

FIVE MINUTE SETTLEMENT – AUCTION PARTICIPATION AGREEMENT CHANGES

FINAL REPORT AND DETERMINATION

Published: **August 2019**





EXECUTIVE SUMMARY

The publication of this Final Report and Determination (Final Report) concludes the Rules consultation process conducted by the Australian Energy Market Operator (AEMO) to consider amendments to the Auction Participation Agreement (APA) under the National Electricity Rules (NER) for the implementation of Five-Minute Settlement (5MS) and Global Settlement (GS).

The amendment involves introducing additional clarifications to clause 16.5 of the APA to prevent new auction participants from using this clause as an exit strategy.

On 22 March 2019, AEMO published the Notice of First Stage Consultation and the Issues Paper for the APA.

AEMO received one submission from Origin Energy agreeing with the proposed changes highlighted in the Issues Paper. Having considered the submission, AEMO's draft determination was to retain the amendments as proposed in the Issues Paper.

On 25 June 2019, AEMO published the Notice of Second Stage Consultation and Draft Determination for the APA. One submission from Origin Energy was received in the second stage consultation agreeing with the proposed changes.

Considering the submission and the requirements of the NER and the amending rules for 5MS and GS, AEMO has made no further changes to the draft APA. AEMO's final determination is to amend the APA in the form published with this Final Report.



CONTENTS

EXECUTIVE SUMMARY	2
1. STAKEHOLDER CONSULTATION PROCESS	4
2. BACKGROUND	4
2.1. NER requirements	4
2.2. Context for this consultation	4
2.3. First stage consultation	5
2.4. Second stage consultation	6
3. DISCUSSION OF MATERIAL ISSUES	6
3.1. Potential effect of Five-Minute Settlement and Global Settlement	6
4. FINAL DETERMINATION	7
5. OTHER MATTERS	ERROR! BOOKMARK NOT DEFINED.
APPENDIX A. GLOSSARY	8
APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES	9
APPENDIX C. ATTACHMENT 1 - SETTLEMENT RESIDUE AUCTION RULES	10
APPENDIX C, SCHEDULE 1 AUCTION PARTICIPATION AGREEMENT	35



1. STAKEHOLDER CONSULTATION PROCESS

AEMO has consulted on amendments to the Auction Participation Agreement (APA), which forms part of the settlements residue auction rules under clause 3.18.3 of the NER. The consultation was conducted in accordance with the Rules consultation process in rule 8.9 of the NER.

Prior to this public consultation, AEMO consulted on 5MS changes with the Settlements Residue Committee (SRC). The SRC is ultimately responsible for approving any proposed amendments to the APA.

AEMO's timeline for this consultation is outlined below:

Deliverable	Indicative date
Notice of first stage consultation and Issues Paper published	22 March 2019
First stage submissions closed	27 May 2019
Draft Report & Notice of second stage consultation published	25 June 2019
Submissions due on Draft Report	16 July 2019
Final Report published	05 August 2019

The publication of this Final Report marks the conclusion of this consultation.

AEMO also consulted on the APA amendments through various 5MS program engagement channels¹ including:

- Procedures Working Group (PWG)
- Systems Working Group (SWG)
- Settlements Focus Group (SFG).

Note that there is a glossary of terms used in this Final Report at Appendix A.

2. BACKGROUND

2.1. NER requirements

Under clause 3.18.3 of the NER, AEMO is responsible for developing and amending the auction rules that set out the procedures and mechanisms for operating settlements residue auctions (SRAs). Clause 3.18.3(d)(1) stipulates that AEMO may amend the auction rules with the approval of the SRC and in accordance with the Rules consultation process outlined in rule 8.9. The APA is Schedule 1 of the auction rules. It documents the agreement between AEMO and eligible market participants concerning the conditions of participation in SRAs, including the terms of settlement residue distribution agreements (SRDAs) for the issue of units subject to each quarterly auction.²

2.2. Context for this consultation

2.2.1. Five-Minute Settlement and Global Settlement

In November 2017, the AEMC made the Five-Minute Settlement (5MS) rule. The rule reduces the trading interval for financial settlement in the National Electricity Market (NEM) from 30 minutes to five minutes, aligning with NEM dispatch.

¹ For more details on the forums and groups specific to the 5MS program: <http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Five-Minute-Settlement>

² If AEMO allocates settlement residue units to an auction participant in accordance with the auction rules and sends a confirmation to the auction participant, AEMO and the auction participant will have entered into an SRDA for the given quarter for which the auction participant has been allocated units.



The AEMC made the Global Settlement³ (GS) rule in December 2018 to introduce a 'global settlement' framework for settlement of the demand side of the wholesale electricity market.

Implementing Five-Minute Settlement

Five minute settlement will commence in the NEM on 1 July 2021. Settlement across the NEM will then be based on five-minute trading interval prices.

5MS will change many NEM processes, including energy and ancillary service bidding, online dispatch, intervention pricing, the calculation of trading amounts, the calculation of the cumulative price threshold, and periodic energy metering.

The final 5MS and GS rules require AEMO to update and publish a number of specified relevant procedures by 1 December 2019, including the Settlement Residue Auction Rules.

Implementing Global Settlement

Implementing global settlement will remove the current 'settlement by differencing' framework that has been in place since the start of NEM.⁴

Under the new GS framework, every retailer will be billed for their customers' loss-adjusted metered electricity in a distribution area and their share of the unaccounted-for energy (UFE) attributable to that area. The final rule requires UFE to be calculated at the transmission connection point level. UFE is then allocated in proportion to each retailer's share of the loss-adjusted consumption in the local area.

2.2.2. SRA Secondary Trading

On 10 October 2017, in response to an NER rule change proposal submitted by Westpac Banking Corporation, the AEMC made a final determination to change the NER to enable AEMO, with the approval of the SRC, to provide a platform for secondary trading of settlements residue distribution units. The AEMC's determination considered secondary trading will improve liquidity in units, which in turn is likely to increase interstate trade of electricity, improve risk management, and increase competition in retail and wholesale markets.

Consultation on SRA secondary trading amendments to the APA commenced on 21 September 2018 and concluded on 30 January 2019. After system development work commenced to implement these changes, it was identified that there were further clauses and definitions in the APA that warrant further clarification. Consultation on these changes commenced on 23 April 2019 and concluded on 19 July 2019. This consultation can be accessed through the link below:

<http://aemo.com.au/Stakeholder-Consultation/Consultations/SRA-Secondary-Trading-Implementation-Consultation>

AEMO intends that the amendments from this consultation to implement 5MS will be incorporated into the APA version that is amended for SRA secondary trading. Please see section 5 of this report for more information.

2.3. First stage consultation

On 22 March 2019, AEMO issued a Notice of First Stage Consultation, and published an Issues Paper and draft amended APA.

³ AEMC. 2018. National Electricity Amendment (Global Settlement and Market Reconciliation) Rule 2018. Available: <https://www.aemc.gov.au/rule-changes/global-settlement-and-market-reconciliation>

⁴ Embedded networks will continue to be settled using settlements by differencing within the network



The Issues Paper included details on AEMO's stakeholder engagement in developing the initial draft procedures and a summary of the specific amendments proposed in the initial consultation pack to address the potential impact of 5MS and GS.

AEMO received one submission in response to the first stage consultation. Copies of all written submissions, minutes of meetings and issues raised in forums (excluding any confidential information) have been published on AEMO's website.⁵

2.4. Second stage consultation

On 25 June 2019, AEMO issued a Notice of Second Stage Consultation, and published a Draft Report and Determination (Draft Report) and Draft Procedures for the APA.

The Draft Report included a summary of the specific amendments proposed in the draft consultation pack.

AEMO received one submission to the second stage consultation. A copy has been published on AEMO's website⁶ and a summary is contained in Appendix B.

3. DISCUSSION OF MATERIAL ISSUES

This section details the material issues identified during the review process. It also provides AEMO's assessment of the issues and how AEMO proposes to address them.

3.1. Potential effect of Five-Minute Settlement and Global Settlement

3.1.1. Five Minute Settlement

From 1 July 2021, the duration of trading intervals will change from 30 minutes to five minutes because of 5MS. This will result in settlement amounts to be calculated using the spot price for each five-minute trading interval.

Clause 16.5 of the APA allows auction participants to terminate a Settlements Residue Distribution Agreement (SRDA)⁷ if there is a change in the way in which the settlement residue is calculated during the term of the SDRA. Under current arrangements this will give auction participants the ability to terminate the relevant SRDA because of 5MS related changes, even though they may be aware of these changes in advance when agreeing to the APA.

3.1.2. Global Settlement

Global Settlement will result in the settlement's framework moving from 'settlements by differencing' to 'global settlement'. This will also change how settlement residues are calculated, and similarly will also give participants the ability to terminate the relevant SDRA.

⁵ For more details on the Auction Participation Agreement first stage consultation see: <https://www.aemo.com.au/Stakeholder-Consultation/Consultations/Five-Minute-Settlement---Auction-Participation-Agreement>

⁶ For more details on the Auction Participation Agreement second stage consultation see: <https://www.aemo.com.au/Stakeholder-Consultation/Consultations/Five-Minute-Settlement---Auction-Participation-Agreement>

⁷ If AEMO allocates units to an auction participant in accordance with the auction rules and sends a confirmation to the Auction Participant, AEMO and the Auction Participant will have entered into a Settlements Residue Distribution Agreement (SRDA) in respect of the given quarter for which the Auction Participant has been allocated Units.



3.1.3. Procedural Amendment

The procedural amendment to the APA involves additional clarifications to clause 16.5 to prevent new auction participants from using this clause as an exit strategy. The additions will clarify that this new clause will not apply to:

- Changes that commence operation before the start of the term of the SRDA
- Changes that are made before or published publicly before the start of the term of the SRDA but only commence operation during the term of the SRDA.

3.2. First Stage Submissions

Stakeholder feedback from Origin supported AEMO's proposed amendments to update clause 16.5 of the APA. No other submissions were received.⁸

3.3. Draft Determination

AEMO noted that the proposed amendments do not affect the function of the APA, but are further clarifications to prevent new auction participants from using clause 16.5 as an exit strategy. Therefore, AEMO considered the proposed draft amendments appropriate.

AEMO's draft determination was to maintain the proposed updates as suggested in the Issues Paper.

3.4. Second Stage Submissions

Origin reviewed the APA and was in agreement with AEMO's draft determination. No other submissions were received.⁹

4. FINAL DETERMINATION

As no additional issues have been raised in second stage submissions, AEMO confirms its draft determination. AEMO's final determination is to introduce additional clarifications to clause 16.5 of the APA in the form attached to this Final Report at Appendix C.

