Major Energy Users Inc.

Australian Energy Markets Commission

RELIABILITY PANEL

2014 REVIEW OF RELIABILITY STANDARD AND SETTINGS (MPC)

Comments on Draft Report

Submission by

The Major Energy Users Inc

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Summary of views

The Reliability Panel (RP) recommends that:

- The **Reliability Standard** should be retained at 0.002% of unserved energy (USE) and that USE should not exceed this level over the long term.

- The **Market Price Cap** (MPC) should be retained at its current level and indexed using CPI and reviewed in 2017. Different price caps for different regions should not be implemented.

- The **Cumulative Price Threshold** (CPT) should be retained at its current level and indexed at CPI, and its form should be reviewed in 2017

- The **Market Floor Price** (MFP) should be retained at its current level but not indexed

- Modelling of the market (especially that supporting the MPC) should be assessed before the next review in 2017.

The Major Energy Users (MEU) considers that the Reliability Standard need not be varied even though there is an argument that having such a high level of reliability at the wholesale level is not consistent with the levels of reliability seen by consumers at their points of connections. Neither does the MEU consider that there should different Reliability Standards or market settings between regions.

The major area of disagreement with the RP assessment is with the MPC. There is clear evidence (see table 2.1 in the draft report) that an MPC of $10,000/MWh has delivered the reliability implied by the Reliability Standard (even to the extent that the actual reliability is so far below the Standard) but as a result consumers are paying a premium for unnecessarily high reliability being delivered in the wholesale market. The current MPC is already one of the highest in competitive electricity markets and in light of community wide concerns with escalating electricity prices in recent years (and Australia`s loss of its international competiveness position in electricity pricing since 2007) it is most disconcerting that the RP has not addressed reducing the MPC in its review given that more robust modelling now provided and the lack of need for dispatchable generation over the next decade or so. Not to reduce the MPC in such circumstances is an abrogation of the responsibility the RP has to comply with the requirements of the Electricity Objective.

In 2010, the RP recommended a 25% increase in the MPC to $12,500. This decision was based on modelling that has since been demonstrated to be flawed with a more robust model developed. The MEU considers that if the more robust model had been used in 2010, then it is doubtful that the RP would have recommended the increased value for MPC.

The RP notes that it considers more detailed review is required at the 2017 review. A detailed review at that time could be influenced by the impending need for new generation investment and therefore the MEU is concerned that the RP will be influenced by this and continue to take an excessively conservative view on what the MPC should be to incentivise new generation. As has been pointed out by AEMO, there is no new generation required for nearly a decade, the timing now is optimal to reduce the MPC and so deliver consumers the benefit of the lower MPC while allowing the RP adequate time to assess in more detail the new modelling approach to valuing MPC. A failure to reduce MPC now will result in consumers having to continue to incur unnecessary costs for wholesale electricity.

The MEU considers that a downward reduction in MPC should be reflected in the setting of CPT.

The RP considers that the indexation of the MPC and the CPT are necessary as these reflect that the cost for providing the "extreme peaker" varies over time[1]. However, the new cap defender approach is less reliant on capital cost assessments and therefore the need to index the MPC and CPT is less of an issue. On this basis the MEU considers that indexation of MPC and CPT should be removed

The MEU agrees with the RP for retaining MFP at a nominal -$1000/MWh.

The National Electricity Objective (NEO) requires the balancing of the costs to consumers to the reliability wanted by consumers in the most efficient manner.

1. Once the reliability standard is set then the lowest market settings should be used so that the standard is not exceeded over the long term.

2. The RP has in the past imposed market settings that have demonstrably provided reliability well in excess of the standard (over the past 13 years the actual reliability is less than one tenth of the standard[2]

3. These settings have imposed greater costs on consumers than are warranted

This shows that the RP has not complied with the NEO and should reduce the market settings so that reliability and cost are more balanced.

[1] There is considerable discussion in the draft report as to which index should be used and how to integrate exchange rate variation

[2] This is deduced from the table 2.1 provided in the draft report where USE in all regions totals 0.0072 over 61 regional outcomes

1. Introduction

In its response to the Roam Consulting analysis and recommendations, the Major Energy Users (MEU) made a number of observations that are pertinent to the Reliability Panel's (RP) recommendations on changes to the settings to be applied to the National Electricity Market (NEM) operations (ie the market price cap (MPC), cumulative price threshold (CPT) and market floor price (MFP)).

The MEU observations can be summarized as:

- Reliability in the wholesale element of the NEM (ie that part which the reliability settings influence) is only a part of the reliability of supply seen by consumers, which see the cumulative reliability of the wholesale market, the transmission network and the distribution network. This then raises the question as to whether the reliability being imposed on the wholesale market (and the costs involved) is commensurate with the overall reliability of the delivered product.

