



Australian Energy Markets Commission

Wholesale Demand Response Mechanisms

ERC0247

CONSULTATION PAPER

Submission by

The Major Energy Users Inc

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The content and conclusions reached in this submission are entirely the work of the MEU and its consultants.

<p>TABLE OF CONTENTS</p>

	PAGE
1. Introduction	3
2. Responses to AEMC questions	15

1. Introduction

The Major Energy Users Inc (MEU) welcomes the opportunity to provide its views to the issues raised in the AEMC consultation paper addressing the wholesale demand response mechanisms generated as a response to three separate rule change proposals to increase the amount of demand side responsiveness to the NEM wholesale electricity market.

The MEU points out that there are similarities between the response it makes to this consultation paper to that provided to the AEMC in 2015 when the CoAG Energy Council made a similar rule change proposal to increase demand side responsiveness but which was effectively rejected.

As an over-riding observation which colours the MEU response (both to this consultation paper and the 2015 rule change proposal) is that end users only interface with the electricity market because they must, not because they are wedded to being actively involved. Further, end users do not want to load shed as this impacts them from what their primary purposes are. It is important that this fundamental aspect is used as the basis for the AEMC decision.

However, the MEU recognises that some demand side responses can be provided at very low cost and with minimal impact on end users. With this also in mind, the MEU accepts that demand side responsiveness should be a part of the electricity market.

The MEU also points out that while end users understand that demand side responsiveness (DSR) is an important tool in managing the NEM wholesale market, load shedding is not costless and those end users that are prepared to forego the use of electricity for a period so that other end users can continue to use electricity, must be recompensed for the harm this load shedding does to them.

1.1 About the MEU

The Major Energy Users Inc (MEU) represents the interests of large energy consumers operating in the NEM and in other jurisdictions. The MEU comprises some 30 major energy using companies in NSW, Victoria, SA, WA, NT, Tasmania and Queensland. MEU member companies – from the steel, cement, paper and pulp, automobile, tourism, mining and the mining explosives industries – are major manufacturers in the NEM and in other jurisdictions, are significant employers of labour and contractors, and are located in many regional centres, including Gladstone, Newcastle, Port Kembla, Albury, Western Port, Mount Gambier, Port Pirie, Kwinana and Darwin.

Analysis of the energy usage by the members of MEU shows that in aggregate they consume a significant proportion of the gas used domestically and

electricity generated in Australia. As such, they are highly dependent on the competition that applies to the provision of gas and electricity, the retail functions needed to enable the competition to apply and to the transport networks to deliver efficiently the energy so essential to their operations.

Many of the MEU members, being regionally based, are heavily dependent on local suppliers of hardware and services, and have an obligation to represent the views of these local suppliers. With this in mind, the members of the MEU require their views to not only represent the views of large energy users, but also those of smaller power and gas using facilities, and even at the residences used by their workforces who live in the regions.

The companies represented by the MEU (and their suppliers) have identified that they have an interest in the **cost** of the energy as well as the associated network services as this comprises a large cost element in their electricity and gas bills.

A failure in the supply of electricity or gas effectively causes every business affected to cease production, and MEU members' experiences are no different. Thus the **reliable supply** of electricity and gas is an essential element of each member's business operations.

With the introduction of highly sensitive equipment required to maintain operations at the highest level of productivity, the **quality** of energy supplies has become increasingly important with the focus on the performance of the energy transmission and distribution networks, because the transport systems control the quality of electricity and gas delivered. Variation of electricity voltage (especially voltage sags, momentary interruptions, and transients) and gas pressure, by even small amounts, now have the ability to shut down critical elements of many production processes. Thus member companies have become increasingly more dependent on the quality of electricity and gas services supplied.

Each of the businesses represented by MEU has invested considerable capital in establishing their operations and in order that they can recover the capital costs invested, long-term **sustainability** of energy supplies is required. If sustainable supplies of energy are not available into the future, these investments will have little value.

Accordingly, MEU members are keen to address the issues that impact on the **cost, reliability, quality** and the long term **sustainability** of their gas and electricity supplies.

