



## **Australian Energy Markets Commission**

National Electricity Amendment (Demand side obligations to bid into central dispatch) Rule  
2015

# **CONSULTATION PAPER**

**Submission by**

**The Major Energy Users Inc**

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**Assistance in preparing this submission by the Major Energy Users Inc (MEU) was provided by Headberry Partners Pty Ltd.**

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

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## 1. Introduction

The Major Energy Users Inc (MEU) welcomes the opportunity to provide its views on the AEMC consultation paper addressing a proposed rule change from Snowy Hydro seeking to have greater involvement by large electricity users in the demand side of the electricity supply chain

### 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 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 that 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 has 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 Snowy rule change proposal overlooks the very fundamental difference between supply and demand. While generators operate just in the electricity market, end users operate in many markets, with electricity supply being a part (often just a small part) of the markets end users operate in.

Generation (the supply) has made a decision that it will be a provider of electricity for use by others, be they single large industrial users through to multiple small residential users and this supply arrangement is facilitated through the market. Generators are in competition with other generators to

provide the most efficient service to end users. This competition allows generators, at times, to price their output at low levels and at other times at very high levels; the higher generators price their product the higher their risk that they might not be able to sell their product.

It needs to be noted that while generators are in the business of selling electricity, but 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 end users to conform their operations to the electricity market is not in their long term interests.

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 cause 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 Snowy proposal is that end users changing their load should be a 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 does so from the needs of the market they operate in. 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 reductions. Yet the import of the Snowy proposal is that load reductions are the primarily caused by high electricity prices.

The Snowy proposal seems to imply that the electricity market should have primacy over the markets end users operate within. What is concerning about the Snowy proposal, is that the discovery of usage intentions made possible by large users having to bid into the electricity market, would flow into other markets that the end users operate in. Whilst price and load discovery might be an issue for the electricity market, it is even more important that such information is not available outside the electricity market; such information is useful to competitors operating in the markets the end user operates in. So forcing end users to identify under what conditions they might elect to cease or curtail operations whilst potentially useful to the electricity market will certainly be detrimental in other markets that the end user operates in.

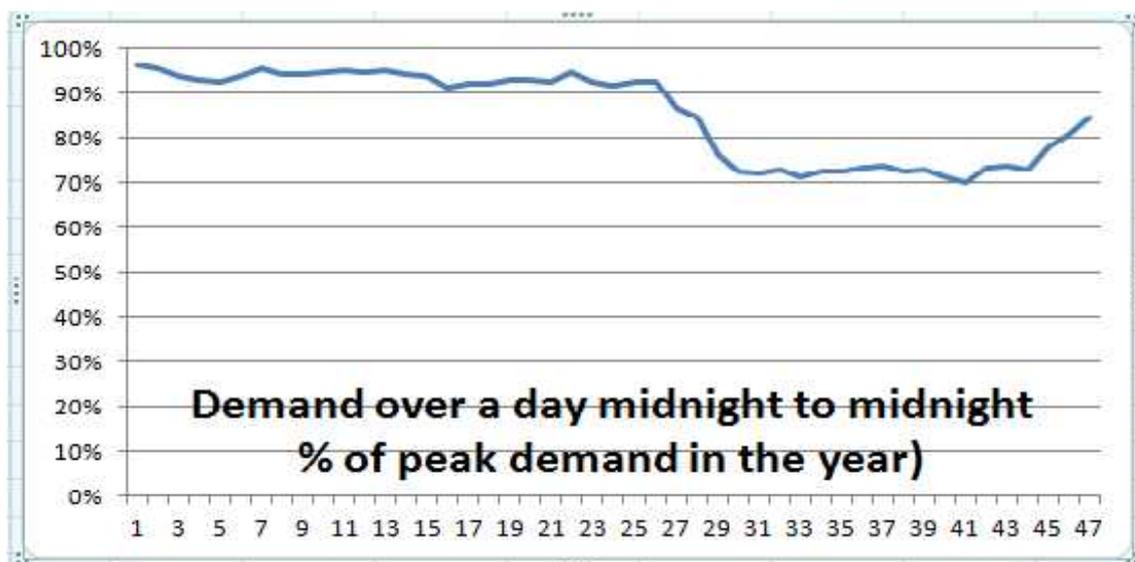
What is frequently overlooked by the supply side of the electricity market, is that their market is different to most other markets, in that it is essentially an ex post market; that is, electricity is used before the price of the electricity is known. In comparison, most other markets are ex ante which allows the buyer to decide whether to buy knowing what the price is before buying. This means that generators can set the price of their product without end users being able to

respond to the price set. This places a significant risk on consumers. Despite this, the Snowy Hydro proposal is aimed at reducing risks for generators.

