC was tasked with promoting the "efficient, economic and environmentally sound development of the electricity industry" and asked to "encourage open access to the eastern and southern Australian grid and free trade in bulk electricity for private generating companies, public utilities and private and public electricity customers"[12].

After a series of subsequent commitments by the Council of Australian Governments (COAG), the NEM was launched in 1998. In October 1992, COAG commissioned the independent Inquiry into a national competition policy, chaired by Professor Fred Hilmer. The Hilmer report was delivered in August 1993 and recommended a framework to implement NCP including the separation of markets dominated by government businesses (like electricity) into natural monopoly and contestable activities[13].

In April 1995 COAG committed Australian governments to the implementation of the principles of NCP recommended in the Hilmer Report[14]. Some of the NCP package agreed to by governments consists of the:

- Conduct Code Agreement – this is the basis of legislative reforms extending the Trade Practices Act 1974 to government businesses;
- Competition Principles Agreement – this set out (1) the key principles for competition reform (structural separation of natural monopoly and contestable activities, regulation of access to natural monopoly infrastructure, competitive neutrality between government and private businesses, review of laws and regulations to identify and deal with anti-competitive effects

[12] Special Premier's Conference, Communiqué, Sydney 30 July 1991

[13] Australian Government, National Competition Policy Review, 1993

[14] Council of Australian Governments, Communiqué, Canberra, 11 April 1995

and application of NCP to local government) and (2) the public interest test to assess when to retain anti-competitive effects;

Separation of Contestable and Natural Monopoly Activities

Allowing distributors to offer new contestable services, such as DSP, may be inconsistent with the objectives in Competition Principles Agreement to separate contestable and natural monopoly activities and assets of government businesses. While some distributors in the current market are privately owned, some remain government corporations and therefore the application of the Competition Principles Agreement remains relevant. More broadly the economic rationale guiding NCP to disaggregate public monopolies is equally applicable to private firms operating as a monopoly.

Under NCP existing state and local government electricity distribution entities were rationalised into a few government businesses, provided with exclusive franchise areas, corporatised or privatised, and separated from retail assets and functions. In some jurisdictions distributors were permitted to participate in the retail market under a separate licensing regime.

By establishing a fixed number of distributors with exclusive franchise areas, governments recognised that distributors exhibit the features of a natural monopoly because they can supply the market more efficiently as a result of their technology, incumbency and economic integration.

It was also recognised that the infrastructure required to manage the distribution of electricity represents the characteristics of a natural monopoly, primarily because it is not economically feasible to duplicate the infrastructure. To promote competition in downstream markets (retail), state or national access regimes were implemented to govern third party access to distribution infrastructure.

These structural separations and regulatory measures were applied to end the vertical integration of distribution businesses in the electricity market. Economic policy recognises that vertically integrated natural monopolies with significant market power tend to have higher production costs, may charge higher prices and may innovate more slowly than firms which are subject to competitive pressures[15].

Despite these structural separations and regulatory arrangements, economic theory and public policy assumes that natural monopolies will always seek to vertically integrate or control a related market if possible. If the related market is perfectly competitive it is difficult for the monopolist to vertically integrate and raise profits because there is only one monopoly rent that can be earned in a supply chain or network[16]. However a natural monopolist may still want to vertically integrate into a related market for a range of reasons which include[17]:

- Avoiding regulatory restrictions or to preserve cross subsidies.

[15] New Zealand Treasury and Ministry of Commerce, Discussion Paper – Regulation of Access to Vertically Integrated Natural Monopolies, 1995, p4

[16] Ibid, 73

[17] Ibid

- Taking advantage of vertical economies of scale and scope, reduce transaction costs or internalise network spill over effects.
- Price discriminating in a downstream market.

The electricity retail market cannot be regarded as a perfectly competitive market but NCP imposes structural and regulatory barriers to the capacity of distributors to vertically integrate in the retail market.

Competitive Neutrality

There are two issues of competitive neutrality applicable to the provision of DSP. The first relates to the principles of competitive neutrality between government and private sector businesses as set out in the Competition Principles Agreement. Under the Competition Principles Agreement competitive neutrality means that government businesses should not enjoy a net competitive advantage by virtue of public ownership[18]. Net competitive advantage is largely considered to arise in relation to[19]:

- Exemptions from taxation liability.
- Access to capital at concessional rates.
- Exemption from aspects of business regulation.
- Pricing policies which do not take account of full production costs.

In general terms, distributors which remain in government ownership have been subjected to a range of measures to ensure their activities comply with the principle of competitive neutrality under NCP. These include:

- Structural separation of distribution and any residual retail functions to eliminate transfer pricing or ensure that any cross subsidisation is transparent.
- Corporatisation to ensure the application of taxes or tax equivalents and all regulatory requirements applying to the private sector.
- Restrictions on access to capital at concessional rates and structural reform to enable borrowings in the private market.
- Market pricing or independent price oversight.

