



19 December 2013

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
Submitted through AEMC Website

Dear Mr Pierce

**RE: Financial Market Resilience Review Stage Two Options Paper**

The National Generators Forum (NGF) welcomes the opportunity to respond to the National Electricity Market (NEM) Financial Market Resilience Review Stage Two Options Paper (Options Paper). We note the Options Paper commences stage two of the Australian Energy Market Commission's (AEMC) advice to the Standing Council on Energy and Resources (SCER) on the potential risk arising from the financial interdependencies between participants in the NEM.

We also understand that the Federal Government is awaiting the outcomes of this review prior to making a decision regarding the application of the G20 Over-the-Counter (OTC) derivative commitments to the electricity market. The NGF has actively engaged in the AEMC's process to date and has provided detailed input into the earlier discussion and options papers.

**Summary**

Our overarching view, confirmed by extensive analysis conducted by Seed Advisory<sup>1</sup> is that the risk of financial contagion in the NEM is low. Therefore, we see little need for the imposition of any additional regulatory measures and stress that any proposed measures be proportionate to the magnitude of clearly demonstrated issues.

We are also concerned about the potential unintended consequences of policy intervention which does not address acknowledged problems. These consequences include adding to electricity market costs and altering the current distribution of risks (for example converting credit risk into cash flow risk).

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<sup>1</sup> Seed Advisory - NEM Financial Resilience - Report for the Private Generators Group, the National Generators Forum and the Energy Supply Association of Australia. Made available to the AEMC and published online <http://www.aemc.gov.au/Media/docs/Consultancy-report-by-Seed-Advisory-61a83f79-d4d6-4444-81c2-2cd990bd6e58-0.PDF>

We believe that overall electricity market risk is most cost effectively managed through a well functioning, liquid derivatives market which has a minimum regulatory burden. With this in mind, we congratulate the AEMC for dismissing the option of mandatory centralised clearing of all OTC electricity derivatives.

### **Development of the Options Paper**

In responding to this Options Paper, we note that the AEMC has provided a set of specific questions. Rather than responding to each question, we have provided a set of general comments on the development of the Options Paper, followed by a detailed assessment of each of the proposed options. This approach more appropriately captures the NGF's main areas of concern and provides more focused and efficient feedback.

On this basis, *our general comments regarding the development of the Options Paper* include:

- **No case for change** – The Australian energy industry, and more specifically the varied means by which NEM participants manage the risk exposures in their large and diversified portfolios have proven robust through difficult spot market circumstances including sustained high spot prices in 2007, through droughts and bushfires, and highly publicised fuel supply shocks since then. In addition to the controls that exist for all Australian Financial Services licensees (director obligations, ASIC reporting and audit requirements and accounting standards) industry participants have developed innovative Over-the-Counter contracts (within the discipline of the International Swaps and Derivatives Association framework) that efficiently target risk factors specific to the Australian energy markets.

The AEMC has not presented any specific and verifiable evidence to suggest cause for any heightened concerns regarding the NEM or identified any market failure within the Australian context that warrants policy intervention. In fact, extensive modelling performed by Seed Advisory shows that even in worst case scenarios, the risk of financial contagion is low. This analysis, carried out by experienced practitioners with in depth understanding of the specific drivers and operational practices of Australian energy markets, must not be discounted.

- **Role of the market in promoting risk management is overlooked** - Market forces place appropriate discipline on participants, especially large players, to ensure appropriate risk management practices are developed, implemented and maintained. In formulating its views, the AEMC appears to have overlooked the role of these wider market forces in defining the level of systemic risk in the Australian electricity market.
- **Options targeted at avoiding an initial failure** - The AEMC has stated that the objective of the review is not to recommend measures that would support businesses that are otherwise destined for financial failure. Rather, the objective is to minimise the risk of further financial contagion if such a business did fail. Some of the options, however, seem at odds with this statement and are targeted at preventing the initial failure of a business.

