

# NEM SETTLEMENT PRUDENTIAL SUPERVISION PROCESS

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## Version Control

| VERSION    | DATE      | DETAILS  |
|------------|-----------|--|
| Version 11 | June 2007 | AEMO has developed and approved a methodology for determining prudential margins in accordance with clause 3.3.8 of the Rules.<br><br>Previous updates of this paper did not record a version update   |
| Version 12 | Aug 2007  | Spot Market Operations Timetable Rules 4.2 amended to:<br>move the obligation for Market Participants to pay AEMO in cleared funds by 10:00am (Sydney Time) to 10:30am (Sydney Time) on Settlement Day (+20 business days);<br>clarify AEMO's payment time obligations to pay in cleared funds to Market Participants on Settlement Day (+20 business days) if:<br>All payments to AEMO are cleared by 10:30am and Participant's, to be paid by AEMO, have entered their settlement transactions into Exigo by 13:00 Sydney Time |
| Version 13 | Jan 2009  | The formula to calculate a Market Participant <i>Call Amount</i> has been amended in accordance with clause 3.3.11 of the Rules  |
| 13.1       | Nov 2009  | Update to AEMO Format  |

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## 1. INTRODUCTION

This paper seeks to summarise the prudential supervision procedures according to which AEMO operates to manage its liabilities arising from the Market Settlements process.

This paper has been prepared as a summary of the prudential processes and is only intended to be a descriptive guide. All parties must take their own advice and refer to the National Electricity Rules (NER) for specific obligations.

It identifies NER obligations and obligations arising from AEMO's procedures which have been prepared to address more general NER obligations.

The process has been summarised in a flow chart that is attached to this paper as Appendix 1. Appendix 2 outlines some of the possible timeframes involved.

## 2. DEFINITION OF TERMS

The following prudential terms are explained for information:-

- Maximum Credit Limit (MCL) – AEMO's reasonable worst-case estimate of the amount of AEMO's exposure to the Market Participant for a period up to the credit period Market Participant.
- Guarantee amount – the value of guarantees lodged with AEMO, which must be greater than or equal to the MCL or reduced Maximum Credit Limit (RMCL).
- Outstandings – AEMO's estimate of the amount the Participant owes to AEMO for trading that has occurred but for which payment is not yet due (as shown on preliminary, final and interim settlement statements), less any security deposits lodged.
- Prudential Margin (PM) – represents AEMO's reasonable worst case estimate of the amount of AEMO's exposures to participant over the Reaction Period (7days). Replaces the prudential factor in determining the TL
- Trading Limit (TL) – is the total guarantee amount less the Prudential Margin.
- Call notice – Letter from AEMO to participant demanding payment or additional guarantee (of the call amount) to return outstandings to average levels by 11am on the next business day.
- Call Amount – Amount needed to reduce outstandings from current estimated level to either the Typical Accrual or the Trading Limit, whichever is lower.
- Typical Accrual - level of participant outstandings for average market prices.
- Security Deposit – Cash deposit lodged with AEMO either voluntarily or in response to a call notice to secure settlement on future due dates. Recognised as credit in the calculation of participant outstandings and returned as a credit with interest to participant on final statements.
- Default Event – Any of 15 events recognised in the Rules that represent an actual settlement default or adversely impact confidence about the participant's ability to meet settlement obligations as they fall due.
- Default notice – letter from AEMO to the participant alleging that a default event has occurred and seeking remedy by a specified time, usually 1 pm on the next day.

### **3. DAILY MONITORING**

AEMO monitors the total outstandings or financial liability of all Market Participants to AEMO on a daily basis. Market Participants can also monitor their own outstandings using the AEMO facility called Prudential Dashboard. Please contact the AEMO Helpdesk to arrange access to this facility.

