



Australian Energy Market Commission

OPTIONS PAPER: OVERVIEW REPORT

NEM financial market resilience

9 November 2012

REVIEW

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Reference: EMO0024

Citation

AEMC 2012, NEM financial market resilience, Options paper: overview report,
9 November 2012 , Sydney

About the AEMC

The Council of Australian Governments (COAG), through its then Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. In June 2011, COAG established the Standing Council on Energy and Resources (SCER) to replace the MCE. The AEMC has two principal functions. We make and amend the national electricity, gas and energy retail rules, and we conduct independent reviews of the energy markets for the SCER.

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Introduction

This overview report accompanies the Australian Energy Market Commission's (AEMC) NEM financial market resilience options paper. The options paper explores potential options for mitigating the risks that could arise following the financial distress or failure of a large electricity retailer.

The options paper is the first stage of advice that the AEMC is providing to the Standing Council on Energy and Resources (SCER) on the resilience of the financial relationships and markets that underpin the efficient operation of the National Electricity Market (NEM).

The options in the paper respond to the risks that could be caused by the failure or financial distress of a large electricity retailer. In particular, the options seek to mitigate the risk that the financial distress of a large retailer could spread serious financial problems to other energy market participants, which would have significant flow-on impacts for consumers.

The NEM currently has arrangements in place to manage the financial distress of a retailer, including retailer of last resort (ROLR) regimes. There have not been any major retailer failures in the NEM to date and the ROLR regimes have been reasonably effective in managing the few small retailer failures that have occurred.

However, there was general agreement in submissions to our recent issues paper that the ROLR regimes and other existing regulatory mechanisms may not be able to deal adequately with the failure of a large retailer. Those existing regimes could potentially even exacerbate the risks of contagion. Although the risk of a large retailer failing is low, if it occurred it would have serious consequences for the efficient operation of the market and the long term interests of consumers. As a result, we are undertaking this work to consider how best to manage the risks posed by such an event.

We are seeking comments on the options set out in the paper.

The options paper does not contain recommendations as to which, if any, of the options should be implemented. We will consider stakeholders' comments before providing an interim report to SCER in early 2013. That report will contain our draft advice on the risks associated with the financial distress of a large retailer and any recommendations for new mechanisms to mitigate those risks in the long term interests of consumers.

This overview report summarises the key issues discussed in the options paper. It should not be used as a substitute for the options paper when considering or responding to the issues discussed in the options paper.

SCER's request for advice

SCER has requested that the AEMC provide advice on:

- the risks to financial stability in the NEM arising from financial interdependencies between participants and the impacts of those risks if they materialise and result in financial instability;
- the existing mechanisms to mitigate risks to financial stability and manage the consequences in the NEM, and whether they are adequate; and
- if existing mechanisms are inadequate, options to strengthen, enhance or supplement them and minimise these risks and their consequences.¹

Financial interdependencies and contagion

The request for advice notes that while market participants need to manage their own financial and commercial positions, significant financial interdependencies exist between NEM market participants. These interdependencies are caused by participants' exposure to a common spot price for electricity and their hedging arrangements to manage spot price volatility.

Electricity retailers and generators in the NEM buy and sell almost all of their electricity through the wholesale spot market. Retailers and generators pay and receive the spot price for this electricity, which can vary between \$12,900 and -\$1,000 per megawatt hour (MWh).

This spot price volatility creates significant risks for retailers and generators. They manage these risks by entering into financial relationships with each other and with other financial market participants, including a variety of types of derivative contracts.²

These financial relationships can create a high level of financial interdependency between market participants. As a result, there is a risk that if one participant encounters significant financial difficulties, other participants could also be affected. These interdependencies could mean that an unexpected or unusual event or series of events could lead to financial contagion that affects several businesses and the overall efficiency of the market.

¹ SCER's request for advice is available on the AEMC website.

² A derivative is an instrument that derives its value from something else - in this case the spot price of electricity. Derivative instruments are used by electricity generators and retailers to "hedge" their spot price exposure by placing bounds on the future electricity prices that a generator will receive or a retailer will pay.

