



AUSTRALIAN
ENERGY
REGULATOR

Draft Report

**Rebidding and Technical
Parameters Guideline**

20 July 2009



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Public consultation process

The AER is required under 3.8.3A, 3.8.19 and 3.8.22 of the *National Electricity Rules* ('Electricity Rules') to follow the *Rules Consultation Procedures* set out in clause 8.9 in developing and issuing this Guideline.

The process being followed by the Australian Energy Regulator (AER) is:

- notice of commencement of consultation and invitation for submissions – 7 April 2009
- publication of this draft report and call for submissions - 20 July 2009
- publication of AER's final Guideline - 25 September 2009.

This draft report and associated revised Guideline constitutes the second step in the AER's consultation process.

The AER invites comments on this Draft Report. Submissions can be sent electronically to: aerinquiry@aer.gov.au, with the subject "Submission on rebidding guideline" or by mail to:

Mr Tom Leuner
General Manager
AER – Markets Branch
GPO Box 520
MELBOURNE VIC 3001

Subject to any confidentiality claims, the AER is required by clause 8.9(k) of the Rules to make available to all consulted persons, on request, copies of any material submitted. Submissions received will be made available on the AER's website (www.aer.gov.au), via the "Legislation and Guidelines" and "Other Guidelines" tabs.

The closing date for submissions is **Friday 14 August 2009**.

If you require further information please contact Ross Mitchell on (02) 9230 9127.

Contents

1. Summary	3
2. Issues raised in submissions	4
2.1 Ramp rates	4
2.2 Inflexible bidding.....	6
2.3 Brief specific and verifiable reasons - clause 3.8.22	8
2.4 Information provided in error	10
2.5 Other issues raised	10
3. Revised draft guideline	12
4. Overview.....	13
4.1 Purpose of this Guideline.....	13
4.2 The role of the AER.....	14
4.3 Definitions and interpretation.....	15
4.4 Processes for revision and version history.....	15
5. Bidding and rebidding technical parameters	16
5.1 Ramp Rates	16
5.2 Bidding and rebidding as ‘inflexible’ (3.8.19)	19
5.3 Market Ancillary Services	21
6. Rebidding (3.8.22)	23
6.1 Overview of requirement	23
6.2 Information to be provided	23
6.3 Form of rebid	24
7. Supervisory Control And Data Acquisition.....	26
8. Additional information requests by the AER	27
8.1 Overview of requirements	27
8.2 When a request may be made	27
8.3 Procedure for requesting further information.....	27
9. Information provided to AEMO in error.....	28
10. AER’s procedures for handling confidential information claims	29
10.1 Overview of requirements	29
10.2 Handling confidential information requests	29
11. Glossary	31

1. Summary

This draft report and the associated revised Rebidding and Technical Parameters Guideline has been informed by submissions on the initial draft for consultation paper published by the AER on 7 April 2009.

Submissions were received from:

- National Electricity Market Management Company (NEMMCO, referred to as the Australian Energy Market Operator or AEMO in this paper)
- National Generators Forum (NGF)
- International Power (IPRA)
- Tarong Energy.

This draft report considers all of the issues raised in these submissions. The AER has amended the draft Guideline based on these considerations. Where the AER has maintained its original position, further explanation has been provided. The attached revised draft is provided in 'mark-up' to enable interested parties to readily identify the material changes that have been made.

The key issue considered by the AER is achieving a balance between placing too much burden on the trading/operations people at the time of submitting a rebid, with the obligation that the reasons are verifiable and specific in their own right and then the ability for the AER to rely on these initial rebidding reasons when it assesses compliance with the Rules. The AER has accepted arguments by the NGF that the initial draft Guideline did not fully take account of the limited information that traders may have regarding technical issues at the time a rebid is required.

Accordingly, the Guideline has been amended to place a heavier reliance on the use of traders log books where the level of detail required in the revised Guideline is not available at the time the bid or rebid is made. The AER may then request further detail on the circumstances of the bid or rebid, with such information to be largely drawn from trader log books.

That said, the Guideline will require a change to the business as normal practices of participants. The AER expects that as a result of the Guideline, more detailed information will be provided with inflexible bids, ramp rates and rebids more generally. The AER will not accept reasons that are vague and only describe the action being taken by the participant. Specific details allow the AER to substantiate and verify the reason provided and avoid unnecessary approaches to the participant after the event. This is necessary to ensure an efficient and robust compliance monitoring process.

Finally, the revised Guideline addresses several other issues identified in submissions. For example, AEMO suggested that the Guideline deal with the potential for differences to appear between offer data and the Supervisor Control and Data Acquisition system. This is now addressed in the revised Guideline.

2. Issues raised in submissions

2.1 Ramp rates

2.1.1 Information to be provided

The NGF noted that the nature of large thermal plant means that on a small number of occasions, low ramp rates are necessary to manage the operation of the plant. However, it may not be possible to provide information in the form that was suggested in the draft Guideline due to the large number of potential technical issues.

For example, a foreseeable technical issue is the common practice of rebidding ramp rates of 1 MW/min when units are returning to service or being taken out of service. The NGF noted that during these times, unit output can vary extensively due to a range of technical reasons associated with either plant issues or telemetry issues associated with dispatch instructions issued by AEMO. It was therefore suggested that a more generic rebid reason such as “Unit RTS” (RTS stands for return to service) should be acceptable for these situations.

The NGF further argued that to a large extent, the draft Guideline could be met but often the details of the technical issue can only be provided at a general level e.g. “milling limit”.

Tarong Energy and the NGF both noted that there are a range of unexpected or unforeseeable technical issues at any level of output which may require below minimum ramp rates. They argue that in order to avoid dispatch non-conformance, rebids often have to be undertaken based on incomplete information. Specifically, traders may be forced to submit rebids to below minimum ramp rates to maintain plant integrity and manage dispatch targets before the issue can be identified. Tarong Energy noted that this could create conflict between expediency of bidding required to safely comply with the dispatch process and unit targets, and the information detail required by the AER.

Following consideration of the issues raised, the AER recognises that there is a balance that needs to be found between requiring a detailed rebid reason to allow an efficient compliance monitoring regime to operate, and the practicalities of trading in an environment where not all the information may be held by the trader at the time the rebid is made. Accordingly, the revised Guideline requires that, in situations where unit and/or system security requires that a rebid be made in a timely fashion ahead of detailed information being available on such things as the length of the outage, a rebid should be submitted containing all the available information, with further information to be noted in the trader’s log book. The rebid reason should note that further information is available upon request from the log book, by abbreviating “see log” to “SL”. Should a subsequent rebid need to be made, any additional information received since the initial rebid should be added to the rebid reason.