- **Financial contagion will not restrict electricity supply to customers** – The essential service of electricity will not be disrupted by a cascading financial failure of electricity market participants. Because of the physical characteristics of electricity, as long as the majority of generators are running, customers will have power. Generators experiencing OTC market default would generally be incentivised to continue operating power stations in order to recoup losses.
- **International policies are not directly transferable** - The Options Paper also draws on international arrangements to frame some of the options. Differences between the Australian energy market regulatory settings relative to the arrangements applying in other jurisdictions means these measures are unlikely to deliver equivalent outcomes.

## Proposed Options

In providing *specific comments on the proposed options* the NGF has framed its view at two levels:

1. At a high level, we are concerned with the AEMC’s overall approach to conducting stage two of the review. We note the majority of the Options Paper focuses on options without providing any meaningful discussion on defining the problem or its magnitude.

The NGF is concerned that the current process is likely to result in the development of policy solutions that are inappropriately targeted and likely to result in unintended negative market consequences. Given our overall concerns with the AEMC’s approach, and the lack of detail on each of the options, it has been difficult to constructively comment on their applicability.

2. At a detailed level, however, we appreciate that the AEMC has developed a useful framework/criterion for assessing potential options. Given the AEMC’s work in developing this framework, we are surprised it was not then used to analyse the proposed options within the Paper.

Notwithstanding our comments above regarding our concern that solutions have been proposed before a problem has been clearly defined, the NGF has endeavoured to objectively assess each of the proposed options using the AEMC’s assessment framework. The outcome of this analysis is detailed in Attachment A. The NGF requests that any further proposed options are also assessed by the AEMC against this useful framework.

The considerable time and resources the NGF and its members have invested in providing this considered, and where possible, detailed response to the Options Paper reflects the level of concern held for the outcomes of this process. The very real potential for unintended negative consequences of policy intervention within the electricity OTC market cannot be overstated.

The NGF welcomes the opportunity to discuss further these views on the AEMC's Option Paper.  
Please feel free to contact me directly on (02) 6232 7790.

Yours sincerely

A handwritten signature in black ink, appearing to read 'TR', with a long horizontal flourish extending to the right.

Tim Reardon  
**Executive Director**

### Summary Results of Applying AEMC Assessment Framework to Potential Regulatory Measures

Assessment Criteria	Contribute to a reduction of the risk of systemic financial contagion in NEM	Be effective – unlikely to lead to perverse behaviour, gamed or by-passed	Be able to be administered in a cost effective manner	Support overall efficiency of the NEM	Be transparent	Be proportionate to the materiality of the risk and problem it seeks to address	Overall Assessment
Option 1 – Status Quo	Amber	Green	Green	Green	Amber	Green	Green
Option 2 – Trade Reporting	Red	Red	Amber	Amber	Amber	Red	Red
Option 3 – Stress Test Reporting	Red	Red	Red	Amber	Amber	Red	Red
Option 4 – Code of Practice (Risk Management) for NEM Participants	Amber	Amber	Amber	Amber	Amber	Red	Amber
Option 5 – Trade Reporting + Additional Margining Requirements	Red	Red	Red	Red	Amber	Red	Red
Option 6 – Stress Test Reporting + Additional Supervision and Regulatory Powers	Red	Red	Red	Red	Amber	Red	Red

Green: meets criteria. Amber: may meet criteria in some circumstances, potential for negative consequences. Red: does not meet criteria, serious negative consequences