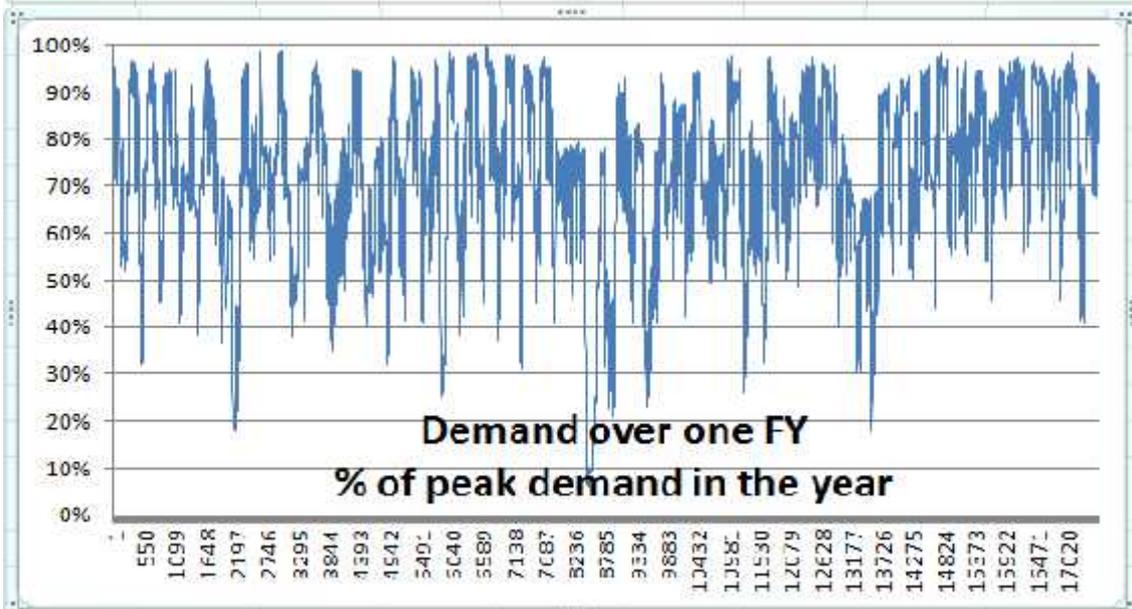
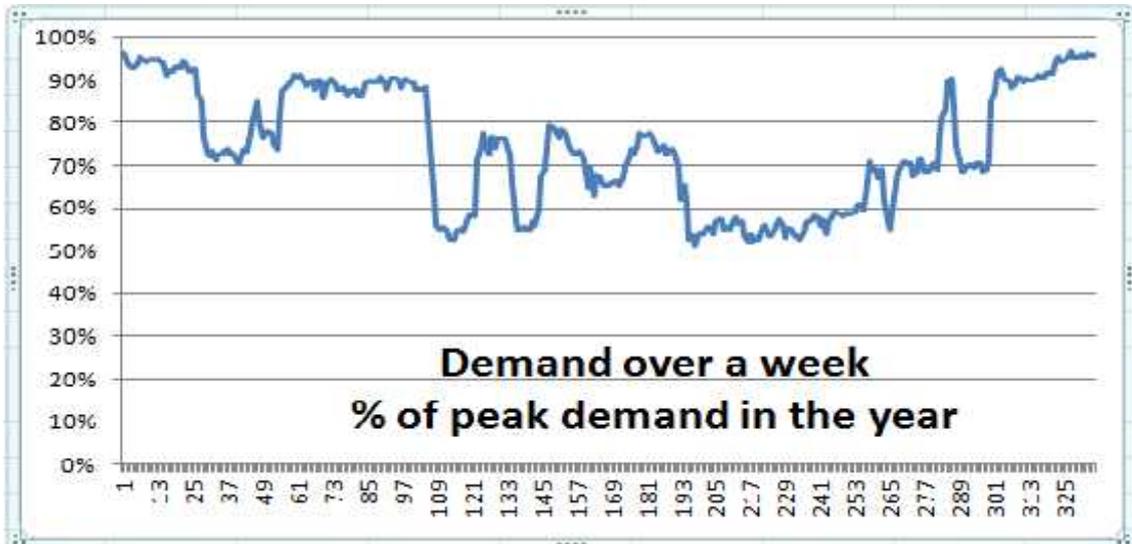
### 1.3 The way consumers use electricity