Stakeholder involvement in the development of our advice

SCER's request for advice requires the AEMC to draw on input from market participants in preparing our advice, including establishing an industry working group and an advisory committee.

We developed the options paper with input and assistance from a working group comprising representatives from AGL Energy, Alinta Energy, Australian Power and Gas, Energy Australia, International Power GDF Suez and Origin Energy. However, the views expressed in the options paper do not represent the views of individual members of the working group.

We also established an advisory committee comprising representatives from the Australian Energy Regulator (AER), the Australian Energy Market Operator (AEMO), the Australian Securities and Investments Commission (ASIC) and SCER officials.

In preparing the options paper, we have also taken into account the 14 submissions we received on the issues paper we published in June 2012.

Context for the development of our options

Why are we concerned about the risks of a retailer failure?

The electricity industry has a number of important features that mean that the failure of an electricity retailer is likely to have more significant effects on its customers than a similar retailer failure would have in other industries:

- Electricity is an essential service. In many other industries, if their suppliers fails, customers are simply left to find a new supplier and have no service until they do so. However, leaving customers without electricity for a prolonged period while they arranged for a new electricity retailer would have unacceptable impacts on customers and could potentially be life-threatening.
- If an electricity retailer fails, electricity will continue to flow to customers until it is physically disconnected. This contrasts with most industries where the failure of a supplier will mean that customers immediately stop receiving the service.
- Electricity retailers collect revenue from customers on behalf of other electricity market participants that do not have direct relationships with customers. The majority of an electricity consumer's bill is comprised of charges that the retailer pays to other market participants such as generators and network businesses. In the absence of regulatory arrangements, the failure of an electricity retailer would stop the flow of those payments to other market participants, despite the fact that they are continuing to provide services and incur costs (because, due to the above points, electricity is likely to continue flowing to customers despite the failure of the retailer). That could cause financial distress for those other businesses, and risk them also failing.

As a result of these features, electricity markets worldwide generally have some form of regulatory mechanism to address the risks of a retailer failure. Those mechanisms usually involve appointing another supplier to take over the customers of the failed retailer and keep supplying them electricity and keep payments flowing.

In the NEM, the main existing mechanism to address the risks of a retailer failure is the ROLR regime. The ROLR regimes in each jurisdiction were intended to be harmonised under the National Energy Customer Framework (NECF). However, the NECF has currently only been adopted in the ACT and Tasmania. As a result, the ROLR regimes currently vary between jurisdictions.

There have not been any major retailer failures in the NEM to date and the market has so far proven reasonably robust. Some small retailers have failed, but those failures have been managed by the ROLR regimes without causing financial contagion concerns.

However, the financial distress or failure of a large retailer is possible and could be caused by a wide range of factors, and if it did occur the potential consequences could be severe.

Recent events in other markets, in particular during the global financial crisis, demonstrated the potential for the financial difficulties of one business to be transmitted to other businesses and cause financial contagion that impacts on the overall efficiency of the market and the long term interests of consumers. The potential for financial contagion in electricity markets was demonstrated by the Californian electricity crisis of 2000/2001, which led to the collapse of two of the largest electricity businesses in the state and needed substantial government intervention to avoid broader contagion.

Due to the operation of the current ROLR regimes and other existing NEM mechanisms, if a large retailer did encounter significant financial difficulties, any response to mitigate the impacts of those difficulties would need to be activated extremely rapidly (ie within hours, or at the most, days). It is therefore not sufficient to rely on the possibility of an undefined government response after the event, such as government funding or the use of existing emergency powers that were designed to respond to physical rather than financial issues.

Instead, it is preferable to develop a clear understanding of the nature of the risks and the preferable response, or range of responses, well before a failure occurs. That approach also allows the development of clear processes for obtaining the necessary information for an informed assessment of the situation, decision points and accountabilities.

Overseas approaches to managing retailer failure

The potential impacts of a large retailer failure have been previously considered by policy makers and regulators in Australia and overseas. That work has generally concluded that ROLR regimes or similar mechanisms are unlikely to be able to manage

such a failure on their own and that there is no simple solution to managing a large retailer failure.

