

Review into the role of hedging contracts in the
existing NEM prudential framework

AEMC Forum on Draft Report

1. NEM Objective undermined because:

Draft AEMC FOA formula fatally flawed:

- a) Places prohibitive inefficiency (and cost) on FOAs;
- b) AEMC's FOA risk/reward analysis ignored extensive futures based efficiencies for other NEM Participants (not just AEMO);
- c) Anti Competitive;
- d) Contrary to derivative market reform.

2. Easily fixed: *d-cyphaTrade provides amended FOA MCL formula*

- a) FOAs will retain much more (and never less) MCL than reallocation;
- b) Optimises efficiency of FOAs for least cost outcome.

1. NEM Objective undermined



The AEMC's proposed **FOA MCL calculation is fatally flawed** and threatens to undermine major efficiency gains from FOAs.

Specifically,

AEMC's FOA MCL calculation limits FOA efficiency gains to a tiny fraction of "rewards" AEMO gives for AEMO reallocation.

This contradicts PWC risk advice and results in:

- Increased collateral requirement for retailers
- Increased working capital costs for retailers
- ***Increase in costs will be passed on to consumers: this is not in line with the NEM Objective !!!***

1(a) NEM Objective test ignored massive futures-related benefits to other Participants



NEM Objective test should consider benefits beyond those to just AEMO

- a) As PWC commented, ***Futures reduce credit risk*** while ***reallocations transfer credit risk*** to other [risky] off-market OTC arrangements
- b) i.e. ***maximum FOA uptake = massive risk reduction efficiencies outside of AEMO***
- c) The AEMC draft MCL Formula *contradicts* this NEM-wide risk reduction efficiency benefit of FOAs

1(b) NEM Objective undermined



Wider benefits to NEM (not just AMEO) from greater futures usage – ignored by AEMC Draft FOA formula

- Transparency (investment signalling, allows market monitoring by regulators);
- Credit risk reduction of hedges through daily mark to market margining;
- Superior compliance, fairness (market access) and regulatory oversight;
- Multi-counterparty hedge netting (eliminates collateral duplication);
- Clearing Participant credit support to participants;
- Increased hedge liquidity from centralised transparent market place;

Greater futures usage via FOAs also,

- **Allows independent retailers to compete against Gentrailers** that are massively competitively advantaged by current MCL formula;
- **Reduces generator market power** (and pricing control) for reallocations;
- Reduces generator market power (and pricing control) for other hedges;
- Allows retailer's hedges to be immune from generator outages (avoiding catastrophic, cascading OTC default events such as **California electricity crisis**).

1(c) Anti-competitive behaviour against futures market



Draft AEMC MCL formula is anti-competitive *against futures*:

- a) *Futures market prevented from competing equally against AEMO derivatives* market;
- b) Imposes Anti-Competitive “penalty & cost” if futures used instead of OTC reallocations;
- c) Many retailers wont bother to use FOAs.
- d) Preferential AEMO treatment of reallocations force retailers to trade supporting OTC deals instead of futures (*i.e. indirectly displacing futures liquidity*);
- e) Proposed AEMO “swap and option” reallocations will *directly displace futures liquidity*;

1(c) Draft AEMC FOA Formula Contrary to derivative market reform



Draft AEMC MCL formula defies best practice derivative reform.

- See US Treasury Reserve reforms in response to OTC credit defaults.

http://www.financialstability.gov/latest/tg_05132009.html

1. All standardised OTC to be moved to licensed Clearing Houses to eliminate OTC credit risk;
 2. Non cleared OTC (like reallocations) forced to hold extra collateral postings in excess of futures due to additional credit risk of OTC;
 3. Seeking international adoption by derivative regulators
- ***If reforms adopted in AUS, impact could be fatal for reallocation OTC market (and for good reason).***

Solution

Minor amendment to FOA MCL formula
(see below)

Solution: d-cyphaTrade suggests a slightly amended FOA MCL formula



- > AEMC should amend FOA MCL formula such that under FOA:
 - > MCL covered by FOA = Retailer's FOA load x **Max of** (*Futures Lodgement Price x 42 days* or *2 x reallocation MCL*)
- > Result:
 - Historically, **50% greater MCL than reallocation;**
 - **Never less than combined** reallocation MCLs;
 - **Prudential margin (PM) twice covered (at least) and hence consistent with intention of PM;**
 - **reduces the artificial discrimination against FOAs** in comparison to reallocations and ensure FOAs are actually utilised, delivering efficiency gains to the NEM.