Large end users of electricity (the focus of the Snowy proposed rule change) do not have a constant power demand. Demand varies from many causes - from different products, changeovers from one product to another, break downs, shift changes, activity shuts, operation of in-house generation, production line slow down, one of a number of production lines having problems, etc. Whilst some of these can be forecast with a degree of precision, most are less predictable. Electricity demand over a period of time, even for high load factor users, varies significantly even when load shedding (ie a load reduction in response to high prices) is not being used<sup>1</sup>. Further, the impacts on electricity demand cannot be readily quantified and therefore assessments of the impacts used to forecast as and when the electricity demand will reach any specific level are quite imprecise.

The following four charts (from actual consumption data of an MEU member) show how demand varies over time even for a high load factor electricity user as the various operational changes impact the electricity usage.



<sup>1</sup> Throughout this response, the MEU uses the term load reduction for load that is reduced for operational reasons and load shedding which is a load reduction caused by either high wholesale prices and from calls by another party for a load reduction.



Both load reductions and load increases have impacts on the electricity market, yet the Snowy proposal focuses on just load reductions caused by high prices. Therefore, logically, the Snowy proposal should address both reductions and increases in demand yet its focus is merely on load reductions due to high prices<sup>2</sup>.

In contrast to end user reductions in demand which are relatively unpredictable and frequent, except for break downs, generators can be relatively precise as to when and how much they can supply the electricity market.

The presumption that high price is the main driver of a load reduction is not true, although it may be the cause for some load reductions. Implicit in both the proposed rule change and the consultation paper is a view that load reductions only occur when high prices occur. As can be seen from the load trace of the MEU member provided above, demand can reduce just as significantly for operational reasons as deliberate load shedding carried in response to high prices. Further, end users reduce demand at call of other Market Participants (eg retailers and networks) as well as for purely operational reasons.

These other reductions (and increases) in demand have just as much impact on the AEMO forecasting and scheduling as deliberate load reductions in response to high prices. Even when high prices do occur, an end user who has previously reduced load when a high price occurred might not do so for operational reasons.

The MEU is concerned that the decision to reduce load (or not) is seen primarily to be driven by high prices, yet the actuality is that high prices are probably a lesser driver of load reductions than load reductions for operational and other reasons.

#### **1.4 Contracting 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 occurs by end users, viz

- Load shedding because prices are high. The amounts that are load shed are set by the price expected and/or how long the high price is expected to apply (ie the load shedder varies its load shedding schedule to reflect the expected price and duration of the high price<sup>3</sup>) and by the amount of

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<sup>2</sup> The MEU does not support the extension of the Snowy proposal for end users to notify both increases and reductions in demand, but highlights this issue as it shows the logic of the Snowy proposal

<sup>3</sup> 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

load shedding that can be achieved safely without risks to employees and/or the plant. Depending on the demands of other markets, load shedding might not be possible due to the requirements of those other markets.

- Load shedding on demand by retailer. Some end users have contracts with a retailer where the retailer provides a reduced price but with a requirement to load shed a certain amount 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.
- Load shedding on demand of the network<sup>4</sup>. Some end users have a lower network price but with a requirement to shed a certain amount of load at the call of the network. This load shedding call is usually related to network loading rather than high wholesale prices.
- 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.

In addition to directed load reductions, as noted in section 1.3 above, significant load reductions occur probably more frequently as a result of operational issues than load shedding because of high prices. Whilst the focus of the proposed rule change is on load shedding because of high prices, if there are significant load reductions that occur at other times, many of the market benefits identified by Snowy would be just as applicable as when load reductions (or load increases) occur at other times. This implies that to garner the full benefits of the Snowy proposal, all significant changes in demand should be notified rather than those just for load shedding.

By and large, most large users that do shed load when wholesale spot prices are high, are not Market Participants, but buy their electricity through retailers taking spot price risk for the price of the electricity they buy, using their ability to load shed to mitigate risk. The MEU is not aware of any end user that is a Market Participant as such, although the MEU is aware of some very large users (such as aluminium smelters) which do have their loads scheduled<sup>5</sup>.

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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.

<sup>4</sup> The MEU points out that 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 load 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.

<sup>5</sup> The MEU is not aware of the details of these agreement but is of the view is that these agreements are the result of negotiated supply contracts and the call to load shed is made at the election of a Market Participant rather than at the election of the end user.

As most (if not all) of the load reduction that is currently being carried out (both as a result of high prices and for operational reasons) is done so through retail contracts, the MEU questions as to the viability of requiring end users who are not Market Participants to be exposed to the market rules.