The AER believes that this approach enables the traders to rebid in timely fashion to maintain unit and system security, but also ensures that sufficient information is

retained to enable a compliance checking process to be undertaken in an efficient manner.

In regard to the commonly occurring events such as units returning to service, the AER agrees that a general rebid reason is sufficient. However, these should be limited to the very small number of routinely occurring situations. Further, in these situations the time that the ramp rate restriction is likely to be removed should also be included.

2.1.2 Standing data

AEMO argued that the requirement to provide a written justification to AEMO, as part of the annual review of standing data, was inconsistent with clause 3.8.3A, that requires reasons to be submitted simultaneously with notifications of scheduled capacity and offers for dispatch. Additionally, AEMO noted its understanding that it would not be required to implement a system to collect justifications from relevant participants relating to ramp rates, including for its annual review of standing data provided by participants under clause 3.13.3(b).

Clause 3.8.3A(i) has the effect of allowing participants to provide standing registered bid and offer data to AEMO which includes a standing below minimum ramp rate. However, such a standing below minimum ramp rate notification must be accompanied by a brief, verifiable and specific reason (clause 3.8.3A(i)(2)). The AER considers that meeting this requirement for a brief, verifiable and specific reason within clause 3.8.3A(i)(2) should be in the form of general correspondence with AEMO. There is no formal system proposed for this data and there is no intention to restrict this data to 64 characters in length. In fact, the AER would expect that the reasons would be significantly more detailed and include a justification supported by performance results, manufacturer's specifications or independent certification.

Given that the AER will often be likely to request the clause 3.8.3A(i)(2) standing data reasons discussed above from either AEMO or the participant, the AER would welcome participants providing a copy of the reasons to the AER at the same time they are provided to AEMO (an email to aer inquiry@ aer.gov.au with the title "ramp-rate standing data – attention Markets Branch" would suffice).

International Power noted that, after having justified to AEMO the reasons for a unit not being able to meet the minimum ramp rate, there should be no further requirement to outline these reasons within the rebid where the ramp rates enclosed are reflective of these circumstances.

The AER agrees, and considers that the Rules do not require justification for below minimum ramp rates in each bid, so long as the requirements of clause 3.8.3A(i)(2) are met. However, if the ramp rate differs materially from the rate included in the standing data, a brief, specific and verifiable reason should be provided. Further, the AER would not expect that a unit would regularly be bidding ramp rates higher than its maximum contained in its standing bid and offer data notified to AEMO. Were this to occur it would draw into question the efficacy of the ramp rate provided in the standing registered bid and offer data.

2.1.3 Minimum safe operating level

Tarong Energy and the NGF accepted the AER's approach to the minimum safe operating level. However, AEMO noted that the term "minimum safe operating level" is not defined and requires more clarity. For example, it is not clear whether the minimum safe operating level is to be achieved with or without auxiliary firing. AEMO suggested that the term be deleted or set out in terms similar used in clause 3.8.3A(d).

The AER acknowledges that the term minimum safe operating level is not defined. However, based on other submissions it would appear that the term has a common meaning in the industry. The revised draft Guideline does attempt to clarify the meaning and addresses the auxiliary firing issue.

Most submissions suggested that the minimum safe operating level could be broadened to deal with 'ramp up rates' for situations where a generating unit is ramping up following synchronisation or when a unit has already been dispatched to a level lower than its minimum operating level. The NGF argued that without applying a fixed load, it may be difficult to increase the dispatch target to the minimum safe operating level. It was suggested that the zero ramp down rate could then be applied to keep the unit output above the minimum level.

In addition, the NGF and International Power noted that some units have a minimum generation defined by factors other than physical safety, for example where an environmental limit cannot be complied with at low load. It was suggested that this section cover these situations.

AEMO further noted that the use of inflexible bids and zero ramp rates have similar effects on the violation of a network or frequency control ancillary services constraint. In addition, AEMO argued that asymmetric ramp rates can also result in an effect where dispatch targets tend to increase away from the desired minimum level.

The revised draft Guideline addresses the situation where a unit has already been dispatched to below its minimum safe operating level, in the manner suggested by the NGF. In addition, the Guideline has been broadened to provide guidance to relevant participants that have legal obligations, for instance environmental requirements, that have implications for unit ramp rates.

In regard to the issue raised by AEMO on the potential for asymmetric ramp rates to result in dispatch targets moving away from the desired minimum level, the AER agrees that this is a potential issue where participants do not amend a zero down ramp rate after they have moved above the safe minimum level. To cater for this concern, the draft Guideline clarifies the circumstances in which a rebid should be submitted to increase the ramp rate above zero.

2.2 Inflexible bidding

The NGF agreed that, where practical, details of the nature of the abnormal plant condition should be provided and lodged through the bidding systems. However, the NGF noted that providing specific information on the nature of the abnormality may be complicated as complete details of the abnormal plant condition or other operating

requirement may not be known by trading staff at the time the rebid is required. For example, a turbine vibration may require a constant loading for a period of time, however, it may be difficult to provide further information until an engineering assessment had been carried out to further establish the nature of the problem.

The NGF argues that the expected duration of the abnormal plant condition is implicitly given by the duration of the fixed load in the bid. However, as more detail is available, the duration of inflexibility may be changed after further review by operating staff.

The AER has amended the draft Guideline to take account of situations where not all information may be known by the traders at the time the need for an inflexible bid arises. Specifically, the draft Guideline requires that in these situations, a rebid should be submitted containing all the available information, with further information to be noted in the trader's log book. The inflexible bid or rebid reason should note that further information is available upon request from the log book ("see log" or "SL"). Should a subsequent rebid need to be made, any additional information received since the initial rebid should be added to the rebid reason.

As a separate issue, International Power noted that it would be desirable for the Electricity Rules to be modified to remove any doubt about the legitimacy of participants using their market offers to ensure compliance with statutory requirements affecting their plant. Whilst the AER acknowledges that this suggestion is outside the scope of the creation of this Guideline, care has been taken to clarify to the extent possible, that participants are able to utilise inflexible bids to manage legal obligations placed on the operation of their plant.

