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Melbourne Office

20 February 2009

Dr John Tamblyn Chairman Australian Energy Market Commission PO Box A2449 SYDNEY SOUTH NSW 1235 By email: submissions@aemc.gov.au

Dear Dr Tamblyn

Public Submission to AEMC 1st Interim Report - Review of Energy Market Frameworks in light of Climate Change Policies

Please accept this non-confidential submission in response to the 1st interim report into the energy market framework.

NEMMCO supports the AEMC's approach in retaining the groups of issues from the scoping paper and largely concurs with this categorisation and the priorities that have been allocated. Where existing frameworks exist that are likely to drive efficient outcomes in the presence of climate change policy, then those issues do not need to be progressed further in this review. NEMMCO has engaged within the categories listed for progression and has suggested approaches.

Having said this, there are a few specific matters within those categories that are not being progressed that we believe are appropriate to remain in discussion. These matters, and the rationale, are explained.

NEMMCO thanks the AEMC for publishing the 12 supporting papers. In particular we welcome the paper prepared by Allen Consulting Group into the application of the Regulatory Investment Test in the presence of climate change policy. This paper provides helpful guidance that can be used as a common basis by network planners and we have used it as a reference in our consultation into the preparation of the National Transmission Statement. We also suggest obtaining further advice into the ability of the existing Test to economically extend the shared network into areas of prospective renewable energy as promoted by option 4 in Issue A5.

NEMMCO has responded in the areas of:

- The convergence of gas and electricity markets with respect to the:
 - powers of AEMO to co-ordinate action and
 - consistency of Energy Market price caps;
- Generation capacity in the short term and possible new assurance mechanisms;
- Increased use of renewables and participant market operations;

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- System operation and intermittent generation;
- Connecting new generators to energy networks;
- Augmenting networks and managing congestion with respect to loss factor volatility; and
- Retail Issues with respect to:
 - o NEM Prudentials, and
 - \circ the RoLR.

For further discussion please call Ben Skinner, Market Development Specialist, 03 9648 8769.

Yours sincerely

S.D. Water

David Waterson General Manager Development and Strategy

NEMMCO

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1. Convergence of gas and electricity markets

Do you agree that the convergence of gas and electricity markets is not a significant issue in the eastern states and therefore should not be progressed further under this Review?

NEMMCO submitted to the scoping paper that it was aware of significant differences in the design of these markets but also that gas fired generation had been successfully operating since market start and that we are unaware of any serious operational issues that have developed due to these differences. We therefore understand the AEMC's initial conclusion. However there are two specific matters that we believe are worthy of further investigation.

1.1 Inconsistency of Price Caps

Few stakeholders raised the risk of "arbitrage"¹ due to the inconsistency of energy pricing during scarcity in submission to the scoping paper. NEMMCO did not. On reflection, we note a risk exists where price caps affect market clearing, leading to gas-fired generators operating contrary to the true marginal spark spread².

This is most marked in circumstances where one market is subject to an administrative price cap. Note that when the NEM's Cumulative Price Threshold for energy is triggered (Clause 3.14.2(c)), the rule simultaneously caps electrical energy (3.14.2(d1)) and electricity frequency control ancillary services markets (FCAS) (3.14.2(d2)). As electrical energy and FCAS are mutually dependent and directly co-optimised by the dispatch engine, serious arbitrage opportunities would otherwise exist.

The various markets have evolved with individual objectives and mechanisms for setting price caps (or Providers of Last Resort). It would be beneficial if these mechanisms were jointly determined, seeking a consistent energy market outcome. We consider this is a matter for the review, as there is no existing framework that could contemplate that convergence. The AEMC could propose a process where the various price cap resetting rules could be harmonised such that converged price caps could evolve over time.

1.2 Power for AEMO to co-ordinate emergency action across energy markets

In our submission to the scoping paper, we noted a concern that gas production facilities tend to be centralised and suffer rare but large "force majeure" failures lasting several weeks. As the NEM becomes more dependent upon gas-fired generation, its reliability is likely to become more exposed to that risk. The 1st interim report acknowledges our concern, but also notes the offsetting trend towards more disaggregated and interconnected gas production. NEMMCO accepts this view.