This has been achieved through the various jurisdictional ring fencing arrangements noted in the Discussion paper. However, it is unclear whether these measures are sufficient to guard against vertical integration and net competitive advantages in the retail market.

The second issue relates to distributors, regardless of their public or private ownership, being able to offer contestable services, such as DSP, in the current and emerging industry. The Victorian Government, as example, has mandated the deployment of AMI for all customers who consume less than 160MWh per annum and provided distributors with the exclusive role in AMI implementation and management. This has been supported by the MCE. This has occurred without any regulatory framework in place to return to the roles or principles that underpin

[18] National Competition Council, Competitive Neutrality Reform, 1997

[19] Ibid, p7

competition in the NEM,[20] through equitable and open access to AMI and SMIS controlled by distributors, fair and clear B2B rules to govern the relationship between retailers and distributors, and appropriate controls and protections for consumers for the use of metering and associated services. The issue is further exacerbated where distributors begin to encroach on the customer-retail relationship such as through the development of customer web portal trials. The blurring of responsibilities has clearly arisen even in the light of current ring fencing provisions.

The new NERL and National Electricity Retail Regulations and Rules confirm the objectives of NCP and energy reform, provide the legal structure for the National Energy Customer Framework (NECF) and regulate the:

- Relationship between retailers and customers. This includes customer service, hardship policies for vulnerable customers, energy affordability, customer education, retail pricing information and comparisons for customers, and retailer of last resort policies. In keeping with the importance of the retailer-customer relationship, retailers are required to report on customer payment difficulties, disconnections, concessions, prepayment meters, complaints, customer service and the like.

- Relationship between distributors and customers. The extent of this is consistent with the limited relationship that distributors have with customers. It includes regulating distributor performance against service standards and delivering specified safety outcomes.

Risks to the NERL can be created when distributors provide direct information to customers about specific products related to energy use such as direct load control, in-home displays, smart appliances and home area networks. This is because these functions are not consistent with the role of distributors recognised in the NERL and because they are regulated businesses. Accordingly there is increased risk that they will subsidise their activities in the retail market with regulated revenue (irrespective of current ring fencing provisions). The ERAA notes that the AER "has advised that distributors' using regulated revenue to fund unregulated activities is unlawful[21].

While current jurisdictional ring fencing measures is one way to minimise this risk, it is the opinion of the ERAA that these are not sufficient to eliminate it all together and have made a recommendation to the AER that in its review of developing a national and consistent set of ring fencing guideline that it ensures that when a distributor does engage in activities considered to be contestable services, that the distributor is subject to the appropriate regulatory conditions imposed on retailers and it is done so with organisational ring fencing.

[20] Under Chapter 7 of the Rules, metering is contestable.

[21] Accenture Final Report: Department of Primary Industries IHD Inclusion into ESC scheme, December 2011, page 85

7. Retailers

7.1 Settlement load profile for residential consumers with accumulation meters

Question 43: Do you consider that settlement profiles which more accurately reflect actual consumption patterns improve incentives on retailers and/or consumers to offer/provide DSP?

Retailers would welcome settlement profiles which more accurately reflect consumption patterns, as this would provide them with more accurate information about individual load profiles, rather than relying on the use of net system loads. This would subsequently enable retailers to know which customers can be incentivised to shift their load away from peak times.

7.2 State based retail price regulations

Question 44: What are the specific aspects of state based retail price regulations that restrict retailers from offering innovative tariffs or products? What amendments to the regulations could better enable retailers and other parties to facilitate DSP?

One of the most significant barriers to achieving a reduction in peak demand is the fact that price signals are muted through retail price regulation, as noted in Question 11. The current regulation of tariffs effectively limits the ability of the industry to introduce innovative tariffs that provide incentives for consumers to reduce demand during periods of high demand. Simshauser and Downer (2011)[22] recently demonstrated that the introduction of relatively simple peak, off-peak and critical peak pricing could significantly improve the utilisation of existing infrastructure. Such an outcome would manifest itself in significant reductions in unit pricing.

Question 45: Should retail price regulation provide some certainty for retailers in their ability to recover any costs associated with facilitating DSP?

The ERAA provides conditional support to this statement. Where retail price regulation continues in the majority of NEM jurisdictions, it is critical that retailers are able to recover the costs of facilitating DSP. Where retail price regulation restricts cost recovery then this will restrict DSP facilitation.

[22] http://www.aglblog.com.au/wp-content/uploads/2011/03/No.24-Limited-Form-Dynamic-Pricing.pdf

7.3 Engagement with consumers

Question 46: Should retailers play a greater role in informing consumers about the potential benefits from DSP and various DSP products? If so, how should they do so?