2.2.1 Testing

The draft Guideline explicitly dealt with the issue of testing of plant where a fixed load was required. This was thought necessary as the inflexible bidding requirements created some ambiguity as to when an inflexible bid could be used for testing.

The NGF submission agreed that this was an important issue. Ultimately, the NGF considers that this ambiguity should be addressed by an amendment to the Electricity Rules.

In relation to the information required as part of a brief, specific and verifiable reason the NGF argued that the reason should only need to include a reason why inflexibility is required if it is unclear why such a test would require a constant load. The NGF noted that information on this issue would be clear to staff who have a technical awareness of the operation of generators.

The AER notes that a key reason for publishing this Guideline is to improve the efficiency and effectiveness of the compliance monitoring framework. As noted above, this involves trying to find a balance between the provision of detailed brief, specific and verifiable reasons and placing overly burdensome requirements on traders who are required to lodge rebids in a timely manner in response to changing plant conditions.

Therefore, whilst technical experts may readily understand why fixed loads are required for certain tests, the compliance framework needs to be capable of being implemented in a way where the specific reason for an inflexibility can be efficiently verified.

The NGF further argues that the provision of an appropriate reason cannot be provided under the current a limit of 64 characters. For example, in providing an appropriate description of an air heater test would be “1425P Air heater draft loss readings – steady state conditions – est. time 2.5hrs.” The NGF suggests that the alternative construction of this rebid reason is “1415P Unit testing.”

The AER does not accept that this is the appropriate alternative formulation. It is questionable whether this would meet the Electricity Rule requirement to provide a “specific” reason. For the example cited by the NGF, the AER considers that an appropriate construction would be similar to “1425P Air heater draft loss test readings – 2.5hrs – SL”.

The AER considers that the limit of 64 characters in a rebid reason provides a natural cap on the burden involved in providing brief, specific and verifiable reasons and is appropriate. The AER acknowledges that some rebid reasons will not fit within the 64 character limit. Similar to the treatment of ramp rates and inflexible bids above, the draft Guideline has been amended to increase the reliance on traders log books in these situations.

The AER is comfortable with abbreviations being developed for use in rebid reasons. The AER can work with the NGF to develop an informal non-binding working list of abbreviations. Whilst such a working document is probably not appropriate to be included with this Guideline, the AER would welcome the opportunity to discuss this possibility further.

2.3 Brief specific and verifiable reasons - clause 3.8.22

2.3.1 Information to be provided

The NGF noted several concerns with the practicalities of the provision of detailed information on rebids as would be required by the draft Guideline. For example, the NGF noted that even if abbreviations were used, it would not be feasible to include the original forecast details and the changed forecast details in the rebid reason as this could be a large amount of information. In addition, a rebid may cover several trading intervals, if a change in forecast demand was the basis of the rebid, there would be a different quantum for each trading interval that would need to be included in the rebid reason.

The NGF went on to note that events can occur which create uncertainty as to the full market impact and their duration. This lack of clarity can require that a rebid be undertaken later as market conditions become clearer. The NGF are concerned that under the proposed Guideline, an explanation may be sought as to why a participant did not rebid earlier, despite the fact the full situation may not have been clear at the time of the initial event. To address this issue, the NGF suggest that the time included in a rebid reason should be the time at which it was decided to lodge a rebid.

The AER accepts that in certain circumstances the provision of changed forecast data into the rebid reason may not be appropriate. In these circumstances the revised draft Guideline would allow the rebid reason to state “see log” or “SL”. However, the type of forecast that the rebid was lodged in response to is still required in the rebid reason. The AER would then use the ability to request further information to substantiate and verify the rebid reason in relation to the extra information.

In relation to the time that should be included in a rebid reason, the AER has maintained its view that it is most appropriate for the time of the event or other occurrence to be included. The time that a decision is made to rebid should be included in a log book, but for the purposes of verifying the brief and specific reason, it is the time of the event or other occurrence that is important. The AER accepts that there may be a series of events or occurrences that lead to a rebid. In these situations, the revised draft Guideline suggests that the time of the first of the series be included, with others noted in the log book.

The NGF also raised concerns with how the draft Guideline dealt with multiple units. The NGF consider that the draft Guideline requires that even if a technical issue was affecting two units, separate rebids would have to be submitted for each unit, even though the bidding system supports doing both at the same time.

The draft Guideline has been clarified to ensure that if the same reason is relevant for multiple units, only one rebid reason need be submitted. Of course, if different reasons apply to different units, separate rebids would be required. The AER welcomes the opportunity for further discussion on this point to ensure that the draft Guideline accurately captures the intent.

2.3.2 Form of information to be provided

The submission received from the NGF argued that a rebid reason should not necessarily have to follow the exact form and order as prescribed in the consultation paper, as long as it has all information required to assist the AER in monitoring the rebidding activities of generators. Further, the NGF argues that no reason was provided as to why this format might assist the AER. The NGF also correctly notes that the AER is also looking to introduce more onerous requirements in relation to the brief and verifiable reason for the rebid.

The AER expects and indeed has designed the Guideline to drive a change to the business practices of relevant participants when submitting brief, specific and verifiable reasons. To a large degree, the rebid reasons currently being submitted by participants makes the conduct of a compliance monitoring regime problematic as many rebids lack specificity. As a result, the current regime relies too heavily on the AER seeking additional information to substantiate and verify information. Accordingly, one important aim of the revised Guideline is to allow compliance monitoring of brief, specific and verifiable reasons that limits the number of times that the AER is required to seek additional information from participants.

As participants would understand, there are many thousands of rebids submitted during any week. Accordingly, any effective compliance monitoring regime will rely heavily on automation and computerised queries of historic rebid reasons. Requiring that rebid

reasons be submitted in a specific form enables an efficient processing of large numbers of rebid reasons. In turn, this benefits participants by limiting the number of separate requests for additional information that are required. Therefore, the AER has maintained its view that reasons should be submitted in the form outlined in the Guideline.

The revised Guideline also corrects an error in the example rebid in section 3.3 that required unit numbers to be included in the rebid reason even though this information is already provided by the unique duid number of the rebid unit.

2.4 Information provided in error

The draft Guideline outlined a brief process to be followed when participants found that errors were contained in information provided to AEMO.

The NGF suggested that the provisions as drafted seemed rather extreme, particularly for minor errors. In preference, the NGF suggested that, if time permits, any corrected information is submitted to AEMO via another rebid, under a new “E” category. Further clarity was also requested on materiality and what constituted an error.