As the very large majority of >30 MW end users have retail contracts so the information sought by Snowy would not be disclosed by the end users to the market, but would be included in the forecasts by their retailers. The import of the Snowy proposed rule change implies that the retailers would therefore have the responsibility of advising the market of the load reductions (including load shedding) contemplated by each individual end user, presumably regardless of whether the decision to load shed was an election of the end user or called by the retailer, aggregator or network. As the larger retailers are also generators in their own right, the retailers might not want to declare this to the market as they might want to keep this information for their own commercial advantage.

Retailers contract significantly more than 30 MW from the market and so their (aggregated) demands have a much greater impact on the market than those of individual large end users. The MEU is not clear as to whether the rule change proposal applies only to large end users or to aggregators of load such as retailers as well. If the rule change is to apply to those with control over more than 30 MW of demand, then retailers and other aggregators should also be exposed to the requirement. The MEU is not sure how the retailers could provide a more accurate expectation of load than AEMO does, raising doubts as to the efficacy of the proposal.

### **1.5 Cost impact of the proposal on end users**

The MEU has approached its members as to what the costs they might face if such a requirement was introduced. They advise they would be faced with considerable costs, not only for the development of the in-house IT systems needed to provide necessary information to AEMO, but significant resources to collect the data from the various usage points throughout their plants.

From a realistic point of view, to provide 5 minute dispatch information, each production line would have to have a person reporting to a central point of what is expected to occur in the next 5 minutes for each production line and this forecast would have to be converted into electricity demand for each production line. As noted above, electricity demand is not necessarily related to rates of production but to the product being produced and other exogenous factors so converting an expectation at a production line level into electricity demand data is not straight forward as it is for generation. The individual forecasts for each production line would have to be aggregated and forwarded to AEMO.

The MEU considers that the costs involved for each end user to provide forecasts of electricity demand far exceed the costs that a generator incurs to forecast its expectations of electricity supply.

But the MEU asks what will be achieved through this high cost?

Firstly, load shedding in response to high prices is a very occasional activity. The imposition of significant costs to capture activities that occur infrequently needs significant investigation to ensure that the value to the market more than offsets the costs incurred. In its review process for the MEU proposed rule change to address generator market power, the AEMC noted the infrequency of trading periods when the wholesale price was high. In fact, in the SA region for the three years July 2007 to June 2010 (the three years which led to the very high annual average regional prices that precipitated the MEU proposed rule change), there were only 182 trading periods when the wholesale price exceeded \$1000/MWh and there were 52,608 trading periods in total over the three years - so high prices were recorded only in 0.35% of all trading periods or about 1 trading period in 300 with the incidence of prices over \$300/MWh being about 1 in 180 trading periods<sup>6</sup>. Should the cost to end users be increased for such limited times when their actions might have an impact on the scheduling of expected demand? The MEU considers that the proposal is totally inappropriate response to a perceived (rather than proven) problem when assessed on this basis.

Secondly, load shedding initiated through a call by a retailer or a network is not initiated by an end user but by another party which might not make the call based on a forecast of high prices. Should an end user be liable for excessive costs for actions that it does not initiate? The MEU considers that, if there is a need for such notification, the retailer or network initiating the call, could advise AEMO at the time it makes the call on the end user rather than imposing a continuous requirement on large end users to provide forecast load data to AEMO.

Thirdly, the MEU is unsure how the arrangements with AEMO could apply to end users with spot market exposure through their retailers (ie where the end users are not Market Participants). End users have elected to acquire their electricity through retailers because they do not want to become Market Participants and be exposed to the liabilities that the market imposes. This then raises the question as to how can end users become liable for complying with the rules for a market which they are not formally part of and do not wish to be a part of.

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<sup>6</sup> Across the NEM for the same three year period (which included impacts of the Millennium drought) the incidence of prices over \$1000/MWh was 1 in every 460 trading periods and for prices over \$300/MWh was 1 in 280 trading periods)

## 1.6 What is achieved by the proposed rule?

The proposal from Snowy asserts that there will be significant benefits to the market by having large end users effectively bid their demand into the market.

Snowy opines that the decision of a large end user to withdraw demand when prices are forecast to be high should be signalled to the market. As noted above, the frequency of such incidents is very low, yet the movements of demand (increase and decrease) at other times appears not to be a problem that Snowy seems to be concerned with. At face value, Snowy's apparent need to enhance the market for the few instances in a year when an end user load sheds, has the potential to impose considerable costs on an ongoing basis. Further, the proposed rule change has much wider implications for consumers than Snowy identifies.

