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6 January 2012

Dear Paul,

**Consultation Paper: National Electricity Amendment (New Prudential Standard and Framework in the NEM) Rule 2011**

TRUenergy appreciates the opportunity to provide a submission on the Consultation Paper: National Electricity Amendment (New Prudential Standard and Framework in the NEM) Rule 2011.

**TRUenergy**

TRUenergy is one of Australia's largest integrated energy companies with a portfolio of approximately \$7 billion of generation and retail assets and employs around 1,600 employees and contractors across South East Australia. TRUenergy provides gas and electricity to approximately 2.75 million household and business accounts in New South Wales, Victoria, South Australia, Queensland and the ACT.

TRUenergy trades in the National Electricity Market (NEM) and is active in managing financially significant levels of prudential security. Given the size of our generation portfolio we also face the risk of payment shortfalls in the event of insufficient market revenues caused by retailer default. We have a vested interest in ensuring that the Prudential Framework is efficient both operationally and from a risk management perspective.

**Role of prudential management**

Prudential management plays an important role in the NEM in providing benefits to both retailers and generators. The benefit to generators is clearly obvious in that risk of short payments is actively managed. The benefit to retailers is that prudential management, as noted by the CEG report, provides an incentive to manage risks. While there is direct cost to any failing retailer and short paid generators, there are also consequential and real costs faced by other market participants. Once the news of a failed retailer becomes public, customers of that retailer will fear the worse – they may be cut off from electricity supply!<sup>1</sup> (regardless of the less sensationalist advice that maybe provided in the back end of a news story).

In the short term all retailers (and potentially distributors) would face an increase in call centre traffic from concerned customers. In the long term competition is harmed if there is a general view

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<sup>1</sup> Author experience in managing customer transition from large retailer exiting the market (OnEnergy, New Zealand 2001)

that the industry is not stable, customers will choose to stay with their known retailer rather than risk transferring to a new retailer, even though it may be financially in the best interest of the customer to transfer.

This does not imply that prudential management should be so onerous such that a barrier to entry is created. The point is that an efficient prudential regime supports the long term interests of consumers – too high or too low a prudential standard inhibits competition. The key question is what is too high and what is too low? It is not evident that any detailed analysis is provided with this Rule Proposal on the “optimal” level of prudential security is maintained in the market.

It would appear that this Proposed Rule change has three components:

- (a) Definition of a probabilistic based Prudential Standard framework ( the majority of the Proposed Rule Changes);
- (b) Setting the level of prudential Standard to a P(LGD) of 2% (included in the new definition of prudential standard); and
- (c) The subsequent/concurrent development of a new Credit Limits Methodology (the Chapter 11 transitional clauses).

The AEMC Consultation Paper and AEMO documents support items (a) and (c), but we are unsure of the evidence of support for item (b) and this is discussed further below.

## **Key Points**

### **Supportive of a Prudential Standard**

TRUenergy supports the concept of moving to a transparent, predictable and understandable statistical Prudential Standard. This provides certainty to Participants and Intending Participants. It also provides a baseline for which to measure future incremental reform.

TRUenergy would also like to note that AEMO have completed a thorough and extensive review of the Prudential Framework and have engaged in extensive industry consultation prior to proposing the Rule change. TRUenergy appreciates the energy and professionalism of the AEMO staff involved in the development of this work to date.

We also note, as outlined in the Rule Change Proposal, that a significant body of work preceded this Rule Change Proposal and that other proposals to provide further change to the prudential regime are reliant on this Rule Change Proposal. In the interests of timeliness and completion we suggest that the AEMC retain a high priority on this work programme.

### **Model Risk – Request for independent risk review**

The Seed Advisory/Taylor Fry report (Seed) discusses the standard framework for analysing credit risk in the financial sector both in Australia and internationally. Credit risk management is an evolving and rapidly changing field and there is a wealth of academic literature and data in relation to the standard framework. In its rawest form credit risk management is about identifying probability of default (PD), loss given default (LGD) and an exposure at default (EAD). The product of these three terms provides a dollar amount for an expected loss. Seed point out that using the standard credit risk management framework is not suitable for the NEM. TRUenergy agrees with Seed’s conclusion about that the standard credit risk management framework is not suitable for the NEM (at least not without significant changes to the prudential operation of the NEM). The reason for this belief is that the unlike wider credit markets, participants in the electricity market are not homogeneous and that there are only a few participants relative to the size of the market (as opposed to thousands of home loans in a comparative banking example). The non-homogeneity and lack of sufficient data points means an exercise in determining PD is unlikely to be statistically meaningful.