At the highest level, the premise of this section of the draft Guideline was to ensure that errors were not systematic. The AER acknowledges that the provisions as drafted were too wide in scope and has made amendments accordingly.

The AER has agreed with the suggestion that, if time permits, a corrected rebid should be submitted. However, if the AER detects a large number of “E” type rebids being submitted, further information may be sought from participants regarding the source of the errors.

If errors are detected with insufficient time for a correction to be issued, an entry should be made in the traders log book. For material errors, the AER should be alerted within two business days of the error being found.

On the question of materiality, the AER considers that any error that would give rise to a breach of the Rules is material. For example, if a rebid is submitted with no associated reason, this would breach the requirement to provide a brief, specific and verifiable reason. In this example, the AER should be alerted to the error, and a brief, specific and verifiable reason should be provided. At that point, the AER may ask for a further description of how the error occurred and may request that steps be taken to ensure future compliance.

2.5 Other issues raised

2.5.1 Supervisory control and data acquisition (SCADA)

AEMO raised the fact that relevant participants are able to alter the ramp rate of a unit by entering it into the bidding system or through the SCADA system. The AEMO dispatch process automatically selects the minimum of these two values. This process

has been established outside of the Electricity Rules and the AER understands that this process was designed to ensure that system security is maintained.

AEMO note that there are situations where participants bid units above the minimum ramp rates, but the SCADA value is less than the minimum ramp rate. As such, AEMO suggests that the Guideline should clarify how to deal with this potential issue.

The AER agrees that this is an issue that should be addressed in the Guideline. The revised Guideline suggests that where material differences emerge between SCADA ramp rate values and bid or offer data, regardless of whether the ramp rate is below the minimum, a rebid should be submitted as soon as practicable to bring the bid or offer in line with the SCADA value. In instances where the SCADA value falls below the minimum ramp rate as set out in Clause 3.8.3A(b), the rebid should also include a brief, specific and verifiable reason, in accordance with this Guideline.

3. Revised draft guideline

AMENDMENT RECORD

Version no.	Date	Pages

4. Overview

4.1 Purpose of this Guideline

The efficient and secure operation of the National Electricity Market (NEM) hinges on the ability to instantaneously match supply and demand of electricity. At the same time, the NEM is designed as a dynamic market, where Scheduled Generators, Semi-Scheduled Generators or Market Participants (*relevant participants*) are able to adjust their commercial offers to reflect changing events, or in response to changing market conditions. The Rules achieve system security, while still permitting dynamic adjustments by *relevant participants*, by imposing certain conditions on offers made by *relevant participants*. This Guideline focuses on those conditions and the associated information requirements.

The Rules require that if an offer is amended through a rebid, a brief, verifiable and specific reason must be provided to the [Australian Energy Market Operator \(AEMO\)](#). The reason provided allows the AER to assess compliance of the relevant participant with specific clauses of the Rules and assists with the efficient operation of the market by providing information to all market participants.

Relevant participants can also limit, amend or rebid their offers to the market on the basis of the physical or technical capabilities of their plant (technical parameters). The ability to make offers in this way is necessary to maintain plant security, however, to bid or rebid on the basis of technical or physical plant parameters as a means of achieving commercial objectives can compromise system security and the efficient operation of the market. On 15 January 2009, the Australian Energy Market Commission (AEMC) adopted a change to the Rules that limits the ability of *relevant participants* to bid and rebid technical parameters to pursue commercial objectives when power system security may be compromised. These changes came into force on 31 March 2009.

This Guideline covers several related areas associated with the above rebidding and technical parameter obligations.

First, in response to the new provisions surrounding the bidding and rebidding of technical parameters, it outlines the AER's interpretation of these provisions and how it will monitor and enforce their compliance.

Second, with respect to rebidding more broadly, this Guideline replaces the existing 'Rebidding: Guidelines on the disclosure of information' published by the National Electricity Code Administrator in July 2001 and outlines the detail that must be contained in a rebid reason submitted to [AEMO](#).

Finally, the Rules require the AER to publish a Guideline on the additional information that may be sought by the AER to verify and substantiate the brief, verifiable and specific reason that must be provided with bids and rebids. This Guideline is intended to meet these Rule requirements.

Specifically, this Guideline is issued by the AER pursuant to the following clauses in the Rules:

- 3.8.3A(g) in respect of provision of ramp rates to [AEMO](#)
- 3.8.19(b)(2) in respect of dispatch inflexibilities
- 3.8.22(c)(3) in respect of rebidding.

However, this Guideline also fulfils a broader role. Where there is ambiguity in the way in which the Rules can be interpreted, the AER believes there is value in clarifying the AER's approach to monitoring and enforcing compliance through issuing Guidelines and compliance bulletins. An understanding of the AER's approach will provide greater certainty and predictability for market participants and reduce compliance costs. Therefore, this Guideline also fulfils a more general role of assisting market participants with understanding how the AER will approach compliance with the Rules.

4.2 The role of the AER

The AER's functions and powers in respect to the monitoring and enforcement of compliance with the Rules and *National Electricity Law* (NEL) are outlined in section 15 of the NEL. Those functions include:

- (a) to monitor compliance by Registered participants and other persons with this Law, the Regulations and the Rules;
- (b) to investigate breaches or possible breaches of provisions of this Law, the Regulations or the Rules that are not offence provisions; and
- (c) to institute and conduct proceedings—
 - (i) against *relevant participants* under section 61 of this Law or section 44AAG of the *Trade Practices Act 1974*; or
 - (ii) in respect of Registered participants under section 63 of this Law; or
 - (iii) against persons under section 68 of this Law; and
- (d) to institute and conduct appeals from decisions in proceedings referred to in paragraph (c).

The AER monitors the operation and performance of the NEM and conducts special investigations in response to market outcomes or events. The AER also assists market participants develop robust compliance cultures through specific targeting of aspects of market operation and a rolling programme of reviews of market participants' compliance strategies as part of its monitoring and enforcement arrangements.

4.3 Definitions and interpretation

In this Guideline the words and phrases presented in italics have the meaning given to them in either the glossary, or if not defined in the glossary, the Rules.

4.4 Processes for revision and version history

The AER may amend or replace the Guideline from time to time in accordance with clauses 3.8.3A(g), 3.8.19(b)(2) and/or 3.8.22(c)(3) of the Rules.

A version number and an effective date of issue will identify every version of this Guideline.