The report also notes the creation of AEMO and states "...we expect the establishment of AEMO to reduce greatly the potential risks associated with greater reliance on gas-fired

¹ 1st Interim Report, Pg 15

² "Marginal spark spread" refers to the difference in marginal energy value between a gas and electricity market, adjusting for the conversion efficiency of a gas-fired generator.



generation to meet electricity demand³ and proposes this as a critical matter for consideration by the AEMO board.

Whilst the creation of AEMO should create a better platform for communication and the monitoring of such risk, we are not certain that it has been adequately empowered to respond to emergencies in the contemplated co-ordinated fashion.

The market operator's intervention powers in the NEM (e.g. Clause 4.8.9) relate to objectives to maintain secure, satisfactory or reliable operating states. These in turn have fairly clear and specific meanings internally focussed upon the electricity market. The characteristics of a reliable operating state are set by the Reliability Panel and do not, for example, contemplate AEMO intervening in the electricity market for the purposes of lessening a gas market emergency.

We understand that gas market legislation and rules are similarly internally focussed.

If the AEMC determines that co-ordination of emergency action in the co-dependent markets is an important goal, then NEMMCO suggests it will need to recommend a framework towards legislative and rule changes that would empower such action.

³ 1st Interim Report, Pg 16



2. Generation capacity in the short term

Do you agree that the ability for NEMMCO to manage actual or anticipated transitory shortfalls of capacity is a significant issue that should be progressed further under this review? Are additional mechanisms required to complement the RERT and NEMMCO's directions powers?

2.1 Electricity Sector Adjustment Scheme (ESAS) conditionality

NEMMCO notes that since the release of the 1st interim report, the Australian Government has released its White Paper into the Carbon Pollution Reduction Scheme (CPRS), which proposes that eligibility for the ESAS assistance be conditional upon a generator retaining registration with its market operator unless the operator permits de-registration based on adequate forecast reliability. This has provided the market operator with an additional measure in relation to incumbent coal plant and may go some way to satisfying the AEMC's concern.

2.2 Demand-Side Participation (DSP) information

The 1st interim report mentions that respondents to NEMMCO's surveys are not under any formal obligation to identify all their DSP capability⁴ and that this may be under-declaring the actual volume of demand-side response. NEMMCO agrees that the process currently undertaken to establish a quantity of non-scheduled, price-responding load and generation in MTPASA and SOO forecasting is yielding unsatisfactory data.

Note that reliability forecasting is an outcome of the matching of supply and demand data and the quality of each is critically important. Whilst the provision of data from large supplyside participants is comprehensive and supported by the rules, formal processes for the collection of information from the demand-side are quite limited.

In the predispatch timeframe, provision of information would require some participant systems development and would first require a cost/benefit justification. However in the MTPASA/SOO timeframe being discussed here, the form of information required is fairly simple and would presumably be readily available for provision to NEMMCO.

NEMMCO would want to avoid performing any intrusive assessments of commercial operations, and, if new rules are proposed, would prefer that participants submit summarised information. Performance would be assessed by the Australian Energy Regulator, the same approach as used for generator obligations.

NEMMCO believes such obligations are better to be on-going rather than only invoked when intervention is likely. This is because:

- Provision of the best available information into NEM forecasting systems is of value to the market and its efficient operation at all times, not just when reliability is low;
- It would provide the opportunity for the development of on-going processes between participants and NEMMCO and an operational understanding of the obligations by those parties affected by it; and
- A "last-minute" collection of data is less likely to be successful, and could delay an intervention process.

⁴1st interim Report, Pg 21



The growth of an active demand-side is not necessarily an outcome of climate change policy and accurate forecasting is a worthwhile goal in any case. The AEMC Demand-Side-Participation Review seems to be an appropriate existing framework for the consideration of this matter.

2.3 Extension of RERT activation period

NEMMCO now has the ability to activate RERT 9 months ahead of a forecast reliability shortfall (having been increased from 6 months from the old Reserve Trader). The supporting paper by McLellan Magasanik Associates (MMA) discusses extending this out to some years.