Each business day, the outstandings for each Participant are compared to the Trading Limit, which is their total guarantee amount less their prudential margin. The guarantee amount must be greater than or equal to the Maximum Credit limit (MCL),

The MCL is a “reasonable worst-case” estimate of the potential exposure based upon the aggregate payments (after reallocations) to be made by a Market Participant to AEMO over their credit period. The MCL is set such that the estimate should not be exceeded more than once in 48 months. The MCL is reassessed at least quarterly and more often if there are changed circumstances. Further information can be found in the ‘Method of Determining Maximum Credit Limits’ paper published on the AEMO website.

If the outstandings exceed the Trading Limit, then a call notice may be issued. A call notice will usually be issued before 12 noon (Sydney time) on any business day.

The aim of the call notice is to require the Market Participant to reduce the outstandings to the level of typical accrual that is currently around 30-40% of MCL and to restore the prudential margin by ensuring the outstandings are reduced to less than the trading limit. This typical accrual represents the outstandings which would have been accrued by the Market Participant if the average price and usage estimates used in the calculation of the MCL were the Market Participant’s actual price and usage over the previous credit period.

The call notice compels response with either increased credit support or a security deposit in cleared funds, or lodging a reallocation request, by no less than the call amount by 11am (Sydney time) on the next business day.

#### **3.1 NER Requirements**

Clause 3.3.8 places obligations on AEMO to determine Maximum Credit Limits for each Market Participant. AEMO must review this limit at least annually but has the right under this clause to change it at any time after appropriate notification.

Clause 3.3.9 details the method AEMO should use to calculate outstandings of a Market Participant. This clause allows AEMO to use reasonable estimates of data where actual data is not available to AEMO.

Clause 3.3.10 details how AEMO should calculate the trading limit for a Participant. Clause 3.3.11 details action that AEMO may take if the outstandings of a Market Participant exceeds its Trading Limit. The NER does not compel AEMO to take such action. However if such action is taken then the NER places very specific obligations on both AEMO and the Market Participant under clauses 3.3.11 and 3.3.13.

## **4. RESPONSE TO CALL NOTICE**

When a call notice is issued, the Market Participant is expected by 11am (Sydney time) on the next business day to:

- Agree with AEMO an increase in the MCL by an amount not less than the call amount and to provide required additional credit support to AEMO;
- Where the preceding paragraph is not satisfied, pay AEMO a security deposit of the call amount; or
- Arrange, together with another Market Participant and in accordance with AEMO's procedures, for a credit ex-post reallocation to be submitted and accepted by AEMO for an amount of at least the call amount; or
- Provide a combination of the above to the value of the call amount.; or

### **4.1 NER Obligations**

Clause 3.3.11(b) details the call amount that AEMO must specify in a call notice. Clause 3.3.13 specifies the required response time and acceptable methods of response by a Market Participant to such a call notice.

## **5. ISSUE OF DEFAULT NOTICE**

If a Participant failed to respond as required to a call notice then a default event as defined by the NER would have occurred and AEMO may issue a default notice requiring rectification within a set deadline (typically 1 pm Sydney time on the next day).

Some default events, for example failure to settle at the appointed time or the appointment of an administrator, failure to provide credit support required to be supplied under the Rules by the appointed time on the due date can lead to a default notice being served without a call notice being issued.

### **5.1 NER Obligations**

Clause 3.15.21 defines what actions and/or circumstances that can result in a *default event* and gives authority to AEMO to issue a default notice. However it does not oblige AEMO to so issue the default notice. This clause also sets a minimum response time for such a default notice (by 1 pm Sydney time on the next day) and allows AEMO at its discretion to specify a longer time.

## **6. SUSPENSION**

If rectification of the default is not forthcoming to AEMO's satisfaction within the prescribed time, AEMO may issue a suspension notice, under which AEMO notifies the defaulting Market Participant of the date and time from which it is suspended from trading in the NEM. The suspension is announced publicly and will take effect from the next midnight following the announcement or other time set out in the announcement.

