19 December2013

EnergyAustralia Pty Ltd
ABN 99 086 014 968

Level 33
385 Bourke Street
Melbourne Victoria 3000

Phone +61 3 8628 1000
Facsimile +61 3 8628 1050

enq@energyaustralia.com.au
energyaustralia.com.au

Mr John Pierce
Mr Neville Henderson
Dr Brian Spalding
Australian Energy Market Commission

Lodged electronically: www.aemc.gov.au (EMO0024)

Dear Commissioners

NEM Financial Market Resilience – Stage two options paper

EnergyAustralia welcomes the opportunity to make a submission on the 'NEM financial market resilience stage two options paper' (the options paper).

EnergyAustralia is one of Australia's largest energy companies, providing gas and electricity to over 2.7 million household and business customer accounts. We own and operate an integrated portfolio of energy generation and storage facilities across Australia. We employ a range of risk management strategies to provide efficient solutions for our customers, including vertical integration and the use of OTC and exchange traded electricity derivatives.

The first phase of the NEM financial resilience review considered the risks to the financial stability of the NEM arising from the failure of a large retailer. That analysis identified regulatory flaws in the 'retailer of last resort' (RoLR) scheme that exacerbate the risk of financial contagion. As noted in our submission to the interim report, we support reform of RoLR to reduce the risks and distortions that it creates. We do not support the proposed 'special administration regime' as it is not proportionate or well targeted to the problem and would be complex, costly and risky to implement[1].

The objective of second phase of the review is to assess other possible risks of financial contagion in the NEM financial markets. The analysis in the options paper does not identify any problem or market failure that suggests intervention is required. There is a robust and well established regulatory and governance framework in place for both the physical and financial markets.

The Australian Government is also currently implementing broad reforms to the regulation of OTC derivatives (known as the G20 OTC derivative commitments). The Government will consider the AEMC's advice before determining the treatment of electricity derivatives[2]. The options paper should focus on the costs, benefits and risks of extending the G20 measures to electricity derivatives.

To inform consideration of the merits of extending the G20 obligations to electricity derivatives the energy supply association (esaa), the Private Generators Group and the National Generators Forum commissioned analysis by SEED Advisory (the SEED report). The SEED report provides a quantitative basis on which to consider the proposed reforms. The report has been provided to the AEMC[3].

[1] http://www.aemc.gov.au/Media/docs/EnergyAustralia-42176888-086c-4deb-981b-fe2f1fe96202-0.PDF
[2] http://www.asic.gov.au/asic/ASIC.NSF/byHeadline/OTC%20derivatives%20reform
[3] http://www.aemc.gov.au/Media/docs/Consultancy-report-by-Seed-Advisory-61a83f79-d4d6-4444-81c2-2cd990bd6e58-0.PDF

The SEED analysis is generally consistent with the qualitative analysis in the options paper. The analysis demonstrates that:

- There is no case to impose new obligations or restrictions on the OTC electricity derivative markets, based on analysis of the risks to the economy, the financial sector or the NEM.
- The case for mandatory reporting of electricity derivatives is weak. The existing market and regulatory frameworks are robust and suitably transparent.
- Margining reduces credit risk but creates other costs and risks. It is not appropriate for all circumstances and should not be mandated.
    - Margining increases capital requirements and cash flow risk but does not mitigate the risk of post default market changes.
    - Three quarters of the potential losses in the SEED 'stress test' arise from changes in the spot and derivative markets post default. Margining has no impact on these.
- Reform proposals should prioritise changes to electricity market design likely to affect the market's performance in the event of a default. For example:
    - Reforming RoLR arrangements.
    - Ensuring a generator is able participate in the market while in administration.
    - Reviewing prudential requirements to making better use of existing risk capital.
- Requiring participants to maintain increased capital is inefficient and poorly targeted. All other options should be preferred to this.

The options paper provides a good overview of risk management in the National Electricity Market (NEM).