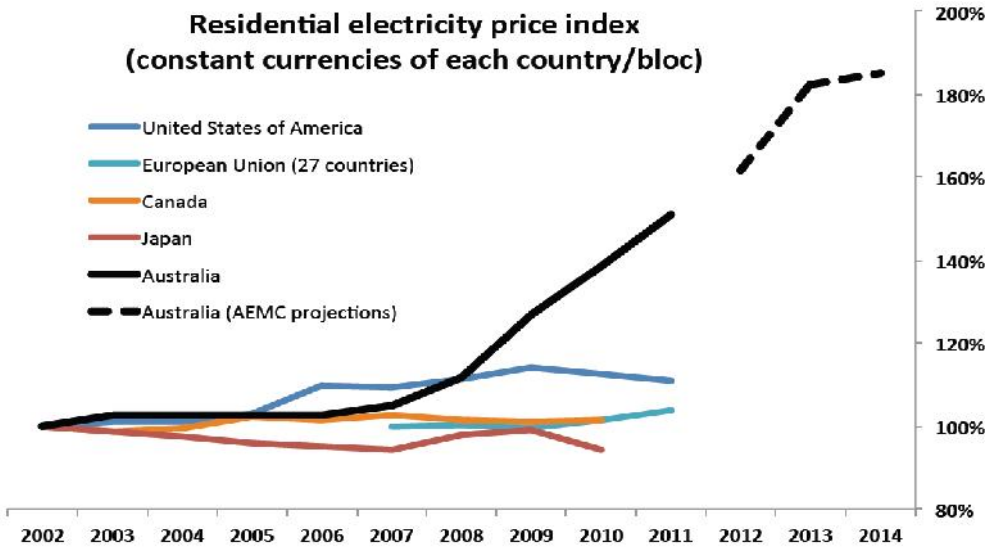
- The market settings (specifically the MPC) drive the reliability seen in the wholesale market. The current setting has resulted in an outcome where the Reliability Standard has not been breached NEM wide since NEM commencement. Further, it has only been marginally breached on a regional basis very infrequently and even then never in consecutive years. This implies that the market settings are too conservative. The RP is expected to assess this degree of conservatism with the costs to consumers for the reliability achieved.

- Market price volatility has been identified as a cause of increased risk seen in the NEM and managing risk is a cost that is ultimately passed onto consumers. The higher the setting for the MPC, the greater the market volatility and the greater the cost to consumers. The RP Is expected to identify whether the increased volatility in the NEM resulting from the market settings they recommend is balanced by the reliability outcomes they consider are needed in the wholesale market.

- Consumers are seeing significant increases in the cost of delivered electricity. Whilst actions are being taken to address costs in other elements of the supply chain (eg network charges, carbon tax, renewable energy imposts) the RP needs to recognise that it is also expected to address costs in the wholesale market and assess whether they too can reduce the burden on consumers. In this regard, the RP is expected to identify if the market settings are unnecessarily high causing increases in costs.

  That electricity prices are rising at inordinately high rates can be seen from the CME Australia calculation of electricity price movements for Australian households over previous years and the doubling of which now puts Australia's electricity price rises amongst the highest in the world, despite Australia having vast resources of low cost energy. The changes in prices

for a number of Australia's trading partners compared to those in Australia can be seen in the following chart[3]:



The RP must take into account these price pressures being seen by consumers

In its summary of the issues facing consumers the MEU posed four basic questions:

1 How influential is raising MPC in securing new generation investment?

2 How long should the MPC be held static in order to give sufficient time to see if the settings are achieving their expected outcome?

3 At what point does increasing MPC no longer improve reliability but creates (perverse) incentives to exit the market?

4 Should the MPC be reduced so as to reduce the cost burden on consumers?

The ROAM Consulting (ROAM) report cast serious doubt on the methodology used in the past to identify what is an appropriate setting for MPC yet, despite this, the RP is recommending retention of the status quo. Therefore, implicit in the RP draft report are the answers to the four questions:

1. The current level and allowing "creep" by CPI is essential in ensuring continuing investment

2. MPC has to be held at current but indexed levels until 2020

[3] This same trend can be seen from other reports such as Garnaut update #8 and ABS statistics and AEMC reviews

3. The current level of MPC (indexed) is not at the point where increasing MPC will not improve reliability and create perverse incentives

4. The MPC should not be reduced to reduce cost burdens on consumers.

The draft report goes onto imply that the issues raised by ROAM are important but should be deferred to the next RP review.

The MEU considers the RP responses to the questions posed are not based on market evidence and therefore has abrogated the responsibilities it has under the NEO.

The MEU is concerned that the RP, after seeking better information and a better methodology for assessing MPC, has effectively ignored the results of the ROAM investigations and is still being guided by a flawed methodology that has been demonstrated as not reflecting the reality of how the market works or what underpins investment decisions for new generation.

