

1 December 2015

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Sent by email: [aemc@aemc.gov.au](mailto:aemc@aemc.gov.au)

Dear Anne

**Submission on Proposed National Electricity Amendment Ref: ERC0189**

Rio Tinto Yarwun (RTY) appreciate the opportunity to make a submission on the proposed rule change request dated 10 June 2015, seeking to amend clause 2.3.4 of the National Electricity Rules (NER) in relation to scheduled loads. RTY's alumina refinery is a market participant and its load is non-scheduled, with an average consumption of approximately 80MW.

RTY oppose the proposed rule change on the basis of it significantly increasing the administrative burden of a market load participant for no market benefit. In fact, we maintain that the proposed rule change would have an outcome of impeding demand side response to high prices and thus generate increased market inefficiencies.

The nature of price setting in the NEM is by necessity asymmetrical. Most consumer loads are relatively inelastic and most consumers purchase power through retailers – oblivious to the operations and mechanisms of the market. Even large consumers such as RTY who may expose all or a portion of their load to NEM pricing are focussed on their core business, which is generally unrelated to electricity. Electricity is just another cost input, albeit a very large one in our case. Practically all consumers have neither the technical expertise nor the commercial impetus to invest in the systems and resources required to do anything more than crudely manage their load on the NEM. This is not to say that demand side response mechanisms will never exist and we applaud the COAG attempt to develop a product where consumers will be more able to simply adjust load to effect lower overall input costs.

The rule change being proposed however, would create unmanageable administrative and process-impacting burdens on consumers who are ill-equipped to be able to handle this imposition. It is evidence in itself that there are no voluntary scheduled loads in the NEM. The application of this rule change would result in significant additional costs for consumers forced to participate with no beneficial impact on price discovery or dispatch management. In practice, restricting the rule to loads who are responsive to (or who intend to be responsive to) price signals actually impedes any load from responding to price due to the burden of being scheduled.

Most large consumer loads are tied to a key process or activity and thus consumers impacted by this proposed rule would be forced to bid prices in order to be continuously dispatched and remain unaffected. However, with a critical industrial process such as that at RTY, it is not always possible to shut-off load due to safety or process reasons. In addition, while the process can be planned in a general sense, the variability of large motors, conveyors and other large intra-site loads cannot be predicted in a timely manner and hence practically impossible to schedule ahead of time or control to any dispatch instruction. If an extreme price event occurred and the process was indeed in a fortunate position to be able to respond, the bid and dispatch process would impede such a response.

The proposal paper refers to the AER submission to the AEMC Power of Choice review, where there appears to have been some demand side responses to extreme price events. This is a matter for celebration not a problem needing to be fixed. The fact that consumers have been faced with an extreme price and responded by reducing load is a laudable outcome – not a perverse one.

The proposal also notes that loads which currently respond to price materially degrade the accuracy of the pre-dispatch prices, degrade AEMO's ability to forecast adequate reserves and manage central dispatch, and impede efficient pricing of financial contracts. The proposal goes further to state that non-scheduled loads perversely impose costs on all other market participants who rely on dispatch and pre-dispatch spot prices to be representative of supply and demand. We do not agree with these premises and they either miss the essential essence of the NEM and/or pre-suppose that demand-side forecasting will create a more efficient outcome than the aggregated forecast that currently exists. The simple concept of the electricity market is for price discovery on the basis of competing electricity suppliers offering their supply bid ex-ante, and for the demand in real time dictating an intersection of the built-up stack to set the price for all consumers in that period.

The proposal goes on to state that more efficient operations would result from demand side participation in pre-dispatch pricing and gives an example of a consumer responding to a high price by reducing load versus a supplier who had declined to put in a pre-dispatch bid but noting that if he had, the outcome would have been worse. The example notes the burden of the supplier bid through rule

obligations, possibility of non-dispatch despite costs of arranging resources and fuel, start-up costs, possible insufficient revenues and non-compliance risks. Again, this is a basic misunderstanding of the essence of the electricity market where generators establish their costs and risks and bid in a price on a competing basis.

The consultation paper lists a number of specific questions pertaining to the proposal, and some additional comments are made on selected questions in the attachment.