Managing the risks that arise from participation in the NEM is a core activity for participants.

The NEM is a facilitated market established under the National Electricity Law (NEL). The wholesale market operates as a mandatory gross pool which means that generators must sell all output to the pool at the spot price and retailers must purchase all load from the pool. The efficient operation of a gross pool requires the use of derivative contracts to manage participant risk and inform investment signals.

Risk fundamentally arises from the decision to participate in the wholesale electricity market - to generate and/or retail electricity. This market risk can be mitigated or transferred using a range of tools, including vertical integration, OTC and exchange traded derivative contracts. Individual participants are best placed to analyse and treat their risks in their own context and the market provides strong incentives to do so.

No one is too big to fail. The governance and regulatory frameworks under the NEL ensure the reliable supply of electricity in the short term. Governments and the market operator have powers to direct market participants to maintain system security. We agree with the AEMC's position that reforms should not focus on preventing individual businesses failing. Reform should focus on ensuring the long term sustainability of the market and removing distortions that may impede its efficient operation in periods of stress (such as RoLR and retail price regulation).

We support the assessment framework proposed in the options paper. Interventions should address a well defined problem, demonstrate that the benefits outweigh the costs, and be consistent with the National Electricity Objective (NEO). They should address a clearly identified market failure and be proportionate to the nature of the problem.

The G20 OTC derivative commitments have four limbs:

i. Mandatory trade reporting
ii. Central clearing of standardised OTC derivatives
iii. Execution of standardised OTC derivatives on electronic trading platforms
iv. Increased capital requirements for non-centrally cleared derivatives.

We agree with the analysis in the options paper that the risks and costs associated with imposing central clearing, trade execution and increased capital requirements for non-centrally cleared derivatives would outweigh the benefits. The market provides participants appropriate incentives to utilise OTC trading platforms or futures markets, and to require collateral where appropriate. Regulatory mandates would impose costs and limit the availability of risk management options to the detriment of participants, the market and ultimately consumers.

While mandatory trade reporting may appear relatively light handed, it is administratively complex and would impose significant costs on participants with little apparent benefit. The derivative transaction information in the trade repository would provide little or no information about the risk position of electricity market participants. A generator would be naturally long; a retailer naturally short; their derivative position is not particularly meaningful without an understanding of their physical position.

It is unclear why the options paper defines a range of new and intrusive regulatory interventions separate from the G20 reforms in the absence of a clear rationale or problem. The analysis to date strongly supports option 1 – no new measures.

A detailed response to the specific issues raised in options paper is attached. For any questions regarding this submission, please contact me on (03)86281034.

[signed for email]

Ralph Griffiths
Wholesale Regulation Manager
EnergyAustralia

EnergyAustralia

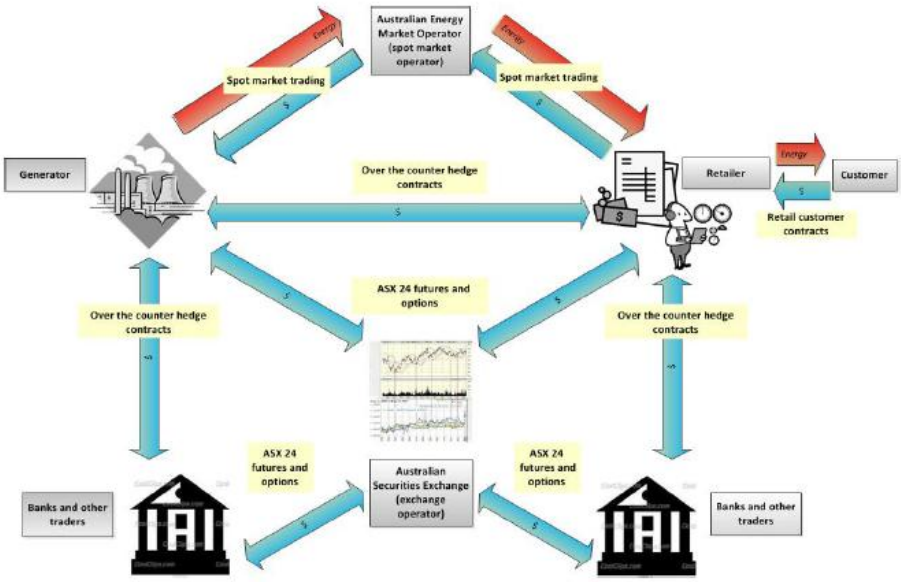
Chapter 2: Financial contagion and systemic risk

