

Australian Energy Market Commission

OPTIONS PAPER

NEM financial market resilience

9 November 2012

REVIEW

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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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Executive summary

This paper explores potential options for mitigating the risks that could arise following the financial distress of a large electricity retailer. It is the first stage of our advice to the Standing Council on Energy and Resources (SCER) regarding the resilience of the financial relationships and markets that underpin the efficient operation of the National Electricity Market (NEM).

This paper does not contain any recommendations. We will consider stakeholders' comments before considering which, if any, of these options to recommend to SCER.

The NEM currently has arrangements in place to manage the financial distress of a retailer, including retailer of last resort (ROLR) regimes. These regimes are considered likely to be effective in managing the failure of smaller retailers (although complications arise due to differences between the ROLR regimes in different jurisdictions). However, there is a general consensus that these regimes may not be able to deal adequately with the failure of a large retailer.

In particular, we consider that there is a risk that the financial distress of a large retailer could spread financial contagion to other energy market participants and, in the extreme case, risk causing a cascading retailer failure. This risk could be exacerbated by the ROLR regimes. Almost all submitters to our issues paper shared these concerns.

The failure of a large retailer, as with the failure of any business, will create risks for other people. This paper explores alternative ways of allocating and sharing those risks between NEM participants, governments and consumers. We pose questions for submitters to consider regarding who is best placed to bear and manage those risks, and whether it is possible to reduce the overall level of contagion risk by sharing risks differently to how they are currently allocated in the NEM.

Context for the development of these options

We are undertaking this project to consider whether the financial relationships and markets underpinning the NEM are sufficiently robust to manage the financial consequences of unexpected events. This project is not related to perceived risks associated with any individual energy market participants.

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 existing market mechanisms without causing financial contagion concerns. However, the 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.

Our advice is primarily concerned with the flow-on impacts that the financial distress of a large retailer could have on other NEM participants and ultimately consumers. 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.

In the NEM, the hedge contracts that generators and retailers enter into to manage spot price volatility are a key potential means of transmitting contagion in this manner. If one participant's financial difficulties caused it to default on its hedge contracts, that could have significant financial impacts on all of the participants that it has contracts with.

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 requires the development of clear processes for obtaining the necessary information for an informed assessment of the situation, decision points and accountabilities.

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. A summary of the approaches taken in several overseas jurisdictions is set out in an Appendix to this paper.

This paper has been developed in consultation with an industry working group, but the working group does not currently recommend any of the options in this paper. We also obtained input on this paper from an advisory committee comprised of representatives from the Australian Energy Market Operator (AEMO), Australian Energy Regulator, Australian Securities and Investments Commission and SCER officials.

Overview of the options

This 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 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.

This 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 these 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 this 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.

We are seeking stakeholders' views on who is best placed to bear and manage these risks.

Responding to this paper and next steps

The Commission invites submissions on this paper by 20 December 2012.

This paper does not contain recommendations as to which, if any, of the options should be implemented. Stakeholder submissions will be a critical input to the Commission's development of recommendations.

This paper will be followed by an interim report in early 2013. That report will set out the Commission's draft advice to SCER 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.

Contents

1	Introduction and background.....	1
1.1	Introduction.....	1
1.2	SCER's request for advice.....	2
1.3	Working group and advisory committee.....	2
1.4	Other relevant projects.....	4
1.5	Next steps in the development of our advice.....	4
1.6	Responding to this paper.....	5
1.7	Structure of this paper.....	6
2	Overview of the risks of financial contagion following a large retailer failure..	8
2.1	Summary of risks outlined in the issues paper.....	8
2.2	Retailer failure timeline.....	12
2.3	Summary of submissions on the issues paper.....	15
3	Framework for developing and assessing the options.....	21
3.1	How we developed the options set out in this paper.....	21
3.2	Framework for assessing the options.....	24
4	Summary of options for mitigating financial contagion risks following the financial distress of a large retailer.....	26
4.1	Structure of options chapters.....	26
4.2	Risk allocation.....	26
4.3	Summary of the options.....	29
5	Options to improve the ROLR regimes.....	33
5.1	Revised cost recovery arrangements.....	33
5.2	Enhanced preparation arrangements for a ROLR event.....	41
5.3	Transfer of the failed retailer's hedge contracts to the designated ROLR.....	48
5.4	Amending the ROLR event triggers.....	53
5.5	Delayed designation of ROLRs.....	56
6	Options to address the designated ROLR's increased credit support obligations	62
6.1	Amendments to AEMO credit support provisions.....	62

6.2	Amendments to DNSP credit support provisions	66
7	Options to address the designated ROLR's increased costs and risks	71
7.1	Spot market price cap	71
7.2	Initial period where the designated ROLR passes through retail prices instead of paying the spot price.....	76
7.3	Delayed settlement period for designated ROLR to pay AEMO for energy	79
7.4	Delayed settlement period for designated ROLR to pay network charges.....	82
7.5	Industry co-insurance fund	83
8	Options for a last resort government response.....	93
8.1	The role of governments in mitigating contagion risk	93
8.2	A government entity posts credit support for the designated ROLR.....	97
8.3	Enhanced administration arrangements coupled with interim government funding ⁹⁹	
	Abbreviations.....	116
A	Summary of international retailer of last resort schemes	118
A.1	Introduction.....	118
A.2	Great Britain	120
A.3	Northern Ireland	126
A.4	Texas	129
A.5	Alberta	135
A.6	Other markets	137
B	Existing jurisdictional step-in and emergency powers	141

1 Introduction and background

1.1 Introduction

This options paper sets out for public consultation a range of options that have the objective of mitigating the risks of financial contagion following the financial distress of a large electricity retailer.

These options have been developed as part of the advice that the Australian Energy Market Commission (Commission or AEMC) has been requested to provide 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) and the risks arising from financial interdependencies between market participants.

We published an issues paper on 8 June 2012 that outlined the Commission's initial views on the nature of the relationships and financial interdependencies between NEM participants, the potential risks that could arise from those interdependencies and the risk management strategies that are currently adopted by generators and retailers to manage those risks.

In the issues paper, we reached the initial view that the financial relationships and markets that underpin the operation of the NEM are generally robust. However, we noted that energy and financial markets around the world have been subject to significant stress in recent years, with the global financial crisis in particular demonstrating the potential for the financial difficulties of one market participant to be transmitted to other participants and cause financial contagion that threatens overall market efficiency. We also set out examples of possible electricity market scenarios where a series of unusual and unexpected events could potentially lead to financial contagion that could damage the long term interests of electricity consumers.

Submissions to the issues paper closed on 20 July 2012 and we received 14 submissions.

Based on the analysis contained in the issues paper and submissions to the issues paper, we consider that the key risks of financial contagion could arise in the event of the financial distress of a large retailer and an associated retailer of last resort (ROLR) event. Accordingly, our initial advice will focus on appropriate mechanisms to mitigate the risks of financial contagion following a large retailer failure and ROLR event.

This options paper sets out a range of options that could mitigate those risks.

The paper discusses the potential value of each of the options in mitigating contagion risks and the potential disadvantages of each option. However, it does not make recommendations as to which, if any, of these options should be implemented. We are seeking comments on the merits of each of the options. We will consider those

submissions before making recommendations, which will be set out in an interim report in the next stage of our advice.

1.2 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

The request for advice provides that the AEMC is to consider the following matters, amongst others, in preparing its advice:

- the National Electricity Objective (NEO);²
- recent developments in electricity markets in other jurisdictions;
- approaches to financial stability regulation in other markets;
- relevant developments in the regulation of financial markets in Australia and other jurisdictions;
- relevant work being undertaken by the Council of Financial Regulators;
- the role of the Australian Securities and Investments Commission (ASIC), and obligations on participants, under the *Corporations Act 2001* (Cth); and
- transitional mechanisms related to the introduction of a price on carbon.

1.3 Working group and advisory committee

The request for advice requires the Commission to draw on input from market participants in preparing its advice, including establishing an industry working group and an advisory committee.

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

² The NEO is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to: price, quality, safety, reliability and security of supply of electricity; and the reliability, safety and security of the national electricity system.

This options paper was developed with input and assistance from a working group comprising representatives from the following market participants:

- AGL Energy;
- Alinta Energy;
- Australian Power and Gas;
- International Power GDF Suez;
- Origin Energy; and
- Energy Australia.³

However, the views expressed in this paper are not to be attributed to the individual members of the working group or the companies that they represent. In particular, the inclusion of an option in this paper does not imply that the members of the working group would support the implementation of that option. Indeed, members of the working group have indicated that they do not support implementing some of options in this paper, but the working group agrees that it is appropriate to include each of the options in this paper for the purpose of seeking views on their respective merits.

We have also established an advisory committee to help ensure that any recommendations that we may make in our subsequent reports consider all relevant policy and regulatory requirements. The advisory committee comprises representatives from:

- the Australian Energy Regulator (AER);
- the Australian Energy Market Operator (AEMO);
- ASIC; and
- SCER officials.

In preparing this paper, we have also taken into account the submissions we received on the issues paper and meetings we held with a range of stakeholders including other energy market participants, financial market participants and industry bodies.

³ TRUenergy recently changed its name to Energy Australia. In the discussion of submissions in chapter 2, we continue to refer to TRUenergy, as it was known at the time of the submissions.

1.4 Other relevant projects

In developing this options paper, we have considered the implications of other relevant projects that have recently been completed or are currently being undertaken by the AEMC and other bodies, including:

- the New Prudential Standard and Framework in the NEM rule change final determination made by the AEMC on 18 October 2012;⁴
- AEMO's recent Energy Market Prudential Readiness Review and current Credit Limit Procedures Consultation;⁵
- the Australian Treasury's recent consultation on the implementation of a framework for Australia's G20 over-the-counter (OTC) derivatives commitments,⁶ and the *Corporations Legislation Amendment (Derivative Transactions) Bill*, which will implement those commitments;
- ASIC's consultation on revised financial requirements for electricity derivative issuers;⁷ and
- the recent report on the Australian OTC derivatives market by the Australian Prudential Regulation Authority, ASIC and the Reserve Bank of Australia, which reviews the risk management practices of OTC market participants and discusses the results of a survey of market participants.⁸

We have also had regard to the role of the Energy Security Council (ESC). The ESC's functions include advising the Treasurer on systemic risks to energy security arising from the financial distress of an energy market participant.⁹

1.5 Next steps in the development of our advice

This paper will be followed by an interim report in early 2013. The interim report will set out the Commission's draft advice to SCER in relation to the risks of financial contagion following the financial distress of a large retailer, including any recommended new mechanisms to mitigate those risks.

⁴ See <http://www.aemc.gov.au/Electricity/Rule-changes/completed.html>.

⁵ See <http://www.aemo.com.au/Electricity/Settlements/Prudentials>.

⁶ See <http://www.treasury.gov.au/ConsultationsandReviews/Submissions/2012/Over-the-counter-derivatives-commitments-consultation-paper>.

⁷ See <http://www.asic.gov.au/asic/asic.nsf/byheadline/12-86MR+ASIC+consults+on+revised+financial+requirements+for+electricity+derivative+issuers?openDocument>.

⁸ Australian Prudential Regulation Authority, Australian Securities and Investments Commission and Reserve Bank of Australia, *Report on the Australian OTC Derivatives Market*, 30 October 2012. Available at <http://www.rba.gov.au/payments-system/clearing-settlement/otc-derivatives/201210-otc-der-mkt-rep-au/index.html>.

⁹ See the ESC's charter, which is available at <http://www.energysecuritycouncil.gov.au/content/Content.aspx?doc=charter/default.htm#ref1>.

In accordance with SCER's request for advice, 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.

This options paper presents the relevant options as stand-alone mechanisms. However, as explained in chapter 3, it is unlikely that any one option discussed in this 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). Accordingly, any response to manage those risks is likely to require a package or "toolkit" of several of the options in this paper.

As a result, if the Commission considers that any of the options in this paper (or any other options proposed in submissions) should be implemented, the interim report will also address how the recommended options would work together. This could involve several options being deployed together to provide a coordinated response to mitigate the risks associated with the financial distress of a large retailer. Alternatively, it could involve a toolkit of mechanisms that can be chosen from depending on the circumstances at the time, for example depending on the size of the failing retailer and the prevailing market conditions.

The Commission has not yet reached a view that any of the options in this paper should be implemented. It is possible that the interim report will conclude that the existing mechanisms to mitigate the risks are adequate, or that the risks of implementing any new mechanisms would outweigh their value in mitigating contagion. In that case, the Commission would not recommend the implementation of any new mechanisms in the interim report.

1.6 Responding to this paper

The Commission welcomes submissions on any of the issues raised in this options paper. In particular, we are interested in stakeholders' views on the following questions:

- Are there any other options that are not set out in this paper that the Commission should consider?
- In relation to each of the options discussed in this 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 in this paper 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 set out in this paper 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:

Australian Energy Market Commission
 PO Box A2449
 Sydney South NSW 1235

1.7 Structure of this paper

The remainder of this paper is structured as follows:

- Chapter 2 provides an overview of the risks of financial contagion following a large retailer failure and ROLR event. It also summarises submissions to the issues paper.
- Chapter 3 outlines the framework that we have used to develop the options, and the approach that we propose to use to assess the merits of the options when making draft recommendations in our interim report.
- Chapter 4 summarises the range of options that are considered in this paper.

- Chapter 5 describes options that involve amendments to the ROLR regimes with the objective of improving their ability to manage a large retailer failure.
- Chapter 6 describes options that seek to address potential financial contagion risks related to a designated ROLR's credit support obligations to AEMO and network businesses.
- Chapter 7 describes options that seek to address potential 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.
- Chapter 8 discusses options for a last resort government response
- Appendix A provides a summary of the retailer of last resort schemes that are adopted in several overseas jurisdictions. Our review of these international regimes has informed the development of some of the options.
- Appendix B provides an overview of existing state emergency powers and why we consider that they are unlikely to provide an optimal response to mitigate financial contagion risks associated with a retailer failure.

2 Overview of the risks of financial contagion following a large retailer failure

2.1 Summary of risks outlined in the issues paper

2.1.1 Overview of financial interdependencies between electricity businesses

Generators, retailers and other businesses that participate in the NEM have complex financial relationships with each other. These relationships primarily arise from the financial contracts that participants use to hedge their exposure to the spot price for electricity.

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. The spot price is calculated every 30 minutes and can be highly volatile – it can vary between \$12,900 and -\$1,000 per megawatt hour (MWh). An administered price cap of \$300/MWh limits the spot price during prolonged periods of high pricing.¹⁰

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.¹¹

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.

2.1.2 The nature and extent of financial contagion risks

Generators and retailers currently adopt a range of strategies to manage these risks, which are described in the issues paper. They are also subject to external risk management requirements, including Australian Financial Services licence requirements imposed by ASIC and requirements imposed by external parties such as brokers and exchange operators.

¹⁰ The administered price cap is explained in section 7.1.1.

¹¹ 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.

There have not been any major failures of retailers or generators in the NEM to date and the market has so far proven reasonably robust. Two small retailers have exited the retail market and triggered ROLR events, but those situations were managed by existing market mechanisms without causing financial contagion.

However, energy and financial markets around the world have been subject to periods of significant stress in recent years. In particular, the global financial crisis demonstrated the potential for high levels of financial interdependency to cause the financial difficulties of one market participant to be transmitted to other participants and cause financial contagion that threatens overall market efficiency. The potential for financial contagion in electricity markets, although on a lesser scale, 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 the need for substantial government intervention to avoid broader contagion.

The Commission considers that there is a low probability of financial contagion occurring in the NEM. However, the issues paper set out examples of potential scenarios where an unusual and unexpected series of events could lead to financial contagion that damages the achievement of the NEO. If such an event occurred, its impacts on the market and the long term interests of consumers would be severe.

Box 2.1: Financial contagion

Financial contagion occurs when the financial interdependencies between market participants act to transmit the financial effects of a negative and unmanageable event from one party to another.

The global financial crisis is a recent example of the emergence of contagion between participants in financial markets. The collapse of one entity caused the collapse of, or placed severe stress on, other entities by virtue of contractual or structural interdependencies between them.

In a market with extensive financial interdependencies, the contagion could emerge as a "cascading" effect as participants progressively encounter financial difficulties and potentially even collapse in response to the financial difficulties of their counterparties.

This project is concerned with the risk that financial contagion in the NEM could hinder the achievement of the NEO. For example, the potential results of financial contagion in the NEM could include intrusive regulatory intervention in markets, reduced competition, reduced investor confidence or threats to the security of electricity supply. Even if electricity continues to be supplied to consumers, they may face higher prices and less reliable supply if investment is deterred.

2.1.3 Financial contagion risks following a large retailer failure and ROLR event

The examples in the issues paper demonstrated that the financial contagion risks could potentially arise in the event of the failure of large retailer failure and ROLR event. In these examples, contagion would initially be spread as a result of a default by the failing participant on its hedge contracts. The operation of the ROLR regime would then spread contagion to additional participants.

A retailer could encounter significant financial difficulties due to a range of events. The issues paper set out examples of a large generation or transmission outage spreading contagion to retailers that are parties to derivative contracts with the affected generators. A retailer failure could also be caused by a variety of other factors such a failure to adequately hedge during a period of high spot prices,¹² fraud or poor financial practices,¹³ external funding constraints,¹⁴ or difficulties experienced by a retailer's parent company.¹⁵

The risks of a large retailer failure could be exacerbated by retail price regulation, which remains in place in most NEM jurisdictions. For example, the existence of regulated retail price caps was a key factor that led to the failure of two of the largest electricity suppliers during the California energy crisis.

Box 2.2: The retailer of last resort mechanism

The ROLR scheme is principally designed to ensure that, if retailer failure occurs, arrangements are in place to ensure that customers continue to receive electricity supply and money continues to flow from customers to retailers and from retailers to generators.

The ROLR mechanisms across the NEM were expected to be harmonised under the National Energy Customer Framework (NECF). However, to date the NECF has only been adopted in Tasmania and the ACT. As a result, the ROLR regimes vary between NEM jurisdictions.

The Commission's analysis has considered differences between the NECF and non-NECF ROLR regimes. Where relevant to the development of the options, this paper discusses material differences between the NECF and non-NECF ROLR regimes. Any recommendations developed by the Commission will be applicable to both NECF and non-NECF ROLR regimes.

For ease of reference, this paper uses the following NECF ROLR terms in relation

12 For example, a period of sustained high wholesale prices has contributed to the recent failure of several smaller retailers in Texas.

13 For example, the failure of Enron Australia in 2001.

14 For example, the "credit crunch" that was experienced during the global financial crisis.

15 For example, the issues paper discussed the failure of TXU Europe in 2002, which was contributed to by difficulties faced by its US parent company which withdrew financial support.

to both NECF and non-NECF ROLR regimes:

- *ROLR event*: the event that triggers the application of the ROLR mechanism and the transfer of the failing retailer's customers to the retailer of last resort, for example AEMO suspending the retailer from the NEM; and
- *designated ROLR*: the retailer that is appointed to act as the retailer of last resort following (or in anticipation of) a ROLR event.

The issues paper explained that the insolvency of a large retailer and associated ROLR event could potentially lead to financial contagion in the form of a "cascading retailer failure". The key factors leading to this risk are that following the ROLR event, the designated ROLR:

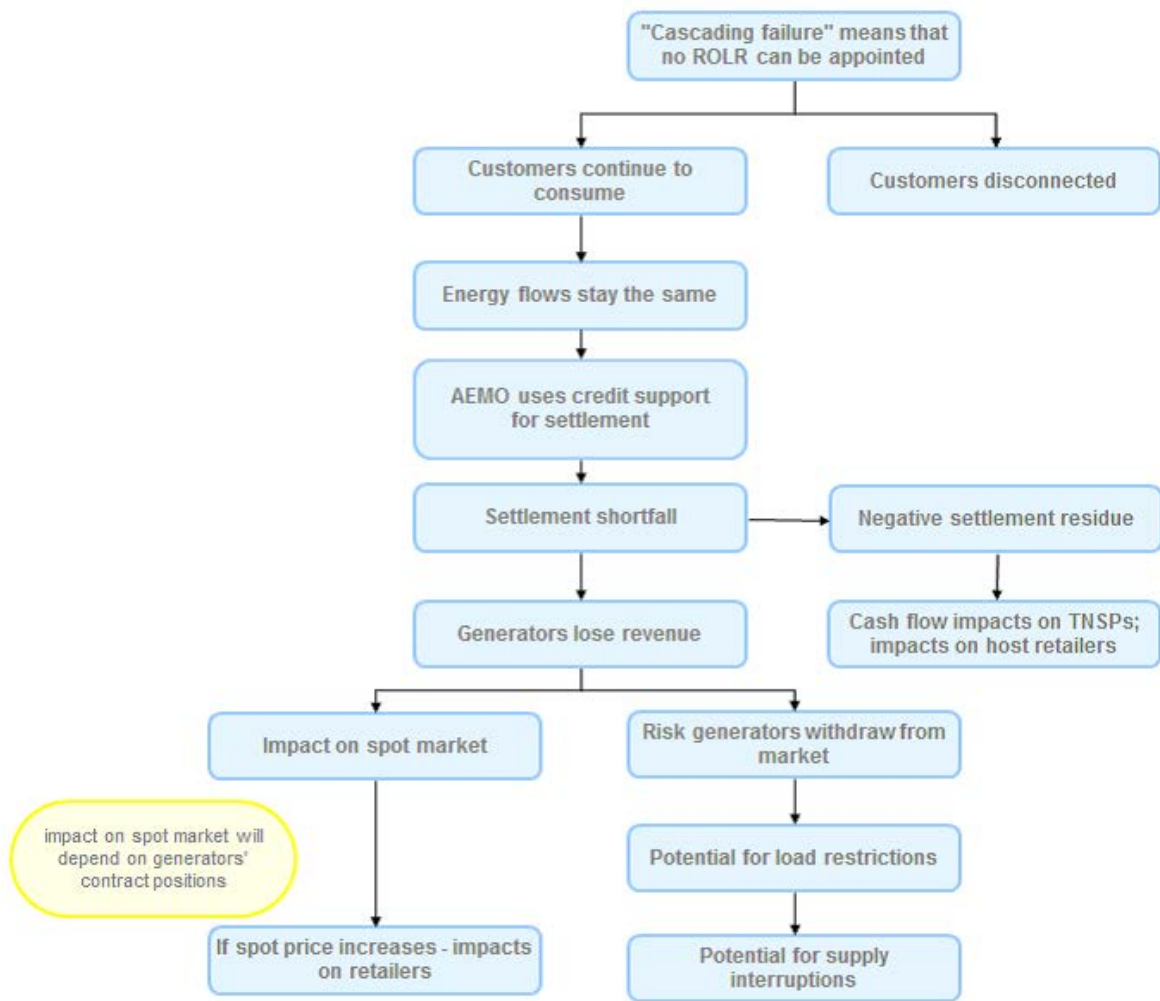
- will be required to provide increased credit support to AEMO to cover the potential spot market energy costs of the customers that it acquires from the failed retailer;
- may be required to provide increased credit support to distribution network service providers (DNSPs) to cover the network costs in relation to the acquired customers;
- will likely be unhedged in relation to the acquired customers and will need to obtain additional hedge cover or be exposed to the spot price for the load of the acquired customers;
- may face considerable increased wholesale energy costs, particularly given that a retailer failure may be most likely to occur at a time of high spot prices; and
- may be constrained in its ability to pass these increased costs on to customers due to retail price regulation or competitive pressures.

In combination, these additional obligations are likely to be very large and require the designated ROLR to access a large amount of funds and credit support in a very short period. Although the designated ROLR will be earning increased revenue from its new customers to offset its increased cash flow obligations, it is unlikely that it will be able to begin billing these customers immediately. As a result, there is a risk that the designated ROLR would not be able to meet these additional obligations.

If the designated ROLR is unable to meet its obligations, the designated ROLR itself may be suspended from the NEM. In a worst case scenario, this could trigger a "cascading retailer failure" as other retailers are then appointed as designated ROLRs and fail for the same reasons. In these circumstances, it is possible that there may be no one that can effectively perform the role of designated ROLR.

The potential financial contagion effects of a such situation are illustrated in the diagram below.

Figure 2.1 Potential effects of a cascading retailer failure



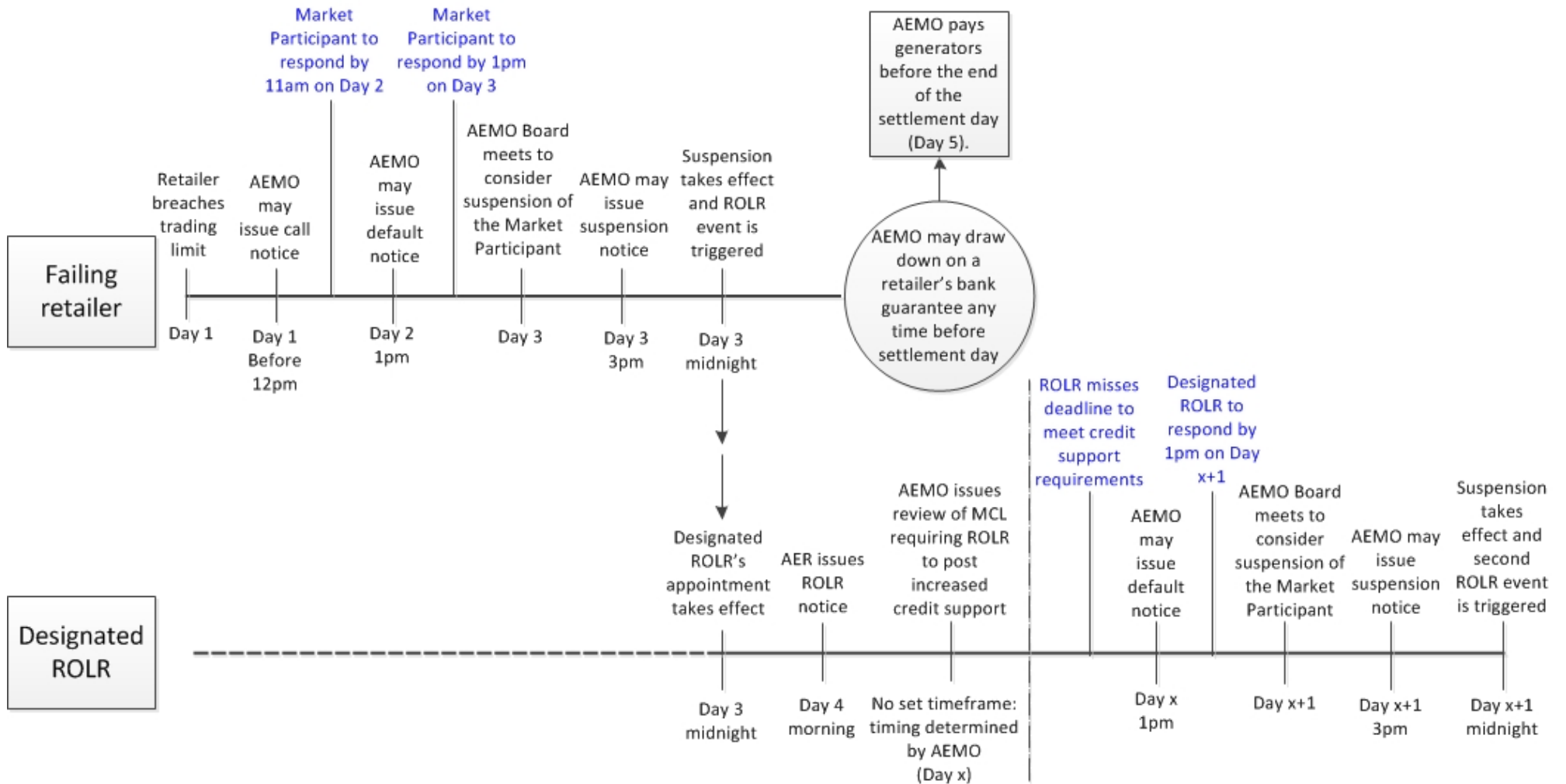
2.2 Retailer failure timeline

One factor that contributes to the financial contagion risks discussed above is the very tight timeframes that apply under the ROLR process and AEMO's credit support requirements.

These timeframes are illustrated in the timeline on the following page, with the key events explained further in box 2.1. This timeline is based on the NECF ROLR provisions.

This timeline shows a hypothetical example with approximate periods for each key step in a retailer suspension and ROLR process. AEMO has some discretion regarding the timing of some of these steps, and the applicable timeframes for some steps also vary depending on the circumstances. Accordingly, the timeframes for any particular retailer failure may differ from this example depending on the circumstances.

Figure 2.2 Indicative retailer failure and ROLR timeline



Box 2.3: Overview of the retailer failure example shown in the timeline

The timeline starts with the failing retailer breaching its trading limit with AEMO.¹⁶ If the failing retailer is unable to remedy this breach within the required timeframes, AEMO has the right to suspend it from the NEM, which would trigger a ROLR event. In this example, it is assumed that the default ROLR is appointed as the designated ROLR.¹⁷

Following the ROLR event, AEMO may recalculate the designated ROLR's required credit support as a result of its increased customer load. If the designated retailer is unable to provide that increased credit support within the required timeframe, AEMO has the right to suspend it from the NEM, which would trigger a second ROLR event. There is no set timeframe by which this increased credit support must be provided. The timeframe will be determined by AEMO depending on the specific circumstances.

The timeline also indicates the process for AEMO to call on the failed retailer's credit support if the failed retailer does not pay AEMO, and for AEMO to use that money to pay generators.¹⁸

Several of the options in this paper involve extending some of these timelines.

The current timeframes are primarily designed to limit generators' exposure to the risks of non-payment by retailers. AEMO collects spot market payments from retailers and pays them to generators. Accordingly, if retailers fail to pay AEMO then AEMO will be unable to pay generators the full amount that they are owed. If some of these timeframes were extended, generators would face a greater risk of short-payment.

Any extension to these timeframes may also impact retailers by requiring them to provide a higher amount of credit support to AEMO.¹⁹

¹⁶ In the diagram, it is assumed that the retailer breaches its trading limit on day 1 but does not fail to meet any settlement obligations to AEMO until day 5, after it is suspended from the NEM.

¹⁷ As discussed in chapter 5, the AER has powers to appoint another retailer as the designated ROLR, in which case it must do so prior to the ROLR event. If that power was exercised in this example, it would most likely occur on day 3.

¹⁸ AEMO will draw down on a retailer's bank guarantee if the retailer defaults on a settlement obligation. In this example it is assumed that the retailer ceases to pay AEMO once it has been suspended from the NEM and defaults on its settlement obligations on day 5. In addition, AEMO may draw down on a retailer's credit support at any time after the retailer fails to meet a call notice. AEMO will draw on the credit support in advance of the deadline for AEMO to pay generators, which in this example is the end of the settlement day (day 5), to ensure that generators are not short paid.

¹⁹ Higher credit support requirements could be avoided if the credit support requirements were also amended, which would result in generators facing a greater risk of short-payment.

2.3 Summary of submissions on the issues paper

The Commission received 14 submissions on the issues paper from a range of stakeholders, including market participants, the Australian Financial Markets Association (AFMA), the AER, the Victorian Department of Primary Industries (Victorian DPI), d-cypha Trade and two private individuals. Submissions are available at www.aemc.gov.au.

Key issues raised in submissions are summarised below.

2.3.1 The Commission's proposed approach and initial focus on the financial distress of a large retailer and the ROLR mechanism

Market participants generally supported the proposed approach set out in the issues paper and the Commission's initial focus on risks related to financial distress in large retailers and an associated ROLR event.

The National Generators Forum (NGF), Energy Supply Association of Australia (ESAA), the Private Generators,²⁰ Alinta Energy and Origin Energy supported the Commission's focus on the ROLR provisions and considered that the ROLR arrangements could cause or exacerbate contagion risks.

However, Simply Energy submitted that the failure of a large retailer may not require regulatory intervention and amending the ROLR provisions may detract from market-based solutions because it can increase regulatory uncertainty and undermine investor confidence in purchasing the failing assets.²¹

The AER considered that there is merit in exploring arrangements to support or supplant the ROLR processes in the event of a large retailer failure, due to the risks that the current ROLR arrangements may not be effective for a large retailer and could lead to a cascading retailer failure.²²

The Victorian DPI supported the Commission assessing the effectiveness of the ROLR regime. However, it proposed that the Commission should also consider a broad range of risks, including risks that arise in broader financial markets, and undertake an extended analysis of overseas electricity failures.

The Victorian DPI submitted that the Commission should progress through the following series of questions in developing its advice:²³

- undertake a comprehensive evidence-based appraisal of the level of risk and potential consequences;

²⁰ AGL Energy, Alinta Energy, Energy Brix, Intergen, International Power GDF Suez, NRG Gladstone, Origin Energy and TRUenergy.

²¹ Simply Energy submission, pp1-2.

²² AER submission, p3.

²³ Victorian DPI submission, pp2-3.

- assess the adequacy of existing mechanisms;
- if the existing mechanisms are inadequate, consider ways to strengthen market discipline; and
- consider mechanisms to ensure minimal supply interruptions, to be used as a last resort.

2.3.2 The resilience of the market and magnitude of financial contagion risks

All market participants and AFMA agreed with the Commission's initial view that the financial relationships and markets that underpin the efficient operation of the NEM are generally robust.

The NGF, ESAA, the Private Generators, Origin Energy, TRUenergy, Stanwell and AFMA considered that market participants' existing risk management strategies and existing regulatory mechanisms are sufficient to manage the risks of financial contagion.