NEMMCO is doubtful that further extensions to the RERT activation period are practical whilst retaining its "safety-net" role. The uncertainties in forecasting both supply and demand 9 months ahead are considerable, and become much greater when extended beyond a year. For example:

- Maximum regional demand forecasts provided to NEMMCO by the jurisdictional planning bodies have varied by as much as 4% between 12 and 6 months ahead of a summer period.
- The assumed supply for the summer of 2010/11 has increased by about 800MW across Victoria and Tasmania between May and Dec 2008 as projects have moved from advanced to committed status⁵. This is an expected outcome of the market investment process. The existing RERT timeframe ensures that no new market-based generation plant remains to be committed after it is invoked. However by definition that will also prohibit the RERT from triggering the construction of generation plant.

NEMMCO suspects that if the current market investment and intervention processes are considered inadequate to ensure reliability, then further extensions of the RERT are unlikely to satisfy these concerns.

2.4 Standing Reserve & Related Options

NEMMCO presumes that "Standing Reserve", as described within the Comprehensive Reliability Review, is likely to be re-considered within this review to deal with this concern. NEMMCO has no policy position on this matter but notes that the option would need to have a clear objective in regards to setting an appropriate volume.

We would also like to suggest for investigation schemes used for market operator controlled demand interruption in some overseas markets⁶.

In NEM history, most involuntary load interruption has occurred not due to inadequate reserve generation supply to meet peak demand, but due to unplanned transmission outage or transient disturbances. Load has been involuntarily interrupted either through NEMMCO directed rotational load shedding, or automatic under-frequency load shedding of distribution feeders provided by distribution networks as a rules obligation. Whilst these tools have

⁵ Comparison of the 2008 SOO (20 May input information cutoff) with the NEMMCO generator information page as of Dec 08

⁶ In particular US markets, e.g. ERCOT's "Emergency Electric Curtailment Plan"



proved effective at restoring system security, they clearly cause widespread community disruption.

Our understanding of the overseas schemes is that significant percentages of the customer base have been activated⁷ for fast, centralised interruption. Participation may be mandatory for some customers, who presumably receive recompense via a reduced network tariff. Such customers lead priority lists of localised automatic under-frequency and manually directed load shedding. They would presumably not be available for consideration in normal network planning so as not to undermine the use of voluntary commercial demand-response as an alternative to network investment. They would also presumably not be considered for normal frequency control so as not to undermine the voluntary provision of services to the FCAS markets.

⁷ Via local relays at the customers' premises, remotely controlled by the network. For example refer to the "LaaR" scheme at www.ercot.com



3. <u>Investing to meet reliability standards with increased use of renewables</u>

Do you agree that the existing framework based on an energy-only market design with supporting financial contracting is capable of delivering efficient and timely new investment, including fast response capacity to manage fluctuations in outputs resulting from larger volumes of intermittent wind generation? Do you agree that the processes supporting the ongoing maintenance of this framework in respect of review and periodic amendment to the market settings, including the maximum market price, are robust?

NEMMCO does not disagree with these conclusions regarding the investment regime, but wishes to raise a related matter that does not appear to be captured within either Issues A3 or A4.

3.1 Participant Market Operations and Intermittent Generation

Accurate forecasting information is presumably very important for day to day participant market operations. NEMMCO has partially implemented the Australian Wind Energy Forecasting System (AWEFS) and early indications show an accuracy consistent with expectations. However there will always be some amount of unpredictable weather events and the market is reliant on participants to prepare rapid response backup for such events.

In submission to the scoping paper, NEMMCO submitted a 2005 document, "Managing Large Changes in Wind Generation Output" which concluded that the features of the market's design, such as the use of "cap" derivative products, provided incentives for participants to prepare for such events. We note however that:

- the 2005 work was done in the presence of the original mandatory renewable energy target. The Expanded Renewable Energy Target (ERET) will drive a much larger volume of intermittent generation than was contemplated in 2005;
- emerging evidence⁸ is showing a greater degree of wind generation correlation within and between regions than was expected in 2005; and
- since the release of the 1st interim report, the release of ERET's draft legislation has clarified that unlimited banking of Renewable Energy Certificates will be available, which incentivises an early build. NEMMCO's planning advice suggests that much of the ERET quota will be supplied by wind generation in Victoria and South Australia and that it will mostly be constructed prior to 2017. This presents a considerable transitional challenge to the NEM.