The members of MEU have identified that in addition to the need for strong competition in the competitive parts of the energy supply chains, energy transport plays a pivotal role in the energy markets. This role encompasses the ability of consumers to identify the optimum location for their investment in their

facilities, and provides the facility for generators and gas producers to also locate where they can provide the lowest cost for energy supplies. Equally, consumers recognise that the cost of providing the transport systems are not an insignificant element of the total cost of delivered energy, and due consideration must be given to ensure there is a balance between the competing elements of price versus reliability, quality and long term security;

The MEU recognises there is tension between the four elements of cost, reliability, quality and long term security and therefore makes its comments in this submission in full knowledge of the need for managing this tension.

1.2 The difference between load and supply

The MEU is concerned that there appears to be a belief that the electricity market almost operates in isolation of other markets. The MEU observes that in constraining end user involvement as the rules current do, there is a view that the electricity market could and should be made more efficient, even if this results in detriments to other markets, especially those other markets where electricity end users operate.

It needs to be noted that while generators are in the business of selling electricity, for end users buying electricity is only a part of their operations. Whilst the electricity market is core business to generators, it is not the core focus of end users who operate in other markets as well. To force consumers to conform their operations to the electricity market is not in their long term interests.

In contrast to generators and retailers, electricity users are not totally focused on the electricity market - they see electricity supply only as one of many inputs to their operations and to force these end users to increase their attention to electricity markets will result a reduction in their attention to other, just as important, inputs they need to address to remain competitive in their own markets.

The implication of the DSR proposals is that end users should be an active part of the electricity market. Whilst in theory, such a view is legitimate, in practice an end user does not want to change its load due to inputs from the electricity market but will do so if the needs of the market they operate in permit; most of the load variation by end users is not driven by the electricity market and its associated prices, but by operational needs. There are some occasions where high prices in the electricity market do signal a decision to reduce demand but this is not the prime cause of load variations by end users.

The import of the above observations is twofold:

1. End users want to have as little to do with the electricity market as is possible while minimising their costs for electricity. The more barriers put in the way of end users, the less end users will participate in the electricity market and less DSR will occur. The MEU has noted that over the years generators and retailers seek to maintain their benefits through maximising barriers and minimising competition and the current rules enable this to continue.
2. End users will focus their attention on the electricity market at times of high prices in the spot market, where they can see the benefit of their involvement in the electricity market has the potential to deliver significant rewards through lower overall costs for electricity for them and other end users.

Generators and retailers want to maximise the amounts of electricity they sell at the highest price they can get as this is their core business yet end users want to use the minimum amount of electricity at the lowest cost to enable them to make the products and services they provide. If the electricity market is structured so that generators and retailers can prevent competition from minimising end user participation by imposing barriers, they will do so. The opposition they provided in 2015 against a similar rule change under current review exemplifies this point

The MEU sees that to maximise end user participation in the electricity market, fewer impediments to participating are needed and, as a result, the more DSR will eventuate and the more efficient the electricity market will become.

1.3 DSR from an end user viewpoint

Noting that the Power of Choice program commenced in 2011, a fundamental question that the MEU raises is:

"Why are we still debating about an issue that will deliver benefits to consumers and to cede some of the power that generators and retailers have over end users in order to provide a better balance of negotiating power?"

A number of end users of electricity have long sought the easy ability to take action in the electricity market when prices are high as this results in the minimum cost for their electricity needs, particularly because the price for electricity can reach levels several hundred times more than the average cost of its production. MEU members have also noted that there are times when generators use their market power to artificially drive the price to very high levels and, by doing so, cause considerable harm to consumers.

The MEU sees that providing more tools and methods for end users to use in order to limit their exposure (either directly through the spot market, or indirectly by limiting retailer risk exposure) to very high prices, is a sensible and needed response to provide more balance in the power between supply and demand.

Previous attempts to introduce greater DSR (eg the rule change proposal in 2015) have been tortuous and culminated with modelling showing that the costs of implementing changes to increase DSR are less than the benefits.

Regardless of the net benefit, there is an essential aspect that is missing from the AEMC analysis – that of a consumer's right not to buy when the price is high and to not be exposed to arduous involvement in a market that is complex.

If the electricity market is so structured that in order to deliver an efficient outcome for consumers, it requires some of the consumers to not use electricity when they would otherwise prefer to use it, then those consumers surrendering their rights need some reward to offset the costs they will incur in providing this service. Under the current rules, this is made quite difficult and that is why the MEU is supportive of the rule change proposal from PIAC and others.