Simply Energy considered that the risk of a large retailer failing is a very low probability event and that the regulatory response needs to be commensurate with that very low risk.²⁴

Stanwell and the Private Generators noted that the NEM has experienced a number of significant events that have affected individual generators and retailers but have not resulted in broader systemic issues for the market.²⁵ They provided examples of the impacts on generators of the 2006-2008 drought, and the collapse of Enron in 2001, neither of which caused financial contagion.²⁶

The NGF considered that the generator outage examples discussed in the issues paper would only lead to a significant risk of contagion if a large number of factors are present simultaneously or in quick succession, and that it is difficult to envisage a situation where that could occur. Accordingly, the NGF considered that the financial contagion risks that could arise as a result of a generator failure are small and should not be the focus of the AEMC's advice.²⁷

Alinta Energy noted that moves by jurisdictional regulators to reduce the wholesale component of regulated retail prices and general uncertainty regarding State-based regulatory processes could potentially give rise to risks for generators that could lead to a cascading default.²⁸ TRUenergy and the ESAA considered that regulated retail

²⁴ Simply Energy submission, p1.

²⁵ Stanwell submission, pp3-4. Private Generators submission, p1.

²⁶ Stanwell submission, pp3-4. AFMA submission, pp1-2.

²⁷ NGF submission, p4.

²⁸ Alinta Energy submission, p3.

prices could cause contagion risks where a designated ROLR acquires customers in a jurisdiction where the regulated prices do not adequately reflect its costs.²⁹

The AER considered that the ROLR arrangements would likely be effective in the event of a small or medium retailer failure without causing a cascading failure. But the AER considered that this may not be the case in the event of a large retailer failure. The AER submitted that although the chances of a large retailer failure may be low, the consequences of a cascading retailer failure and the impacts on market structure are very serious.³⁰

D-cypha Trade and Lorne Franks disagreed with the Commission's initial views in the issues paper that:

- the financial relationships and markets that underpin the efficient operation of the NEM are generally robust; and
- there is a low likelihood of financial contagion in the NEM.³¹

D-cypha Trade submitted that:

- in the absence of daily margins, the internal risk management policies adopted by market participants are recognised by financial regulators to be inadequate;
- similar risk management practices adopted by banks were ineffective during the global financial crisis;
- credit default risks are exacerbated by the high degree of counterparty concentration in electricity over-the-counter (OTC) derivatives trading; and
- credit default risks between electricity market participants are considerable and contagion could be triggered by any one of numerous potential events.

Lorne Franks submitted that:

- the risks caused by OTC derivatives are widely recognised by financial regulators and justify greater regulation to avoid the need for a government bailout in the event of derivatives defaults causing financial contagion;
- NEM participants do not have sufficiently robust internal risk management policies to protect against systemic risks linked to OTC derivatives trading, for example due to not holding collateral to cover counterparty credit risk and by over-reliance on reported credit ratings;
- many of the risk management practices that exist in other derivatives markets are not present in the NEM;

²⁹ TRUenergy submission, p1. ESAA submission, p2.

³⁰ AER submission, p3.

³¹ D-cypha Trade submission, p1. Lorne Franks submission, pp5-6.

- there has recently been a large increase in the volume of electricity derivatives trading and the sheer volume of trading increases systemic risks; and
- derivatives can also contribute to systemic risks due to excessive speculation, fraud or market manipulation.

2.3.3 Proposed options

Market participants considered that the Commission should consider the following issues related to the ROLR mechanism and credit support requirements when developing potential measures to mitigate the risks of a large retailer failure:

- Alinta Energy, TRUenergy and the ESAA considered that the Commission should consider credit support requirements, which would contribute to a retailer failure.³²
- The NGF, ESAA and TRUenergy submitted that the AEMC should consider amendments to the ROLR cost recovery provisions.³³
- The NGF considered that there would be merit in the AER developing a pre-determined methodology to allocate the customers of a large retailer to the remaining retailers in the applicable region in the case of a ROLR event of a large retailer.³⁴
- The NGF considered the AER's ability to appoint a designated ROLR without its consent could contribute to contagion risks.³⁵ Don Burttt also made a similar comment, and proposed appointing the designated ROLR through a tender process.³⁶
- TRUenergy submitted that the timeframes in the ROLR arrangements, and associated timeframes for the designated ROLR to provide credit support and pay network charges, were not sufficiently flexible to manage a large retailer failure and should be relaxed to mitigate the risks of a cascading retailer failure.³⁷

However, apart from issues related to the ROLR regime and credit support requirements, market participants submitted that other regulatory interventions were not justified.

³² Alinta Energy submission, p3. TRUenergy submission, pp4-5. ESAA submission, p2.

³³ NGF submission, p3. ESAA submission, p2. TRUenergy submission, p4.

³⁴ NGF submission, p3.

³⁵ NGF submission, p3.

³⁶ Don Burttt submission, p6.

³⁷ TRUenergy submission, p5. TRUenergy's submission encouraged the AEMC to consider these issues as part of the New Prudential Standard and Framework in the NEM rule change request (see <http://www.aemc.gov.au/Electricity/Rule-changes/Open/new-prudential-standard-and-framew>)

The AER considered that it is generally very difficult to monitor or predict retailer failure. As a result, the AER submitted that the Commission should focus on contingency measures for a large retailer failure, rather than preventative or monitoring measures. However, the AER noted that there may be merit in exploring possible processes or frameworks for monitoring the adequacy of participants' governance and risk management structures and considering whether there is a role for some limited form of prudential supervision.³⁸

The AER proposed that the Commission consider a range of options, including:³⁹

- further emergency powers for governments and the role of the Energy Security Council in the context of the ROLR regime;
- emergency wholesale spot market price caps;
- emergency arrangements to support hedging following a large retailer failure;
- industry funded insurance schemes; and
- whether the ROLR regime is the appropriate response mechanism for a large retailer failure.

The Victorian DPI submitted that the AEMC should apply the following principles when developing any response mechanisms:⁴⁰

- risk mitigation options should be proportionate to the risks;
- the beneficiaries of risk mitigation measures should pay for them;
- governments should not assume commercial risks that can be addressed through the market, except where governments create those risks, for example through retail price regulation;
- any government intervention should be short-term and last resort;
- the greater financial resources of the Australian Government and its vertical fiscal imbalance with State and Territory Governments should be acknowledged in allocating any last resort role for government intervention.

G20 OTC derivatives commitments

D-cypha Trade and Lorne Franks submitted that the most appropriate solution to mitigate the risks of financial contagion was to implement the G20 OTC derivatives

ork-in-the-nem.html). However, the AEMC considers that these issues are outside of the scope of that rule change process.

38 AER submission, p4.

39 AER submission, p4.

40 Victorian DPI submission, p3.

commitments.⁴¹ Don Burt also supported implementing those commitments to improve the transparency of derivatives transactions.⁴²

The G20 OTC commitments are that:⁴³

“All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements.”

Submissions from the ESAA and TRUenergy opposed the application of the G20 OTC commitments to the electricity sector.

Responsibility for decisions related to implementation of the G20 OTC commitments resides with the Australian Treasury, who recently sought submissions on a Consultation Paper in relation to the framework for implementing those commitments.⁴⁴ Many electricity participants made submissions to this consultation process, opposing its application to the electricity sector.⁴⁵

The Australian Treasury also recently released for consultation an exposure draft of the legislation to implement the G20 OTC commitments. The *Corporations Legislation Amendment (Derivative Transactions) Bill 2012* (Cth) has been considered by the Parliamentary Joint Committee on Corporations and Financial Services, which published its report on 11 October 2012.⁴⁶ A number of electricity market participants made submissions to both of these processes.

Given that legislation has been introduced in relation to implementation of the G20 commitments and that legislation contains a clear process for the relevant Minister and ASIC to determine whether and how to apply those commitments to electricity derivatives, the Commission does not consider that issues related to the G20 OTC commitments are within the scope of this paper. Accordingly, the options in this paper do not include any options related to implementing the G20 OTC commitments.

41 D-cypha Trade submission, p8. Lorne Franks submission, pp32-35.

42 Don Burt submission, p4.

43 2009 Pittsburgh G20 summit Leaders Declaration - available at: <http://www.g20.utoronto.ca/2009/2009communique0925.html>. This commitment was recently reaffirmed at the 2012 Mexico G20 summit.

44 Treasury, *Implementation of a framework for Australia's G20 over-the-counter derivatives commitments, Consultation Paper*, April 2012, available at: <http://www.treasury.gov.au/ConsultationsandReviews/Submissions/2012/Over-the-counter-derivatives-commitments-consultation-paper>.

45 Submissions are available at <http://www.treasury.gov.au/ConsultationsandReviews/Submissions/2012/Over-the-counter-derivatives-commitments-consultation-paper>.

46 See http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Committees?url=corporations_ctte/derivatives/index.htm.

3 Framework for developing and assessing the options

3.1 How we developed the options set out in this paper

The options in this paper have been developed to address the potential causes of contagion risk following financial distress in a large retailer. 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. If the designated ROLR is unable to meet those liabilities within the relevant timeframes, there is a significant risk that the designated ROLR could also fail and trigger a cascading failure as discussed in chapter 2.

Each of the options therefore seeks to directly or indirectly address one or both of the following issues:

- the increased costs that will be imposed on the designated ROLR in the period immediately following a ROLR event, in particular increased wholesale costs in relation to the customers that it acquires, including the risks that:
 - spot prices could be high following a ROLR event;
 - the designated ROLR will initially not have hedge cover in relation to the acquired customers to manage the risks of high spot prices; and
 - retail price regulation, competitive pressures and delays in billing and receiving payments from customers are likely to limit the designated ROLR's ability to recover these increased costs from the acquired customers, at least in the short term;
- the increased credit support that the designated ROLR will be required to provide to AEMO and DNSPs in relation to the customers that it acquires, and the relatively short timeframes in which that credit support is required to be provided.

The options are summarised in chapter 4 and each option is described in more detail in chapters 5 to 8.

Any response to the risks caused by the financial distress of a large retailer will involve costs. The costs and potential disadvantages associated with each of the options are explained in the relevant chapter.

Due to the number of options discussed in this paper, we have kept the description of each option reasonably brief and have not explored in detail all the issues regarding how each option could be implemented. In the interim report, we will develop in more detail any options that we recommend.

Where the options involve amendments to the ROLR schemes, those amendments are equally applicable to both the NECF ROLR provisions (which currently only apply in

Tasmania and the ACT) and the jurisdictional ROLR schemes in other NEM jurisdictions. A similar comment applies to options that address DNSP credit support obligations, which are now regulated by the National Electricity Rules (NER) in jurisdictions that have adopted the NECF. Any relevant differences between the arrangements in NECF and non-NECF jurisdictions are discussed in the descriptions of the relevant options in chapters 5 to 8.

We welcome submissions on any other options that should be considered, or any alternative ways of implementing the options that would improve their ability to mitigate contagion or reduce their costs.

3.1.1 A combination of options may be required

In the report that they prepared for the Ministerial Council on Energy retail policy working group in 2009 in relation to the development of the NECF ROLR scheme, NERA Economic Consulting and Allens Arthur Robinson stated:⁴⁷

“The issue of a large retailer failure appears to be one in which there is no simple answer. We note that none of the jurisdictions we have reviewed (including the UK) have comprehensive arrangements in place to address a large retailer failure.”

We agree with this view and consider that it is unlikely that any single mechanism could fully address the range of contagion risks that could arise following a large retailer failure. A comprehensive response to contagion risks is therefore likely to require a combination of several mechanisms, potentially including both existing market and regulatory risk management mechanisms and some of the options for new mechanisms discussed in this paper.

It is also likely to be desirable that a spectrum of mechanisms are available to manage the different nature and extent of contagion risks that can arise. For example, the extent of the risks will vary depending on the size of the failing retailer and the market conditions at the time, in particular whether the failure occurs during a period of high spot prices.

Most of the options in this paper only seek to address one of the causes of contagion risk discussed above. Accordingly, if the Commission considers that current market and regulatory risk management mechanisms are insufficient to adequately mitigate each of the key contagion risks, an effective regulatory response is likely to require a combination of two or more options.

We consider that mechanisms that operate within the market frameworks are generally preferable to an undefined government response or reliance on existing emergency provisions that were not designed with financial contagion issues in mind.⁴⁸

⁴⁷ NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group*, 29 January 2009, p66.

The existing market and regulatory risk management mechanisms and the options for new market-based mechanisms set out in chapters 5 to 7 would be likely to significantly mitigate the risks of financial contagion in most circumstances where a large retailer encounters significant financial difficulties. However, they would not remove all risks of contagion and could potentially prove insufficient for some situations, for example a failure of one of the largest retailers during a period of high spot prices. Accordingly, the "spectrum of mechanisms" referred to above may need to include some last resort role for governments. Any such role should be reserved for those few situations where market-based mechanisms may be inadequate.

However, before recommending any new mechanisms that involve a role for government, we would need to consider any negative impacts of the option, including moral hazard risks and the potential impacts on the efficient functioning of the wholesale and retail markets.

3.1.2 "Large" retailer failure

The focus of the options in this paper is the financial distress of a large electricity retailer, because that is the scenario that creates the greatest risk of financial contagion.

We consider that the existing market and regulatory mechanisms are likely to be sufficient to appropriately manage the failure of a small retailer without a material risk of financial contagion. Accordingly, the options in this paper are not aimed at failures of smaller retailers. However, several of the proposed options could also have efficiency benefits for small and medium retailer failures, for example by facilitating a more efficient allocation of customers to multiple designated ROLRs.

We have not attempted to quantify the number of customers or size of load required to constitute a "large" retailer whose financial distress could raise material contagion risks. However, our focus extends beyond just the three largest retailers in the NEM.

The extent of contagion risks depends on a range of factors other than the number of customers that a retailer has, such as the type and size of the customers, the geographic spread of the customers, and the prevailing wholesale market conditions. For example, the failure of a retailer with 500,000 customers mainly in one NEM region that occurred at a time of high spot prices may create greater contagion risks than the failure of a retailer with 800,000 customers spread across all NEM regions that occurred during a period of average prices.

We welcome submissions on whether it is appropriate to define a threshold size at which the financial distress of a retailer raises material financial contagion risks, eg X customers or X per cent of the load in a NEM region, and at what level such a threshold should be set. Several of the options in chapters 5 to 8 discuss the possibility that some of the options would only be applied to retailers over a certain threshold size.

⁴⁸ Existing jurisdictional step-in and emergency powers are described in Appendix B.

3.1.3 Application of ROLR regimes to a large retailer failure

Our options that involve amendments to the ROLR regimes are directed at improving the ability of those regimes to manage a large retailer failure and reducing the risks of contagion. A comprehensive review of other aspects of the ROLR regimes, such as operational issues, is not within the scope of our advice. However, we welcome submissions on other issues related to the ROLR regimes if they affect the nature or extent of the risks acquired by the designated ROLR following a large retailer failure.

We also invite submissions on whether there are broader issues with the suitability of any form of ROLR regime to manage the failure of one of the largest retailers. We have proposed options in chapter 5 that seek to improve the ability of the ROLR regimes to respond to a large retailer failure. Are those amendments likely to be sufficient to allow the ROLR regimes to manage a large retailer failure, or is an alternative to ROLR required for the largest retailers?

As discussed in section 8.3, the UK Government is currently implementing a special administration regime for electricity retailers, largely because it has concluded that its supplier of last resort regime will not be effective if one of the "big 6" UK electricity retailers fails. Is a similar alternative to the ROLR regimes necessary as an option to manage the failure of one of the largest retailers in the NEM?

3.2 Framework for assessing the options

In accordance with SCER's request for advice, our interim report will provide draft advice to SCER 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.

Accordingly, we will only recommend the implementation of any of the options discussed in this paper if we consider that the existing market and regulatory risk management mechanisms are inadequate to appropriately mitigate the risks of financial contagion and the consequences of any such contagion.

We will also only recommend new regulatory mechanisms to strengthen, enhance or supplement the existing mechanisms if we consider that additional mitigation of contagion risks is justified taking into account the likely impacts of those new

mechanisms. As noted by the Victorian DPI in its submission, any regulatory response should be proportionate to the risks and the severity of the potential consequences.⁴⁹

⁴⁹ Victorian DPI submission, p3.

4 Summary of options for mitigating financial contagion risks following the financial distress of a large retailer

4.1 Structure of options chapters

The remaining chapters of this paper discuss each of the options.

We have grouped the options as follows:

- Chapter 5: options that involve amendments to the ROLR regimes with the objective of improving their ability to manage a large retailer failure.
- Chapter 6: options that seek to address financial contagion risks related to the designated ROLR's credit support obligations to AEMO and DNSPs.
- Chapter 7: 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.
- Chapter 8: options for a last resort government response.

Each chapter explains the options using the following structure:

- a summary box providing a 1-2 sentence summary of the option;
- a more detailed description of the option, including for some of the options a discussion of different ways in which the option could be implemented and an explanation of any precedents for a mechanism of this nature;
- an analysis of how implementation of the option is likely to mitigate financial contagion risks following the financial distress of a large retailer; and
- an exploration of the potential costs and other disadvantages of the option.

4.2 Risk allocation

The chapters also discuss how each option allocates the risks and costs of a ROLR event following a large retailer failure.

Current allocation of risks

Currently, most risks and costs related to a ROLR event are allocated to the retailer that is appointed as the designated ROLR.

Many of the existing regulatory arrangements are designed to limit the risks that are borne by other market participants if a retailer fails. For example, the AEMO credit support provisions in the NER limit generators' credit default risks arising through the

pool (but not credit default risks under hedge contracts).⁵⁰ DNSP credit support provisions serve the same purpose in relation to network businesses.

A limited amount of risk is currently borne by customers, with some costs being directly passed on to customers following a ROLR event. For example, the customers that are transferred to the designated ROLR may be required to pay an administration charge, and other costs may be recovered from all customers in the relevant NEM jurisdiction under the ROLR cost recovery provisions.⁵¹ However, regulatory arrangements limit the amount of costs that can be recovered in this way.

At present, little risks or costs are allocated to generators, retailers other than the designated ROLR, network businesses or governments, except for the risks that they could each bear in the event of financial contagion and a cascading retailer failure as discussed in chapter 2. If that occurred, each of those parties could bear significant risks and potentially incur considerable costs.

The current risk allocation position has some efficiency benefits. For example, the NEM was designed to allocate only a small amount of spot market credit default risk to generators so that generators would not be required to attempt to increase their spot market offer prices to incorporate an allowance for that risk. If more credit default risk was allocated to generators, wholesale prices may increase. Similarly, if more credit default risk was allocated to DNSPs, changes may be required to DNSPs' regulated weighted average cost of capital to reflect this increased risk, which would increase network charges.

Each of the options involves changes to risk allocation

All of the options in this paper involve some degree of reallocation of risks and costs so that they are shared with parties that currently bear less risks, in return reducing the extent of risks borne by the designated ROLR.

Changes to the way that risks are currently allocated could reduce the risks of financial contagion. A better understanding of the nature and extent of the risks and how they can be managed may also have benefits in mitigating contagion risks even without any changes to how those risks are allocated.

However, any changes to the allocation of risks could also create new risks and problems. For example, transferring risks from retailers to generators could decrease the risk of a cascading retailer failure but create an increased risk of spreading financial contagion to generators.

⁵⁰ The amount of AEMO credit support is set so that generators bear some risk of non-payment by retailers, but most risk is removed by the credit support obligations. The AEMC is currently considering a rule change proposal to define the level of risk based on a 2 per cent probability of loss given default, ie a 2 per cent probability that if there is a default it will cause a shortfall in payments to generators. See section 6.1.1 of this paper for more details. Generators also currently bear risks in relation to non-payment by retailers under hedge agreements.

⁵¹ See section 5.1 for more details regarding the current ROLR cost recovery arrangements.

A key question that we will address in the interim report is who is best placed to manage the relevant risks. If participants bear the risks, they will have an incentive to minimise those risks. However, some participants are likely to have a greater ability to mitigate risks than others.

Most consumers will have little or no ability to mitigate contagion risks, particularly in relation to the failure of a large retailer. It is reasonable for consumers to assume that all large retailers adopt prudent risk management strategies, and consumers are unlikely to know whether one large retailer is at a greater risk of failing than another large retailer. A large retailer could fail for a variety of reasons, most of which could not be foreseen or protected against by consumers. Accordingly, we consider that customers have limited ability to manage the risks of a large retailer failure.

The table in section 4.3 summarises the options and the key impacts on risk allocation under each option. As shown in the table, many of the options share some risks with, or impose additional costs on, market participants. Where that occurs, it is likely that the additional costs imposed on participants, including the costs of managing any additional risks that are imposed on them, will be partly passed on to consumers through increased charges.

4.3 Summary of the options

Chapter 5: Options involving amendments to the ROLR regimes					
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	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	The NEM suspension provisions would be amended to delay the triggering of a ROLR event	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

Chapter 6: Options to address the designated ROLR's credit support obligations					
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		
Chapter 7: Options to address the designated ROLR's increased costs					
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 a "transitional ROLR tariff" (which would be calculated 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

Chapter 8: Options for a last resort government response			
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 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 this 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

In general, these options are not mutually exclusive and it is not a case of just picking the single best option. As discussed in chapter 3, a comprehensive solution to the risks of the financial distress of a large retailer may involve adopting several of these options.

However, some of the options within a chapter are alternatives for other options in that chapter and it would not be appropriate to implement all of the options. In particular:

- amending the ROLR event triggers (section 5.4) and delayed designation of ROLRs (section 5.5) are alternatives;
- the spot market price cap (section 7.1) and the initial period where the designated ROLR passes through retail prices (section 7.2) are alternatives;
- the delayed settlement period for the designated ROLR to pay AEMO (section 7.3) may be an alternative to both the spot market price cap (section 7.1) and the initial period where the designated ROLR passes through retail prices (section 7.2); and
- depending on how the fund was designed, the industry co-insurance fund (section 7.5) could be an alternative for all of the other options in chapter 7.

5 Options to improve the ROLR regimes

5.1 Revised cost recovery arrangements

Box 5.1: Overview of this option

The existing ROLR cost recovery provisions could be expanded and clarified to give the designated ROLR greater certainty that it can quickly recover all reasonable costs associated with a ROLR event.

5.1.1 Description of this option

Overview of existing ROLR cost recovery arrangements

The ROLR regimes in each NEM jurisdiction currently contain a cost recovery arrangement under which the designated ROLR may apply to recover some of the costs that it incurs as a result of its designation. However, the cost recovery arrangements differ significantly between jurisdictions, which creates considerable complexity.

There are three general ways that ROLR costs are recovered under the different regimes:

- an upfront fee paid by acquired customers;
- a variation to the retail tariffs paid by the acquired customers; or
- through distribution network charges payable by all customers in the relevant distribution area or areas.

The NECF ROLR cost recovery arrangements allow for all three types, but each of the non-NECF regimes only allow for one of these options.

Cost recovery is primarily an issue in relation to small customers that are subject to retail price regulation. Designated ROLRs are generally free to set cost-reflective charges for large customers. In most circumstances, they should be able to recover their costs in relation to large customers through retail charges without any explicit cost recovery mechanism.⁵²

⁵² For example, under the NECF ROLR regime, the charges for large customers (business customers that consume more than 100 MWh per year) are those published by the designated ROLR on its website, and the only requirement is that they must be "fair and reasonable" - see section 146(3) of the National Energy Retail Law.

Box 5.2: NECF ROLR cost recovery arrangements

Under the National Energy Retail Law (NERL), a designated ROLR may apply to the AER to recover costs that it incurs on or after a ROLR event.⁵³ The NERL does not provide guidance as to what costs are recoverable, except that they may include costs paid to an insolvency official of a failed retailer in respect of anything done under the NERL and costs paid to a distributor for service orders and which are not recoverable through other means.⁵⁴ A default ROLR may also apply to the AER to recover costs incurred in preparing for ROLR events.⁵⁵

Upon receipt of an application, the AER must determine a "ROLR cost recovery scheme". In doing so, the AER may "limit either generally or in particular cases or classes of cases the costs (and the amount of those costs) that are recoverable".⁵⁶

The AER must be guided by the following principles when making its decision:⁵⁷

- the designated ROLR should be provided with a reasonable opportunity to recover the reasonable costs that it incurs;
- the recovery of costs should allow for a return commensurate with the regulatory and commercial risks with respect to the ROLR scheme; and
- the designated ROLR will itself bear some of the costs, in proportion to its customer base.

If the AER approves the cost recovery application, a designated ROLR may recover its costs either from the customers it acquired from the failed retailer or from a broader group of customers in accordance with a "distributor payment determination" made by the AER.⁵⁸

Under a distributor payment determination:

- one or more DNSPs must pay the amount determined by the AER to the

53 NERL, section 166. Applications must be made within nine months of the relevant ROLR event.

54 NERL, section 166(3)(b).

55 NERL, section 166(3)(a). Preparation costs incurred by a default ROLR do not create a significant contagion risk so are not addressed in the remainder of this section.

56 NERL, section 166(8). However, the AER has stated that limits of this nature will generally not be imposed - see AER, *Retailer of last resort statement of approach*, November 2011, p19.

57 NERL, section 166(7).

58 As explained below, the AER will determine which costs are to be recovered through which mechanism.

designated ROLR; and

- the costs incurred by the DNSP(s) are passed through to all customers in the DNSP's area.⁵⁹

The AER has published a retailer of last resort statement of approach, which provides some guidance as to how it will assess cost recovery applications.⁶⁰

In this statement of approach, the AER sets out its general principles for cost recovery scheme determinations and non-binding hypothetical examples of how the AER may exercise its powers. Key points that are made in the statement of approach include:

- To assess whether the costs incurred by a designated ROLR are reasonable, the AER will assess whether the actions of the designated ROLR have been prudent and minimised its costs.
- The statement of approach does not list the types of costs, or provide examples of relevant costs, that may be recovered by designated ROLRs.
- Cost recovery could occur through any one or more of the following mechanisms depending upon the nature of the retailer failure and the type of costs incurred:
 - an upfront fee paid by customers of the failed retailer;
 - a variation to the retail tariffs paid by small customers of the failed retailer;⁶¹
 - a distributor payment determination.
- In the event of a small retailer failure that is unlikely to threaten market security, the AER provides examples that involve the use of an upfront fee that only recovers administrative costs. The AER also raises the possibility that in some scenarios, some of the costs could be recovered from small customers of the failed retailer through a retail tariff variation.
- In the event of a large retailer failure, the AER may opt for the entire cost

⁵⁹ See section 167 of the NERL. Section 167(2) provides that a distributor payment determination is taken to be both a regulatory change event and a positive change event for the purposes of the NER. This means that the DNSP's regulated revenues and prices will be increased by the amount of the ROLR cost recovery payments without a need for any additional regulatory processes. Those increased DNSP charges will be payable by all retailers with customers in the DNSP's area. Retailers will seek to pass those increased charges on to consumers.

⁶⁰ AER, *Retailer of last resort statement of approach*, November 2011.

⁶¹ Under section 145 of the NERL, the prices applicable to small customers of the failed retailer are the designated ROLR's standing offer prices, subject to any variations made by the AER under the cost recovery scheme. Any variations to prices under this power only last for a maximum period of three months - see section 147(4) of the NERL.

recovery to be managed through a distributor payment determination in order to spread the costs across a wide customer base to minimise the impact of the ROLR event on all market participants.

The ROLR cost recovery arrangements under jurisdictions that have not adopted the NECF are summarised in the following table.⁶²

Table 5.1 Summary of non-NECF cost recovery arrangements

	QLD	NSW	VIC	SA
What costs can be claimed?	Any costs incurred because a ROLR event has happened, including (i) incremental administration costs and (ii) incremental energy costs (including hedging costs) for small customers that are not included in notified prices	No separate cost recovery claims process – some costs recovered through charges to acquired customers	No separate cost recovery claims process – estimated costs recovered through charges to acquired customers	Any costs incurred by ETSA due to a ROLR event, including establishment costs, energy costs and retail operating costs
Who determines claims?	Queensland Competition Authority	NA - Minister approves one-off fee	NA - Essential Services Commission set a one-off fee	ETSA Utilities may apply to the AER for a pass through amount under its distribution determination
How are costs recovered?	Recovered from all customers through distribution charges	Retailers charge all acquired customers a fee not exceeding \$50	Retailers charge all acquired customers a \$65 fee	Recovered from all customers through distribution charges

As noted in the table, some jurisdictions provide for costs to be recovered from the acquired customers rather than through a separate cost recovery claims system.

Small customers are generally required to be charged the usual regulated or market tariffs. In some jurisdictions, small customers are also charged a one-off fee to at least partly recover the designated ROLR's costs. In Victoria, the Essential Services Commission determined in 2008 that small customers would be charged a one-off supply fee of \$65. This fee was based on modelling and analysis of the additional

⁶² This table is based on NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group, 29 January 2009, updated where necessary.*

wholesale and retail costs likely to be incurred by the designated ROLR under various scenarios.⁶³ In NSW, the fee is capped at \$50 by regulations.

Most jurisdictions also expect the designated ROLR to recover costs directly from large customers. For example, in NSW, the tariffs that the designated ROLR may charge non-small customers must not exceed the greater of:

- the total of the spot price plus a margin of 10 per cent or \$20 per MWh (whichever is less), network charges, costs of network losses, AEMO charges, metering service charges and any other charges approved by the Minister;
- the retailer's published charges for the supply of electricity to customers other than small retail customers.⁶⁴

Potential limitations of the current cost recovery schemes

Under the current ROLR regimes, there is uncertainty about what costs the designated ROLR can recover, and a risk that it will not be able to recover all of its efficient costs.

Under the NECF regime, the designated ROLR may potentially be able to recover all of its efficient costs. However, the NERL provides little certainty as to what costs are recoverable. Instead, the AER is given a very broad discretion.

Some of the NERL provisions may also undermine the confidence of the designated ROLR that it can recover all of its efficient costs. In particular, the NERL:

- allows the AER to "limit either generally or in particular cases or classes of cases the costs (and the amount of those costs) that are recoverable",⁶⁵ although as noted above the AER has stated that it is unlikely to exercise this power; and
- states the principle, which the AER must follow, that the designated ROLR will itself bear some of the costs, in proportion to its customer base.⁶⁶

The NERL also does not provide any guidance as to what costs can be recovered, for example additional energy costs in relation to the acquired customers.

In the non-NECF regimes, the extent of costs that can be recovered varies significantly. The regimes in Queensland and South Australia provide for a relatively broad right to submit a cost recovery claim. However, they provide limited certainty as to what costs can be claimed, although the Queensland scheme provides the most guidance of all of the regimes.

⁶³ NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group, 29 January 2009, Appendix B p43.*

⁶⁴ *Electricity Supply (General) Regulation 2001 (NSW)*, regulation 63. Similar provisions apply for large customers in Queensland and South Australia.

⁶⁵ NERL, section 166(8).

⁶⁶ NERL, section 166(7).

The small one-off charges that can be levied in NSW and Victoria may be sufficient to recover the costs incurred by a designated ROLR following a small retailer failure. However, they may be insufficient to recover the costs associated with a large retailer failure, particularly if it occurred during a period of high spot prices.

NERA Economic Consulting and Allens Arthur Robinson prepared an extensive report for the Ministerial Council on Energy (MCE) on Australian and international ROLR regimes as part of the development of the NECF ROLR provisions. In relation to cost recovery, that report recommended that:⁶⁷

“there should be provision for the RoLR to recover any difference between its charges and efficient costs incurred within three months of a RoLR event:

- any difference between wholesale energy costs incurred by the RoLR in supplying small customers and the default RoLR’s standing offer tariff would be recovered via this ex post mechanism;
- the AER should have oversight of the additional costs that the RoLR seeks to be recovered (ie those costs should be efficiently incurred and material); and
- the approved additional amount should be recovered via a levy on the distribution businesses, which they would then pass through to all customers in the affected network area.”

The report explains that the additional costs that would be recovered under the cost recovery mechanism would relate primarily to wholesale energy costs for small customers which are not covered by the designated ROLR’s standing offer tariff. It was recommended that recoverable costs be limited to costs incurred within three months of a ROLR event as it would be expected that the designated ROLR should have in place appropriate hedging or supply arrangements within that timeframe.⁶⁸

The report considered an alternative arrangement where the designated ROLR would be free to charge all customers (large and small) the wholesale price in order to manage the risks faced by a large retailer failure. However, it was considered that this approach would be inconsistent with other objectives of the ROLR scheme and would be unworkable in practice as many small customers would be unable to pay high spot prices and the designated ROLR would experience high levels of customer default.⁶⁹

⁶⁷ NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group*, 29 January 2009, p88.

⁶⁸ Ibid, p89.

⁶⁹ Ibid, p66.

Proposed amendments to cost recovery arrangements

To address these issues, each of the ROLR regimes could be amended to provide greater certainty to the designated ROLRs that they could recover all of the efficient costs that they incur following a large retailer failure.

These amendments could contain:

- a clear process for the designated ROLRs to apply to a regulator for recovery of costs that they incur as a result of a ROLR event (for example, as under the NERL);
- a right for the designated ROLRs to recover any reasonable costs that they incur as a result of a ROLR event, including a list of specified types of costs such as:
 - administration costs;
 - spot market or hedge contract energy costs in relation to the acquired customers, to the extent that they are not recovered in the prices charged to those customers;
 - financing costs in relation to additional credit support that is required to be provided to AEMO or DNSPs in relation to the acquired customers; and
 - financing costs to cover the period from when the costs are incurred and when they are recovered under this mechanism;
- a period during which these costs can be claimed, for example three months from the date of the ROLR event; and
- clear timeframes for the relevant regulator to determine a compensation claim, and for payment of any approved compensation.