Yours Sincerely

A handwritten signature in black ink, appearing to be 'CM', written over a rectangular box.

Colin McGibbon  
**General Manager – Yarwun Operations**

**Attachment: Additional responses to questions in the Consultation Paper**

Question 1: The rule change request	
(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?	No
(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?	No
(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?	None. This is how the market price is set, through competing suppliers bidding in a price stack based on cost and risk.
(d) Does Snowy's proposed rule address the issue identified in the rule change request?	The issue in the proposal appears to be with the market concept of asymmetrical price setting. This is the essence of an electricity market, not an issue needing to be solved.
(e) If no, are there other ways to address the issue identified in the rule change request?	There are indeed improvements to be made to pre-dispatch pricing, such as more effectively constraining supplier re-bidding and capacity withdrawal.
Question 2: Market impacts	
(a) What would be the impacts, positive or negative, on the behaviour of market loads if they were required to become scheduled?	There is a significant negative impact of the administrative burden to bid and respond to dispatch instructions. Since most loads are relatively inelastic, these bids would be largely irrelevant but inhibit any real response of the load to reduce cost and shed load when an extreme price event occurs and the process allows. The burden of bidding on scheduling market loads serves only to inhibit the ability of a consumer to respond to a high price signal.
(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?	There should be no impact. This is an asymmetrical market and generators bid in ex-ante based on cost and risk, ready to be dispatched if the demand reaches the required threshold. Whether market loads are scheduled or not, this concept does not change.
(c) What would be the impacts, positive or negative, on the price signals in	Practically, market loads would be unable to resource the requirement to

the pre-dispatch and dispatch periods and the half hour trading intervals if market loads were required to become scheduled?	bid and follow dispatch instructions and hence the impact would be to remove demand side response and increase prices overall.
(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?	The need to bid in load would likely impede an ability to offer FCAS and thus reduce demand side participation and increase prices.
(e) Are any negative impacts related to the procurement and use of FCAS by AEMO mitigated if market loads are scheduled?	No
(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?	-
(g) What are the impacts, positive or negative, in relation to the other market services as a result of market loads being non-scheduled?	-
(h) Are any negative impacts related to the other market services obtained and used by AEMO mitigated if market loads are scheduled?	-
<b>Question 3: Obligation on market loads</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?	There should be no threshold as even very large market loads should be able to respond to price signals, as long as their response does not impact on grid quality or security. Loads cannot be subjected in a compulsory manner to dispatch – this is neither practical nor logical. Even if the rule (as is proposed) were only to apply to loads that respond or intend to respond to price signals – this will impede a consumer not normally responsive to price from shedding load during an extreme price event.
(b) If not, how should the threshold for mandatory participation of scheduled loads be determined?	
(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)?	
(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?	
(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?	
(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>Question 4: Incentives and obligations</b>	
(a) Do any incentives currently exist for market loads to become scheduled loads?	No
(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?	It is very difficult for most loads to be "dispatched" and therefore unlikely that loads could participate in the dispatch process, even if the systems and resources were available.
(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?	Most loads would need to bid in such that they would be dispatched, almost irrespective of price. This would result in lower demand side participation and higher costs.
(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>Question 5: Provision of information</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?	No. An ability of a load to respond to a price can often be dictated by safety or process stability at the time and therefore very difficult to predict.
(b) If yes, what form would this additional information take?	-
(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>Question 6: Implications on derivatives market</b>	

(a) What are the costs and/or benefits to the derivatives markets (both exchange traded and over-the-counter) of market loads becoming scheduled?	-
(b) If so, what are these costs and benefits?	
(c) Are there costs and/or benefits to the various market participants of increased participation by market loads in the derivatives market?	
(d) What types of over-the-counter derivatives products are used by market participants to mitigate market risk under the current arrangements?	
(e) How would these other derivative products be impacted, either positively or negatively, by market loads becoming scheduled?	
<b>Question 7: Technical Requirements</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?	Yes. Loads are usually (by nature) dynamic, unpredictable and dependent on many conditions. This makes discrete dispatch nearly impossible.
<b>Question 8: Costs and benefits</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: <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>(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:</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>	
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