The current arrangements impose a barrier to DSR and by limiting competition in the provision of services to allow DSR has been the cause of why there is currently so little DSR offered by consumers to the market. Structuring the rules such that there is increased competition should allow those consumers able and willing to provide DSR to get adequate recompense for providing this service. This will result in increasing DSR into the market.

1.4 End users and load shedding

The MEU is aware of four main forms of load shedding (ie reductions in load that are not the result of operational needs) that are provided by end users, viz

-) Load shedding because prices are high. The amounts of load that are shed are set by the price expected and/or how long the high price is expected to apply (ie the end user varies its load shedding schedule to reflect the expected price and duration of the high price¹) and by the amount of load shedding that can be achieved safely without risks to employees and/or the facility. Depending on the demands of markets unrelated to the electricity market, load shedding, whilst giving a cost benefit, might not be possible due to the requirements of those other markets.

¹ Some end users have a scale for their load shedding, eg some plant will be load shed at one price level and more at another higher price level. Some will not shed load unless the price duration exceeds a certain number of trading periods. Some end users can shed load within minutes and others have extended run down times limiting the financial benefit of load shedding.

-) Load shedding on demand of a retailer. Some end users have contracts with a retailer where the retailer provides a reduced retail contract price or benefit from load shedding but with a requirement to shed a certain amount of load at the call of the retailer. While the timing of the load shedding might be related to high price events or expected high price events, this load shedding is not under the control of the end user. This form of load shedding effectively results in limited competition for the service
-) Load shedding on demand of the network². Some end users are offered a reduced network tariff but with a requirement to shed a certain amount of load at the call of the network. This form of load shedding call is usually related to network loading and is not driven by wholesale market requirements.
-) Load shedding on demand of an aggregator. The MEU is aware that aggregators are seeking to enter the electricity market and they will offer load into the market based on the ability of those contracting with them to shed load at the call of the aggregator. The benefit to consumers of this approach is that it increases competition for the services that might be provided by the end user.

In addition to load shedding to attain a commercial benefit in retail or network contracts, the MEU is aware that there are some large electricity users that load shed in order to provide FCAS in the event of an unexpected loss of supply (eg if Basslink dropped out of service with no or little warning, some large load has been requested to immediately shed load in order to maintain frequency in Tasmania). In this case, there is a cost to the end user providing the FCAS which needs to be recovered by the end user.

Except for the decision by an end user to take spot market risk and load shed when high prices occur to mitigate risk, it is the supply side that initiates the request for load shedding. This places negotiating power with the supply side entity³ rather than there being equal negotiating powers between the parties that would lead to a balanced outcome for all.

End users currently select their retailer based on where the bulk of the costs are incurred (ie in the provision of electricity as and when required), rather than on the basis that the retailer relationship might be able to add value to the end user experience through other means. This means that unless a retailer is willing to provide a benefit to an end user seeking to provide demand response, then it is

² The MEU points out that some networks have agreements with large end users to shed load on demand in order to limit loading on the network. Whilst such agreements tend to be focused on larger end users, networks through direct control of many residential loads (eg a/c units) also can cause significant impacts on the overall regional demand by effectively causing the same outcome as a single large end user reducing its load.

³ For example, the MEU is aware of some end users offering load shedding to networks which the networks have declined and others which have offered the service to retailers and also been declined

unlikely that the end user will participate in providing any demand response. It is clear from the absence of significant amounts of demand response that the benefits offered by retailers to their end user clients to provide this service are insufficient to generate large amounts of demand response.

There has been an assumption (and probably still is) that a retailer acts for the interests of its end user client. In practice, a retailer acts in the retailer's interests and only in its end user client's interests when these coincide with those of the retailer. This means that, once selected, the retailer has significant control of the relationship until the end user elects to change retailer, noting that premature termination of a retail contract can be expensive.

The large retailers are also generators in their own right (ie are "gentailers") and this also biases the retail "experience" for end users as a gentailer has a different set of goals in the electricity market to that of a "pure" retailer, further moving retailers' interests from being aligned with those of end users. Essentially a gentailer seeks to advantage itself through both its retail functions and its generation functions so its interests are significantly conflicted with those of end users.