As under the NECF regime, these costs could be recovered through any of the following three mechanisms, or a combination of them:

- an upfront fee paid by acquired customers;
- a variation to the retail tariffs paid by the acquired customers; or
- distribution network charges payable by all customers in the distribution network area or areas in which the failed retailer operated.⁷⁰

5.1.2 How is this option likely to mitigate financial contagion?

This option could reduce the financial uncertainty faced by designated ROLRs following the failure of a large retailer. This improvement could increase the appetite

⁷⁰ This approach of recovering costs through distribution network charges involves a form of subsidy by the customers in the relevant distribution network area.

among retailers to submit expressions of interest to act as additional ROLRs and be appointed as designated ROLRs. It could also reduce the likelihood of the designated ROLRs failing as a result of their appointment.

Although the mechanism will not resolve the immediate liquidity challenges faced by the designated ROLR, clearer cost recovery rights could also assist the designated ROLR in the short term. If the designated ROLR has a more certain right to be compensated for the costs that it incurs, financial institutions may be more willing to provide funding to the designated ROLR to cover these costs in the interim period. That may be particularly so if the cost recovery scheme provides:

- certainty as to the types of costs that can be recovered;
- a clear legal right to be reimbursed those costs;
- a clear timeframe for reimbursement of the costs; and
- a mechanism for payment of the costs that involves little or no credit default risk, as would be provided by a mechanism where the relevant DNSP(s) pay the approved cost recovery amount to the designated ROLR and then recover it from all consumers in the region through an increase to regulated network charges.

Those features may make lending funds to the designated ROLR to cover its initial costs a less risky proposition, as there would be a very high likelihood of the designated ROLR recovering those costs under the cost recovery mechanism.

5.1.3 Potential disadvantages of this option

This option is unlikely to be enough on its own to mitigate contagion risks related to a large retailer failure.

In particular, it may not be sufficient to manage the high initial costs that could be incurred by a designated ROLR. Although this option could potentially assist in obtaining financing as discussed above, the current ROLR and AEMO credit support provisions impose a very tight deadline for meeting some of the designated ROLR's initial obligations and it may not be able to obtain finance within that period.

A balance needs to be struck between prescription and discretion in any cost recovery regime. Additional prescription and less discretion for the regulator could potentially result in the designated ROLR recovering inefficient costs.

An ability to recover actual costs as opposed to a pre-determined fee as under some of the non-NECF regimes could reduce the incentives on the designated ROLR to minimise its costs. However, these issues could be managed by ensuring that the regulator retains the ability to test whether any costs were efficiently incurred.

In relation to a large retailer failure, the recoverable costs are likely to be significant. If the costs are recovered only from the acquired customers, each customer could be liable for a significant charge. If the costs are spread across all customers in the relevant

region (or potentially across all customers in the NEM) through distribution charges, each customer will be required to pay a smaller amount but a very large number of customers will face increased charges.

5.2 Enhanced preparation arrangements for a ROLR event

Box 5.3: Overview of this option

The existing ROLR provisions under the NECF could be augmented to assist the AER to better prepare for a ROLR event in relation to a large retailer failure and develop a plan for how it would designate multiple ROLRs. Similar powers could be given to the AER or jurisdictional regulators in non-NECF jurisdictions.

5.2.1 Description of this option

Overview of the current powers to designate multiple ROLRs

The current ROLR framework under the NECF makes provision for retailers to be appointed ahead of time as "default ROLRs".⁷¹ Retailers can also register as firm or non-firm "additional ROLRs" voluntarily. The issues paper provided a summary of the operation of the ROLR scheme under NECF, which is repeated below.

Box 5.4: How does the NECF ROLR scheme work?

The NERL contains provisions for a national ROLR scheme to provide arrangements across all NEM jurisdictions in the event of retailer failure.⁷²

A "default ROLR" must be appointed by the AER for all electricity connection points. In practice, default ROLRs are generally the original incumbent retailers in the region who previously acted as ROLRs under the existing jurisdictional schemes. It is possible for more than one default ROLR to be appointed in an area.

In addition, the AER may appoint one or more "additional ROLRs" in an area. If there is a ROLR event, the AER will then be able to determine which of the default ROLR(s) or additional ROLR(s) should become the new retailer and take on the customers of the failed retailer in each area, or spread the customers between more than one retailer.

Retailers can submit an expression of interest to the AER to become an additional ROLR. The AER has developed measures to assist with the selection process for additional ROLRs. This includes establishing two categories of additional ROLR registration – a "firm offer" category and a "non-firm offer" category. The firm offer registration category allows retailers to pre-commit to the terms and

⁷¹ NERL, section 125.

⁷² NERL, Part 6.

conditions under which they would be prepared to be appointed as a ROLR. This enables the AER to have the information it needs to quickly make appointment decisions and the prior agreement of retailers to make the appointments. The non-firm offer category enables retailers to register their interest to be a ROLR, but does not commit them to acting in that role. Retailers are able to register for either or both additional ROLR categories.

When a ROLR event is triggered, a default ROLR or an additional ROLR will be appointed as the "designated ROLR" for each electricity connection point. The designated ROLRs are responsible for taking on new customers and facilitating customer transfers from the failed retailer.

The default ROLRs will be appointed as the designated ROLR unless the AER provides AEMO with written notice appointing another retailer instead before the ROLR event occurs.

The AER can appoint more than one retailer as a designated ROLR in any area. If it does so, the customers of the failed retailer will be allocated between the designated ROLRs.

Under the NERL, a ROLR event is triggered in a number of ways, including:

- the revocation of a retailer's retailer authorisation;
- the suspension of the retailer from the wholesale market by AEMO;
- the appointment of an insolvency official in respect of the retailer or any its property; or
- the making of an order for the winding up of the retailer or the passing of a resolution for its winding up.

If any of these events occur, the AER may publish a notice advising that a ROLR event has occurred and AEMO must begin the process to transfer the failed retailer's customers to the designated ROLR(s).

The ROLR regimes in jurisdictions that have not adopted the NECF (ie all jurisdictions except the ACT and Tasmania) do not contain any similar mechanisms for designating multiple ROLRs.

In Queensland, NSW and Victoria, designated ROLRs are appointed by distribution network area, with a single designated ROLR appointed for all customers in the relevant distribution network area. The retailers that will be appointed as designated ROLRs have been determined in advance, with Origin, AGL and TRUenergy each registered for different network areas. There is no clear process for appointing a

different retailer where the ROLR event relates to the retailer that was intended to be appointed as the designated ROLR.⁷³

In South Australia, ETSA Utilities (the DNSP in South Australia) will be appointed as the designated ROLR for all customers. However, it has subcontracted that responsibility to AGL, up to certain limits.

Challenges posed under the NECF ROLR framework

While the ROLR process under the NERL is a comprehensive set of arrangements, there is a possibility that the provisions could prove challenging to apply in the case of a large retailer failure.

The main potential problem relates to tight timing of designation when a ROLR event happens because of suspension of the failed retailer from the NEM. Under the NERL, the default ROLR is automatically appointed as the designated ROLR unless, prior to the ROLR event occurring, the AER appoints another retailer instead of, or in addition to, the default ROLR.⁷⁴ As a result, when a retailer is issued a default notice by AEMO, the process of deciding whether to appoint other retailers to act as additional ROLRs must be complete before suspension is enacted around 36 hours later.⁷⁵ This could be difficult for the AER because:

- there will be a prudent desire not to impede the retailer's ability to meet the default notice and rectify the shortfall that is specified within it. There might be a concern that broadcasting of the impending ROLR event via discussions with non-firm additional ROLRs about whether they are willing to act as a ROLR would damage the prospects of a trade sale of the failing retailer and speed the failure of the business;
- one day or less may not be enough time to decide on the prudent allocation of a large number of customers amongst the potential ROLRs (including default, firm and non-firm additional ROLRs);
- the AER may have very limited information about the financial position and other circumstances of retailers to help it make an informed decision as to who to appoint as the designated ROLR(s). The short timeframe limits the AER's ability to gather this information after it becomes aware of the failing retailer's financial problems, and the AER does not have powers to compel potential ROLRs to provide this information;

⁷³ In Victoria, the Essential Services Commission has indicated that in this situation customers would be allocated between the remaining major retailers. In Queensland, the regulations contemplate that the Minister will appoint a ROLR, by consent, if the event of the failure of the intended designated ROLR. See NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework*, Final report prepared for the MCE retail policy working group, 29 January 2009, p9.

⁷⁴ NERL, section 132.

⁷⁵ See the timeline in section 2.2.

- should the AER not provide AEMO with instructions prior to the ROLR event, the customers will all be transferred to default ROLRs, which may or may not be financially able to cope with the adoption of a large or very large number of new customers; and
- it is possible that a default ROLR may be the retailer that is facing suspension and that there are no firm additional ROLRs that can be readily appointed instead. In this case the AER could be forced to make a decision at very short notice with no specific legal structure and limited information to guide it. This situation could require the AER to appoint a retailer as a designated ROLR without its consent and without any prior notification.

Expanding the ROLR arrangements

The NECF ROLR provisions could be expanded to more explicitly guide what the AER should do in response to the failure of a large retailer.

Sections 162-163 of the NERL currently contain provisions requiring the AER, in consultation with AEMO and jurisdictional ministers, to develop ROLR plans that cover the procedures to be used in a ROLR event and provide for regular ROLR exercises. The AER has developed detailed plans and procedures and conducts regular simulation exercises in accordance with these provisions. These plans are equally applicable to small and large retailers and do not contain specific plans for large retailer failures.

The provisions could be extended to require the preparation of a separate "large retailer failure contingency plan". Given the sensitive nature of this contingency plan, it would not be a public document (unlike the existing plans under the NERL). The potential contents of such a plan are discussed below.

The AER could explore, under consultation with other stakeholders, what decisions it would make upon the failure of the largest retailer in each jurisdiction and what plans and procedures it should put in place prior to such an event to enable it to respond within the required timeframes to appoint multiple designated ROLRs. For example the AER could every month or quarter maintain and update a specific "large retailer failure" plan, explicitly stating what it would do in the event of a ROLR event caused by the failure of the largest retailers in each jurisdiction. This plan could form the basis of "standing instructions" to AEMO on the allocation of customers in the event of a large retailer failure.

The AER could be required to make such a plan for the failure of all retailers above a certain size.

This plan could include a list of the retailers that would be expected to be appointed as designated ROLRs under a range of potential scenarios, and what approximate proportion of the affected customers would be transferred to each designated ROLR.

To facilitate the development of this plan, the AER could be given stronger powers to compel retailers to provide information on a regular basis so it could decide who is best placed to act as the designated ROLR. In addition, retailers could be required or invited to indicate to the AER how many customers they would be prepared to accept in the event of the failure of the largest retailer.

These measures would assist the AER to determine how many customers each retailer would be likely to be able to accept under a variety of circumstances without being likely to encounter significant financial difficulties and cause a risk of financial contagion.

The objective of the AER carrying out this preparatory work could be to enable it to make more effective use of the tools currently available to it under the NERL ROLR provisions. In particular, it may:

- better enable the AER to spread customers of the failed retailer around a number of different designated ROLRs so as to reduce the burden on any individual designated ROLR;
- encourage more retailers to volunteer to register as potential ROLRs ahead of time under varying categories of firmness so as to increase the options available at the time a ROLR event occurs.

These plans may also better equip the AER to make use of some of the new mechanisms proposed elsewhere in this paper.

The non-NECF ROLR regimes would also need to be amended to include a clear process for the appointment of multiple designated ROLRs and to cater for what should happen if the retailer that is listed as the default ROLR fails.

It may be most efficient for the AER to coordinate the appointment of designated ROLRs and develop a plan for appointing multiple designated ROLRs across the NEM. If a large retailer fails, the failure is likely to trigger a ROLR event in multiple NEM regions and it would be more efficient and effective to have a single body coordinate the appointment of designated ROLRs across all affected regions. Jurisdictional regulators and/or Ministers could be consulted or involved in the process.

5.2.2 How is this option likely to mitigate financial contagion?

Specifically planning for what should be done when a large or a default retailer fails could allow such failures to be handled more smoothly. While there may be some extreme events that are not practical to plan for, specific plans for the failure of the largest individual retailers could:

- reduce the likelihood of the ROLR regime not working effectively when a significant failure happens;
- improve the ability of the AER to appoint multiple designated ROLRs, which would spread the financial obligations associated with being appointed as a

designated ROLRs amongst several parties and reduce the pressures imposed on any individual retailer;

- improve the information available to the AER when determining who to appoint as a designated ROLR and the ability of that party to meet the financial obligations associated with being appointed as a designated ROLR;
- as a result, reduce the likelihood that retailers designated to act as ROLRs will collapse as a result of their designation;
- boost confidence among participants and their financiers that such a failure would not cause unnecessary distortions, and, as a result;
- reduce the likelihood of financial contagion propagating from the failed retailer to the designated ROLRs and risking a cascading retailer failure.

Amending the jurisdictional ROLR regimes to allow the use of multiple designated ROLRs when a large retailer fails would also have significant benefits in reducing contagion risk. This would allow the jurisdictional regulator to spread the burden of having to assume responsibility for a large number of customers at short notice between multiple designated ROLRs, reducing the likelihood that any one ROLR will collapse as a result of its designation.

In their report to the MCE as part of the development of the NECF ROLR regime, NERA Economic Consulting and Allens Arthur Robinson recognised the risks posed by a large retailer failure, including the possibility of a cascading retailer failure. They noted that the issue how to deal with a large retailer failure “appears to be one in which there is no simple answer” and that “none of the regimes we have reviewed (including the UK) have comprehensive arrangements in place to address a large retailer failure”.⁷⁶

However, NERA Economic Consulting and Allens Arthur Robinson advised that the most effective means of addressing the issue of a large retailer failure was likely to be allocating the failed retailer’s customers to more than one designated ROLR.⁷⁷ They recommended that the AER should be required to:⁷⁸

- “ • work with the default RoLRs, market operators, distribution network businesses and other affected parties to establish a RoLR management plan for each local retailer area (many elements of which are likely to be common between local retailer areas); and

⁷⁶ NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group*, 29 January 2009, p66. We note that some important developments have been made on the topic of large retailer failure in international markets since NERA Economic Consulting and Allens Arthur Robinson conducted this work, including the recent introduction of energy supply company administration in Great Britain, which are discussed in section 8.3.

⁷⁷ Ibid, p67.

⁷⁸ Ibid, p48.

- establish the basis for allocating customers within a single local retailer area to more than one RoLR, in the event of a large retailer failure that raised the risk of cascading retailer failure.”

5.2.3 Potential disadvantages of this option

This option seeks to make improvements to how the ROLR regimes are applied in practice, in particular by enhancing preparation and facilitating the appointment of multiple designated ROLRs. However, this option will only be effective if the ROLR regimes are considered to be a suitable means of managing a large retailer failure. It is possible that even with these enhancements, the ROLR regimes will not be able to cope with the failure of a large retailer (although their ability to do so may be improved by also adopting some of the other options in this chapter). As discussed in chapter 8, the UK government is in the process of implementing reforms to insolvency law on the basis that it has concluded that its equivalent to the ROLR regime will simply not be able to manage a failure of one of the largest retailers.

There are some potential downsides to imposing additional obligations on the AER to prepare plans. One issue is the increase in cost and overhead for regulators and the businesses involved in the ROLR process. For example, the AER may find formulating a plan for the failure of a large vertically integrated NEM business to require a deeper consideration of the generation side of the business, which may complicate the process. The consultation process would involve a number of stakeholders from industry through to government and consumer groups. These groups may have divergent views as to what measures should be taken upon the failure of any individual retailer.

For the AER’s preparations to be most effective, retailers are likely to need to provide sensitive financial information to the AER to enable it to make a better informed decision as to who to appoint as a designated ROLR. This may require additional information disclosure powers for the AER. Any such information would need to be subject to protections and restrictions on the AER’s use of it. Market participants may have concerns about disclosing this type of sensitive information to the AER, even with restrictions on its use and disclosure.

Any such information disclosure requirements would impose additional compliance costs on retailers and increased costs for the AER.

We note that even with access to an increased amount of information, the competing objectives of the ROLR process would still make designation a significant challenge for the AER to manage in the case of a large retailer failure. For example, a decision on the allocation of designated ROLRs that focussed on mitigating the risk of contagion may not result in the best outcome in terms of protecting the interests of the customers of

the failed retailer (eg in terms of the costs borne by those customers) or market concentration and competition concerns.⁷⁹ It may not be possible to develop a plan in advance that addresses all of the relevant objectives when the specific circumstances of the failure are not known.

Co-ordination across NECF and non-NECF jurisdictions could also prove a difficulty, given that the largest retailers in the NEM have significant market shares in multiple jurisdictions. As suggested above, we consider that the AER should be given a role in planning for a large retailer ROLR event in all jurisdictions, regardless of whether they have adopted the NECF. However, there may be legal impediments to implementing such an arrangement.

It is also possible that some categories of particularly unusual or unlikely contingencies could still lead to a designated ROLR collapse after even the most stringent preparations are made.

5.3 Transfer of the failed retailer's hedge contracts to the designated ROLR

Box 5.5: Overview of this option

The designated ROLR could be granted an option to acquire some or all of the hedge contracts of the failing retailer.

5.3.1 Description of this option

As explained in chapter 2, retailers in the NEM often enter into derivative contracts to "hedge" the volatility of the spot price.

The retailers that are appointed as designated ROLRs will probably have a number of contracts in place that are designed to hedge the exposure of their existing energy volumes to the spot price. The contracts might be designed to some corporate risk target, for example a certain proportion of the retailer's energy purchase volumes might be hedged using a mix of swap and cap contracts.

When a large ROLR event occurs, the designated ROLR will acquire a large number of new customers immediately. If for example the failed retailer was the same size as the designated ROLR, then the designated ROLR's energy volumes would double as a result of the ROLR event. From a risk exposure perspective, this would mean that following the ROLR event, the designated ROLR would now only have a much smaller proportion of its energy purchase volumes hedged, with all of the new volumes exposed to the spot price. In a period of high spot prices, this could leave the designated ROLR with the option of either paying the high spot prices or trying to seek

⁷⁹ The failure of a large retailer may result in the allocation of a significant number of customers to one or more of the remaining large retailers. Depending on how the customers are allocated, such an outcome could raise concerns about a potential substantial lessening of competition in the retail electricity market.

new contracts for the new volumes at very short notice at what might be expensive premiums.

The mechanism outlined in this section would allow the designated ROLR to become the counterparty to the failing retailer's hedge contracts. This would allow the designated ROLR to at least partly hedge the added exposure to the spot price that would otherwise stem from the ROLR event, so long as the failing retailer had contracts that were desirable to acquire.

The mechanism would work by providing an option for the designated ROLR to become a party to some or all of the failed retailer's hedge contracts. Those contracts would be transferred to the designated ROLR by a legislated novation of those contracts, without any requirement for consent or negotiation with the contract counterparty.⁸⁰ This arrangement would require new legislative provisions, perhaps in the NERL ROLR provisions or equivalent jurisdictional ROLR laws, to set out how this mechanism would work and to authorise the transfer of the contracts.

The mechanism could only work to the extent that the failed retailer had hedge contracts that were valuable to the designated ROLR and the termination provisions within those contracts were not exercised by the counterparties.

Box 5.6: Termination provisions

Most hedge contracts struck between NEM participants feature termination provisions that can be invoked by one party should the other default on its obligations or if other specified default events occur. In the event of default (for example because of non-payment under the contract beyond a cure period), the non-defaulting party will usually have a termination right.

Upon termination, if the contract is "in the money" (eg because the expected spot price is higher than the strike price) for the non-defaulting party, then it would become an unsecured creditor to the defaulting party. If instead the contract is "out of the money" for the non-defaulting party, the mark to market value would be paid by the non-defaulting party to the defaulting party.

There is no obligation for the non-defaulting party to terminate. It can instead choose to continue to perform under the contract, including when the contract is "out of the money" from its perspective. An example of this took place following the default of Enron Australia in 2001, in which TXU, a contracted counterparty, chose not to terminate the contracts despite the fact they were "out of the money" for TXU.⁸¹ However, we understand that there is a significant likelihood that the non-defaulting party will terminate the contact where the defaulting party is insolvent. We understand that following the collapse of Enron Australia, almost

⁸⁰ The effect of a novation would be to create a hedge contract directly between the designated ROLR and the existing counterparty under which the designated ROLR has the same rights and liabilities that the failed retailer had under the contract.

⁸¹ McMillan Binch LLP, *Derivatives Bulletin December 2004*. Available at <http://mcmillan.ca/Files/enron%20v%20australia%201204.pdf>.

all counterparties elected to terminate their hedge agreements with Enron.

An additional issue is that of cross-default, where a default event from one party above a specified threshold level can result in a default event being activated for all other counterparties that have other hedge agreements with the defaulting party. This would mean that, should a retailer default on one contract, termination rights could be invoked under all of its other contracts even though it may not have failed to meet any obligations under them.⁸²

It may also be possible to apply this option to exchange-traded contracts. However, doing so would raise additional complications. This is because exchange-traded contracts feature the legal involvement of brokers and/or clearing houses, as well as the exchange itself. In contrast to OTC contracts, there are no specific counterparties to exchange-traded instruments. This means that assignment of title to the contracts would require amendments to the registered instruments of the failing retailer as well as the designated ROLR on the exchange and within any intermediary businesses. An example of a complication that could arise from this would be if the designated ROLR was not party to the relevant exchange or to any relevant intermediaries at the time of the ROLR event.

NERA Economic Consulting and Allens Arthur Robinson considered this type of mechanism in their work advising the MCE Retail Policy Working Group during 2008 and 2009, but recommended that the NECF ROLR framework avoid interfering with the hedge or wholesale supply contracts of a failed retailer.⁸³

“In regards to the transfer of hedge or supply contracts, we do not consider that it would be appropriate to seek to effect a regulated assignment of the failed retailer's contracts to the RoLR. If the retailer failed due to poor hedging or supply arrangement then the assignment of these contracts could increase the risk of cascading failure. Further, imposing long term hedge or supply obligations upon the RoLR could have the potential of increasing the risk of the RoLR function. ... we consider this would raise significant issues under chapter 5 of the Corporations Act 2001, and that such a departure from the established insolvency laws ... may not be acceptable from a policy perspective.

We also consider that any further interference in the relevant wholesale market is beyond the scope of what a RoLR scheme should seek to achieve. ... We consider that the exercise of a power of this nature is more in the nature of an emergency power, which may be used in circumstances where the RoLR scheme is unable to operate...”

82 The degree to which cross-default termination rights could emerge for struggling retailers in the NEM is not explored in depth in this paper, but is worth noting in terms of its potential capacity to speed the failure of a struggling retail business.

83 NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group, 29 January 2009, pp100-101.*

5.3.2 How is this option likely to mitigate financial contagion?

As highlighted above, the designated ROLR may acquire a large number of customers at short notice without having adequate hedge cover available to rely on to prevent a significantly increased exposure to the spot price.

This mechanism would allow the designated ROLR to take up any favourable hedge contracts that were held by the failed retailer at the same time as it acquires the new customers, potentially reducing the risk that it will fail under the weight of immediate and direct exposure to the pool price.

As an additional benefit, AEMO's credit support requirements (explored in more depth in chapter 6) allow retailers with hedge contracts to register those contracts as "re-allocations" which reduce the amount of credit support that is required of the retailer. The transferred hedge contracts could allow the designated ROLR to seek re-allocation arrangements with AEMO (with the consent of the contracted counterparties), reducing the level of increased credit support that is required to be posted to AEMO as a result of acquiring the new customers.

A further benefit from this mechanism could come in the form of reduced incentives currently faced by solvent retailers who wish to exit the NEM without incurring the cost of doing so.⁸⁴ Under this mechanism, by intentionally causing a ROLR event, a retailer would also cede any financial benefit of their hedging contracts and therefore may be less inclined to cause the ROLR event if there are instead other options for orderly market withdrawal available.

5.3.3 Potential disadvantages of this option

The implementation of this mechanism could be difficult as it may legally involve a taking of property without compensation and may be incompatible with insolvency or corporations law or other legal requirements.

As discussed, contracts struck by participants in the NEM will typically be subject to termination provisions that allow a non-defaulting party to terminate the contract. Conceptually there could be a high correspondence between those contracts that a designated ROLR might want to acquire and those that the generator counterparty might want to terminate.⁸⁵ We consider that it would not be appropriate to prevent a counterparty from exercising its termination rights due to the default of a retail business.

⁸⁴ It is presently possible for a retailer to intentionally cause a ROLR event by simply failing to pay AEMO on time for energy charges, or by failing to post sufficient credit support. In addition, a ROLR event could potentially be triggered simply by a retailer advising AEMO that it does not intend to carry on its business in the NEM, which was the trigger for the Energy One ROLR event in 2007. This effect can be used by solvent retailers who wish to withdraw from the NEM without having to make arrangements for the continued supply of electricity to their customers.

⁸⁵ This need not be a hard rule, and the counterparty might not exercise its termination right on the basis of prevailing fair value alone.

It is also possible that no favourable hedge contracts might exist at the time of the ROLR event, for example if all the failed retailer's contracts may be "out of the money" (indeed this could be a causing factor of the failure).

This mechanism would also involve a significant intrusion into generators' risk management practices and contract freedom. In particular, it could result in hedge contracts being novated to a retailer that the counterparty generator would not have chosen to contract with. However, the generator would retain its termination rights and could terminate the contracts if it did not want to deal with the designated ROLR.

Arrangements which "net off" the financial exposures of "in the money" and "out of the money" contracts are often used to reduce credit exposures. These arrangements can apply across different commodities and introduce another complexity when considering contracts for potential novation under this option.

It should also be noted that large retailers have material generation assets and wholesale market positions in electricity and other commodities (such as gas and environmental products). In the event of failure of a large retailer, market participants which have exposures to the failed retailer will be seeking to manage their risk by transacting in wholesale markets. This would be a stressful time for markets and affected market participants. It is important for the ROLR and other affected market participants to understand their exposures and act quickly to mitigate their risks due to the failure. The "selective" novation process would take time to implement and would result in uncertainty for affected entities and would potentially delay their ability to manage their exposures in the market. This increases the risk for all parties, with a detrimental impact on the potential for contagion.

This mechanism would be even more difficult to implement if multiple designated ROLRs were appointed. In that situation, there would need to be some way of apportioning the contracts between the designated ROLRs, which is unlikely to be workable.

These drawbacks, combined with the likelihood that any "in the money" contracts would be terminated by counterparties, could mean that in practice there are no contracts for the designated ROLR to acquire under this option. As a result, there is a significant risk that this option would not be workable in practice and would be of limited value relative to the potentially significant legal difficulties associated with its introduction.

5.4 Amending the ROLR event triggers

Box 5.7: Overview of this option

The NEM suspension provisions could be amended, delaying the triggering of a ROLR event.

5.4.1 Description of this option

The timelines for the removal of a retailer from the NEM following a failure to pay or post credit support to AEMO were explored in section 2.2. By international standards, these timelines could be considered relatively short.⁸⁶ As described earlier, in the NEM, a retailer that misses a payment to AEMO or breaches a trading limit can be suspended 1-3 days later, causing a ROLR event. This framework could contribute to the risk of contagion by increasing the likelihood of a ROLR event occurring in the first place, or increasing the risk of a second ROLR event occurring if the designated ROLR is unable to meet its liabilities in the period immediately following its appointment.

To address this risk, amendments could be made to alter the way that suspension from the NEM and ROLR events interact.

The period between default notice and suspension notice could be extended. If this period was extended, it would permit more time for the failing retailer to try to find a solution, and/or for regulators to liaise with potential ROLRs, the failing entity and/or its receivers.

The appropriate period of time to extend the period by would be a critical consideration. A short extension, for example only 1-2 days or possibly even less, could be sufficient to reduce contagion risks in some circumstances.

A simple option would be to amend the NER to provide that a certain minimum time must elapse between the issuance of a default notice and a suspension notice by AEMO.

Another possible framework could be to introduce an intermediate step between the issuance of a default notice and suspension notice. The process could include an additional phase that commences 24 hours after the default notice has been issued, assuming no adequate response is received (this is the current minimum trigger time for suspension). This additional phase could last up to a specified maximum time.

⁸⁶ For example in Great Britain, a Supplier of Last Resort event will typically only be triggered following the revocation of licence authorisation by the regulator. This might happen weeks after a default on payment rather than a day or two later.

During this phase, additional powers could potentially be granted to a regulator to:

- liaise with receivers regarding potential options for "rescuing" the retailer or ensuring that it continues to meet its obligations to AEMO for an interim period while options for a trade sale are investigated;⁸⁷
- undertake a process to determine who to appoint as designated ROLR(s), with the aim of appointing multiple designated ROLRs, which could involve:
 - inviting expressions of interest from potential ROLRs; or
 - implementing more advanced processes to determine who to appoint as designated ROLR(s), such as arranging for auctions to be carried out;
- potentially co-ordinate the involvement of governments (depending on whether any of the options in chapter 8 of this paper are implemented and the severity of the event); and/or
- coordinate the transfer of customers to the designated ROLR(s) in liaison with AEMO.

At the conclusion of this phase, either:

- the retailer may have corrected the cause of the default notice; or
- if the retailer was still in default, suspension and the corresponding ROLR event could be activated with the benefit of whatever arrangements had been put in place or planned for in the preceding period.

A variation on this concept would be to give the AER the power to extend this period beyond a specified minimum time where conditions were appropriate to do so. For example, this discretion might be useful if a trade sale had been negotiated in principle but could not be entirely completed in the specified timeframe.

5.4.2 How is this option likely to mitigate financial contagion?

Changing the trigger conditions for ROLR events could allow them to be better managed at the time, or to be avoided altogether. This option could help to facilitate a trade sale of the failing business, avoiding the need for any form of response from regulators, governments or other participants.

The key benefit is likely to be a reduction in the risk that the retailer that is appointed as a designated ROLR following the initial ROLR event also fails, triggering a second ROLR event and potentially a cascading retailer failure.

⁸⁷ Such a process currently forms part of the retailer of last resort regime in Great Britain, where prior to triggering the retailer of last resort process the regulator seeks to reach an agreement with the failing retailer and/or a potential receiver – see Appendix A.

If a large retailer fails, the retailer or retailers that are appointed as designated ROLRs will incur significant financial obligations as a result of their appointment. As explained above, some of these obligations must be met within very short timeframes. The acquisition of the customers may be profitable to the designated ROLR in the long term, but it may face liquidity challenges immediately following the ROLR event due to the size of those financial obligations, creating a risk that even an otherwise financially sound designated ROLR may be at risk of suspension from the NEM.

Even a relatively short extension to those timeframes may give the designated ROLR sufficient time to obtain the necessary funding to meet its obligations and avoid the risk of suspension, and/or allow the AER to spread customers more effectively among multiple designated ROLRs.

In addition, a delayed triggering of the ROLR process could give regulators, the failing retailer and other retailers valuable time to negotiate an outcome that is in the long-term interest of consumers. For example, a mechanism that is available in Great Britain is one where the regulator could liaise with the receiver to see if they will guarantee the debts of the failing party for a period.⁸⁸ This could allow the struggling retailer to remain in the NEM while some form of trade sale or rescue is negotiated, rather than being suspended and having its customers transferred through the ROLR process.

5.4.3 Potential disadvantages of this option

Changing the timing of default and suspension processes would be a significant reform that could necessitate review of the prudential framework. The AEMC is currently considering a rule change to amend the prudential framework to implement a new design built around the concept of a statistical probability of exceedence and a seven day suspension window⁸⁹ called the "reaction period". If the period that it takes to suspend a retailer was extended, the amount of time that AEMO (and therefore generators)⁹⁰ might be exposed to ongoing accrual of energy debt by the failing retailer could increase beyond this seven day assumption.

The prudential standard could be left unchanged, such that the amount of credit support posted by retailers would increase to compensate the generators for the higher potential exposure due the longer reaction period. A concern however could be that the credit support requirements might become difficult to calculate if the length of the extension to the suspension period varied from case to case.

If the prudential standard was not changed, this mechanism would represent a transfer of risk away from the designated ROLRs and affected customers, and toward other market participants, particularly generators. That would be inefficient if it simply

⁸⁸ The supplier of last resort process in Great Britain is described in detail in Appendix A.

⁸⁹ This window is seven days from breach to suspension. See AEMC's draft determination available at <http://www.aemc.gov.au/Electricity/Rule-changes/Open/new-prudential-standard-and-framework-in-the-nem.html> for more information about the Prudential Framework.

⁹⁰ Noting that generators are ultimately allocated any shortfalls in retailer payments to AEMO.

moves the contagion risk to another sector of the market and does not reduce the overall level of risk.

In the case of a lengthened reaction period, generators would be assigned an increased risk of payment shortfalls. Generators will have their own financial obligations that may depend on the timely receipt of payments from AEMO, such as settlement of fuel contracts and hedge contracts. This could mean that the risk of contagion could be effectively transferred over to generators by this mechanism, if for example a generator were to fail to make a payment to a creditor on time as a result of being short-paid by AEMO.