As a result, consumers are expected to continue to pay a premium for their electricity supplies despite there being clear evidence that the current levels of reliability significantly exceed the reliability levels being targeted.

The RP should accept that it used a flawed methodology in earlier investigations into setting the MPC and, most importantly, to its misguided policy positions in persistently raising the MPC since NEM commencement and its failure to make decisions that meet the NEO. Simply deferring rectifying its errors and leaving, to a future date, a general review of the MPC is disingenuous.

2. Assessment framework

The RP states it is required to assess the reliability standard and the market settings to achieve this by consideration of:

- The National Electricity Objective
- The potential impact of changes to spot prices, forward contract prices and contract liquidity, investment, reliability and the impact on market participants and consumers
- a number of other considerations:
  - Modelling
  - Broader NEM philosophy
  - Value to customers
  - Trade off between price and reliability
  - Investment certainty
  - Financial risk
  - Stability and predictability
  - Proportionality and materiality

The MEU agrees that these are issues that should be used as the basis for assessing the reliability standard and the settings to achieve the standard. But the MEU considers that on a number of these issues, the RP does not abide by these considerations it posits.

What is missing from the framework, is an assessment of the market evidence as to whether the market settings are achieving the Reliability Standard. In this regard the AEMC has been consistently observing that it seeks evidence to support the theories used to develop the market. Setting the market parameters should not be exempt from this.

The MEU considers that the RP must have cognizance of the evidence of the market outcomes as a driver of the decisions it makes. In this regard, the market evidence is that electricity prices have risen to unprecedented highs and there has been almost no unserved energy (USE) experienced in the market for the past 13 years. The MEU sees that these two elements of market evidence cannot be overlooked in the assessment framework used by the RP in reaching its recommendation.

2.1 The Reliability Standard

In its response to the ROAM modelling report, the MEU reminded the RP as to decisions made earlier regarding the Reliability Standard. The MEU does not reiterate these points but provides the following summary outline of the points made as these have pertinence regarding its following comments.

- The reliability standard measure sets the acceptable amount of unserved energy (USE) to provide a balance between the cost to consumers and the reliability of that supply.

- Achievement of the standard is assessed over the long term. This means that occasionally, reliability will reflect a greater USE than the standard, as the standard is seen as a target in the short term and not to be exceeded over the long term

- The standard is achieved through setting the market price cap (MPC). The higher the MPC, the greater the reliability of supply.

- The higher the MPC, the greater the cost to consumers. Conversely, a lower MPC will reduce prices to consumers

- The Reliability Standard for the wholesale market is only one element of reliability of supply seen by consumers at their points of connection. So the reliability standard is not definitively what consumers see and is only an assessment.

- The Reliability Standard of USE = 0.002% has not changed from the days of the government owned vertically integrated supply authorities, but its assessment was changed in 2010 to make it easier to achieve by the removal from the calculation certain loss of supply events (such as industrial action, Acts of God, etc)

The National Electricity Objective (NEO) requires the balancing of the costs to consumers to the reliability wanted by consumers in the most efficient manner.

1. Once the reliability standard is set then the lowest market setting (ie MPC) should be used so that over the long term, the standard is not exceeded

2. The RP has in the past imposed market settings that have demonstrably provided reliability greater than the standard

3. These settings have caused unnecessary harm to consumers as they imposed greater costs on consumers than are warranted

This shows that the RP has not complied with the NEO and should reduce the market settings so that reliability and costs are more balanced.

2.2 The performance to the reliability standard and market changes

In assessing the settings to achieve the Reliability Standard, it is essential to examine the state of the wholesale market and the reliability outcomes that have been achieved and compare this to the reliability sought. The decision of the RP in

the Comprehensive Reliability Review and restated on page 7 of the review of the operational arrangements for the reliability standard in the 2010 is that:

> "The level of the Reliability Standard specifies how much USE is acceptable as a percentage of annual demand. The level is currently set at a maximum of 0.002% of USE per annum over the long term[4]".

The reliability of the wholesale market has been extraordinary good and has achieved an outcome that has delivered reliability that is much greater than targeted. This is displayed in RP's table 2.1[5]

Table 2.1 Regional USE (2000-01 to 2012-13)

Year	Queensland	New South Wales	Victoria	South Australia	Tasmania[11]
2012-13	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2011-12	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2010-11	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2009-10	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2008-09	0.0000%	0.0000%	**0.0040%**	**0.0032%**	0.0000%
2007-08	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2006-07	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2005-06	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2004-05	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
2003-04	0.0000%	0.0000%	0.0000%	0.0000%	
2002-03	0.0000%	0.0000%	0.0000%	0.0000%	
2001-02	0.0000%	0.0000%	0.0000%	0.0000%	
2000-01	0.0000%	0.0000%	0.0000%	0.0000%	

In its report (page 23) the RP comments:

> "To date, the NEM has performed well against the reliability standard. In the past 10 financial years, the reliability standard has only been breached, on a regional basis, twice - in Victoria and South Australia in 2008-09. These two breaches

[4] Compliance with the Reliability Standard is measured over a ten year period.
[5] This table shows that over the past 13 years reliability has been less than one tenth of the standard on the basis of USE in all regions totalling 0.0072 over 61 regional outcomes

> occurred around the same time and coincided with relatively extreme weather events."