The options paper defines financial contagion as the potential for the financial distress of one participant to be transmitted to another, and identifies three main channels through which market participants are financially interconnected:

1. The wholesale spot market via the settlements process managed by AEMO
2. The ASX24 futures and options exchange
3. Direct bilateral 'over the counter' (OTC) hedge contracts

These connections are shown on figure 2.1 in the options paper (copied below).

Figure 2.1 Financial relationships between market participants in the NEM



Two additional channels that link all participants are consumers and generators.

i. Consumers are the source of all income for electricity market participants. Electricity retailers manage consumer credit risk for all other participants. Potentially the single most important contribution that Government can make to the electricity market resilience is to minimise barriers that restrict efficient and timely passage of wholesale market price signals to consumers.

ii. Market generators provide the vast majority of all electricity for consumers. Three quarters of impact associated with the default of a large counter-party calculated in SEED report results from the assumption that it is accompanied by a significant and sustained increase in spot prices. Priority should be given to reforms to minimise distortions that impede the wholesale market providing efficient signals for investment and operation of reliable generation and removing any regulatory barriers that may prevent a generator operating in times of market stress.

The options paper suggests that the use of OTC derivative contracts give rise to a more significant risk of financial contagion than the spot market or the futures market. The rational for this is that the prudential regime in the spot market, and margining in the futures market, manage counter party credit risk.

This reflects a narrow focus on credit risk and it discounts the impact of cash-flow risk and market risk. Participants need to manage market, credit and cash flow risk concurrently, as recognised in later chapters of the options paper. Futures contracts can transmit financial distress precisely because of margin calls; spot market risk is the essential underlying source of all of participant's financial risk.

The options paper classifies the impact of a counter-party default into direct losses and secondary effects.

- Direct losses: the loss of payments under the contract and the cost of replacing the contracts.
- Secondary effects: how default affects market conditions (spot price and generation).

Margining of futures contracts only provides protection against direct losses. Secondary effects occur post default and are not be included in calculation of margins or collateralisation. If the spot market is not affected by the default, then there are no secondary effects and the direct losses are relatively small. It is also important to note when reviewing the SEED analysis that the potential 'market' or 'credit' losses for one participant represent a gain to another participant. The money largely stays within the industry.

If there is a large and sustained movement in the spot price related to the originating default, then margin calls associated with futures contracts and spot market prudential requirements can act to transmit short term financial distress to other participants.

The options paper defines the term '*coincidence'* to describe the possibility of severe losses or even failure of multiple participants due to a number of unfavourable events occurring at the same time as the failure of an individual participant.

The potential for a coincidence of unfavourable events is always theoretically possible. The best defence is to ensure participants have access to the widest range of risk management options and to minimise any barriers that may impede the ability of market participants and prices to respond to efficiently to events as they occur. The retailer of last resort (RoLR) regulatory arrangements are a special case.

We note and agree with the observation in the options paper that the failure of a large electricity business would not cause significant instability to the overall financial system given the relatively small exposure of the broader financial system to the NEM. This is consistent with the analysis in SEED study and should give policy makers confidence to focus on the interests of the electricity market and consumers when considering whether to extend the application of the G20 reforms to the electricity sector.