As part of the development of our options, we analysed the approaches to managing retailer failure in a number of overseas jurisdictions that have similar market conditions to the NEM. Several of our options contain features based on aspects of these overseas models.

Appendix A to the options paper describes the approaches taken the following jurisdictions and analyses the potential lessons from each of those jurisdictions for mitigating the contagion risks associated with a large retailer failure:

- Great Britain;
- Northern Ireland;
- Texas; and
- Alberta.

It also provides a high-level summary of the retailer of last resort or similar mechanisms that have been adopted in Sweden, Norway, Finland, Denmark, the Netherlands, the Czech Republic and Ontario.

Overview of the options

The options paper sets out a series of potential options that are designed to mitigate the risks of financial contagion that could arise following the financial distress of a large retailer and an associated ROLR event.

The options have been developed not to prevent the initial failure of a retailer, but instead to address the potential causes of contagion risk. In particular, the options are designed to reduce the risk that the designated ROLR will be unable to meet the financial liabilities imposed on it following a large retailer failure. That risk is primarily caused by:

- the increased costs that will be imposed on the designated ROLR in the period immediately following a ROLR event, in particular increased wholesale energy costs in relation to the customers that it acquires; and
- the increased credit support that the designated ROLR will be required to provide to AEMO (to cover its liabilities to pay for energy) and DNSPs (to cover its liabilities to pay for network charges) in relation to the customers that it acquires, and the relatively short timeframes in which that credit support is required to be provided.

If the designated ROLR is unable to meet those liabilities within the relevant timeframes, there is a risk that the designated ROLR could also fail and trigger a cascading failure.

The options are grouped as follows:

- options that involve amendments to the ROLR regimes with the objective of improving their ability to manage a large retailer failure;
- options that seek to address financial contagion risks related to the designated ROLR's credit support obligations to AEMO and distribution businesses;
- options that seek to address financial contagion risks related to the increased costs and liquidity challenges that the designated ROLR is likely to face in the period immediately following a ROLR event; and
- options for a last resort government response.

The paper explores the potential value of each of these options in mitigating financial contagion. It also discusses the potential disadvantages of implementing each option.

Most of the options are not mutually exclusive and a comprehensive response to the risks of the financial distress of a large retailer may require a combination of options.

Risk allocation

The current NEM arrangements allocate the risks of a retailer failure in a certain way. Under the ROLR regimes and the requirements to provide credit support to AEMO and distribution businesses, most of those risks are currently allocated to the retailer that is appointed as the designated ROLR.

The options in the paper all affect how these risks are allocated.

Changes to the way that risks are currently allocated to share the risks amongst a greater range of NEM participants and consumers could potentially reduce the risks of financial contagion. However, changes of this nature could alternatively just move the risk of contagion around if the risks are transferred to parties that are unable to effectively manage them, for example by increasing the risk of a generator failure instead of a retailer failure.

Regulatory responses cannot remove all of these risks. Instead, the key questions are who is best placed to bear and manage the relevant risks, and can changes to how individual risks are allocated reduce the overall level of risk in the market.

Summary of the options

The options are summarised in the table on the following pages. This table also summarises the impacts of each option on risk allocation.

Options involving amendments to the ROLR regimes (chapter 5 of the options paper)					
Option	Revised cost recovery arrangements	Enhanced preparation arrangements for a ROLR event	Transfer of hedge contracts to the designated ROLR	Amending the ROLR event triggers	Delayed designation of ROLRs
Description of option	The existing ROLR cost recovery provisions would be amended to give the designated ROLR greater certainty that it can quickly recover its costs from consumers	The existing ROLR provisions would be augmented to assist the AER to better prepare for a large retailer ROLR event and facilitate the appointment of multiple designated ROLRs	The designated ROLR would be granted an option to acquire some or all of the hedge contracts of the failing retailer ³	The NEM suspension provisions would be amended to delay the triggering of a ROLR event ⁴	The ROLR regimes would be amended to delay the time at which the designated ROLR is appointed to allow more time to appoint multiple designated ROLRs. The appointment would be backdated to the time of the original ROLR event
Risk allocation	More costs are likely to be recovered directly from consumers	Risks spread amongst multiple designated ROLRs. Would also increase compliance costs	Would reduce the value of the failing retailer's assets, impacting its creditors and shareholders	Generators would bear increased risks that the failing retailer will not pay AEMO for energy during the period prior to the ROLR event, which would result in AEMO short-paying generators. Alternatively, AEMO credit support amounts could be increased to cover this risk, imposing additional costs on all retailers	Risks spread amongst multiple designated ROLRs, who would face increased risks from having a shorter period to meet the liabilities once appointed. Generators would face a risk of short-payment if designated ROLRs were not appointed within the usual energy settlement cycle