5. Bidding and rebidding technical parameters

This section of the Guideline covers bidding and rebidding technical parameters. Bidding and rebidding technical parameters includes:

- the bidding and rebidding of up and down ramp rates, which set out the limits on how quickly a generator can vary its output up or down
- inflexibilities bids and rebids, to be used only where abnormal plant conditions or operating requirements mean that generators are not able to follow instructions from [AEMO](#) and need to hold their output constant
- market ancillary services [offers](#) and rebids, which are services that are offered by *relevant participants* to assist with the maintenance of system security.

This section provides some guidance on when the AER expects bidding or rebidding of technical parameters should occur, and sets out the amount of information that should be initially provided to [AEMO](#). Should the brief, verifiable and specific reason be provided to [AEMO](#) in accordance with the guidance below, it may limit the need for a formal request for additional information by the AER under clause 3.8.3A(f) or 3.8.19(b)(2) (see section 4 of this Guideline).

Technical parameters will generally be provided in an initial offer to [AEMO](#). In cases where a revision to technical parameters is provided as a rebid under clause 3.8.22, *relevant participants* should also note the guidance on rebidding issued under 3.8.22(c)(3) (provided in Section 3 of this document).

5.1 Ramp Rates

As part of an energy market offer, *relevant participants* are obliged under the Rules to provide [AEMO](#) with details of the rate at which the output of the generator may vary up and down. This is generally referred to as the generator's ramp rate and is measured in MW/minute. This enables [AEMO](#) to safely issue dispatch instructions to generators to vary their output to match supply and demand. *Relevant participants* have the ability to rebid their ramp rates during a dispatch interval.

New provisions that came into force on 31 March 2009, insert a new clause (3.8.3A) that requires *relevant participants* to submit a ramp rate that is at least:

- 3MW per minute in the case of a scheduled network service or scheduled load;
- the lower of 3MW/minute or 3% of the registered full load (MW generated) in the case of a scheduled generating unit or 3MW/minute or 3% of the registered capacity in the case of a semi-scheduled generating unit.

These changes were introduced in response to concerns that if generators pursued commercial objectives by submitting very low ramp rates, power system security may be compromised.

The new provisions require that, where a relevant participant submits a ramp rate that is less than the prescribed minimum, the participant must provide a ramp rate that is the maximum the relevant generating unit can safely attain at that time¹. The amount of detail that should be provided in the reason to [AEMO](#) and the way a plant should bid its ramp rate in certain circumstances is outlined below.

5.1.1 Information to be provided

If a relevant participant provides a ramp rate that is less than the minimum, it must simultaneously provide [AEMO](#) with a brief, verifiable and specific reason for that ramp rate. The reason provided to [AEMO](#) must relate directly to the technical reason preventing the relevant generating unit, scheduled load or scheduled network service from attaining the minimum ramp rate.

The brief, specific and verifiable reason submitted with the ramp rate should include:

- details of the technical issue that is preventing a ramp rate of greater than the minimum from being safely achieved
- the time the technical issue was identified.

For example, where a generator has a poor coal quality issue, impacting on its flame stability, which means that it cannot readily move its output up or down at normal rates, it might provide the following reason to [AEMO \(where ET stands for estimated time\)](#):

“1000P Coal Quality – Flame Instability - [ET 5hrs](#)” or

“[1655P Rough Running Band Min OP Level ROC DN Reduced](#)”

It is recognised that occasionally a rebid to a ramp rate will need to be made prior to all of the information outlined above being available to the trader. In these circumstances, traders should include all available information in the rebid. As more information becomes available, this should be included in the trader’s log book. Should further rebids be required, the additional information obtained since the initial rebid should be included.

To signal that the rebid was based on incomplete information, the rebid reason should indicate that further information will be logged, in the form of “SL” as an abbreviation of “see log”. The AER may request the information log at a later stage to substantiate and verify the reasons for the rebid.

5.1.2 Legal and other operating requirements

Participants are often subject to environmental or other legislative constraints on how their plant can be operated. In some cases, this will affect the maximum ramping capability that can be bid by these participants.

¹ Whenever a ramp rate is rebid pursuant to clause 3.8.22, a brief, verifiable and specific reason must be provided, in accordance with section 3 of this Guideline, regardless of whether the revised ramp rate is above or below the minimum.

In these situations, the bid or rebid reason should clearly outline the relevant constraint. If required, the AER may seek further information to substantiate and verify the legal or other operating requirement that necessitates a below minimum ramp rate.

5.1.3 Standing data

The Electricity Rules allow relevant participants to provide standing registered bid and offer data that includes a ramp rate of less than the minimum. Clause 3.8.3A(h) requires that relevant participants provide a brief, specific and verifiable reason to AEMO explaining why the standing data includes a below minimum ramp rate.

As long as relevant participants bid the ir ramp rates at the maximum rate as outlined in their standing data and provide AEMO with the brief, specific and verifiable reason as required under clause 3.8.3A(h), there is no need to continue to provide brief, specific and verifiable reasons for a below minimum ramp rate.

The AER may audit the ramp rates included in standing registered bid and offer data. It is expected that standing data that includes below minimum ramp rates could be supported by performance results, manufacturer’s specifications or independent certification. To assist in this process, the AER would welcome participants providing a copy of the reasons to the AER at the same time they are provided to AEMO (an email to aer inquiry@ aer.gov.au with the title “ramp-rate standing data – attention Markets Branch” would suffice).

In addition, the AER will monitor the ramp rate capability of all participants as part of its compliance monitoring program and seek additional information as required to ensure that the registered standing data and obligations with respect to clause 3.8.3A are fulfilled.

5.1.4 Minimum safe operating level

As generating units approach the lowest output they can sustain without becoming unstable, a rebid may need to be submitted to ensure that the unit does not receive an even lower dispatch target. This is required to ensure safe operation of the plant.

For clarity, the minimum safe operating level is assumed to be the level below which the unit would become unstable, after other technical responses have been exhausted (for example, auxiliary firing). The minimum safe operating level does not reflect commercial issues, only technical and plant safety issues. Plant availability reflecting commercial considerations should still be managed through the normal price-band bidding dispatch process.

In instances where a Scheduled Generator or Semi-Scheduled Generator has reached its minimum safe operating level and can not safely follow a dispatch instruction to vary its output downwards, it is appropriate for a zero down ramp rate to be provided to AEMO, as long as the zero ramp rate can be justified on the basis of a technical limitation.

This approach should be used in preference to submitting an inflexible bid, as it provides greater flexibility to ensure the market remains in a secure operating state.