The draft report adds (footnote 42):

> "At the time, the Panel noted that the "long term" reliability standard over the past 10 year period had not been breached, and that AEMO and market participants managed the incidents appropriately."

The reliability of the market has been exceptional yet the draft report implies that the only conclusion that can be drawn is that the standard has not been breached. **This is an extreme understatement and biases the conclusions that might be drawn from such an outstanding performance.**

In fact table 2.1 shows that for the 12 years the MPC was set at $10,000/MWh there was only two times when regional USE exceeded the standard and even then, the NEM wide USE did not exceed the standard. Prima facie, this implies that an MPC of $10,000/MWh more than achieved the reliability standard.

Despite this, the RP implemented a 25% increase (indexed) to the MPC to operate from 1 July 2012, primarily driven by what is now seen as flawed modelling which implied that the MPC needed to be increased to maintain the reliability standard. Since the increase in MPC, USE has continued to be zero.

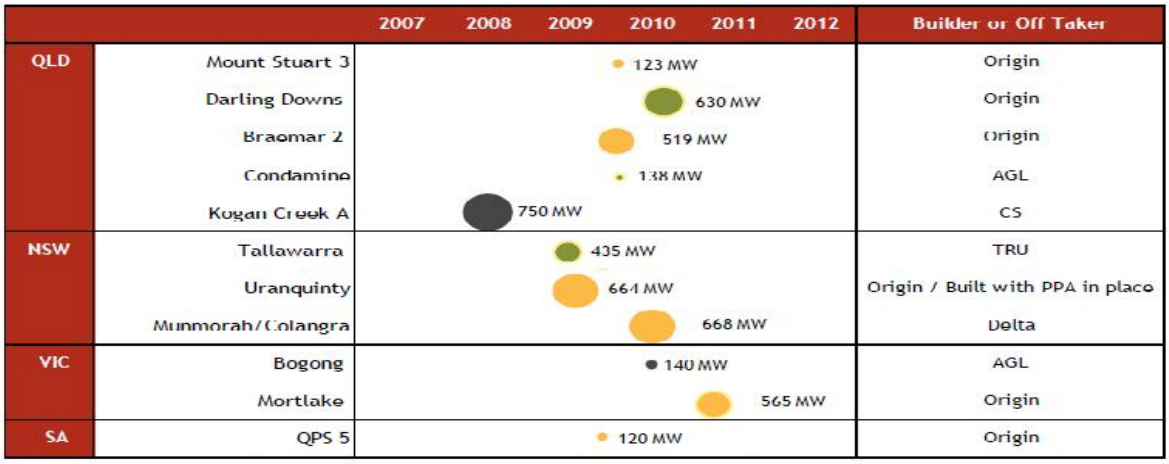
What has been overlooked since the MPC was last increased, has been a continuing fall in demand and consumption across the NEM and in each region. As a result there is surplus generation in the NEM to such an extent that some existing generation plants have been "mothballed" and others closed for considerable periods of each year.

Confirming this trend is that forecasts of peak demand and consumption made by AEMO reflect continual revision downwards, to such an extent that AEMO is not forecasting a need for new generation investment until 2020[6] and even later in some regions. At the same time, there is continuing investment in renewable generation which, if it continues to be installed as forecast, will cause even greater deferral of the need for new investment in dispatchable generation. At the same time, some existing dispatchable generation has been withdrawn from the market (and AEMO forecasts there is no need for new dispatchable generation until well into the next decade); this mothballed generation could be reintroduced should demand require it.

There is clear evidence from the market that an MPC of $10,000/MWh was more than adequate to provide for new generation investment. As Origin Energy advised in a presentation to the RP in February 2010 some 4800 MW of generation was either built (or was being built) in the four years 2008-11. This alone increased the

[6] See AEMO Electricity Statement of Opportunities February Update: Supply-Demand snapshot March 2014