Assessment Criteria	Option 1 – Status Quo	Assessment
Contribute to a reduction of the risk of systemic financial contagion in NEM	<p>While there may always be some very small risk of systemic financial contagion in the NEM, the Seed Analysis commissioned by the Private Generators Group, the National Generators Forum and the Energy Supply Association of Australia and provided to the AEMC found that ‘systemic risk to the wider economy is unlikely to follow from the failure of a large OTC electricity derivative position held with a large electricity market participant’, and ‘relative to the financial sector or the real economy, the estimated costs of a default are low’.</p> <p>Existing risk management processes within the sector, which continue to mature, have proven robust through difficult spot market circumstances including sustained high spot prices in 2007 due to drought, through bushfires, and through highly publicised fuel supply shocks since then. Businesses are best placed to manage their risk in the most appropriate, whole of portfolio, manner.</p>	Amber
Be effective – unlikely to lead to perverse behaviour, gamed or by-passed	With no increased regulator monitoring or possibility of regulator intervention, participants must continue to perform their own thorough risk management rather than rely on a regulator’s monitoring, i.e. no moral hazard is introduced. The existing NEM framework incentivises businesses to invest in risk management better practice – sustained commercial performance cannot be achieved without it.	Green
Be able to be administered in a cost effective manner	No increases in regulator or participant’s direct or indirect costs. Participants would continue to invest in and conduct the forms of risk management most appropriate to their business.	Green
Support overall efficiency of the NEM	Participants will continue to manage risk in the most cost effective manner available to their business. The Australian energy market continues to deliver risk management discipline as part of its evolution, and the broader market provides feedback on this via debt funding decisions and capital raising interactions.	Green
Be transparent	The domestic electricity OTC market is not as transparent as some more liquid international markets. In this context, interested parties not active in the market can arrive at incorrect conclusions by placing too much weight on data supplied by market participants voluntarily. For example, while the AFMA survey results are useful for trend analysis, given that the data provision is voluntary, it follows that exposure concentrations will be materially overstated. Also, any relationship one might infer between gross contract turnover and a participant’s net risk exposures to individual counterparts will be seriously flawed.	Amber

	This level of transparency in the OTC electricity market has not proven a significant barrier to its maturation. NEM participants have had adequate information to trade and manage risk day to day as well as through the price and fuel supply shocks experienced by the market over the last decade. If more information was required, the market would have developed a case for it, as was the case for PASA.	
Be proportionate to the materiality of the risk and problem it seeks to address	Minimal regulatory invention will lead to the most efficient market outcomes.	Green

Assessment Criteria	Option 2 – Trade Reporting	Assessment
Contribute to a reduction of the risk of systemic financial contagion in NEM	<p>One of the key reasons electricity industry participants execute OTC derivatives is the risk management benefits they provide due to their scope for tailoring terms and conditions to meet the specific needs of an energy portfolio.</p> <p>A standard reporting format will not be able to capture tailored terms and thus two paths for handling this problem present themselves:</p> <p>(1) require participants to only report their standard OTC contract types, or</p> <p>(2) require participants to report only specific terms for every OTC contract in their portfolios (e.g. aggregate volume and start and end date, average price etc) meaning the reported data will not reflect the true terms of tailored contracts.</p> <p>Either path will result in trade reporting data that, at best, does not reflect that entity's OTC contract position. In all likelihood, such incomplete trade reporting will misrepresent the market and credit risk exposures an OTC contract position presents to its holder.</p> <p>Standard electricity trade reporting frameworks will not capture the benefits of internal hedges within a business' asset portfolio or across commodities other than electricity, nor would it reflect the risk mitigation provided by collateral or other credit support provisions documented under ISDA. Incomplete or misrepresentative reporting will not aid decision making and could present a moral hazard.</p> <p>It must also be acknowledged that reporting entities already provide considerable information on their risk</p>	Red