This challenge probably now requires more than a theoretical analysis and we re-iterate our suggestion of directly surveying participants to determine the way in which the characteristics of wind generation are considered with respect to hedging customer load and operating a spot market portfolio. NEMMCO feels this is necessary because the process relies on participant trading activity that is not observable to NEMMCO.

3.2 Market incentives to prepare backup capacity

We note that the incentive to invest and operate rapid-response back up capability in the energy market relates to the risk of high prices immediately following a large reduction in output of intermittent generation. This signal is affected by these factors:

⁸ See ROAM "Market impacts of CPRS and RET" supporting paper to 1st interim report pg 53.



- The Market Price Limit. The approach used to date by the Reliability Panel in setting the limit has only related to the long-term modelling of installed supply capacity. Future settings will also need to take into account the need to invest in and operate a volume of rapid response plant to respond to sudden wind fluctuations.
- The 30 minute price averaging for settlement. The fluctuations of concern to NEMMCO can occur in a timeframe shorter than the NEM's settlement interval of 30 minutes. This dulls the financial incentives associated with a 5 minute price signal. There does not seem to be an existing framework that can investigate this issue.



4. System operation and intermittent generation

Do you agree that operation of the power system with increased intermittent generation is not a significant issue and therefore should not be progressed further under this review?

NEMMCO concurs with this position on the basis that some existing frameworks do exist for emerging matters in ancillary services and connection standards and that it is too early to be certain that these frameworks are inadequate to deal with the growth in intermittent generation. A key relevant matter is the introduction of semi-dispatch requirements upon wind-farms this year which should improve the controllability of network loading.

NEMMCO further advises that it has embarked upon an internal activity: "CPRS & RET Risk Assessment Forum" that will consider new dynamics in managing power system security as a result of the climate change policy. This activity will develop scenario analyses that postulate credible adverse power system operational conditions approximately 2 years into the future. Should a plausible system security concern emerge from those considerations, then regulatory adjustments, e.g. to ancillary services markets, will be researched and promoted.

4.1 Jurisdictional Generator Licence Conditions

The 1st interim report refers to ESCOSA licence conditions that apply a variation to the NER's connection rules to windfarms connecting in South Australia⁹. It is hoped that Reliability Panel's Reliability Technical Standards Review would resolve any perceived technical shortcomings in the national standard and therefore remove any need for variations. The on-going role of technical standards variations being applied through jurisdictional licensing conditions may be relevant to the Review as, to our knowledge, there seems to be no existing framework that could drive a harmonisation of connection conditions.



5. <u>Connecting new generators to energy networks</u>

Do you agree that the connection of new generators to energy networks is a significant issue that should be further progressed under this Review? Would any of the models identified in this chapter ensure the more efficient delivery of network connection services?

Consistent with our submission to the Scoping Paper, NEMMCO concurs this is a significant issue and the AEMC should be focussing upon these objectives. We welcome the interim report's articulation of some potential models in this regard.

5.1 Efficient joint applications

A first step toward a more efficient delivery of network connection standards relates to the sharing of information. The rules already provide for some sharing of information about relevant projects between affected NSPs and NEMMCO but not with other intending generators. . Intending generators would likely tailor their own proposals towards a more efficient outcome if NSP's and NEMMCO were at liberty to share more information with them about the current and likely circumstances of connection. Ways to remove these barriers to the sharing of information should be investigated in the Review.

There would be benefits, for example, in requiring the staged disclosure of information by NSP's on those generation projects that have an interest in connecting to their networks. Such disclosure might commence at the earliest stages of negotiation, and progressively increase the amount of information released, better balancing the commercial needs of potentially competing projects against the potential for over-investment.

Regarding option 1 ("open season"), NEMMCO recognises its worthy intent to enable a group of connection requests to be considered jointly by a NSP. We also note that the option creates new challenges, for example it necessarily introduces delay into the consideration of applications from otherwise well developed proposals, whilst incomplete applications may be rushed to meet a deadline.