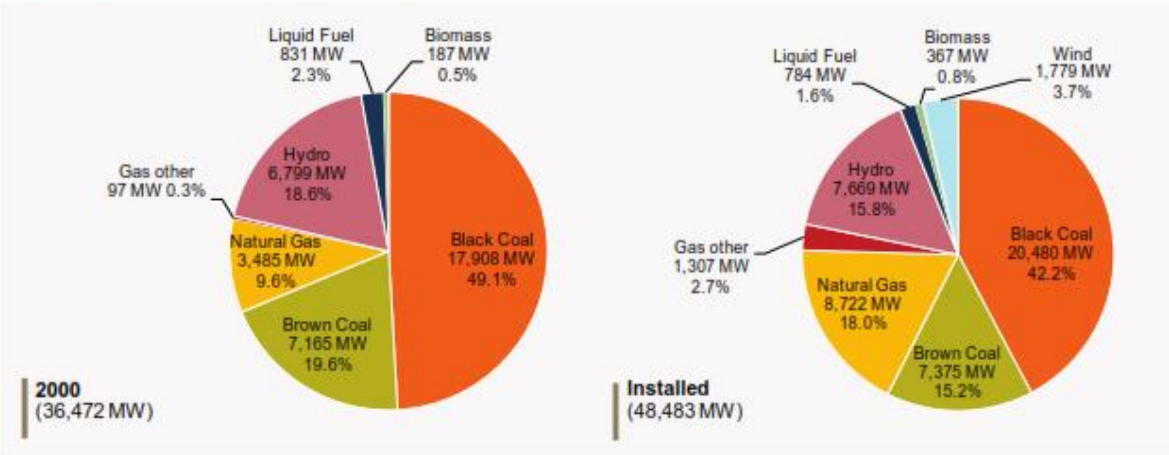
stock of generation in the NEM by over 12%, and this generation was committed with an expectation of an MPC of $10,000/MWh.



Source: Origin Energy presentation to RP 12 February 2010 page 10

This trend of investment is supported by the 2011 Electricity Statement of Opportunities where AEMO points out that there was an overall increase of 33% in installed generation stock over the ten years 2000 to 2010, during which the MPC was set at $10,000/MWh

Figure 2-3 — Installed capacities by fuel source



Source: AEMO ESoO 2011, page xxix

What this shows is that the RP decision to increase MPC in 2012 at the 2010 review was not driven by evidence of market performance but by the modelling that had been prepared for it.

2.3 The relation between prices, reliability and investment

Modelling by ROAM for the RP has clearly shown that the higher the MPC, the higher prices are for consumers. This observation is supported an expectation that

there should be a cost for increased reliability as this reflects the importance that consumers place on reliability.

Although the target for USE has remained at 0.002%, the reliability standard has reduced marginally since the NEM commenced as the basis for calculating USE has changed. In the 2010 RP review, the RP decided that the USE measure was no longer to include the effects of industrial actions or Acts of God - effectively reducing the standard. This should have resulted in a reduction in the market settings, especially the MPC.

However, the reverse occurred. The RP recommended an increase in MPC!

Yet despite the increase in MPC, there could be no improvement in the reliability performance (as reliability is well below standard), and nor was one warranted. At the same time, more than sufficient investment was occurring at an MPC of $10,000/MWh.

As there was a subsequent fall in peak demand and consumption, the existing generation stock was adequate indicating no increased incentive was required to ensure investment to match a non-existent need (or at least a need for another decade).

So achievement of better than required reliability, more than adequate investment and now no demonstrable need for future investment clearly provides evidence that the increase in MPC in 2012 was not warranted[7]. This means that the increase in the price electricity and the attendant increase in risk that the higher MPC causes are also not warranted.

2.4 Other considerations

The RP has provided a number of other considerations that it has taken into account when reaching its decision. The MEU comments on each of these in relation to the actual outcomes and market evidence.

2.4.1 Modelling

The RP has identified that there is a better modelling process that reflects what better reflects what actually occurs when decisions are made regarding investment.

In all assessments of the MPC up to the most recent one initiated by the RP, the MPC has been assessed on the basis of the costs to provide a generator to provide the last MWh of generation to ensure continuing supply (the Extreme Peaker model). This approach was used to justify an increase in the

[7] And was only increased because of what is now seen as flawed modelling provided at the time

MPC from $5,000/MWh to $10,000/MWh in 1999 and again more recently in 2010 from $10,000/MWh to $12,500/MWh.

In 2010 there was considerable concern expressed by many stakeholders that an increase from $10,000/MWh was not warranted and that perverse outcomes might well result. Additionally, modelling showed that increasing MPC would result in increased prices to consumers which consumers considered was not warranted.

An alternative approach to modelling MPC to achieve the reliability standard was developed (the Cap Defender model) which more closely reflects the decision processes used by investors to meet market needs for generation. This new modelling implies that a significant reduction in MPC could be made and still achieve the reliability standard. This new modelling reflects the evidence seen in the market that the reliability standard would be achieved with an MPC = $10,000

However, the RP has effectively disregarded this new approach and proposes to retain a MPC that was set using what can now be considered to be a flawed model.

2.4.2 Broader NEM philosophy

The RP considers that the settings should be designed to provide promotion of competition between buyers and sellers in the market. The MEU notes that this can only be assessed on evidence.

