



Submission by

**Alternative Technology Association**

on

**Demand Side Participation Review: Stage 3  
Power of Choice - Draft Recommendations**

**12<sup>th</sup> October 2012**

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## *Introduction*

Founded over 30 years ago, the ATA is a National, not-for-profit organisation whose 5,500 plus members are mostly residential energy consumers with an interest in sustainable energy and resource use.

Through the application of our in-house expertise and experience in the energy market to our continuing advocacy and research, and close collaboration with fellow members of the National Energy Consumer Roundtable, the ATA is an important voice for energy consumers Australia wide and in each of the NEM jurisdictions.

ATA presents a uniquely two-fold perspective in the DSP policy debate: as well as directly representing all Australian energy consumers through our support of improving energy affordability through improvements to the energy market that have net benefits to all consumers, we speak with authority on behalf of the growing portion of the consumer base who have an active interest in DSP.

While ATA's membership is diverse, many members are of above average energy literacy and keenly await opportunities for DSP. Many ATA members play an important role in the development of DSP as the 'early adopters' of new and emerging technology, which in the context of DSP is vital to bring about the uptake and maturation of any new technology.

As a leading consumer organisation in the energy policy space, ATA plays an equally important advocacy role working with energy market participants and institutions, other energy businesses and state and Commonwealth governments to ensure that new opportunities for DSP are introduced in such a way that, by achieving the aspirations of the National Electricity Objective, DSP becomes part of the solution to the problem of increasing energy prices caused by unrealised potential efficiencies in the NEM.

ATA applauds the AEMC for their draft recommendations, and thanks the commissioners and staff for providing opportunities to contribute to this review through submissions, bilateral meetings, public forums and participation in the stakeholder reference group.

## *Chapter 2: Consumer access to information*

### *Q1. What should be the minimum standard form and structure of energy and metering data supplied to consumers (or their agents)?*

Where interval data is metered, ½ hourly data on all channels must be made available to all consumers (and authorised third parties acting on their behalf with explicit informed consent) both in its raw form as well as summarised data.

Continuous access should be granted for largely automated data provision at no ongoing charge in ways that allow automated integration with

- online portals and information hubs
- price comparator tools
- devices such as in home displays

This data access should be facilitated by a competitively neutral party such as their LNSP or a government agency.

Data should also be provided on request, at no charge, once per bill billing cycle in electronic format (for example as a .csv file attached to an email) to allow customers or their agents to undertake their own analysis of data.

### *Should these arrangements differentiate between consumer sectors (ie industrial/ commercial and residential)?*

While the timing and charges for data provision may differ for different customer types, ATA feel the above principles should apply to all customer types.

### *Q2. 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?*

ATA feel it is reasonable to charge a fee for

- the provision of data in electronic format more frequently than once per billing period, or
- provision of data in another format, such as in hard copy,

Where a charge is levied, it must be reflective of the cost of using efficient systems to provide this data in the format and the time required.

### *Q3. 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? (and)*

### *Q4. 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?*

ATA strongly support the collection and publication by AEMO of data including customer segment load profiles.

ATA feel it is appropriate to consider that there are some classes of consumers, such as public housing tenants as noted by SACOSS, who would clearly have a less 'peaky' load profile than the current Net System Load Profile (NSLP).

Providing flat retail tariffs that reflect the load factor of these classes of consumers may remove a regressive cross subsidy that is inherent in the settlement of accumulation meters under the NSLP, without requiring the expense of installation of interval metering for these customers or exposing them to the risk of time variant pricing. (See also our proposed variation to AEMC's proposed introduction of time of use pricing in this submission, which offers a simplified approach to this).

We note also that having data relevant to more levels of the network/system, and at greater resolution, is important for identifying efficient DSP. For example, cycling household air conditioning may be a less effective on parts of a network that are significantly winter peaking, when compared with those that are summer peaking.

For these reasons, our submission to the AEMC's Draft Advice on Market Arrangements for Electric and Natural Gas Vehicles contains further recommendations regarding thresholds for data provision to and by networks:

*ATA are of the view that*

- *15A and above (as distinct from above 15A) is an appropriate threshold for single phase loads for households.*
- *10A and above (as distinct from above 10A) is an appropriate threshold three phase loads for households.*
- *Above 15A is an appropriate threshold for single phase loads for non-residential small customers.*
- *Above 10A is an appropriate threshold for single phase for non-residential small customers.*

*Included in the information provided to the DNSP should be whether or not the load is, for example, capable of load control in accordance with AS 4755.*

*To make this data of use, DNSPs should also required to*

- *maintain this information*
- *make this information available in de-identified format to TNSPs and other parties*

*ATA are of the view that networks should be required to consider the value of implementing programs to control some reported loads as aggregated demand response to defer network based capex to deal with constraints (for example through RIT-Ds and RIT-Ts).*

*Customer privacy issues will need to be considered, particularly where this data is to be released to third parties, but ATA see these obstacles as surmountable and ultimately that the potential benefits would outweigh the costs.*

### *Chapter 3: Engaging with consumers*

*On “We seek stakeholder views on the following:*

- Where the AER has approved DSP network management services as “regulated network support services”, that network business should seek to engage with a retailer or third party to offer those services to consumers. In certain circumstances, the network business should be able to offer DSP network services directly to consumers.*
- Appropriate arrangements should be placed on retailers to ensure consumers are provided with appropriate information and offers on the DSP products and services which may be available to them.”(p32)*

ATA strongly supports the AEMC’s, views that “the network business should be able to offer DSP network services directly to consumers.”