This potential for transfers of contagion risks away from designated ROLRs and toward other market participants also arises in some of the other options in this paper.

This option may be an effective way of providing a relatively small increase to the period of time that the designated ROLR has to fulfil its obligations, for example an additional 24 or 48 hours. However, an additional 24 or 48 hours within the suspension process may not be sufficient, depending on the circumstances of the retailer failure. Where more time is required in order to sufficiently mitigate contagion risk, other mechanisms in this paper such as the delayed designation concept presented in the next section might be more appropriate.

5.5 Delayed designation of ROLRs

Box 5.8: Overview of this option

The ROLR regime could be amended to delay the time at which the designated ROLR is appointed. The designated ROLR's appointment would be backdated to the time of the original ROLR event and it would still be held financially responsible for the acquired customers from that date.

5.5.1 Description of this option

The mechanism would take advantage of the fact that:

- customers, including those who were previously supplied by the failed retailer, typically do not expect to pay for their energy until several months after the time of consumption;
- retailers do not pay AEMO for energy consumed by their customers until four to five weeks after the time of consumption; and
- under the ROLR regimes, the designated ROLR only assumes rights and liabilities from the date of the ROLR event. For example, it is only liable to pay AEMO for energy consumed by the acquired customers from that date and it only bills the acquired customers for energy they consume after that date. All rights and liabilities for energy consumed prior to the ROLR event remain with the failed retailer.

Taken together, these features of the NEM mean that the designation of a ROLR on the day of default by the failed retailer may not be necessary to ensure continuation of the physical billing cycle.

Under this option, the designated ROLR would be liable to AEMO for the energy consumed from the point of suspension while also being entitled to bill customers for energy consumed from that same point in time, as usual under all the ROLR regimes presently. However, its actual designation as ROLR might occur days or even weeks after the ROLR event. The physical flow of the payments owed from customers to the designated ROLR and from the designated ROLR to AEMO would not occur until after the ROLR had been designated.

This option would be an alternative to amending the ROLR event triggers under the option in section 5.4.

It would require a distinction to be made between the following dates, which currently occur simultaneously under the NERL ROLR provisions:

- the date that the ROLR event occurs (for example the date of the suspension of the failed retailer from the NEM by AEMO, which constitutes a ROLR event under the NERL); and
- the date that the designated ROLR is appointed.

In the period between these two dates, the relevant regulator would determine who to appoint as the designated ROLR(s). Once that decision has been made, the designated ROLR would be appointed on a specified date and notified of its appointment. However, the commencement date of that appointment would be backdated so that the designated ROLR assumed all rights and liabilities in relation to the acquired customers from the date of the ROLR event.

This mechanism could open up opportunities to auction the allocation of customers in situations where it was considered appropriate to do so, or other mechanisms to determine who to appoint as the designated ROLR that are more flexible than under the current ROLR regimes.⁹¹

An auction process for affected customers has been tried previously in Texas, as discussed in Appendix A, but we note that it had limited success. An auction could be permitted to yield negative hammer prices (ie where the retailers are paid to accept the failed retailer's customers), if the bidding retailers consider that the acquisition of the customers would be a net cost rather than benefit.

⁹¹ We note that an auction or similar mechanism could raise competition law issues that may risk making it unworkable for a large retailer failure. For example, if a large retailer bid for the customers of the failed retailer, it may require merger clearance, which it would be unlikely to be able to obtain within the short timeframe provided for the auction process.

A possible model in which the process of delayed designation that would fit within the existing NEM settlement cycle could be one in which the following events take place in order:

- Suspension of the failed retailer (Day 0).
- AEMO creates a notional or virtual holding participant within the market systems and transfers all the retailer's national metering identifiers (NMIs)⁹² over to it (Day 0).
- Virtual participant begins to accrue debt from Day 0.
- Regulator decides to hold auction, announces the details (Day 3).⁹³
- Auction held (Day 8).
- Full assignment of NMIs from virtual participant to designated ROLRs in accordance with auction outcomes (Day 14).
- Virtual participant's debt volumes allocated to designated ROLRs in accordance with auction outcomes (Day 14).
- Virtual participant now has no debts or customers and is closed in market central systems (Day 14).
- Designated ROLRs make first payment for new customers according to the standard settlement schedule (around Day 30, 4 weeks after suspension).
- Positive auction revenues are handed to AEMO to net against market participant fees, or to creditors of the failed retailer minus an allowance for the auction cost (Any time after Day 8).
- Negative auction revenues are recovered through the ROLR cost recovery framework that applies in the jurisdiction(s) as normal (Any time after Day 8).

A variant of this model in which the designation of ROLRs is simply by choice of a regulator as under the current ROLR regimes would simply involve replacing the auction steps with designation decision steps taken by the regulator.

A further alternative would be to allow a staged appointment of designated ROLRs for blocks of customers. At present under the NECF, any additional ROLRs must be appointed prior to the ROLR event. However, we understand that the physical transfer of the customers of a large retailer with for example 1 million customers would take AEMO one to two weeks to complete. This time window could be used to give the

⁹² These are unique identifiers for connection points and associated metering points in the NEM.

⁹³ An auction process might involve a number of blocks of customers being auctioned in convenient blocks, for example all small customers within a particular distribution area could be auctioned in a single block. The winning retailer would become the designated ROLR for all of those customers.

AER slightly longer to provide instructions to AEMO in a staged manner as to which customers to transfer to which designated ROLR.⁹⁴

5.5.2 How is this option likely to mitigate financial contagion?

The optimal allocation of retailers to act as designated ROLRs following a large failure might depend significantly on the nature of the failed business, including its size and spread across the jurisdictions. By delaying the final decision on which retailer(s) to appoint as designated ROLR(s), regulators could be given an greater opportunity to determine the allocation that involves the least risk of the designated ROLR failing and causing financial contagion.

This is a mechanism which could permit sufficient time for retailers, AEMO, regulators and/or governments to implement the most efficient response to the failure of the large retailer. This flexibility could help prevent financial contagion including by:

- providing greater scope for the appointment of multiple ROLRs, which as discussed in section 5.2 is difficult in practice under the current NECF ROLR provisions and is not currently provided for under the non-NECF ROLR regimes;
- allowing regulators more time to determine which retailer to appoint as a designated ROLR and to ensure that the retailer has sufficient financial resources to meet the obligations that it will incur upon appointment; and
- allowing more scope for retailers to volunteer to act as designated ROLR, potentially through an auction or tender process, with the benefit of knowing more about the extent of obligations that will incur as a designated ROLR (ie the number of customers involved and the current spot market prices).

We invite submissions on whether these potential benefits are likely to be realised under this option. This option assumes that an extra one to two weeks will allow more efficient decisions to be made regarding who to appoint as the designated ROLR. In practice, how valuable would that extra time be for regulators?

More broadly, the mechanism could facilitate more economically efficient responses to the ROLR event, and could mitigate the need for expanded preparations as contemplated in section 5.1. For example, under auctions the true cost or benefit of the ROLR event could be discovered. This would allow ROLR events that are beneficial to the designated ROLR to result in costs being funded by the designated ROLR, avoiding the need for a cost recovery scheme.

As mentioned in the example model above, the revenues from a positive auction hammer price could be circulated to consumers. Alternatively, the funds could be paid to the failed entity (or its administrators), minus the costs incurred in carrying out the auction.

⁹⁴ There would need to be some clear process for doing so, for example progressively working through each NEM region or distribution area.

Importantly, the size of the energy debt that would accrue during the delayed designation should be transparently available to regulators and potential providers of the last resort service, as AEMO could easily provide this information. This data would be a crucial input to the process for appointing the designated ROLR in the weeks following the event and allow the regulator and retailers to make more informed decisions about appointment of the designated ROLR.

5.5.3 Potential disadvantages of this option

Under this mechanism, the financially responsible person for energy volumes consumed by the customers of the failed retailer in the days following suspension will be unknown for days or weeks as the process of designation is concluded.⁹⁵ The concept of having energy debt "hanging" on some yet-to-be-determined obligor could prove a discomfort for generators, regulators and other parties.

This accrued debt would be taken on by the designated ROLR once it is appointed. This could potentially increase the financial challenges faced by the designated ROLR because it will have less time between when it is appointed and the due date for it to pay AEMO for energy and meet other liabilities such as network charges.

This shortened timeframe may not cause concerns if a process is adopted where retailers volunteer to be appointed as the designated ROLR, for example under a tender or auction process. In those circumstances, the retailers should be able to make a reasonably informed decision regarding the liabilities that they would incur if appointed and ensure that they can access funding within the necessary timeframes to pay those debts.⁹⁶

However, this mechanism could cause increased contagion risks if no retailer volunteered to act as a designated ROLR. In those circumstances, the retailer that was appointed by the regulator as the designated ROLR may have a much reduced period of time to pay AEMO and network businesses and may not have access to sufficient funding to do so. That could increase the risk of the designated ROLR itself failing, triggering a second ROLR event and potentially a cascading failure.

As discussed in Appendix A, when an auction process was used in Texas, no acceptable retailer made a qualifying bid and the regulator had to adopt a contentious process to determine who to appoint. Texas subsequently moved away from an auction process.

The energy consumed during the interim period could not be hedged, as it is not known who will be appointed as the designated ROLR and be responsible for these energy costs. The designated ROLR will therefore inherit an unhedged exposure to the

⁹⁵ The example model provided earlier has these debts simply accruing to a notional or virtual retailer within the AEMO systems in the intervening period between suspension and designation.

⁹⁶ However, there may remain a risk that market conditions could change significantly between the date of any auction or tender and the date that the retailer is appointed, which could increase the risks for the party appointed as the designated ROLR.

spot price for all energy consumed during the interim period. Although the interim period will be short, the unhedged cost of energy consumed during that period could be substantial if the failure occurred during a period of high spot prices.

AEMO's Prudential Readiness Review contemplates the possibility of shortening the NEM settlement cycle.⁹⁷ Should a shorter settlement window be introduced, the delayed designation of ROLRs could mean that the designation of the ROLR might not occur before the accrued energy debts are due, with the result that:

- generators might have to wait longer to get paid than they would under any revised settlement window;⁹⁸ and
- the NER may need to cater for the designated ROLRs being permitted sufficient time following their designation to pay for the overdue debt to AEMO.

These issues could be dealt with by making provisions in the NER. For example, a provision could be inserted allowing all designated ROLRs a specified period following their designation to make all outstanding payments owed to AEMO for the acquired customer volumes. However, this approach would transfer the costs and risks of the delayed designation to generators, who would be short-paid by AEMO in the interim. This could result in a transfer of contagion risk to generators in a similar way to those identified in the previous section, and would not be efficient unless it reduced the overall level of contagion risk rather than just moving the risk around.

⁹⁷ See <http://www.aemo.com.au/Electricity/Settlements/Prudentials/Energy-Market-Prudential-Readiness-Review>. No rule change proposal has been submitted to implement such a change.

⁹⁸ For example if the settlement window was one standard week, but designation took three weeks, the generators would be waiting at least two weeks longer than normal to get paid.

6 Options to address the designated ROLR's increased credit support obligations

6.1 Amendments to AEMO credit support provisions

Box 6.1: Overview of this option

The increased credit support required to be provided by the designated ROLR to AEMO for the new energy volumes of the acquired customers could be waived or reduced for a short transitional period.

6.1.1 Description of this option

Box 6.2: The NEM credit support arrangements

Retailers settle their accounts with AEMO approximately four weeks after the end of the week in which the electricity was supplied. This gives rise to credit risk, because if a retailer fails to pay for the energy consumed, a shortfall will arise between AEMO's incoming payments and outgoing payments to generators.⁹⁹

To address this risk, retailers are required to post credit support to AEMO when they are unable to meet the acceptable credit criteria.¹⁰⁰ This criteria includes having a rating of A-1 or higher as rated by Standard and Poor's (Australia) or P-1 or higher as rated by Moody's Investor Service, for short term unsecured counterparty obligations. Such a strong rating is not usually met by electricity retailers, and in practice, retailers typically need to post credit support.¹⁰¹ In addition to this requirement, retailers are required at all times to maintain a margin (called the prudential margin) between the amount they owe to AEMO and the total value of all credit support, cash deposits and other offsetting instruments posted with AEMO.

The NER requires that the credit support is to take the form of a guarantee or bank letter of credit.¹⁰² If the retailer fails to pay AEMO, the guarantee can be drawn down by AEMO to cover any shortfall arising from the failure to pay.

The NER empower AEMO to revise the minimum level of credit support that it

⁹⁹ Note that under the NER, a payment shortfall from retailers will result in AEMO short-paying generators rather than taking any loss itself.

¹⁰⁰ NER, section 3.3.

¹⁰¹ The criteria also require that the business be under the prudential supervision of APRA. This is a condition not typically met by electricity retailers.

¹⁰² NER, sections 3.3.2. to 3.3.5.

requires of a retailer at any time, provided only that AEMO notifies the party first.¹⁰³ While there are no conditions on the exercise of this power, AEMO has published guidance on the circumstances in which it would review the level of credit support. These circumstances include a significant change in the projected customer load due to unusual customer transfer volumes.¹⁰⁴

Box 6.3: Increases in a designated ROLR's credit support due to its appointment

The acquisition of a large new customer base as a result of a large ROLR event would be expected to represent a circumstance where AEMO would increase the designated ROLR's credit support requirements, in order to maintain the prudential quality of the NEM.¹⁰⁵

The NER does not specify the timing for a designated ROLR to provide increased credit support in the situation of a large retailer failure. We understand that AEMO is likely to determine the required timeframe after discussions with the retailer and allow a period of several days. However, technically there is nothing to stop a designated ROLR from being required to immediately (ie within effectively one day) obtain increased credit support for the acquired customers. In either case, in the event of a large retailer failure, this could represent a very significant obligation at short notice. The AEMC has estimated that the increased credit support associated with the failure of a large retailer in the NEM could exceed \$100 million.

It is possible that an otherwise solvent designated ROLR could fail to meet these obligations in the time allowed. Should that occur, AEMO is entitled to issue the designated ROLR with a default notice on the same day. Failure to respond to the default notice within 24 hours could result in suspension of the designated ROLR.¹⁰⁶ This outcome would trigger a second ROLR event, in a potentially cascading effect in which retailers are progressively suspended after being designated as ROLRs. This outcome would be an example of financial contagion caused by the failure of the first retailer.

Under this option, the increased credit support that would apply to a designated ROLR when a ROLR event occurs would be waived, either wholly or partially, during an initial period following a large retailer failure. This would mean that the designated ROLR could avoid immediately having to find the additional collateral at the time of or shortly after the ROLR event. This would help to reduce the likelihood that an

¹⁰³ NER, section 3.3.6.

¹⁰⁴ AEMO, *Credit Limits Methodology Paper*, version 10, 10 May 2012.

¹⁰⁵ Or in the case of the new prudential framework under the New Prudential Standard and Framework in the NEM rule change final determination made by the AEMC on 18 October 2012, maintenance of the prudential standard.

¹⁰⁶ See the timeline in chapter 2.

otherwise financially sound designated ROLR would be suspended from the NEM due to an immediate inability to meet the increased credit support requirements.

There are two options we have considered for implementing this mechanism:

- A complete waiver of the increase in the credit support requirement caused by the ROLR event for a fixed period. This might best be implemented by setting out a specific minimum notice period in the NER that AEMO must give the designated ROLR before requiring the increased credit support. This would replace the discretion AEMO currently have in fixing a date by which the extra credit support must be provided.
- A reduction in the amount of credit support required over a fixed period, with the amount of credit support then gradually increasing over that period and returning to the normal amount at the end of the period.

Under either approach, it would be appropriate to define the relevant time period for the credit support relief to align with the reasonable time needed for the designated ROLR to secure adequate credit support. In some circumstances this might only be a matter of days, rather than weeks.

While a prescriptive rule that specifies how long the waiver would apply would provide certainty to designated ROLRs and AEMO regarding the operation of the mechanism, there could be some circumstances that warrant an extended application of the mechanism. An example might include general stress in the financial sector such as that observed following the collapse of Lehman Brothers in 2008. To cater for the worst scenarios, an appropriate body such as the AER could be given power to extend a period of credit support relief beyond whatever period is specified in the NER.

As with several of the options discussed in this paper, this mechanism may only be appropriate in the event of a large retailer failure. If a smaller retailer fails, the amount of credit support required is more likely to be manageable for the designated ROLR and material financial contagion risks are unlikely to arise. If this distinction was adopted, the amended NER provisions would need to specify the circumstances in which the waived or reduced credit support would apply, for example only in relation to a ROLR event where the failed retailer has more than a specified number of customers or a specified percentage of customer load in a region.

6.1.2 How is this option likely to mitigate financial contagion?

This mechanism would allow the designated ROLR to take up its new customers without having to bear the immediate risk or cost of sharply increased credit support requirements, reducing the likelihood that AEMO will suspend the designated ROLR for failing to post the increased credit amounts required.

An arrangement for waiving or reducing of credit support following a ROLR event could be set out in the NER and need not be particularly complex, aiding certainty and confidence for NEM and financial market participants. The mechanism could increase

confidence for retailers that are called to provide the last resort service, and could give funders and financiers of a retail business an added confidence that the ROLR framework may be less likely to cause a material threat to the ongoing solvency of the business. This benefit would flow from the fact that the designated ROLR would have sufficient time to find a suitable bank guarantee on reasonable terms when called on to provide the last resort service.

6.1.3 Potential disadvantages of this option

The prudential quality¹⁰⁷ of the NEM would reduce for generators, because there would be a decrease in the amount of collateral held by AEMO.

If the designated ROLR collapses following a transfer of customers and is unable to pay AEMO, and AEMO does not hold sufficient credit support, AEMO would need to short-pay generators. If this occurs, it is possible that losses to generators could be very large, potentially in excess of \$100 million¹⁰⁸ if the collapse of the designated ROLR were to occur after a period of high spot prices with no increase in credit support.

Generators could potentially address the decrease in prudential quality by increasing their spot price offers in order to reflect the increased magnitude of short payments that would occur should the designated ROLR default. While this might only become a material issue should the mechanism be triggered, generators might also decide to include a sustained increase in offer prices simply due to the existence of the mechanism and its potential to reduce the prudential quality of the NEM if triggered.

However, this form of response from generators may not be possible or efficient in practice for the following reasons:

- The lack of clarity as to the nature and degree of the decrease in the prudential quality of the NEM in the period following a ROLR event could make any increase in offer prices difficult for generators to calculate.¹⁰⁹ The nature of the costs imposed by this increase in risk are very different to the usual short-run costs on which generators offer prices are based. The high magnitude of the potential losses would also create difficulty for generators in adjusting their spot price offers to respond efficiently to this mechanism and may require them to increase their offer prices by a large or overly-conservative amount.

¹⁰⁷ We use this term to define the degree of confidence generators have that they will be paid by AEMO for all the energy they generate.

¹⁰⁸ This is a broad estimate compiled by the AEMC, having regard to the magnitude of the largest retailers in the NEM and the debt that can accumulate to AEMO during periods of high spot prices.

¹⁰⁹ The New Prudential Standard and Framework in the NEM rule change final determination made by the AEMC on 18 October 2012 (see <http://www.aemc.gov.au/Electricity/Rule-changes/completed.html>) establishes a transparent statistical standard for prudential quality in the NEM. The new provisions would have retailers each post sufficient credit support such that, should they default and be suspended, the resulting probability of a short payment to generators occurring would be equal to a target percentage (2 per cent).

- Even if an individual generator was able to increase its offer prices by an efficient amount to compensate for this risk, it will only receive additional revenue if the spot price changes as a result. An efficient response to "price in" the additional risk would require all generators to increase their offer prices by the same amount so that the spot price changes by that amount, which is highly unlikely in practice.
- If the generator is fully hedged, then any increase in the spot price will not be retained by the generator and will instead be paid out under its hedge contracts. Any spot price increase may flow through to contract prices, but that will only occur over the longer term.

A shorter period of relief from credit support (for example a day or two) would result in a smaller increase in the potential exposure of generators to default of the designated ROLR. This could make the mechanism easier for generators to manage, but would reduce its potential to mitigate contagion.

6.2 Amendments to DNSP credit support provisions

Box 6.4: Overview of this option

The increased credit support required to be provided by the designated ROLR to DNSPs under the NECF or jurisdictional requirements could be waived or reduced for a short transitional period.

6.2.1 Description of this option

Overview of current arrangements

Retailers pay DNSPs for distributing electricity over the low voltage distribution network to homes and businesses. These payments are termed "use of system" charges and are collected via a billing process on a regular (typically monthly) cycle.

DNSPs also charge customers for the cost of transmitting electricity over the high voltage transmission system. DNSPs pay TNSPs for this service, and subsequently include an element in their bill to retailers in order to recover it. Distribution and transmission use of system charges are referred to collectively below as "network charges".

Depending on their credit rating, retailers may be required to post credit support to DNSPs to reflect the risk posed by potentially failing to pay for network charges, in a similar fashion to credit support requirements that are imposed by AEMO for energy charges.

Unlike the NEM prudential framework, the credit support arrangements between DNSPs and retailers in each NEM jurisdiction vary. We do not explore each jurisdiction in detail in this paper, but for demonstration, the arrangements under the

NECF (which currently applies in Tasmania and the ACT) and the arrangements in NSW are summarised and contrasted below:

Box 6.5: Credit support to DNSPs under NECF

Under the NECF arrangements adopted by Tasmania and the ACT, a retailer is required to post credit support for each dollar that its forecast network charges liability exceeds its credit allowance.¹¹⁰

The network charges liability is an estimate of the forecast amount that will be owed for network charges over a period of around 50 days (one monthly billing cycle plus an invoicing and payment period of ten days each).¹¹¹

The credit allowance is calculated as one quarter of the total annual retailer charges,¹¹² multiplied by a percentage that is specific to the retailer. The credit allowance percentage is calculated depending on the credit rating of the retailer, using the following table from Schedule 6.B1 of the NER:

Standard and Poor's / Fitch Rating	Moody's Rating	Dun and Bradstreet dynamic risk score	Credit allowance (% of Maximum)
AAA	Aaa		100.0%
AA+, AA, AA-	Aa1, Aa2, Aa3	Minimal	100.0%
A+, A, A-	A1, A2, A3	Very Low	100.0%
BBB+	Baa1	Low	52.9%
BBB	Baa2	Average	37.5%
BBB-	Baa3		22.0%
BB+	Ba1		17.0%
BB	Ba2	Moderate	11.0%
BB-	Ba3	High	6.7%
B+	B1	Very High	3.3%
B	B2		1.4%
B-	B3	Severe	0.9%
CCC/CC	Caa, Ca, C		0.3%

¹¹⁰ Chapter 6B, Part B of NER.

¹¹¹ Distributors charge retailers for use of the transmission system and pass these revenues through to TNSPs. The network charges liability is thus a composite of Transmission and Distribution Use of System charges.

¹¹² This is the total annual amount of network charges billed by the DNSP to all retailers.

Should a DNSP request additional credit support, a retailer has 10 business days in which to provide it.¹¹³ This time period is used elsewhere in the NECF as well, including the maximum time a DNSP can take to issue a statement of charges following a retail billing period, and the number of days a retailer has to pay its bill.

Box 6.6: Credit support to DNSPs in NSW

Billing and credit support arrangements between DNSPs and retailers in NSW is governed by the *Market Operations Rule (NUIOS Agreements) No. 2 of 2001*.¹¹⁴

In NSW, DNSPs calculate the credit support required of retailers by making a reasonable estimate of the network charges to be incurred by the retailer over 90 days from the point of calculation.¹¹⁵ Retailers with at least an unqualified credit rating of BBB (Standard & Poor's (Australia) Pty Ltd), Baa (Moody's Investor Service Pty Ltd) or equivalent rating as determined by the DNSP do not have to post credit support.¹¹⁶

Retailers must post the credit support within 5 business days of a request being made by the DNSP.

Bills to retailers must include a due date for payment no earlier than 16 business days from the date of issue.

Comparing the two regimes, some important differences emerge:

- Retailers that can maintain at least an unqualified BBB/Baa credit rating do not have to pay any credit support under the NSW arrangements, regardless of their size. Under NECF, these retailers instead would post guarantees for around 50 days-worth of network charges in credit support, minus a discount to reflect their credit allowance.
- Retailers that have ratings below BBB/Baa post credit support in NSW for 90 days' worth of network charges, with no reductions. Under NECF, these retailers face a requirement to only post around 50 days' worth of network charges, with the possibility of a discount to reflect their credit allowance.¹¹⁷

113 NER, clause 6B.A2.

114 Available on the NSW Department of Trade and Investment, Regional Infrastructure and Services website, http://www.trade.nsw.gov.au/energy/electricity/market-rules/electricity_market_market_operations_rule_no2_of_2001.pdf.

115 Section 14.5 of the Market Operations Rule.

116 Section 11.2 of the Market Operations Rule.

117 We note that for ratings of BBB- or lower, the maximum Credit Allowance will be 22 per cent of 25 per cent of the total annual retailer charges.

Overview of this option

This option mirrors the relief from AEMO credit support obligations for energy described in section 6.1.

Increased credit support required to be provided by the designated ROLR to DNSPs could be waived or reduced for an initial period after a ROLR event.

The same principles could be applied in designing this mechanism as for the AEMO credit support changes discussed in section 6.1, for example by only waiving the obligation for as long as it would reasonably take a designated ROLR to obtain suitable bank guarantees. As with the AEMO credit support changes, it may be appropriate for this option to only apply in a ROLR event in relation to a large retailer over a certain size.

6.2.2 How is this option likely to mitigate financial contagion?

This option would provide the designated ROLR with relief from having to find new bank guarantees at short notice, in similar fashion to the relief described in the previous section. This would assist in preventing the designated ROLR from failing to meet the obligations that will be imposed on it in the period immediately following a ROLR event. This in turn would lower the probability that the designated ROLR would suffer a default event as a result of its appointment to act as the last resort provider, reducing the risk of a cascading retailer failure.

6.2.3 Potential disadvantages of this option

This option could transfer risks to DNSPs and result in reduced revenue for DNSPs if the designated ROLR fails to pay network charges and has not provided credit support to guarantee those payments. However, DNSPs' risks will be significantly limited by their ability to make a pass through application under the NER. A "retailer insolvency event" is specifically listed as a pass through event in the NER. A DNSP could therefore apply to the AER for a change to its regulated revenues to account for any charges that were not paid as a result of the insolvency of a designated ROLR.¹¹⁸

The differences between DNSP credit support regimes in the NEM could make the design of a useful relief mechanism for designated ROLRs difficult. For example, the designated ROLR may not be required to post credit support should its credit rating be at least BBB / Baa in the case of NSW. In addition, under NECF the designated ROLR would have 10 business days from the time of notice to post the additional credit

¹¹⁸ See clause 6.6.1 of the NER. A retailer insolvency event is defined in chapter 10 of the NER as "The failure of a retailer during a regulatory control period, to pay a Distribution Network Service Provider an amount to which the service provider is entitled for the provision of direct control services, if: (a) an insolvency official has been appointed in respect of that retailer; and (b) the Distribution Network Service Provider is not entitled to payment of that amount in full under the terms of any credit support provided in respect of that retailer."

support, and this might be considerably easier to achieve than under the NSW framework where the deadline is 5 business days.

A suitable mechanism would therefore need to consider the specific arrangements in each jurisdiction in order to function effectively. Considering that most large retailers have operations in more than one jurisdiction, this could present a significant burden to achieving an effective and efficient outcome.

The differences also mean that the DNSP credit support obligations may not be a significant cause of contagion risk in some jurisdictions. For example in NSW where there is no credit support obligation imposed on retailers with high credit ratings, the large retailers that are the most likely to be appointed as the designated ROLR following a large retailer failure might meet these high ratings and see no benefit from the mechanism.

We have not examined the likely magnitude of new guarantees required by DNSPs due to a large ROLR event. However the quantity of guarantees required in the event of large retailer failure may be significantly smaller than those required by AEMO under the prudential framework. This is because:

- There is no appreciable volatility in the network charges over the course of a billing cycle and therefore no need to procure more credit support from the retailer than the amount that will be expected to be owed to the DNSP. By comparison, the spot price can be highly volatile and the prudential framework of the NEM sets the required credit support at a level that is designed to protect the generators on 98 per cent of default occasions. As a result, the credit support requirements will typically be much higher than the expected amount of energy debt that will in reality be owed.
- Companies with investment grade credit ratings, such as AGL, Origin and TRUenergy, are generally not required to post any DNSP credit support in the non-NECF jurisdictions.

We also note that DNSPs do not have the power to suspend a retailer from provision of its service in the way that AEMO does. This means that the consequences of a retailer not paying its bill for network charges on time may be more limited and less likely to lead to immediate distress to the retailer. We explore the settlement timetable for network charges in detail and consider the implications of this effect further in section 7.4.

These observations raise the question of whether relief from credit support to DNSPs would be of material benefit to the designated ROLR or of real use in mitigating the possibility of financial contagion following the failure of a large retailer.

7 Options to address the designated ROLR's increased costs and risks

7.1 Spot market price cap

Box 7.1: Overview of this option

The spot price could be capped at a set price, such as \$300/MWh, for a specified period following a ROLR event. The cap could be designed so that it only applies if the failed retailer was larger than a specified size, or a regulator could be given discretion to choose to apply the cap.

7.1.1 Description of this option

This is a mechanism that would place a cap on the wholesale spot price whenever a ROLR event happens. This process could make use of the existing Administered Price Period provisions in the NER¹¹⁹ and should therefore be relatively easy to implement.

Box 7.2: Price capping in the NEM

The NEM already features a comprehensive price capping arrangement under the administered pricing framework. The framework operates by capping spot prices to \$300/MWh (the Administered Price Cap - APC) whenever there is a breach of the Cumulative Price Threshold (CPT). The CPT is a sum of the previous 336 spot prices (equivalent to a seven day period). Should this sum exceed \$193,900, an Administered Pricing Period (APP) is triggered in which spot prices are limited to \$300/MWh.¹²⁰ The APP is lifted once the rolling cumulative price (calculated as if no cap was in place) descends back below the CPT.

Potential precedents

A precedent for this concept exists in the Victorian Declared Wholesale Gas Market, in which a ROLR event directly acts to trigger the declaration of the commencement of an Administered Price Period.¹²¹ We understand that this feature was included in the rules in order to limit the exposure of the ROLR to spot prices for supply contracts, which may be in a state of deteriorating liquidity at the time the ROLR event occurs.

¹¹⁹ Section 3.14.2.

¹²⁰ An APP is also triggered if the sum of the market ancillary services price in the previous 2,016 dispatch intervals (equivalent to a seven day period) exceeds six times the APC. An APP triggered by high market ancillary services prices causes the APC to apply to all market ancillary services, but does not result in a capping of the energy spot price.

¹²¹ AEMO, *Wholesale Market Administered Pricing Procedures (Victoria)*.

The procedures¹²² stipulate that AEMO is to lift the Administered Price Period after 15 days unless the ROLR(s) all agree an earlier date.

Another precedent is in the Short Term Trading Market (STTM) for gas, where there is a distinction made between minor and major ROLR events. The National Gas Rules (NGR) and STTM Procedures¹²³ together specify that for ROLR events in which the failed retailer has more than 3 per cent of the total market volumes at a gas hub, an Administered Price Cap state is triggered. Further, for events in which the failed retailer has more than 6 per cent market share, Market Administered Scheduling or Market Administered Settlement are triggered.¹²⁴

A further potential precedent is the contingency administered price period that was proposed in a rule change proposal that was submitted in 2008.

Box 7.3: Contingency-triggered administered price periods

In October of 2008 the National Generators Forum (NGF) submitted a rule change proposal to the AEMC to introduce the concept of a Contingency Administered Price Period (CAPP).¹²⁵ The intent of the proposal was to institute a cap on spot prices of \$300 / MWh during periods of "non-credible" contingency,¹²⁶ so as to limit the exposure of generators to short contract positions during periods in which physical constraints may be placed on their output.

The AEMC published its final determination in June of 2009, determining not to implement the proposed rule. The Commission considered that the rule change proposal would be likely to:

- distort investment signals creating an inefficient bias towards investment in baseload generation;

122 AEMO, *Wholesale Market Administered Pricing Procedures (Victoria)*, Chapter 3.

123 See Part 20, Division 7, Subdivision 6 of the NGR and section 8.3 of the STTM Procedures.

124 The distinction depends on whether or not an ex-ante market schedule for the gas day has been issued. Market Administered Scheduling features a 20 business day period in which ex-ante prices are calculated by averaging the most recent 30-day historical prices with each data point capped at the Administered Price Cap, capacity prices are set to \$0/GJ, and ex-post prices are fixed to equal the ex-ante prices. Market Administered Settlement is applied to the gas day on which the ROLR event happens if the ex-ante market schedule for that day has already been issued. In this case, the effects are the same except that ex-ante prices are simply retained, but capped to the Administered Price Cap for that day. On subsequent days up to the 20th business day, Market Administered Scheduling would apply.

125 Available at <http://www.aemc.gov.au/electricity/rule-changes/completed/contingency-administered-price-cap-following-a-physical-trigger-event.html>.

126 Examples of "non-credible" contingency events include three phase electrical faults on the power system or multiple generating unit failures. Though these events are possible, the distinction is drawn in the NER for the purposes of assessing the operational reliability and security of the power system - the system is considered in a satisfactory operating state if it can withstand the occurrence of a credible contingency.