The evidence is that the actual reliability achieved is so much better than the target reliability of USE averaging no more than 0.002% over a notional 10 year period. Under a MPC of $10,000/MWh, the USE in the worst performing region (Victoria) averaged 0.0004%, some 20% of the targeted USE for the period. This means that the MPC of $10,000/MWh was clearly higher than what was needed to achieve the standard.

As an increase in MPC increases prices, it is clear that consumers are paying a premium for a level of reliability that is not required. The evidence is that $10,000/MWh does not reflect competition where the market sets an efficient price to match the reliability sought and in fact delivers a higher reliability.

2.4.3 Value to customers

The level of reliability has been set so that the USE does not exceed 0.002% in the long term. Currently actual USE is well below this level implying that either the reliability target should be lower or that the market settings are too high.

As consumers see the level of reliability at the end of the supply chain, they see much lower reliability than 0.002% USE because the networks have a

lower reliability than the wholesale market. The MEU sees that the costs to consumers for having such a high level of reliability in the wholesale market does not translate to a realisable benefit at the point of delivery and that the cost reduction from having a lower MPC would more than offset the reduction in reliability (if any) seen at the point of connection.

Further, the MEU notes that the forecasts for the need of new generation are so far into the future, that paying a premium in the wholesale market now to incentivise investment (if needed) for such high reliability does not provide value to consumers.

2.4.4 Trade off between price and reliability

The MEU accepts there is a trade off between price and reliability.

The evidence shows that reliability being achieved is far in excess of the Reliability Standard which has been accepted by consumers as appropriate. As price is driven by the level of MPC, and MPC delivers the level of reliability, it is clear that a reduction in price could be achieved by a lower MPC and a lower MPC could be implemented and still not exceed the Reliability Standard currently in use.

In addition, there has been no assessment as to whether the Reliability Standard of 0.002% USE is necessarily appropriate when considering the reliability seen and accepted by consumers at their points of supply. Such an assessment might result in a higher level of USE being more cost effective than not. Regardless of this the MEU sees that even at USE of 0.002% there is scope for a reduction in MPC with a resultant cost saving to consumers.

2.4.5 Investment certainty

The MEU accepts that investor certainty is an important consideration but the needs of the market were, according to Origin Energy - a major investor in new generation and presenter to the 2010 RP review - being met when the MPC was set at $10,000/MWh. Origin also commented that increasing MPC could well lead to perverse outcomes. Origin also commented in its presentation that investment in new generation was more driven by the generator having an acceptable counterparty to purchase the generation than by an ever increasing MPC.

What the RP has failed to take into consideration is investor certainty on the demand side of the electricity market. Ever increasing values for MPC leads to increasing prices in the wholesale market and increased volatility which requires higher risk premiums. Investors on the demand side are not investing (in fact many are closing down or reducing demand - both forms being the reverse of investing) as a direct result of increasing electricity prices. So the RP must be cognisant that a decision to have an MPC higher than necessary, results in the demand side deciding not investing.

The MEU also raises the point that there is no need to invest in more generation, as AEMO has forecast that for the next decade or so, there is no requirement for investment in new generation.

The MEU therefore considers the RP must assess whether the current level of MPC is required, or whether a lower MPC could just as readily ensure whether the needs for generation investment will still be met with a lower MPC.

2.4.6 Financial risk

The higher the MPC, the greater the risk to generators, retailers and end users of electricity. Therefore the MEU considers that the financial risks to all will be reduced with a reduction in MPC, especially as the reliability standard is far from being breached.

2.4.7 Stability and predictability

The MEU considers that the RP never considered the issue of stability or predictability when in 2002[8] the MPC was doubled or again in 2012 when it was increased by 25%[9]. At these times, there was no concern expressed by the RP that such large increases should be moderated in the interests of predictability and stability.

The MEU queries why stability and predictability are considered to be so important at a time when there is potential for the RP to recommend a reduction in the MPC, particularly when it has identified a new approach to assessing the trigger price for new generation investment which might be lower than previously thought.

It is simply unacceptable that the RP imposes new constraints on setting the MPC now that it appears the MPC is currently set too high.

2.4.8 Proportionality and materiality

There is no doubt that from a consumers' viewpoint, a reduction in the MPC will be material, and the larger the fall (as implied by the ROAM report) the greater the materiality.

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[8] The recommendation of the RP in 1999 which resulted in the increase of MPC from $5,000 to $10,000 was a direct result of applying the Extreme Peaker methodology. The decision to increase the MPC was made despite the level of USE incurred in the previous five years of performance of NEM and NEM1 being considerably below the USE target level of 0.002%. If the Cap Defender model had been used to advise the RP in 1999 as to the appropriate level of MPC, then based on the outcomes of the current ROAM modelling, it is likely that the MPC would not have been increased in 1999, or if it was, then there would have been only a small increase.