As soon as the output of the unit moves materially above the minimum safe operating level, a rebid must be submitted to provide a ramp rate compliant with clause 3.8.3A.

5.2 Bidding and rebidding as ‘inflexible’ (3.8.19)

5.2.1 Overview of requirement

Clause 3.8.19(a) of the Rules sets out the conditions under which a relevant participant must declare itself “inflexible” – that is, the participant is unable to operate in accordance with [AEMO’s](#) dispatch instructions. The clause explicitly states that the declaration of inflexibility must be “due to abnormal plant conditions or other abnormal operating requirements in respect of that *scheduled generating unit*, *scheduled network service* or *scheduled load*”.

Prior to [a change to the Electricity Rules that came to effect on 31 March 2009](#), there was some ambiguity about whether participants were allowed to declare themselves inflexible for other reasons (such as commercial reasons). Such a declaration has the potential to threaten system security as it allows no variation in plant output to match supply and demand. A generator that declares itself 'inflexible' is treated outside the normal market arrangements and must be dispatched by [AEMO](#) at the volume notified regardless of the price the generator offers that capacity. Accordingly, bidding inflexible is an exception to the normal operation of the market and it is expected to be used on a very limited number of occasions.

Clause 3.8.19(a) was amended to make it clear that *relevant participants* may only declare themselves inflexible in circumstances where abnormal plant conditions or other abnormal operating requirements justify such a declaration. For the avoidance of any doubt, clause 3.8.19(a2) now requires that the relevant participant not advise [AEMO](#) of an inflexibility unless it is *unable* to follow dispatch instructions.

When bidding inflexible, a relevant participant must provide [AEMO](#) with a brief, verifiable and specific reason for the inflexibility. The relevant participant must also, as soon as practicable, advise [AEMO](#) of the removal of the inflexibility once it reasonably expects to be able to operate in accordance with dispatch instructions.

5.2.2 Defining abnormal plant or operating requirements

As a general principle, the AER considers that abnormal plant conditions or other abnormal operating requirements as conditions that are related directly to the internal operation of the relevant plant. For example, technical failures or instabilities within a plant could be considered abnormal plant conditions. Conversely, third party contracts or transmission constraints do not directly relate to the internal operation of the plant and are therefore unlikely to constitute abnormal plant conditions or operating requirements.

An exception to this principle is where another law or licensing requirement requires that plant be operated in a certain manner. For example, some water licences for hydro plant require the release of set quantities of water from time to time. In situations where these are legal requirements on participants, the AER considers that this could amount

to abnormal operating requirements. However, such situations are expected to be very rare and the AER would encourage participants to contact both the AER and [AEMO](#) to discuss the management of these requirements.

5.2.3 Information to be provided

There are two requirements on *relevant participants* to provide information in relation to an inflexible bid. First, under clause 3.8.19(b)(1), *relevant participants* must provide [AEMO](#) with a brief, verifiable and specific reason for the inflexibility. Second, under 3.8.19(b)(2) *relevant participants* must provide to the AER, upon written request, in accordance with this Guideline, such additional information to substantiate and verify the reason for such inflexibility as the AER may require from time to time.

The information provided to [AEMO](#) at the same time as an inflexible bid should be sufficiently comprehensive to identify the nature of the reason for the inflexibility. This should be directly related to the change associated with physical conditions (for example, control system malfunction or changed hydrological conditions).

Specifically the inflexible bid or rebid should include:

- details of the abnormal plant conditions or other abnormal operating requirements that require the plant to be inflexible, and
- the time the abnormal plant conditions or other abnormal operating requirements were identified.

Example inflexible bid:

“1415P Loss of unit computer: manual control only - ET 4hrs”

The AER will typically review all inflexible bids. Given that abnormal plant conditions or other abnormal operating requirements may be of a highly technical nature, the AER may often issue requests for additional information, pursuant to clause 3.8.19(b)(2). In this circumstance, the AER will seek information to ascertain the nature of the abnormal plant conditions or other abnormal operating requirements. In doing so, the AER may request any information that is reasonably required to confirm that the inflexible bid, or rebid, was submitted in accordance with 3.8.19. If participants provide detailed reasons in their initial statement to [AEMO](#), it makes it less likely that the AER will pursue additional information pursuant to clause 3.8.19(b)(2).

It is recognised that occasionally an inflexible bid will need to be made prior to all of the information outlined above being available to the trader. In these circumstances, traders should include all available information in the rebid. As more information becomes available, this should be included in the traders log book. To signal that the inflexible bid was based on incomplete information, the reason provided should indicate that further information was logged, in the form of “SL”. The AER may request the information log at a later stage to substantiate and verify the need for inflexibility.

5.2.4 Testing

As outlined above, under the new provisions of clause 3.8.19, an inflexible bid can only be submitted where a participant is unable to follow dispatch instructions. As such, testing of plant and equipment during the normal course of plant operation without a verifiable technical abnormal operating requirement would seem to be outside of the scope of clause 3.8.19.

However, in situations where plant or other equipment requires testing at a constant output, an inflexible bid may be required. In such cases, the reason submitted with the bid or rebid should provide a brief, verifiable and specific [reason](#) that includes:

- a description of the test being conducted
- why inflexibility is required
- the expected duration of the test.

Additionally, in cases where testing is required [following the return of](#) a unit back into service the inflexible bid reason should provide brief, specific and verifiable details.

[Should the 64 character limit for bid reasons mean that it is not practical to provide all of the information outlined above, the reason should provide as much information as is possible, with further information added to the trader's log book. In these situations the rebid should end with "SL." The AER may then request further details if necessary to substantiate and verify the need for inflexibility.](#)

In order for system security to be appropriately managed, participants should advise [AEMO](#) as soon as the need for a test that requires an inflexible bid is recognised.

5.3 Market Ancillary Services

Under clause 3.8.7A *relevant participants* are able to provide [AEMO](#) with market ancillary services offers. These are services that are offered by *relevant participants* to assist [AEMO](#) manage system security. For example, Frequency Control Ancillary Service (FCAS), is purchased by [AEMO](#) to ensure that the system frequency remains within the standard.

Offers for market ancillary services must contain:

- an incremental MW amount for each of the 48 trading intervals, distributed across up to 10 price bands with an enabling price for each price band
- the response breakpoint
- the upper and lower enablement limits
- the response capability.

The final three on this list define the technical parameters of the offer and provide the maximum amount of ancillary service that can be provided for a given MW output level for the generating unit or load.