Seed then propose an alternative probabilistic model – probability of loss given default P(LGD). This probabilistic model provides a probability as opposed to a dollar amount (as calculated in the standard credit risk model). TRUenergy believes this is a reasonable approach.

However this is a new approach, we are unaware of the P(LGD) been used elsewhere, either in energy markets or more broadly. Given that the prudential framework process can lead to suspension of a participant and significant financial exposure for other participants (i.e it has the potential to be a high impact event), we request that the P(LGD) model is independently risk

reviewed by a suitable experienced credit risk management professional to ensure that there are no fatal flaws. The scope of a risk review should cover both the concept of P(LGD) and its suitability for the NEM as well as the data and processes used to draw conclusions. The current consultation process is not a suitable method for a independent risk review of the model as participants are not independent. We would not expect that any scope of work to suggest alternative methodologies unless a critical flaw was identified.

**The setting of the Prudential Standard to 2%**

Our major concern is the lack of significant quantitative analysis supporting the setting of the P(LGD) to 2%. The analysis presented by AEMO to support the 2% standard is based on returning to the perceived P(LGD) prior to the introduction of the Reduced Maximum Credit Levels (RMCL). It would appear that the change to the RMCL did not take into account an increase in the probability of loss given default at the time it was introduced, and was an unintended consequence. The Proposed Rule change is seeking to return to the previous status quo (pre RMCL) and is not seeking to determine the most efficient level of prudential security for efficient market operation.

What is lacking is a model to minimise the costs of more prudential security by retailers (higher costs for retailers, increasing barriers to entry) and the costs for generators (default risk exposure). The lowest summation of the two costs represents the lowest cost, and hence most efficient solution. This method is analogous to the trade-off between more generation capacity and the risk of energy shortages used for determining efficient levels of reliability in electricity markets.

Note that the Seed report states that the report was not about “optimisation” but clarification of a framework<sup>2</sup>.

In the interest of timeliness it is feasible to accept that the 2% is not an optimised number and proceed with the Proposed Rule Change on that understanding, and at some time in the future review the 2% with a view towards an optimisation process (and proceed with another Rule Change proposal to amend the 2% if needed). However this relies on a third party proposing a Rule Change.

Alternatively prior to making a draft Rule Determination the AEMC could also seek to ensure that the % P(LGD) does indeed represent the minimal overall cost to the consumer. This is not a preferred option due to the additional time this step could take.

A third approach may consider a more preferred Rule in that responsibility lies with the AEMC to publish the level of Prudential Standard (similar to the Administered Price Cap), and have a once-off review and amendment process to ensure that the Standard is optimised. This approach offers participants more certainty and alleviates the concern around the derivation of the actual %P(LGD). It would also offer the ability to review the Prudential Standard in operation and allow for any learnings to be incorporated into a review process. This would be TRUenergy’s preferred approach. AEMO would then seek to ensure that its processes would meet the published Prudential Standard.

**Assessment Framework**

The assessment framework provided by the AEMC does not indicate that any quantitative assessment of the Rule is proposed and relies on general assertions of behaviour. We recognise that there is an element of uncertainty in assessing quantitative benefits but an assessment that seeks to indicate the relative size of costs and benefits is useful.