The amendments will take effect on a date to be specified depending on SRC approval. This is likely to be in November 2019, to provide a limited window for existing participants to execute a new APA that includes amendments for secondary trading without the amendments determined in this consultation. AEMO will publish notice of the effective date approximately three weeks in advance.

⁸ Origin, Submission to first stage consultation, p.1

⁹ Origin, Submission to second stage consultation, p.1

**APPENDIX A. GLOSSARY**

Term or acronym	Meaning
5MS	Five-Minute Settlement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
GS	Global Settlement
NEM	National Electricity Market
NER	National Energy Rules
PCF	Program Consultative Forum
PWG	Procedures Working Group
Rules	National Energy Rules
SWG	Systems Working Group
UFE	Unaccounted for energy
SRA	Settlements Residue Auction
SRC	Settlements Residue Committee
SDRA	Settlements Residue Distribution Agreement



APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES

No.	Respondent	Participant Comment	AEMO response
1.	Origin	<ul style="list-style-type: none">Origin has reviewed the Auction Participation Agreement Second Stage Consultation and we are in agreement with AEMO's draft report and determination	<ul style="list-style-type: none">AEMO notes the respondents support of the proposed change



APPENDIX C. ATTACHMENT 1 - SETTLEMENT RESIDUE AUCTION RULES

The Settlement Residue Auction Rules, which includes the APA requires approval from the Settlements Residue Committee (SRC) before the procedure can be made effective. This appendix contains the Settlement Residue Auction Rules that will be effective after SRC approval has been granted.

SETTLEMENTS RESIDUE AUCTION RULES

PREPARED BY: AEMO [Markets]
DOCUMENT REF: SRA-AuctionRules
EFFECTIVE DATE: TBD
STATUS: FINAL

Approved for distribution and use by:

APPROVED BY: Settlements Residue Committee

DATE: / / 2019

APPROVED BY: Peter Geers

TITLE: Chief Strategy and Markets Officer

DATE: / / 2019

RELEASE HISTORY

Effective Date	Summary of Changes
1 July 1999	Previous releases
1 May 2010	Amendments to facilitate auctioning of units up to three years in advance, as well as additional miscellaneous changes.
12 March 2014	Minor amendments to include the method for calculating auction expense fees, describe the process AEMO uses to reconcile fees, allow auction dates to be changed either earlier or later, remove the requirement to publish several notifications on NEMNET.
7 November 2014	Amendments to remove the maximum number of units and proportions for each SRA directional interconnector, define the principles to be applied in determining number of units, removing references to jurisdictional derogations, modify definition of the start of the auction bidding period, rephrasing the timing for auction expense notification.
1 October 2019	Amendments to facilitate secondary SRA dealing, including amendments identified through implementation of the systems to facilitate secondary dealing.
TBD	Amendments to clarify termination conditions of an SRDA

CONTENTS

1.	INTRODUCTION	15
1.1.	Purpose	15
1.2.	Application	15
1.3.	Amendment	15
1.4.	Conduct of Auctions	15
2.	INTERPRETATION	15
2.1.	Definitions	15
2.2.	Interpretation	18
3.	PARTICIPATION	18
3.1.	Auction Participation Agreement	18
3.2.	Eligibility Criteria	18
3.3.	Default Event under the Rules	19
3.4.	Continuing Eligibility	19
3.5.	Limited Participation	19
4.	UNITS	19
4.1.	Definition	19
4.2.	Unit Categories	20
4.3.	Maximum Units and Proportional Entitlements	20
4.4.	Alterations	20
4.5.	Notifications	21
5.	AUCTION TIMETABLE	21
5.1.	Tranches	21
5.2.	Deleted	21
5.3.	Notifications	21
5.4.	Alterations to Timetable	21
6.	OFFERING UNITS	21
6.1.	Right to offer Units	21
7.	PRUDENTIAL REQUIREMENTS	22
7.1.	Confidentiality	22
7.2.	Cash Security	22
7.3.	Calculation of prudential amounts for Auction Participants	22
7.4.	Trading Margin requirements	25
8.	AUCTION UNITS	26
8.1.	Available Units	26
8.2.	Notification	26
9.	BIDDING PROCEDURE	26

9.1.	Bidding Period	26
9.2.	Bids	26
9.3.	Bidding Procedure	27
9.4.	Defective Bids	27
10.	OFFER PROCEDURE	27
10.1.	Offer Period	27
10.2.	Offers	28
10.3.	Offer Procedure	28
10.4.	Defective Offers	28
11.	ALLOCATION OF UNITS	29
11.1.	Unit Allocation	29
11.2.	Proof of Eligibility	29
12.	CANCELLATION OF OFFERED UNITS	29
13.	PURCHASE PRICE	29
13.1.	Common Price	29
13.2.	Auction LP	29
13.3.	Payments to AEMO	30
13.4.	Cancellation Price	30
14.	RESULTS	30
14.1.	Allocation Confirmation	30
14.2.	Cancellation Confirmation	30
14.3.	Notification	30
14.4.	Purchase Statement	31
15.	AUCTION EXPENSE FEES	31
15.1.	Notification	31
15.2.	Auction Expense Fees Calculation	31
15.3.	Reconciliation	33
16.	DISTRIBUTION OF AMOUNTS TO <i>NETWORK SERVICE PROVIDERS</i>	33
16.1.	General	33
16.2.	Distribution after a Default Event	34
	SCHEDULE 1	35
	AUCTION PARTICIPATION AGREEMENT	35
	SCHEDULE 2	54
	LINEAR PROGRAMING PROBLEM	54

5. INTRODUCTION

5.1. Purpose

These *auction rules* have been developed by AEMO in accordance with clause 3.18.3 of the *Rules*.

5.2. Application

These *auction rules* will govern all *auctions* conducted by AEMO.

5.3. Amendment

- a) AEMO may amend these *auction rules* in accordance with clause 3.18.3(d) of the *Rules*.
- b) An amendment to these *auction rules* will have effect from the later of:
 - i) the date the amendment is approved by the *settlement residue committee* in accordance with clause 3.18.3(d)(1) of the *Rules*; and
 - ii) the date specified by AEMO and *published* on the AEMO Website.

5.4. Conduct of Auctions

AEMO may:

- a) suspend, or remove a suspension on, conducting *auctions* in respect of any *directional interconnector* for any Relevant Quarter in accordance with clause 3.18.2(d) of the *Rules*; or
- b) cease conducting *auctions* in accordance with clause 3.18.2(e) of the *Rules*.

6. INTERPRETATION

6.1. Definitions

The following definitions apply unless the context requires otherwise:

AEMO Website means the website located at <http://www.aemo.com.au>.

Allocated Units means Units allocated to an Auction Participant in accordance with these *auction rules* but do not include Cancelled Units.

Allocation Fee means *auction expense fees* in respect of the allocation of units to an Auction Participant through an *auction* in accordance with these *auction rules* and the *Rules*.

Auction LP means the linear programming problem set out in Schedule 2

APA means an *auction participation agreement*:

- a) in the same form as that set out in Schedule 1; or
- b) in the same form as that set out in Schedule 1 to a previous version of these *auction rules*.

Auction Participant means a person entitled to participate in an *auction* in accordance with clause 3 and who has entered into an APA with AEMO.

Available Units means, in respect of an *auction*, the number of Units to be made available at an *auction* as determined in accordance with clause 8.1.

Bid means a single price bid for a specified number of Units available during an *auction* for a specified Relevant Quarter and a reference to a Bid includes Single Category Bids, single Quarter Bids, Linked Category Bids and Linked Quarter Bids (or any combination of Category Bids and Quarter Bids).

Bid Database means the *AEMO* database where Bids for an *auction* are accumulated.

Bid File means a file submitted to *AEMO* by an Auction Participant in accordance with clause 9.3(a).

Bidding Period means, in respect of set of *auctions*, the bidding period for that set of *auctions* described in clause 9.1(a).

Cancellation Fee means *auction expense fees* in respect of the cancellation of units offered by an Auction Participant in an *auction* in accordance with these *auction rules* and the *Rules*.

Cancellation Confirmation means the statement provided to each Auction Participant in accordance with clause 14.2.

Cancelled Units means Offered Units that are cancelled in accordance with clause 12.

Category Bids includes a reference to Single Category Bids and Linked Category Bids.

Cash Security means security provided to *AEMO* in respect of an Auction Participant in the form of cash.

Prudential Approved Participant means a person that meets the both of the following requirements:

- a) either:
 - i) an entity under the prudential supervision of the Australian Prudential Regulation Authority; or
 - ii) a central borrowing authority of an Australian State or Territory or the Commonwealth which has been established by an Act of Parliament of that jurisdiction; and
- b) has a credit rating of:
 - i) A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard & Poors (Australia) Pty Ltd; or
 - ii) P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moody's Investor Services Pty Ltd.

Default Event means a failure by an Auction Participant to pay the purchase price for a SRDA on the due date or failure to comply with a Margin Call in accordance with an SRDA and the *auction rules*.

GST has the meaning given in section 195-1 of the A New Tax System (Goods and Services) Tax Act 1999 (Cth).

Linked Bid means a Bid that is either a Linked Category Bid or a Linked Quarter Bid or both.

Linked Category Bid means a Bid that specifies more than zero Units in more than one Unit Category.

Linked Quarter Bid means a Bid that specifies more than zero Units for more than one Relevant Quarter.

Margin Call means a request issued by *AEMO* to an Auction Participant under clause 7.4(d) to bring its Trading Margin above a specified level.

Market Clearing Price means, in respect of a Unit Category and a Relevant Quarter, the lowest price in respect of which Units are allocated in that Unit Category for that Relevant Quarter in accordance with clause 13.

Maximum Units means, in respect of a Unit Category and a Relevant Quarter, the number of Units to be made available in that Unit Category for that Relevant Quarter, as published under clause 4.5.

AEMO Markets Portal means the electronic communication system established between AEMO and locations in Adelaide, Brisbane, Melbourne and Sydney to which *Registered Participants* may connect for the purposes of the *Rules*.

Offer means a single price offer for a specified number of Offered Units for a specified Relevant Quarter.

Offer Database means the AEMO database where Offers for an *auction* are accumulated.

Offer File means a file submitted to AEMO by an Auction Participant in accordance with clause 10.2.

Offer Period means, in respect of set of *auctions*, the offer period for that set of *auctions* described in clause 10.1(a).

Offered Units means Units allocated to an Auction Participant in a previous auction that are offered by the Auction Participant into a subsequent auction in accordance with the SRDA for those Units and the *auction rules*.

