

## Wholesale Electricity Market Submission to Rule Change Proposal

## RC\_2013\_10 Harmonisation of Supply-Side and Demand-Side Capacity Resources

#### Submitted by

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#### Submission

Submissions for Rule Changes should be submitted to:

Independent Market Operator Attn: Group Manager, Development and Capacity PO Box 7096 Cloisters Square, Perth, WA 6850 Fax: (08) 9254 4399 Email: <u>market.development@imowa.com.au</u>

# 1. Please provide your views on the proposal, including any objections or suggested revisions.

#### Preamble

Newmont's comments on this rule change proposal are based on the impacts on it as an electricity consumer participating in a DSM program in the SWIS.



Newmont understands that certain of the proposals in the IMO paper are based on the assumption in the Lantau report (Section 3.2.1) that "that any qualifying resource should be able to provide an equivalent service".

Indeed the underlying premise for DSM is that that a demand side response may be more efficient (in the true economic sense) at responding to high electricity demand for (say) 0.5% of the year than a generation response which arises from having sunk capital idle for a corresponding 99.5% of the year; that is to say the economic loss from shutting down productive equipment for a short time is less than the loss from having capital idle for a long time. Implicit in this is that an "equivalent service" may not be relevant as there are different economic drivers.

The impact of the proposed DSM availability change "tilts the economic playing field" so that now the productive equipment must be shut down for 1500 hours of 17% of the year, but with no resultant economic benefit for the owners of that productive equipment. As a result it is believed that the owners of this productive equipment will withdraw their participation in DSM programs, resulting in the supply side having to fund capital to build generators (idle most of the time, probably 99.5% based on the SWIS load duration curve) to make up the "lost" capacity. This does not in our view result in an efficient economic outcome and does not assist in the achievement of the market objectives.

#### Comment on the specific Issues in the paper

Newmont provides no comment on the proposed rule changes associated with Items 1, 4, 6 & 7.

Newmont is of the view that the proposed rule changes discussed in Items 2, 3 and 5 will act to materially reduce the quantity of DSM capacity made available to the SWIS because:

(a) the increased availability requirements (Issue 2) will act to deter electricity consumers from participating in a DSM program.

Currently DSM participants can expect to be called to reduce load for no more than 24 hours (48 hours in some cases) in a year. Under the new proposal DSM participants can expect to be called to reduce load for up to 1500 hours in a year. For a business which operates 8hrs/day on business days only this represents 75% of their working hours; for a 24x7 business this represents 17% of their working hours.

In our view businesses participating in the current DSM seize the opportunity to undertake opportunistic maintenance during the potential 24 hours per annum of DSM call, offsetting maintenance only shutdowns at other times and thereby reducing lost business revenues. However there is a limit as to how much maintenance can be done, and the higher availability requirements will result in idle production equipment.

This additional availability will thus potentially have a significant impact on the ability of the business to earn revenues. Whilst it is acknowledged that the actual dispatch of the DSM facility may be much less than 1500 hours/year, a prudent business, when making a risk assessment of whether to participate in a DSM program, will adopt a conservative "worst case" view of needing to shutdown operations for a figure approaching 1500 hours/year, and in any case much more



than the current 24 hours/year.

As a result Newmont is of the view that it is highly likely significantly fewer businesses will participate in a DSM program and participation in DSM will fall from the current levels to near zero from 2016/17 onwards.

Whilst the initial fall in DSM may well be handled by existing generation capacity, ultimately the proposed changes must result in the construction of new generation being brought forward to fill the gap left by "departing" DSM providers. This will result in unneeded and inefficient capital expenditure by generation providers.

The lower level of DSM participation by business will also likely result in more DSM calls on those businesses which do participate as there will be less participants to spread DSM calls over.

We note also

- (i) that the extra cost to business has not been included in costs and benefits section of the IMO's proposal notice. We should assume that current participant businesses are happy with the "cost/benefit" trade-off imposed by the current DSM regime, but that an increase in availability hours must increase the cost to business (without benefits).
- (ii) that the load duration curve for the SWIS (such as that in Figure 3 of the Lantau Report) shows that the peak capacity is only required for a few hours per year – in the order of 24 to 72 hours, as was contemplated by the current four classes of availability. Reducing the classes to two, with the top class having an availability requirement of 1500 hours, seems to do little to address the short duration SWIS system peak.
- (iii) this outcome is seemingly at odds with the implied conclusions of the PA Consulting report (Appendix 1 of the IMO proposal notice) which suggest that increasing availability and decreasing the number of availability classes will result in more DSM (see Table 4 of Appendix 1). Whilst the *potential* for more DSM may be the outcome of the analysis of the proposed changes, we think it unlikely additional DSM will eventuate.
- (b) the additional cost of the IT requirements (Issue 3) will decrease the economic returns to DSM providers, and for smaller providers, eliminate totally any financial benefit from DSM.

The IMO has estimated a DSM participant's costs to implement IT systems of \$100,000 to \$200,000. It is unclear whether this is a one-off cost (in which case the ongoing costs have not been specified) or an annual cost.

We note that revenue from a DSM program in the order of 1000kW would be required to cover the cost of such a system. There are several current DSM programs of that size already registered with the IMO and we understand that DSM aggregators active in the SWIS have many small loads associated with their programs. It is likely these smaller loads will exit the DSM programs because of this cost.

