AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

20 March 2013

FROM THE OFFICE OF THE
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John Pierce
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PO Box A2449
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Your reference: EMO 0024

Attention: Richard Owens

Dear Mr Pierce

Submission: NEM Financial Market Resilience Options Paper

Thank you for the opportunity to make a submission on the Australian Energy Market Commission's (AEMC) options paper on NEM Financial Market Resilience (FMR options paper). I attach AEMO's submission for your consideration.

AEMO is supportive of the work being undertaken by the AEMC to identify and address the risk of financial contagion occurring through a range of mechanisms in the context of the NEM. A number of the options proposed in the FMR options paper have the potential to enhance the resilience of the market, and deliver improvements to the operation of the Retailer of Last Resort (RoLR) arrangements. AEMO is of the view however, that RoLR is unlikely to be capable of managing all types of failure – the following are examples of failure types requiring mechanisms other than RoLR:

- Failure of a participant with a very large customer based, for which the use of RoLR will introduce its own new risk of contagion due to the inability of the RoLR to absorb the quantity of customers.
- Failure of a participant with generation in their portfolio – there is currently no mechanism that ensures the ongoing operation of the generation when a business is insolvent or suspended.

AEMO notes that the AEMC has identified options for a last resort government response which could be used as an alternative to RoLR in specified circumstances. AEMO suggests that the AEMC further develop a policy framework which allows the RoLR arrangements to be displaced in scenarios where RoLR is likely to be ineffective at managing the failure. Our submission sets out some of the factors and challenges in designing the policy around such an option.

If you would like to discuss any aspect of the submission, please contact David Swift, Executive General Manager Corporate Development on (08) 8201 7371.

Yours sincerely

David Swift
Executive General Manager

AEMO Submission – FMR Options Paper

This submission responds to the Australian Energy Market Commission's (AEMC) options paper on Financial Market Resilience (FMR options paper). The FMR options paper sets out a range of options aimed at mitigating the risks of financial contagion that might follow the failure of a large electricity retailer.

1. Key Points

Retailer of Last Resort (RoLR) arrangements will successfully handle some failures with minimal contagion risk, but it is unlikely to be capable of managing all types of failures. Mechanisms other than RoLR (some of which could work in conjunction with RoLR) are therefore required to contain the risk of contagion in the case of some types of participant failure. Those types of participant failure requiring mechanisms other than RoLR include:

- Failure of participants that have a very large customer base, for which the use of RoLR will introduce its own new risk of contagion.
- Failure of participants with both generation and retail load in their portfolio.

The AEMC identifies that "a comprehensive regulatory response to mitigate contagion risks is likely to involve some last resort role for governments"[1]. AEMO shares this view, and suggests that further development be undertaken on a policy solution that involves an alternative response to displace the RoLR arrangements in scenarios where RoLR is likely to be ineffective at managing the failure.

The remainder of this submission develops these key points with the aim of identifying a number of factors that are important when designing a policy framework for the management of participant failure while containing the risk of financial contagion.

2. Background

The AEMC has been requested by the Standing Committee on Energy and Resources (SCER) to provide advice on the nature of risks to the NEM arising from financial interdependencies between market participants, and options to minimise those risks and consequences if deemed necessary. As part of preparing its advice, the AEMC published an issues paper in June 2012 and an options paper in November 2012. The most recent paper focusses on the potential failure of a large electricity retailer, and discusses a range of options to support or supplement the existing Retailer of Last Resort (RoLR) mechanisms.

A number of Government policy developments have also been advanced recently, which also have potential to impact the outcomes of a participant failure. The National Energy Customer Framework (NECF) has been adopted in 2 jurisdictions, where it passes responsibility for administering RoLR to the Australia Energy Regulator (AER). And as part of the Clean Energy Future legislative package the Energy Security Council (ESC) has been established, and can make recommendations to the Commonwealth Government as to whether it should provide assistance to a financially distressed market participant that has lodged an application for assistance. This form of Government assistance has been identified as one of the potential last resort response options in the FMR options paper.