Prudential Exposure means the amount of an Auction Participant's actual or contingent liability in respect of Units that are or may be allocated in an auction including but not limited to Cancelled Units as calculated by AEMO under clause 7.3(d).

Purchase Statement means the statement provided to each Successful Participant in accordance with clause 14.4.

Quarter means a period of 3 calendar months commencing on the first day of July, October, January or April.

Quarter Bids includes a reference to Single Quarter Bids and Linked Quarter Bids.

Relevant Quarter means the Quarter in respect of which an *auction* is conducted in accordance with clause 5.1.

Secondary Trading Auction Rules Amendment Date means the date from which these *auction rules* are amended to implement secondary trading of Units pursuant to clause 3.18.3A of the *Rules*.

Single Category Bid means a Bid that specifies more than zero Units in only one Unit Category.

Single Quarter Bid means a Bid that specifies more than zero Units for only one Relevant Quarter.

SRDA means a *settlements residue distribution agreement*.

Successful Participant means an Auction Participant to whom Units are allocated in accordance with clause 13.

Trading Limit, for an Auction Participant at any time, means the amount calculated by AEMO under clause 7.3(c) by reference to the amount of that Auction Participant's Cash Security.

Trading Margin, for an Auction Participant at any time, means its Trading Limit less its Prudential Exposure.

Trading Position means the trading position of the Auction Participant, with respect to the Relevant Quarter and Unit Category, calculated in accordance with clause 7.3.

Transaction means either of the following types:

- a) an allocation of Units to an Auction Participant through an auction in accordance with these *auction rules* and the *Rules* and for the avoidance of doubt, includes an allocation of Units to an Auction Participant prior to the Secondary Trading Auction Rule Amendment Date; or
- b) the cancellation of Units offered by an Auction Participant in an *auction* in accordance with these *auction rules* and the *Rules*.

Unit has the meaning given to it in clause 4.1, and a reference to “Units” may be a reference to Units in a specific Unit Category or a reference to Units in all Unit Categories, as the context requires.

Unit Category means a category of Units as defined in clause 4.2.

Any word or phrase *in this style* has the same meaning given to that word or phrase in the National Electricity Rules.

6.2. Interpretation

Headings are for convenience only and do not affect interpretation. The following rules of interpretation apply unless the context requires otherwise.

- a) The singular includes the plural and conversely.
- b) A gender includes all genders.
- c) If a word or phrase is defined, its other grammatical forms have a corresponding meaning.
- d) A reference to a person, corporation, trust, partnership, unincorporated body or other entity includes any of them.
- e) A reference to a clause or Schedule is a reference to a clause of or a schedule to these *auction rules*.
- f) A reference to an agreement or document (including a reference to these *auction rules*) is to the agreement or document as amended, varied, supplemented, novated or replaced, except to the extent prohibited by the *auction rules* or that other agreement or document.
- g) A reference to a person includes the person’s successors, permitted substitutes and permitted assigns (and, where applicable, the person’s legal personal representatives).
- h) A reference to legislation or to a provision of legislation includes a modification or re-enactment of it, a legislative provision substituted for it and a regulation or statutory instrument issued under it.
- i) A reference to \$ or dollars is to Australian currency.
- j) A reference to a time is to *Eastern Standard Time*.
- k) The word “includes” or “including” or “such as” are not words of limitation, and when introducing an example, do not limit the meaning of the words to which the example relates to examples of a similar kind.

7. PARTICIPATION

7.1. Auction Participation Agreement

To participate in an *auction*, a person must enter into an APA with AEMO.

7.2. Eligibility Criteria

AEMO will enter into an APA with a person only if that person:

- a) is registered under the *Rules* as a *Generator, Market Customer, Trader*; or a person seeking to be eligible for registration as a *Trader* under clause 2.5A of the *Rules*
- b) is not registered under the *Rules* as a *Transmission Network Service Provider*; or
- c) would not be a 'retail client' as defined in section 761G(7) of the Corporations Act 2001 (Cth), if that person entered into an SRDA with AEMO.

AEMO will not enter into an APA with a person if:

- d) AEMO has previously terminated an APA with the person under clause 16.3(d) or (e) of the APA as a result of a failure by that person to pay the purchase price for an SRDA on the due date;
- e) AEMO has previously terminated an APA with the person in accordance with the APA as a result of a failure by that person to comply with a Margin Call by the due date;
- f) that person is a *Market Participant* who has been suspended from trading under clause 3.15.21 of the *Rules*; or
- g) AEMO believes, on reasonable grounds, that the person is acting on behalf of or in concert with a person:
 - i) who has not entered into an APA;
 - ii) who is a *Transmission Network Service Provider*; or
 - iii) described in paragraphs (d), (e) or (f); or
- h) in the case of a *Trader* who is not resident in, or does not have a permanent establishment in Australia, unless the *Trader* has appointed an agent in accordance with clause 2.5A(c)(2) of the *Rules* who has also entered into the same APA as the *Trader*.

7.3. Default Event under the Rules

AEMO may refuse to enter into an APA with a *Market Participant* in relation to whom a *default event* has occurred.

7.4. Continuing Eligibility

From time to time, Auction Participants must demonstrate to AEMO's reasonable satisfaction and in a timeframe specified by AEMO that they continue to satisfy the eligibility criteria detailed in clause 3.2. An Auction Participant must advise AEMO promptly if it no longer satisfies the eligibility criteria in clause 3.2.

7.5. Limited Participation

An Auction Participant must comply with any condition or restriction in respect of the Auction Participant's participation in the *auctions* imposed on the Auction Participant by the *Rules*.

8. UNITS

8.1. Definition

- a) There is a category of Units for each *directional interconnector*.
- b) Units are defined with respect to a Relevant Quarter.
- c) In each Unit Category, subject to Allocation Fees and Cancellation Fees, a Unit is an entitlement to an amount equal to the total of, for each *billing period* or part of a *billing period* that falls within the Relevant Quarter, an amount that is the greater of:
 - i) a proportion of the net *settlements residue* attributable to the *directional interconnector* for that Unit Category under clause 3.6.5 of the *Rules*, arising in respect of that *billing period* or part of a *billing period*; and
 - ii) zero.

8.2. Unit Categories

- a) The Unit Categories, and the *directional interconnector* for each Unit Category, are set out in the following table:

Unit category	directional interconnector
SAVIC	South Australia to Victoria
VICSA	Victoria to South Australia
VICNSW	Victoria to New South Wales
NSWVIC	New South Wales to Victoria
NSWQLD	New South Wales to Queensland
QLDNSW	Queensland to New South Wales

- b) *AEMO* may, with the approval of the *settlement residue committee*, introduce a new Unit Category in respect of a new *directional interconnector* by *publication* on the *AEMO* Website at least 10 *business days* prior to the first *auction* proposed to be conducted by *AEMO* for Units in that new Unit Category.

8.3. Maximum Units and Proportional Entitlements

Subject to clause 4.4 and 4.5, *AEMO* must determine and *publish* the maximum number of units to be made available in each Unit Category for a Relevant Quarter and the proportions referred to in clause 4.1(c)(i) for each Unit Category in accordance with the following principles:

- The maximum number of units for a unit category will be reviewed when there is confirmation to *AEMO* that work is being undertaken which will result in a material change to the interconnector capacity, or other relevant trigger.
- The maximum number of units for the unit category should represent a reasonable measure of nominal interconnector capacity assigned to the *directional interconnector*, noting the actual capacity of the relevant *directional interconnector* will vary and at any time may be higher or lower than the nominal capacity assigned to that *directional interconnector* for this purpose.
- The proportions are to be determined by taking the inverse of the maximum number of units, expressed as a percentage.
- AEMO* must ensure that the maximum number of units and the proportions are published on its website at all times.

8.4. Alterations

- a) *AEMO* may, at any time prior to the date that is 10 *business days* prior to the first *auction* for a Relevant Quarter, alter:
- the proportion referred to in clause 4.1(c)(i) to apply in respect of a Unit Category for that Relevant Quarter; or
 - the maximum number of Units to be made available in a Unit Category for that Relevant Quarter.

- b) AEMO will, not less than 10 *business days* prior to the first *auction* proposed to be conducted by AEMO for Units in a new Unit Category, determine:
 - (i) the proportion referred to in clause 4.1(c)(i) to apply in respect of each new Unit Category; and
 - (ii) the maximum number of Units to be made available in each new Unit Category.
- c) The *settlement residue committee* must approve changes to the maximum number of units and proportions.

8.5. Notifications

The proportion referred to in clause 4.1(c)(i) for each Unit Category and the maximum number of Units to be made available in each Unit Category for a Relevant Quarter will be published on the AEMO Website 10 *business days* prior to the first *auction* for the Relevant Quarter.

9. AUCTION TIMETABLE

9.1. Tranches

In each Quarter, one auction will be conducted for the Units made available across all Unit Categories for each of the twelve Relevant Quarters.

9.2. Deleted

9.3. Notifications

Subject to clause 5.4, the dates on which *auctions* for a Relevant Quarter will be held will be *published* on the AEMO Website 10 *business days* prior to the first *auction* for the Relevant Quarter.

9.4. Alterations to Timetable

Notwithstanding the publication of *auction* dates under clause 5.3, AEMO may change the date of any *auction* by:

- a) notifying each Auction Participant of the revised date for the auction; and
- b) publishing the revised date for the auction on the AEMO Website,

at least 10 *business days* prior to the then published date for the *auction*.

10. OFFERING UNITS

10.1. Right to offer Units

A Successful Participant that has been allocated Units for a Relevant Quarter in an auction may offer those Units in future auctions for the Relevant Quarter in accordance with the SRDA for those Units and the auction rules.

11. PRUDENTIAL REQUIREMENTS

11.1. Confidentiality

Information about the Prudential Exposure, Trading Limit and Trading Margin of an Auction Participant is Confidential Information.

11.2. Cash Security

- a) An Auction Participant that is not a Prudential Approved Participant must provide and at all times maintain Cash Security for the amount and forward period required to ensure that its Trading Margin does not fall below zero.
- b) Cash Security must not be subject to any interest (whether legal, equitable or statutory) by way of security at the time it is provided and must not become subject to any interest (whether legal, equitable or statutory) by way of security other than in favour of AEMO at any time while it is held by AEMO.
- c) All Cash Security credited by AEMO to an Auction Participant in accordance with the *auction rules* is the absolute legal and beneficial property of AEMO and represents a debt equal to the credit balance of the Cash Security owing by AEMO to the Auction Participant.
- d) An Auction Participant must not submit an Offer that, if accepted and would result in Units being cancelled, would result in its Trading Margin being less than zero.
- e) AEMO must record Cash Security amounts paid by an Auction Participant, together with any interest earned on those amounts, as a credit balance in respect of that participant in AEMO's cash security fund.
- f) AEMO may apply the credit balance for an Auction Participant in the cash security fund by setting off all or part of that amount against any amount owing by that participant to AEMO under a Purchase Statement.
- g) AEMO may deduct any liabilities or expenses of the security fund from the balance of an Auction Participant in that fund, to the extent those liabilities or expenses are attributable to the maintenance or application of that balance.
- h) AEMO may, at any time after the occurrence of a Default Event in respect of an Auction Participant and while that Default Event is subsisting, exercise its rights to apply any amount of Cash Security relating to that Auction Participant against any amount actually or contingently owing to AEMO in accordance with the Auction Participant Agreement or SRDA relating to that Auction Participant.
- i) AEMO must inform the relevant Auction Participant if AEMO exercises its rights to apply any amount of Cash Security.