We also that we feel it is necessary that measures ensure that

- retailers offer to consumers any and all network DSP products offered by the their LNSP in their area
- energy only retail products must in no way impede consumers from entering into arrangements to undertake DSP with networks or third parties<sup>1</sup>.

ATA acknowledge that this may require retailers to be exposed to a higher degree of uncertainty than they are currently. We feel the risk brought about by this uncertainty is

- mostly immaterial, and entirely manageable. The use of DSP for measures predominantly targeted at reducing network costs for consumers will have little impact on retailers, and will possibly be offset by benefits to the retailers such as incidental reduced exposure to higher spot market prices. The volume and price risks are is far lower than for factors which retailers are already in the habit of effectively dealing with, such as the impact of climate and weather on market price volatility.
- unlikely to place any retailers at a competitive disadvantage (with other retailers) that is not beyond their control. It is not appropriate to ever compromise consumer choice on the basis that some retailers choose to be overhedged.
- in any case, far lower in magnitude than the long term benefits for consumers brought about by the deployment of more efficient DSP to reduce the cost of networks.

ATA provide further comment on related issues in our recent response to the AEMC/s Draft Advice on e Market Arrangements for Electric and Natural Gas Vehicles:

*We ask the AEMC to consider, as part of this Advice and/or as part of the Power of Choice review, what measures may be required to prevent consumers from being disadvantaged by retailers refusing to offer some market offers to consumers with more than one FRMP.*

*ATA are of the view that all offers by retailers should be made available for all residential consumers, including those with more than one FRMP, except where the retailer is unable to offer that product*

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<sup>1</sup> ATA do see it as reasonable to expect that certain DSP based retail products, as distinct from energy-only retail products, may require retailer’s exclusivity over other parties, for example a consumer would not be able to contract with a third party for the control of a specific appliance already controlled by the customer’s retailer.

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*for reasons beyond their control (for example, where customer metering arrangements preclude market settlement of that retail product).*

*On complexity and consumers:*

*“Market arrangements will influence the development of DSP options and products, and how these are taken up by consumers. To encourage consumers to participate and realise the benefits of DSP, such arrangements should support consumer decision making and should not introduce, nor lead to, increased complexity. It is also important that sufficient consumer protection and other support mechanisms are in place.” (p33, 34)*

*“It is important that the regulatory arrangements in place, such as the NECF and NER, facilitate consumer choice to allow for the benefits of DSP to be realised. They should not create greater complexity for the consumer, particularly in the current climate where consumers’ knowledge and awareness of their electricity use remains relatively limited.”(p40)*

ATA supports the AEMC’s views regarding the need to arrangements that balance the promotion of DSP and the protection of consumers.

Nonetheless, we are very concerned with the repeated, and usually unqualified, assertion that DSP “should not introduce, nor lead to, increased complexity” (p34), and the assumption of homogeneity of consumers that underpins the view that “consumers’ knowledge and awareness of their electricity use remains relatively limited.” (p40)

Clearly, vulnerable consumers need to be protected from increased complexity, and for all consumers increased ‘involuntary’ complexity such as any introduction of mandatory cost reflective pricing needs to treat the management of the impacts on these consumers as paramount.

However, a blanket avoidance of increased complexity fails to acknowledge that all consumers are not the same, and risks stifling the uptake of more efficient DSP.

Without accepting changes in complexity in the energy market in the past, we would not have a number of now common, well understood, efficient consumer products, such as off-peak hot water, today.

There are a large and growing number of energy literate, well informed customers, who are not vulnerable or at risk of becoming and who keenly seek to engage with the energy market from the demand side, in a way that is by necessity far more complex than the options available to them now.

In recent years, about one in ten Australian households have chosen to move from being passive energy users to becoming ‘prosumers’, generating their own energy with rooftop solar, effectively selling surplus to the grid and buying the shortfall for their own use. Most of these consumers have at the same time moved from flat pricing to time of use pricing.

To take these steps, 850,000 consumers have accepted – in many cases, welcomed - a step change in the complexity of their interaction with the energy market. By and large they would disagree that their “knowledge and awareness of their electricity use remains relatively limited.”, and they

would be backed up by recent findings that the average customer with solar PV consumes about 20% less energy<sup>2</sup> around the home than non-PV households<sup>3</sup>.

Yet, had a blanket avoidance of complexity informed policy decisions taken in the last three or four years, most of these households would today remain passive energy users.