- reduce incentives for peaking generators and demand side participation to efficiently respond following a non-credible contingency event;
- increase demand from participants for compensation in relation to CAPPs and NEMMCO¹²⁷ directions;
- place additional responsibilities on NEMMCO at a time when NEMMCO's control room should be focussed on managing power system security.

We consider that it would be important that a price cap put in place during the failure of a large retailer would avoid the short-comings relating to the CAPP identified by the Commission in its decision.

Making use of existing administered pricing provisions

The simplest model for a price cap would be one where an APP was automatically triggered whenever a ROLR event happens.

The time period of the APP could be hard-coded into the NER (for example, a few days), or the time period could be left to the discretion of relevant regulators¹²⁸ potentially in liaison with AEMO. By applying the existing APP framework, this would mean that the price cap would be \$300/MWh, as this is the current value of the APC.

In determining the time period to include in the NER, an appropriate principle could be that the cap lasts long enough to give the designated ROLR time to establish suitable hedging arrangements.

It may however be undesirable to have an APP triggered when a small retailer fails (such as the two observed in the NEM's history), as events like this might present no material threat to financial contagion. To address this concern, a more refined option could be that the price cap would only apply upon the failure of a medium or large sized retailer. For example if more than 500,000 customers or if a certain percentage (e.g. 15 per cent) of the load in a region were contracted with the failing retailer, the price cap could be triggered.

Alternatively, a regulator could be given power to apply or not apply a price cap depending on its assessment of the likelihood of contagion occurring as a result of the ROLR process. It would not be appropriate to apply a price cap retrospectively and it would only apply to energy traded from the time of the decision by the regulator. Accordingly, that decision would need to be made very quickly following a retailer failure.

A further alternative that may be simpler would be to reduce the threshold (the CPT) at which the existing APC applies for a specified period following a ROLR event. This

¹²⁷ NEMMCO was the NEM management company that preceded AEMO.

¹²⁸ This might be the AER or jurisdictional regulators depending on whether the jurisdictions in question were participant to the NECF.

approach would provide some protection against prolonged high spot prices without requiring a new mechanism. It would also ensure that the price cap only applies if spot prices are high for a prolonged period, which is the situation that is most likely to cause risks for the designated ROLR.

Tailored price cap for the designated ROLR

A more tailored, though also more complex approach, would be to cap the spot price for the designated ROLR only.

This approach could be thought of as similar to AEMO effectively writing a free cap contract for the designated ROLR, equal in volume to the size of the customers it has acquired, and spanning a suitable time horizon (as considered above).¹²⁹ The notional \$300/MWh value that applies to exchange-traded cap contracts is also the value of the APC and could be the most suitable strike price for the cap contract.

Whenever the spot price exceeded the cap price of \$300/MWh, the designated ROLR would only pay AEMO \$300/MWh for the energy consumed by the acquired customers, instead of the spot price. AEMO would then have a shortfall in the total amount of money that would be owed to the generators, and would be required to spread the short payment across the generators.

7.1.2 How is this option likely to mitigate financial contagion?

This mechanism would directly prevent the designated ROLR from having to fund the cost of high spot electricity prices for the volumes of energy it has inherited at short notice from the failed retailer, reducing the likelihood of it immediately cascading into failure itself.

The cap price of \$300/MWh is still relatively high and would still require the retailer to pay significantly increased amounts if the ROLR event were to occur during a period of high spot prices. These higher amounts will exceed the retail revenues the retailer will obtain from the acquired customers. As such, the mechanism could not completely remove contagion risk for the designated ROLR, but would reduce the risks caused by very high spot prices.

This mechanism is reasonably simple and transparent, which is a favourable feature that could promote confidence for those retailers wishing to participate as ROLRs. In particular, it could allow them to better estimate the maximum liabilities that they could incur if appointed as a designated ROLR. That may in turn encourage more retailers to offer to act as firm additional ROLRs, which would give the AER greater ability to appoint multiple designated ROLRs.

¹²⁹ A cap contract is a one-sided agreement in which the seller pays the buyer the difference between the spot price and the strike price in the contract, whenever the spot price exceeds the strike price. In exchange for this benefit, the buyer pays the seller a premium. Contracts were summarised in more detail the AEMC's issues paper (section 2.4).

The mechanism could mitigate the need for material increases in collateral requirements from the designated ROLR during the period in which the cap is in place. This could arise because the new customers' energy volumes would be subject to much lower price volatility, and volatility is a key driver in the calculation of credit support that must be posted to AEMO.

7.1.3 Potential disadvantages of this option

Applying a cap to the spot price for energy for the entire NEM in order to limit the risk faced by the designated ROLRs could prove distortionary, and could harm the long-term incentives for generators to invest in the NEM. This distortion could emerge because the cap would apply to some participants which are not materially affected by the failure of the large retailer.

Although the price cap may only apply for a short period of time, it could have a significant impact on generator revenues if that period coincided with a period of high spot prices. Generation investment, particularly investment in peaking generation, relies on an expectation of a reasonably small number of high price periods to recover the high fixed costs involved in the investment. However, the low likelihood of a large retailer failure may reduce the impact on investment incentives.

A cap applied to the whole NEM could raise similar concerns to those identified by the AEMC in its consideration of the Contingency Administered Price Period rule change proposal discussed in box 7.3 above, including that it could:

- distort investment signals and reduce the incentives for investment in peaking generation. This could lead to a sub-optimal generation mix in the long term;
- reduce incentives for peaking generators and demand side participation to efficiently respond following a ROLR event. This could reduce the efficiency of dispatch and pricing, and could threaten system security at times of supply scarcity; and
- increase demand from participants for compensation under clause 3.14.6 of the NER.

The compensation arrangements in clause 3.14.6 of the NER provide a mechanism for ensuring that generators do not run at a loss during a price cap event. The objective of these provisions is to address the potential impact on reliability that could arise if a generator ceased operating because it would incur a loss during an APC. If a generator incurs direct or opportunity costs that exceed the APC, the generator can, in certain circumstances, apply to the AEMC for compensation under clause 3.14.6 of the NER.

However, making and assessing compensation claims involves considerable administrative expenses for the generator and the AEMC. The amount of any compensation is recovered by AEMO from retailers, and retailers have previously noted that large compensation claims impose risks on retailers because they are unable to hedge against the costs of a compensation claim and their ability to pass the costs

onto customers may be limited.¹³⁰ We note that the application of a tailored price cap would not necessarily constitute or coincide with an APP. As such the compensation arrangements in the NER may need to be modified to allow generators to claim compensation under the tailored price cap option.

A further disadvantage could arise because of the possible need to choose which NEM regions to apply the price cap during the ROLR event. It is conceivable that conditions for the triggering of a ROLR event might be satisfied in one jurisdiction but not another, despite the fact that the failing retailer has customers in both.¹³¹ An additional complexity could emerge if it was deemed that the mitigation of contagion risk only required capping of the spot price in one or some, rather than all of the regions in which the failing retailer had customers.

The idea of capping the price for the designated ROLR only would avoid some of the pitfalls involved with the intervention into pricing for the entire market that is implied by the simpler version of the price cap. This approach would also circumvent the question of whether to cap prices in more than one or all regions of the NEM, as the cap would naturally target only the acquired customers wherever they are located.

The designated ROLR would remain fully exposed to prices up to the cap value. This might be several times higher than average prices and could still represent a significant financial burden on the designated ROLR.

Applying a price cap following the failure of a large retailer could require a regulator to subjectively select the moment in time in which to institute the APC, and this could prove inefficient. It may be unlikely that this moment could be effectively determined, given the regulator would be hampered by asymmetry of information issues and the need to make a decision very quickly.

7.2 Initial period where the designated ROLR passes through retail prices instead of paying the spot price

Box 7.4: Overview of this option

Instead of paying the spot price for energy, the designated ROLR would initially pay AEMO a "transitional ROLR tariff" that is set to equate to the wholesale component of the retail prices that it charges to the acquired customers.

7.2.1 Description of this option

Under this model, the designated ROLR would pay AEMO a pre-determined price, referred to in this section as a "transitional ROLR tariff", for an initial period instead of paying the spot price for the energy volumes consumed by the acquired customers.

¹³⁰ AEMC, *Issues Paper - Review of Arrangements for Compensation following an Administered Price, Market Price Cap or Market Floor Price*, 26 May 2011.

¹³¹ This would only be the case in regions in which the NECF does not apply, as the NECF is designed to be a consistent framework for all NEM jurisdictions in which it applies.

The transitional ROLR tariff would be set based on an estimate of the wholesale energy component of the retail prices that the designated ROLR charges to the acquired customers, as discussed below. The intention of this option is that the designated ROLR would effectively retain no profit or loss for these energy volumes, but would act as a conduit for this cash flow for the initial period.

In many ways this model is similar to the "tailored price cap" mechanism in section 7.1, except that instead of a free cap contract, AEMO (on behalf of generators) would instead effectively be giving the designated ROLR a free swap contract, with the strike price struck at the transitional ROLR tariff. Compared to the tailored price cap, this would have the advantage of preventing the designated ROLR from being exposed to high spot prices that were nevertheless below the \$300/MWh cap (noting as above that \$300/MWh may be several times higher than the average spot price and retail prices).

These advantages come at the cost of considerable complexity. Various details would need to be considered, including the following:

- The level of the transitional ROLR tariff would need to be established. In jurisdictions with retail price regulation, there are prevailing regulated prices that can be applied that include specific breakdown of wholesale components. The jurisdictional regulators, such as IPART in NSW and ESCOSA in SA, expressly determine a \$/MWh wholesale component when calculating the regulated retail rates, which could potentially be used to set the transitional ROLR tariff.¹³² In jurisdictions with no price regulation, the task of calculating an appropriate tariff would be more difficult, although this work could be carried out ahead of time, or suitable procedures could be built ahead of time.¹³³
- Various margins could be included in the transitional ROLR tariff and would need to be decided upon. For example, a risk premia reflective of the spot-price risk being mitigated by the transitional ROLR tariff could be included.
- The designated ROLR would pay AEMO the transitional ROLR tariff rather than the spot price, but only for the energy consumed by the acquired customers. AEMO would need to develop a process to short or to long-pay generators by the difference between the amount of the spot price and the transitional ROLR tariff, multiplied by the amount of energy consumed by the acquired customers.¹³⁴

¹³² However, we note that these regulated rates may not be appropriate as a basis for the transitional ROLR tariff due to the particular way in which they are calculated under retail price regulation arrangements.

¹³³ For example, notified or advertised prices averaged across the remaining retailers in the region could be used as an index for setting of the transitional ROLR tariff. Alternatively, a long-run marginal cost calculation could be carried out, or prevailing futures contract prices on the ASX might provide a useful index.

¹³⁴ We note that this mechanism is "two-sided" and might result in profits to generators if the transitional ROLR tariff is higher than the spot price. This could happen for example if a large retailer was to fail for some external reason such as the failure of an overseas parent company.

- The trigger for the mechanism would need to be determined, which would raise similar issues as the price cap option in section 7.1. The mechanism could be triggered on a conditional basis (as could be the case for many of the mechanisms in this paper). This could mean that a regulator would decide if or when to apply a transitional ROLR tariff pass-through arrangement, or some other conditions (for example the size of the failing retailer) could trigger the operation of this type of mechanism.
- Financial exposure of the designated ROLR to the spot price in relation to energy consumed by the acquired customers would occur a certain period after the ROLR event. The duration of this transitional period would need to be determined. As with the price cap option, this period could be determined in several ways, for example:
 - by decision of a regulator; or
 - by firm timeframes specified in the NER; or
 - on a voluntary basis. In this case the designated ROLR could choose to terminate the swap arrangement at any time ahead of a fixed deadline at which it would otherwise terminate automatically.

A principle for setting the period of time that this mechanism should operate could again be commensurate with the time required for the designated ROLR to obtain adequate hedge for the acquired customers.

A variation on this mechanism would be for the difference between the transitional ROLR tariff and the spot price to be recovered from all retailers through a charge levied by AEMO. This variation would have similarities with the co-insurance fund concept discussed in section 7.5.

7.2.2 How is this option likely to mitigate financial contagion?

This mechanism could mitigate the immediate contagion risks caused by short-notice exposure of the designated ROLR to high spot prices.

The mechanism could mitigate the need for material increases in collateral requirements from the designated ROLR during the period in which the mechanism is in operation. This could arise because the new customers' energy volumes would be subject to no price volatility, and volatility is a key driver in the calculation of credit support.

These benefits could significantly reduce the likelihood that the designated ROLR will cascade into failure as a result of its appointment to serve the acquired customers.

7.2.3 Potential disadvantages of this option

On its own, this mechanism would still require the designated ROLR to pay settlement debts on time for the acquired customers. While that debt will be based on the transitional ROLR tariff and the designated ROLR would not be exposed to the risk of very high spot prices, there would still be an increased requirement for working capital to cover the lag between AEMO settlement and receiving bill payments from the acquired customers.

This option would raise the same potential issues as the price cap in relation to the impact on generators, but to a greater degree because the effective cap would be lower. The wholesale component of retailer revenues may be below some generators' short-run costs, and this could lead to concerns about efficiency and incentives faced by generators to continue operating. These concerns would in part depend on how any short payments were spread between generators.

As described under the options in 7.1, this risk could possibly be mitigated by amending the compensation provisions to allow generators to claim compensation for the application of the transitional ROLR tariff. We note that the same potential concerns relating to the costs and risks faced by retailers would apply.

This mechanism could be very complex to implement. It would tend to result in regular short and/or long payments (equal to the difference between the spot price and the transitional ROLR tariff) from AEMO to generators. The extent of these short or long payments would constantly vary, for example with a long payment in one trading interval if the transitional ROLR tariff is higher than the spot price and a short payment in the next trading interval if the transitional ROLR tariff is lower than the spot price.

The settlement systems may be capable of handling some of this complexity - for example, under the current rules it is possible for generators to be short-paid by virtue of the prudential framework. However, long-payments are not currently contemplated and systems changes are likely to be required. It may also be operationally problematic to have regular ongoing short and/or long payments requiring reconciliation by AEMO and the parties concerned.

This complexity could also result in unintended consequences for participants as a result of the short and long payments, for example in relation to the impact on settlement of hedge contracts.

7.3 Delayed settlement period for designated ROLR to pay AEMO for energy

Box 7.5: Overview of this option

The settlement period for the designated ROLR to pay AEMO for the extra energy volumes that would result from the ROLR event could be extended.

7.3.1 Description of this option

Box 7.6: The NEM settlement cycle

Billing of retailers by AEMO for energy is conducted on a weekly basis, four weeks in arrears. For example, for the energy that was consumed in the week from 2 September to 8 September 2012, payment was due on 5 October 2012.¹³⁵

As highlighted earlier, it is possible that the settlement cycle could be shortened in the future should a relevant rule change proposal be presented as recommended in the conclusions of AEMO's NEM Prudential Readiness Review.

This mechanism would delay the date on which the designated ROLR is required to pay AEMO for the energy consumed by its new customers until some later time than that required under the settlement calendar. The length of the delay could be specified by:

- a set delay written in to the NER, or;
- decision by a suitable body such as the AER, AEMO, or a jurisdictional regulator for those regions that have not adopted the NECF, or;
- a combination of these, where the regulator could have discretion to extend the delay beyond some minimum period specified in the NER.

AEMO would be required to develop an equitable methodology to short-pay generators during the delay period.

The designated ROLR would still have to pay for the energy consumed by its existing customers on time.

By having to wait longer to be paid for the energy consumed by the acquired customers, the generators could not employ the money they are owed until a later time. This means that a transfer of wealth in the form of working capital would occur whenever this option was used. As an alternative option, an additional payment for working capital could be made by the designated ROLR at the eventual time of settlement. This additional payment would then be paid by AEMO to the generators.

The NER already features arrangements for deferred payments (such as payments to directed participants¹³⁶) to be adjusted to reflect the bank bill rate. This rate is defined in the NER as the "market rate as at 10.00 am ... for Australian dollar denominated bank accepted bills of exchange having a tenor of 30 days".¹³⁷ So, if for example the designated ROLR was granted a deferral of one month to pay for the first week of energy charges relating to the acquired customers, it would owe that amount to AEMO plus one month's worth of interest at the bank bill rate.

¹³⁵ AEMO, *Settlement Calendar 2012*.

¹³⁶ NER, clause 3.15.7(b).

7.3.2 How is this option likely to mitigate financial contagion?

The intention of this mechanism would be to grant the designated ROLR additional time to pay for the energy consumed by the acquired customers. This would be expected to reduce the amount of financial obligations placed on the designated ROLR in the period following the ROLR event. This in turn would be expected to reduce the likelihood of the ROLR event causing the designated ROLR to experience financial distress in the short-term as a result of its designation, thereby reducing the likelihood of it collapsing as a result.

However, the issues noted below may limit the extent to which this intention would be achieved in practice.

7.3.3 Potential disadvantages of this option

The existing NEM settlement cycle may make this type of mechanism of little marginal benefit. This is because the designated ROLR already gets at least four weeks to pay for the energy consumed by the acquired customers. If the designated ROLR finds itself in immediate financial stress following its designation, the existing settlement period provides a window for the designated ROLR to work through those issues and obtain funding to allow it to meet its liabilities to AEMO prior to them falling due four weeks after the ROLR event. Accordingly, it may have already remedied any initial financial difficulties before any benefit of the delayed settlement mechanism would be felt.

As noted above, there have been suggestions that the NEM settlement cycle may be shortened in the future. Should this occur as a result of a future rule change proposal this mechanism might provide a more tangible benefit in reducing the designated ROLR's immediate financial demands.

This mechanism would represent a transfer of risk from the designated ROLR to generators, who would have to wait longer than normal to be paid. As identified in previous sections, generators will have their own financial obligations that may depend on the timely receipt of payments from AEMO, including settlement of hedge contracts. This could mean that the risk of contagion could be effectively transferred to generators by this mechanism.

7.4 Delayed settlement period for designated ROLR to pay network charges

Box 7.7: Overview of this option

The settlement period for the designated ROLR to pay DNSPs for the extra network charges that would result from the ROLR event could be extended.

7.4.1 Description of this option

Section 6.2 explained the network charges and credit requirements imposed by DNSPs on retailers.

In a similar manner to the previous section, this option would allow the designated ROLR to defer having to pay for the increased network charges that it would owe to DNSPs in relation to the customers that it acquires after the ROLR event.

In jurisdictions that have adopted the NECF, the NER stipulate that the retailer must pay for network charges by the due date on the bill,¹³⁸ which must be at least 10 business days after the date the bill is issued. Retail rules in the jurisdictions that have not adopted the NECF vary. In NSW for example, a retailer is obligated to pay within 16 business days of receiving the bill.¹³⁹

Under this option, the relevant date for payment under the NECF and jurisdictional legislation would be extended in relation to the network charges attributable to the acquired customers. There would be several options for how to determine and set the extended date, as in the option in section 7.3.

7.4.2 How is this option likely to mitigate financial contagion?

This option would act in a similar vein to the deferred payment of energy charges to AEMO in section 7.3 by reducing the financial obligations of the designated ROLR in the weeks following its designation. This reduction in financial obligations would be expected to reduce the likelihood of the designated ROLR collapsing as a result of its designation.

7.4.3 Potential disadvantages of this option

This option may have only a minor benefit relative to some of the other options, because the NER already features a minimum delay period in which retailers must pay their bill once it has been issued. As with the option in section 7.3, any immediate financial pressures faced by the designated ROLR may have been addressed by the date that network charges become payable.

¹³⁸ NER, clause 6.20.4.

¹³⁹ *Market Operations Rule (Network Use of System Agreements) No.2 of 2001*, clause 8.2.

In addition, the amount owed to DNSPs for network charges are not subject to the degree of volatility that is present in the spot price for energy, so the materiality of any benefit may be relatively low compared to the other options.

The consequences of non-payment of network charges are also not as immediate as for non-payment of AEMO for energy. If the designated ROLR fails to pay AEMO, AEMO can suspend the designated ROLR from the NEM within approximately 36 hours, which would trigger a second ROLR event and significant contagion risk. Non-payment of network charges would entitle the DNSP to commence insolvency proceedings against the designated ROLR, which could eventually trigger a ROLR event if the failure to pay was not remedied. Such an action by a DNSP for non-payment of network charges was the trigger for the ROLR event in relation to Jackgreen in 2009. However, this process would take longer to trigger a ROLR event than a failure to pay AEMO.

7.5 Industry co-insurance fund

Box 7.8: Overview of this option

A fund could be established that could be used following a ROLR event. Money from the fund could temporarily pay for the energy consumed by the acquired customers for an initial period after the ROLR event. The fund could also or instead be used temporarily as a provider of increased credit support to AEMO, and/or as a way to refund the designated ROLR's costs. The fund could be built up from premiums progressively charged to retailers over time.

7.5.1 Description of this option

In its submission to the issues paper, the AER suggested the possibility of an insurance scheme of some kind to reduce the risk of cascading retailer failure when a ROLR event occurs.

This option would involve the development of a fund ("ROLR fund"). The ROLR fund would be filled by levies paid by retailers over time. This could be accomplished by levying all retailers in the NEM a fixed amount which would be likely to be passed through to consumers. A body would be appointed to manage the fund and oversee the application of it during a ROLR event.

When a ROLR event happens, the fund could be used to do one or more of the following:

- Provide a cash loan to the designated ROLR.
- Provide credit support to AEMO for the acquired customers' energy volumes.
- Reimburse the designated ROLR for its costs as a form of cost recovery.

This scheme has a number of precedents, the most relevant of which are discussed in this section.

Of note, a possible framework for such a scheme already exists under the provisions for participant compensation following a scheduling error in clause 3.16 of the NER.¹⁴⁰ This framework could possibly be used as a template to design a ROLR insurance fund.

Box 7.9: Making use of clause 3.16

Clause 3.16 of the NER lays out the arrangements for the participant compensation fund. The fund is maintained by AEMO in the books of the corporation for compensating participants for scheduling errors.¹⁴¹ Interest paid on money in the fund accrues to and forms part of the fund.

The fund has an effective target amount of \$5 million, which is filled by including a component within participant fees that are levied to all participants as described in clause 2.11 of the NER. In any given year, the total amount of funding to be levied to participants to augment the fund cannot exceed \$1 million.

Where a scheduling error occurs, a market participant may apply to the dispute resolution panel for a determination for compensation.

Clause 3.16.2 of the NER provides guidelines to the dispute resolution panel regarding the technical criteria they are to use in assessing the claim for compensation and in calculating the amount of any compensation to be awarded.

Clause 3.16.2(h)(5) of the NER specifies that the aggregate liability in any year in respect of scheduling errors cannot exceed the balance of the fund that would have been available at the end of that year if no compensation payments had been made during that year.

Custody of fund

The fund could be overseen and administered by AEMO using similar provisions to those in clause 3.16 of the NER. Alternatively it is possible that a different body could administer the fund. There is some precedent for the use of a different body, for example the Securities Exchange Guarantees Corporation which manages the National Guarantee Fund for retail customers of financial market exchange participants in Australia.

¹⁴⁰ We note that Snowy Hydro, in their submission to the AEMC to the Contingency Administered Price Cap rule change (discussed in chapter 5) mooted the idea of an industry-driven insurance fund for physical generator contingencies based on the provisions in clause 3.16.

¹⁴¹ These errors can be deemed by the dispute resolution panel or declared by AEMO to have occurred when AEMO fails to follow the central dispatch process, or when a dispatch interval contains a manifestly incorrect input.

Box 7.10: The National Guarantee Fund

The Securities Exchange Guarantees Corporation provides a useful summary of the organisation and its custody of the fund in its 2011 Annual Report:¹⁴²

“Securities Exchange Guarantees Corporation (SEGC) is the trustee of the National Guarantee Fund (NGF) which is a compensation scheme available to the operators of licensed financial markets who are members of SEGC. ASX Limited (ASX) has been the only member of SEGC since the NGF was created in 1987. As at June 2011 the net assets of the NGF were \$106.1 million...”

The fund is generally designed to compensate investors for certain events in which they incur losses because of the failure of a dealer to function as required. This includes failure by a dealer to complete transactions, unauthorised transfers made by a dealer, or losses caused by insolvency of a dealer.

The fund is to be maintained to a specified minimum amount - set to \$76 million in 2005. Though the minimum amount has never been breached, arrangements are in place that would allow the SEGC to respond to this eventuality, including:

- adjustment of the minimum amount;
- insuring against possible future claims;
- paying claims in instalments;
- borrowing from the ASX in order to meet a payment;
- raising of funds by imposing a levy on the ASX or on all or a class of participants of ASX.

The NGF is an example of a market fund in which the custody of the fund is distinct and separated from the market operator (in this case, the ASX).

Limitation of liability

A key question will be the degree to which the fund is to be drawn or relied upon when a ROLR event happens. There are two broad policy options:

- The fund is limited as to how much it pays by capping any compensation at a maximum equal to the amount that is in the fund at the time of the ROLR event.
- Alternatively, should there be insufficient money in the fund at the time of the ROLR event, the fund could borrow from third parties in order to pay the required liabilities.

¹⁴² Available at http://www.segc.com.au/pdf/segc_annual_report_2011.pdf.

Capped liability

Under this model, a designated ROLR could only access the fund up to whatever amount was contained in it. Should this amount be insufficient, additional measures taken outside the operation of the mechanism might be necessary to avoid the failure of the designated ROLR.

This version might work best therefore in an environment in which it was not the only policy instrument in place to protect the designated ROLR from the likelihood of defaulting as a result of its designation.

We discuss below options for the use of the fund. Some of those options, such as using the fund to provide credit support, would involve potentially very large claims that would be likely to significantly exceed the amount contained in the fund unless the fund was very large. Accordingly, a capped liability structure may not be viable for some potential uses of the fund.

Un-capped liability

Should there not be enough money in the fund when the ROLR event occurred, some other form of credit or capital would be required up front that could be paid back by the fund over time. This up-front cost could conceptually be borne or delivered in different ways:

- A government entity could provide the fund with a loan at short notice so that it can pay for its liabilities when a ROLR event happens. The fund could then, using the established levying arrangements, fill itself while paying the government entity back over some reasonable timeframe.¹⁴³
- The fund could insure itself against claims, so that when a ROLR event happens, an immediate payment might flow to the fund from an insurer to help it pay for its liabilities.¹⁴⁴
- Generators might provide the initial resources by accepting short payments from the pool during the ROLR event that would then be made up to them via the progressive filling of the fund via levies placed on retailers after the ROLR event had happened. This would in effect work as a form of deferred settlement (similar to that contemplated in section 7.3) with the payments to be made over a term by a fund rather than by the designated ROLR. From the generators' perspective this option might carry less risk, because the likelihood of the fund being unable to pay would presumably be lower than the likelihood of the

¹⁴³ Taken to an extreme, this concept could be used so that no levies are charged and the fund remains empty right up until the first ROLR event in which it required to operate. The government entity would provide whatever funds were required and only then would levying of retailers commence in order to fill the fund so that the government(s) could be paid back.

¹⁴⁴ A precedent for this exists in that, as highlighted earlier, the Securities Exchange Guarantees Corporation can purchase insurance against claims made on the National Guarantee Fund.

designated ROLR becoming insolvent. This arrangement would not help in circumstances where the fund required money immediately and so may be less useful than the concept of having the fund acquire loans or insurance.

Award criteria

A robust, transparent and predictable claims process would be required to be designed for the proper functioning of a ROLR fund during a ROLR event. There would be some important matters to decide upon in designing the claims process including:

- the selection of decision maker / claim-awarder. The most likely choice might be a regulator such as the AER; and
- the balance between prescription (such as explicit awards to be provided to the designated ROLR written in to the NER) and discretion given to the claim-awarder.

One possible framework would be to copy the structure of clause 3.16 in the NER. It may be appropriate replace the dispute resolution panel, which determines claims under clause 3.16, with the AER. Alternatively, it may be possible to use the dispute resolution panel or some other form of expert panel. It is also likely to be necessary to create a set of guidelines that the decision maker should apply in deciding whether and how much to award the designated ROLR from the fund when a ROLR event happens.

Filling the fund

The fund could be filled progressively to a target minimum amount by imposing a levy on retailers in the NEM. Once the minimum amount of the fund is reached, premiums charging could be suspended to prevent the fund from growing over-large. This is a common approach used to fill fidelity funds, as discussed below.

Box 7.11: The minimum amount

Most fidelity funds are constructed around the concept of a minimum amount. Whenever the value of assets held by the fund drops below the minimum amount, contributions are sought from relevant parties (ie potential beneficiaries and/or causers) to return the fund to the minimum amount. Examples of minimum amounts include:

- The NEM's participant compensation fund features an effective target fund amount of \$5 million. As noted earlier should the fund fall below this value, AEMO can invoke fees of no more than \$1 million per year in order to re-fill it.
- As noted above, the National Guarantee Fund overseen by the SEGC features a minimum amount of \$76 million.

Deciding on an appropriate value for the minimum amount of a ROLR fund

would be a significant exercise requiring consultation with stakeholders, as it would be a trade-off between the support it would provide and the cost of funding. The appropriate minimum amount would depend quite heavily on the nature of payments that might flow from the fund, and whether or not the fund had capped or un-capped liability.

A decision would also be required regarding the pattern of fees that should be applied to fill the fund to its minimum amount. A possible method for this would be to specify a timeframe by which the fund should be filled, assuming no claims. This would allow a simple, transparent calculation of, for example, annual or monthly contribution fees from retailers. A reasonable timeframe for the buildup of a fund capable of mitigating the collapse of a designated ROLR in the event of a large retailer failure might be five to seven years.

Below we consider the specific question of which parties bear the cost of the levies under two premises:

- **Beneficiaries pay** - all retailers benefit by the fact that they could potentially claim from the fund if they are appointed as a designated ROLR, and from the favourable effect of continuing market stability flowing from the fund. In this case all retailers could be levied a flat volume-based charge (for example a fixed fee per MWh).
- **Causers pay** - retailers that take excessive risks would pay in to the fund at a higher amount than retailers that take fewer risks.

While the second premise could have the benefit of helping to incentivise retailers to take on efficient levels of risk, such an approach would require these parties to be identified probabilistically ahead of time, perhaps using credit ratings or other relevant measures. To the extent that a hypothetical assessment of the likelihood each retailer has of causing a ROLR event could be inaccurate, any inaccuracy could impose barriers on retailers operating or wishing to operate in the NEM. This potential downside may make the principle of "causers pay" undesirable relative to the simpler premise of "beneficiaries pay".

Operation of the fund during a ROLR event

We have identified three functions that a ROLR fund could provide, either on their own or in combination:

- Providing a loan to the designated ROLR so that it can pay for the extra energy on time and purchase hedge contracts quickly (Function 1).
- Providing the increased credit support to AEMO that results from the ROLR event, which would otherwise have to be posted by the designated ROLR at short notice (Function 2).

- Directly compensating the designated ROLR for the cost of performing the last resort service as an alternative to the cost recovery mechanisms discussed in section 5.1 (Function 3).

Providing loans

This function would provide a loan to the designated ROLR to consolidate its financial position so it can pay for the additional costs that it will face in serving the new customers.

The design detail of this function would centre on the terms and conditions of the loan, including the term of the loan and the interest rate to be applied.

As mentioned previously, the NER presently apply the bank bill rate to revision adjustments. This could potentially form the basis for interest payable by the designated ROLR back to the fund.

The term of the loan could be fixed at some reasonable period, which would need to be determined. A six or 12-month term might be reasonable, for example.

Providing credit support

This function would allow AEMO to use the ROLR fund as a guarantor for the credit support requirements of the designated ROLR, instead of requiring that designated ROLR to provide new bank guarantees when a ROLR event happens.

This arrangement would work in much the same way as the mechanism described in section 6.1, in which the designated ROLR does not have to post any increased credit support for an initial period when it acquires the new customers. The distinction here would be that the ROLR fund would take on the additional risk this poses, rather than the pool of generators.

The period of time that the fund would act as guarantor could be set using the concepts presented in section 6.1.2, where the level of support provided could diminish over a defined period to allow the designated ROLR time to obtain commercial credit support.

Providing funding for cost recovery

This function would pay for the costs that the designated ROLR incurred, as an alternative to the amended cost recovery mechanisms proposed in section 5.1, or the existing arrangements under the NECF and/or the jurisdictional ROLR regimes.

A benefit of this option over the existing cost recovery arrangements or the option in section 5.1 would be that the fund may be able to pay the amounts to the designated ROLR more quickly. The cost recovery arrangements under the ROLR regimes are likely to involve a period of several months before the designated ROLR is refunded its costs.

Box 7.12: What happens if the designated ROLR defaults?

Under Function 1, should the designated ROLR default or become insolvent, it may be unlikely to be able to pay back the loan that has been extended to it by the ROLR fund.

Under Function 2, should the designated ROLR default, AEMO would draw on the fund to cover the designated ROLR's debts to AEMO for settlement of energy. A default however would leave the fund unpaid for the provision of its services. If the designated ROLR fails to pay AEMO, AEMO is likely to move to suspend it from the NEM, which will trigger a ROLR event.

Under either Function 1 or Function 2, if the designated ROLR becomes insolvent and is unable to repay the fund, the ROLR fund would become a creditor in the insolvency. However, as an unsecured creditor, it may be unlikely to recover any of the money that it provided to the designated ROLR.

Function 3 features a non-refundable payment to the designated ROLR to compensate it for the cost of providing the ROLR service. The fund would not have any claim for recovery of the money if the designated ROLR failed despite receiving this payment.