Chapter 3: Risks and risk management in the NEM

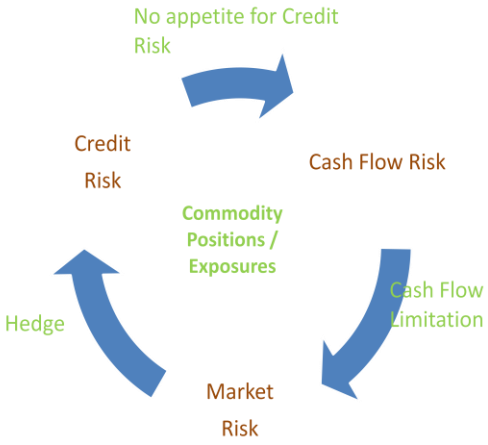
The options paper provides a good overview of the risk management requirements and practises in the National Electricity Market (NEM) and recognises that managing the risks that arise from participation in the NEM is a core activity for participants.

Key sources of risk arising from participation in the market include spot price, settlement, customer load volume, generation availability, congestion and dispatch volume.

We employ all of the risk management strategies identified in the options paper to provide efficient solutions for our customers, including vertical integration, exchange traded derivatives, OTC derivatives, weather derivatives and insurance.

We operate within a risk management policy established by the board that assigns responsibility and accountability for management and independent monitoring of risk in EnergyAustralia. The policy specifies risk limits for all trading activity and requires that we do not engage in trading for other than the purpose of hedging our net exposures (ie we do not engage in 'speculative trading'). EnergyAustralia Pty. Ltd. holds an Australian Financial Services Licence (AFSL) and is subject to regulatory oversight by ASIC. ASIC has access to all information about our risk management and derivative position through its existing surveillance powers.

Risk management involves a continuous trade off of risks, as shown in the diagram below which has been adapted by the AEMC for use in the option paper. The NEM is a mandatory gross pool, generators must sell all output into the pool and retailers must purchase all load from the pool in real time. Participation creates volume and price risk for both generators and retailers.



Price and volume risk can be reduced through the use of OTC or exchange-traded futures contracts to hedge exposure to the market. The bespoke and bilateral nature of OTC's means they are flexible and can be tailored to meet specific circumstances, however they give rise to counter-party credit risk. Credit risk can be reduced by using exchange-traded futures contracts. However the associated margin calls create cash flow risk and, being standardised products, futures don't offer the same flexibility.

The most important point to note in relation to this risk trade off is that there is no optimal answer. The preferred trade off depends on the circumstances of the market and underlying physical portfolio and is best determined by individual participants. Regulatory restrictions on the availability or cost of risk management tools and products will necessarily lead to sub-optimal risk management.

We do not think there is value in the AEMC exploring the treatment and valuation of derivatives used for hedging purposes under the relevant accounting standard (AAS/IAS 39). The gestation of international accounting standards is a slow and complex process. Accounting standards are developed for a different purpose and are too restrictive to adequately cover the range of uses of derivatives for risk management purposes. For example, cap products are essential to prudent risk management for electricity market participants but do not meet the transactional definition of hedges for accounting purposes.

A risk management based definition of hedging would be more appropriate for the issues that the Commission is considering.

Chapter 4: Measuring the materiality of systemic risk

The options paper identifies the difficulty associated with defining and measuring systemic risk in the electricity financial markets.

- Aggregate turnover is a poor measure. Turnover is greater than underlying demand due to rebalancing of contract positions and liquidity is desirable.
- Degree of concentration will largely reflect the structure of the underlying physical market. Naturally contracts will be sold by generators to retailers.
- The value of gross open OTC positions is not meaningful for electricity market participants who are naturally long or short.
- The degree of collateralisation is a poor measure for electricity market participants. Requiring collateral and margin calls can increase contagion risk. As noted in the options paper typical measures also ignore generation assets behind most sold positions.

There is no need to define, quantify or track any new measures of systemic risk. The governance and regulatory framework under the NEL addresses systemic risks associated with the physical supply of electricity market and pool settlements.