11.3. Calculation of prudential amounts for Auction Participants

- a) An Auction Participant that is a Prudential Approved Participant will not have a Trading Limit or Trading Margin.
- b) AEMO must calculate the Prudential Exposure, Trading Limit and Trading Margin for each Auction Participant at least once each *business day* and at the following times and make the calculations available to the relevant Auction Participant:
 - i) on payment of an amount of Cash Security;
 - ii) on submission of an Offer File;

- iii) immediately after each auction.
- c) The Trading Limit of an Auction Participant at any time is an amount equal to the amount of that participant's current Cash Security as recorded in AEMO's cash security fund.
- d) The Prudential Exposure of an Auction Participant at any time is the amount calculated by AEMO as follows reflecting a reasonable estimate of the maximum net aggregate amount actually or contingently owing to AEMO under SRDAs, the *auction rules* and the *Rules* in relation to Units including but not limited to Cancelled Units at that time.
- i) The trading position (TP(p,q,u)) of an Auction Participant for each Unit Category and Relevant Quarter is calculated as follows:

$$TP(p, q, u) = CV(p, q, u) \times (ACP(p, q, u) - APP(p, q, u, MTc(p, q, u)))$$

TP(p,q,u)	<p>Trading Position</p> <p>Trading position of participant "p" for Unit Category "u" and Relevant Quarter "q" at the time of calculation</p> <p>Note: If a participant is expected to owe money to AEMO then TP(p,q,u) will have a negative value.</p>
CV(p,q,u)	<p>Cancelled volume</p> <p>Sum of the number of units cancelled for Unit Category "u" and Relevant Quarter "q" with the number of units that are currently offered for a price less than APP(p,q,u) at the time of calculation</p> <p>Note: offers are only valid in the Offer Period, as defined in Clause 10.1.</p>
ACP(p,q,u)	<p>Average cancellation price</p> <p>Average volume-weighted price of units cancelled for Unit Category "u" and Relevant Quarter "q" with the number of units that are currently offered to be cancelled at a price less than the average volume-weighted price of units that have been allocated to participant "p" for Unit Category "u" and Relevant Quarter "q" at the time of calculation.</p>
APP(p,q,u,MTc(p,q,u))	<p>Average purchase price</p> <p>Average volume-weighted price of units that have been allocated to participant "p" for Unit Category "u" and Relevant Quarter "q" before the most recent tranche "MTc(p,q,u)" in which participant "p" had units for Unit Category "u" and Relevant Quarter "q" cancelled at the time of calculation. "MTc(p,q,u)" is further defined below</p>
MTc(p,q,u)	<p>The most recent tranche prior to the time of calculating the trading position in which the participant "p" has had</p>

	<p>units cancelled for Unit Category "u" and Relevant Quarter "q" at the time of calculation.</p> <p>If the participant has offered units for Unit Category "u" and Relevant Quarter "q" which are less than the average purchase price of all units the participant has previously had allocated for Unit Category "u" and Relevant Quarter "q", $MTc(p,q,u)$ is set to the tranche in which the offer is being made, "To".</p>
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- ii) The cancelled volume ($CV(p,q,u)$) in the calculation of the trading position of an Auction Participant under subclause (d)(i) above is calculated as follows:

$$CV(p, q, u) = \sum_{Tc} CancelledUnits(p, q, u, Tc) + \sum_{\substack{o \\ \text{where } OP < APP(p,q,u,MTc=To)}} OfferedUnits(p, q, u, o, To)$$

CancelledUnits(p,q,u,Tc)	Number of units of participant "p" that have been cancelled for Unit Category "u" and Relevant Quarter "q", in tranche "Tc"
OfferedUnits(p,q,u,o,To)	<p>Number of units participant "p" is offering for Unit Category "u" and Relevant Quarter "q", in offer "o", and in tranche "To" .</p> <p>Note, offers will only be valid in one tranche "To" for Unit Category "u" and Relevant Quarter "q" at a time, and only in the Offer Period, as defined in Clause 10.1.</p>

Note: Offered Units are only included in the cancelled volume calculation if the offer price is less than the Average Purchase Price as calculated including all previously allocated units ($APP(p,q,u,MTc(p,q,u) = To)$).

- iii) The average weighted price of cancelled and offered Units ($ACP(p,q,u)$) and allocated units ($APP(p,q,u,MTc(p,q,u))$) in the calculation of the trading position of an Auction Participant under subclause (d)(i) above is calculated as follows:

$$ACP(p, q, u) = \frac{\sum_{Tc} (CancelledUnits(p, q, u, Tc) \times CP(q, u, Tc) + \sum_{\substack{o \\ \text{where } OP < APP(p,q,u,MTc=To)}} (OfferedUnits(p, q, u, o, To) \times OP(p, q, u, o))}{CV(p, q, u)}$$

$$APP(p, q, u, MTc(p, q, u)) = \frac{\sum_{Ta=1 to MTc-1} (AllocatedUnits(p, q, u, Ta) \times PP(q, u, Ta))}{\sum_{Ta=1 to MTc-1} (AllocatedUnits(p, q, u, Ta))}$$

CP(q,u,Tc)	Cancellation price for Unit Category "u" and Relevant Quarter "q" in tranche "Tc"
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OP(p,q,u,o)	Offer price participant “p” has offered for Unit Category “u” and Relevant Quarter “q” in offer “o”
AllocatedUnits(p,q,u,Ta)	Number of units participant “p” has been allocated for Unit Category “u” and Relevant Quarter “q”, and in tranche “Ta”
PP(q,u,Ta)	Purchase price for Unit Category “u” and Relevant Quarter “q” in Tranche “Ta”

- iv) The Prudential Exposure of an Auction Participant is the negative of the aggregate of the trading positions of an Auction Participant under subclause (d)(i) above calculated as follows:

$$ATP(p) = \text{Min} \left(0, \sum_{q=1} \sum_u TP(p, q, u) \right) + \sum_{q=2 \text{ to } n} \sum_u TP(p, q, u)$$

$$PE(p) = -ATP(p)$$

ATP(p)	Aggregate trading position of participant “p” Note: Payments due to the participant due to Cancelled Units in one Unit Category and Relevant Quarter can offset payments owed by the participant in another Unit Category and Relevant Quarter for the purposes of calculating Prudential Exposure of that participant.
q	is the Relevant Quarter of the unit. q=1 means the unit will be settled in the next settlement. q=n is the final Relevant Quarter to be settled.
PE(p)	Prudential Exposure of a participant “p”

11.4. Trading Margin requirements

- a) The Trading Margin of an Auction Participant at any time is an amount equal to its Trading Limit less its Prudential Exposure.
- b) If at any time the Trading Margin of an Auction Participant is less than zero, that Auction Participant:
 - i) must not submit any further Bids or Offers; and
 - ii) may pay an amount of Cash Security to increase its Trading Margin.
- c) If the Trading Margin remains below zero for 2 consecutive *business days*, AEMO issue a Margin Call by notice to the relevant participant in accordance with paragraph (d).
- d) An Auction Participant who has received a Margin Call must, by the applicable time under paragraph (e) pay an amount of Cash Security in cleared funds to AEMO under clause 7.2 so that the Trading Margin of that participant immediately after taking that action is not less than zero.

Note: Failure to comply with a Margin Call is a Default Event.

- e) An Auction Participant must comply with paragraph (d) by 12:00 noon 2 *business days* after the Margin Call was issued.
- f) If a Margin Call was not issued on a *business day*, or was issued after 2:00pm on a *business day*, it is taken to have been issued at 9:00am on the next *business day*.
- g) Each Auction Participant is responsible for ensuring that its Trading Margin does not reduce below zero.

12. AUCTION UNITS

12.1. Available Units

The number of Units to be made available in a Unit Category at each *auction* for Units in that Unit Category for a Relevant Quarter will be determined as follows:

- a) at the first *auction* for the Relevant Quarter, the number of Units made available will be equal to the Maximum Units for that Unit Category divided by the number of whole Quarters between the date of the first auction and the end date of the Relevant Quarter rounded down to an integer.
- b) at each of the second, and subsequent *auctions* for the Relevant Quarter, the number of Units made available in the Unit Category will be the total of:
 - i) the number of Units made available at the first *auction* for that Relevant Quarter in that Unit Category, and
 - ii) if it is the last *auction* for a Relevant Quarter, any Units that otherwise have not been made available due to rounding down, and
 - iii) any Units in that Unit Category that were listed at a previous auction but remain unallocated (including Units that were allocated at a previous auction but were subsequently returned to AEMO as a result of termination of the SRDA for those Units) , and
 - iv) any Offered Units in that Unit Category for the Relevant Quarter.

12.2. Notification

The Available Units in a Unit Category (excluding Offered Units) for an *auction* for Units in that Unit Category will be *published* on the AEMO Website 10 *business days* prior to the date of the *auction*.

13. BIDDING PROCEDURE

13.1. Bidding Period

- a) The Bidding Period for each set of *auctions* will commence at 10:00 am (EST) on the first *business day* of the last month preceding each Relevant Quarter and end at 2.00pm (EST) on the date on which that set of *auctions* is conducted.
- b) AEMO will not access the Bid Database until after the end of the Bidding Period.

13.2. Bids

- a) For each set of *auctions*, an Auction Participant may submit a Bid File containing a maximum of 2000 Bids.

- b) Subject to paragraph (c), each Bid may be for any number of Units from any combination of Unit Categories and Relevant Quarters provided that each Bid must specify:
 - i) either zero Units or a whole number of Units in each Unit Category for each Relevant Quarter; and
 - ii) a single price (in dollars and cents) for the Bid.
- c) Where a set of *auctions* is conducted in respect of Units in specified Unit Categories or for specified Relevant Quarters only, a Bid submitted in respect of the *auction* must specify zero Units in each other Unit Category or Relevant Quarter, as the case may be.
- d) Bids must be made on a GST exclusive basis.
- e) Bids must not be less than zero.