7.5.2 How is this option likely to mitigate financial contagion?

The means by which this mechanism would mitigate financial contagion would be similar to those identified for previous options - the designated ROLR would enjoy the benefit of not having to find increased money and/or credit support facilities at short notice. This would be expected to help reduce the likelihood that it will cascade into failure as a result of its designation as ROLR.

7.5.3 Potential disadvantages of this option

Working out the functional aspects of such a scheme could be complex. It would require the establishment of governing rules or legislation, as well as considerable consultation and stakeholder engagement for an administering body. This could lead to delays in implementation when compared with some of the other mechanisms that might be implemented more readily.

Implementing a fund framework ahead of a ROLR event occurring may result in costs being assigned to consumers for a contingency that may be a very low risk, in that the fund may never be needed. This option differs from most of the other options in this paper in this respect, as it imposes a direct up-front cost on participants regardless of whether a retailer failure actually occurs.

This issue, and the potential size of the fund, raises the question of proportionality - ie the protection offered by the fund may not warrant the cost, depending on the minimum amount that was decided upon.

For illustration, the AEMC has estimated that the cost of filling a \$250 million fund over five years would equate to a charge of around \$0.23/MWh. If this charge was passed on to customers, it would result in an average cost of \$8.50 per residential customer in total over the five year period.¹⁴⁵

If the costs were not passed on to consumers, then the fund would impose a significant cost on market participants. It would tie-up large amounts of capital that could not be used for investment and other productive purposes.

We note that having the fund post credit support to help an otherwise financially sound designated ROLR to remain in the NEM would be useful in helping to mitigate contagion. However, we consider that the actual drawing down of credit support from the fund would likely only occur when the designated ROLR was failing. A draw-down of credit support to pay for a failing designated ROLR's debts could result in all of the money in the ROLR fund being used and not being repaid, with the fund needing to be refilled over time by further contributions from other retailers. We consider that this would be a significant disadvantage and limitation to the suitability of a fund for the purpose of providing credit support.

The award criteria for use of the fund could be a significant challenge to establish. The nature (particularly size) of loans or grants made to the designated ROLR during a ROLR event would also be a key issue that would need to be developed. A fine balance may need to be struck between prescription and regulatory discretion in order for the fund to adequately meet its design objectives when a real ROLR event happens, without imposing undue costs or otherwise causing unintended consequences in the market more broadly. The design could prove difficult because of the potentially unique nature of situations in which large retailers fail, and the potentially large sums of money involved.¹⁴⁶

It is also conceivable that the fund might simply not be big enough to prevent contagion on its own in a very severe circumstance. As we highlight earlier, energy debts faced by large retailers can be very large during periods of unhedged high prices, potentially requiring the fund to be tens of millions of dollars or more in magnitude in order to safely cover most instances of large retailer failure. The option of allowing the fund to be supported by government loans or re-insurance, or using the fund as only one possible regulatory response to a large retailer failure might help to allay this shortcoming.

In their report to the MCE as part of the development of the NECF ROLR regime, NERA Economic Consulting and Allens Arthur Robinson noted that several submitters

¹⁴⁵ Calculation based on forecast energy consumption data from the AEMO *Statement of Opportunities, 2011*, and assuming an average residential customer energy use of 7.5MWh per year. The cost to non-residential customers would be higher than this figure.

¹⁴⁶ The size of any single award from the participant compensation fund in clause 3.16 of the NER will not typically exceed \$5 million. We note that this amount is orders of magnitude smaller than what might be required to be paid out from an effective ROLR insurance fund during a large retailer failure.

raised the possibility of an industry co-insurance fund as an alternative to a RoLR cost recovery scheme. However, they concluded that:¹⁴⁷

“given that the costs of a RoLR event are likely to be event-specific, it would be difficult to determine a priori the appropriate amount of any such levy, and it would be likely that consumers would pay too much or that the amount collected would be below the costs of any RoLR event that occurred, with a consequent need for a special RoLR event payment to make up the difference.”

We note that there may be some potential legal issues regarding the ability of either Commonwealth, State or Territory governments to impose a levy on retailers in the NEM. These potential issues arise due to constitutional and other limitations and would require a detailed investigation were this option to be pursued.

¹⁴⁷ NERA Economic Consulting and Allens Arthur Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group*, 29 January 2009, pp91-92.

8 Options for a last resort government response

8.1 The role of governments in mitigating contagion risk

8.1.1 The potential need for a last resort government role

We consider that the market-based mechanisms outlined in chapters 5 to 7 have the potential to significantly mitigate the risks of financial contagion in most circumstances following the financial distress of a retailer. However, the mechanisms are unlikely to remove all risks of contagion. They may also 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 is likely to involve some last resort role for governments. As proposed in the Victorian DPI submission, we agree that any role for governments should be short term and last resort.¹⁴⁸

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 indicated in the timeline in section 2.2, it is possible for a ROLR event to be triggered within 3 days of the first external signs that the retailer is in financial difficulties. The failure of the first retailer could potentially cascade to a second retailer failure within 10 days or less if the designated ROLR is unable to provide increased credit support. This is a very short timeframe for governments to decide to act, determine the best form of response (including determining which government agency should respond, or co-ordinate a response by several governments or agencies) and implement that response.

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

¹⁴⁸ Victorian DPI submission, p3.

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 the designated ROLR and seek to prevent the contagion that would result if the failure of the first retailer caused a cascading failure of the designated ROLR and 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.

8.1.2 Options for government responses

A government response could involve providing funding, loans or guarantees, as is potentially an option for any industry where governments consider that the costs to society of a potential failure justify government involvement. Such a response would not require any special mechanisms to be put in place in advance of the event. However, such a response may not be the most efficient means of mitigating contagion in the NEM. It is likely to be possible to design mechanisms that address contagion risks at a lower cost to taxpayers and electricity consumers. Sections 8.2 and 8.3 set out what we consider to be the most likely candidates for such mechanisms.

Section 8.2 discusses an option involving a government entity posting credit support to AEMO to meet the credit support obligations imposed on the designated ROLR for an initial period after the ROLR event. This option addresses the contagion risk that would arise if the designated ROLR was unable to meet AEMO's credit support requirements within the required timeframes following a large retailer failure, which is a key cause of contagion risk. Other options in this paper also seek to address that risk. Government involvement would be an alternative if those other options were not adopted or were considered insufficient in relation to a very large retailer where the amount of credit support required was very high.

Section 8.3 sets out options for enhanced administration arrangements, which would be combined with short-term government funding. These options involve using existing or amended insolvency and administration arrangements to enable a more orderly transfer of customers from the failed retailer to other retailers in a manner and timeframe that avoids contagion, rather than relying on the current ROLR framework. A government entity would fund the administrator during this interim period, and potentially recover its costs through a cost recovery mechanism at a later date.

Government involvement to support the use of other options

In addition to the options discussed in sections 8.2 and 8.3, a government response could be integrated with some of the market-based options discussed in chapters 5 to 7.

In particular, short-term government funding could be used to support those mechanisms rather than transferring risks or costs directly to other market participants. Examples of such an approach are discussed below.

Box 8.1: Examples of integrating government support into market-based mechanisms

Funding any reduction in spot market payments

The possibility of price capping was raised in section 7.1, including a possible price cap that would prevent the designated ROLR from having to pay spot prices in excess of \$300/MWh.

Under a price cap, AEMO would reduce the amount that it pays to generators for energy. Some of the other options in chapter 7 would have a similar result where generators would be paid less for energy. On their own, any of these options would represent a transfer of value to the designated ROLR from the generator pool.

As an alternative, a government entity could bear the costs of these options instead of generators. For example, under the price cap option, whenever the spot price exceeds \$300/MWh, the designated ROLR could pay AEMO \$300/MWh and a government entity could pay AEMO the difference between \$300/MWh and the spot price. This structure would allow generators to be paid the full spot price, avoiding any risk that the option would transfer the contagion risk to generators.

Co-insurance front-loading

The possibility of co-insurance funds were raised in chapter 7 as a possible means of having capital ready to assist the designated ROLR during a ROLR event. The possibility of government involvement was raised there in the context of providing money so the fund could operate to the full extent required, even if there was not enough money in the fund at the time of a ROLR event.

One variant of these ideas could be for a government entity to provide a lump payment up-front in order to fill the fund initially so that it can be fully functional from the beginning of its existence. Contributions from participants would then be collected and built up over time, substituting for the government funds, allowing the fund to progressively pay the government entity back.

Funding settlement delays

Chapter 7 considered the possibility of delaying the deadline that the designated ROLR would have to meet to settle its debts to AEMO and/or DNSPs for the acquired customers. Rather than having the providers of generation and/or network services bear the risk and working capital impact of this delay, a government entity could act as an intermediary by paying the providers on time, and then recovering the money from the designated ROLR at a later time.

Co-ordination of any government response

It will be necessary to co-ordinate any government response, particularly in relation to a large retailer that is operating in several NEM jurisdictions. Most options for a government response also require decisions as to which government entity is best placed to lead the response, and determine how any government funding should be allocated. The options in sections 8.2 and 8.3 could be designed to allow a range of Commonwealth, State or Territory bodies to lead the response.

We note that in its submission to the issues paper, the Victorian DPI included as a proposed principle for the design of any options that "The greater financial resources of the Commonwealth and its vertical fiscal imbalance with State and Territory jurisdictions should be acknowledged in allocating any last-resort role for government intervention".¹⁴⁹ We invite comments from stakeholders on this issue.

Existing jurisdictional emergency powers

Most NEM jurisdictions have legislation relating to state of emergency powers that can be exercised in certain situations. Most jurisdictions also have emergency step-in powers that allow the jurisdictional regulator to step in and take control of an electricity entity in certain circumstances.

This paper does not propose any options that relate to using or enhancing these existing powers. These emergency powers are designed as a last resort measure for threats to physical electricity supply, energy shortages and security of supply issues. We do not consider that they are well-suited for managing financial contagion arising from a retailer failure.

The existing emergency powers are summarised in Appendix B.

8.1.3 Amendments to jurisdictional ROLR schemes to avoid inconsistency with insolvency laws

In addition to the options discussed in this chapter, we recommend that the South Australia and New South Wales governments take steps to address potential inconsistencies between their jurisdictional ROLR regimes and insolvency laws.

Some of the insolvency provisions in chapter 5 of the *Corporations Act 2001* (Cth) may be inconsistent with the current ROLR regimes. This potential for conflict mainly arises because the priorities, responsibilities and duties of insolvency officials will be different to the priorities, responsibilities and duties of the market and market operator during a ROLR event. As discussed in section 8.3, the priorities and duties of insolvency officials centre on maximising the return of creditors and they must act in the interests of creditors. In contrast, the priority of NEM institutions administering a ROLR event is the long term interests of electricity consumers.

¹⁴⁹ Victorian DPI submission, p3.

Whether the Corporations Act would prevail in the event of an inconsistency would depend on the particular circumstances. Uncertainty about which provisions prevail could exacerbate contagion risks. For example, the AEMC has previously noted the risk that the liquidator of a failed retailer could seek to clawback amounts held by AEMO in a security deposit,¹⁵⁰ and if that occurred it could have significant impacts on generators. During the Jackgreen ROLR event, the administrators queried whether the transfer of Jackgreen's customers was consistent with the Corporations Act, and any such challenge in relation to a large retailer failure could result in significant uncertainty and delays that hindered the designated ROLR's ability to obtain financing.

The Corporations Act provides a solution for this potential inconsistency. Section 5G contains a declaration mechanism for inconsistent State provisions to displace the Corporations Act.

The ROLR arrangements under the NECF contain such a displacement provision. Accordingly, this risk of inconsistency has been mitigated in jurisdictions that have adopted the NECF. The jurisdictional ROLR legislation in Victoria and Queensland also contain a displacement provision.

However, there are currently no displacement provisions in the South Australian and NSW ROLR legislation. If those jurisdictions do not adopt the NECF in the near future, we recommend that they implement appropriate displacement provisions.

8.2 A government entity posts credit support for the designated ROLR

Box 8.2: Overview of this option

A government entity could post credit support to AEMO to meet the increased credit support obligations imposed on the designated ROLR for an initial period after the ROLR event. A rule change would be required to implement this option.

8.2.1 Description of this option

This is a variant of the options identified in chapter 6, in which we raise the possibility of waiving or reducing the credit support required to be posted by the designated ROLR for an interim period.

Under this option, a government entity could provide a guarantee to AEMO for a defined initial period. After that initial period, the designated ROLR would need to obtain ongoing credit support from a commercial provider.

It is likely to be appropriate for the relevant government entity to charge the designated ROLR at least a commercial rate for providing this service, to encourage the designated ROLR to transition to commercial credit support as soon as possible.

¹⁵⁰ AEMC, *Final Report - Review into the role of hedging contracts in the NEM Prudential Framework*, 30 June 2010.

Clause 3.3.2 of the NER sets out the requirement that market participants provide credit support from an organisation that meets the acceptable credit criteria, unless the market participant itself meets the criteria. Clause 3.3.3(a) of the NER specifies that an entity that meets the acceptable credit criteria must be either:

- an entity under the prudential supervision of the Australian Prudential Regulation Authority (APRA); or
- a central borrowing authority of an Australian State or Territory which has been established by an Act of parliament of that State or Territory.

In our view neither the Commonwealth Government (eg through the Treasury) nor a Commonwealth Government entity such as the Reserve Bank of Australia could currently provide credit support to a market participant under clause 3.3.2 of the NER, as neither meets the criteria in clause 3.3.3(a).

A rule change would be required to allow a Commonwealth Government entity to provide credit support. Alternatively, credit support could be provided by a State or Territory central borrowing authority.

8.2.2 How is this option likely to mitigate financial contagion?

As with the options described in chapter 6, this option would address the risk that the designated ROLR could not obtain the necessary increased credit support within the required timeframe following a ROLR event. If a government entity provided credit support for an initial period, the designated ROLR would be likely to have sufficient time to obtain commercial credit support to commence at the end of that initial period. This option would therefore mitigate contagion by reducing the likelihood that the designated ROLR would fall into financial difficulty as a result of its appointment and trigger a second ROLR event and potential cascading failure.

The main advantage that this arrangement might have over that contemplated in section 6.1 is that the generator pool would see no reduction in the prudential quality of the NEM.¹⁵¹ This would mitigate the potential disadvantages of the option in section 6.1, in that the transparency and certainty of the prudential quality in the NEM would be preserved.

8.2.3 Potential disadvantages of this option

If the designated ROLR fails despite this government assistance and is unable to pay AEMO, the government entity will need to pay out under the guarantee. As we have highlighted earlier, should spot prices be sufficiently high, these payments may be potentially very large.

¹⁵¹ This benefit would only arise to the extent that the government guarantees carried at least the same level of surety as bank guarantees, which we assume would be a requirement when implementing this option.

This could result in a large liability for the relevant government entity, which may ultimately be borne by taxpayers. Alternatively, mechanisms could be implemented together with this option to provide for any such costs to be recovered through a levy on industry participants, in which case the costs would be likely to be passed on to electricity consumers. This could be seen as a relative disadvantage compared to some of the other options.

We note that AEMO requires that any guarantee be provided in the form of the pro forma guarantee prepared by AEMO and published on its website.¹⁵² We expect that any government guarantee would also need to be provided in this form, but it is not known whether it would be practicable for a government entity to provide a guarantee in this form.

In particular, AEMO currently requires that 60 per cent of the value of all guarantees posted to AEMO must be able to be called within 60 minutes of a demand from AEMO.¹⁵³ This requirement is necessary due to the need to use the money to pay for settlements to generators on the same day that the call-down is made. This could prove a difficult requirement for government entities to meet should they be called on to pay out under the guarantee, for example due to the need for approvals for the payment.

8.3 Enhanced administration arrangements coupled with interim government funding

Box 8.3: Overview of this option

A government entity could appoint an administrator to manage the failing retailer for an interim period to facilitate a trade sale or orderly transfer of customers to alternative retailers, as an alternative to the ROLR regime. Existing Australian insolvency laws could potentially be used. Alternatively, insolvency laws could be amended to implement a special administration regime for electricity retailers. A government entity would provide funding during the administration, which could be recovered through an industry levy if necessary.

8.3.1 Description of this option

This option would involve governments taking on a role in relation to the administration of the failing retailer and providing funding during the administration period. There are a number of potential means of implementing this option, which are discussed in this section.

The most common forms of external administration under the *Corporations Act 2001* (Cth) are receivership, voluntary administration and liquidation. The purpose of each of these forms of external administration is different, as are the specific duties of an

¹⁵² See <http://www.aemo.com.au/en/Electricity/Settlements/Prudentials/AEMO-Credit-Support>.

¹⁵³ AEMO, *AEMO Credit Support Management Guide*, available at http://www.aemo.com.au/en/Electricity/Settlements/Prudentials/~/_media/Files/Other/corporate/2530-0001%20pdf.ashx.

insolvency practitioner appointed in the role of receiver, administrator or liquidator and the powers at their disposal to continue to operate the business. In general terms, however, the role of each of a receiver, administrator and liquidator appointed in an insolvency scenario is to take steps to maximise the financial return to relevant creditors of the company to which they have been appointed. One underlying premise to the duties of external administrators in the usual forms of external administration is that they should not continue to trade a business where that will not confer a benefit to creditors.

If a large electricity retailer became insolvent, there is some scope under present insolvency laws for governments to become involved in the administration or receivership of the retailer. There is a precedent for such an arrangement in the insolvency of ABC Learning Centres in 2008. This precedent and how it could potentially be applied to an electricity retailer is discussed in section 8.3.2.

Alternatively, insolvency laws could be amended to permit an alternative form of administration, which we refer to in this section as “special administration”. Under this approach, significant amendments would be made to Australian insolvency laws including the process for appointing an administrator and amending the duties and powers of administrators discussed above. For example, administrators appointed under a special administration regime would be obliged to secure the ongoing supply of electricity to the customers of the retailer ahead of any other objectives. This would mean that the company would continue to meet its credit and settlement obligations to AEMO until such time as it was no longer responsible for supplying its customers.

Well-developed potential precedents for a special administration regime for electricity companies exist in Great Britain and, to a lesser extent, Singapore. A relevant Australian precedent for a similar regime also exists in the judicial management regime that currently applies for insurers. These precedents and how they could potentially be applied to electricity retailers in Australia are discussed in section 8.3.3.

Under either approach, the cost of continuing to supply the customers during the administration could be borne by a suitable body such as a government entity for an initial period. It may be appropriate to specify a maximum funding period in advance, or there may need to be some flexibility to tailor the appropriate funding window to the particular circumstances.

The funding could potentially be structured as a payment to the administrator that is repayable to the government entity in priority to other creditors.¹⁵⁴ To the extent that the government entity was not fully compensated following completion of the administration, any shortfall could be recovered via a cost recovery mechanism such as an industry levy.

¹⁵⁴ Under current insolvency laws, the government may rank ahead of some, but not all, other creditors, with the order of priority depending on the circumstances, eg whether the company was in voluntary administration or receivership. Under a special administration regime, it would be possible to design the regime so that repayment of the government funding ranked ahead of all other secured and unsecured creditors, as in the UK special administration regime for energy supply companies.

An arrangement of this kind would need to be applied as an alternative to the current ROLR process. This may require a decision of an appropriate body such as the AER or jurisdictional regulator as to whether the usual ROLR process should apply or whether it should cease to apply and the administration arrangements would apply instead.

This would avert the immediate transfer of customers away from the failing retailer so that the administrator could pursue other solutions, for example either a rescue of the company or a trade sale or managed transfer of the customers to other retailers. The AER could be well placed to make a decision whether to use the ROLR framework or the special administration framework in each situation, based on the size of the failing retailer and the likelihood of the ROLR regime being capable of coping with it without creating a material risk of contagion.

Sections 8.3.2 and 8.3.3 provide further details on the various options for implementing such a mechanism.

8.3.2 Making use of current insolvency arrangements

Potential precedent – administration of ABC Learning

The failure of The ABC Learning Centre in 2008 was considered by the Commonwealth government to be a matter of special social significance because of the extent of the business's penetration in the market for childcare services. The case is a useful precedent in that the government intervened in the administration of the company in order to fulfil its objective of keeping children and families adequately serviced with child care facilities.

On 6 November 2008, ABC Learning Centres Limited (ABC Learning) went into voluntary administration and had receivers and managers appointed over its assets by its banking syndicate (bank receivers), owing creditors almost \$1 billion. At the time, ABC Learning was the largest childcare service provider in Australia, servicing 25 per cent of all children in care and being the only child care provider available in many areas. As a result of this unexpected collapse, the provision of child care to over 120,000 children in more than 1,000 centres was put at risk.

As the extent of the potential social consequences became clearer, the Commonwealth government intervened, in collaboration with receivers and creditors, to keep services open in the short term to allow for processes to be put into place to secure the continuation of both childcare and employment to the greatest extent possible.

At the time bank receivers were appointed, the banking syndicate, which was ABC Learning's principal creditor, had established that approximately 40 per cent of ABC Learning's centres were unprofitable. In order to manage the already considerable financial exposure of the banks, there was a real risk that the bank receivers would immediately close up to 400 centres. This could have disrupted the care arrangements for around 44,000 children and up to 30,000 families.

On 7 November 2008, following discussions with ABC Learning's banks and the bank receivers, the Commonwealth government announced an "initial support package" in the form of a commitment of \$24 million to ensure that all ABC Learning centres would remain open to the end of 2008 while the bank receivers carried out a proper assessment of the viability of each centre. Consequently, in December 2008, centres were categorised into three broad groups which were actioned as follows:

- 55 confirmed unviable centres were closed at the end of 2008 with affected children accommodated in nearby centres;
- 262 unviable centres were transferred – for nominal consideration – to ABC2 Group Pty Limited (ABC2), a non-trading subsidiary of ABC Learning.¹⁵⁵ The government committed up to an additional \$34 million in financial support to ensure the continued operation of the ABC2 centres until suitable buyers could be found by the court receivers. This process was completed in August 2009; and
- 720 centres continued to operate into 2009 as ABC Learning, with 705 of these centres subsequently sold through a process which commenced in August 2009.

The Commonwealth Government's Department of Education, Employment and Workplace Relations (DEEWR) applied to the Court for the appointment of receivers and managers of ABC2.¹⁵⁶ The ABC2 centres were then sold through a process managed by the court appointed receiver.

The party seeking the appointment of a court appointed receiver is normally required to provide an undertaking for damages to protect anyone who suffers loss as a result of the appointment. In the unique circumstances of this appointment, the Court agreed to waive this requirement.

There are significant parallels between the government's objective to secure the ongoing delivery of childcare services in this case, and the motivation for this project in which we are seeking to address the harmful effects that an unmanaged large retailer failure could have on the National Electricity Objective.

¹⁵⁵ The ABC2 centres were then sold through a process managed by a Court Appointed Receiver (Court Receiver) at the request of the government. The party seeking the appointment of a Court Appointed Receiver is normally required to provide an undertaking for damages to protect anyone who suffers loss as a result of the appointment. In the unique circumstances of this appointment the Court agreed to waive this requirement.

¹⁵⁶ DEEWR was a significant creditor of ABC Learning due to its payment of government subsidies for childcare.

Clayton Utz describe the negotiations between DEEWR, the secured creditors, bank receivers, and the court appointed receivers as having two objectives in mind:¹⁵⁷

- “ • to ensure, as much as possible, the continuation of childcare for children currently enrolled in the “unviable” centres, as well as the continuation of the employment of their staff; and
- pending the outcome of the negotiations, to keep the “unviable” centres afloat, rather than subjecting them to an immediate asset “fire sale”.”

The end result of the administration was considered successful as it avoided the sudden closure of childcare centres and ensured that no families were presented with the sudden burden of having to find alternative care at short notice.

Of note, this process did not require the government to use any special powers or enact additional legislation or in any way force parties to agree to the special form of administration. This suggests that all the parties to the collapse were probably made no worse off than they would have been had normal insolvency proceedings taken place, which may be due to the particular circumstances of ABC Learning’s situation.

How existing insolvency laws could be applied to the failure of an electricity retailer

The ABC Learning case is an example of how governments, administrators, courts, companies and creditors can work together under Australia's existing insolvency laws as they are described in the Corporations Act 2001 in order to satisfy an important objective of the government.

If a large retailer in the NEM fails, governments could potentially seek to implement a similar response to ensure the continued supply of electricity to customers, while also facilitating the best realisable outcome for the company and its creditors. No changes would be required to insolvency laws, but the issue noted in section 8.3.1 regarding the amendment of the jurisdictional ROLR regimes - such that they were made more compatible with insolvency law - would still be required.

However, there may be some uncertainty about whether such an arrangement would be successful, as there may have been unique features that enabled it to be effective in the ABC Learning scenario that would not apply in the case of an electricity retailer failure. Potential limitations of the approach are discussed in more depth in section 8.3.5

¹⁵⁷ Clayton Utz, *The ABC of a successful corporate rescue: Lessons from the Court receivership of ABC2Group Pty Ltd*, 20 May 2011, available at http://www.claytonutz.com/publications/news/201105/20/the_abc_of_a_successful_corporate_rescue_lessons_from_the_court_receivership_of_abc2_group_pty_ltd.page.

8.3.3 Implementing a special administration regime for electricity retailers

Potential precedent – judicial management regime for insurance companies in Australia

Following the collapse of HIH Insurance in 2001, judicial management in relation to general insurers was introduced in October 2008 by Part VB of the *Insurance Act 1975* (Cth). A similar regime has applied in relation to life insurers since 1945 under the *Life Insurance Act 1945* (Cth) and then the *Life Insurance Act 1995* (Cth).

Judicial management is a form of external administration which takes into account the interests of policyholders and financial system stability when determining what actions should be taken. This can be contrasted with the usual forms of insolvency related external administration under the Corporations Act, in which the interests of creditors and/or members are paramount.

Judicial management is not a regime for the distribution of assets in the manner of most other forms of external administration. Rather, it is more like a provisional liquidation or a court appointed receivership. Under judicial management an external party is inserted by the court to take control of the insurer, investigate its state of affairs and determine what course of action would best serve the interests of policyholders and the stability of the financial system in Australia.

Either APRA or the general insurer can apply to the Federal Court of Australia to have a judicial manager appointed.¹⁵⁸ The insurer does not need to be insolvent for there to be an appointment. An appointment may be made if the court is satisfied, among other things, that:

- it is in the interests of the policyholders that the order be made, having regard to the findings of an investigation by APRA under Part V of the *Insurance Act 1975* (Cth);
- the general insurer is, or is likely to become, unable to meet its liabilities; or
- there are reasonable grounds for believing that the financial position or management of the insurance business may be unsatisfactory.

Judicial management takes precedence over all other forms of external administration. No other appointment can be made without prior notice to APRA and if it is, it is invalid and ineffective. When a judicial manager is appointed, the appointment of any other external administrator is terminated.

While under judicial management, court proceedings cannot be commenced or continued against the general insurer, except with the written consent of the judicial manager or the leave of the court.

¹⁵⁸ Section 62K of the *Insurance Act 1975* (Cth).

On appointment, management of the business of the general insurer in Australia vests in the judicial manager and the powers of the directors of the insurer are displaced. Therefore, after the appointment of the judicial manager, and during the period of the management, the directors will not be exposed to liability for acts done by the judicial manager, including insolvent trading. Contractual counterparties are prohibited from:

- denying any obligations under the contract;
- accelerating any debt under the contract; or
- closing out any transaction relating to that contract or terminating the contract,

based on the appointment of a judicial manager.

A prohibition of this type does not exist for other forms of external administration in Australia. The wording of the prohibition is however quite specific, which means that a counterparty could still potentially rely on an event of default other than the appointment of a judicial manager (such as insolvency) to deny obligations under a contract, accelerate a debt under the contract or close out any transaction relating to the contract.

A judicial manager can exercise numerous powers during a judicial management including:

- bringing or defending legal proceedings;
- selling or otherwise disposing of all or any of the property of the general insurer; and
- proving in the bankruptcy of any debtor of the general insurer.

A judicial manager is required to conduct the judicial management as efficiently and economically as possible. They must submit a report to the court as soon as possible recommending a course of action which is, in their opinion, the most advantageous to the general interest of the policyholders of the general insurer while promoting financial system stability in Australia.

Courses of action can include one or more of the following steps:

- transferring the business of the insurer to another insurer;
- allowing the insurer to carry on its business after judicial management;
- winding up the insurer; or
- taking steps to alter the constitution, rules or other arrangements for the governance of the insurer.

The court may make an order giving effect to one or more of the recommended courses of action if it considers it to be most advantageous to the general interest of the

policyholders of the general insurer while promoting financial system stability in Australia.¹⁵⁹

Potential precedent – energy supply company administration in Great Britain

In Great Britain, an arrangement is in place called "energy supply company administration" (esc administration) that is designed to replace normal insolvency processes should the Supplier of Last Resort (SOLR) arrangements¹⁶⁰ prove to be an unsuitable response to the failure of a large supplier. A special administration regime had already previously been in place for electricity and gas network businesses, and that regime was extended to energy supply companies, ie retailers, under the *Energy Act 2011*.

The broad framework for esc administration has been legislated within the *Energy Act 2011*.¹⁶¹ Further details on how the regime is proposed to operate are contained the draft *Energy Supply Company Administration Rules 2013* (draft esc rules), which are currently being consulted on.¹⁶² The Energy Act also grants the Secretary of State the power to make changes, under consultation, to supply licences in order to give effect to an esc administration in the event of insolvency of the licensee.

The UK Department of Energy and Climate Change (DECC) has recently published a consultation paper on the draft esc rules.¹⁶³ The paper contains the following summary of the key features of the esc administration regime:

Box 8.4: Functionality of energy supply company administration¹⁶⁴

The purpose of energy supply company administration is to ensure that if a large gas or electricity supply company is in financial difficulty, arrangements are in place to allow the company to continue operating normally until it is either rescued, sold, or its customers transferred to other suppliers. This will reduce the risk of financial failure spreading across the energy market, maintain market stability and therefore protect consumers...

The Government ... judges it prudent to put in place a framework to ensure the continued operation of a large energy supply company experiencing financial distress, and for which no buyer can be found. Energy supply company administration is intended as a **backstop to the Supplier of Last Resort Process - not as a substitute**. It is essentially a contingency measure to deal with a low

¹⁵⁹ Subsection 62ZJ(1) of the *Insurance Act 1975* (Cth).

¹⁶⁰ These are similar to the ROLR provisions in the NEM and are described in Appendix A.

¹⁶¹ http://www.legislation.gov.uk/ukpga/2011/16/pdfs/ukpga_20110016_en.pdf.

¹⁶² Available at http://www.decc.gov.uk/en/content/cms/consultations/en_sup_rules/en_sup_rules.aspx.

¹⁶³ DECC, *Consultation on energy supply company administration rules*, June 2012. Available at <http://www.decc.gov.uk/assets/decc/11/consultation/5573-consultation-on-energy-supply-company-administrat.pdf>.

¹⁶⁴ Content in this box is direct quotes from DECC's consultation paper, with emphasis added.

probability, but high impact event. It will allow the company to continue trading normally, potentially with financial assistance from the Government, if the company is unable to secure funding from commercial sources, until it is either rescued, sold or its customers transferred to other suppliers...

Securing an esc administration order is a court process. In the event that a large company is in financial distress, no trade sale seems likely, and Ofgem advises it is not practicable to appoint a supplier of last resort, the Secretary of State (or Ofgem with the consent of the Secretary of State) may apply to the court for an esc administration order...

The objective of the energy administrator is ... **to continue to contract to supply gas and electricity to customers** until the company is either rescued as a going concern, or if this is not possible transferred to another company as a going concern, or if this is not possible, transferred to two or more companies.

The energy administrator is an officer of the court and in exercising his or her duties in relation to the company is an agent of the company.

Section 95 of the Energy Act 2011 sets out the objective of esc administration.

Box 8.5: Objective of energy supply company administration¹⁶⁵

- (1) The objective of an energy supply company administration is to secure –
 - (a) that energy supplies are continued at the lowest cost which it is reasonably practicable to incur; and
 - (b) that it becomes unnecessary, by one or both of the following means, for the esc administration order to remain in force for that purpose.
- (2) Those means are –
 - (a) the rescue as a going concern of the company subject to the esc administration order; and
 - (b) transfers [of the company as a going concern to another company, or of different parts of the company to two or more different companies]

The legislation explains that the rescue¹⁶⁶ of the company as an ongoing concern is always to be favoured where such a rescue is practically possible ahead of transfers¹⁶⁷ to other companies, unless the transfers would result in a better outcome for the creditors and members of the company than a rescue would. Aside from the

¹⁶⁵ Content in this box is direct quotes from the *Energy Act 2011*.

¹⁶⁶ The term "rescue" is used in the legislation to refer to a capital injection from some third party or the company's affiliates or creditors that would serve to make the company solvent.

¹⁶⁷ The term "transfers" is used to refer to the transfer of ownership of the company's assets to some third party.

over-arching objective of ensuring that energy supplies are continued at the lowest reasonable cost, the objectives of the administrator otherwise align with those under normal insolvency law (such as maximising value for the company and its creditors).

The operation of esc administration may require funding and this is contemplated explicitly in the legislation. DECC's consultation paper and impact assessment on the draft esc rules¹⁶⁸ provide the following description of the funding arrangements.