After considering the benefits of such an option against the new difficulties it imposes, NEMMCO suggests that the AEMC should not progress this option at this time, but instead first focus upon the data provision barriers discussed above. Simply providing this data may go some way towards more efficient joint delivery of service without the significant new challenges of option 1.

5.2 Clusters and Hubs

NEMMCO welcomes the AEMC's articulation of options to extend the geographical reach of the shared network into areas of prospective renewable resource. NEMMCO is unable to comment on the various cost and risk allocations. We do however wish to make an observation regarding the potential use of the existing transmission planning arrangements.

Option 2 suggests that candidate extensions should be "only proceeded with if an economic test (to be defined in the NER and consistent with the NEO) was met"¹⁰. The "market benefits" encapsulated within the existing Regulatory Investment Test (RIT) seem to meet that objective well, and its economic principles have been subject to considerable review and

¹⁰ 1st Interim Report, Pg 40



remain supported by policy makers and the AEMC. Thus NEMMCO questions whether it is necessary to create a new test.

The paper "Climate change policies and the application of the RIT for Transmission" (Allen Consulting Group) commissioned for the Review clarifies how the ERET can be incorporated into a RIT's market benefits analysis. The fact that the economic benefits derived from the creation of a new hub are prospective but uncertain does not prohibit the use of the RIT, as long as appropriate probabilities are applied to these benefits. Indeed, TNSP's have previously performed probabilistic Regulatory Test modelling that has considered the hypothetical economic cost of future constructions of fossil fuel generators influenced by a shared network augmentation. NEMMCO is unsure why a similar approach could not be used for remote renewable generators.

To put the matter beyond doubt, the AEMC could commission Allen Consulting to clarify whether the RIT and the market benefits approach suggested could be applied to network extensions of this form.

If NEMMCO's observation in this matter is supported by such expertise, then the existing regulatory framework would appear to already support network development of the form contemplated by Option 4. If it does, yet transmission planners are still failing to identify and promote economically efficient network extensions, then the AEMC's focus should be upon why the planning is not occurring rather than the provision of new options and rules.



6. Augmenting networks and managing congestion

Do you agree that the issue of network congestion and related costs requires further examination in this Review to determine its materiality? This includes considering whether the existing frameworks provide signals that are clear enough and strong enough in the new environment where congestion may be more material.

6.1 Allen 2008 Renewables and RIT-T Paper

NEMMCO welcomes the provision of this supporting paper that provides guidance to transmission planners in identifying the market benefits resulting from the removal of network congestion in the presence of the CPRS and ERET incentives. This paper meets our suggestion promoted in our scoping paper submission that the AEMC should provide this guidance. NEMMCO believes the approach recommended by Allen Consulting is consistent with the intent of the regulatory test and we have already referred to it in the National Transmission Statement (NTS) consultation.

The paper will assist planners, regulators and participants by fostering a consistent approach to the estimation of market benefits. We concur with Allen Consulting's view that there would be benefit through explicit treatment in the AER's guidelines¹¹.

6.2 Transmission Loss Factors

The 1st interim report identifies the year on year volatility of static loss factors as diminishing the benefit of this locational signal. Such volatility will occur where a network is undergoing rapid change in topography and/or usage patterns. This situation is common in South Australia where windfarms are connecting in locations that were previously pure load centres and are at the ends of long lines of lower voltages and high resistance.

A basic introduction into how loss factors are calculated and used in the NEM is provided by our 1999 paper "Treatment of Loss Factors in the NEM"¹². More detailed discussions of how loss factors are calculated can be found in "Methodology for calculating Forward Looking Loss Factors: Final Methodology"¹³ and "Proportioning of Inter-Regional Loss Factors within Regions"¹⁴.

Loss factors are a key feature of electricity markets and serve two critical functions:

- Accurate dispatch and pricing, ensuring that participant offers are efficiently
- dispatched relative to each other and that the correct marginal price is discovered;
- Settlement adequacy, ensuring that electrical losses in the network are funded.