[1] FMR options paper, p93

2.1. Participant Failure

Failure of a participant in the NEM can manifest in a variety of ways, however the consequence is a defining factor – suspension from trading in the NEM. It is usual to consider a potential failure to emanate from financial distress within the company, either as an inability to pay a debt (to AEMO or to another company), inability to access credit support, or another form of distress leading to insolvency. For the NEM, 15 triggers (default events) are identified in the Rules, which may lead AEMO to issue a default notice. Failure to remedy a default event may lead to suspension from the NEM, which prevents the participant from further trading in the market. Under the NECF, the responsibility for taking action on some of these triggers will transfer to the AER, but at this stage all states have not adopted the NECF leaving a mixture of processes in place across the jurisdictions.

2.2. Retailer of Last Resort

The NEM currently has arrangements in place which protect retail customers from the failure of a participant, referred to as Retailer of Last Resort (RoLR). The mechanisms of RoLR facilitate the transfer of retail customers from a suspended participant to another participant, the RoLR, which is then financially responsible for the retail customers. RoLR has been invoked twice in the NEM, with the suspension of EnergyOne in 2007 and Jackgreen International in 2009.

Analysis performed by AEMO, and supported by the AEMC's analysis[2], suggests that the RoLR mechanism is effective in providing customer protection during the failure of all but the largest retailers. However, if the RoLR mechanism was used following the failure of a large retailer, there is a material risk that the number of retail customers required to be redistributed to the remaining retailers would be too large for the RoLR to successfully absorb. In such a scenario, rather than protecting customers, it is likely that the process would lead to financial distress and possibly even cascading failure of the RoLRs, representing a form of contagion propagating the failure across the NEM by way of the RoLR process itself.

2.3. Financial Contagion

As discussed in the FMR options paper[3], "financial contagion occurs when the financial independencies between market participants act to transmit the financial effects of a negative and unmanageable event from one party to another." The contagion might result in a cascading of financial distress, and without external assistance, could ultimately lead to failure of the market.

There are a number of channels by which financial contagion can propagate, including:

- RoLR – where the RoLR participant is unable to successfully absorb customers transferred from a suspended retailer. This inability might arise through immediate or sustained financial distress, or due to a lack of scalability of the RoLR's systems or processes.
- Shortfall – where there are insufficient funds recovered from settlement payments and the drawdown of credit support, AEMO passes the deficit to generators as a short-payment. The payment shortfall could lead to a shortage of working capital for the generator, and the generator being unable to meet all its immediate financial

[2] FMR options paper, p23: "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."

[3] FMR options paper, p9

obligations. This could happen either under current arrangements or under the new prudential standard of 2% probability of loss given default.

- Hedge contracts – where market participants suffer financial impact as a result of counterparty default on a bilateral hedge contract which is not adequately managed by default provisions such as collateral.
- Reallocations – where the participant has used reallocations, and is either exposed to transactions with a failed counterparty that are not covered by collateral or through hedge contracts, or are subject to increased credit support requirements due to AEMO deregistering a reallocation.
- NEM supply – where the suspension of a participant with generation results in a shortage of supply leading to higher prices and potentially load shedding. While this might appear as physical contagion, it is likely to manifest as financial instability due to high prices and the effects on derivative positions associated with the affected generation – it is therefore worthy of consideration in the context of financial market resilience.