³ We note in the options paper that there are significant questions about the workability of this option in practice.

⁴ Suspension of the failing retailer from the NEM by AEMO is currently the most likely trigger for a ROLR event. Under this option, extra steps could be inserted into the process or the timeframes could be extended to delay suspension occurring and triggering a ROLR event.

Options to address the designated ROLR's credit support obligations (chapter 6 of the options paper)					
Option	Amendments to AEMO credit support provisions			Amendments to DNSP credit support provisions	
Description of option	The increased credit support required to be provided by the designated ROLR to AEMO would be waived or reduced for a short transitional period			The increased credit support required to be provided by the designated ROLR to DNSPs would be waived or reduced for a short transitional period	
Risk allocation	Generators would bear the risk that the designated ROLR fails and does not pay AEMO for energy and AEMO will not be able to call on a bank guarantee to cover the non-payment, which would result in AEMO short-paying generators			DNSPs and TNSPs would bear a risk that the designated ROLR fails and does not pay network charges, which will not be secured by a bank guarantee	
Options to address the designated ROLR's increased costs (chapter 7 of the options paper)					
Option	Spot market price cap	Initial period where designated ROLR passes through retail prices	Delayed settlement period for designated ROLR to pay AEMO	Delayed settlement period for designated ROLR to pay DNSPs	Industry co-insurance fund
Description of option	The spot price would be capped at a set price, eg \$300/MWh, for a specified period of time following a ROLR event. The cap could potentially apply only to the designated ROLR	Instead of paying the spot price, the designated ROLR would pay AEMO an amount based on the wholesale component of retail prices for an initial period following a ROLR event	The date for the designated ROLR to pay AEMO for energy would be delayed in relation to the acquired customers	The date for the designated ROLR to pay network charges to DNSPs would be delayed in relation to the acquired customers	Retailers would be required to pay levies into an industry co-insurance fund. Following a ROLR event, the fund could be used to provide loans or grants to the designated ROLR to cover some of its costs, or used to provide credit support to AEMO
Risk allocation	Generators' revenues would be reduced during the period in which the price cap applies	Generators' revenues would be reduced during the initial period	AEMO's payments to generators would be delayed by a corresponding period	DNSPs' and TNSPs' revenues would be reduced during the period of the delay	All retailers would incur additional costs in relation to levies for the fund

Options for a last resort government response (chapter 8 of the options paper)			
Option	Government posts credit support for the designated ROLR	Enhanced administration arrangements coupled with interim government funding	Government funding, loans or guarantees
Description of option	A government entity, such as the Reserve Bank of Australia, would post credit support to AEMO to meet the designated ROLR's increased credit support obligations for an initial period following a ROLR event	A government entity would appoint an administrator to manage the failing retailer to facilitate a trade sale or orderly transfer of the customers to alternative retailers, as an alternative to the ROLR regime. Could potentially be implemented under existing insolvency laws or they could be amended to introduce a new special administration regime. A government entity would provide funding during the administration. This funding could be recovered from the administrators after any sale of the customers, with any shortfall recovered through an industry levy	Government funding, loans or guarantees would also potentially be available, but do not require any additional mechanisms to be put in place and are not discussed in the options paper
Risk allocation	Government incurs costs of providing the guarantee and the risk that the designated ROLR will default on its obligations. Those costs would ultimately be borne by taxpayers or, if recovered through an industry levy, consumers	Government incurs initial costs of providing funding. If the administration regime includes an express cost recovery mechanism, costs would be recovered from market participants, who would pass them on to consumers. Otherwise, costs would be borne by taxpayers	Government incurs costs, which would ultimately be borne by taxpayers or, if recovered through an industry levy, consumers

A potential last resort government role

We consider that the market-based mechanisms outlined in the options paper may prove insufficient for some situations, for example a failure of one of the largest retailers during a period of high spot prices.