13.3. Bidding Procedure

Bids must be submitted to *AEMO* as follows:

- a) Bids must be submitted via the AEMO Markets Portal by way of a Bid File that is in a format approved by *AEMO*;
- b) the Bid File for a set of *auctions* may be submitted at any time during the Bidding Period, and may be varied, withdrawn or replaced at any time before the end of the Bidding Period; and
- c) subject to clause 9.4, the Bid File in the Bid Database at the end of the Bidding Period for a set of *auctions* will be taken to be the Bid File submitted for that set of *auctions*.

13.4. Defective Bids

AEMO will reject any Bid that:

- a) is made by a person who is not a party to an APA; or
 - b) is in breach of a condition or restriction in respect of an Auction Participant's participation in the *auctions* that is imposed on the Auction Participant under the *Rules*,
- and may, in its absolute discretion, reject any Bid that:
- c) is made by an Auction Participant that is otherwise in breach of its APA or any SRDA;
 - d) does not comply with the requirements of clause 9;
 - e) is not made in accordance with these *auction rules* in any other respect; or
 - f) is made by a person who has not provided *AEMO* with such documents and information as *AEMO* has requested under clause 11.2.

14. OFFER PROCEDURE

14.1. Offer Period

- a) The Offer Period for each set of *auctions* will commence at 10:00 am (EST) on the first *business day* of the last month preceding each Relevant Quarter and end at 2.00pm (EST) on the date on which that set of *auctions* is conducted.
- b) *AEMO* will not access the Offer Database until after the end of the Offer Period.

14.2. Offers

- a) For each set of *auctions*, an Auction Participant may submit an Offer File containing a maximum of 2000 Offers.
- b) Offer Files and Bid Files must be submitted separately.
- c) Each Offer may be for any number of Units and Relevant Quarters provided that each Offer must specify:
 - i) only one Unit Category;
 - ii) only whole Units in a Unit Category for each Relevant Quarter; and
 - iii) a single price (in dollars and cents) for the Offer.
- d) Offers must be made on a GST exclusive basis.
- e) Offers must not be zero or less than zero.

14.3. Offer Procedure

Offers must be submitted to *AEMO* as follows:

- a) Offers must be submitted via the AEMO Markets Portal by way of an Offer File that is in a format approved by *AEMO*;
- b) the Offer File for a set of *auctions* may be submitted at any time during the Offer Period, and may be varied, withdrawn or replaced at any time before the end of the Offer Period; and
- c) subject to clause 10.4, the Offer File in the Offer Database at the end of the Offer Period for a set of *auctions* will be taken to be the Offer File submitted for that set of *auctions*.

14.4. Defective Offers

AEMO will reject any Offer:

- a) that is made by a person who is not a party to an APA with a right to offer Units;
- b) that is in breach of a condition or restriction in respect of an Auction Participant's participation in the *auctions* that is imposed on the Auction Participant under the *Rules*;
- c) for Units for a Relevant Quarter that commenced prior to the time the Offer is submitted;
- d) if the Offer is for Cancelled Units of an Auction Participant;
- e) which, if accepted, would result in the Auction Participant's Trading Margin (as last calculated by *AEMO*) falling below zero;
- f) where the Auction Participant's Trading Margin (as last calculated by *AEMO*) is below zero at the time of submitting the Offer:

and may, in its absolute discretion, reject any Offer that:

- g) is made by an Auction Participant that is otherwise in breach of its APA or any SRDA;
- h) does not comply with the requirements of clause 10;
- i) is not made in accordance with these *auction rules* in any other respect; or
- j) is made by a person who has not provided *AEMO* with such documents and information as *AEMO* has requested under clause 11.2.

15. ALLOCATION OF UNITS

15.1. Unit Allocation

For each *auction*, Units in each Unit Category for each Relevant Quarter will be allocated to Bids by solving the Auction LP, pursuant to which the value of the Units allocated to Bids in each Unit Category for each Relevant Quarter is maximised subject to:

- a) the number of Units available in each Unit Category for each Relevant Quarter; and
- b) the number of Units for which Bids are submitted in each Unit Category for each Relevant Quarter.

15.2. Proof of Eligibility

At any time before Units are allocated consequent upon an *auction*, *AEMO* may request any person who has participated in that *auction* to provide it with such documents and information as *AEMO* requires to satisfy itself that the person continues to meet the eligibility criteria detailed in clause 3.2, and that person must comply promptly with that request.

16. CANCELLATION OF OFFERED UNITS

If an Auction Participant offers Offered Units in an auction in accordance with the SRDA and the *auction rules* and the Offered Units are allocated in the auction, *AEMO* must:

- a) pay the Auction Participant the Cancellation Price for those SRDA Units in accordance with the SRDA; and
- b) immediately cancel the SRDA Units.

For the avoidance of doubt, the cancellation of an Offered Unit by *AEMO* does not terminate the underlying SRDA between *AEMO* and the Auction Participant under which that Cancelled Unit was allocated to that Auction Participant, and does not affect the obligation of the Auction Participant to pay *AEMO* the purchase price for the Cancelled Unit or *AEMO* to pay the Auction Participant for cancellation of the Cancelled Unit in accordance with the *auction rules* and the SRDA under which that Cancelled Unit was allocated to the Auction Participant.

17. PURCHASE PRICE

17.1. Common Price

Successful Participants at an *auction* will pay the same purchase price for Units in the same Unit Category and Relevant Quarter.

17.2. Auction LP

- a) The purchase price for each Unit Category for each Relevant Quarter will be determined by solving the Auction LP, pursuant to which:
 - i) where, in respect of a Unit Category and a Relevant Quarter the number of Units for which Bids are submitted is less than the number of Available Units, excluding Offered Units, the purchase price for that Unit Category for that Relevant Quarter will be zero;
 - ii) where, in respect of a Unit Category and a Relevant Quarter the number of Units for which Bids are submitted equals or exceeds the number of Available Units, the purchase price for that Unit Category for that Relevant Quarter will be the Market Clearing Price; and

- iii) the Market Clearing Price will be determined by maximising the revenue to *AEMO* for the Units allocated under clause 11.

17.3. Payments to AEMO

For the avoidance of doubt, the payment to *AEMO* by a Successful Participant of any amount under clause 3.12.2 of the *Rules* is not to be taken as a payment towards the purchase price of a Unit.

17.4. Cancellation Price

The cancellation price for Cancelled Units for each Unit Category for each Relevant Quarter will be the same as the purchase price for the Unit Category for the Relevant Quarter.

18. RESULTS

18.1. Allocation Confirmation

AEMO will, within two *business days* after each set of *auctions*, send each Auction Participant that submitted a Bid File in respect of that set of *auctions* a confirmation via the AEMO Markets Portal setting out:

- a) the number of Units for each Unit Category for each Relevant Quarter that have been allocated to the Auction Participant;
- b) the purchase price per Unit for each Unit Category for each Relevant Quarter in respect of which Units have been allocated to the Auction Participant;
- c) the aggregate purchase price for the Units allocated to the Auction Participant for each Relevant Quarter; and
- d) the total purchase price for the Units allocated to the Auction Participant.

18.2. Cancellation Confirmation

AEMO will, within two *business days* after each set of *auctions*, send each Auction Participant that Offered Units in respect of that set of *auctions* a confirmation via the AEMO Markets Portal setting out:

- a) the number of Cancelled Units for each Unit Category for each Relevant Quarter;
- b) the cancellation price per Cancelled Unit for each Unit Category for each Relevant Quarter;
- c) the aggregate cancellation price for the Cancelled Units for each Relevant Quarter; and
- d) the total cancellation price for the Cancelled Units.

18.3. Notification

The following results of each set of *auctions* will be published on the AEMO Website within 5 *business days* after the date on which the set of *auctions* is conducted:

- a) details of the Bids made at each *auction* conducted in that set of *auctions* (without identifying the relevant Auction Participant);
- b) details of the Offers made at each *auction* conducted in that set of *auctions* (without identifying the relevant Auction Participant);
- c) the purchase price per Unit for each Unit Category for each Relevant Quarter; and

- d) the number of Units sold in each Unit Category for each Relevant Quarter.

18.4. Purchase Statement

AEMO will issue a confirmation (called the Purchase Statement) to each Successful Auction Participant via the AEMO Markets Portal *two business days* prior to the settlement date for each Relevant Quarter settling out:

- a) the total cost for the purchase of the Units which have been allocated to the Auction Participant for that Relevant Quarter;
- b) the total cost of the cancellation of Cancelled Units for the Relevant Quarter;
- c) the Units purchased, the purchase price per Unit and the amount payable by the Auction Participant for each tranche of each Unit category for that Relevant Quarter;
- d) the Cancelled Units, the cancellation price per Cancelled Unit and the amount payable to the Auction Participant for each Unit category for that Relevant Quarter;
- e) the net amount payable to or by the Auction Participant;
- f) the date on which payment is due (which is the 14th *business day* of the Relevant Quarter); and
- g) the time on the payment date at which payment is due.

19. AUCTION EXPENSE FEES

19.1. Notification

AEMO will set *auction expense fees* per Transaction for each Unit Category for each Relevant Quarter. The *auction expense fees* per Transaction for each Unit Category for a Relevant Quarter will be *published* on the AEMO Website 10 *business days* prior to the first *auction* for the Relevant Quarter.