With the larger retailers being heavily conflicted through their generation activities, the MEU is very concerned that the issues (and costs) raised by retailers to the demand response mechanisms being proposed are designed to prevent (or at least minimise) competition for the supply of DSR.

1.6 The reality of DSR

In reality, the bulk of demand response is unlikely to be initiated by end users as most will be focused on their core activities. An end user is more likely to raise the issue with its retailer when approached by an aggregator or another retailer rather than initiate demand response of its own volition. The market already prevents demand response aggregators operating in the market on the grounds that introduction of third party providers of DSR is difficult to manage. Pragmatically, unless the dominant retailers have to embrace DSR in a competitive environment, then DSR won't deliver the outcomes possible. It will be the pressure that the DSR aggregators will put on the retailers that will result in functioning and extensive DSR and force the retailers to provide well priced options for end users⁴.

While opponents of the PIAC et al rule change proposal highlight that load scheduling will be needed. The MEU points out that this is spurious as already the market operates satisfactorily with end users exposed to the spot market

⁴ Many end users have commented that they do not offer DSR as the benefits from doing so through their retailers do not make the loss of production worthwhile.

reducing demand without formally scheduling this into the market⁵. Demand side aggregators could provide increased visibility by advising the availability of a demand response without heavy impositions of compliance obligations on end users.

1.7 The MEU view of the rule change proposal

The MEU considers that the rule proposed by PIAC et al is well overdue and strongly supports the implementation of it as the overall benefits will significantly outweigh the costs.

The MEU believes the benefits of implementing the rule will take time to result as end users become more comfortable with the concept; the MEU considers allowing DSR aggregators to enter the market will result in faster take up of DSR as this would be the core business of the aggregators.

1.8 The baseline

The MEU accepts that, while a baseline of some form is required to identify the amount of DSR that has been provided, the MEU is concerned that the options being considered are overly complex.

The MEU points out that DSR will only ever be a small contributor to the overall market – that load shedding or load shifting will reflect only a miniscule part of the electricity market⁶ as end users will only want to be involved as a tool to reduce their costs and this will almost exclusively occur when the spot price is high enough that the benefits from changing the demand will be more than offset by the saving from avoiding the high prices. The MEU considers that the approach to setting the baseline needs to reflect this reality.

Further, the MEU is concerned that the approach to DSR is effectively attempting to “shoe horn” DSR into a process for which DSR is entirely unsuited. The current dispatch process has been designed to provide a dispatch process for generation so that generation will be dispatched into the market in a form replicating merit order of generation costs. As noted frequently, end users are not just concerned with how the electricity market is operating – they have many more interests that have to be addressed than just the electricity market. This means that the process for DSR has to be simple and readily usable; if made complex or difficult to engage with, this will be a barrier to wider take up.

⁵ When done through retailers or networks this demand reduction is not visible to the market and not scheduled and this does not cause significant problems to AEMO.

⁶ The MEU points out that the NEM had a turnover of \$190 Bn in calendar 2017, so any DSR has to be seen in this context. For example, the AEMO RERT program in the summer of 2017/18 cost \$52m (in percentage terms that same as the Reliability Standard of 0.002%)

While the MEU members use their own tools when load shedding because of high spot prices, the MEU accepts that these do not readily translate into the wider market. Discussions with MEU members do highlight that they do not provide load shedding at a specific point in time⁷ but do so over a period of time. The challenge that this introduces is that load shedding is not effectively provided at a specific point in time, but their demand reduces over a period of time. This reality needs to be reflected in the establishment of the process by which DSR is provided to the market. As few DSR providers will be able to provide their DSR within a 5 minute dispatch period, the concept of assessing DSR as scheduled load (even with defined ramp rates⁸) rather than them providing a “negawatt” reduction over time needs much more conceptual analysis.

However, the MEU is aware that there are already a number of markets where DSR does operate where this issue of setting a baseline has been addressed and implemented. The consultation paper makes few references to how other markets have addressed this problem.

The MEU is aware that there are aggregators of demand side responses already operating in electricity markets and that they have had to develop their own approaches to how to measure the extent of a demand side reduction.

The MEU also points to the RERT process where AEMO has contracted with demand side entities to provide demand side offers for the RERT. The MEU considers that the AEMO approach could be used as the basis for developing a baseline against which to establish the extent.