Snowy has a view that its rule change would improve:

- Confidence in pre-dispatch prices
- Reserve forecasting
- Management of the dispatch process
- Pricing of financial contracts
- Overall transparency in the NEM

The MEU can see that, at a theoretical level, such enhancements could provide a benefit to the electricity market, but there is considerable doubt as to the value to the market of such improvement. What is absent from the Snowy proposal is any quantification of the benefits of its proposal. If the AEMC accepts that the Snowy proposal has merit, then it needs to quantify these benefits and compare them to the costs of implementation<sup>7</sup>.

The MEU is aware that generators already use the freedoms allowed in the market to increase their revenues through various means that distort the market; issues such as late rebidding of prices, using ramp rate bidding to constrain off lower priced generators in the market, and economic withdrawal of capacity for financial gain have already been the focus of rule change proposals, and the MEU is aware of other freedoms<sup>8</sup> within the rules that permit outcomes that are less than would be delivered by a purely competitive market. The MEU sees that the impacts of the freedoms generators already employ to move the market away from a "pure" transparent market with clear competition result in significantly greater distortions to the market than the impacts that large end users cause through withdrawing load when prices are forecast to be high.

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<sup>7</sup> For example, in its rule change proposal on economic withdrawal of generation, the MEU quantified the costs to consumers of the economic withdrawals that had occurred.

<sup>8</sup> For example, the MEU notes that the AEMC has made a decision not to attempt to address within the rules structural generator dominance within a region

The MEU notes that the AEMC has, in previous rule change proposals, discussed the concept of "workable competition". The import of this concept is that, according to the AEMC<sup>9</sup>, "...a market that is considered to be workably competitive need not have reached a state of perfect competition." This observation implies that in attempting to create a perfectly competitive market, there are costs and other impacts which more than offset the benefits of the supposed increased competition.

As the AEMC has already accepted that economic withdrawal of generation should not be prevented (the MEU rule change proposal) and continues to permit the use of ramp rates to prevent lower priced generation from being dispatched (the AER rule change proposal), the AEMC clearly has a view that the current market is considered to be "workable" and tightening of the rules might lead to unnecessary consequences. If significant impacts on the workability of the NEM such as those identified by the MEU and AER are not considered by the AEMC to be of sufficient import to make major changes to address clear distortions of the market, then the MEU questions whether the much more modest changes proposed by Snowy would provide much benefit to the workability of the NEM.

It is obvious that a number of the benefits claimed by Snowy are those that would (and should if they were needed) have been identified by AEMO as providing a benefit to the market, yet the MEU is not aware of any concerns raised by AEMO about these issues that Snowy raises. As AEMO has not previously raised these aspects as concerns, then it is apparent that AEMO does not consider the benefits that would be delivered from such changes would be significant. On this basis, the MEU questions the benefits to the market asserted by Snowy.

Snowy has not quantified the benefits to the market by the introduction of their proposal, yet to achieve the outcome will impose significant costs and risks to a number of users of electricity. What is not clear is to what extent will these end user costs and risks be passed back to other consumers. As consumers are price takers in the electricity market (as it is an ex post market) it would be inequitable if consumers were to incur increased costs and risks if the benefit went to generators. The MEU is very concerned that the Snowy proposal is based on generators being able to use these new impositions on consumers in order to increase generator profitability.

### **1.6 What is missing is an essential assessment of buyer's rights**

The Snowy proposal is equivalent to using a sledgehammer to crack a nut. It is an over reaction to a small number of incidents in a year. End users should

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<sup>9</sup> See for example, AEMC consultation paper, National Electricity Amendment (Potential Generator Market Power in the NEM) 14 April 2011, note 33 page 23

have the right to reduce demand in response to high prices sought by generators (just as occurs in other markets) and not be required to incur significant costs by doing so. If generators are so concerned that the market allows end users an unimpeded ability to reduce demand in response to excessive prices then they can address the problem by offering lower prices which would trigger load shedding. No one requires buyers of other products to signal they won't buy if there is a high price - the producers and retailers accept the risk they can be left with unsold goods if they are priced too high. Why should electricity buyers have to signal to producers they won't buy if generators want a high price?

The market structure is designed to provide a basis for dispatching generators in merit order of their pricing approaches - it is not designed (nor should it) be a mechanism for consumers to have to bid their decision not to buy.