Solution: d-cyphaTrade suggests an amended FOA MCL Calculation



d-cyphaTrade suggests modifying: s7.2. as follows:

For FOA load,

$$\text{MCL} = \text{MAX} \left[\left[\text{FLP} \times \text{E2} \times \text{42 days} \times \text{LF} \times (\text{GST} + 1) \right], \right. \\ \left. \text{P} \times \text{VF} \times \text{E2} \times \text{2} \times \text{Trp} \times \text{LF} \times (\text{GST} + 1) \right]$$

Where:

- > **Blue** = MCL under FOA based on FLP x *42 days instead of 35 days*,
- > **Green** = MCL “floor” equivalent to base load reallocation (i.e. 2 x PM)

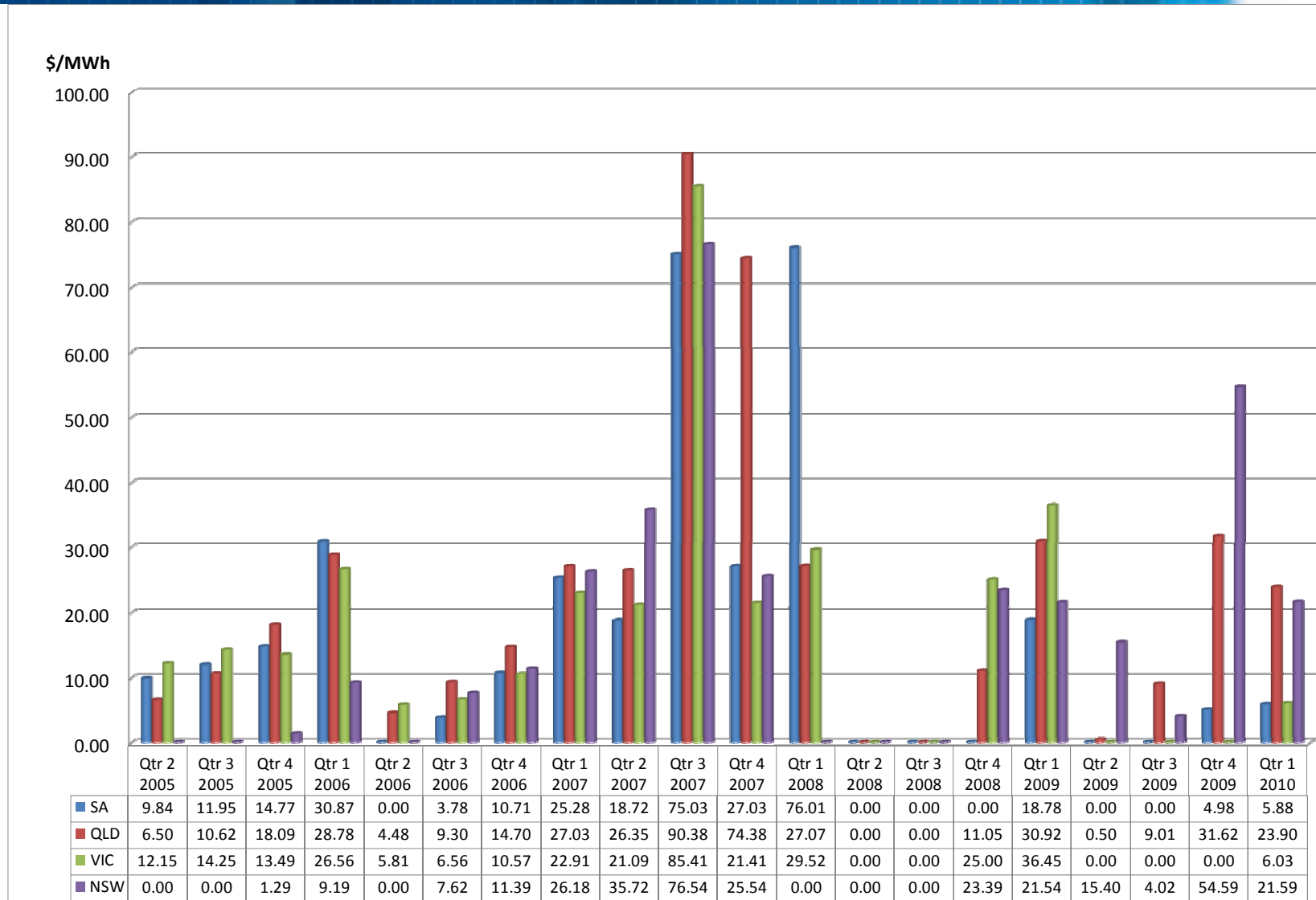
Preserved MCL under each FOA model Q2 2005 to Q1 2010



	Average MCL \$/MWh	ADDITIONAL MCL BURDEN placed on FOAs v.s. reallocation
Reallocation (2 x PM)	\$ 36.44	-
d-cypha amendment MAX of (FLP or 2 x PM)	\$ 54.56	50%
FOA with no additional PM	\$ 49.94	37%
PWC FOA model with 1 PM	\$ 59.84	64%
AEMC draft FOA model with 1 PM plus (PM-FLP)	\$ 69.93	92% ??

Ignores GST and Loss Factor.

d-cyphaTrade formula amendment FOA MCL in excess of reallocation MCL



Ignores GST and Loss Factor

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