### **6.1 NER Obligations**

Clause 3.15.21(c) allows AEMO to issue a Suspension Notice if a default is not rectified but does not oblige it to do so. Clause 3.15.21(d) requires AEMO to "forward a copy of the suspension notice to the AER and to each Market Participant which is financially responsible for a transmission network connection point to which is allocated a connection point for which the defaulting Market Participant is financially responsible". This effectively obliges AEMO to advise the suspension to all Local Retailers of the suspended Participant's customers. Clause 3.15.21(f) obliges AEMO to publicly advise that a Suspension Notice has been issued.

## 7. POTENTIAL CONSEQUENCE OF SETTLEMENT DEFAULT

If a Market Participant has defaulted on a settlement payment then the potential consequences are:

- initially a draw down on the bank guarantee until this is exhausted in order to make good the defaulted settlement payment;
- issue Default Notice to the Market Participant;
- short payment to Generators in proportion to the amounts owed to each for energy and reallocation.

Thus if AEMO does not suspend a potentially defaulting Market Participant once the credit support is exhausted, Generators face financial exposure. Although the credit limits are set to cover a reasonable worst-case, this support could be insufficient to cover the financial exposure within a few days or less if near-VoLL pricing occurs.

### 7.1 NER Obligations

Clause 3.15.21(b)(2) gives AEMO the authority to, in the event of a default event, call upon the credit support provided by a Market Participant for such an amount as AEMO determines represents the amount of any money actually or contingently owing by the Market Participant to AEMO pursuant to the Rules.

Clause 3.15.22 details the manner in which Settlements will be handled for a billing period in which there is a shortage of funds due to a default of a Market Participant where the shortfall cannot be made up through calling upon any remaining credit support. Clause 3.15.22 (c) essentially specifies that any such shortfall would be shared out in proportion to the amounts owing to each Market Participant.

## 8. RETAILER OF LAST RESORT

If a Retailer of Last Resort (RoLR) scheme were available to assist in a quick transfer of customers to alternative retailers, then that procedure would be activated if the *defaulting Market Participant* was suspended and relevant jurisdictions confirm that the scheme will be supported by license conditions etc.

## 9. APPLICATION FOR DISCONNECTION

If a RoLR arrangement cannot transfer all customers effectively then, in the absence of Jurisdictional intervention, AEMO would have no alternative but to request the AER to seek an order from a court for physical disconnection of the market loads for which the defaulting retailer is responsible.

### 9.1 NER Obligations

Clause 3.15.21(j) specifically requires the following:

“Unless provided with instructions from the relevant participating jurisdiction or participating jurisdictions that a nominated third party is to assume financial responsibility for a suspended Market Participant’s obligations under the Rules and that person does so, then, following the issue of a suspension notice, AEMO **must** request the AER to seek, and the AER must then seek, an order from a court to physically disconnect market loads for which the defaulting Market Participant is financially responsible.”

Clause 5.9.3 gives AEMO the right to direct a network service provider to disconnect a Market Participant in order to implement a court order.

## 10. IMPLICATIONS IF NO ACTION IS TAKEN FOLLOWING SUSPENSION

If no action is taken such that following the suspension of a *Market Participant* the customers for which the suspended Participant was formerly financial responsible remain connected to the network consuming energy with no RoLR arrangement in place then the implications will be as follows:

- a) If the customers were directly connected at Transmission Connection Points
  - If no-one were financially responsible for these customers in the NEM then the load consumed would be treated in the same manner as intra-regional losses and unmetered load in the transmission system.
  - This would result in a corresponding reduction in the intra-regional settlements surplus payable to the TNSP (or the party who receives the intra-regional residue) in the corresponding region.
  - If this load was large enough the intra-regional settlement surplus for a trading week may become negative and AEMO would net this amount off against any inter-regional settlements surpluses payable to the TNSP for the same trading week.
  - If the shortfall was so large that such netting off resulted in an overall negative amount then AEMO would invoice the TNSP for this amount to be payable to AEMO.
  - If the TNSP did not pay this amount at time of settlement then the TNSP would be issued with a default notice. The corresponding shortfall would be shared amongst all Market Participants to whom payments are to be made, across the whole of the NEM in proportion to the net of amount (energy and reallocation) payable to each.
- b) If the customers were connected at Distribution Connection Points
  - This load would be treated in the same manner first tier load and franchise load and would fall to the Local Retailer's account.
  - As the Local Retailer is financially responsible for energy supplied at the local transmission connection points then this load would be included in the calculation of the payments required to be made to AEMO by the local retailer.
  - This additional amount would be added into AEMO's daily calculation of outstandings for that local retailer. This might in turn result in the issue of a call notice if the local retailer's trading limit is exceeded.
  - If the local retailer defaults on paying this amount at the time of settlement then AEMO would call upon the local retailer's credit support to ensure full payment to all Participants requiring to be paid by AEMO.
  - Without a RoLR scheme in place it is not clear that the Local Retailer would be able to collect payments from the customers of the Suspended Retailer.

### 10.1 NER Obligations.

NER Clause 3.6.5 details the manner in which settlements residues are allocated. In particular sub-clause 3.6.5 (a)(4)(ii) details the process that would occur if the intra-regional settlements residue became negative.

NER Clause 3.15.22 describes the process that would occur if there were a payment shortfall due to a market Participant being in default. In particular subclause (c) details how such a shortfall should be managed.

NER Clause 3.15.5 details the method of calculation of the adjusted gross energy amount for a transmission connection point. It indicates that energy consumed by such customers of a suspended Participant supplied via this transmission connection point would be included in the adjusted gross amount.

## **11. SUMMARY**

A prudential crisis in the market could develop very quickly.

If AEMO does not act decisively and rapidly to suspend a defaulting Participant, Generators could be short paid on their entitlements.

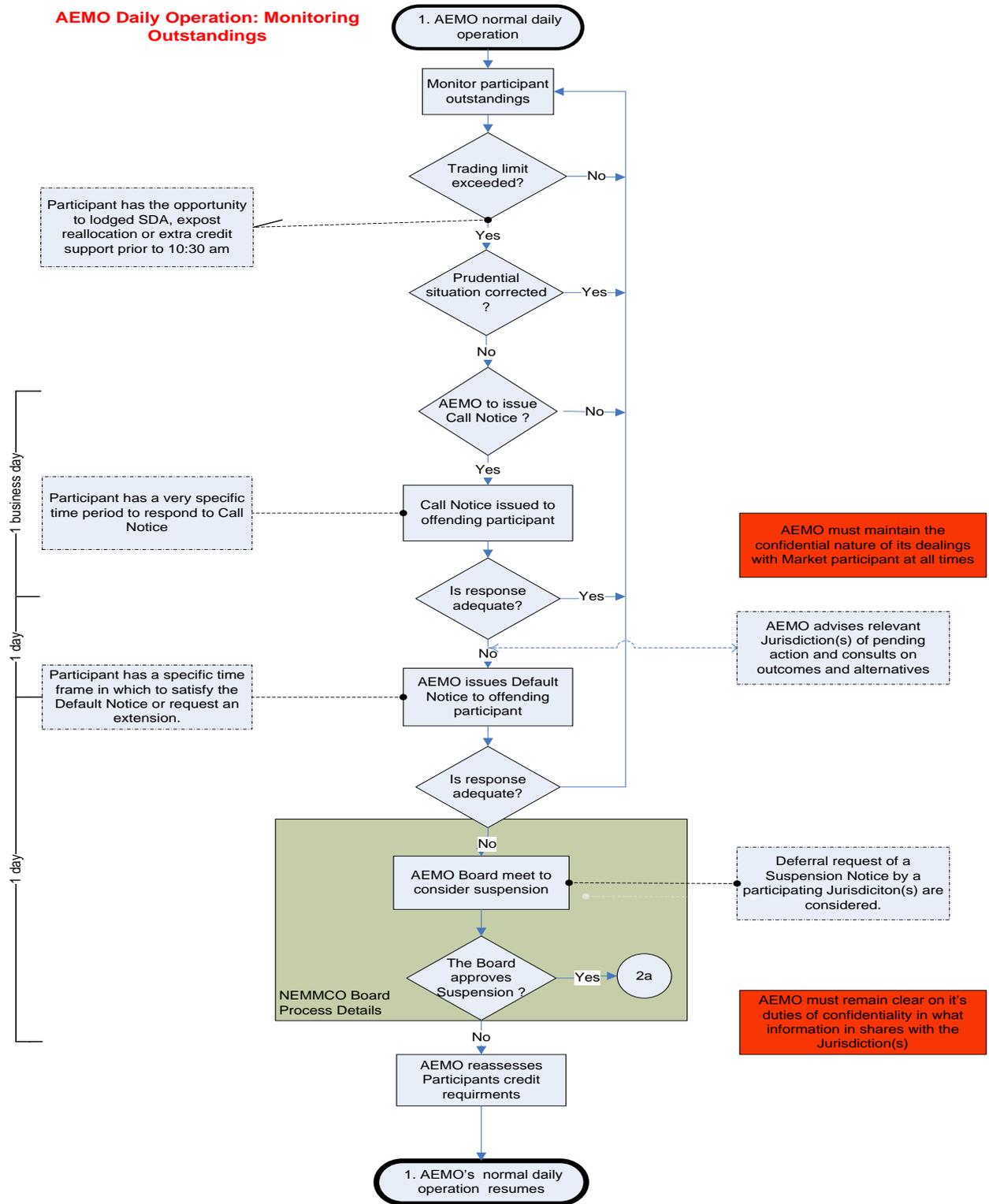
When AEMO suspends a Market Customer (Retailer) and no effective RoLR scheme is available then normally either:

- the Local Retailer faces the costs of the suspended Retailer's customers; or
- the customers must be rapidly disconnected.

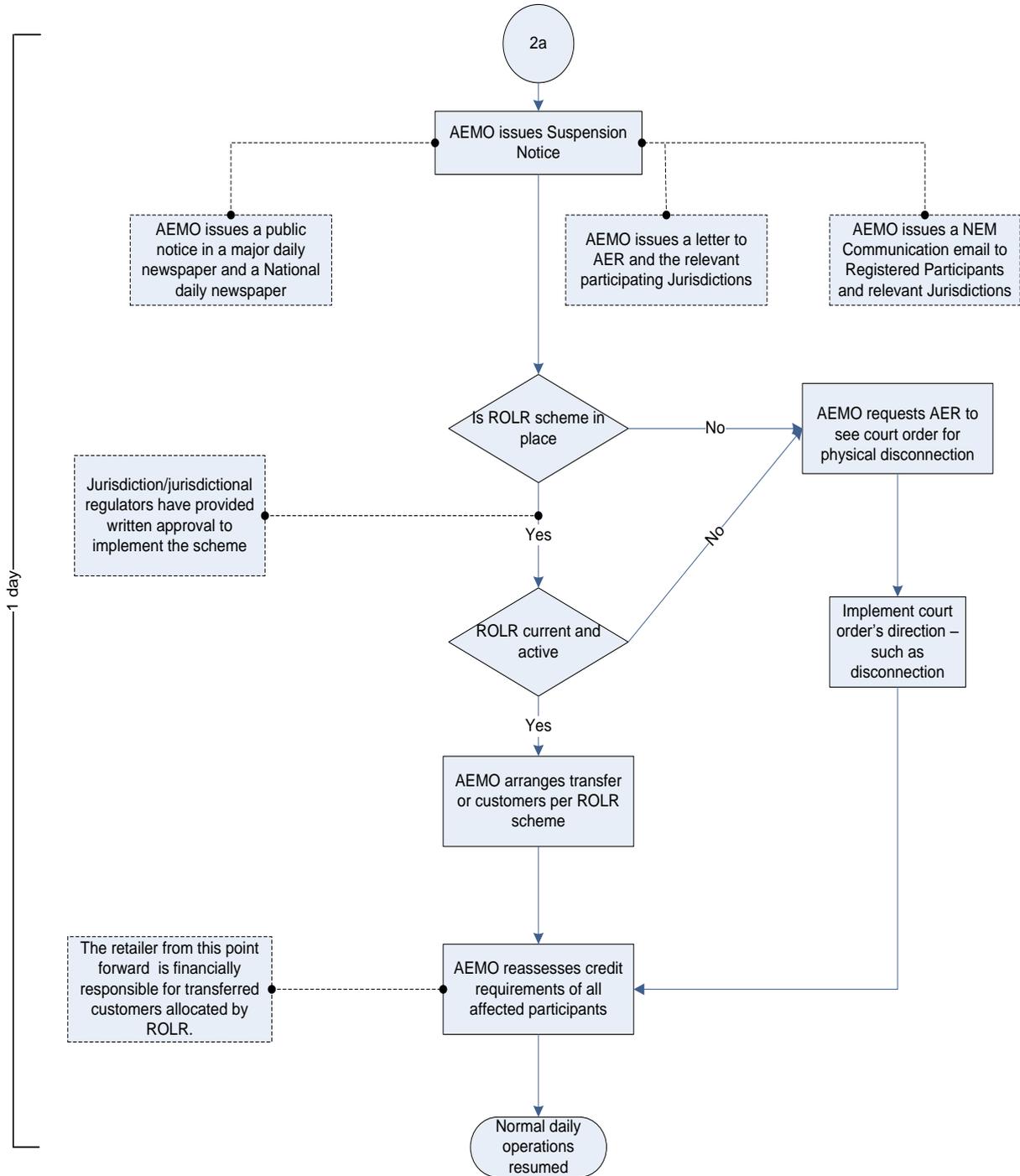
In the more unusual case where customers are connected directly at transmission connection points the exposure would fall onto TNSPs through the determination of settlement residue.

Where an effective RoLR scheme is available to be operated rapidly then the suspended Retailer can be removed from the market with controlled impacts.