In the NEM, loss factors between regions are determined dynamically, being calculated every dispatch interval. Simplified static loss factors are used within regions, calculated using an annual load-weighted averaging process which inevitably introduces some inaccuracy and an annual step change. More dynamic calculation of loss factors is available through smaller regions or nodal pricing which would realise this volatility over a continuous time interval.

¹¹ Allen Consulting's Paper, pg. 8

¹² http://www.nemmco.com.au/psplanning/1254.html

¹³ http://www.nemmco.com.au/psplanning/172-0032.pdf

¹⁴ http://www.nemmco.com.au/psplanning/701.html

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NEMMCO understands that the concern raised by stakeholders results from the financial implications of regulations supporting the Mandatory Renewable Energy Legislation that adjust Renewable Energy Certificates (REC's) from NEM-connected renewable generators by the relevant static Marginal Loss Factor (MLF). NEMMCO suggests that the MLF's were not designed for this purpose and are not a good indicator of the relative values of renewable energy. This is because:

- The MLF reflects a loss factor between a transmission connection point and the region's regional reference node (RRN) which is not intended to represent where a generator's energy is consumed. All customer nodes have their own MLF. The choice of the RRN becomes mathematically redundant when determining the loss-adjusted value of energy at any point within a region¹⁵.
- The MLF refers a connection point to the RRN in its region that is in-turn referred to another region's RRN by an inter-regional loss factor. This means that the choice and size of a regional boundary will change the MLF. For example, the snowy region abolition resulted in Murray Power Station's MLF going from 1.00 (as the snowy RRN) to 0.9772 (referred to Vic RRN). Previously this physical loss was recognised in the inter-regional loss factor. REC's produced at Murray would now be adjusted despite there having been no physical change.
- The MLF is a "marginal" loss equivalent to the impact upon total network losses of an increment of load or generation at that connection point. The squared term in electrical losses results in this being up to twice the average of actual losses. This in turn results in a settlement surplus which is returned to TNSP's¹⁶ or Settlement Residue Instrument holders¹⁷. Actual losses may be more appropriate for the REC calculations, but individual generator contributions are not identifiable in a meshed network.

NEMMCO submits that the treatment of loss factors in calculating the REC has exaggerated the importance of static intra-regional loss factors and that this issue should first be addressed within the ERET scheme.

With respect to the energy market price, NEMMCO submits that marginal loss factors, recalculated regularly, are an important part of efficient dispatch, pricing and settlement adequacy. They also provide an efficient locational signal to investors. The observed volatility is symptomatic of rapid changes in the use of some parts of the network, and frequent forward-looking loss factor re-calculation allows this locational signal to flow quickly into participant decision-making.

¹⁵ Except to the extent that price caps or floors affect the loss-adjusted price.

¹⁶ Intra-regional settlement surplus

¹⁷ Inter-regional settlement surplus

7. <u>Retailing</u>

Do you agree that the limitations with current RoLR arrangements are a significant issue that should be progressed further under this Review? Are there any additional options that could supplement the processes currently under investigation to address these issues?

7.1 Prudential Arrangements

NEMMCO notes the AEMC's observation that the CPRS will result in increased spot prices for electricity, and thereby increase the prudential burden on retailers in the spot market.

The NEM settlement and prudential mechanism is based on gross settlement with a credit period averaging about 32 days of trading. This, combined with the potential for very high spot prices inherent in the NEM design, can lead to weekly settlement amounts of over one billion dollars being paid by retailers to NEMMCO for spot market purchases. A significant proportion of this payment is subsequently passed back to retailers in the settlement of financial contracts. The potentially high cash flows and long credit cycle give rise to large prudential obligations, particularly in the spot market, and also lead to transaction costs associated with the 'circular' cash flows.

NEMMCO suggested in its submission to the scoping paper that the AEMC consider the merits of reviewing the NEM prudential arrangements in light of the increased prudential burden likely to arise from the CPRS, noting that a retailer provides guarantees of one form or another to NEMMCO, DNSPs, Australian Stock Exchange for futures trading and counterparties for Over the Counter trading.

The 1st Interim Report notes the importance of reallocation arrangements as a mechanism whereby retailers can, in conjunction with a counterparty, offset part of their spot market prudential obligation. The report does not appear to engage with this issue beyond that observation.