The recent Rule change inserts two new clauses, 3.8.7A(l) and 3.8.7A(m), which require the technical parameters of market ancillary service offers to represent the technical characteristics of the generating unit or load at the time of dispatch. Prior to this change, the Rules did not prevent these technical parameters from being bid or rebid to pursue commercial objectives, even in circumstances when system security was or could be compromised.

An ancillary service provider must now ensure that the technical parameters of its offer represents the technical characteristics of the ancillary service generating unit or ancillary service load at the time of dispatch.

The AER is cognisant of the practical difficulties of ensuring that the exact technical characteristics of plant at any point in time are reflected in bids precisely. Accordingly, it is not expected that participants should constantly rebid to update minor variations in plant characteristics. However, it is expected that more significant variations would be updated quickly.

6. Rebidding (3.8.22)

6.1 Overview of requirement

As noted above, the NEM is a dynamic market, which allows participants to adjust their commercial positions in response to changing events or market conditions. This is in addition to provisions that allow participants to amend their offers, bids or rebids in response to changes in the technical capabilities of their plant (for instance, in response to an equipment failure).

When submitting a rebid to [AEMO](#), clause 3.8.22 requires that *relevant participants* provide, at the same time, a brief, verifiable and specific reason for the rebid and the time at which the events or other occurrences adduced by the relevant participant as the reason for the rebid occurred.

Clause 3.8.22(c)(3) of the Rules require the AER to publish a Guideline that outlines the detail that must be included in the brief, verifiable and specific reason to be submitted to [AEMO](#) with a rebid. Accordingly, this Section 3 outlines the detail that must be provided with any rebid. With respect to rebids that amend the technical parameters of ramp rates, market ancillary services or inflexibilities, the rebid reason must include the information described in [the relevant section](#) of this Guideline.

When following this Guideline, relevant participants will be required to provide detailed information with inflexible bids, ramp rates and rebids more generally. Detailed rebid reasons allow the AER to substantiate and verify the reason provided and avoid unnecessary approaches to the participant after the event. This is necessary to ensure an efficient and robust compliance monitoring process. Clearly, the maintenance of quality records, in including trading logs, are an essential part of that process.

6.2 Information to be provided

At the most basic level, the information provided to [AEMO](#) with the rebid must set out the specific reason for the rebid and the reason given must be verifiable. The information should focus on the event(s) and occurrence(s) that support the explanation of the reason for the rebid, and must provide the time at which those event(s) and occurrence(s) took place.

The information should include:

- details of the event(s) or other occurrence(s) adduced by the market participant as the reason for the rebid (for example, revised demand or price forecast, unplanned technical plant issues or unplanned network issues)
- the time the event occurred (for the avoidance of doubt, this may not be the time at which the decision to make the rebid was made, nor the time the rebid was submitted to AEMO, this is the time at which the relevant event(s) or occurrence(s) that the participant adduced as the reason for the rebid occurred)

- where the event relates to a revised forecast produced by [AEMO](#), a description of the forecast type and when it was produced should be included (for example, by providing the time of the relevant 5-minute or 30-minute price or demand forecast)
- if a change to a AEMO forecast is the reason for a rebid, where possible, the reason should provide the original forecast and the revised forecast (eg. for a change in demand the rebid reason may be drafted: 0935N 30-min PRD FORECAST DEMAND INCREASE 2400 2600)
- Where the event relates to technical plant conditions the information provided to [AEMO](#) should include the time the condition was identified and a brief, specific and verifiable explanation of that condition.

It is recognised that rebids can be submitted in response to a series of events, or a number of different forecasts. In this case, the provision of all of the information outlined above would not be practical. In these situations, details of the first event in the series should be provided, with a note that further information is available from the log book, in the form of “see log” or “SL”.

One single brief, specific and verifiable rebid reason can be included for multiple units as part of a portfolio rebid. If different reasons for rebidding multiple units within a portfolio are being adduced as the reason for the rebid, then separate rebids should be submitted with different rebid reasons.

As discussed in section 2.4, where the technical parameters of market ancillary service offers are being rebid, the reason provided should relate directly to the technical characteristics that have altered since the initial market ancillary service offer. This is required as, in order to be compliant with 3.8.7A(1), the initial offer must have represented the technical characteristics of the ancillary service generating unit or ancillary service load. Therefore, if a rebid is submitted, there necessarily must have been a change in technical characteristics.

6.3 Form of rebid

The rebid should be in the general form:

HHMM Category {space} DDD...D

Where:

HHMM is the time of the event(s) or other occurrence(s) adduced by the participant as the reason for the rebid occurred

Category is either P for a plant or physical change, [A](#) for a [AEMO](#) forecast or dispatch change, F for a financial or commercial change or E for a rebid to address an error.

DDD...D is a verifiable description of the events or occurrences that explain the rebid. Where appropriate, the participant should provide before and after data for relevant factors that assist in explaining the reason for the rebid.

A rebid that meets the criteria in 3.8.22 is set out below.

Example rebid:

“0947P coal conservation – expect reduced avail for 8hr”

The AER may seek additional information to verify a rebid under clause 3.8.22(c)(3). However, the AER would be less likely to seek further information in relation to a rebid with a reason that meets the criteria outlined above. The AER will seek additional information if it becomes aware that the information provided was not accurate. Furthermore, if a participant adduces a change to a commercial arrangement as a reason for a rebid, the AER may seek details of those commercial arrangements to verify the reason for the rebid. Such detail should be readily available from the participant, as rebids also need to be compliant with “verifiable” element of 3.8.22.

7. Supervisory Control And Data Acquisition

Relevant participants are able to alter the ramp rate of a unit by entering it into the bidding system or through the Supervisory Control And Data Acquisition (SCADA) system. The AEMO dispatch process selects the minimum of these two values.

Changes to SCADA values effectively allow a rebid to be made without requiring the information obligations of either clause 3.8.3A or 3.8.22 to be satisfied. The Electricity Rules do not explicitly cover this matter, with the process of using SCADA values being developed by AEMO in conjunction with the industry to ensure the most accurate generator information is available to manage the security of the power system.

In situations where a material difference emerges between SCADA values and bid or offer data, a rebid should be submitted, as soon as practicable, to bring the bid or offer in line with the SCADA value.

In instances where the SCADA value falls below the minimum ramp rate as set out in Clause 3.8.3A(b), a rebid should be submitted with a brief, specific and verifiable reason, in accordance with this Guideline.