The Corporations Act provides a robust governance, licensing and regulatory framework for the operation of the electricity derivative market. NEM financial markets do not directly affect the reliable supply of electricity in the short term. NEM financial markets are not systemically important to the broader Australian financial system and participants are licensed and regulated by ASIC.

Therefore, there is no rationale for specific new interventions or monitoring of the NEM financial markets.

Chapter 5: Assessment framework

The assessment framework proposed in the options paper is appropriate. Prior to recommending any option, analysis must demonstrate:

- A clearly defined deficiency or problem that results in material risk of contagion, not merely the *possibility* of contagion.
- The existing market and regulatory risk management mechanisms are inadequate.
- The benefits of intervention would outweigh the costs and be consistent with the NEO.

Any intervention should be well targeted and proportionate to the identified market failure.

No prima facie case has been made to support the design and implementation of new regulatory interventions. No market failure has been identified. All potential options create new distortions and impose new costs without apparent benefit.

The NEM and associated financial markets provide strong commercial incentives for participants to manage their risks.

The options paper identifies that regulators in the EU and US have implemented exemptions to some of the G20 requirements for OTC contracts entered into for the purposes of hedging. The preferred outcome should be for electricity derivatives remain exempt. If the exemption is not maintained then an exemption should be provided for OTC contracts entered into for the purposes of hedging. A risk management definition of hedging should be used for this purpose rather than the accounting standard.

All our OTC contracts are entered into for the purposes of hedging and this is likely to be the case for majority of electricity OTC counterparties.

Chapter 8: Potential Options

The options paper defines six potential options. Based on the analysis conducted to date the recommended option should be that no new measure be introduced.

The other five options combine a range of measures that seek to improve transparency, risk management and/or provide active supervision. All of these options will increase participant costs. The options that seek to change behaviour (central clearing, margining, code of practise, intervention power) would limit risk management options available to participants and are likely to increase risk. These options are not targeted at any identified market failure.

The potential measures are shown on the diagram below from the options paper[4].

[4] Figure 5.1 pg 43

- **Option 1: no new measures (preferred)**

  This option is consistent with the quantitative analysis in the SEED report and qualitative analysis in the options paper. The OTC electricity market is sufficiently transparent and there is little scope for protracted mispricing of OTC's as they derive their inherent value from a highly liquid and transparent electricity spot market and complement a transparent futures market. Participants actively manage counter-party credit risks and the market provides strong incentives for them to do so.

  In the last decade the NEM and related financial markets have dealt with the impact of droughts, major generator failures, retailer failures, the introduction of a carbon price (and anticipated repeal) and the impacts of the global financial crisis.

  There are strong governance and regulatory frameworks in place for the physical market under the NEL and for the NEM financial market under the Corporations Act. ASIC can access all information about participants risk management process, futures and OTC positions at any time under their existing surveillance and licensing powers.

  ASIC has recently commenced regular surveys of participant OTC positions. Refinement of this process could deliver the regulator similar transparency as mandatory trade reporting at a fraction of the cost to participants.

  There is no analysis in the options paper that identifies any case for further intervention.

- **Option 2: mandatory trade reporting for electricity derivatives (not supported)**

  Mandatory trade reporting would create significant regulatory burden for participants and require costly investment in IT systems to facilitate daily reporting of over 70 data fields for every derivative transaction. It would provide no benefits to electricity consumers or market participants.

  There are more efficient and less onerous methods for ASIC to achieve the stated objectives:

  - Enhance the transparency of transaction information available to relevant authorities and the public
  - Promote financial stability
  - Support detection and prevention of market abuse

As noted above, a regular survey of participants OTC positions would deliver similar transparency at a fraction of the cost. ASIC can report non-commercial aggregated data as required.

Near real-time transactional information is unlikely to add any significant value to the regulator in relation to market participants hedging natural positions.

If there are consistency benefits to some financial organisations from reporting all OTC derivatives, this can be facilitated without placing reporting obligations on electricity supply companies.