	<p>management practices in the notes that accompany the financial statements in accordance with AASB7. For example, Financial Risk Management notes generally span several pages and cover market, credit and liquidity risk exposures, maturity and concentration analyses, along with fair value hierarchy and stress testing of financial instruments. In addition to this, effective 1 July 2013 International Financial Reporting Standard 13 'Fair Value Measurement' made it mandatory for entities to include credit value adjustments (CVA) and debit value adjustments (DVA) in the calculation of fair valuation for all derivatives.</p>	
<p>Be effective – unlikely to lead to perverse behaviour, gamed or by-passed</p>	<p>Due to the limitations around the reporting of OTC contract terms outlined above, if entities believe they are being judged in isolation on the data highlighted by this reporting framework, by either shareholders or regulators, and they believe there is potential for a commercial gain or disadvantage to them based on that judgement, entities will game or by-pass this process. One way they could do this is by specifying terms within OTC contracts differently, whether or not such changes reflect real risk management benefits in practice. This could allow their activities to represent well within the stipulated reporting framework but could in fact result in the company taking on great portfolio risk exposures in their quest to do so.</p>	Red
<p>Be able to be administered in a cost effective manner</p>	<p>Electricity industry participants already face a large regulatory compliance and reporting burden (e.g. environmental/asset licencing, safety, security and environment liability schemes) in addition to that of traditional financial market participants. Any additional reporting requirements will add to the large overheads already borne by electricity utilities and translate into increased costs of supply.</p> <p>The ISDA Master Agreement includes strict confidentiality provisions around the terms under which OTC contracts are struck. Participants hold very real concerns about maintaining the confidentiality of any information reported.</p>	Amber
<p>Support overall efficiency of the NEM</p>	<p>Due to the limitations around the reporting of OTC contract terms outlined above and the very real potential for it to become a source of misinformation and an opportunity for entities to game the system, it is difficult to see how the additional reporting requirements proposed could support efficient allocation of capital within the NEM.</p>	Amber
<p>Be transparent</p>	<p>While it may appear that reporting OTC positions increases transparency, the reporting of misrepresentative information (as outlined above) could actually hinder market participant decision making rather than aid it. For example, inferring the level of system risk by measuring the value of open OTC positions on a gross basis rather than a net basis, as proposed in AEMC's paper, would be highly erroneous.</p>	Amber

	While within the Paper it has been asserted that public reporting of OTC positions could aid price transparency, the logic used to arrive at that conclusion is flawed. Due to their tailored characteristics, nominal price comparison of OTC contracts without proper consideration of the business benefits bespoke contract terms provide an entity would be inappropriate and misleading.	
Be proportionate to the materiality of the risk and problem it seeks to address	Since it has not been demonstrated that there exists a material risk of financial contagion, nor can it be argued that trade reporting would support the efficient operation of the NEM, any additional reporting burden imposed on companies cannot be argued to be a proportionate response.	Red

Assessment Criteria	Option 3 – Stress Test Reporting	Assessment
Contribute to a reduction of the risk of systemic financial contagion in NEM	<p>Although it may appear that the Regulator will gain an increased awareness of the possibility of financial contagion through the stress tests proposed, in practice, the stress tests will not reveal how participants would actually respond to a systemic event. Participants will have access to many and varied means to manage their business risk (real options) which would not be captured through a stress test which will not necessarily be known to a Regulator, such as changing generation profiles within their portfolio, diverting fuel to export markets or liquidating financial investments to help meet cash flow requirements.</p> <p>Also, the immediate theoretical imposition of vastly different market parameters on a portfolio compared to that currently in existence would grossly overstate risk exposures that would arise in reality. This is because participants closely monitor market developments and take preparatory actions as the likelihood of a risk event that may impact their business increases. One very simple example of such preparatory action is utilising both the OTC and futures markets to adjust the level and composition of hedge positions in order to increase short term resilience during stressed conditions. The execution of bespoke OTC contracts such as triggered swaps and callable options could form a part of that tactical response. Therefore the stress testing results reported would inevitably overstate the level of risk that would actually exist during a time of stress and this could lead to unnecessary and badly targeted regulation which creates additional costs with little to no verifiable benefit</p>	Red
Be effective – unlikely to	There are many different approaches to modelling future outcomes in a stress test, each of which could be	Red