It is also understood that near real time information about DSM load status is available from existing Western Power metering equipment if configured to suit. It



is unclear why the IMO has not given consideration to using this equipment rather than imposing additional costs on potential DSM providers.

(c) the proposed changes to the DMO (Issue 5) state that all facilities (generation and DSM) with the same price will be ranked on the basis of the time since last dispatch. As DSM and many of the liquids generation facilities price at the Alternative Maximum STEM Price the result of the ranking will be that DSM facilities will be dispatched in a "round-robin" with liquid fuelled facilities.

Our understanding of the current arrangements is that all generation facilities are dispatched before any DSM is dispatched, perhaps because System Management is holding the limited DSM resource in reserve for when there are more pressures on the SWIS. Thus the proposed changes will result in more frequent dispatch of individual DSM participants.

This will also be taken into account by businesses when making a decision to participate or not participate in any DSM program, as it increases the likelihood of being dispatched up to the 1500 hours in a year.

The resultant reduction in DSM will result in increased costs to business as they will no longer receive IMO payments for DSM, and will result in increased funding demands on generation as the need for additional generation capacity is brought forward.

#### Other comments

Newmont notes that the IMO proposals have not taken into account that some DSM participants may have entered into long term (2016/17 and beyond) contractual arrangements regarding DSM and has not considered how these contractual arrangements may be impacted (if at all) by the rule changes. The committee should consider how these rules may impact long term contracts.

#### 2. Please provide an assessment whether the change will better facilitate the achievement of the Market Objectives.

It is Newmont's view that the implementation of the proposed rules changes associated with Issues 2, 3 and 5 will **not** facilitate achievement of the following Market Objectives:

Objective (a): to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system.

We note that a DSM service is not strictly "production and supply of electricity", but is an "electricity related service". Notwithstanding this the implementation of the proposed rule changes will not be economically efficient as it will result in higher costs to electricity consumers. Consumers who continue to participate in the DSM programme will face high cost impacts on their businesses due to

(i) the lost production in the businesses due to the shutdown of equipment for up to 1500 hours per year; and



(ii) their IT costs associated with connection

In addition all consumers will face higher costs due to the pass through of the IMO and System Management costs of implementation and operation.

The expected decrease in DSM participants (due to the higher cost of being available for more hours) will ultimately result in construction of new generation capacity being brought forward. This will result in a sub-optimal economic outcome due to unneeded capital expenditure by generation providers.

The proposal also fails to demonstrate how the cost of production and supply of electricity will be reduced; it seems to us that the cost of capacity, ultimately funded by consumers, will be unchanged, as the Reserve Capacity Target will be unchanged and the Maximum Reserve Capacity Price will be unchanged.

Objective (b): to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors

In the context of this objective, an effective DSM service will encourage competition by facilitating entry of new competitors in the form of DSM providers. It is our view that the proposed rule changes will reduce the number of DSM providers willing to participate in the SWIS and have the effect of reducing competition.

Objective (c): to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions

The proposed rule changes will discriminate against and increase the barriers to entry for small DSM providers due to the costs of the IT requirements.

Objective (d): to minimise the long-term cost of electricity supplied to customers from the South West interconnected system

The proposal does not demonstrate how the cost of electricity supplied to consumers will be reduced; it seems to us that the cost of capacity, ultimately funded by consumers, will be unchanged, as the Reserve Capacity Target will be unchanged and the Maximum Reserve Capacity Price will be unchanged. In addition, all consumers will face higher costs due to the pass through of the IMO and System Management costs of implementation and operation.

The proposals will impose additional costs directly on consumers who agree to participate in the DSM service – these are not reflected in the "cost of electricity supplied" and so are (unfortunately) not covered by this objective but are nevertheless part of the overall cost of electricity to those consumers.

#### Objective (e): to encourage the taking of measures to manage the amount of electricity used and when it is used

It is Newmont's view that the proposed rule changes will positively **discourage** the taking of measures to manage the amount of electricity used and when it is used. Consumers will be less willing to participate in a DSM programme due to the increase in the availability hours required and the likely impact on businesses supplying the DSM service. This will have the effect of consumers not being incentivised to reduce electricity use during periods of system need (eq high load, system emergencies)



# 3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.

Newmont notes the IMO's estimate of DSM participants costs to implement IT systems of \$100,000 to \$200,000. It is unclear whether this is a one-off cost (in which case the ongoing costs have not been specified) or an annual cost. Newmont is not in a position to comment on these estimates as it not aware of the requirements for any system, but notes that revenue from a DSM program in the order of 1000kW would be required to cover the cost of such a system.

Of more significance is the impact on Newmont's mining operations due to implementation of the proposed rule changes, should it elect to continue to participate in the DSM program. Using publically available information, the value of metal sales from Newmont's Boddington Mine in 2012 at today's metal prices is in the order of \$1,100Mpa. Currently this production can potentially be disrupted under a DSM call for a maximum of 24hrs/year (when opportunistic maintenance can be undertaken). This disruption will increase to 1500hrs/year (or 17% of the time) under the proposed rule change.

## 4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

Newmont makes no comment on this topic.