- **Option 3: stress test reporting (not supported)**

  Stress testing is an important component of prudent risk management. We undertake various stress tests and expect this would be true for the vast majority, if not all participants.

  The proposal to require businesses to undertake and report the results of stress tests against prescribed scenarios may appear to be a 'light handed' intervention, however it is likely to impose significant distortions and costs. It would effectively act as a 'prudential standard' and distort participant risk management decisions.

  Key issues with mandated stress testing include:

  - Defining the 'prudential standard'. What level of 'stress' that should be endured and for how long? A high standard would increase capital costs and reduce competition to the detriment of consumers.
  - 'Moral hazard' risks reducing incentives for prudent risk management as participants rely on the regulator to manage counterparty risk.
  - Perverse incentives for participants to reduce internal controls if these limits are used as criteria in a stress test.
  - Distortion of prudent risk management if the stress test prioritises some risks over others, for example credit risk over market or cash flow risks.

  The preferred approach should be to ensure market participants have access to the widest range of risk management tools and the maximum flexibility to respond to market stresses as they occur.

  Stress testing obligations will not significantly increase transparency for the regulator. ASIC can already access any information it deems necessary in relation to participants derivative position and risk management policies.

  The New Zealand stress test is specifically designed to ensure participants have appropriate contract cover or financial resources to cover their exposure to the spot market.

- **Option 4: Code of best practice for NEM participants (not supported)**

  We continually review, and refine and improve our risk management practices and incorporate developments in best practise within Australia and globally. Our risk management policies and systems are consistent with the international risk management standard (ISO 31000).

  We support best practice, however best practice risk management must consider the full context of the organisation and market. As recognised in the options paper a mandatory code of best practice is likely to be too rigid to cater for the diversity of individual circumstances, distort management decisions to focus on compliance with the code rather than choosing the best option, and create moral hazard. A regulated code will also take time to amend and may impede innovation and delay uptake of new methodologies.

  Alternatively the code would need to be so flexible that it would have limited utility and at best represent minimum standards. The existing licensing and regulatory framework already ensures licence holders establish and maintain appropriate risk management systems.

- **Option 5: Trade reporting plus additional margin requirements (not supported)**

  Margining reduces credit risk however it creates cash flow risk. Mandatory imposition of margining would unnecessarily limit the risk management options available to electricity market participants.

  Participants would need to hold more capital and/or reduce contract cover and accept more market risk. This would reduce competition, directly increase costs for consumers and increase volatility in the market.

  Margining increases capital requirements and increases cash flow risk but does not mitigate the risk of post default market changes. In other words, additional margining is likely to be counter-productive as it could increase, rather than reduce, any risk of financial contagion. Three quarters of the potential losses in the SEED 'stress test' analysis arise from post default changes in the spot and derivative markets and margining has no impact on these.

  The options paper notes that the use of OTC derivatives has increased during some periods to help market participants manage carbon price uncertainty and the fall out of the GFC. This demonstrates the importance of the OTC in providing more flexible risk management products and allowing market participants to deal directly without excessive reliance on financial intermediaries.

- **Option 6: Stress test reporting plus additional supervision plus regulatory powers (not supported)**

  This option defines the implementation of prudential regulation for the electricity industry. This would substantially increase participant costs, create barriers to entry and reduce innovation and competition to the significant detriment of electricity consumers.

  The options paper refers to this option creating a 'macro prudential regime'. It is unclear what this is intended to mean in practise. The proposed interventions operate at the individual 'firm' or participant level to impose prudential requirements. Implementation of this option would inevitably create moral hazard risks.

  Participants have very strong incentives to survive and will seek to have sufficient liquidity, capital and actively manage risks. Competition drives firms to balance risk and efficiency objectives. A prudential regulator will almost invariably prioritise stability over efficiency and competition to the detriment of consumers.

  Requiring participants to hold additional capital is inefficient and poorly targeted and all options should be considered in preference to this.