2.4. FMR Options Paper

In the FMR options paper[4], the AEMC lists an assortment of options that are intended to mitigate the risk of financial contagion occurring through the use of RoLR. The FMR options paper categorises the options as follows:

- Amendments to the RoLR regime
- Addressing the RoLRs credit support obligations
- Addressing the RoLRs increased costs
- Last resort government responses

With the exception of the last resort government responses, the options focus on potential enhancements to the RoLR process and associated arrangements after a RoLR event. Without taking a position on each individual option to enhance these arrangements, AEMO considers these options would not be effective in managing all types of participant failures, and this raises the following challenges:

- If a failing business has a significant amount of generation in its portfolio, the current NEM default mechanism, and the RoLR process do not deal with the fate of the generation. This is likely to be due to the limited amount of vertical integration present at NEM start. As the Rules do not prescribe otherwise, if the business is suspended from the NEM, the generation would presumably need to shut down immediately, potentially giving rise to a supply shortage, which is itself a mechanism for contagion. If the generation component of the business is not suspended, then there is a presumption that the generation will keep operating while the business is insolvent, possibly under the management of an administration agent or liquidator, and after breaking the inherent hedge the generation might have had with load in the business. The current policy framework does not extend to this important scenario, leaving significant uncertainty as to whether contagion might result.
- Where a failing business has a very large customer base, the application of RoLR is likely to have consequences beyond the financial contagion discussed in the FMR options paper. Such consequences include separation of generation and retail parts

[4] FMR options paper, pp29-31

of the business, interaction with other business activities which might be of a much broader nature than the NEM, a material reduction in retail competition, and the potential for countervailing action from the ACCC. There is also the potential that inadequate scalability of retail systems may lead to delays in customer billing and revenue collection, resulting in further financial stress, and contributing to risk of contagion.

AEMO agrees that enhancements to the RoLR process and associated arrangements after a RoLR event may improve the efficiency of RoLR for managing the failure of small and medium-sized retailers. However, an alternative to RoLR such as the last resort government response options will be necessary to contain the risk of contagion for some participant failure scenarios, particularly those where generation is involved in the portfolio, and where the customer base is large.

3. Key factors to consider in designing a solution

For the purpose of this submission, the following discussion focuses on failure of a large retailer, which may also have generation as part of its portfolio, and highlights the range of factors that would need to be considered when deciding on a course of action to manage the failure. At a high level it is suggested that the principle decision will be whether to intervene prior to actual failure, to step into or assist the failing company to trade through while being restructured, or to allow that business to fail and provide assistance to the affected participants (such as the RoLRs) to mitigate the risk of cascading failure.

3.1. Protecting the customer

The objective of RoLR is to provide security of supply and financial certainty to retail customers, who will generally have limited other ability to endure the impact of their retail company failing. For small customers (typically residential consumers and small businesses), this provides continuity of supply as well as price protection, in the form of default tariffs. For large customers (typically industrial businesses) no specific price protection is afforded, though the Retail Law requires the terms and conditions of supply to be “fair and reasonable”. The lack of a specific price protection could become a socio-economic issue in the event of a major RoLR event.

The failure of ABC Learning discussed in the FMR options paper provides an example of where government intervention has been used to protect the interests of the customer.

Any failure management mechanism will need to protect the interests of customers of the failing entity and of other entities that might be subject to the effects of contagion.

3.2. Company structure

A number of electricity companies registered in the NEM are part of a hierarchical structure of related companies, many of which are not part of the NEM. Failure of the NEM entities could be caused by the failure of related companies or by the withdrawal of support from the parent. On the other hand, the risk of failure in some cases might be mitigated by support provided to the NEM participant by the larger group. When considering the option to intervene or assist an entity within such a hierarchy, these inherent relationships need to be considered. Of primary concern are the contractual and legal arrangements that exist between the failing entity and the other entities in the group. When managing the failure of a participant, there needs to be clear policy guidance as to the objective of the process – for example, is the process seeking to preserve the interests of consumers, the market as a whole, all entities in the group and their creditors, or shareholders? The policy will also need to mitigate moral hazard. However, a risk in this regard is that the financial interdependencies between entities could lead to the ultimate application of any assistance being to activities not related to the NEM.

Commercial arrangements between the failed company and other unrelated companies also present a risk when providing assistance. An example of this was the bailout of American International Group (AIG) by the US Federal Reserve, where it is believed that tens of billions of dollars of cash were effectively transferred to AIG's counterparties through undisclosed commercial arrangements.[5].