The MEU recommends that the AEMC provide a summary of the different approaches used by market operators and aggregators for managing DSR in other jurisdictions as part of any further discussion on establishing a baseline strategy.

The MEU considers that greater availability of this information needs to be developed and shared with stakeholders as to how the issue of setting a baseline might be best implemented in the NEM before settling on the best option.

⁷ This point was made in reference to the 5 minute settlement review process where the MEU advised that those members active in providing DSR were not able to load shed within the planned 5 minute settlement period, and that their load shedding usually takes longer to implement than a single 5 minute dispatch period

⁸ The MEU points out that that end user DSR “ramp rates” vary not just with each individual facility but at different times and with different products. Implementing a DSR process that depends on defining ramp rates will limit the amount of DSR available

1.9 Other issues

The MEU notes that the consultation paper introduces some additional features/alternatives to the process for better implementation of DSR in the electricity market in terms of creating a Register and considering a load shedding compensation mechanism; these tools appear to the MEU of not recognising the point made in section 1.8 above – that DSR will be a very small part of the overall amount of electricity used and traded in the market

The MEU is concerned that the proposals for “improving” DSR are being developed so that additional costs are being loaded into the concept, perhaps as a means to limit the potential competition in the provision of DSR.

The MEU considers that the proposal for a register starts to increase complexity but the value of the tool is questionable when applied to such a small component of the market. While a register is needed of those end users offering DSR in order for AEMO to identify which end users have be involved in the DSR process at any particular time, and to allow measurement of the DSR provided, but to take the register beyond this would be to increase complexity unnecessarily and achieve little benefit.

The MEU is concerned that the AEC proposal attempts to make DSR fit the existing market when, as noted above, DSR is not really appropriate to be structured in this way. Greater flexibility in process is needed for DSR to ensure there are as few barriers to its inclusion as possible, especially noting that DSR will be, in volume terms, a small part of the electricity market, albeit one that should result in significant cost savings for consumers both directly and indirectly.

Implementing a standard contract offer process for DSR will limit the flexibility of the DSR process from a DSR provider viewpoint, resulting in less DSR being offered.

Limiting the DSR process to be just between a customer and its retailer reduces the amount of competition that would be available under the PIAC et al concept. While potentially better than what applies now, it still allows the retailer to control the process and use its market power to limit the ability for end users to enter the DSR market and gain adequate compensation for voluntarily providing load shedding. One of the key aspects of allowing aggregators to enter the market is to maximise the rewards that will be available for voluntary load shedding – maximising rewards will increase DSR.

Effectively, the AEC proposal retains most of the negative elements of the current rules which has failed to increase DSR to the levels that are possible.

The MEU is also concerned as to how the AEC proposal might interact with the Retailer Reliability Obligation should the NEG be implemented.

The load shedding compensation mechanism (LSCM) is a separate issue entirely from providing DSR and the MEU considers that the introduction of it to the discussions on DSR detracts from what the proposed rule changes are seeking to have implemented bearing in mind that end users are prepared to offer load shedding on certain criteria which would include the notice for the load shedding, the quantum, the duration and each of these impacts the cost the end user will incur. Involuntary load shedding does not reflect any of these aspects

While supportive of the concept that end users might be compensated for involuntary loss of supply, the MEU considers that the loss of supply due to a failure in the wholesale market is a very rare event whereas most losses of supply are caused within the distribution network. As end users are only concerned with the loss of supply at the point of usage, the introduction of the LSCM could lead to confusion.

The MEU is also concerned with how the LSCM might interact with the Retailer Reliability Obligation that might be implemented should the National Energy Guarantee (NEG) ever be introduced.

The MEU is concerned at one of the observations made in the section of the LSCM which states that retailers have unlimited electricity exposure to their customers. This is not the case for many larger end users. For these customers, retailers tend to limit their exposure by applying caps and floors (typically +/- 10%) to the amounts of electricity that will be provided under the retail contract. Discussion on LSCM confuses the essential issue of implementing DSR by introducing aspects of involuntary load shedding.