[9] If the cap defender model had been used in 2010 it is doubtful that an increase in MPC would have been implemented

Equally, as consumers are being faced by ever increasing electricity costs (so much so that Australian electricity prices are now greater than those experienced by other countries less well endowed with low cost energy sources - see section 1 above) the issue of delivered electricity prices (of which the wholesale market and its MPC are a part) it is proportionate to take actions wherever possible to reduce this massive burden electricity consumers are facing.

To reduce the MOC is both material to consumers (and probably much less material to generation investors) and proportionate.

2.5 Summary

The MEU broadly supports the assessment framework to be used by the RP, but where the MEU differs from the draft recommendation, is the degree to which the balance of competing issues is addressed.

The MEU therefore considers that the RP must give greater weight to the evidence of the market. The evidence of the market is:

- With the MPC set at $10,000/MWh or lower the level of USE was zero for a 12 year period in NSW, Queensland and Tasmania and only once in that 12 year period did the level of USE exceed the standard in Victoria and in SA. On this basis alone, it should be accepted that there was no reason to increase MPC in 2012

- With the MPC set at $10,000/MWh there was an increase of over 12% in dispatchable generation in just 4 years (2008-2011)

- In the 10 years 2000-2010, there was an overall increase of more than 33% in generation stock, during which time the MPC was $10,000/MWh.or lower

- The decision to increase the MPC in 2010 was based on modelling that has since been superseded by a modelling approach that more closely reflects the actuality of decisions to invest in new generation and which implies a much lower MPC is needed to deliver the reliability standard.

- The new modelling approach for MPC is consistent with what has been seen in the market, where the higher levels of MPC have delivered outcomes where there is almost no USE observed in the market, leading to the conclusion that MPC is set too high.

3. The two models and the RP approach

The MEU has already provided its views to the RP on the modelling work carried out by ROAM and has provided its views on the two models and the outcomes that are derived from the two. Because of this, the MEU will not reiterate its views on the two models other than to confirm that it is of the view that the cap defender model delivers outcomes that are supported by market evidence.

3.1 The models and market evidence

ROAM comments in its report to the RP (page 1)

> **"The cap defender method is the preferred approach used in this review.** The cap defender approach includes commercial considerations that drive new entrant investment in the real market. Therefore, this new method is more robust and informative that the theoretical approach applied in the 2010 Review."

Whilst the cap defender model delivered outcomes indicating that the MPC should be between $3,000 and $10,000 depending on the regions, the market evidence is that an MPC of $10,000/MWh (or lower) has delivered over a 12 year period a USE in the market that has been zero in most regions, and has only exceeded the standard once in two regions, and even then, by only a small margin.

Such an outcome delivers evidentiary support that an MPC of $10,000/MWh - the highest MPC calculated for any region using the cap defender approach - will provide support to achieve the reliability standard.

In contrast, the evidence does not support increasing MPC as is the outcome from the "extreme peaker" modelling which suggests that an MPC of between $18,000 and $22,000 is required. The fact that at MPC = $10,000, actual USE was negligible for a 12 year period (and well below the target USE over the long term) indicates clearly that the extreme peaker approach delivers unnecessarily high values for MPC.

For every review of the market settings undertaken by the RP, the "extreme peaker" model has served as the basis for either increasing the MPC or for maintaining its value. However, as the RP states (page 32):

> "…it can be observed that after a number of MPC reviews, there appears to be an emerging consensus that this approach to determining an appropriate MPC to achieve the reliability standard produces a MPC outcome that is arguably higher than what is needed for the NEM to meet the reliability standard."

The MEU would agree with this view and the market evidence supports the contention. The fact that since the "extreme peaker" approach has been used, the

level of USE has been so low that it is clear that the approach has provided market settings that are grossly overstated.

The RP comments that the alternative approach - the cap defender approach - is as yet unproven but reflects a model more akin to what is actually seen in the market, that is, the model is more realistic than the assumptions used to underpin the "extreme peaker" approach.

The RP notes that the "cap defender" model is more influenced by the amount of demand side participation (DSP) and this is borne out by the ROAM modelling. However, whilst the MEU supports making DSP a more viable option for consumers, at the most fundamental level, consumers do not want to turn off their electricity supplies if they can avoid doing so. It must be remembered that demand side investors have made their investments on the assumption that they can continue to use their assets when they wish to and that providing a demand side response is only a mechanism to recover some of the costs they incur when electricity supplies fail.

3.2 The RP reasons for not changing MPC

On page 36 of the RP draft recommendation, the RP observes:

> "**Given the importance of maintaining the stability and predictability** of the NEM's reliability framework, any changes proposed to the reliability settings - in this case, the MPC - would need to be supported by evidence that change is warranted. This includes evidence that the potential benefits of an increase, or decrease, in the level of the MPC (in terms of investment incentive) are likely to be outweighed by the additional risks and costs that may be introduced by the change." (emphasis added)

The MEU finds this statement disturbing on three counts.