Any management mechanism involving the provision of financial or other support would therefore need to take account of the specific company structure.

3.3. Generation

The process of RoLR is only designed to manage the transfer of the retail customers, and there is no mechanism in the NEM that provides for ongoing operation of the generation when a business is insolvent or suspended. A number of retailers in the NEM also have generation in their portfolios and there is no explicit provision for the ongoing operation of their generation if their retail operations are suspended.

During a failure of a gentailer, an insolvency official might assume control of the business, including management of the generation assets. The insolvency official is usually responsible for ensuring the best financial outcome for creditors, so is expected to only take actions that increase the net return to creditors. For a gentailer, the operation of generation facilities will usually involve a number of competing financial pressures, such as fixed and variable operating costs, spot market revenue, and contractual positions. Generally, it might be expected that the best value would be achieved for the generation plant if it is profitable (income at least exceeds variable costs) and it is maintained as a going concern. An important component of this would be the status of the portfolio of contracts held. There is no guarantee the insolvency official would decide to continue to trade the generation capacity available. Worse still, if the entire business was suspended from the NEM by AEMO due to insolvency, then the generation would need to shut down forthwith.

Thus, there is a material risk that during the winding-up of a vertically integrated business, the NEM could be impacted by a reduction in supply, with consequential high prices and the risk of contagion. As a consequence of the energy only NEM design, it is impractical to determine ahead of time the full impact of the supply reduction, or to determine a threshold below which the supply reduction would be considered immaterial. In a scenario of a failure of a large electricity company, the supply reduction could be significant enough to cause sustained extreme prices, and the potential for market intervention such as reserve trading and mandatory restrictions. In the worst case, periods of load shedding might be unavoidable. Such periods of physical stress translate into financial stress and the potential for further failures, particularly if the event is sustained.

Clause 3.15.21 affords discretion to AEMO when suspending a participant; however there is no current policy guidance on whether AEMO could suspend the retail component of a gentailer in order to invoke RoLR whilst allowing the generation assets to continue to trade in the NEM. Perhaps more seriously no policy analysis has been carried out on how such a scenario might ultimately play out if it occurred. For example, if retail customers were transferred under RoLR while generation remained operational with an insolvent business,

[5] Factors Affecting Efforts to Limit Payments to AIG Counterparties, SIGTARP: http://www.sigtarp.gov/Audit%20Reports/Factors_Affecting_Efforts_to_Limit_Payments_to_AIG_Counterparties.pdf

the two parties would become logical hedging counterparties, but it is not clear whether hedging could take place between them.

It is suggested that any comprehensive contagion mitigation framework must deal explicitly with any generation that is being operated by the failing business. Furthermore, the policy framework for managing such an event is inextricably linked with the work currently being carried out by AEMC on financial market resilience.

3.4. Contractual arrangements

A significant risk during the application of RoLR is that the RoLRs are expected to take on unhedged load. This is because RoLR only involves the transfer of load, and not the contractual arrangements that might support that load. The FMR options paper discusses this issue[6], and proposes the option of transferring the hedge contracts to the RoLRs. The option would involve granting the RoLR the option to take up any favourable hedge contracts at the same time as acquiring the retail customers. As the AEMC identified however, the option of transferring hedge contracts is not considered practical due to the legal issues associated with the termination conditions of the contract.

A further complication for the failure of a gentailer will be the contractual arrangements that support the generation business. This may be in the form of coal or gas supply contracts, or cap contracts with retailers to generate revenue for peaking units when the price is low.

Notwithstanding the difficulty associated with doing so, if the effects of contagion are to be contained, then it will be necessary for derivative contracts and possibly other supply contracts to be managed through a failure. One way of looking at this is to manage some critical failure scenarios through a step-in process rather than through RoLR – such a process can keep hedge, or vertical integration arrangements on foot, allowing the business to be on-sold (with appropriate equity write-downs) as a whole or in parts to contain the risk of systemic failure of the market while also protecting consumers. As acknowledged by establishment of the ESC process, such a mechanism is likely to require temporary funding support, which might need to come from government sources in the interests of the long term stability of the market.