19.2. Auction Expense Fees Calculation

Auction expense fees for each Transaction must be calculated using the following formula:

$$F(q, u, t) = \frac{E(q, t) \times N(qls, u, t) \times P(qls, u, t)}{\sum_u (N(qls, u, t) \times P(qls, u, t)) \times N(q, u, t)}$$

F(q,u,t)	<i>auction expense fee</i> for Unit Category "u" and Relevant Quarter "q" (\$ per Unit) and Transaction type "t";
t	Transaction type where: "a" = Allocation Fee "c" = Cancellation Fee
E(q, t)	AEMO's auction expenses associated or attributed to transaction type "t" after any reconciliation under clause 15.3 to be recovered via <i>auction expense fees</i> in Relevant Quarter "q" (\$);

P(q,s,u,t)	<p>Average <i>auction</i> purchase price for Units either allocated or cancelled for Unit Category “u” for Transaction type “t” for the last corresponding Relevant Quarter that has been settled “q,s”;</p> <p>If the number of Cancelled Units in Unit Category “u” for the last corresponding Relevant Quarter that has been settled “q,s” is zero, average <i>auction</i> purchase price for Units cancelled is set to the average purchase price for Units allocated for Unit Category “u”. That is $P(q,s,u,a)=P(q,s,u,c)$</p>
N(q,u,t)	<p>Where Transaction type “t” is the allocation of Units, the maximum number of Units and Offered Units expected to be allocated in Unit Category “u” in Relevant Quarter “q”; and</p> <p>Where Transaction type “t” is the cancellation of Cancelled Units, the number of Cancelled Units in Unit Category “u” expected in the Relevant Quarter “q”;</p>
N(q,s,u,t)	<p>Where Transaction type “t” is the allocation of Units, the maximum number of Units and Offered Units that were allocated in Unit Category “u” for the last corresponding Relevant Quarter that has been settled “q,s”; and</p> <p>Where Transaction type “t” is the cancellation of Cancelled Units, the number of Cancelled Units in Unit Category “u” for the last corresponding Relevant Quarter that has been settled “q,s”, provided that if the number of Cancelled Units in Unit Category “u” for the last corresponding Relevant Quarter that has been settled “q,s” is zero, this number is set to 1.</p>

Note: AEMO’s auction expenses associated or attributed to each transaction type and the number of Cancelled Units in Unit Category “u” expected in the Relevant Quarter “q” (N(q,u,t)) will be determined by AEMO from time to time in accordance with the *Rules* and approved by the *settlement residue committee*.

Note: The ‘corresponding Relevant Quarter’ refers to a quarter at the same time of the year as the Relevant Quarter. For example, if the Relevant Quarter is the first quarter for the year, the corresponding Relevant Quarter that has been settled would be the most recently settled “first quarter”.

Auction expense fees for each Auction Participant for the first *billing period*, or part of a *billing period*, within a Relevant Quarter must be calculated at the start of the Relevant Quarter using the following formula:

$$Fee(p, q, 1) = \sum_u (n(p, q, u, c) \times F(q, u, c)) + \sum_u ((n(p, q, u, a) \times F(q, u, a)) + Fee(p, q - 1, n)$$

Fee(p,q,w)	total fees (\$) due in Relevant Quarter “q” from participant “p” in <i>billing period</i> or part of a <i>billing period</i> “w”
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w	<i>Billing period</i> or part of a <i>billing period</i> . Where $w = 1$ is the first <i>billing period</i> , or part of a <i>billing period</i> , of a Relevant Quarter and $w = n$ is the last <i>billing period</i> , or part of a <i>billing period</i> , of a Relevant Quarter.
$n(p,q,u,t)$	Number of units allocated ($t= "a"$) or cancelled ($t= "c"$) for participant " p " in Unit Category " u " for Relevant Quarter " q "

Auction expense fees for each Auction Participant for each *billing period* within a Relevant Quarter, after the first *billing period*, must be calculated using the following formula:

$$Fee(p, q, w) = \text{Max}(0, Fee(p, q, w - 1) - \text{Billing Period Payment}(p, q, w - 1))$$

Billing Period Payment(p,q,w)	The amount paid (\$) to a participant " p " in a <i>billing period</i> or part of a <i>billing period</i> , " w " in a Relevant Quarter " q "
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The amount paid to a participant in a *billing period* or part of a *billing period*, except the last *billing period* in a Relevant Quarter, must be calculated using the following formula:

$$\text{Billing Period Payment}(p, q, w) = \text{Max}(0, \sum_u (\text{Residue}(q, u, w) \times (n(p, q, u, a) - n(p, q, u, c))) - Fee(p, q, w))$$

Residue(q,u,w)	The proportion of the net <i>settlements residue</i> attributable to the <i>directional interconnector</i> for Unit Category " u " in Relevant Quarter " q " in the <i>billing period</i> , or part of a <i>billing period</i> " w ", as per clause 4.1(c).
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The last *billing period*, or part of a *billing period*, in a Relevant Quarter will be used to make any minimum payments as required by the SRDA for that Unit, else the amount paid will be calculated as above.

19.3. Reconciliation

At the conclusion of each *financial year*, AEMO must reconcile the *auction expense fees* recovered from Auction Participants for that *financial year* against the costs incurred and adjust the *auction expense fees* for the next *financial year* to recover or return the difference.

20. DISTRIBUTION OF AMOUNTS TO NETWORK SERVICE PROVIDERS

20.1. General

- a) In accordance with the *Rules*, AEMO must distribute to the relevant *Network Service Provider* the auction clearing price for each Unit received by an eligible person in an auction in accordance with the *auction rules*; and any portion of the settlements residue allocated to the directional interconnector in respect of which a Unit has not been issued under a SRD agreement, in accordance with the principles in clause 3.6.5 in the *Rules* in relation to the allocation and distribution of settlements residue attributable to regulated interconnectors.
- b) In accordance with the *Rules*, the distribution of the auction clearing prices to *Network Service Providers* is subject to clauses 3.6.5(a)(4) and 3.6.5(a)(4A) of the *Rules* and the payment of

Cancellation Prices by AEMO to Auction Participants in accordance with SRDAs and *auction rules*.

- c) In accordance with the *Rules*, the distribution of settlement residue is subject to recovery of auction expense fees to the extent the settlements residue is distributed to *Network Service Providers*, as if the settlements residue was being distributed to eligible persons in accordance with the auction rules.

20.2. Distribution after a Default Event

If a Default Event occurs in relation to an Auction Participant and AEMO terminates the Auction Participation Agreement and SRDAs of that Auction Participant:

- a) AEMO will apply the close out and offset provisions of the Auction Participant Agreement and SRDAs relating to the Auction Participant in relation to which the Default Event occurred including applying Cash Security (if any) of that Auction Participant;
- b) to the extent that Cash Security is applied to the amount of the purchase price owing to AEMO by the Auction Participant to which the Default Event occurred, or the purchase price that would have been owing to AEMO by that Auction Participant under SRDAs had the SRDAs or Auction Participation Agreement not been terminated, AEMO will, subject to the *Rules*, distribute that amount to the relevant *Network Service Provider* in accordance with the *Rules*;
- c) AEMO will make available in the next auction any Allocated Units which that Auction Participant held immediately prior to the relevant agreement being terminated and distribute the auction clearing price for those units allocated in the auction to the relevant *Network Service Provider* in accordance with the *Rules*;
- d) in respect of any Allocated Units which that Auction Participant held immediately prior to the relevant agreement being terminated which are unable to be made available in another auction or which otherwise remain unallocated, AEMO will deduct the Allocation Fees and Cancellation Fees for all Transactions for that Auction Participant before distributing the settlements residue represented by those Units to the relevant *Network Service Provider* in accordance with the *Rules*;
- e) if AEMO is unable to distribute any amount owing to that Auction Participant in accordance with the *auction participant agreement* or an SRDA for that Auction Participant (for example, if a profit to the Auction Participant remains after applying the close out and offset provisions in the *auction participant agreement* and the Auction Participant is a company and has been wound up and deregistered by the time AEMO is required to make the payment), AEMO will distribute that amount to the relevant *Network Service Provider*.

SCHEDULE 1

AUCTION PARTICIPATION AGREEMENT

DETAILS

Date:

Parties:

1 Australian Energy Market Operator Limited ABN 94 072 010
327 of Level 22, 530 Collins Street, MELBOURNE VIC 3000
(AEMO)

and

2 [name]
ABN

of [address] (Auction Participant).

and¹⁰

3 [name]
ABN

of [address] (Agent).

Austraclear Account:

¹⁰ Delete the text starting with the 'and' if there is no Agent.

Address for Service of Notices:

To AEMO:
Level 22, 530 Collins Street, MELBOURNE VIC 3000
Facsimile: 03 9609 8080
Attention: Group Manager Settlements and Prudentials

cc:
Level 22, 530 Collins Street, MELBOURNE VIC 3000
Facsimile: 03 9609 8080
Attention: Group Manager Legal

To the Auction Participant:
[address]
Facsimile:
Attention: ¹¹

To the Agent:
[address]
Facsimile:
Attention:

¹¹ Delete the remainder of the text in this box from this point if there is no Agent.

OPERATIVE PROVISIONS:

1. DEFINITIONS AND INTERPRETATIONS

1.1. Definitions

The following definitions apply unless the context requires otherwise:

AEMO Clearing Account means Austraclear account NEMM30 or such other Austraclear account as is notified to the Auction Participant by *AEMO*.

AEMO Markets Portal has the meaning given to it in the *auction rules*.

Allocation Confirmation means a confirmation sent to the Auction Participant by *AEMO* in accordance with clause 14.1 of the *auction rules*.

Bid has the meaning given to it in the *auction rules*.

Bid File has the meaning given to it in the *auction rules*.

Cancellation Confirmation means a confirmation sent to the Auction Participant by *AEMO* in accordance with clause 14.2 of the *auction rules*.

Cancellation Price means, in respect of Offered Units, the aggregate cancellation price for the Relevant Quarter, as specified in the Relevant Cancellation Confirmation.

Cancelled Units means Offered Units that are cancelled in accordance with clause 6.2.

Disclosed Information means:

- a) the information contained or referred to in the AEMO Settlements Residue Auction Information Memorandum (any version); and
- b) any other information provided to the Auction Participant by or on behalf of *AEMO* in connection with an *auction*.

Distribution Instalment means, in respect of an SRDA, an instalment of SRDA Units to be distributed in accordance with clause 9.2.

GST has the meaning given to it in section 195-1 of the A New Tax System (Goods and Services) Tax Act 1999 (Cth).

Input Tax Credit has the meaning given to it in section 195-1 of the A New Tax System (Goods and Services) Tax Act 1999 (Cth).

Margin Call has the meaning given to it in the *auction rules*.

Offer has the meaning given to it in the *auction rules*.

Offer File has the meaning given to it in the *auction rules*.

Offered Units has the meaning given to it in the *auction rules*.

Previous Agreement means any *auction participant agreement* entered into between the Auction Participant and Agent (if applicable) and *AEMO* prior to the date of this Agreement.

Purchase Price means, in respect of an SRDA, the aggregate purchase price for the Relevant Quarter, as specified in the Relevant Allocation Confirmation.

Purchase Statement has the meaning given to it in the *auction rules*.

Reconciliation Statement is defined in clause 10.

Relevant Allocation Confirmation means, in respect of an SRDA, the Allocation Confirmation pursuant to which the SRDA is formed in accordance with clause 5.2.

Relevant Cancellation Confirmation means, in respect of Cancelled Units, the Cancellation Confirmation pursuant to which the Cancelled Units are cancelled in accordance with clause 6.2.

Relevant Quarter has the meaning given to it in the *auction rules*.

SRDA means a *settlements residue distribution agreement*. SRDA Units means, in respect of an SRDA, the Units specified in the Relevant Confirmation for that Relevant Quarter and, for the avoidance of doubt, may include Units in more than one Unit Category.