Box 8.6: Funding of energy supply company administration¹⁶⁹

The Secretary of State is **empowered to make grants and loans to the company** in energy supply company administration and **may also give guarantees in respect of any sum borrowed** by the energy supply company while it is in energy supply company administration. He may also agree to indemnify the energy administrator (and those involved with his/her business) against loss or liability incurred during the exercise of his or her duties.

Provisions in the Energy Act allow for the **recovery from the company of any financial assistance provided by the Government**. However, the Government recognises that any company entering energy supply company administration may not be in a position to repay some, or all of the funding it receives, and included provisions to allow for funding provided by the Government to be **recovered through charges industry participants are required to pay** the system operator as a condition of their licences...

Esc administration allows the Government to fund the company, so it can continue to supply customers through its usual contracting arrangements with generators and wholesale gas suppliers. It should therefore diminish the overall uncertainty and risk and **reduce the risk of contagion**. Esc administration is essentially an insurance policy in case of a low probability, high impact event that could potentially destabilise the [Great Britain] energy market...

Under esc administration, the Government is able to provide grants or loans (or to underwrite any loans taken out by the energy administrator in order to maintain electricity and gas supply). Should the company not be in a position to repay some or all of the loans, there is provision to allow the [Secretary of State] **to modify electricity and gas licences, subject to consultation with the industry, to recover any shortfall...**

Government has first claim (ahead of other creditors) on any company assets in the event that some or all of its loans are not repaid.

¹⁶⁸ DECC, *Energy supply company administration rules, Impact Assessment*, March 2012. Available at <http://www.decc.gov.uk/assets/decc/11/consultation/5574-energy-supply-company-administration-rules-impact.pdf>.

¹⁶⁹ The first two paragraphs in this box are direct quotes from DECC's consultation paper, with emphasis added. The remaining paragraphs are direct quotes from DECC's impact assessment paper, with emphasis added.

These provisions essentially mean that the government would be able to recoup the costs of the esc administration (should there be net costs to the government) by imposing levies, for example on the transmission owner National Grid, that would be passed through to all electricity consumers.

Potential precedent – special administration in the National Electricity Market of Singapore

A special administration arrangement also applies in the National Electricity Market of Singapore (NEMS) in which the Minister may order the regulator (the Energy Market Authority) to manage a failing business in the interest of continuity of security of supply.

The Electricity Act Chapter 89A¹⁷⁰ sets out the provisions for a Special Administration Order, which "is an order of the Minister made ... in relation to an electricity licensee directing that, during the period for which the order is in force, the affairs, business and property of that electricity licensee shall be managed directly or indirectly by the [Energy Market] Authority".

Clause 28(2) of the Act provides that the purposes of a special administration order are:

- “(a) the security and reliability of the supply of electricity to the public;
- (b) the survival of the electricity licensee, or the whole or part of its business for which it is authorised by its licence to carry on, as a going concern;
- (c) the transfer to another company ... to 2 or more different companies, as a going concern, of such of the electricity licensee’s undertakings as it is necessary to transfer in order to ensure that the functions and duties which have been vested in the electricity licensee by virtue of its licence may be properly carried out; or
- (d) the carrying out of the functions and duties which have been vested in the electricity licensee pending the making of the transfer and the vesting of those functions and duties in other company or companies.”

These motivations have some similarities with those featured in the energy supply company administration arrangements in Great Britain. They include at their heart the objective of ensuring security and reliability of supply, and beyond that the best interests of the failing company as would be expected to apply under standard insolvency law (this is included in clause 28(1)).

The legislation features detailed descriptions of the conditions under which the Minister may exercise his power to issue an order that the company enter special administration under the Energy Market Authority.

¹⁷⁰ Available on the Attorney General's Chambers website at www.agc.gov.sg.

The grounds for the making of an order are laid out in clause 29(2) and are:

- “(a) the electricity licensee is or is likely to be unable to pay its debts;
- (b) the occurrence of a public emergency;
- (c) the Minister considers it in the interest of the security and reliability of supply of electricity to the public; or
- (d) the Minister considers it in the public interest.”

These grounds include factors that might not relate to insolvency, including public emergencies, or even conditions where the Minister has reason to consider an order to be in the public interest. This implies that these provisions give the Minister more overarching powers to intervene in the operation of a licensee than that which might be possible under energy supply company administration in Great Britain.

In addition to making a special administration order, the Minister can also issue an order "requiring the electricity licensee immediately to take any action or to do or not to do any act or thing in relation to that part of its business or undertaking to which its electricity licence relates as the Minister may consider necessary", or "an order appointing a person to advise the electricity licensee in the proper conduct of that part of its business or undertaking to which its electricity licence relates." In addition or alternatively, the Minister also has powers to order that a licensee not be wound up voluntarily without consent of the Energy Market Authority, and/or to order that no judicial management or enforcement actions be carried out in relation to the licensee.

The legislation does not specifically contemplate how the cost of special administration might be recovered or managed, although it is possible that the "management of property" provision may allow the government via the Authority to interact financially with the failing entity in some similar fashion to that described under the energy supply company administration arrangements in Great Britain.

How these precedents could be applied to the failure of an electricity retailer

The precedents we summarise above could be used to design an Australian version of a special administration regime for electricity retailers, potentially utilising features from each of the regimes. The key features that we consider that such regime would to contain at a minimum, include:

- an ability for a government entity or regulator to apply for the appointment of a special administrator of a failing retailer;
- defined objectives of the special administration, including the continued supply of electricity to customers;
- a process to prevent the ROLR regime from applying to the failing retailer, eg a decision by a regulator that the special administration regime will apply instead of the ROLR regime;

- a process for a government entity to provide interim funding during the administration;
- a process, such as an industry levy, for the recovery of any government funding that is not repaid by the failing retailer or the administrators at the conclusion of the administration.

8.3.4 How is this option likely to mitigate financial contagion?

General benefits of this option

Intervention into the administration process of the failing retailer could allow a number of important objectives to be realised with regard to the mitigation of financial contagion:

- the avoided use of the current ROLR process, which as we have identified may be unsuitable in the event of a large retailer failure;
- increased flexibility and time to determine the best outcome in terms of possibly rescuing the failing retailer or transferring the customers to one or more other retailers as part of a trade sale;
- more scope for retailers to volunteer to take on the customers and potentially pay to acquire them; and
- more flexibility to spread the customers across multiple retailers.

These benefits would be expected to result in the retailers that acquire the customers being in a better position to manage the liabilities that they take on, reducing the risk of them cascading into failure.

Additional benefits of introducing a special administration regime

The above benefits could potentially be achieved either by using current insolvency laws or by implementing a special administration regime. However, implementing a special administration regime would provide greater certainty that the administration process could be effectively applied to a large electricity retailer and that these benefits would be able to be realised.

The SOLR regime in Great Britain features similar limitations to those we identified in the issues paper with the ROLR regime that applies in the NEM. A key reason for implementing the esc administration regime in Great Britain was that the government concluded that the SOLR regime is unlikely to be effective in the event of a large retailer failure.

In its impact assessment on the draft esc rules, DECC states that the SOLR arrangements have worked well in relation to failures of small suppliers, but that “experience has shown that it is unlikely that they would be effective in the event of a

large supplier becoming insolvent".¹⁷¹ DECC states that a failure of one of the six largest suppliers would involve a transfer of such a large number of customers that it could not take place in any orderly manner in a short timescale and would impose significant financial obligations on the supplier that acquired the customers.¹⁷²

DECC discuss the merits of esc administration as it pertains to the mitigation of financial contagion in several parts of the impact assessment on the draft esc rule.

Box 8.7: Benefits of energy supply company administration¹⁷³

Esc administration allows the Government to fund the company, so it can continue to supply customers through its usual contracting arrangements with generators and wholesale gas suppliers. It should therefore diminish the overall uncertainty and risk and **reduce the risk of contagion**. Esc administration is essentially an insurance policy in case of a low probability, high impact event that could potentially destabilise the GB energy market.

... esc administration ... will **limit contagion effects in the event of insolvency**. As described above, in the event of a large supplier insolvency there will be large unexpected cost transfers from the insolvent company to other market participants. This will cause cash flow problems for other market participants, putting a strain on the system and threatening the stability of other market participants.

While recognising the differences between the energy market structures of Great Britain and the NEM, these expected benefits of the esc administration model are very similar to the results that we are seeking to achieve with the options proposed in this paper. Accordingly, such a regime may be a strong candidate for consideration in the NEM.

The establishment of a special administration regime for electricity retailers in Australia could allow governments to put in place legal mechanisms that provide advantages compared with relying on the existing Corporations Act insolvency regime as proposed in section 8.3.2, including:

- the establishment of a different set of objectives for the special administration that better reflect government policy objectives in ensuring the continuation of electricity supply notwithstanding the insolvency of the market participant;
- the establishment of a specific mandate for the person appointed to manage the administration – be that the sale of the business as a going concern (without, for example, the statutory obligation imposed on receivers by section 420A of the Corporations Act to ensure that such a sale achieves market value), or any other appropriate mandate in the circumstances;

¹⁷¹ DECC, *Energy supply company administration rules, Impact Assessment*, March 2012. p3.

¹⁷² DECC, *Energy supply company administration rules, Impact Assessment*, March 2012. p4.

¹⁷³ Content in this box is direct quotes from DECC's impact assessment paper, with emphasis added.

- the exemption from potential civil and criminal insolvent trading liability for directors or other parties who allow the insolvent market participant to continue to incur debt during the course of the administration; and
- the inclusion of provisions that restrict contractual counterparties from exercising certain contractual rights that they might otherwise have as a result of the insolvency or administration of the market participant such as:
 - denying any obligations under the contract;
 - accelerating any debt under the contract;
 - closing out any transaction relating to the contract; or
 - otherwise exercising any right of termination in respect of the contract.¹⁷⁴

These advantages should increase the likelihood that the regime could be applied effectively to the failure of a large electricity retailer. In particular, they would assist the failing retailer to continue operation during the administration period until it can be rescued or the customers can be transferred to alternative suppliers in an orderly fashion.

8.3.5 Potential disadvantages of this option

The implementation of a special administration regime would require drafting of legislation that would change laws related to insolvency of businesses in Australia, such as the Corporations Act. It would be a significant change to existing insolvency laws with potentially far-reaching consequences. Implementation of such a regime could be a complex and time-consuming process and is likely to require greater resources and have a longer implementation timeframe than changing NEM rules or procedures, which is all that would be required by many of the other options in this paper.

A particular design challenge could stem from the contrasting regulatory, jurisdictional and constitutional arrangements in place in Australia compared to, for example, Great Britain. There is a significantly larger number of potentially relevant decision-making entities in Australia, including the AER, jurisdictional regulators, ministers and Commonwealth and State governments. By comparison, the arrangements in Great Britain feature a single regulator (Ofgem), who also acts as the issuer of retailer licences, and a single relevant minister (the Secretary of State).

Complex design and implementation challenges could also arise due to the varying corporate structures used by large retailers that operate in the NEM. An administration arrangement would be most effective if the electricity retail operations were in a separate corporate entity that could be quarantined from the participant's other operations, so that only the retail operations were placed into administration and

¹⁷⁴ The effect of contractual termination rights following default was explored in some detail in section 5.2.

supported by government funding. However, we understand that most of the large retailers in the NEM do not currently structure their operations in this way.

As discussed in section 8.3.2, it may be possible to use existing insolvency laws instead of introducing a special administration regime, in a similar manner to the ABC Learning example. However, there are several features of existing insolvency laws that would mean that it would be uncertain whether such an approach would be successful in relation to the failure of a large electricity retailer.

For example, it would be a breach of duty for a receiver, administrator or liquidator under the current Corporations Act insolvency regimes to continue to trade a business at the expense of the company's creditors, notwithstanding the fact that ceasing to trade could have harmful consequences for other industry participants or consumers. This issue could be addressed in a special administration regime by amending the objectives and duties of the administrator, as in the Great Britain regime.

In addition, under current insolvency laws it is unclear what rights the government would have to appoint a receiver or administrator, and there is no mechanism to prevent other parties doing so first, which would trigger the ROLR process.¹⁷⁵ This issue is overcome in both the Australian judicial management regime for insurance companies and the Great Britain special administration regime for energy supply companies by imposing a requirement that the relevant regulatory body be notified prior to any move to put the company into a traditional form of external administration. This allows the regulatory body the opportunity to consider whether it wishes to apply to court to instead put the company into the special administration regime. Under an Australian special administration regime, the regulatory body could also make a decision at the same time that the usual ROLR process will not apply.

If no such application is made within the mandated time period, the regulatory body would be taken to have concluded that the mitigation of financial contagion does not require that the failing retailer be dealt with outside of the traditional ROLR and insolvency processes. If the retailer is put into the special administration regime, that regime would apply and creditors (or other stakeholders) would be prohibited from then seeking to have a receiver, administrator or liquidator appointed.

The NEM's suspension arrangements could present a potential area of complexity in implementing a special administration process.

AEMO can suspend a retailer from the NEM in a range of circumstances that constitute a default event under the NER, including if the retailer fails to pay any money due to AEMO.¹⁷⁶ Accordingly, AEMO could still suspend the failing retailer regardless of whether administration (either normal or special) had commenced. Any such

¹⁷⁵ Such an arrangement was possible in the case of ABC Learning as discussed in section 8.3.2, but there may be specific circumstances of that situation that facilitated such an approach that would not apply to an electricity retailer.

¹⁷⁶ NER clause 3.15.21.

suspension would prevent the failing retailer from continuing to trade and would defeat the objectives of a special administration process.¹⁷⁷

This issue might require additional provisions such as:

- a requirement that a regulator maintain a list ahead of time of all the retailers that would be subject to special administration in the event of their insolvency or imminent suspension;
- laws that trigger the special administration process instead of suspension, or the right for special administration to be imposed by a regulator, when a listed retailer fails to respond to a default notice;
- amendments to the NER to prevent AEMO from suspending a retailer that was subject to special administration.

Alternatively or in addition, the NEM suspension arrangements could be changed as contemplated in chapter 5 in order to accommodate the functioning of a special administration regime.¹⁷⁸

¹⁷⁷ We note that this issue should not arise if the special administrator were appointed prior to any default event occurring, as the special administrator would continue to pay AEMO and post credit support during the administration.

¹⁷⁸ For example, extra steps within the suspension process, or a delayed suspension process, or removal of suspension provisions.

Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AFMA	Australian Financial Markets Association
APC	Administered Price Cap
APRA	Australian Prudential Regulation Authority
ASIC	Australian Securities and Investments Commission
CAPP	Contingency Administered Price Period
Commission	See AEMC
CPT	Cumulative Price Threshold
DECC	UK Department of Energy and Climate Change
DEEWR	Commonwealth Government's Department of Education, Employment and Workplace Relations
DNSP	Distribution Network Service Provider
ESAA	Energy Supply Association of Australia
ESC	Energy Security Council
MCE	Ministerial Council on Energy
MWh	megawatt hour
NECF	National Energy Customer Framework
NEL	National Electricity Law
NEM	National Electricity Market
NEMS	National Electricity Market of Singapore
NEO	National Electricity Objective
NER	National Electricity Rules

NERL	National Energy Retail Law
NGF	National Generators Forum
NGR	National Gas Rules
NMI	National Metering Identifier
OTC	over-the-counter
ROLR	retailer of last resort
SCER	Standing Council on Energy and Resources
SOLR	Supplier of Last Resort
STTM	Short Term Trading Market
Victorian DPI	Victorian Department of Primary Industries

A Summary of international retailer of last resort schemes

A.1 Introduction

This appendix examines international regulatory models that have been designed to deal with retailer failure in electricity markets. It describes these models and analyses whether there are any elements from these international models that should be incorporated into our options for amendments to the current Australian ROLR arrangements to help mitigate financial contagion following a large retailer failure.

Factors considered in selecting overseas markets

We developed a set of considerations in selecting international markets to compare with the NEM. We sought to select overseas markets that have similar levels of contagion risk following a large retailer failure and could become subject to cascading retailer failure.

The factors we had regard to include the following:

- level of retail market competitiveness;
- level of private vs. state ownership in the retail market;
- structure and operation of wholesale electricity market; and
- existence of a ROLR mechanism or other regulatory design for managing retailer insolvency.

We consider it important to select countries that have competitive retail markets. If there are multiple retailers operating in the market, the failure of one retailer could impact other retailers and give rise to a risk of a cascading failure.

The level of private vs. state ownership in retail businesses is a useful gauge of the potential consequences of a large retailer failure. For instance, if large retailers are government owned, it is likely that government assistance will prevent those retailers from failing. This means that the government owned retailer may effectively act as a "circuit breaker" to prevent contagion. Alternatively, if all retailers are privately owned, the failure of a large retailer poses a greater risk of cascading failure.

The structure and operation of wholesale electricity markets underpin the efficient operation of retail markets. Therefore, the structure of the wholesale market is an important indicator of the types of risks that exist in the electricity market. A common feature in most wholesale electricity markets is spot price volatility. Exposure to this volatility can increase the likelihood of retailer failure. For example, if a retailer's customer load (or part of its load) is unhedged against high spot prices, this could increase its risk of failure if there is an unexpected period of high spot prices.

It is therefore important to consider how wholesale markets in selected overseas jurisdictions operate. It is also useful to consider any regulatory mechanisms, such as price caps, that may mitigate or exacerbate the risk of spot price volatility and potentially affect the risk of contagion.

Finally, as this paper focuses on different regulatory designs aimed at managing contagion arising from retailer insolvency, we have focussed on markets that have some sort of mechanism in place to deal with retailer failure.

Overseas markets examined in this appendix

This appendix summarises regulatory models for dealing with retailer failure in the following markets:

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

A high level overview of other selected countries that have some form of a ROLR scheme is included in the table at the end of this appendix. These countries have been included in a table because we were unable to find detailed information to include as part of a more in depth analysis.

Structure of this appendix

The structure of the remainder of this appendix is as follows:

- **A.2 - Great Britain**
 - A.2.2 - Introduction to the Great Britain electricity market.
 - A.2.3 - Supplier of Last Resort scheme.
 - A.2.4 - Special administration regime.
 - A.2.5 - Potential lessons for mitigating contagion.
- **A.3- Northern Ireland**
 - A.3.1 - Introduction to the Northern Ireland electricity market.
 - A.3.2 - Supplier of Last Resort scheme.
 - A.3.3 - Potential lessons for mitigating contagion.

- **A.4 - Texas**
 - A.4.1 - Introduction to the Texas electricity market.
 - A.4.2 - Provider of Last Resort scheme.
 - A.4.3 - Potential lessons for mitigating contagion.
- **A.5 - Alberta**
 - A.5.1 - Introduction to the Alberta electricity market.
 - A.5.2 - Regulatory measures for dealing with retailer insolvencies.
 - A.5.3 - Potential lessons for mitigating contagion.
- **A.6 - Other markets**

A.2 Great Britain

A.2.1 Introduction to the Great Britain electricity market

The Great Britain electricity supply industry was deregulated in the 1990s, which led to many new entrants entering the electricity generation and retail markets.

Unlike the NEM which is a "gross pool" arrangement which requires generators to sell all their output in the spot market, the Great Britain wholesale market operates on a "net pool" basis. This means that the bulk of electricity is normally sold through bilateral financial contracts, allowing generators to opt in to the net pool to sell any remaining volume of electricity. If a supplier consumes more or less electricity than it has contracted with a generator, it must pay a balancing charge to account for the difference through the pool.

Bilateral contracts account for over 90 per cent of electricity volumes traded between market participants. Given that only a small amount of electricity is traded in the net pool, this reduces the overall risk to market participants arising from spot price volatility.

The electricity retail or "supply" market in the Great Britain was opened up to full competition in May 1999 when all consumers became eligible to choose their suppliers, with all price controls being removed by April 2002. Similar to the NEM, the Great Britain retail electricity market is characterised by the existence of large vertically integrated suppliers. There are six of these incumbent suppliers in Great Britain that account for more than 90 per cent of market share. At the end of 2010, there were also six smaller suppliers in the market.¹⁷⁹

¹⁷⁹ Council of European Energy Regulators, *2011 Great Britain and Northern Ireland National Reports to the European Commission*, 25 July 2011, pp32-33.

We note that over twelve small suppliers have exited the Great Britain retail market since it was opened up to competition.

A.2.2 Supplier of Last Resort scheme

Under the *Utilities Act 2000* (UK) licensing schemes and standard license conditions, the Great Britain electricity and gas regulator - Ofgem - has the power to appoint a supplier of last resort (SOLR) to ensure that customers of a failed supplier have continuity of supply of electricity.¹⁸⁰

Key elements of the SOLR scheme

In Great Britain, the SOLR scheme is only triggered by the revocation of a supplier's license by Ofgem.

The SOLR scheme operates by Ofgem selecting a SOLR from a group of suppliers which have been pre-selected through a tender process. This means that Ofgem uses a tender process to determine a list of possible SOLRs well in advance of a potential SOLR event, which means that during a SOLR event, Ofgem already has a list of pre-qualified SOLRs from which it can select a SOLR.

To officially appoint a SOLR, Ofgem must issue a "Last Resort Supply Direction".¹⁸¹

In Australia, the NECF ROLR arrangements mandate a strict decision making processes and timing for appointing a designated ROLR. In contrast, the regulatory model in Great Britain:¹⁸²

“gives Ofgem some discretion as to when it revokes a license, and how it selects and appoints a SOLR.”

Initial stages of supplier failure

In the event of supplier failure, Ofgem must consider whether to revoke the failing supplier's license by taking into account the following factors:

- whether a potential receiver is willing to pay post-receivership costs;
- whether the supplier is unable to meet its debts (as defined in the *Insolvency Act 1986* (UK));¹⁸³
- the ability of a potential SOLR to supply to customers of the failed supplier; and

¹⁸⁰ Ofgem, *Supplier of Last Resort: Revised Guidance*, November 2003, p3.

¹⁸¹ Ofgem, *Supplier of Last Resort: Revised Guidance*, December 2008.

¹⁸² Ofgem, *Supplier of Last Resort: Revised Guidance*, December 2008, p4.

¹⁸³ Ofgem will not revoke a licence on the basis of its own decision as to whether a supplier is unable to meet its debts. It will only do so following a decision by a court. For example, Ofgem notes that if a supplier fails to pay a creditor, Ofgem will not take any action until after the creditor has issued a statutory demand, the 21 day period to satisfy the demand has elapsed and a court has decided that the demand is valid. Ofgem, *Supplier of Last Resort - Revised Guidance*, November 2003, p4.

- the appropriate timescale for revoking a supplier's license, which is dependent on the circumstances of the failure.¹⁸⁴

Ofgem is required to provide at least 24 hours' notice to a failing supplier regarding the revocation of its license if the supplier is insolvent. However, in other circumstances - which may include failure to pay license fees, failure to pay financial penalties or comply with an enforcement order for breach of license conditions - Ofgem must provide 30 days' notice prior to revoking its license.¹⁸⁵

During the initial stages of a supplier failure, Ofgem has a role in assessing whether a trade sale agreement can be reached between the failing supplier and a potential receiver. Ofgem has indicated that it prefers failing suppliers to enter into a trade sale rather than prompt a SOLR process.¹⁸⁶ Therefore, prior to deciding on whether to revoke a license, Ofgem will engage with prospective receivers to discuss the possibility of a trade sale.

Appointing a SOLR

As discussed earlier, Ofgem chooses a SOLR from a group of pre-qualified suppliers which have been selected by tendering for suppliers to provide the SOLR service. However, prior to appointment, Ofgem must determine whether a potential SOLR has the capacity to take on affected customers of the failed supplier.

A difference between the Great Britain SOLR scheme and the NECF ROLR arrangements is that Ofgem can only appoint a SOLR if it considers that the potential SOLR has the capacity to take on customers of a failed supplier. Under the NECF ROLR arrangements, a ROLR must be appointed under any circumstances, even if it means that the prospective ROLR may not have the capacity to fulfil its obligations.

The discretion afforded to Ofgem to take account of a potential SOLR's capacity to fulfil the obligations of a SOLR, and the powers that exist to assist Ofgem to assess that issue, could assist in preventing a cascading failure. For instance, Ofgem can require a potential SOLR to provide it with information that assists in determining its suitability to take on the customers of a failed supplier. The requirement to provide 30 days' notice prior to revoking a license in most circumstances provides time for Ofgem to consider and assess relevant information prior to making any decisions.

Ofgem can require a potential SOLR to provide information regarding:

- its ability to supply gas and electricity to the acquired customers without compromising its ability to supply its existing customer load;
- its ability to manage the SOLR process quickly and efficiently

¹⁸⁴ Ofgem, *Supplier of Last Resort: Revised Guidance*, December 2008, pp4-5.

¹⁸⁵ NERA Economic Consulting and Arthur Allens Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework*, Final report prepared for the MCE retail policy working group, 29 January 2009, Appendix C.3, p168.

¹⁸⁶ Ofgem, *Supplier of Last Resort - Revised Guidance*, November 2003, p6.

- how it will meet increased credit cover requirements; and
- how customers will be informed of the change to the SOLR, new charges faced by customers and notifying customers of when they can select alternate suppliers.¹⁸⁷

The Great Britain SOLR model also allows Ofgem to provide certain information about a failing supplier's portfolio to a potential SOLR to enable it to assess its capability to take on additional customers. This helps facilitate informed decisions by the prospective SOLR.

While the regulatory model for appointing a SOLR encourages suppliers to volunteer as SOLRs, Ofgem can direct a non-volunteering supplier to act as the SOLR if it considers it necessary. In the event that no SOLR volunteers, Ofgem has indicated that it is likely to appoint one of the six largest suppliers as a SOLR.

The SOLR has an obligation to remain as a SOLR for customers of the failed supplier for a six month period. A SOLR has the responsibility to develop deemed contract schemes and applicable conditions so that affected customers of a failed supplier can be transferred over to these deemed contracts.

Deemed contract prices are higher than market prices as they are designed to reflect the cost of being a SOLR. Ofgem considers that a SOLR should recover its costs primarily through customer tariffs, so this means that deemed contract prices should reflect the SOLR's anticipated costs involved in taking on a new customer load. After six months have elapsed - if a customer has not switched to a different supplier - the SOLR will become the supplier for that customer. For customers staying with the SOLR after the six month period, the SOLR must revert from a deemed contract price to a market price.

Cost recovery

As noted above, Ofgem's preference is for a SOLR to recover its costs through customer tariffs (deemed contract prices). However, a SOLR's license conditions also allow it (in some circumstances) to make a claim for costs that are unable to be recovered through tariffs. Distributors will contribute to this recovery by way of a levy included as part of distribution use of system charges.

If a supplier seeks to make a separate claim for cost recovery, Ofgem will assess each claim, determine whether the SOLR should be able to make the claim and also whether the amount being claimed is "reasonable".¹⁸⁸

¹⁸⁷ Ofgem, *Supplier of Last Resort - Revised Guidance*, December 2008, pp10-11.

¹⁸⁸ Ofgem, *Supplier of Last Resort - Revised Guidance*, December 2008, p15.

A.2.3 Special administration regime

As discussed in chapter 8, the United Kingdom Department of Energy and Climate Change is currently implementing a special administration regime to deal with the failure of a large energy supplier. This is because it considers that the existing SOLR regime is unlikely to work in the event of a large supplier failure. In its impact assessment for the draft esc rules, it states that:¹⁸⁹

“Current arrangements to deal with the insolvency of gas and electricity suppliers allow Ofgem to revoke the supplier's license and appoint another supplier to take over its customer accounts. There is a significant risk they would not be effective in dealing with the insolvency of large suppliers because of the large volume of customers involved. Customers would continue to be supplied at potentially greater cost with energy bought through balancing mechanisms rather than under contract. This would put industry systems under strain, reduce stability in the market and risk contagion.”

The special administration regime is designed as an alternative mechanism to manage the failure of a large supplier.

A.2.4 Potential lessons for mitigating contagion

One of the key differences between the Great Britain SOLR scheme and the NECF ROLR arrangements is the flexibility in the timing of triggering the SOLR process. Unlike the NECF, SOLR timeframes in Great Britain are not mandated in any legislation and the only trigger event is the revocation of a supplier's license. This flexibility has a number of potential benefits in mitigating contagion risk.

The flexibility in timing means that a potential SOLR is given additional time to consider the impacts of taking on the customers of a failed supplier, in light of the particular circumstances at the time of the failure. It also facilitates greater use of volunteering SOLRs. The fact that Ofgem has discretion in its decision making also means that Ofgem has more time and ability to consider the relevant issues associated with appointing a particular SOLR. This flexibility assists both parties (Ofgem and the potential SOLR) to assess the situation and allows Ofgem to make decisions that may mitigate the risk of contagion. Ofgem also has powers to require potential SOLRs to provide information to it to assist in this decision making.

As discussed in chapter 2, the current Australian ROLR arrangements could result in a risk of the designated ROLR triggering a second ROLR event if it is unable to meet the financial obligations that it takes on as designated ROLR (such as increased credit support obligations), even though it is fundamentally solvent. In Great Britain, there is less risk of this because the only trigger is the revocation of a license. Ofgem will generally provide considerable notice before suspending a licence and try to facilitate

¹⁸⁹ UK Department of Climate Change, Impact Assessment, *Energy supply company administration rules*, 20 March 2012, p1.

alternatives such as a trade sale, which adds flexibility in dealing with large supplier failure.

In contrast, the NECF ROLR arrangements give less flexibility to the AER and AEMO in triggering a ROLR event and appointing a designated ROLR. While the Great Britain SOLR model only has one trigger for the SOLR process, the NECF arrangements set out a number of prescriptive triggers, which appear to reduce regulatory flexibility in dealing with retailer failure.

Further, the NECF does not allow the AER to decide *not* to appoint a designated ROLR, even if there is no potential ROLR that has the capacity to fulfil its obligations without risking financial contagion. If a ROLR event occurs, the default ROLR will automatically be appointed as the designated ROLR unless the AER appoints another party instead. The Great Britain SOLR regime and the introduction of the special administration regime explicitly recognise that in the case of a large retailer failure it may not be appropriate to appoint a SOLR and that alternative arrangements may be required.

We note that more flexibility in timing in Great Britain may mean a greater risk of unpaid spot market debts during the period prior to a SOLR being appointed, which increases the risk borne by generators. However, the net pool arrangement in the Great Britain means that there is less money at risk in the pool, which could potentially reduce the risks incurred by generators as a result of a delay in appointing a SOLR. In contrast, the impact of flexibility in timing in the NEM would be more significant because of the gross pool market design, which means that much higher unpaid spot market debts could accrue as a result of any delay in appointing a designated ROLR.

The cost recovery scheme in Great Britain is also different to the NECF ROLR cost recovery arrangements. As mentioned earlier, Ofgem prefers that suppliers recoup their costs through deemed contract prices charged to customers of the failed supplier while in Australia, retailers can recover costs through an AER cost recovery determination.

The Great Britain approach, where suppliers generally recover costs by charging higher tariffs to acquired customers, may provide greater flexibility for a SOLR to recover its costs. There is limited ability under Australian ROLR regimes for a designated ROLR to recover its costs by increasing its charges to the acquired customers (at least in the case of small customers). Therefore, the Great Britain cost recovery method could be an alternative arrangement to consider.

However, it is important to note that despite some of the potential advantages of the Great Britain SOLR scheme discussed above, the British Government has stated when introducing the special administration regime that it considers that the SOLR scheme will not be effective if a large supplier fails and could cause financial contagion risk. Accordingly, there is likely to be a limit to how much we can learn from the Great Britain regime in managing the failure of a large retailer.

A.3 Northern Ireland

A.3.1 Introduction to the Northern Ireland electricity market

The trading of wholesale electricity on the island of Ireland takes place in the Single Electricity Market (SEM). Similar to the NEM, the SEM is a mandatory gross pool with a single spot price calculated on a half hour basis. This price applies in both Northern Ireland and the Republic of Ireland. Like the NEM, all generators receive, and all retailers pay, the market clearing price.¹⁹⁰

To hedge against potential spot price volatility, generators and retailers enter into bilateral financial contracts which are separate from trading that occurs in the gross pool. However, unlike the NEM which is an energy only market in which generators are paid only for their output, the SEM includes a capacity payments mechanism. These capacity payments:¹⁹¹

“are made in respect of generator units based on a measure of their availability, and hence the provision of capacity. Capacity payments are funded by capacity charges, which are levied in respect of supplier units based upon their electricity consumption.”

The spot price in the SEM is capped at €1,000.

The electricity retail market in Northern Ireland has been open to competition since 2007. The Northern Ireland retail electricity market is currently dominated by Power NI, which has over 90 per cent market share. However, there are eight other competing suppliers that have a customer base from the remaining market share.¹⁹² Similar to most jurisdictions in the NEM, Northern Ireland continues to regulate retail prices.

A.3.2 Supplier of last resort scheme

Northern Ireland instituted a SOLR scheme as a result of an EU directive in 2003 which states that:¹⁹³

“Member States shall ensure that all household customers, and, where Member States deem it appropriate, small enterprises... enjoy universal service that is the right to be supplied with electricity of a specified quality within their territory at reasonable, easily and clearly comparable and

¹⁹⁰ Commission for Energy Regulation and Utility Regulator, *Trading and Settlement Code - Helicopter Guide*, 16 October 2007, p9.

¹⁹¹ Ibid, p15.

¹⁹² Utility Regulator, Electricity, Gas, Water, *Quarterly Transparency Report - quarter two 2012*, 4 September 2012, pp2-4.