The MEU considers that the LSCM should be addressed as a separate issue unrelated to the DSR proposal

The SA government has suggested that there might be introduced a separate DSR market, ostensibly to enable an earlier start to a formal DSR program. It is not clear how the proposal would allow the DSR program to be implemented earlier than under the PIAC et al proposal. The main downside to the concept is that the costs of the separate market will be passed directly to consumers in a similar way to the RERT process. While the MEU is a supporter of the RERT as a last resort process, it does not consider that the RERT process is the most cost effective solution for the recovery of costs for a DSR program.

The DSR program needs to be embedded into the market so that the effects of DSR are seen by retailers and generators so that they can respond to the market price signals that DSR will generate in the wholesale market. Specifically, the MEU can see that DSR will provide a clear signal to generators when the demand/supply balance is tight, that generators can lose sales if they price their product too high, as end users will prefer to load shed in preference

to paying excessive prices. The limited DSR that is already operating (eg as some MEU members already are doing) is providing some counter to the high prices set in the wholesale market – more DSR will amplify this outcome but only if the DSR is seen directly in the wholesale market.

The MEU also is concerned how the separate DSR market would operate should the Retailer Reliability Obligation be implemented.

1.10 Conclusions

The MEU supports the PIAC et al proposal as it reflects the optimum approach to introduce additional DSR into the wholesale market.

The MEU does not support either the AEC proposal (including the AEMC proposed extensions to it) as the MEU sees that this still retains much of the limitations that the current rules have.

The MEU does not support the SA government proposal for a separate DSR market as it is not clear that this would reduce the time to implement DSR in the wholesale market or provide the price signals that DSR will generate to moderate generators pricing strategies when there is a tight demand/supply balance.

The MEU is concerned that the consultation paper makes little or no attempt to assess how the various options would operate should the Retailer Reliability Obligations under the National Energy Guarantee be implemented.

The MEU does accept that the implementation of some form of baseline is required to address the extent that a DSR provider has reduced its demand but the MEU considers that greater use of the knowledge of such baselines needs to include the benefits of work carried out in overseas jurisdictions and held by aggregators who have provided such services in other markets, including the FCAS market. As a start, the MEU considers that the AEMC could seek information from aggregators already operating in Australasia who are aware of the challenges of operating in the NEM.

2. Responses to AEMC questions

The MEU provides the following responses to the specific questions raised in the Consultation Paper. The MEU has endeavoured to keep its answers as concise as possible and refers to the commentary in the preceding sections to amplify its reasoning behind the observations it makes. The MEU has elected not to respond to all of the questions in the consultation paper but where there is no response, the MEU points to the comments made in the text above.

	Description	MEU observations
2	(a) Is it difficult for consumers to participate in wholesale demand response? If so, which consumers face the greatest amount of difficulty? What is the cause of this difficulty?	Involvement in the electricity market is not core business for end users. As a result, many will not enter the market due to the complexity of the NEM. Having an independent intermediary (eg a DSR aggregator) to keep things simple will result in more DSR. The MEU considers there will be multiple forms of DSR aggregator – those seeking large end users to provide DSR ranging through to those aggregating residential batteries to form a VPP. Regardless of the form of DSR aggregated, consumers want as little to do with the electricity market as possible to allow them to focus on their core activities.
	(b) What demand response providers and products are currently available in the market?	Predominantly retailers and networks, although there are some firms looking to aggregate output from residential providers through aggregation of rooftop solar and associated batteries
	(c) Is there effective competition for demand response as a service to be used by retailers? If not, are consumers able to access the benefits of wholesale demand response directly? Is competition for wholesale demand response as a service increasing?	No. Accessing benefits from the market directly is expensive and time consuming. As a result it is very large users that mainly provide DSR. While there are some signs that DSR is increasing, the take up is very slow. Explicitly allowing DSR aggregators to enter the market will result in a massive increase. To some extent this can be seen from the take up of FCAS when that market was opened up to