AEMC assessment criteria	TRUenergy comment
the Rule better encourages retailers to take on an efficient level of risk, or at least to take on a level of risk that is not excessive;	<p>This point reflects the importance of setting the Prudential Standard at an appropriate level.</p> <p>TRUenergy is unsure if this Rule change is seeking to just clarify the current Rules which have been found to be ambiguous or is also about adding “efficiency” to the market through an improvement in risk management.</p> <p>We believe the former to be the case and do not believe that there is any significant benefit from setting an efficient level of</p>

<sup>2</sup> Seed report – page 13, para 3

	<p>risk as the proposed 2% level seeks to enshrine the status quo (prior to RMCL) i.e. is not a material change in the level of risk management.</p>
<p>participants agree that the P(LGD) is a good statistic to use in pursuing a Prudential Standard, and to use as a basis for further reform of the Prudential regime more generally;</p>	<p>While TRUenergy believes this Rule Change proposal is a reasonable justification for a Rule Change in that it promotes a more objective based assessment of Prudential's.</p> <p>We also recommend an independent risk review of the P(LGD) methodology as this has not occurred in the work to date.</p>
<p>the Rule minimises the administrative costs of the prudential regime</p>	<p>AEMO are in the best position to discuss overall administrative cost impacts between the Proposed Rule Change and the status quo. Aside from implementation costs it does not appear that there are significant increases in AEMO administrative costs.</p> <p>In terms of potential costs savings to Retailers this may be misleading. The Seed Report<sup>3</sup> states that average prudential costs would have been lower if this methodology had been used in the previous ten years. However this is misleading as retailer typically put in place bank guarantees to cover their expected maximum expected exposure, as the bank guarantee is typically for a longer period of time than that would be required under a short duration period where higher outstandings and prudential margin is required.</p> <p>There is a need to review the methodology proposed by AEMO in their upcoming consultation on this issue to determine if there is a material change in the expected maximum levels of prudential security. Significant variations in the level of Prudential Security may increase administration costs – even if their overall level of security is lower.</p>
<p>the Rule maximises flexibility for retailers and other parties to respond to the prudential regime</p>	<p>Having this Proposed Rule in place provides the framework to assess possible benefits for future Rule changes. But this Rule by itself does not materially change the flexibility for retailers and other parties to respond to the regime.</p>
<p>the Rule improves the perceived transparency and predictability of the prudential regime</p>	<p>As noted above the advantage of the Proposed Rule is to enable future incremental reform of the regime and this may deliver cost reductions in Prudential Management.</p> <p>Additionally since the Proposed Rule closely mirrors current processes it allows for a reasonable predictable transition period.</p>

### Transitional Provisions and Next Steps for Draft Rule Determination

TRUenergy requests that any transitional provisions for the Rule implementation are commensurate with the likely quantum of financial change, i.e. if Participants had to significantly increase the level of prudential security to market at the commencement of the Rule that sufficient time is provided to allow this to occur.

Since the transitional provision of the Proposed Rule allows for AEMO to begin consultation on the Credit Limits Methodology in advance of the Final Determination We also request that the time frame to respond to the Draft Determination allows for AEMO to begin the consultation on the Procedures as well as time for Participants review the Procedures to ensure that the draft Rule and the Procedures are complementary.

### Response to AEMC Questions

<sup>3</sup> Seed Report page 6 para 3

Does the existing architecture for protection from default in the NEM (as described in Chapter 2) constitute a sound platform from which meaningful reform to the Prudential Framework can be built? Does it remain an optimal architecture given the wider potential reforms contemplated in AEMO's Prudential Readiness Review? If not, what reforms should instead be considered prior to the adoption of the changes proposed by Proponent?

The Rule Change Proposal is the culmination of a lengthy investigation and review of the Prudential Framework. No serious flaws or imminent market failures were identified that would justify significant reforms that would fundamentally alter the nature of prudential and credit risk management in the NEM more generally e.g a move to a net market or a central clearing house model.

One trend identified overseas (mainly in light of the GFC) is a trend to a shorter settlement cycle to reduce participant risk exposures. However, the changes proposed by the Proponent are broadly compatible with a future possible rule in relation to settlement cycle length, should a net benefit to consumers be identified.

The Proposed Rule does not seek to make significant changes to the operations of current businesses. One benefit of the existing architecture is that it is reasonably well established and Participants have a good understanding of the processes and actions required to comply with the Rules. In many cases Participants have invested time and resources into ensuring efficient operation and compliance with the current arrangements. Although retention of the status quo should not be automatic, at this time, given carbon introduction and other more general investment uncertainty, a stable prudential regime and a minimisation of change is probably a benefit.