Taxable Supply has the meaning given to it in section 195-1 of the A New Tax System (Goods and Services) Tax Act 1999 (Cth).

Trading Position has the meaning given to it in the *auction rules*

Unit has the meaning given to it in the *auction rules*.

Unit Category has the meaning given to it in the *auction rules*.

Any word or phrase *in this style* has the same meaning given to that word or phrase in the National Electricity Rules.

1.2. Interpretation

Headings are for convenience only and do not affect interpretation. The following rules of interpretation apply unless the context requires otherwise.

- a) The singular includes the plural and conversely.
- b) A gender includes all genders.
- c) If a word or phrase is defined, its other grammatical forms have a corresponding meaning.
- d) A reference to a person, corporation, trust, partnership, unincorporated body or other entity includes any of them.
- e) A reference to a clause or Schedule is a reference to a clause of or a schedule to this Agreement.
- f) A reference to an agreement or document (including a reference to this Agreement) is to the agreement or document as amended, varied, supplemented, novated or replaced, except to the extent prohibited by this Agreement or that other agreement or document.
- g) A reference to a person includes the person's successors, permitted substitutes and permitted assigns (and, where applicable, the person's legal personal representatives).
- h) A reference to legislation or to a provision of legislation includes a modification or re-enactment of it, a legislative provision substituted for it and a regulation or statutory instrument issued under it.
- i) A reference to \$ or dollars is to Australian currency.
- j) A reference to a time is to *Eastern Standard Time*.
- k) The word "includes" or "including" or "such as" are not words of limitation, and when introducing an example, do not limit the meaning of the words to which the example relates to examples of a similar kind.

2. PREVIOUS AGREEMENT

The Parties agree that:

- a) any Previous Agreement is terminated on and from the date of this Agreement;
- b) subject to subclause (c), any SRDAs entered into pursuant to a Previous Agreement for SRDA Units allocated to the Auction Participant before the date of this Agreement (the "Existing SRDAs") continue notwithstanding the termination of the Previous Agreement;
- c) the terms of SRDAs entered into pursuant to a Previous Agreement for any SRDA Units allocated to the Auction Participant before the date of this Agreement (each an "Existing SRDA") are amended, effective from the date on which the Existing SRDA was entered into pursuant to the Previous Agreement, to the terms of the SRDA that would have been entered into had the SDRA Units been allocated to the Auction Participant in accordance with the terms of this Agreement;
- d) notwithstanding any term of the Previous Agreement, the rights and obligations of the parties in relation to *auctions* and SRDA Units, including the right of a party to recover an amount, or the obligation of a party to pay an amount that become payable prior to the date of termination of the Previous Agreement, and any rights of a party that otherwise relate to, or may arise in the future from, any breach of nonobservance of obligations under the Previous Agreement or an Existing SRDA are subject to the terms of this Agreement and the Existing SRDAs as amended pursuant to paragraph (c).

3. TERM

This Agreement commences on the date specified in the Details and continues until it is terminated in accordance with clause 16.

4. AUCTIONS

4.1. General

The Auction Participant:

- a) acknowledges that *AEMO* will conduct the *auctions* in accordance with the *auction rules*; and
- b) agrees that it will participate in the *auctions* in accordance with the *auction rules*, and on the terms and conditions set out in this Agreement.

5. SETTLEMENTS RESIDUE DISTRIBUTION AGREEMENTS

5.1. Eligibility

AEMO will only enter into an SRDA with *eligible persons* who meet and continue to satisfy the criteria detailed in the *Rules*, or clause 3.2 of the *auction rules*.

5.2. Formation

The parties agree that if:

- a) the Auction Participant submits a Bid File to *AEMO*; and
- b) *AEMO* allocates Units to the Auction Participant in accordance with the *auction rules* and sends a Confirmation to the Auction Participant,

the parties will have entered into an SRDA in respect of each Relevant Quarter for which the Auction Participant has been allocated Units, pursuant to which *AEMO* unconditionally agrees to grant to the Auction Participant, and the Auction Participant agrees to acquire, the SRDA Units for the Purchase Price on the terms and conditions set out in this Agreement.

5.3. Term of SRDA

Each SRDA commences on the date of the Relevant Confirmation and, subject to clause 16, continues until 16 *business days* after receipt by the Auction Participant of the Reconciliation Statement to be provided by AEMO under clause 10.

5.4. Separate Agreements

Each SRDA is a separate agreement and shall be subject to the terms and conditions set out in this Agreement.

6. OFFERING UNITS

6.1. Right to offer Units

An Auction Participant may offer any or all SRDA Units for a Relevant Quarter in future auctions for the Relevant Quarter in accordance with the SRDA and the *auction rules*.

6.2. Cancellation of Offered Units

If an Auction Participant offers SRDA Units in an auction in accordance with clause 6.1 and the SRDA Units are allocated in the auction, AEMO must:

- a) pay the Auction Participant the Cancellation Price for those SRDA Units in accordance with the SRDA and the *auction rules*; and
- b) immediately cancel the SRDA Units.

For the avoidance of doubt, the cancellation of a SRDA Unit by AEMO does not terminate the underlying SRDA between AEMO and the Auction Participant under which that Cancelled Unit was allocated, and does not affect the obligation of the Auction Participant to pay AEMO the Purchase Price for the Cancelled Unit in accordance with the *auction rules* and the SRDA under which that Cancelled Unit was allocated to the Auction Participant.

7. PURCHASE PRICE

7.1. Payment

For each SRDA, the Auction Participant must pay the Purchase Price by the payment date and time specified in the Purchase Statement by authorising the transfer of funds in dollars to the AEMO Clearing Account.

7.2. Default Interest

The Auction Participant must pay interest at the *bank bill rate* calculated as simple interest on a daily basis from the date on which payment of the Purchase Price was due in accordance with clause 7.1 up to and including the date of payment.

8. CANCELLATION PRICE

8.1. Payment

For each Cancelled Unit, subject to payment of the Purchase Price by the Auction Participant to AEMO, AEMO must pay the Cancellation Price by the payment date and time specified in the Purchase Statement by authorising the transfer of funds in dollars to the Austraclear Account

specified in the Details or such other Austraclear account notified to *AEMO* by the Auction Participant.

9. DISTRIBUTION OF UNITS

9.1. Default Interest

Except for Cancelled Units under the SRDA and subject to Allocation Fees and Cancellation Fees, for each SRDA, the Auction Participant is entitled to receive the greater of:

- a) \$10 per SRDA Unit; and
- b) the amount that is represented by the SRDA Units

For the avoidance of doubt, the payment by *AEMO* to the Auction Participant of any amount under clause 3.12.2 of the *Rules*, or in accordance with an assessment made by an independent expert under clause 3.12.3 of the *Rules* following a referral to that independent expert under clause 3.12.2(l) or 3.12.2(m) of the *Rules*, is not to be taken as a payment towards the amount referred to in paragraph (a).

9.2. Distribution Instalments

Subject to Allocation Fees and Cancellation Fees, *AEMO* must distribute the *settlements residue* represented by SRDA Units (excluding Cancelled Units) in instalments as follows:

- a) a Distribution Instalment must be made in respect of each *billing period* or part of a *billing period* falling within the Relevant Quarter to which the SRDA Unit relates;
- b) the Distribution Instalment must be included on the statements provided by *AEMO* in respect of the relevant *billing period* under clauses 3.15.14 and 3.15.15 of the *Rules*; and
- c) each Distribution Instalment must be made on the date on which payments in respect of the relevant *billing period* are to be made by *AEMO* under clause 3.15.17 of the *Rules*,

provided that *AEMO* is not obliged to make any Distribution Instalments under an SRDA unless the Auction Participant has paid the Purchase Price for that SRDA.

9.3. Calculation of Instalments

For each SRDA Unit, the amount of *settlements residue* for each Distribution Instalment is based on the *settlements residue* for the relevant Unit Category in respect of the relevant *billing period* or part of a *billing period*.

9.4. Auction Expense Fees

- a) The total Allocation Fees and Cancellation Fees for all Transactions for an Auction Participant in relation to Units for a Relevant Quarter must be deducted from the total of the first Distribution Instalments for that Relevant Quarter provided that, if the total Distribution Instalments would be a negative amount, no distribution will be made and the remaining part of the total Allocation Fees and Cancellation Fees for all Transactions will be deducted from the total of the next Distribution Instalments or, if necessary, the total of the next succeeding Distribution Instalments until the adjustment has been fully made or all of the Distribution Instalments have been made.
- b) If the total Allocation Fees and Cancellation Fees for all Transactions for an Auction Participant in relation to Units for a Relevant Quarter have not been fully deducted after all the Distribution Instalments for the Relevant Quarter have been made in accordance with clause 9.4(a), the balance of the total Allocation Fees and Cancellation Fees will be added to the total Allocation Fees and Cancellation Fees for Transactions for the Auction Participant for the next Relevant

Quarter for which the Auction Participant has been allocated Units to be deducted from the Distribution Instalments for that Relevant Quarter.

9.5. Adjustment to Settlements Residue

If any adjustment is made to the amount of the *settlements residue* for a Unit Category in respect of a *billing period* covered by an SRDA, AEMO must, subject to clause 9.1, pass on that adjustment to the Auction Participant as follows:

- a) AEMO must issue to the Auction Participant such revised statements and other statements as may be required under clause 3.15.19 of the *Rules* specifying the adjustment and interest calculated in accordance with clause 3.15.19 of the *Rules*; and
- b) AEMO or the Auction Participant, as the case may be, must pay the adjustment and interest payable in respect of the adjustment in accordance with clause 3.15.20 of the *Rules*.

9.6. Reconciliation Adjustment

Any adjustment set out in a Reconciliation Statement must be paid on a date specified by AEMO, between 10 and 15 *business days* from the issue of the Reconciliation Statement that coincides with a payment time stated in a *final statement* issued under clause 3.15.15 of the *Rules*.

9.7. Payment Procedure

All Distribution Instalment payments and adjustments must be effected through the Austraclear system as follows:

- a) payments by AEMO must be made by authorising the transfer of funds in dollars to the Austraclear Account specified in the Details or such other Austraclear account notified to AEMO by the Auction Participant; and
- b) payments by the Auction Participant must be made by authorising the transfer of funds in dollars to the AEMO Clearing Account.

9.8. Default Interest

- a) Subject to paragraph (b), if any amount specified in clause 9 is not paid on the due date, AEMO or the Auction Participant, as the case may be, must pay interest at the *bank bill rate* calculated as simple interest on a daily basis from the date the amount was due up to and including the date of payment.
- b) The parties agree that interest is not payable on an amount under this clause 9.8 if interest is payable on that amount under clause 3.15.25 of the *Rules*.