		aggregators.
3	(a) Do stakeholders have views on the existing levels of wholesale demand response in the NEM? Please provide evidence or data to substantiate these views where possible.	The fact that AEMO can access large amounts of DSR for its RERT program indicates that there is DSR available that is not being accessed under the wholesale market rules
4	Do stakeholders consider there are other regulatory solutions: (a) to providing the demand side with greater access to wholesale prices, and (b) to increase the transparency of demand side response to these prices?	These questions presuppose that end users are actively involved with the electricity market. In practice, consumers focus on their issues rather than on the electricity market. Providing greater visibility and transparency implies that these would be used by all end users but this is not the focus of end user activities as they have other issues that take up their time. While these improvements would be welcome, the MEU does not consider they will be sufficient to increase DSR and other changes can provide better outcomes.
5	(a) Do stakeholders agree with our characterisation of how efficient wholesale demand response would improve outcomes in the wholesale market?	The MEU considers that an increase in DSR will improve the efficiency of the electricity market, but notes that this will result in less efficiency in the other aspects of an end user's activities. For example, reducing demand might result in better pricing in the electricity market but cause increased costs in other markets
	(b) What are stakeholders views on how facilitating wholesale demand response could affect outcomes in the wholesale energy market?	The MEU supports the introduction of better tools and increased competition (eg by introducing aggregators to the NEM) for end users to provide DSR as this will be a benefit to all consumers
6	Are consumers able to access competitive offers from retailer or third parties to assist consumers to undertake wholesale demand response? Is the level of competition greater for larger consumers?	Under the current rules, consumers are not able to access competitive offers for DSR as they are constrained to either provide DSR to their retailer or to their network. Some larger end users have developed tools (at significant expense) to be able to load shed when spot prices are high, but the entry costs are high, limiting the numbers

		<p>of end users prepared to provide DSR. The MEU notes that reducing demand when there are high spot process results in costs being incurred through reduced production.</p>
<p>7</p>	<p>(b) Do stakeholders consider that if demand response were to participate in the wholesale market, it should do so as a scheduled load (rather than scheduled “negawatts”)? Would the pros and cons of participating as a scheduled load differ for different types of demand response providers, e.g. those that have demand response controls on all or only part of their load?</p> <p>(d) Which information provision processes should a demand response provider participate in, i.e. pre-dispatch, ST-PASA, MT-PASA?</p>	<p>These questions assume that DSR will be a major provider of electricity for other consumers to use. In practice DSR will always be a small element of the total electricity supply mix. DSR should not be considered to be in the same league as generation as DSR will always be at “the margin” (to trim the peaks that drive high prices) as for most of the time as consumers will use electricity for their normal activities, even when a high price is too low for them to substitute not using electricity and so reducing production and therefore increasing costs in other markets. In volume terms, DSR will be a fraction of the total electricity generated and used in the NEM</p> <p>To assume that DSR has equal standing with generation is a fallacy and this needs to be recognised when developing the new rules for DSR.</p> <p>To impose on DSR the requirements that apply to generation implies a degree of equality which is not the case. DSR needs to have rules which recognise what it is – in volume terms, it is and always will be miniscule and will only be used when spot prices are sufficiently high to offset the costs incurred in providing it.</p>
<p>8</p>	<p>To what extent will these mechanisms facilitate more demand side participation throughout the NEM?</p>	<p>Allowing aggregators to enter the market will increase competition for the supply of DSR with the result that more DSR will be made available to the NEM.</p> <p>Further, a dedicated DSR aggregator with is focus on DSR aggregation will be more active in sourcing DSR than a retailer which provides a number of other services. An aggregator will provide end</p>

		users with a better knowledge about their ability to provide DSR as part of the service they provide. This will also result in an increase in the provision of DSR.
9	(a) What is the extent of the upfront costs that would be imposed on participants to introduce the proposals outlined in the rule change requests? Please provide evidence or data to substantiate these views where possible.	The feedback provided by MEU members that do provide DSR indicates that the upfront costs vary considerable depending on what the DSR is to provide and how they integrate DSR into their normal operations. Some MEU members advise that even providing DSR for short periods can result in loss of production for many hours as the facility returns to the same level of operation that applied before the DSR is provided.
	(b) Will demand response providers have sufficient information regarding expected revenue to make commercial decisions regarding the cost/benefit trade-off of incurring upfront costs in order to participate in the mechanism?	As noted above, end users have other issues to address than the electricity market. The MEU sees that DSR aggregators will focus on providing this guidance to end users, just as AEMO does with its RERT program. Generally retailers have been significantly absent in encouraging the greater use of DSR. This is understandable as retailers make their money in selling electricity and not by encouraging end users to use less.