While goal of avoidance of complexity has apparently not interfered with a number of the AEMC's own recommendations in this review, ATA are very concerned about the message that such statements send to SCER and to other stakeholders.

In ATA's view, it not only entirely incorrect, but inconsistent with many of the commission's other recommendations, to report to SCER that the blanket avoidance of increased complexity in the energy market is somehow in the long term interests of consumers.

ATA therefore recommend the Commission revise the message in the final report, to say not that complexity is something to be avoided entirely, but that it is something to be managed, and that its impacts should be monitored, with particular regard to vulnerable consumers.

*Q5. What specific criteria could be used to determine whether elements of the NECF (ie marketing code) apply to third parties providing DSP energy services to consumers? That is, beyond Australian Consumer Law?*

*and*  
*Q6. What requirements should be in place for these third parties? For example, what should be the form of authorisations/accreditations?*

ATA welcome the AEMC's proposed improvements to energy market competition by allowing consumers to engage with the energy market via third parties

As DSP starts to evolve and mature in the market, it would be appropriate to develop specific policy defining the relationships of third parties with consumers, retailers and networks as part of NECF.

ATA feel it is important to allow the third party market to take some shape and begin to mature before finalising this work, so that the nature of any emergent issues, and required protections, can become better understood.

ATA are concerned that the views put forward by some retailers, that third parties should effectively be required to become retail market participants, in no way reflects the long term interests of consumers. Clearly such arrangements are unnecessarily onerous for parties that are not selling energy to consumers, and consumers would continue to endure a dearth of DSP options if this were the case.

#### **Long term consumer protections and NECF for third parties**

SCER are undertaking a review of consumer protection and safety for smart metering to support the development of NECF for smart meters. Consumer protection, access arrangements and related

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<sup>2</sup> For the removal of doubt, these homes are actually consuming 20% less energy with their own appliances through efficient behaviour, additional to any reductions in import from the grid due to locally generated solar.

<sup>3</sup> <http://www.theage.com.au/environment/solar-panel-takeup-heads-towards-the-millionth-home-20121010-27d9t.html>

issues pertaining to third party service providers are being considered as part of this review.

ATA support this approach, and feel that National consistency for requirements for third parties will be important.

Noting that about a decade after consultation began NECF is only now slowly being implemented, ATA feel it is appropriate to take interim measures to ensure a suitable degree of consumer protection is achieved in relation to third parties, but, importantly, without placing any unnecessary impediment to the growth of the (still embryonic) third party market.

### **Near term marketing protections and accreditation**

ATA support the view expressed by AGL that the marketing obligations under NECF and ACL, with particular regard for the need for explicit informed consent from the consumer, should apply to third parties also. On this:

- ATA assume third parties would automatically be covered by ACL.
- ATA support the development of a voluntary code of conduct for third parties with regard to marketing, noting the similar approach adopted by energy retailers<sup>4</sup>, which could effectively invoke the marketing protections afforded by NECF.
- ATA are of the view that accreditation is not required for third parties at this stage. If however the Commission is of the view that third parties should be formally accredited, ATA suggest that
  - AER would be the appropriate body to oversee this.
  - Where parties aren't selling energy but are providing energy services, the accreditation approach used for Accredited Persons by the Victorian Essential Services Commission as part of the Victorian Energy Efficiency Target scheme<sup>5</sup>, provides a good example of an effective model of accreditation of third party energy service providers.

### **Review of consumer protections for third parties**

ATA suggest that the AEMC recommend to SCER that a review of the effectiveness of consumer protections, specifically in relation to marketing, services and other issues relating to third parties be undertaken two years from the implementation of the changes to arise from this review. This off course could be brought forward if needed.

*Q7. 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?*

Noting our earlier points regarding retail arrangements for network based DSP, ATA strongly support the AEMC's proposed approach regarding the arrangements and requirements for networks to contract with residential and small consumers, and agree that "it would be appropriate for

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<sup>4</sup> Energy Assured Ltd, <http://energyassured.com.au/>

<sup>5</sup> <https://www.veet.vic.gov.au/Public/Public.aspx?id=FAQs#businesses>

network businesses to directly engage with residential and small consumers to deliver their DSP network management services/programs. “

ATA agree that the rules and guidelines should be amended accordingly.

The ATA suggests that some of our recommendations regarding third parties may also apply to DSNPs, particularly in relation to suggested near term measures.

#### *Chapter 4: Enabling technologies for DSP*

ATA and strongly support the AEMC's key recommendations that

*“• A minimum functionality specification is included into the NER for all future new meters installed for residential and small businesses consumers. This specification should include interval read capability and remote communications.*

- The installation of metering consistent with this minimum functionality must occur in certain situations. eg. refurbishment, new connections, replacement of old meters.*
- In addition, such metering capability must also be installed on an accelerated basis for large residential and small business consumers with annual consumption above a defined threshold.” (p42)*

ATA agree with the Commission that

*“The benefits of these arrangements through facilitating efficient DSP are expected to exceed the costs involved to consumers who install the meters and the market as a whole.” (p42)*

when a range of conditions are met. As ATA has discussed at some length with the AEMC staff, for a number of reasons, meeting these conditions outside of mandated rollout of AMI meters is a challenge.