<p>lead to perverse behaviour, gamed or by-passed</p>	<p>verified and certified. A participant will have an incentive to choose the stress test which reflects most positively on their business, thereby reducing the effectiveness of the exercise to the regulator.</p> <p>Any public release of stress test results would introduce significant moral hazard within the Australian energy industry.</p>	<p></p>
<p>Be able to be administered in a cost effective manner</p>	<p>In order to design effective stress tests, the regulator would require a deep understanding of the electricity and financial markets and over what time period risks may occur. The major electricity businesses are diversified businesses and the source of stress and financial contagion to these businesses may exist outside of the electricity market or not be easily quantifiable. For example the source of stress may relate to foreign exchange exposures, industrial relations, fuel prices or fuel shortages. These complexities would make choosing effective stress tests difficult and time consuming for both the regulator and involved market participants.</p>	<p>Red</p>
<p>Support overall efficiency of the NEM</p>	<p>It is crucial for the AEMC to acknowledge that for an entity to consistently “perform well” under the proposed stress tests it would need to be taking a market position that was conservative to such a degree that it reflected an uneconomic/inefficient allocation of scarce capital. Any quasi-performance metric that has the potential to discourage the most efficient allocation of capital is contrary to the best interests of all stakeholders.</p> <p>Regular stress testing for external reporting purposes will add to participants’ costs, reducing efficiency in NEM businesses.</p> <p>While the proposal appears to have been based on the New Zealand stress testing regime, it does not follow that any benefits that scheme may have yielded in New Zealand would necessarily be achieved if applied within the Australian market context. The NEM is a very different market to the New Zealand system: in scale, participant profiles and in the sources of risk.</p>	<p>Amber</p>
<p>Be transparent</p>	<p>While the stress test results would appear transparent, the usefulness of the results in practice would depend heavily on the assumptions used to generate the stress tests, their applicability to a particular NEM participant and would only be valid at a single point in time. The hazards of making judgements based on misrepresentative information cannot be overstated.</p>	<p>Amber</p>

	Any public release of stress test results would introduce significant moral hazard as less mature market participants may rely on this information rather than perform their own thorough risk management analysis.	
Be proportionate to the materiality of the risk and problem it seeks to address	There would be material costs incurred by every participant performing the stress tests and getting them certified. The costs will not be minimal as suggested in the Paper as any stress tests proposed by the regulator are likely to be different to a participant's existing internal stress tests. In order to provide results external audit firms are prepared to certify, participants may require new systems development which would be costly and time consuming, and most concerning, divert key business resources from core operations.	Red

Assessment Criteria	Option 4 – Code of Practice (Risk Management) for NEM Participants	Assessment
Contribute to a reduction of the risk of systemic financial contagion in NEM	<p>The Board is accountable for setting the risk tolerances of a business and ensuring that Management have the necessary systems and processes in place to ensure that risks are identified, reported and managed appropriately. Australian Financial Service (AFS) Licensees are already required to maintain appropriate risk management policies, systems and processes and these can be subject to audit by ASIC. In order to maintain an AFSL, an entity must prove to ASIC that the key Officers that are accountable for the derivatives trading and associated risk management functions within their organisation are suitably qualified and experienced (Responsible Managers).</p> <p>Each year, Australian Financial Services (AFS) licensees must lodge with ASIC their profit and loss statement, balance sheet and audit report along with ASIC forms FS70 and FS71. Within the ASIC forms both the auditor and licensee must confirm that the financial accounts “give a true and fair view of the financial performance and financial position of the licensee” and are compliant with relevant accounting standards. This is relevant as the financial position of the licensee encompasses its risk exposures.</p> <p>Entities also already provide considerable discussion on their risk management practices in the notes that accompany their financial statements in accordance with AASB7. The Financial Risk Management notes generally span several pages and cover market, credit and liquidity risk exposures, maturity and concentration analyses, along with fair value hierarchy and stress testing of financial instruments. It is standard practice for the auditors to give an opinion to the Board on the strength and accuracy of the</p>	Amber