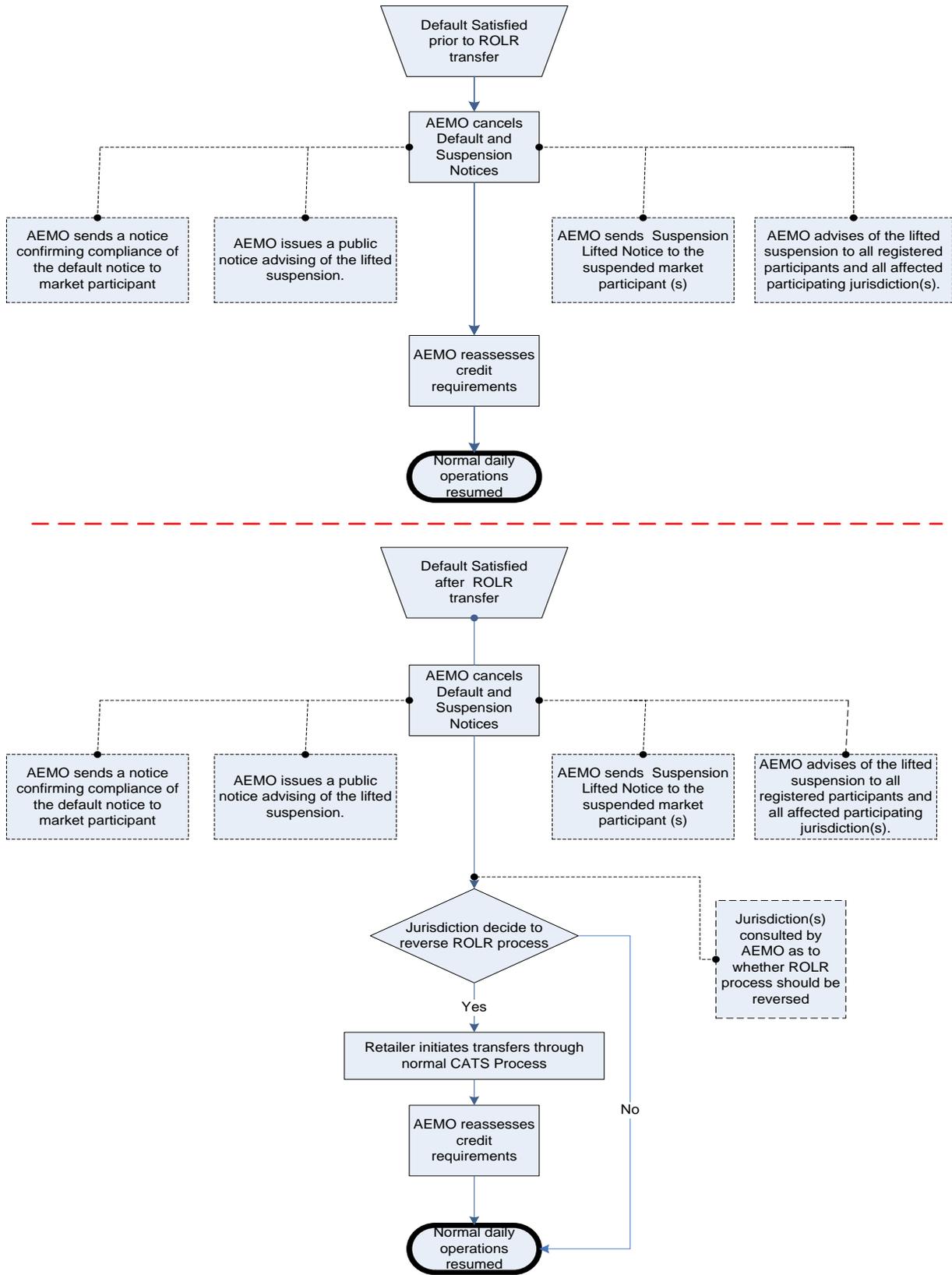
## Appendix 1 Flow Chart Diagrams of the Prudential Process



AEMO Board Approves Suspension



Participant Satisfies Default Event



## Appendix 2 Possible timeframes in the Prudential Process

The Rules has detailed procedures in place to manage credit risk to Market Participants which, if properly applied provide protection to the market. The credit risk provisions of the Rules seek to do this through such methods as:

- the market loads for a suspended market participant being disconnected to protect the market in the absence of a Retailer of Last Resort scheme operating; and
- by basing each Market Participant's Trading Limit on the assumption that a defaulting Market Participant can be removed from incurring further losses within seven days of default.

This second control is in accordance with clause 3.3.10 of the Rules which requires that the Trading Limit is established on the basis that default procedures undertaken by AEMO proceed according to the normal timetable set down in section 3.3 of the Rules.

It is expected that the minimum time available to AEMO to remove the defaulting party will be as follows:

- Party does not pay settlement amount or respond to call notice (1 business day);
- AEMO issues a default notice and where necessary draws down on credit support (1 day);
- Default notice not met (1 day);
- AEMO's Board meets to consider suspension of the Market Participant. (2 days);
- Suspension decision published; and
- Retailer of Last Resort scheme implemented (1 day) or request made to the AER for order from a court for disconnection.

This minimum time totals 5 to 7 days, consequently a value of 7 days is assigned to the Reaction Period for calculation which is the time allowed for in the Maximum Credit Limit and Trading Limit assumptions.