¹⁹³ Utility Regulator, Electricity, Gas, Water, *Supplier of Last Resort in Electricity, Decision Paper*, 5 August 2009, p3.

transparent prices. To ensure the provision of universal service, Member States may appoint a supplier of last resort.”

The Northern Ireland SOLR scheme has been in place since August 2009.

Key elements of the SOLR scheme

Similar to Great Britain, the Northern Ireland SOLR scheme is only triggered when a supplier’s license has been revoked. As Ofgem would be required to do, the Northern Ireland Utility Regulator (Utility Regulator) must issue a “last resort supply direction” to trigger the SOLR scheme.

Like Ofgem, the Utility Regulator seeks volunteer suppliers to act as SOLRs. It then creates a shortlist of suppliers who have shown the willingness and the ability to take on the role of SOLR. From this shortlist, it appoints a suitable supplier to which customers of a failed retailer will be transferred.

Similar to the Great Britain model, the Northern Ireland SOLR scheme allows for flexibility in the timing of the SOLR process. There are no mandated timing restrictions triggering a SOLR or appointing a SOLR.

Initial stages of supplier failure

In Northern Ireland, a supplier’s licence may be revoked for a number of reasons, including:

- breaches of its license conditions;
- defaulting on the payment of its license fees;
- being unable to pay its debts; or
- its decision to exit the market.¹⁹⁴

Similar to Ofgem, the Northern Ireland Utility Regulator considers that a trade sale is preferable to invoking the SOLR process. However, if this is not possible, the Utility Regulator will revoke the defaulting supplier’s licence and issue a last resort supply direction.

Appointing a SOLR

The two factors that the Utility Regulator will consider when appointing SOLRs are:

- price - prospective suppliers must provide a list of tariffs applicable to affected customers so that the Utility Regulator can compare between suppliers to select a SOLR; and
- the Utility Regulator's role in promoting market competitiveness.¹⁹⁵

¹⁹⁴ Ibid, p8.

Similar to Ofgem, the Utility Regulator will "market test" prospective SOLRs prior to appointing them. This aims to ensure that the SOLR has the capacity to take on a new customer load without compromising its ability to supply its existing customer load. As discussed earlier, this may help to mitigate the potential for cascading retailer failure.

There is a requirement that affected customers of the failed supplier to remain with the SOLR for a 20 business day "lock in" period before being able to sign contracts with other suppliers.

Similar to arrangements in Great Britain, a SOLR in Northern Ireland is required to remain in the role of a SOLR for a six month period. During this time, the SOLR must create a deemed contract with applicable conditions for customers that have been transferred from a failed supplier. However, unlike Great Britain, the deemed contract prices are not allowed to be higher than standard rates charged to all customers. Customers who elect to remain the SOLR after the 20 day lock in period may choose to sign onto a different contract.

Cost recovery

As is the case under the NECF ROLR arrangements, the SOLR cost recovery scheme in Northern Ireland requires a SOLR to claim its cost *after* a SOLR event has occurred. The SOLR provisions do not allow for special "SOLR tariffs", which means that SOLRs are not allowed to charge rates that are higher than standard rates charged to all customers.

After a SOLR event, a SOLR can recover its costs by submitting a claim to the Utility Regulator. It is allowed to recover all of its costs and earn a "reasonable profit". Types of recoverable costs include:

- non-energy related costs - such as costs of customer transfers, communication with customers and costs arising from higher credit support payments; and
- energy related costs - such as purchasing additional electricity for a larger customer load.¹⁹⁶

A SOLR must submit its claim for cost recovery within six months of when the last resort supply direction is issued by the Utility Regulator.

A.3.3 Potential lessons for mitigating contagion

The Northern Ireland SOLR scheme is very similar to the Great Britain scheme and accordingly has similar potential benefits in terms of mitigating contagion to those discussed above in relation to Great Britain.

¹⁹⁵ In Northern Ireland, a separate SOLR may be appointed to serve non-domestic customers.

¹⁹⁶ Utility Regulator, Electricity, Gas, Water, *Supplier of Last Resort in Electricity, Decision Paper*, 5 August 2009, pp 23, 31 and 35.

Similar to Great Britain, the SOLR process in Northern Ireland allows flexibility for the regulator in making decisions to appoint a SOLR. It also does not mandate a timeframe for appointing a SOLR. The discretion given the Utility Regulator in "market testing" a potential SOLR prior to appointment allows the regulator to consider the capacity of the SOLR in taking on affected customers. These factors could reduce the risk of contagion by allowing retailers more time to avoid a SOLR event and more time for the regulator to make an informed decision as to who to appoint if a SOLR event cannot be avoided.

The cost recovery scheme in Northern Ireland is generally similar to the NECF ROLR cost recovery arrangements. However, the Northern Ireland scheme provides more clarity about the that can be recovered, including in particular energy costs and increased credit support costs. While the AER's Statement of Approach in relation to the NECF ROLR regime sets out some limited examples of costs that can be recovered, the NECF ROLR cost recovery arrangements give considerable discretion to the AER and provide little guidance as to what costs can be recovered. That uncertainty could potentially cause uncertainty for the designated ROLR and its financial providers.

A.4 Texas

A.4.1 Introduction to the Texas electricity market

The Texas wholesale electricity market is an "energy-only" market in which both operations and investment are driven primarily by energy price signals. Similar to Great Britain, it is a net pool market design where over 95 per cent of electricity is traded through bilateral contracts, and any remaining electricity is then sold into a balancing market. This market is managed by the Electric Reliability Council of Texas (ERCOT).

A market clearing price is set at 15 minute intervals and this price is paid to generators who sell electricity in the balancing (or spot) market. Similar to the NEM, the Texas wholesale market has a price cap in place to manage spot price volatility. However, the level of the price cap is significantly less than the NEM.

The Texas wholesale market previously had a \$3,000 price cap in place to manage significantly high spot prices. However, the Public Utilities Commission of Texas (Utilities Commission) increased this price cap to \$4,500 on 1 August 2012 to encourage greater investment in electricity generation.¹⁹⁷

Texas moved towards a competitive retail electricity market in 1999, with small customers being able to select their retailer from 1 January 2002.¹⁹⁸ The Texas electricity retail market has five incumbent retailers; two of these incumbents hold a

¹⁹⁷ Houston Business Journal, *Texas' wholesale electricity price cap increases this week*. Available at <http://www.bizjournals.com/houston/news/2012/07/31/texas-wholesale-electricity-price-cap.html>.

¹⁹⁸ Analysis Group - Economic, Financial and Strategy Consultants, *ERCOT Texas's Competitive Power Experience - A view from the Outside Looking In*, October 2008, p7.

market share of 30-40 per cent each while the other three hold market shares of less than 20 per cent each. In total, there are approximately 100 privately owned retailers actively supplying the residential market in Texas.¹⁹⁹

In 2008, four retailers in the Texas retail market filed for bankruptcy, which triggered the Provider of Last Resort scheme for over 30,000 customers.²⁰⁰ In 2008, Etricity, National Power, Pre-Buy Electric and Riverway Powerco became insolvent. The failure of the first three retailers led to 1,000 customers in Corpus Christi being transferred to a POLR. The reasons for these failures were a result of extreme market conditions and price volatility, which increased financial obligations for all of these retailers.²⁰¹

Similarly, in February 2011, Abacus Resources Energy exited the Texas retail market due to exposure to high wholesale prices. However, rather than using the provider of last resort (POLR) scheme, Abacus Resources Energy independently transferred its customers to two other retailers to ensure that customers would not be unnecessarily exposed to high POLR tariffs.²⁰²

A.4.2 Provider of Last Resort scheme

Key elements of the POLR scheme

The *Public Utility Regulatory Act* requires the Public Utilities Commission of Texas to designate retailers to act as a POLR.

The Texas POLR scheme is different to the Australia ROLR regimes and the overseas regimes discussed above in that the POLR performs two distinct functions. The definition of POLR in Texas refers to both a default retailer and the retailer to whom customers are transferred in the event that their retailer fails. For example, in Texas, customers can elect to sign a contract with a POLR which essentially acts as a default retailer in a particular area. In this instance, a POLR must accept a customer's request for POLR service.

Under the *Public Utility Regulatory Act*, the purpose of the POLR scheme is to provide:

- a basic, standard retail service package at a fixed, non-discountable rate to any requesting customer in an area of Texas that is open to retail market competition; and

¹⁹⁹ Public Utilities Commission of Texas, http://www.puc.state.tx.us/industry/electric/directories/rep/alpha_rep.aspx.

²⁰⁰ Caller, Elvia Aguilar, *Bankruptcy hearing today; customers may want to look now for new firm, PUC says*, 10 June 2008, <http://www.caller.com/news/2008/jun/10/another-electric-provider-sinking/>.

²⁰¹ Ibid.

²⁰² Houston Chronicle, *Price spike means electric retailer goes dark*, 11 February 2011, <http://www.chron.com/business/energy/article/Price-spike-means-electric-retailer-goes-dark-1595362.php>.

- continuity of service if a retail electric provider fails.²⁰³

Consistent with these two distinct purposes of the POLR scheme, the two triggers for application of the Texas POLR scheme are:

- a request by a customer for POLR service; and
- the occurrence of a "mass transition event" in relation to a customer's retail electric provider.²⁰⁴

In this appendix, we will only discuss the application of the POLR scheme to mass transition events, such as retailer failure. The application of the POLR scheme to provide a default retailer for customers that have not chosen a retailer is not relevant to the NEM financial market resilience project.

Mass transition events are triggered by termination of certain retailer agreements with ERCOT, issuance of a Utilities Commission order that decertifies a retailer or similar issuances that have the effect of a retailer exiting the market.²⁰⁵ The Texas scheme also allows a retailer to invoke the POLR scheme on a voluntary basis. In this instance, the Utilities Commission will issue an order that starts the process of appointing a POLR and transferring customers.²⁰⁶

Similar to the NECF ROLR arrangements, the Texas scheme allows for two types of POLRs:

- volunteering POLR (which is similar to an "additional ROLR" under the NECF);
- non-volunteering POLR (which is similar to a "default ROLR" under the NECF).

In Texas, this structure means that retailers can volunteer to act as a POLR. However, non-volunteering POLRs are also designated as a "back up" POLR if volunteer POLRs cannot take on affected customers. The Utilities Commission must make a list of volunteering POLRs publicly available. In addition to these volunteering POLRs, the Utilities Commission must select five non-volunteering POLRs, who are essentially the "incumbent" retailers in each of the respective POLR zones. A non-volunteering POLR is assigned to each zone.

Auctions

In 2001, the Utilities Commission opted for an auction process to select POLRs. However, this approach was not successful.

203 NERA Economic Consulting and Arthur Allens Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework, Final report prepared for the MCE retail policy working group*, 29 January 2009, Appendix C.1, p155.

204 Ibid, p.155.

205 Ibid.

206 Ibid.

The Utilities Commission stated that:²⁰⁷

“The selection process for the POLR was very difficult. Only one qualified bidder, TXU, submitted qualifying bids for POLR service and by rule could not be the POLR in its own service territory. We [the PUCT] had to assign POLR obligations to various [Retail Electric Providers] through a contentious, contested, case-hearing process. There was a great amount of criticism that the original POLR prices bid were very high. There was pressure to keep rates low... ”

After this experience, the Utilities Commission opted to move away from the auction process because it was ineffective where insufficient bids were submitted and bid prices were considered to be too high due to the lack of competition.

Appointing a POLR

Retailers in Texas are required to provide information to the Utilities Commission in accordance with specific rules once in every two years. The Utilities Commission uses this information to designate retailers that are deemed "eligible" to serve as POLRs.²⁰⁸

Retailers must provide the following information to the Utilities Commission every two years:

- number of customers and types of customers to whom the retailer is supplying electricity;
- number of supply points in a POLR area;
- volume of electricity supplied to customers; and
- the retailer's technical and financial ability to serve as a POLR if the need arises.

The Utilities Commission assigns the role of POLR to a retailer based on the above information.

If a POLR event is triggered, customers will first be allocated to volunteer POLRs. If there are any remaining customers that cannot be assigned to a volunteer POLR, the Utilities Commission will assign these customers to non-volunteering POLRs in a non-discriminatory fashion. The only instance in which a non-volunteering POLR can be exempt from serving as a POLR is if the Utilities Commission considers that its financial stability will be compromised.²⁰⁹

207 Public Utilities Fortnightly, Energy, Money, Power, *POLRized In Texas: A Duty Unresolved*, available at <http://www.fortnightly.com/fortnightly/2002/07/polrized-texas-duty-unresolved>.

208 NERA Economic Consulting and Arthur Allens Robinson, *Retailer of Last Resort – Review of current jurisdictional arrangements and development of a national policy framework*, Final report prepared for the MCE retail policy working group, 29 January 2009, Appendix C.1, p152.

209 Ibid, pp152-153.

A POLR that is appointed by the Utilities Commission must continue in that role for a two year term. When the two year period ends, the POLR can choose to remain a POLR for customers who do not actively select another supply. Alternatively, they can transfer POLR customers to the new POLR that has been appointed for the next two year term. The rules in Texas do not stipulate a minimum timeframe for customers to remain with a POLR, which means they can elect to switch to another retailer at any time.

Cost recovery

The only mechanism for a POLR to recover its costs is through the tariff that it charges its customers. The POLR rate is not "intended to be a competitive offering but a cost and risk based offering".²¹⁰

If a POLR rate is not sufficient to recover the costs of being a POLR, the Utilities Commission can permit a POLR to adjust the tariff so that it reflects the costs incurred by the POLR. We note, however, that customer protection measures still apply to the POLR tariff. This means that hardship customers are still entitled to receive discounts and payment plans even while on the POLR rate tariff.²¹¹

The formula for arriving at a residential POLR rate is:

$$\text{POLR rate} = (\text{non-bypassable charges} + \text{POLR customer charge} + \text{POLR energy charge})/\text{kWh}.$$

Non-bypassable charges include transmission and distribution costs, administrative charges imposed by ERCOT and applicable taxes. The POLR customer charge is a cents/kWh charge for taking on a new customer. The POLR energy charge is the "sum over the billing period of the actual hourly market clearing price for the customer multiplied by the level of kWhs used, multiplied by 130%."²¹²

This means that a POLR can pass through actual costs (including energy costs) plus another 30 per cent in addition to those costs. We note that retail prices are not regulated in Texas, which means that a POLR can directly pass through spot price volatility, which results in a high POLR rate.

A.4.3 Potential lessons for mitigating contagion

One of the key lessons from the Texas POLR scheme is the complexity and potential risks associated with using an auction process to select POLRs. As the Utilities Commission experience demonstrated, the auction process will only be successful if bids are received from several retailers. The lack of bids received in the Texas auction in 2001 resulted in a very contentious and contested process to appoint a POLR after the failure of the auction process and the lack of a clear alternative mechanism. There

210 Ibid p156.

211 Ibid, pp160-161.

212 Ibid, p161.

were also concerns that the bids in the auction process were overly high, which was likely related to the lack of competitive pressure in the auction.

This experience indicates that using an auction process to designate a ROLR is only likely to be effective if a number of retailers submit bids and the action delivers a competitive outcome. Therefore, it may not be sufficient to rely on an auction process alone to select a ROLR, and if an auction process is used there should be a clear back-up mechanism in case there are insufficient bids.

The Texas structure of volunteering and non-volunteering POLRs has similarities to the NECF ROLR regime's default and additional ROLRs. However, a notable difference is that under the Texas regime there must always be at least one volunteering POLR and at least one non-volunteering POLR for each POLR area. This structure ensures that there will always be a back-up POLR in case the other retailer fails. Under the NECF ROLR regime, there will always be a default ROLR, but will only be additional ROLRs if retailers submit expressions of interest to register as additional ROLRs. There is accordingly a risk under the NECF regime that there may be no additional ROLRs and no clear "back-up" if the default ROLR fails.

In Texas, the Utilities Commission has information gathering rights to obtain information from retailers on their ability to fulfil obligations of a POLR. This information is intended to help the Utilities Commission to decide who to appoint as a POLR, which may be useful in mitigating contagion. However, retailers are only required to provide information to the Utilities Commission every two years, which is likely to be of limited value if a POLR event is triggered well after company information is provided to the Utilities Commission. In contrast, the AER's powers to compel retailers to provide information under the NECF ROLR provisions are much more limited.²¹³

The cost recovery mechanism in Texas appears to provide greater ability for a POLR to recover all of its costs compared with the Australian ROLR regimes. Further, the Utilities Commission has set out the key types of costs that can be recovered, which reduces uncertainty for the POLR in setting a POLR rate and recovering its costs. In particular, the POLR can pass through spot energy prices plus a margin, which could mitigate the POLR's exposure to spot price volatility.

However, this method of cost recovery could also pose problems for a POLR because high POLR rates may be unlikely to retain customers over the period necessary for the POLR to recover the costs. As mentioned earlier, the rules in Texas do not stipulate that customers must remain with a POLR for a specific period of time, which means that a customer is free to switch suppliers at any stage after being transferred to the POLR.

²¹³ If the AER has reason to believe that a retailer is failing, it has powers to require that retailer to provide it with information under section 130 of the NERL. It is also able to "inquire of one or more registered RoLRs as to whether it wants to be appointed designated RoLR for that event" under that section. However, it does not have general powers to compel retailers other than the failing retailer to provide it with financial information to assist its preparation for a ROLR event.

This ability to charge higher rates to the acquired customers has also resulted in concerns in relation to the impact on customers. We understand that the POLR rate is significantly higher than normal market rates, which has resulted in a desire to avoid invoking the POLR scheme in relation to recent retailer failures.²¹⁴

A.5 Alberta

A.5.1 Introduction to Alberta's electricity market

In 1996, Alberta began operating its wholesale hourly electricity market known as the Power Pool. The Power Pool is a wholesale market that operates in a mandatory gross pool market design like the NEM. Similar to the NEM and Texas wholesale market, the Power Pool is also an "energy only" market, which means that market participants are paid only for the energy that they produce, rather than the capacity they hold.

The nature of the power pool means that it is subject to spot price volatility like the NEM. Therefore, market participants need to hedge their risk through bilateral financial contracts. The Alberta wholesale market also has a price cap in place to manage significantly high spot prices. The market price cap is set at \$999.99/MWh.²¹⁵ Accordingly, it has a similar potential for volatility as the NEM.

The Alberta retail market was opened up to full competition in 2001, when all customers were able to select their supplier. In 2010, there were five retailers operating in the residential electricity market, with a total of 14 retailers active in the Alberta electricity retail market.

As discussed in more detail below, electricity distributors also have a role in the retail market. The *Electricity Utilities Act* requires the owner of each of the distribution networks in Alberta to ensure that a "regulated rate option" is available to all eligible customers within its service area. An "eligible customer" is any customer with an annual consumption less than 250 MWh. These regulated rate options are regulated by the Alberta Utilities Commission in some areas and by the relevant city council in other areas. Customers can elect to receive this regulated rate or select a competitive offer from another retailer.²¹⁶

Some of the previously integrated distribution and retail businesses have sold their retail businesses and are no longer active competitors in the retail market. However, all distributors remain liable under the *Electricity Utilities Act* to ensure that the regulated rate option is available to all eligible customers in their respective service areas. The distributor may appoint another party to supply this service on its behalf.²¹⁷

²¹⁴ Houston Chronicle, *Price spike means electric retailer goes dark*, 11 February 2011, <http://www.chron.com/business/energy/article/Price-spike-means-electric-retailer-goes-dark-1595362.php>.

²¹⁵ Market Surveillance Administrator, *Alberta Wholesale Electricity Market*, 29 September 2010, pp9-11.

²¹⁶ Market Surveillance Administrator, *Retail Review: Electricity and Natural Gas*, 13 February 2009, p2.

²¹⁷ Market Surveillance Administrator, *Retail Review: Electricity and Natural Gas*, 13 February 2009, p2.

A.5.2 Mechanisms to deal with retailer failure

We held informal discussions with staff from Alberta's Market Surveillance Administrator (MSA) to obtain information on how the Alberta market would cope with the failure of a retailer. The MSA advised that Alberta does not have a specific ROLR scheme or similar mechanism to deal with retailer insolvency.

As noted above, the Alberta retail market is significantly different to NEM retail markets because of the role that distributors have in ensuring that customers are supplied at the retail level. While a distributor is not a competing player in the Alberta retail market, it is required to act as the default retailer for customers who do not actively select a supplier and ensure that they are supplied at the regulated rate.

It is also required to act as the "back up" if a retailer fails. This means that if a retailer failed, all eligible customers (ie all except for the largest customers) would be transferred to the distribution company, which would be required to ensure that those customers are supplied at the regulated rate.

The distributor would recover its costs of taking on affected customers through the regulated rate, which we understand is allowed to factor in the costs incurred as a result of retailer failure.

In our discussions with the MSA in Alberta, they indicated that they have not yet dealt with an event in which a retailer fails. Therefore, the exact nature of how such an event would be managed is unclear. Further, there are no specific regulations that set out how this situation would be managed if it were to occur.

A.5.3 Potential lessons for mitigating contagion

A key difference between the approach to retailer failure in Alberta and most of the ROLR regimes in Australia is the role of a distributor in effectively acting as the ROLR.

We note that the South Australian ROLR regime is based on a distributor acting as a ROLR if a retailer fails. However, in practice we understand that the distributor, ETSA Utilities, has subcontracted with a retailer, AGL, for it to fulfil its obligations as a ROLR up to certain limits. That arrangement is similar to the ability under the Alberta model for a distributor to arrange for another party to supply services on its behalf.

We also note that several jurisdictions included in the table in section A.6 below also have a similar model to Alberta where the distributor is involved in the ROLR process. However, in many of those jurisdictions distributors also have a broader role in the retail market as a default retailer for customers that have not selected an alternative supplier.

We consider that the Alberta model is unlikely to be suitable to be adopted in the NEM because it would require distribution businesses to take on the role of a retailer. Adopting this structure in the NEM would require major changes to the role of a distributor. It would be inconsistent with the separation of the regulated natural

monopoly network parts of the electricity supply chain from the competitive retail and generation sectors. Distributors also do not have the systems in place (such as billing and customer service functions) to take on this role. Further, it would require distribution businesses to have retail licenses and other regulatory approvals to act as retailers.

Some of these issues could be avoided by adopting the South Australian variation of this model where the distributor has the primary responsibility to act as the ROLR but subcontracts that responsibility to a retailer. However such an approach is likely to impose increased complexity and have several drawbacks and is unlikely to provide additional benefits compared with a regulator appointing the ROLR directly.²¹⁸

A.6 Other markets

The following table sets out a high level overview of how other selected international markets deal with retailer insolvency. We have focussed on markets that have some form of ROLR scheme or other express system for addressing a retailer failure. However, it was difficult to source detailed information on these jurisdictions and therefore we did not include them as separate chapters in the appendix.

²¹⁸ For example, to be effective for a large retailer failure, such an arrangement would require the distributor to have subcontracting arrangements with multiple retailers in case the subcontracted retailer was the failing retailer. It is also likely to require a process to determine who should be appointed as the ROLR and an ability to spread the customers between multiple ROLRs, which are decisions that a regulator is better placed to make than a distributor.

Table A.1 Mechanisms to deal with retailer insolvency

Country	Is the retail market competitive?	Are there retail price controls?	Mechanism to deal with retailer insolvency	How does it work?
Sweden	Yes	No	Supplier of Last Resort	A SOLR is a supplier that must supply electricity to customers who have not selected their supplier. Similarly, in cases of supplier failure, the supplier of last resort is obligated to temporarily provide electricity to the customer under an "obligation to supply".
Norway	Yes	Yes	Supplier of Last Resort	Under the <i>Energy Act</i> , distributors assume the role of SOLR within their network area and must supply electricity to all customers. This means that customers of a failed supplier, as well as those who have not selected a supplier, must be supplied electricity by a distributor. Customers who have not chosen their own supplier fall under an "obligation to supply" tariff for the first six weeks of the "obligation to supply" contract. The idea is for the "obligation to supply" tariff to be higher than other contracts available to customers to encourage switching and competitive offers.
Finland	Yes	No	Supplier of Last Resort	In the event of retailer failure, it is the distributor's responsibility to ensure that customers still receive electricity supply for at least three weeks until the Energy Market Authority appoints a new supplier that will have the "obligation to supply" for a particular region. However, a distributor may approach a supplier to carry out its role in supplying electricity to affected customers until the authority designates a specific supplier. A distributor may be compensated by end-use customers for any costs incurred for the supply of electricity.

Country	Is the retail market competitive?	Are there retail price controls?	Mechanism to deal with retailer insolvency	How does it work?
Denmark	Yes	Yes	Supplier of Last Resort	In the event that a supplier fails, customers of the failed supplier will be transferred to the company that holds the license for “obligation to supply” for that region. That supplier must continue to supply electricity to affected customers until the customers select another supplier. While most energy retailers apply for a license of “obligation to supply” (for a duration of five years), it’s usually the default or incumbent suppliers are granted these licenses in practice
The Netherlands	Yes	No	Supplier of Last Resort	Retailers and distributors are obliged to notify transmission businesses, the Ministry of Economic Affairs and the regulator if they think that a supplier's ability to continue supplying its customers could be compromised. If the involved supplier is unable to fulfil its role, the regulator will withdraw its supply license after a 10 day window. Within these 10 days the SOLR procedure will take place. Customers of the involved supplier are not allowed to switch within these 10 days. During this period the customers will be either distributed amongst all other suppliers or the complete database of customers will be sold to another party that has a supply license. Transmission businesses also have a role in taking over the financial liability for supplying customers and then pass on these costs to the "new" supplier.
Ontario	Yes	Yes	Distributor takes on affected customers of a failed supplier	There is no special regulatory mechanism to deal with the failure of a retailer. The customer’s distribution utility is the default supplier so if the customer’s retailer fails, the customer is supplied by the distributor and would come under the regulated retail price. The distributor can recover its costs through the tariffs that it charges to customers. However, if a distributor is unable to recover all of its costs through this process, it can be recovered through the distributor’s rates proceeding before the Ontario Energy Board.

Country	Is the retail market competitive?	Are there retail price controls?	Mechanism to deal with retailer insolvency	How does it work?
Czech Republic	Yes	No	Supplier of Last Resort	There are explicit provisions that assign a specific SOLR to relevant distribution areas for both gas and electricity. Each SOLR has an obligation to supply electricity to affected customers of a failed supplier for six months.

B Existing jurisdictional step-in and emergency powers

Most NEM jurisdictions have their own legislation which confers state of emergency powers on either the responsible Minister or a relevant agency that can be exercised in certain, defined emergency situations. Most NEM jurisdictions also have emergency step-in powers that allow the jurisdictional regulator to step in and take control of an electricity entity in certain defined circumstances.

This options paper does not include any options that relate to using or enhancing these existing powers because we do not consider that they are well-suited for managing financial contagion.

As explained below, these emergency powers are designed as a last resort measure for threats to physical electricity supply and security issues. It is conceivable that these powers could eventually be invoked as an absolute last resort following a large retailer failure that led to a cascading failure and significant financial contagion. In those circumstances, emergency powers could be used in relation to generators and network service providers to ensure that electricity continued to be supplied. However, these powers are unlikely to be suitable for use at an earlier stage following a retailer failure to prevent significant financial contagion, for example to prevent the designated ROLR from failing.

In addition, these powers are unlikely to be sufficient on their own even as a last resort and would need to be coupled with other measures such as government funding.

Accordingly, we consider that the government intervention options discussed in chapter 8 of this options paper are preferable to attempting to rely on or enhance these existing emergency powers.

Overview of step-in powers

All jurisdictions other than NSW, the ACT and Tasmania currently have in place a legislative framework that allows the jurisdictional regulator to step in and take control of a defaulting electricity retailer, as summarised in the table below.²¹⁹ In some jurisdictions, this power can be exercised on the initiative of the regulator alone. However, most jurisdictions require another step in the process, for example the Governor to authorise the regulator to take action.

The triggers for invoking these powers illustrate that they are primarily designed for physical supply issues. For example, in Queensland the Governor in Council may authorise the regulator to take over the whole or part of the operation of a defaulting electricity entity to ensure that customers receive an adequate, reliable and secure supply of electricity.²²⁰ In Victoria, the Essential Services Commission may appoint an

²¹⁹ The ACT and Tasmania had jurisdictional step-in rights for electricity retailers prior to adoption of the NECF. Those rights remain in place for certain electricity entities, but no longer apply to electricity retailers.

²²⁰ Section 130 of the *Electricity Act 1994*(QLD)

administrator to a licensee if it considers that the contravention by the licensee of its licence conditions threatens the security of electricity supply.²²¹

In each jurisdiction, the available powers and mechanisms for their application in the event of an electricity-related emergency differ slightly, along with the tests that must be met before the Minister or agency can intervene. These emergency powers will generally be used only after the mechanisms in the National Electricity Law (NEL) and NER have been exhausted. Government intervention is exercised as a last resort, typically where market and infrastructure operators require assistance to maintain the safety of infrastructure and supplies to essential users.

Overview of state of emergency powers

Each non-NECF jurisdiction also has state of emergency powers that are potentially applicable to electricity retailers, as summarised in the table below.

In addition to the issues discussed above that would limit their application to financial contagion events, these emergency powers have the limitation that the underlying events that trigger their use may affect multiple jurisdictions within the NEM and so would invoke multiple emergency powers frameworks.

To minimise adverse impacts arising from this limitation, emergency powers in the electricity context are exercised by jurisdictions in an organised and co-ordinated fashion via Memoranda of Understanding and protocols that establish committees and channels of communication. For major energy supply disruptions affecting more than one jurisdiction, national advisory committees are activated to facilitate cross-border communication and co-ordination. AEMO is also a party to the Memoranda of Understanding and provides a whole of market response and exercises its powers in a manner consistent with the requirements of the jurisdictions.

In addition, the majority of state emergency powers have time restrictions on how long the emergency powers may apply, which may limit their usefulness. For example, in NSW there is a limit of 30 days.

²²¹ Section 34(1) of the *Electricity Industry Act 2000* (Vic).

Summary of existing step-in and emergency powers in non-NECF jurisdictions

	NSW			QLD		VIC	SA
Legislation	<i>Essential Services Act - general powers</i>	<i>Essential Services Act - state of emergency powers</i>	<i>Energy and Utilities Administration Act</i>	<i>Electricity Act - rationing powers</i>	<i>Electricity Act - taking over powers</i>	<i>Electricity Industry Act</i>	<i>Electricity Act</i>
Trigger	If it appears to the Governor that the provision of an essential service is, or is likely to, cease, be interrupted, be reduced, or be rendered insufficient for the reasonable requirements of the community.	The Governor declares in writing that a state of emergency exists.	Whenever it appears to the Governor that the available supply of energy or energy resources is, or is likely to, become less than is sufficient for the reasonable requirements of the community.	The Minister must be satisfied that an electricity entity cannot supply the electricity needed by its customers and the making of the order is necessary to enable the continued supply of electricity by restricting electricity use.	The regulator must be satisfied that to ensure customers receive and adequate, reliable and secure supply of electricity, it is necessary for the regulator to take over the operation of the whole or part of a defaulting entity's works and business.	Direction powers are triggered if it appears to the Governor in Council that the available supply of electricity is, or is likely to become, less than sufficient for the reasonable requirements of the community. ESC may appoint an administrator if a contravention of licence conditions threatens the security of electricity.	If the contravention of licence conditions threatens the security of electricity, ESCOSA can appoint an operator to take over an entity's operations. The Governor may declare a period of emergency if circumstances have arisen, or are likely to arise, that have caused, or are likely to cause, interruption or dislocation of essential services.
Power	Direction powers. Regulation powers. Suspension powers. Delegation powers. Inspection powers.	Direction powers. Inspection powers.	Direction powers. Regulation powers.	Electricity rationing powers.	Taking over operations.	Direction powers. Appointment of administrator powers.	Taking over operations. Declaration of a state of emergency.

	NSW			QLD		VIC	SA
Procedure	The Governor must make a proclamation, published in the Gazette, declaring that an essential service is one in respect of which regulations may be made. A regulation takes effect once the proclamation is effective.	A state of emergency must be declared by the Governor. The declaration must be published in the Gazette.	The Governor by proclamation, published in the Gazette, declares that the energy or energy resources provisions specified in proclamation. If a proclamation is in force the Governor may make a regulation.	An emergency rationing order becomes effective by a Gazette notice. The Minister may also make an emergency rationing order if satisfied that it is necessary because of extraordinary circumstances.	The regulator advises the Minister that it is necessary for the regulator to take over an electricity entity's operation. The Governor in Council authorises the regulator to take over the relevant operation of that entity and publishes a Gazette notice.	A proclamation must be made by the Governor in Council and published in the Gazette. The Minister can issue a direction under the proclamation.	A proclamation must be made by the Governor in Council and published in the Gazette. Following a proclamation, the Minister can give any direction necessary to manage an event. Regarding taking over operations, an electricity entity may make submissions as to why the proclamation should not be made. ESCOSA appoints a suitable person to take over the operations.
Time	Period not exceeding 30 days.	Period not exceeding 20 days.	Period not exceeding 30 days.	Minister must repeal an emergency rationing order as soon as it is no longer required or if the emergency no longer exists, otherwise expires within one month.	Period that the regulator considers necessary to ensure customers receive an adequate, reliable and secure supply of electricity.	Proclamation or direction may be revoked at any time by the Governor in Council or Minister. Appointment of administrator has effect for 28 days unless revoked earlier, but can be renewed.	Each proclamation cannot exceed 7 days and successive periods of emergency must not exceed 14 days.