Accordingly, a comprehensive regulatory response to mitigate contagion risks may involve some last resort role for governments.

If a large retailer encounters significant financial difficulties and creates a risk of contagion that justifies some form of government response, that response will need to occur extremely rapidly. As a result, we consider that there is benefit in considering in advance how governments could best respond in the event of the financial distress of a large retailer, and putting in place mechanisms that would allow governments to respond quickly if a threat of contagion arises.

In addition to facilitating a response within the required timeframes, defining in advance the mechanisms for any government intervention will provide important clarity to the market. Defining the appropriate role for governments can reduce the moral hazard risk that exists if market participants, investors and creditors assume that there will be an implicit government guarantee of the largest retailers. If participants assume that the largest retailers are "too large to fail" and will be bailed out by governments, there is a risk that those participants will not take appropriate steps to minimise the risks of failure.

Moral hazard risks can be minimised if it is made clear in advance that any government role will be limited to the minimum role necessary to mitigate financial contagion. We consider that the appropriate role of governments is limited to a last resort role to avoid financial contagion in circumstances where market-based mechanisms are expected to be insufficient to adequately mitigate contagion. In particular, we consider that any government response should not necessarily be aimed at preventing the first retailer from failing. Instead, any government assistance should be targeted at preventing the contagion that would result if the financial distress of a retailer caused a cascading failure of other market participants.

This form of limited role for governments will also result in a more targeted and efficient response that minimises the costs to taxpayers (or consumers if the costs are ultimately recovered from the electricity industry) and minimises impacts on the efficient functioning of the market.

Next steps

The options paper will be followed by an interim report in early 2013.

The interim report will set out the Commission's advice on:

- the nature and extent of the risks of financial contagion following the financial distress of a large electricity retailer;
- the existing mechanisms to mitigate those risks and manage their consequences, and whether those existing mechanisms are adequate; and
- if existing mechanisms are inadequate, options to strengthen, enhance or supplement them and minimise the risks of financial contagion and their consequences.

The options paper presents the relevant options as stand-alone mechanisms. However, it is unlikely that any one option discussed in the paper will be sufficient on its own to effectively manage the risks of financial contagion (if the Commission concludes that the existing mechanisms are insufficient). As a result, if the Commission considers that any of the options should be implemented, the interim report will also address how the recommended options would work together.

Responding to the options paper

The Commission invites submissions on any of the issues raised in the options paper.

In particular, we are interested in stakeholders' views on the following questions:

- Are there any other options that the Commission should consider?
- In relation to each of the options discussed in the paper:
 - How effective is the option likely to be in mitigating the risks of financial contagion?
 - What are the likely costs and other impacts of the option?
 - Are the expected benefits of the option in terms of mitigating the risks of contagion likely to outweigh any detrimental effects of the option?
 - Are there alternative ways of implementing the option that would improve its ability to mitigate contagion or reduce its costs?
- Acknowledging that most of the proposed options involve a reallocation or sharing of associated costs and risks, who is best placed to manage the relevant risks?

- Can amendments to the ROLR regimes significantly improve their ability to manage the failure of a large retailer? Or are there broader issues with the ability of any form of ROLR regime to respond to the failure of one of the largest retailers, meaning that an alternative to ROLR is required in some circumstances? If there are any such broader issues, what are they?
- How could the options be developed into a coordinated package of responses to mitigate the risks associated with a large retailer failure?
- Based on the expected impacts of each of the options and the likelihood and potential consequences of a large retailer failure, are any of the options preferable to the status quo?

The closing date for submissions is 20 December 2012.

Submissions should quote project number "EMO0024" and may be lodged online at www.aemc.gov.au or by mail to:

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