ATA's key recommendation regarding metering is that AEMC recommend that SCER

- Undertake updated cost and benefit assessments to determine, in light of updated information and the experience of Victoria, in which states and territories it would be to the net benefit of consumers to roll out AMI infrastructure. Such an assessment must have specific regard to the impacts on vulnerable consumers.
- Deliver on MCE's previous commitment to roll out smart meters where there is a net benefit to consumers, with specific regard to the management of impacts on vulnerable consumers.

ATA understand that such advice, though likely in the long term interest of consumers and so in keeping with the NEO, is not palatable to SCER. While this frustrates the ATA, the AEMC is clearly not responsible for this situation.

We acknowledge the AEMC have clearly given careful consideration many of the broad spectrum of issues that relate to the likely ad-hoc deployment of AMI infrastructure under a market led rollout model, and measures proposed by the AEMC are sensible in this context and will go a long way towards ameliorating these issues.

We offer some suggestions for the consideration of the AEMC in finalising their recommendations regarding AMI as an enabling technology for DSP.

*The other Q7. 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?*

In principle, ATA support the full adoption of the National Minimum Functional Specification as endorsed by the NSSC and approved by SCER. It was developed with the extensive input of all stakeholders, including consumers, to reflect the suite of smart meter functionality representing the highest net cost benefit to consumers.

We note that the MFS was designed with mandated smart meter rollouts to most or all consumers in mind, in an environment of derogations from meter provision contestability. In such a situation, the case for maximum functionality is clear. In the rollout model proposed by the AEMC, the case for inclusion of some functionality (for example those generally for the purposes of network support and/or where they may not be used by consumers in the near term) will not be apparent for all installations.

For a number of reasons, ATA is of the view that

- adhering to the National MFS in entirety, and
- minimising the number of potential configurations for meters
- preventing asset stranding and reversion of metering

will be in the long term interest of all consumers

We suggest that it is important that changes occur in chapter 7 of the NER, for the reasons noted in our response to question 13(c) in this submission regarding metrology process and procedure changes.

### **Economies of scale and the need for maximum meter functionality**

In global terms, Australia is a small market for meters. Throughout the National Smart Meter Program, a concern that was repeatedly raised by industry, government and consumers alike that having too many options for metering configurations would drive up the cost of meters, resulting in lower functionality, and therefore lower benefits, at higher cost than having more options.

ATA understand that most of the 2.5 million meters rolled out in Victoria are of two models. These meters meet a common minimum specification, and presumably have been purchased in lots of tens or hundreds of thousands of meters at a time over three or four years. These volumes have justified the cost of developing new models of meter.

By way of comparison, 20 market customers ordering meters in annual volumes one or two orders of magnitude lower than the Victoria example, with not result in manufacturers investing the capital, time and risk required to develop meters that suit the Australian market.

For these reasons of scale, under the market-based rollout model, having a

- small number of allowable meter configurations, that
- maximise the potential usefulness to
  - consumers,
  - networks, and

- retailers,

is all the more critical to achieving the long term interests of consumers.

### Minimum functions for metering infrastructure

ATA recommend that there should be one basic meter configuration<sup>6</sup>, that includes energy management and smart grid functions.<sup>7</sup>

For the net benefit of consumers, the minimum functionality should include

- Interval metering of energy and reactive energy.
- Bidirectional capability at a hardware level. We note that
  - Victorian AMI meters have bidirectional capability
  - The additional hardware cost of a bidirectional-ready meter compared to a unidirectional meter is trivial.
  - The cost to a customer to reconfigure a bidirectional-ready meter when solar is installed is low (around \$28-39 in Victoria, and likely to be lower from 2013<sup>8</sup>), compared with the alternative cost of replacing unidirectional meters with bidirectional meters when needed (which is hundreds of dollars in any case).
  - importantly, as per the National Minimum Functional Specification for Smart Meter Infrastructure, twin element meters must be also capable of monitoring not only energy flows and power for each element, but also the totalised flows, representing the import and export across both elements. This means twin element meters must affectively be capable of bidirectional metering on each element and across both elements
- Local meter read capability.
- Remote read capability at a hardware level (such that remote reading can be implemented at a later date without a further change of meter). On metering communications, ATA are of the view that
  - As well as the transfer of data, communications networks must support customer demand response, with adequate reliability to allow consumers to contract with retailers, networks and third parties while satisfy the requirement for a degree of firmness.
  - it may be cost effective to have latent mesh radio capability built into the meter for activation at a later time, however this presents a raft of other issues and requires a thorough cost benefit analysis.
  - Wireless point to point communications may in some cases be the most cost effective means of data transfer. ATA are concerned that the lack of reliability of wireless P2P communications services means it is unsuited to firm demand response, limiting a consumer's capacity for effective DSP.
  - ATA supports the suggestion by the AEMC that the NBN (or other hardwired internet) may be an effective communications system for both data and demand response and customer messaging. ATA note that the communication system for the

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<sup>6</sup> In keeping with the National MFS it is appropriate to differentiate further on the basis of the number of measurement elements and whether the meter is CT connected or a whole of current meter. ATA's recommendations apply to all of these sub types.