1. The MEU accepts that stability and predictability are important considerations but that in the past the RP has been keen to increase the MPC without considerations as to whether such moves reflected stability and/or predictability. Certainly stability cannot have been an influence in doubling the MPC in 2002 or even increasing it by another 25% in 2012, as both major step increases certainly did not exhibit a concern that stability had to be maintained.

2. The RP observes that evidence is needed that change is warranted before change should be made. In fact, the RP is effectively stating that a reduction needs to have evidence that the reduction is warranted as previously the RP has increased the MPC despite there being no evidence (other than from what is now seen to be a flawed model) that an increase was warranted. The fact that the RP considers that evidence is needed only

for reductions belies the requirements of the NEO. There must not be double standards.

3. There is more than ample evidence that at MPC = $10,000 the reliability standard has not only been met but reliability has greatly exceeded the standard. 12 years of evidence in more than sufficient to demonstrate that the MPC = $10,000 is an appropriate setting.

Regarding predictability, the only aspect of predictability of MPC values has been that it has always increased, regardless as to whether the market evidence indicated that continuing increases of MPC were not required.

What the RP totally overlooks is that the market evidence (and now supported by the new modelling approach - the cap defender model) does show that a reduction in MPC could be implemented without exceeding the reliability standard over the long term.

The MEU points out that the risks to consumers are that overstating the MPC increases electricity prices, but the market evidence is that the MPC could be reduced without significant increase to loss of supply. This is clear from the evidence that at MPC = $10,000, the reliability standard was effectively zero for the past 13 years. On this basis, the risks to consumers by reducing the MPC would appear to be minimal and the benefits significant.

In contrast, the RP seems to be of the view that reducing MPC would impact the revenue generators would get and that this might lead to unforeseen outcomes. The MEU has difficulty in accepting this assertion based on the market evidence, as at MPC = $10,000 there was significant investment in new dispatchable generation.

The MEU does see that the impact of the renewable energy target and the incentives offered will have a greater impact than a reduction in the MPC. Despite this observation, the MEU points to the AEMC review in 2009 of the impacts of the CPRS and expanded RET on energy markets, where the AEMC concluded that the electricity market could accommodate the pressures imposed by the impacts of these environmental changes. On this basis, the RP should not accommodate this impact in their assessment of MPC.

3.3 Reasons for not reducing MPC

The RP comments that it should not reduce the MPC on the basis that:

- Stability and predictability are pre-eminent concerns. In contrast the MEU comments on this above but adds that an error in increasing MPC in the past to levels not warranted (and causing consumers increased costs) does not meet the requirements of the NEO.

- It wants more evidence before it can justify a reduction. To this the MEU considers that 13 years of outstanding performance should provide sufficient market evidence that the MPC is currently too high.

In its report ROAM considered there were other reasons for not reducing the MPC including:

- An increase in USE would result. The MEU accepts that this is true but currently the level of USE under MPC = $10,000 has USE at less than a tenth of the standard so an increase could be tolerated
- A potential reduction in DSP (see MEU comments in 3.1 above)
- Lower recovery of generator revenue due to reduced volatility in the market. The MEU accepts that this would be a natural corollary to consumers paying less, but adds that the NEO is written in terms of the long term interests of consumers and not of generators
- The cap defender generator might not be able to respond fast enough to prevent loss of supply thereby increasing USE. This observation is not borne out by the market evidence and the levels of reliability achieved

In contrast to these negatives, ROAM observes the positives will include a reduction in costs to consumers from lower pool prices, lower risk of exceeding cap contracts, lower prudential requirements, less negative settlements residue, and less risk for inter-regional trading.

Cleary, the detriments of reducing the MPC are far outweighed by the benefits.

3.4 CPT and MPC relationship

The RP draft report highlights that the modelling by ROAM does indicate that there is a link between CPT and MPC in that increasing the multiplier between CPT and MPC leads to the need for a lower MPC and conversely reducing the multiplier would result in a need to increase MPC.

The MEU notes that the RP accepts this aspect of modelling by ROAM yet it has not accepted the other modelling by ROAM in relation to the outcomes of the cap defender model.

The MEU accepts that to draw conclusions at this stage that the multiplier be varied and to what extent requires more investigation.

The MEU therefore agrees that in the interim, the multiplier should remain at CPT = 15*MPC pending more research.

3.4 Indexation of MPC and CPT

The RP considers that the indexation of the MPC and the CPT are necessary as these reflect that the cost for providing the "extreme peaker" varies over time[10]. However, the new cap defender approach is less reliant on capital cost assessments and more related to market outcomes. Therefore the need to index the MPC and CPT is less of an issue.

On this basis the MEU considers that indexation of MPC and CPT could be well removed, recognizing that the RP reviews the setting of MPC on a three year cycle.

[10] There is considerable discussion in the draft report as to which index should be used and how to integrate exchange rate variation