## 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.

	<b>Description</b>	<b>MEU observations</b>
<b>1</b>	<b>a) Is the lack of participation of market loads as scheduled loads in AEMO's central dispatch process, a material issue, in relation to the price discovery process or any other aspect of the market's operation?</b>	The MEU considers that as AEMO has not identified the issue as significant by raising the concerns, then the benefits are unlikely to be material.
	<b>b) Has the problem related to lack of participation by market loads as scheduled loads in AEMO's central dispatch process been correctly identified in the rule change request?</b>	The MEU is not aware of any problems
	<b>(c) If no, what problem or issue, if any, arise as a result of market loads not participating in AEMO's central dispatch process as scheduled loads?</b>	See comments in section 1
	<b>(d) Does Snowy's proposed rule address the issue identified in the rule change request?</b>	The MEU does not consider there is a problem to be resolved
	<b>(e) If no, are there other ways to address the issue identified in the rule change request?</b>	The MEU does not consider there is a problem to be resolved
<b>2</b>	<b>(a) What would be the impacts, positive or negative, on the behaviour of market loads if they were required to become scheduled?</b>	The MEU considers that the amount of load involved is insignificant in relation to the total NEM and regional loads. Therefore the impacts of load shedding will be negligible.

	<p><b>(b) What would be the impacts, positive or negative, on the behaviour of market participants, such as scheduled, semi-scheduled and non-scheduled generators, if market loads were required to become scheduled?</b></p>	<p>The MEU does not consider there would be significant change, recognising the market is considered to be workable even with greater distortions initiated by generators themselves</p>
	<p><b>(c) What would be the impacts, positive or negative, on the price signals in the pre-dispatch and dispatch periods and the half hour trading intervals if market loads were required to become scheduled?</b></p>	<p>The MEU does not consider there would be significant change, recognising the market is considered to be workable even with greater distortions initiated by generators themselves</p>
	<p><b>(d) What are the impacts, positive or negative, in relation to the procurement and use of FCAS by AEMO as a result of market loads being non-scheduled?</b></p>	<p>Whilst the demand side does provide FCAS at times, its supply by the demand side is usually initiated by Market Participants. Generally, FCAS is not an aspect of the market that the demand side gets involved with as its primary role is to use electricity as an adjunct to production for other markets.</p>
	<p><b>(e) Are any negative impacts related to the procurement and use of FCAS by AEMO mitigated if market loads are scheduled?</b></p>	<p>The MEU considers this question is best answered by AEMO and the MEU is not able to comment</p>
	<p><b>(f) What other market services obtained and used by AEMO to ensure system safety and reliability are impacted as a result of the market loads being non-scheduled?</b></p>	<p>The MEU considers this question is best answered by AEMO and the MEU is not able to comment</p>
	<p><b>(g) What are the impacts, positive or negative, in relation to the other market services as a result of market loads being non-scheduled?</b></p>	<p>The MEU considers this question is best answered by AEMO and the MEU is not able to comment</p>
	<p><b>(h) Are any negative impacts related to the</b></p>	<p>The MEU considers this question is best answered by AEMO and the</p>

	<b>other market services obtained and used by AEMO mitigated if market loads are scheduled?</b>	MEU is not able to comment
<b>3</b>	<b>(a) Is 30 MW or greater, the appropriate threshold for mandatory participation of market loads as scheduled loads in AEMO's central dispatch process?</b>	The MEU does not consider there is any need for demand to be forced to participate in the market. Further, whilst some end users have a demand greater than 30 MW, not all of this load is used for load shedding when prices are high.
	<b>(b) If not, how should the threshold for mandatory participation of scheduled loads be determined?</b>	The setting of 30 MW is purely arbitrary
	<b>(c) Given that market loads do not have a nameplate rating (whereas generators do), how should the size of a market load be determined (eg. average consumption, maximum consumption, single connection point)?</b>	The presumption is that demand will schedule its entire load but this is most unlikely. Demand has a limit as to how much load it can schedule and this varies depending on what production is occurring at any time. Load shedding can only be implemented when production is occurring and the amount that can be load shed at any point in time varies continuously.
	<b>(d) Should a market load only be required to participate in the central dispatch process if it is, or intends to be, responsive to the electricity spot price?</b>	Load shedding occurs at times other than high prices, although high price is probably the most common reason to shed load, but an end user might not shed load even if the price is high.
	<b>(e) If the obligation to participate in AEMO's central dispatch process as scheduled loads, should only apply to price responsive market loads, how should it be determined if a market load is, or intends to be, responsive to the electricity spot price?</b>	As noted above, the decision to reduce load is not always at the election of the end user, and an end user might not reduce load even if the price in the market is high. Load is reduced at other times than just time of high prices. The import of the rule change is that these instances would also have to be forecast even when the market is not exposed to high prices