<sup>7</sup> as referred to on page 47 of the AEMC's draft recommendations

<sup>8</sup> <http://www.aer.gov.au/sites/default/files/Final%20Decision%20-%20AMI%20Remote%20Service%20Charges%20-%202015%20February%202011.pdf>

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meter must in no way be reliant on the maintenance of a customer's own network or connection.

- An open platform Home Area Network interface such as a Zigbee<sup>9</sup> 2.0, to support
  - In Home Displays
  - Customer messaging
  - Demand response
  - Customer devices such as smart thermostats<sup>10</sup>

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<sup>9</sup> ATA note that Zigbee is the standard used for all Victorian AMI meters.

<sup>10</sup> Ideally the HAN will be ready, or upgradable, to support emerging and future customer devices such as EVs (Zigbee 2.0 achieves this today) and the control of PV inverters.

### *Chapter 5: DSP in wholesale electricity and ancillary services markets*

ATA are strongly supportive of the AEMC's approach with respect to DSP in the wholesale and ancillary services markets.

ATA also agrees with the AEMC's positive estimations of the likely volume of demand response in the medium term, which will have material benefits to electricity consumers.

2,100 to 2,800 MW of peak demand reductions in the short to medium term will likely deliver material value to end consumers in the way of reduced wholesale prices. In turn, this will likely have material impacts on generator / gentailer revenue.

For this reason, ATA implores the AEMC to remain vigilant to retailer and generator advocacy on this issue.

ATA notes at the recent Power of Choice forum in Melbourne (3<sup>rd</sup> October), comments from a number of generator and retailer representatives. These included:

- that price 'spikes' in the wholesale market were a positive sign and necessary to drive further investment into generation;
- that the NEM was purposely designed as an 'energy only' market, and the status quo should to be given priority for this reason.

Whilst price 'spikes' and higher wholesale prices may create the market conditions for new generation investment, a volatile wholesale market is definitely not in the long term consumer interest.

In general terms, price 'spiking' is the result of constraints and high peak demand, and if there are other, more cost effective ways to address these constraints and meet peak demand, then the market should select those in preference to traditional investment. It is our energy only market that is preventing more cost effective peak demand solutions from being implemented.

ATA is cognisant of the significant pressure that is likely to be brought to bear by those market businesses who will be negatively impacted by lower wholesale prices. ATA again implores the AEMC to maintain momentum with these necessary reforms, and to continue to maintain a marked distinction between the interest of market business shareholders and the long term interests of consumers, in this regard.

*12 (a) Do stakeholders agree that the proposed demand response mechanism is likely to result in efficient consumption decisions by end-users? If not, are there any changes you recommend to the mechanism to facilitate this?*

Yes, ATA believes that the proposed demand response mechanism will likely result in more efficient consumption decisions by end-users, which should also lead to market price benefits for all consumers.

*12 (b) On balance, is a new sub-category of market generator required for consumers providing a demand that enables aggregation?*

ATA believes that a new sub-category of market generator for demand response consumers is required.

The creation of new roles in the NEM, such as load aggregators that can both act as a market participant (including on the spot market) and a service provider to small customers, is a necessary step in realising the potential NEM-wide benefits of DSP.

One of the key benefits to the market that would be brought about by allowing third parties to enter is increased competition, through:

- Competition between retail businesses and new third parties such as load aggregators:
  - As noted above, retailers and generators have raised concerns regarding the impact on the revenue from the generators that they own and/or contract energy from, mostly in off-market arrangements. ATA contends that the long term consumer interest, in line with the NEO, outranks the long term interests of either retailers or generators in this regard.
- Supply side generators and new third parties such as load aggregators:
  - There is a clear area of potential benefit to consumers when load aggregators can contract large volumes of load and trade that directly into the spot market, when it is cheaper than the next most expensive supply-side generator. This is not novel, is commonplace in other energy markets around the world, and has been discussed for many years in relation to the NEM and its status as an 'energy only' market.

Given the problems associated with peak demand through the NEM leading to business cases being realised for generators that may only 'switch on' for a small number of hours in any year, it is clearly nonsensical to posit that consumers would not benefit from price reductions from more cost effective load curtailment being traded directly into the wholesale energy market. There are a number of businesses that are seeking to better participate in the NEM in this way, and the ATA supports the proposal of the AEMC to realise this potential.

- (regarding considerations of the energy supply chain) Competition between regulated NSPs and providers of non-network solutions to meet energy supply needs. NSPs may not always be the best parties to, or may lack interest in, promoting non-network alternatives to expensive network upgrades, so specialist third party service providers are often the best placed organisations to do this.