8. Additional information requests by the AER

8.1 Overview of requirements

As provided in clauses 3.8.3A(g), 3.8.19(b)(2) and 3.8.22(c)(3), the AER may request additional information to substantiate and verify the reason for ramp rate below the minimum, inflexible bid or a rebid.

The AER can also seek information in relation to rebids under section 28 of the National Electricity Law.

8.2 When a request may be made

Throughout this Guideline, references have been made to the circumstances when the AER is likely to seek additional information (see section 2.3.3 and 3.3). The AER will seek additional information in range of circumstances, including:

- when the initial information is difficult to verify, cannot be understood, or appears inconsistent with other data or cannot be reconciled against changes in market conditions.
- as part of the AER's ongoing market analysis (for example, as part of an investigation into events where the spot price exceeds \$5000/MWh, pursuant to clause 3.13.7(d)
- as part of a broader investigation of compliance with national electricity laws (including compliance with the good faith provision— clause 3.8.22A); and
- as part of an audit of a *relevant participant's* ramp rate, inflexible or rebid reason in the context of the AER's broader compliance monitoring program.

8.3 Procedure for requesting further information

Where the AER exercises the power to request additional information under these clauses, the AER will provide the relevant participant with an opportunity to discuss the request and specify, in writing, the detailed additional information required.

9. Information provided to AEMO in error

The aim of this section is to ensure that genuine errors can be identified and corrected in a timely fashion. Given the high number of rebids that are lodged daily, it is to be expected that a small number of genuine errors will occur. The AER would only be concerned if errors are being made systemically.

If a relevant participant becomes aware of an error in the bid or rebid reasons they have provided to AEMO and there is sufficient time to lodge another rebid, a rebid should be submitted under the category of “E” (for error). If a large number of corrected rebids are submitted, the AER may seek further information regarding the source of the errors.

If errors are detected with insufficient time for a correction to be issued, an entry should be made in the traders log book. If the errors are material, the AER should be alerted within two business days of the error being found.

A material error is defined as any error that would give rise to a breach of the Rules. For example, if a rebid is submitted with no associated reason, this would breach the requirement to provide a brief, specific and verifiable reason.

In this example, the AER should be alerted to the error and a brief, specific and verifiable reason should be provided. At that point, the AER may ask for a further description of how the error occurred and may request that steps be taken to ensure future compliance.

Consistent with the AER’s Compliance and Enforcement Statement of Approach (www.aer.gov.au), an important consideration of whether to take further enforcement action is whether the participant has cooperated with the AER in relation to the breach. For example, by providing evidence that the AER was otherwise unaware of, and taking prompt and effective action to rectify the breach and avoid a recurrence. The AER may also consider whether the participant has cooperated fully with the investigation (for example, by providing full and frank disclosure of documents and other evidence in relation to the relevant conduct).

10. AER's procedures for handling confidential information claims

When monitoring and enforcing compliance with Rules provisions relating to dispatch inflexibility, ramp rates and rebidding, the AER will handle confidential information in the manner outlined in this section.

10.1 Overview of requirements

The AER is required to make information provided to it under clause 3.8.19(b)(2) and 3.8.22(c)(3) available to any relevant participant that requests it, except to the extent that the information can be reasonably claimed to be confidential.

10.2 Handling confidential information requests

Where a relevant participant claims that all or part of any additional information provided to the AER is confidential, the relevant participant should provide sufficient reasons to support the claim at the time of providing the request for confidentiality.

The claim for confidentiality must:

- identify the type of information being provided (i.e. financial/technical/legal)
- detail the potential impact that disclosure of the information would have on the NEM and the claimant.

The AER does not generally accept blanket claims for confidentiality over the entirety of the information provided and such claims should not be made unless all information is truly regarded as confidential. The identified information should genuinely be of a confidential nature and not otherwise publicly available. In addition to this, parties must identify the specific documents or relevant parts of those documents which contain confidential information. The AER does not accept documents or parts of documents which are redacted or 'blacked-out'.

The AER will assess the request for confidentiality, having regard for whether the information contains commercially sensitive financial/technical information and whether [AEMO](#) or the AEMC have determined that the information is confidential.² The assessment will also consider the potential impact of disclosure on the market and claimant. It should be noted that the criteria for the AER's assessment of a confidentiality claim are largely determined on a case by case basis.

² Chapter 10 of the rules define 'confidential information', in relation to a registered participant or [AEMO](#), as information which is or has been provided to a registered participant or [AEMO](#) under or in connection with the Rules, and which is stated under the Rules, or by [AEMO](#), the AER or the AEMC, to be confidential.

If the AER approves the confidentiality claim, it will use all reasonable measures to protect confidential information from unauthorised use or disclosure, consistent with the obligation on it under section 44AAF of the *Trade Practices Act 1974*.

In some circumstances the AER may be required by law to disclose information even if it is confidential. For example, under section 44AAF of the *Trade Practices Act 1974* and clause 8.6.2(i) of the Rules, the AER may be required to disclose confidential information to certain Government agencies, such as the AEMC.

Similarly, if the AER obtains information on a matter that is relevant to the ACCC, it is authorised, under the *Trade Practices Act 1974*, to share or use the information in the context of the matter related to the ACCC, subject to any legal requirements to the contrary. It should also be noted that the AER generally will not accept conditions that seek to limit the use of information to a particular matter.³

Where the AER is not satisfied a claim of confidentiality is fully or partially made out, it will discuss this with the relevant participant.

Should the AER make a decision to disclose information which a relevant participant claims is confidential, it will notify the relevant participant as soon as practicable after it has made the decision to disclose the information.

³ AER/ACCC Information Policy

11. Glossary

AER means the Australian Energy Regulator

AEMC means the Australian Energy Market Commission

AEMO means the Australian Energy Market Operator

Guidelines means the Rebidding and Technical Parameters Guideline

National Electricity Law (NEL) means the National Electricity Law (a Schedule to the *National Electricity Act*)

National Electricity Act means the National Electricity (South Australia) Act 1996 (South Australia)

National Electricity Rules (Electricity Rules) means the rules as defined in the *National Electricity Law*

NEM means the National Electricity Market

NEMMCO means the National Electricity Market Management Company (referred to as *AEMO* in this document)

Relevant Participant means Scheduled Generators, Semi-Scheduled Generators or Market Participants

SCADA means Supervisory Control And Data Acquisition