	<p><b>(f) What requirements or obligations are necessary to ensure that market loads do not change their behaviour so as to avoid the requirements associated with the mandatory obligation to participate in AEMO's central dispatch process?</b></p>	<p>Loads vary for more reasons than the price in the wholesale market. To impose on end users a requirement that they have a consistent approach to load reduction (regardless of cause) denies the fact that end users need to vary their demands on a consistent basis to reflect their operational needs as distinct from the financial need to reduce the cost of their electricity.</p> <p>The fact that almost all end users operate through a retailer demonstrates that end users (including large end users) do not want to be exposed to the requirements and strictures of the electricity market. Further, the MEU questions the rationale of enforcing such a requirement</p>
<p><b>4</b></p>	<p><b>(a) Do any incentives currently exist for market loads to become scheduled loads?</b></p>	<p>The only reason for end users to become scheduled loads would be if there was value to them to do so. The complexities of the market are such that end users clearly prefer to operate one step removed from the market.</p>
	<p><b>(b) If no, could incentives be created in the market to encourage market loads to participate in the central dispatch process as scheduled loads without creating a mandatory obligation on market loads to become scheduled?</b></p>	<p>There are mechanisms already available to end users to effectively participate in the spot market if they prefer to do so without having to become a Market Participant. The MEU questions why end users should be forced to enter the market as this will increase their costs and risks and deliver no benefit to the end user. The MEU considers there would have to be significant market benefits that would be seen to flow to consumers to offset the increases in cost and risks that end users would incur.</p> <p>The Snowy proposal appears to be focused on load withdrawal at times of high price. Why should end users not be able to elect not to use electricity when generators are stating the price will be high?</p>

	<p><b>(c) If a mandatory obligation is created requiring market loads to become scheduled, how may this impact the behaviour of market loads in the electricity spot market?</b></p>	<p>The imposition of mandatory requirement for demand to bid into the market, totally overturns a buyer's right not to buy. A generator has the right not to supply, or to limit the supply into the market, then why should a buyer be obligated to advise they will not buy? The market structure is designed to provide a basis for dispatching generators in merit order of their pricing approaches - it is not designed (nor should it) be a mechanism for consumers to bid their decision not to buy</p>
	<p><b>(d) If a market load's incentives are impacted by a mandatory obligation how can market loads behaviour be aligned with the intentions of the proposed rule?</b></p>	<p>An end user's decision not to buy or to buy less is more dependent on the impacts of markets other than on the electricity market, and the decisions to buy (or not) from the electricity market are relatively minor influencers when considering all of the pricing influences on an end user. The cost to end users will be significant to bid their demand into the market and will achieve little benefit. As a result, end users will seek other means to acquire the electricity they need, whether through retailers or independent of the market.</p> <p>For example, some end users are already implementing changes so they source their electricity independent of the electricity market as they see that the cost of the traditional electricity supply chain is too high compared to alternatives</p>
5	<p><b>(a) Is it possible to address the issues raised by Snowy in its rule change request, through the provision of further information from market loads in relation to their intentions to increase or decrease their consumption at specific spot prices?</b></p>	<p>The MEU considers that high prices in themselves are an indication that end users will reduce their demand. This is what occurs in other markets.</p> <p>The MEU is aware in gas markets (for instance) retailers do seek an indication of planned gas usage for the following day from large gas users. This works because gas usage is assessed over an entire day</p>

		and hourly fluctuations are absorbed through line pack. This still imposes costs on end users and inaccuracies do not critically impact prices. However, the import of the Snowy proposed rule is that updates would be required continuously through a day dependent on electricity spot prices and this would impose considerable costs on retailers as well as end users.
	<b>(b) If yes, what form would this additional information take?</b>	See above
	<b>(c) If additional information were to be provided, what mechanisms or incentives could be used to ensure that the information provided and updated by market loads reflects the market loads true intentions relative to its consumption under various spot prices?</b>	<p>Generators already have an ability to reprice their input up to a few seconds before a dispatch period. When changing their price they have to have an acceptable reason for making such changes. The MEU is aware that increasing profitability is considered to be an acceptable reason for a generator to change its price.</p> <p>The most common reason for end users to change their electricity demand is in response to market forces within their own markets, and not from changes in the electricity market or because a Market Participant (ie retailer, aggregator, network) requires such a change. In the relatively few instances where an end user changes its demand in response to the electricity market, it is almost always because of high prices in the electricity market - an end user does not increase demand when prices are very low because it is limited by its production schedule.</p> <p>The MEU considers that the question posed does not recognise the realities of why an end user takes electricity from the NEM and the forces that drive electricity demand.</p>
<b>6</b>	<b>(a) What are the costs and/or benefits to the</b>	Unless a derivatives trader sought an end user to reduce demand at