### *What types of issues should be considered when developing the registration process?*

ATA would like to see that access to this sub-category is inclusive of small scale DSP distributed generation, and emerging developments such as vehicle-to-grid electric vehicle services and battery storage.

Consideration of these potentially aggregated services may be required as the market evolves in respect to these technologies. Consideration of these technologies should also have regard to considerations as part of the Small Generator Aggregator Rule Change and the Review of Natural Gas and Electric Vehicles Arrangements, in keeping with the AEMC's current approach to harmonising these processes.

*Q. 13(c) Are there any substantial changes to metering and settlement arrangements required for this mechanism to be implemented? Can these issues be resolved through AEMO's consultation process and procedures or are broader amendments to the rules required?*

In ATA's view it is critical to the effective implementation of these measures, to best serve the NEO and hence the long term interests of consumers, that such changes are accommodated by changes to the rules, rather than through AEMO's consultation processes.

There is a public aspect to AEMO's consultations; ATA have engaged with these effectively on numerous occasions, and we support AEMO in implementing some changes that arise from these.

ATA are concerned, however, that unlike that of a rule change process, the final decisions regarding B2B, non-B2B and metrology processes and procedure ultimately rests with committees (the IEC and RMEC) comprising mostly of retailers and DNSPs<sup>11</sup>, and that would lead to a suboptimal outcome for consumers and new market participants.

Due to the current lack of representation of consumers or DSP providers on these AEMO committees, and the fact that DSP inherently conflicts with the business interests of the current membership of these committees, ATA are of the view that these committees could not effectively introduce the changes required.

Accordingly, ATA recommend that

- Any changes are generally implemented through changes to the Rules to ensure full, fair and open consultation and implementation to effectively introduce DSP to the market in a timely manner.
- Alternately, to ensure that consumer interests are met and that DSP providers have input into the decision-making process, the AEMC could recommend to SCER that the constitution of the IEC and RMEC are amended to include consumer representation and DSP provider representation<sup>12</sup>.

*Q. 14 (a) Do you agree that similar arrangements for generation should apply to demand resources in terms of thresholds for registering as scheduled or non-scheduled basis?*

With respect to market registration, ATA supports similar threshold arrangements for DSP as for generation.

Registration thresholds should be applied on a regional, aggregated basis (e.g. thirty 1 MW resources in the same price region have the same impact on market prices, and a similar impact on power system stability, as a single 30 MW resource).

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<sup>11</sup> While the IEC also includes two independent members, ATA notes that

- To our knowledge, full consensus, therefore support of independents, is not required for decisions of the IEC
- Independents are not the same as actual representatives of consumers or DSP providers
- The independent members are historically nominated and appointed by the retail and DNSP members

<sup>12</sup> The IEC is described in the Rules. ATA are unsure where the governance arrangements of the RMEC are described, however as noted the two committees effectively have common industry members.

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We would suggest that a similar approach is taken with small generator aggregators as well as with DSP.

*Q. 14 (c) Should both market and non-market loads above a certain size be required to provide information to AEMO regarding their controllable (and therefore interruptible) load blocks?*

ATA do not have strong views on this issue, but would be inclined to respond in the affirmative, provided reporting requirements are not unnecessarily onerous.

*The other Q. 15. Do you agree that a new category of market participant should be established for the provision of non-energy services?*

Noting also our response to question 12 (b) herein, ATA agrees that a new market participant category is required.

Not only is this required for the provision of non-energy services, but it is critical that in the unbundling of services at the connection point, that the ability to separate import and export energy services, as well energy and non-energy services, is facilitated (i.e. allowing for aggregated distributed generation to be purchased by one FRMP, whilst electricity consumption at any individual metering point may be contracted to another FRMP).

ATA acknowledge that the AEMC have noted the purpose of the Small Generator Aggregator Rule Change in respect to this issue, and support the AEMC's efforts to ensure that the outcomes of that Rule Change, and this Market Review process, are consistent.

*The first Q. 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?*

ATA suggests that at a minimum, AEMO should be required to update its DSP expectations on an annual basis, or more frequently if when beneficial. For example, the addition of new market DSP more than 3 months before a normal annual update may give rise to the need for an additional update.

We note that if a large amount of DSP adopts the proposed demand-side bidding mechanism, AEMO may not need to rely so greatly on surveys and disclosures, as they will have real data and will be able to more easily model the impacts and opportunities for DSP.

## *Chapter 6: Efficient and flexible pricing options*

*Q18. 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?*

ATA strongly supports the AEMC's overall proposed approach to the implementation of Time of Use pricing.

ATA support the idea of the use of bands as put forward by the AEMC, but propose a variation to the AEMC's banding approach which, we feel;

- Reflects the nature of the causes of the problems that cost reflective pricing is trying to solve, and better targets consumers who can act to address these problems
- Lessens the
  - complexity, and
  - risk to consumers and retailers,of having differential treatment of three bands of consumers.
- Removes the risk to networks of medium consumers switching from ToU to flat network tariffs under the AEMC proposal
- Removes cross subsidy between bands, at both a market level and a network tariff level
- More effectively protects vulnerable consumers, by giving them a choice of tariff structures regardless of their consumption. While minor complexity is added by our proposed inclusion of vulnerable consumers in band two, in our view this is offset by benefits of the removal of the third band.