NEMMCO continues to consider that the increased prudential burden deriving from the CPRS is potentially material, and that in the context of the ongoing financial crisis, even small increases in financial burden are likely to give rise to material risk for individual participants. Some relevant parameters associated with access to credit support are set out from a capital markets perspective in the S³ Report¹⁸. Issues such as the withdrawal of banks from local trading, a more risk averse approach being taken by financial institutions and the allocation of capital between risk sectors are identified, and are relevant to this issue of prudential management.

In view of these observations, we welcome the AEMC's recent announcement of a "Review of the role of hedging contracts in the existing NEM prudential framework" (the Prudential Offsets Review), stemming from its considerations of the proposed Futures Offset Arrangements Rule. The draft terms of reference for that review appears, however, to be narrow in comparison to the settlement and prudential regime as a whole.

¹⁸ "Financing of future energy sector investments in Australia: The potential effects of the Carbon Pollution Reduction Scheme and Renewable Energy Target" (S3 Consulting) supporting paper to the 1st interim report.



In NEMMCO's view, the NEM prudential and settlement regime is part of the NEM gross pool framework, which will place materially increased obligations on some NEM participants in the context of the future CPRS. It is therefore important the AEMC considers the prudential issues that will arise from higher spot prices in some detail in the context of this Frameworks Review and, if appropriate, explores measures to eliminate unnecessary risk while maintaining the effectiveness of the regime.

We also note that the AEMC has listed a number of processes that are underway to investigate potential changes in this area. The MCE / SCO Financial Markets Working Group (FMWG) should be included. The FMWG was established by MCE/SCO in early 2008 to consider ways to improve the integration of spot and forward contract markets. It has wide industry representation including the AEMC. Its intended focus intersects with the prudential related issues identified in the 1st interim report, and some of the areas being discussed in the FMWG process will therefore be relevant to both the prudential issues raised in the 1st interim report, and the AEMC's proposed Prudential Offsets Review. For these reasons, the FMWG may be a useful point of interaction for the AEMC in its deliberations on prudential matters identified in the 1st Interim Report.

We also note that the recent MCE Communiqué (dated 6 February 2009) foreshadows that the MCE intends to approach the Australian Energy Markets Operator (AEMO) to carry out a detailed assessment of the adequacy and readiness of NEM prudential arrangements for market participants subject to CPRS.

In summary, NEMMCO suggests that in light of the issues identified in the AEMC's 1st Interim Report, the AEMC ensures that its Frameworks review includes consideration in some detail, of whether the NEM prudential framework is as well adapted as is reasonably possible for use within the CPRS trading environment.

7.2 RoLR mechanism

NEMMCO agrees with the AEMC's observation that the current jurisdictional RoLR mechanisms are largely untested, and could give rise to material issues if used to manage the financial failure of a large retailer. As discussed above the CPRS is likely to give rise to increased energy prices and therefore higher prudential risks in the NEM. It therefore follows that there will be an increased likelihood of a circumstance arising where there is reliance on the RoLR mechanism to manage the exit of a failed retailer from the NEM.

The AEMC has noted in its 1st interim report that the MCE is currently developing a national framework for RoLR, and that any potential delays in that process timetable could mean that changes to the RoLR framework may not be in place before that start of the CPRS. AEMC has not however proposed any measures to address this risk.

While acknowledging that a process is under way to develop a national RoLR scheme, NEMMCO suggests that the AEMC explore whether there is any way of accelerating its development, or reducing the risk of delay. Options would clearly need to be explored with the MCE, and might include such measures as:

- separating RoLR development from other elements of the work package to allow it to be accelerated independently, and to avoid delays being caused by other elements of the package;
- parallel development of framework, and Rule and procedural elements or the national RoLR arrangement; or



• other measures that might be identified by AEMC.

NEMMCO suggests that the RoLR mechanism resides at the frameworks level in the market architecture which is the focus of the AEMC's review, and the potential for the introduction of the CPRS to increase the market's reliance on the existing mechanism is sufficient to warrant further investigation by the AEMC of risk mitigation options.