The ERAA considers that retailers must play a pivotal role in educating customers, particularly if customers are to be encouraged to take up new forms of pricing such as TOU or CPP pricing. Addressing for the barriers noted in Question 11, prior to any large scale movement towards dynamic pricing or smart metering, there should be a joint Government, retailer and community-sector customer engagement program, aimed at educating customers about the tools that will enable them to engage in DSP (such as time of use pricing and smart meters). While retailers have a key role in assisting consumers to understand DSP, we consider that all stakeholders must be involved. Within the broader education program, individual retailers could work with their own customer base to educate them. Information could be provided on-line, or in mail outs, but it should be left to each retailer to determine the most appropriate methods to inform their customers about the benefits of DSP. An education program would be a great benefit to consumers targeting the messages around the problem with peak demand and the relationship with energy efficiency schemes.

8. Distributed generation

8.1 DNSP Incentives schemes for DG

Question 47: What incentives should be provided to DNSPs to ensure that they support DG projects? Is there merit in the proposal for DG proponents to pay DNSPs a fee-for-service to connect a DG installation? If so, how should this proposal be applied?

The ERAA does not support additional incentives being provided to DNSP's to accommodate DG projects. Ensuring that a DNSP supports DG projects should be a mandatory obligation on a cost recovery basis. This is not without precedent. For example, the obligations placed on retailers to comply with and administer various environmental schemes do not come with any "incentive".

8.2 Metering and settlement arrangements for DG

Question 48: What are the appropriate metering and settlement arrangements to facilitate the ability of consumers and DG projects to sell their demand response to any party?

The ability to switch retailers has the effect of making the DSP "portable". The only limitation being the ability to negotiate this mid-contract but with the implementation of a demand-response programme typically having a long lead time, this limitation is not considered material. Given this capability, the resource and cost in designing into the market the ability to sell DSP to parties other than the FRMP is best targeted elsewhere. DG projects, which can export to the grid, do of course have the ability to sell this capability to whomever, as does any other generator.

Question 49: Are amendments to the current market arrangements required to facilitate DSP contracts which enable the DSP provider to sell its services to any party? If so, what amendments are appropriate?

Please refer to our comments in Question 11.

8.3 Maximising the export value of DG to address peak demand

Question 50: Should there be supplementary provisions to the arrangements governing feed in tariff payments to encourage such consumers who have micro generation units to maximise their export at times that enable deferment of network augmentation? If so, what are possible options to achieve this?

DSP and DG need to have contracts with market entities, aggregators or a network that rewards them for reducing system demand. An open contestable market for DSR and DG would maximise this because the value provided by the load reduction could be allocated via the market to the party that values it most. This is an area where aggregators would fit best, putting together parcels of DG and DSR and selling them to networks or retailers that need the capacity reduction.

9. Energy efficiency regulatory measures that integrate with or impact on the NEM

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

Question 51: What do you consider is the role for regulatory energy efficiency policies and measures in the context of facilitating uptake of cost effective DSP in the electricity market?

Regulatory energy efficiency policies are complementary to DSP measures. Energy efficiency schemes tend to have a greater impact on reducing overall demand, whereas DSP is directed specifically at reducing peak demand. The ERAA considers that a national energy efficiency scheme would incentivise the market (i.e. retailers, distributors, ESCO's) to undertake DSP actions.

Question 52: In your view, do consumers consider energy efficiency measures separately to DSP, or do they consider all actions as part of managing consumption and hence controlling electricity costs?

While recognising that not all consumers think the same way, our view is that the majority of consumers (particularly at the residential level) would not consider energy efficiency measures

separately to DSP. For many consumers, the ultimate aim is to reduce their energy costs. They recognise that this can be achieved by, for example, using energy efficient appliances, or shifting load to off-peak times, where possible. However, it is unlikely that in making these decisions, they would be considering whether one is an energy efficiency measure as opposed to a DSP measure.

Question 53: What are the elements for a best practice model or approach for energy efficiency policy to facilitate efficient investment in, and use of, DSP in the electricity market?

There should be a nationally co-ordinated focus on improving energy efficiency, particularly given that there remains great potential for step-change in Australia's energy consumption practices. We support amalgamating these schemes by introducing a National Energy Savings Initiative (NESI).

Incorporating successful elements of the existing schemes, a 'best practice' NESI should have the following characteristics:

- Multi-sectoral coverage: To capture energy efficiency opportunities in both the residential and commercial and industrial (C&I) markets.
- Retailer obligation: an annual obligation to pursue and facilitate energy efficiency projects should be placed on holders of electricity and gas retail licences in each jurisdiction.
- Flexible methodologies – approaches to evidencing energy efficiency outcomes should be adopted that are reflective of the scale of take up and the individual savings/load of each project.
- Appropriate price signal: a NESI should feature a price cap/penalty value that is aligned with delivery of desired targets to ensure market participants have sufficient pricing information to apply to projects.