To achieve the above, ATA proposes simplifying the AEMC's proposed model to two bands:

- Band One (medium and large consumers) with mandatory ToU network tariff and a choice of flat or time of use retail tariffs.
- Band Two (small and vulnerable consumers) with a choice of flat or ToU tariffs.

Detail regarding the thresholds and further rationale for our proposal is described in our response to question 20.

*Q19. Have we identified the main issues with transitioning to cost reflective pricing? If not, what other issues need to be considered?*

ATA considers that the AEMC has identified the key issues with cost reflective pricing. We note two general issues that, while considered elsewhere in the draft recommendations, we wish to reinforce the importance of in this context.

1. The cost and design of metering technology. Cost reflective pricing requires the implementation of time of use metering.

When deploying remotely read interval metering it is clearly in consumers' best interests increase the functionality to use smart meters, to give consumers the tools, such as real time

information, demand response and messaging, to respond positively to cost reflective pricing.

Refer to our response herein to Chapter 4 of for more detail regarding metering.

2. As discussed at some length in our response to the AEMC's Draft Advice on Arrangements for Electric and Natural Gas Vehicles, the benefits of cost reflectivity extend beyond those that arise from resultant behaviour change.

*"... if price signals are sensibly designed and in some way cost reflective, one of two outcomes will result in each case.*

- *Greater efficiency, where the proponent changes their behaviour, and is rewarded through lower prices, or*
- *Equitable cost allocation, where the proponent does not change their behaviour, and pays for the impact*

*In summary: while behaviour change is often a desired outcome of price signals, it is not needed for price signals to be effective. Cost reflective pricing can improve equity and efficiency, thereby achieving the NEO, in the absence of behavioural response to price signals."*

For further detail on the above, refer to ATA's submission to the AEMC's Draft Advice on Arrangements for Electric and Natural Gas Vehicles.

#### *Q20. How should consumption thresholds be determined?*

In ATA's view, the two overarching concerns that must inform the design of the customer bands and the setting of thresholds are;

- The net impact (for example, in terms of increased or decreased cost or risk) on each class, and some sub classes, of consumer
- The net impact (for example, in terms the introduction or removal of cross subsidy between consumer classes and sub classes) on all other consumers

For reasons outlined in our response to Question 18, our proposal is for the two bands instead of the three proposed by the AEMC

- Band One (medium and large consumers) with mandatory ToU network tariff and a choice of flat or time of use retail tariffs.
- Band Two (small and vulnerable consumers) with a choice of flat or ToU tariffs.

Our proposed thresholds, the key aspects of the proposed design, and reasoning for the same are summarised in the following table.

Table 1 - ATA's proposed approach to the banding of energy consumers for cost reflective pricing

	Band One	Band Two	Rationale
Annual (and daily) consumption threshold (non off-peak/controlled loads only)	>3.5 MWh/year (more than 10kWh/day)	<3.5 MWh/year (less than 10kWh/day)	<p><b>Consumers using &lt; 10 kWh/day</b></p> <ul style="list-style-type: none"> <li>- do not contribute significantly to peak demand growth: they are not part of the problem.</li> <li>- Have less opportunity to reduce energy consumption</li> <li>- Have less opportunity to respond to time of use based price signals</li> <li>- Lack significant peak loads such as pool pumps that can be efficiently engaged for demand response.</li> <li>- For the above reasons, will not experience a net benefit from smart metering given the annual cost of at least \$100 per customer for AMI metering</li> </ul> <p><b>Consumers using &gt;10 kWh/day:</b></p> <ul style="list-style-type: none"> <li>- Have energy costs exceeding \$1000/year, therefore are more likely to be in a position to benefit from the use of AMI meters using above-noted measures</li> </ul> <p><b>Exclusion of separately metered off peak loads:</b></p> <ul style="list-style-type: none"> <li>- Off- peak circuits provide a net benefit to all consumers through improved load factor, and do not contribute to peak demand, so should be excluded from consumption threshold calculations</li> </ul>
Estimated* portion of customers per band	ATA estimate* this to be in the order of the highest three quartiles, by consumption, of all non-vulnerable consumers.	ATA estimate* this to be in the order of the lowest quartile, by consumption of all non-vulnerable consumers.	*These are rough estimates for indicative purposes only: ATA do not have actual data to hand regarding the specific distribution of the energy use (excluding separately metered off peak as noted above) of non-vulnerable customers
Vulnerable consumers	Can opt in to Band One (although this is unlikely to benefit them)	Default to Band Two (regardless of their consumption)	Vulnerable consumers need to be protected from the potential impact of ToU pricing, while being able to access it if they choose.
Network tariff type	Time varying	Flat, with option to move to time-varying	
Network tariff calculation (for both tariff shapes)	Based on load profile of Band One customers	Based on load profile of Band Two customers	There should be no cross subsidy between bands in relation to network tariffs. Hence, the network impact of the load profile for each band should be separately considered