	<p><b>derivatives markets (both exchange traded and over-the-counter) of market loads becoming scheduled?</b></p>	<p>times of high prices, the MEU considers that most derivatives traders would not be influenced by end user offers into the market when prices were high as the frequency of such instances are too low. An exception might be when the derivatives trader is aware that a generator is using its market power to artificially hold prices high, but under such a circumstance the load reduction from large end users might not be sufficient to eliminate the exercise market power by a generator.</p> <p>As noted above, an end user varies its demand continuously through most of the year and this tends to mitigate the value of notifying that an end user intends to load shed when high prices occur</p>
	<p><b>(b) If so, what are these costs and benefits?</b></p>	<p>See above</p>
	<p><b>(c) Are there costs and/or benefits to the various market participants of increased participation by market loads in the derivatives market?</b></p>	<p>The MEU considers the value to the market by notification of load shedding is minimal, but the costs to implement such notification are high</p>
	<p><b>(d) What types of over-the-counter derivatives products are used by market participants to mitigate market risk under the current arrangements?</b></p>	<p>Retailers use load shedding at call to minimise their risk exposure, but this is achieved on the basis of having the end user under a retail contract. An aggregator of load shedding would also be a beneficiary, but only if the load is actually reduced.</p> <p>The MEU cannot see that a derivatives trader would benefit significantly from the proposed rule change</p>
	<p><b>(e) How would these other derivative products be impacted, either positively or negatively, by market loads becoming scheduled?</b></p>	<p>The MEU considers that there would be minimal (if any) impact on derivative products</p>

<p><b>7</b></p>	<p><b>(a) Are stakeholders aware of any technical limitations of market loads which would not allow, or make it difficult for, market loads to comply with the requirements and obligations that currently exist for scheduled loads that participate in the central dispatch process?</b></p>	<p>See comments in section 1.5</p>
<p><b>8</b></p>	<p><b>(a) Under the current arrangements in the NER, what are the qualitative and/or quantitative costs and benefits associated with the current operation of the market given market loads are not generally scheduled, including but not limited to the market loads' ability to respond to changes in the spot price, the pre-dispatch process including the demand forecast, the central dispatch process, and system safety and reliability with respect to:</b></p> <ul style="list-style-type: none"> <li>• <b>market customers with market loads;</b></li> <li>• <b>generators, both base load and peaking generation;</b></li> <li>• <b>AEMO;</b></li> <li>• <b>retailers and their customers;</b></li> <li>• <b>other parties who participate in the market?</b></li> </ul>	<p>The MEU considers that the volume of demand withdrawn in response to high prices is minimal, considering that high prices are more commonly coincident with times of high demand. The vast majority of consumers use their electricity in ignorance of the price that occurs when they use the electricity (ie as is typical in an ex post market) and most high price periods coincide with high regional temperatures. A demand side response implies that to significantly reduce demand sufficient to cause price reductions in generator bids would require many consumers to turn off their a/c units and suffer the impacts of the high regional temperature. Realistically this does not occur.</p> <p>The reduction in demand from those few end users that are prepared to reduce production in response to high prices is small in proportion to the regional demands and small in terms of the amount of generation that is usually available to be dispatched.</p> <p>The MEU considers that the NEM operates adequately even when some end users reduce demand when high prices are present<sup>10</sup>.</p>

<sup>10</sup> The MEU does not consider this applies when generators use their market power to artificially cause high prices in the NEM

	<p><b>(b) Under the proposed rule, what are the qualitative and/or quantitative costs and benefits associated with the operation of the market given market loads requirement to become scheduled, including but not limited to the market loads ability to respond to changes in the spot price, the pre-dispatch process including the demand forecast, the central dispatch process, and system safety and reliability with respect to:</b></p> <ul style="list-style-type: none"><li>• market customers with market loads;</li><li>• generators, both base load and peaking generation;</li><li>• AEMO;</li><li>• retailers and their customers;</li><li>• other parties who participate in the market?</li></ul>	<p>The MEU considers that the proposed change will have minimal (if any) impact of the market operation and will cause significant and unnecessary cost increases within end users and retailers.</p>