In such a scenario moral hazard would need to be mitigated by making it clear that support is being provided to protect the market and consumers, and not to protect the failing business in any way.

3.5. Reallocations

As part of their contractual arrangements, a failing participant might have entered into reallocation agreements with their counterparty and AEMO. As a result, a portion of that participant's contractual position is being settled through the NEM, and they could have ongoing liability. AEMO has discretion to deregister reallocations once a default event has occurred.

The AEMC might see merit in considering whether the deregistration of reallocations can be a contagion mechanism, due to the retail counterparty being required to put forward adequate credit support to cover the reallocation at short notice. As discussed in the context of contractual arrangements, a step-in process may be more effective in managing the risk of contagion spreading to reallocation counterparties.

[6] FMR options paper, pp48-52

4. Responding to financial distress

As discussed earlier, it is unlikely that the existing RoLR mechanism, or even an enhanced form of it, would be adequate to prevent financial contagion in the event of a failure of large electricity retailer or a retail business that has generation in its portfolio.

In relation to failure of large retail businesses, a form of external assistance or intervention would appear to be necessary, most likely including the option of support from the Commonwealth Government through a process such as the ESC.

In relation to retail businesses with generation in their portfolio, policy clarity is required as to what should happen in relation to the generation component of the business to prevent contagion. In designing that policy, it will be important to avoid creating moral hazard by allowing a business to easily shed its customer base while retaining its generation base. As this matter has not previously been covered in the financial market resilience work, it is suggested that AEMC also consider this as a potential form of contagion.

4.1. Credit support

This option was discussed in the FMR options paper, proposing a government entity would post credit support to AEMO to cover additional requirements as a result of a RoLR event. The AEMC notes that neither the Commonwealth Government nor a related entity (such as the Reserve Bank of Australia) meets the acceptable credit criteria defined in the NER, consequently would not be able to provide acceptable credit support to AEMO. It appears that this mechanism would currently rely on AEMO exercising discretion to not issue a default notice.

The provision of credit support assists the RoLR in two ways:

- Enables the RoLR to meet the MCL requirements during the establishment of facilities with its financial institutions. These facilities are required to support the capital requirements of the business, and would need to reflect the increased market exposure and changes in contractual arrangements.
- Provides coverage for any additional prudential requirements due to spot market prices being higher than the MCL assumptions. During periods of very high prices (which are likely to have caused the initial participant failure), participant's outstandings may exceed the levels established in the MCL process. Until these trading amounts are settled approximately 4 weeks later, participants are required to securitise these amounts.

Comprehensive containment of systemic risk to the market should ideally not rely on regulatory decisions of this type falling in a particular way – in this case for example, circumstances could arise where AEMO cannot exercise discretion to accept a particular type of credit support that is precluded under the Rules. It is preferable that policy be developed, and embodied in the Rules to clarify that credit support from the Reserve Bank should be considered acceptable by AEMO. Removal of this type of uncertainty is core to gaining confidence in the mechanism.

5. Summary

In view of the practical limitations of RoLR, AEMO supports the further development of policy solutions which involve the displacement of the RoLR arrangements in scenarios where RoLR is likely to be ineffective at managing the failure. A solution is expected to involve a government response, either in supporting the failing participant or RoLR, or stepping in during the insolvency process.

Any such mechanisms would be complex, and there will be large amounts of money, as well as market stability, at stake at all stages of the process. It is clearly not feasible for such processes to be designed "on the fly" when the need arises, so the AEMC's financial market resilience work provides the opportunity to develop a comprehensive package of policy measures that provide targeted responses to the containment of all forms of financial contagion arising from any type of participant failure.