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Retail tariff type	Time varying or flat	Flat, with option to move to time varying	
Flat retail tariff market settlement	Retailer's choice of - Market price, or - Net System Load Profile, of Band One customers	Net System Load Profile of Band Two customers	There should be no cross subsidy between bands in relation to market settlement. Hence, a separate System Load Profile should be developed for each band
Time variant retail tariff market settlement	Market price	Market price	

## *Chapter 7.4: Distributed Generation*

### **DNSP Incentives regarding DG**

ATA agrees with the AEMC that an incentive-based payment system for DNSPs to facilitate grid-connection is an inappropriate framework for overcoming the barriers of DG connection.

ATA is supportive of the content and intent of both the Property Council / ClimateWorks / Seed Rule Change for the Connection of Embedded Generation, and the Small Generator Aggregator Rule Change.

Ultimately, it is not in generally a favourable investment decision for DNSPs to invest greater levels of DG as an alternative to poles and wires, despite the fact that in many circumstances, it will offer long term benefits to all consumers through the avoidance of network upgrades and/or price spikes in the wholesale market.

As such, incentive-based arrangements are unlikely to be effective in delivering a more efficient outcome in the area of DG grid connection.

Greater certainty over the timeframe and assessment framework that DNSPs must comply with for applications of DG connection is an absolute must, and only a regulatory requirement will overcome the current uncertainty.

### **Ability of DNSPs to Own and Operate DG**

ATA agree with the AEMC that DNSPs should be allowed to develop their own DG for network support and trade directly into wholesale mkt.

The critical issue here though is that if DG is being used as an alternative solution to network constraint, then the investment required to develop that DG solution must not only be more cost effective than the network alternative, but it must also be implemented at least cost – i.e. through a competitive tender process, allowing third parties to compete with networks to provide the service.

Only when both of these objectives are achieved will the outcome be in the long term interest of consumers.

DNSPs do not traditionally have the skills, capacity or tendency to deliver least cost DG or DSP solutions. Whilst some network businesses are evolving in this regard, there are a number of dedicated DSP service providers active in the energy market that can provide DG or DSP solutions at lower cost and in shorter timeframes than DNSPs.

The most cost effective DG solutions are obviously in the long term interest of consumers.

As such, ATA recommends that more careful consideration is given the ensuring transparent regulation of DNSPs when investing in DG solutions for network support, outside of existing ring fencing arrangements. This may have ramifications for existing RiT-D (and RiT-T) processes.

ATA specifically notes the AEMC's comment at the bottom of page 143:

*“More generally, the nature of economic regulation suggests that DNSPs should have an incentive to seek the lowest cost option to address an identified network constraint, in as much as they are able to retain the resultant capex cost saving. This means that DNSPs may have some incentive to select the lowest cost non-network option, as obtained through open tender. However, we acknowledge that in making this decision, the DNSP will weigh the potential cost saving against the total return on capex it would receive if it constructed the asset itself and included this asset in the RAB.”*

ATA agree that DNSPs will always weight the potential cost savings from DSP measures against the total return on capex it would receive if it constructed the asset itself and included it within the RAB – and from a return on investment perspective, DSP is unlikely to ever be strong enough to overcome the a DNSPs alternative financial return in the RAB.

This is exactly why the ATA and others have been arguing strongly for targets to ensure a minimum level of spend on DSP, and do not believe that even the strongest ‘incentive-only’ approach will be sufficient to change the investment behaviour of some DNSPs while meeting the long term interests of consumers.

#### **Feed in Tariffs and Value of Export from DG Units**

ATA supports the AEMC's recommendation that SCER proceed to develop a framework for time variant feed-in tariffs (FiTs) for DG.

There has been a significant lack of support at the Federal level for FiTs nationally over the past five years. Despite the efforts of many organisations, and despite the small progression that was made in developing the national principles for FiT design, there has been no genuine willingness at the Federal level to progress efficient, value reflective FiT policy nationally.

Given the somewhat complex technical nature of FiT policy with respect to costs and benefits (for example that a value reflective FiT driving efficient levels of DSP offers benefits for both the individual DG owner and all consumers through reduced wholesale prices), ATA would also suggest that SCER is not the best body through which to evolve time variant FiT policy internally, and that they should formally seek the AEMC's advice for this process.

ATA would like to see more certainty with respect to Power of Choice Review recommendations as to how this process will be facilitated in a regulatory sense.

#### ***Further Contact***

Thank you for the opportunity to provide comment to this process and please do not hesitate to contact Craig Memery ([Craig.Memery@ata.org.au](mailto:Craig.Memery@ata.org.au) or (03) 9631 5418) or Damien Moyse ([Damien.Moyse@ata.org.au](mailto:Damien.Moyse@ata.org.au) or (03) 9631 5417).

Yours sincerely,  
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