In summary TRUenergy does not believe that other reforms should be considered in advance of the AEMO proposal.

Is the existing language of "*reasonable worst case*" ambiguous, and if so, should the ambiguity be removed from the Rules? Should the language in the Rules be replaced with a statistical measure that AEMO must use in developing their Procedures under consultation? Over what timeframe should a Prudential Standard be upheld? (i.e. is it preferable to continue to seek to achieve the standard over the long-run course of several years, like the USE standard set by the Reliability Panel, or should the standard be upheld over short or even very short time frames?).

TRUenergy agrees that the language "reasonable worst case" can be ambiguous, even with the additional information provided in the NER definitions with "A position that, while not being impossible, is to a probability level that the estimate would not be exceeded more than once in 48 months." The issue is that that is difficult to estimate a probability of default with a 1/48 month exceedences rate as discussed earlier.

The time frame for the Prudential Standard should be longer than shorter, and probably comparable to the time frame used in the USE standard. Default and the potential for loss given default are a function of broader economic macro factors and business specific factors, with each factor type independent of each other. When the economic macro factors worsen the correlation for default typically increases and the risk of multiple defaults may occur over a short period of time, for example during a period of time (such as a hot summer and/or drought causing very high spot market prices). This could potentially cause a cluster of defaults within a period of several months. Since the P(LGD) is conditional on default occurring, there is a risk that with a number of defaults the P(LGD) may be exceeded over short time period.

Does the 'frequency-based' statistic described in AEMO's Proposal and the Readiness Review - the Probability of Loss Given Default - constitute a transparent, understandable statistic? Would its use improve the ability of risk-taking parties to manage their risk compared to the existing descriptive standard of "*reasonable worst case*" and/or the ability of AEMO to develop a more accessible, predictable Credit Limits Methodology? Is P(LGD) sufficiently separable as a Standard for protection from default from other variables that act to influence that protection, such as the actual and assumed Reaction Period?

TRUenergy believes that the P(LGD) is conceptually a transparent and understandable statistic and allows AEMO to develop an accessible, predictable Credit Limits Methodology. The consultation by AEMO on the methodology would further enhance participant understanding of the new Prudential Standard.

The AEMC question above also asks if this Rule improves the ability of risk-taking parties to manage their risks. Individually it is hard to draw a positive conclusion on the actions of each participant. There is no uncertainty – either a participant complies with the Rules or not, the Proposed Rule does not allow for participants to improve risk management techniques. This may come about as a result of subsequent Rule changes as suggested in the Prudential Readiness Review. However the Proposed Rule may benefit the perception of risk management in the electricity market more generally due to improved clarity.

Do the proposed accompanying changes to the Rules and potential changes to the Procedures best complement the introduction of the P(LGD)? Do these changes help to further the accomplishment of the NEO? These changes include:

- the introduction of the Outstandings Limit (OSL). This will replace calculation of the MCL, which will now float as the simple summation of the two calculated variables [OSL + PM];
- an iterative statistical approach to calculation of OSL and PM, using VF percentiles;
- a review of the application of load profiles to individual participants in calculation of OSL and PM;
- the introduction of seasonal adjustments in calculation of OSL and PM;
- the removal of the option for a Reduced MCL.

What guiding principles for the construction of AEMO's Procedures, if any, should be built into the Rules beyond or instead of those proposed by AEMO?

The proposed changes to the Procedures do appear to support the P(LGD) Prudential Standard. We note that AEMO has to consult on these Procedures and we intend to review them more fully at this time.

In the context of the complete proposal, is a setting of 2% P(LGD) optimal with regard to maximising the achievement of the NEO? Would such a value adequately incentivise retailers to take on an appropriate level of risk? What value could be used instead, and how/why would such a different value better meet the NEO compared to the proposed setting?

As noted earlier the Proposed 2% P(LGD) seeks to maintain the status quo and no research on the optimal setting has been carried out with a view to minimising overall cost to the consumer.

TRUenergy thanks the AEMC for the opportunity to provide a submission in relation to the Approach Paper. Please feel free to contact me on (03) 8628 1632 should you wish to further discuss this submission.

Yours Sincerely,



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