

Response to Review on Reliability Standard and Settings Draft Report

Presentation to: AEMC Reliability Panel

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Summary



- The NEM is already one of (if not) the most volatile commodity markets in the world.
- A higher MPC to encourage investment must be balanced against the potential for increased volatility resulting in perverse and costly outcomes.
- Given the subjective nature of modelling, greater weight must be placed on real market evidence...
 - which shows the current market settings are delivering capacity when required and the evidence does not suggest this is likely to change in the future.
- New investment is driven by the contract price not spot price. A focus on spot revenues by ROAM means the modelling overestimates the required MPC level.
- An MPC that is too high unnecessarily increases participant risk levels for no material benefit to investment.
- Effective retail competition is likely to suffer as a consequence of the financial stresses from greater risk capital, working capital and prudential requirements combined with an already constrained supply of bank guarantees.

An increase in the MPC will increase the cost for all market participants operating in the NEM. This cost will ultimately be borne by consumers for no material reliability benefit.

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Existing market signals are working effectively



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• AEMO's supply-demand outlook does not suggest any material medium-term supply shortfalls.

ESOO 2009	Existing & committed plant		<i>If add in proposed generation plant</i>
Region	LRC Point	Reserve Deficit (MW)	LRC Point
QLD	2014/15	34	Beyond 2018/19
NSW	2015/16	182	Beyond 2018/19
VIC & SA (combined)	2013/14	17	Beyond 2018/19
SA (local)	2012/13	68	2012/13*
Tasmania	Beyond 2018/19		Beyond 2018/19

*VIC has reserve surplus that could meet shortfall

Source: ESOO p.2-5 & Executive Briefing, p.5

... there is no evidence that the current market is failing to provide capacity when required or will do so in the future.

ROAM's modelling does not reflect the reality that the majority income source for new build is contract revenue

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Spot Revenue vs Contracted Revenue Distribution



- Spot market revenues are alone too volatile and uncertain to make an OCGT project bankable.
- New and existing generators use the contract market to provide revenue certainty for debt and equity holders.

... the contract market provides a price signal when new capacity is needed.

There is no evidence that the contract market is - or is about to start - failing to provide this signal.

Modelling can be highly subjective... greater weight must be placed on real market evidence



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- The modelling justifies a higher MPC on the basis of anticipated spot revenues of a super peak OCGT
- Modelled spot revenue outcomes are highly sensitive to input assumptions
- In particular:
 - capital costs
 - fuel costs (gas prices)
 - strategic bidding which is highly dependent on the *assumed level of contracting* (e.g. zero)
- Historical bidding patterns are not necessarily reflective of future behaviour
- Difficult to capture multitude of variables that influence bidding decisions, which in turn determine spot price outcomes
 - ... climate change policies introduce an additional unknown influence

Modelling can inform decisions, but it should not be the sole driver for policy change - real market evidence matters.

A higher MPC may adversely affect generator contracting and investment incentives



- Higher MPC increases risk exposure from unit failure and ability to meet contract requirements:
 - Plants traditionally contract N-1 units to manage risk
 - Less units enhances this risk
 - Higher insurance costs to manage risk
 - Greater levels of spot price volatility amplify risk
- Higher MPC may therefore lower the contract level generators wish to carry
- Higher MPC also increases potential pay-offs from strategic bidding, leaving more generation uncontracted
- Increased riskiness makes it more difficult for small new entrant merchant plant to source finance

... a higher MPC will increase price volatility and contracting costs.

Generators contract to less than their installed capacity to manage plant risk

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... so the contract market moves into shortfall quicker than underlying supply-demand. If availability of contracts reduces, retailers will experience higher contract costs, which increases their investment incentives to manage risks.

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Higher MPC will require larger risk limits and risk capital allocation





Earnings Volatility Effect of increase in MPC

 Increased MPC will result in larger P&L volatility for all market participants, requiring higher levels of working capital and risk capital.

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• The cost of this capital will need to be recovered in the market during a time of increased pricing pressure when there are regulated tariffs in most NEM regions.

Source: Origin internal modelling

.. increase risk capital will lead to increased costs for all market participants and will ultimately be borne by consumers.

Retailers must manage the price risk through their own generation or contracts

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Source: Origin internal modelling

... the price risk associated with high customer demand and high prices means > 90% of retailer costs and generator revenues are derived from contract prices NOT spot prices.

Existing contract prices already reflect the current level of price volatility and are sufficiently high to justify new OCGT investment.

Recent and expected generation projects over the next four years mostly built or backed by retailers

2007 2008 2009 2011 2012 Builder or Off Taker 2010 Mount Stuart 3 QLD Origin 123 MW Darling Downs Origin 630 MW Braemar 2 Origin 519 MW Condamine AGL 138 MW 750 MW Kogan Creek A CS TRU **NSW** Tallawarra 435 MW Origin / Built with PPA in place Uranguinty 664 MW Munmorah/Colangra 668 MW Delta AGL VIC Bogong • 140 MW Mortlake 565 MW Origin SA QPS 5 120 MW Origin

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origin

Source: AEMO generator information (existing, committed & proposed projects)

..the existing level of market risk has resulted in new build requirement being met predominately by retailers with no new OCGT build left uncontracted to earn revenue from the pool.

These investments deliver reliable supply.

Effective retail competition likely to suffer

\$6,000

\$5,000

\$4,000

\$3,000

\$2,000

1 year before increase



1 year after increase



NSW

QLD

SA

VIC

- Spot price volatility greater after VoLL increased from \$5,000-to-\$10,000/MWh
- Results in increased AEMO prudential requirements for retailers
 - Events in December 2009 increased our prudential requirements by 30%
- Already insufficient credit available at current prudential level; banks at exposure ceiling for sector
- Existing requirements already creating "financial stress" – e.g. Jackgreen exit
- g 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 t Month (Before/After)

\$5.000 VOLL

Pre/Post VOLL Change Max Daily Price

\$10.000 VOL

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- Higher requirements likely to make it less viable for smaller retailers
- More RoLR events possible risks for retailers of last resort
- Lower contract market liquidity with fewer retailers in the NEM
- Retail price regulation may limit cost pass-through and therefore recovery and investment options
- Another financial stress when costs are already increasing

(Note: days normalised for weather) Source: Origin internal modelling

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