	financial risk management processes and controls as part of their support for the annual accounts.	
Be effective – unlikely to lead to perverse behaviour, gamed or by-passed	<p>Financial risk management methodology and risk limit application is intrinsically linked with an entity's strategy and trade execution ability and as such is commercially sensitive information. Just as a trader will not declare upfront to the counterpart they are negotiating with the lowest price they are willing to sell their product to them for, an entity is not incentivised to disclose to their competitors their risk measurement methodology and the point at which internal controls will restrict them from trading. For this reason, any information provided to a regulator that participants knew would be subsequently made publically available, would be high level at best.</p> <p>Requiring compliance with a standardised code of practice for perceptions purposes could distract management attention from commercially beneficial core business initiatives.</p>	Amber
Be able to be administered in a cost effective manner	Electricity industry participants already face a large regulatory compliance and reporting burden (e.g. environmental/asset licencing, safety, security and environment liability schemes) in addition to that of traditional financial market participants. Any additional reporting requirements will add to the large overheads already borne by electricity businesses and translate into increased costs of electricity supply.	Amber
Support overall efficiency of the NEM	<p>Businesses make most efficient use of their scarce capital by managing risk exposures across their entire business portfolio. In the energy industry, this typically includes managing risk exposures to several commodities and markets other than electricity. Also, what is deemed a high risk exposure for one entity may be relatively speaking a low risk exposure within the context of another business structure. Risk management frameworks specifically tailored to individual businesses will result in the most efficient allocation of capital within the industry and hence the lowest cost of supply for end users.</p> <p>It is unclear how the conflicting objectives for the Code of Practice mentioned in the paper could be achieved. The consultation paper states that since accounting standards already establish generic risk management guidelines, the Code of Practice would need to be specifically tailored to electricity. In contrast, the paper says that the Code must be flexible and high level enough to allow for the diverse range of business profiles within NEM participants. These objectives are incompatible.</p>	Amber

Be transparent	As discussed above, an entity's financial risk management methodology and limit application is intrinsically linked with an entity's strategy and trade execution ability and as such is commercially sensitive information. For this reason, any information provided to a regulator that participants knew would be subsequently made publically available, would be only at a very high level.	Amber
Be proportionate to the materiality of the risk and problem it seeks to address	<p>Since it has not been demonstrated that there exists a material risk of financial contagion, or indeed a specific problem identified, any compliance and reporting burden other than that already borne by NEM participants cannot be argued to be a proportionate response.</p> <p>The preparation of end of year accounts consumes considerable resources and places great time pressure on business operations. At such a time, the insertion of an additional Code of Practice audit or certification requirement would further divert management attention from core business operations.</p>	Red

Assessment Criteria	Option 5 – Trade Reporting + Additional Margining Requirements	Assessment
<i>***** The NGF's assessment of Option 5 is in addition to the assessment of Option 2 (Trade Reporting) *****</i>		
Contribute to a reduction of the risk of systemic financial contagion in NEM	<p>Imposing mandatory margining for electricity OTC contracts would materially increase the risk of systemic financial contagion in the NEM – not reduce it. The cash flow risks energy participants would become exposed to (volatility and quantum) would present a much greater risk to electricity market participants' business stability than current credit risk exposures.</p> <p>Electricity participants typically hedge a material portion of their portfolio output at least 3 years in advance and substantially longer base load hedges are highly desirable for market risk management purposes. This means that under mandatory margining, on any given day a participant would be required to have the net liability value of its entire hedge book for 3+ years lodged with a clearing participant. The resulting margining would put considerable cash flow strain on participants as the mark to market value of an entity's outstanding contract position is not correlated with its short term spot market and contract settlements. In recent electricity market history, it has been large futures positions that have been the cause of great financial stress to NEM participants. For example, the forward curve increases experienced during the 2007 Queensland drought and resultant futures margin calls left some participants either close to, or breaching, their AFSL Adjusted Surplus Funds requirements. Rather than continuing to meet those</p>	Red

	margin call requirements, some participants chose to close out their futures positions (effectively forfeiting their intended market risk management benefits).	
Be effective – unlikely to lead to perverse behaviour, gamed or by-passed	<p>The costs of capital and the operational risks associated with margining on OTC contracts could incentivise participants to reduce their level of hedging. This would leave them exposed to a greater level of market risk than at present.</p> <p>It is crucial to acknowledge that the credit risk exposures brought about by entering OTC contracts are very much secondary to the primary risk exposures they are executed to manage, market risks. Any regulatory response intended to mitigate credit risk that could in turn encourage participants to carry greater market risk exposure is perverse and disproportionate in the extreme.</p>	Red
Be able to be administered in a cost effective manner	Mandatory margining would create two requirements for collateral, (1) an initial margin requirement and (2) the mark to market value (liability) of all contracts executed. The amount of capital that would need to be lodged with a clearing participant would be substantial, as would the costs associated with the ongoing lodgement of that capital, along with the costs of maintaining funding facilities that would enable a participant to meet large intra-day margin calls.	Red
Support overall efficiency of the NEM	As outlined above, mandatory margining would pose greater financial risks to a NEM participant than the secondary credit risk exposures that the response is intended to mitigate. Margining would also increase the variability of a participant's financial performance which could translate into less desirable investment propositions for equity investors and greater costs of supply to consumers. Any regulatory measure that hinders private investment in existing or future energy utilities within the Australian economy is counter to the best interests of consumers.	Red
Be transparent	Mandatory margining presents no identifiable transparency benefits.	Amber
Be proportionate to the materiality of the risk and problem it seeks to address	<p>The costs associated with meeting margining requirements including the potential for an increase in market risk far outweigh the credit risk reduction benefits the proposal is intended to deliver.</p> <p>If the market felt that the level of credit risk between OTC counterparts was a problem, and that margining was a viable solution to that problem, there would be considerably greater utilisation of the futures market than there is currently.</p>	Red

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Assessment Criteria	Option 6 – Stress Test Reporting + Additional Supervision and Regulatory Powers	Assessment
<i>***** The NGF’s assessment of Option 6 is in addition to the assessment of Option 3 (Stress Test Reporting) *****</i>		
Contribute to a reduction of the risk of systemic financial contagion in NEM	The powers proposed would be major interventions in a distressed participant’s management of risk, and would introduce significant moral hazard within the Australian energy industry. Knowing that a regulator could intervene may lead other participants to change their risk management behaviour towards distressed participants, for example by terminating hedge contracts earlier than they may have otherwise done. This could increase the risk of financial contagion rather than reduce it as intended.	Red
Be effective – unlikely to lead to perverse behaviour, gamed or by-passed	<p>The Australian energy market continues to deliver risk management discipline as part of its evolution, and the broader market provides feedback on this via debt funding decisions and capital raising interactions.</p> <p>The potential for intervention by a regulator could blur the lines of accountability for risk management within energy businesses. Any regulatory measure that could hinder private investment in existing or future energy utilities within the Australian economy is counter to the best interests of consumers.</p>	Red
Be able to be administered in a cost effective manner	<p>In addition to the costs involved in designing relevant stress tests as discussed in Option 3, the regulator would require additional resources with specialist expertise to follow through on any supervisory obligations imposed and dedicated resources to manage any intervention deemed necessary.</p> <p>From a NEM participant perspective, any direction by a regulator to reduce particular risk exposures would result in additional, unwarranted costs.</p>	Red
Support overall efficiency of the NEM	<p>Regulatory intervention on the basis of stress test results is likely to be inappropriately timed and bring forward costs that may never otherwise eventuate.</p> <p>Knowing that a regulator is playing an active role in supervising financial exposures and potentially performing risk management decisions for distressed participants could erroneously give investors the impression that the electricity market is a low risk market.</p>	Red

	Liquid and active financial markets in energy are the most cost effective forms of risk mitigation available to all NEM participants. Any regulatory measure that lessens participant autonomy will hamper the development and effectiveness of these financial markets.	
Be transparent	Transparency of such a proposal would be increased if the regulator had a clear framework for intervention. However, it is likely that business uncertainty would still exist as not all evolving contagion situations could be captured in a framework.	Amber
Be proportionate to the materiality of the risk and problem it seeks to address	Existing risk management processes within the energy sector have proven robust through difficult spot market circumstances including sustained high spot prices in 2007, bushfires, and highly publicised fuel supply shocks since then. An entity's Board and management team are best placed, and ultimately accountable for, managing risk exposures across multiple commodities and markets, and any regulatory intervention in respect to electricity exposures in isolation could prove harmful to that business' overall performance and be of detriment to shareholders.	Red