10. RECONCILIATION STATEMENT

For each SRDA, AEMO must, within 10 *business days* after the last Distribution Instalment has been made, provide the Auction Participant with a Reconciliation Statement via the AEMO Markets Portal, setting out:

- a) the total amount that has been distributed to the Auction Participant under the SRDA;
- b) the amount to which the Auction Participant is entitled under the SRDA under clause 9.1; and
- c) any adjustments required to be made to ensure the requirements of clause 9.1 have been satisfied.

11. GOODS AND SERVICES TAX

11.1. GST to be added to amounts payable

- a) The parties acknowledge that:
 - i) all amounts payable under this Agreement including the Purchase Price, Cancellation Price and *auction expense fees*, are expressed to be exclusive of GST; and
 - ii) any Bid or Offer is made on a GST exclusive basis.
- b) If GST is payable on a Taxable Supply made by *AEMO* to an Auction Participant, the amount payable for that Taxable Supply will be the amount expressed in this Agreement plus GST.

11.2. Impact of GST on the Calculation of Amounts Payable

Without limiting clause 11.1:

- a) If an amount payable under this Agreement is calculated by reference to or relates to a cost, expense, liability or similar amount (Liability) incurred by a party, the Liability shall be reduced by the amount of any Input Tax Credit to which that party is entitled in respect of that Liability.
- b) If an amount payable under this Agreement is calculated by reference to or relates to price, value, sales, revenue or a similar amount (Revenue), the Revenue shall be exclusive of GST.
- c) If *AEMO* becomes liable to pay GST on a Taxable Supply to the Auction Participant prior to the time that it is entitled to receive in full the consideration for that Taxable Supply, the Auction Participant will, at the request of *AEMO*, pay to *AEMO* an amount equal to the GST payable on the Taxable Supply at least 7 days before the time that *AEMO* is liable to pay the GST.

12. DISPUTE RESOLUTION

The dispute resolution procedures set out in clause 8.2 of the *Rules* will apply to any dispute arising in relation to this Agreement, a SRDA or otherwise in relation to any *auction*.

13. AUCTION PARTICIPANT ACKNOWLEDGEMENTS

13.1. General

The Auction Participant acknowledges, in respect of this Agreement and each SRDA, that neither *AEMO*, nor any person acting on behalf of or associated with *AEMO*, makes any representation, gives any advice, or gives any warranty or undertaking of any kind in respect of this Agreement, an SRDA, the Units, or the *auctions* or otherwise in relation to or in connection with this Agreement, or any transaction or arrangement contemplated under this Agreement.

13.2. Acknowledgements

Without limiting the generality of clause 13.1, the Auction Participant acknowledges, in respect of this Agreement and each SRDA, the following:

- a) each SRDA is speculative and a high risk investment, and it is not possible to predict the amount of *settlements residue* the subject of a SRDA accurately;
- b) the Disclosed Information does not constitute an invitation, offer or recommendation by or on behalf of *AEMO*;
- c) the purpose of the Disclosed Information is to provide the Auction Participant with information to assist it in making decisions regarding bidding for Units in the *auctions*;

- d) the Disclosed Information does not purport to contain all of the information that the Auction Participant requires for the purpose of making decisions regarding bidding for Units in the *auctions* or offering Units in *auctions*, and does not purport to have been prepared having regard to the Auction Participant's business objectives, financial situation or particular needs;
- e) neither *AEMO*, nor any person acting on behalf of or associated with *AEMO*, makes any representation or warranty either express or implied as to the accuracy, reliability or completeness of the Disclosed Information;
- f) the Auction Participant will not rely in any way on the Disclosed Information or on the skill or judgement of *AEMO* or any person acting on behalf of or associated with *AEMO* and will rely absolutely on its own opinion and professional advice based on its own independent analysis, assessment, investigation and appraisal in making decisions regarding bidding for Units or offering Units in the *auctions*; and
- g) the Auction Participant will carry out all investigations it considers relevant and will examine and acquaint itself concerning:
 - i) the contents, correctness and sufficiency of the Disclosed Information; and
 - ii) any other information which it considers relevant to the risks, contingencies and other circumstances which could affect the *settlements residue* and the Auction Participant's decisions regarding bidding for Units or offering Units in the *auctions*.

13.3. Waiver

To the maximum extent permitted by law, the Auction Participant waives any right that it has (whether at the date of this Agreement or a SRDA or otherwise) to bring any action or to make any claim against *AEMO* or any person acting on behalf of or associated with *AEMO* arising (directly or indirectly) out of any alleged negligent act or omission, misrepresentation, or conduct which is likely to mislead, deceive or confuse on the part of *AEMO* or any person acting on behalf of or associated with *AEMO* in providing the Disclosed Information or otherwise in relation to the *auctions*.

14. LIABILITY

14.1. Implied Warranties

To the maximum extent permitted by law and except as otherwise provided in this Agreement, all terms, conditions, warranties or statements (whether express, implied, written, oral, collateral, statutory or otherwise) which would be implied or incorporated into this Agreement or a SRDA as having been given by *AEMO* in favour of the Auction Participant are excluded and *AEMO* disclaims all liability in relation to them.

14.2. Limitation of Liability

Despite any other provision of this Agreement and except as otherwise provided by law:

- a) *AEMO* is not liable to make any payment (whether by way of damages or otherwise) for any breach of any representation, warranty, condition or obligation unless a claim is made in writing by the Auction Participant (setting out in reasonable detail the nature of the claim and the damages sought) on or before the date that is 6 months after the end of the Relevant Quarter covered by the SRDA to which the claim relates; and
- b) *AEMO* will not be liable for an amount for breach of representation, warranty, condition or obligation which would exceed the aggregate amount of the Purchase Price that has been paid by the Auction Participant in respect of the SRDA to which the claim relates less the aggregate

amount of the Cancellation Price that has been paid to the Auction Participant in respect of the SRDA to which the claim relates.

14.3. Notification

If the Auction Participant becomes aware of a claim or potential claim against AEMO with respect to any breach of any representation, warranty, condition or obligation, the Auction Participant must notify AEMO in writing within 5 *business days* after becoming so aware.

14.4. Statutory Immunity

For the avoidance of doubt and despite any other provision of this Agreement, nothing in this Agreement, SRDA, or the *auction rules* varies or excludes the operation of section 119 and 120A of the *National Electricity Law*.

14.5. Agents Liability¹²

Where an Agent is a party to this Agreement, the Agent will be jointly and severally liable with the Auction Participant in relation to the Auction Participant's obligations under this Agreement and any SRDA entered into by the Auction Participant.

15. AUCTION COSTS

The Auction Participant will be responsible for all costs and expenses incurred by it in connection with the *auctions*. AEMO will not be liable on any grounds whatsoever for costs or expenses incurred by the Auction Participant in the conduct of due diligence in relation to the Units, making decisions regarding bidding for Units or offering Units in the *auctions* or in any other way in connection with the *auctions*.

16. TERMINATION

16.1. National Electricity Market

This Agreement and each SRDA will terminate immediately if the *National Electricity Market* permanently ceases to operate. For the avoidance of doubt, this clause 16.1 does not come into effect by reason of AEMO declaring the *spot market* to be suspended for any of the reasons set out in clause 3.14.3 of the *Rules*.

16.2. Continuing Eligibility

AEMO may terminate this Agreement and any or all of the SRDAs between AEMO and the Auction Participant by notice to the Auction Participant if:

- a) the Auction Participant ceases to satisfy the criteria specified in clause 3.2 of the *auction rules*;
- b) the Auction Participant does not demonstrate to AEMO's reasonable satisfaction that it continues to satisfy the criteria specified in clause 3.2 of the *auction rules*;
- c) the Auction Participant fails to provide AEMO with the evidence sought by AEMO under clause 3.4 of the *auction rules* by the date and time requested by AEMO;
- d) the Auction Participant breaches any condition or restriction in respect of the Auction Participant's participation in the *auctions* that is imposed on the Auction Participant pursuant to the *Rules*.

¹² This clause can be deleted if there is no Agent.

16.3. Breach

- a) If a party commits a material breach of this Agreement that relates to a particular SRDA, and fails to remedy that breach within 3 *business days* after being required in writing to do so, the other party may terminate the SRDA to which the breach relates by further notice to the other party.
- b) If the Auction Participant commits a material breach of this Agreement that does not relate to a particular SRDA, and fails to remedy that breach within 3 *business days* after being required in writing to do so, *AEMO* may terminate this Agreement and any or all of the SRDAs between *AEMO* and the Auction Participant by further notice to the Auction Participant.
- c) If an Auction Participant fails to comply with a Margin Call in accordance with clause 7.4 of the *auction rules*, by the appointed time on the due date *AEMO* may terminate this Agreement and any or all of the SRDAs between *AEMO* and the Auction Participant by further notice to the Auction Participant.

d) If:

- i) *AEMO* terminates a SRDA under clause 16.3(a); and
- ii) *AEMO* and the Auction Participant are parties to SRDAs in respect of which, at the date the SRDA is terminated under clause 16.3(a), the Purchase Price has not been paid,

AEMO may, by notice to the Auction Participant, require the Auction Participant to pay the Purchase Price under each such SRDA within 35 *business days* after receiving the notice. If the Auction Participant does not comply with the notice *AEMO* may terminate this Agreement and each such SRDA by further notice to the Auction Participant.

Note: If the Auction Participant does comply with the notice, payment of the Cancellation Price and distribution of the *settlements residue* represented by SRDA Units (excluding Cancelled Units) under each such SRDA will not occur on payment of the Purchase Price but will only occur during the Relevant Quarter in accordance with the *Rules* and the applicable SRDA.

e) If:

- i) *AEMO* has served two notices on the Auction Participant under clause 16.3(a) or clause 16.3(b), or has served one notice on the Auction Participant under each of clause 16.3(a) and clause 16.3(b); and
- ii) the Auction Participant commits a further material breach of this Agreement,

AEMO may, even if the previous material breaches were remedied within 3 *business days* after the Auction Participant was required in writing to do so, terminate this Agreement and any or all of the SRDAs between *AEMO* and the Auction Participant by notice to the Auction Participant.

- f) For the purposes of clause 16, a failure by the Auction Participant to pay the Purchase Price for a SRDA on the due date is a material breach of this Agreement that relates to that SRDA.

16.4. Insolvency

Any party may terminate this Agreement and any or all of the SRDAs between the parties by notice to each other party if:

- a) the other party stops or suspends or threatens to stop or suspend payment of its debts;
- b) the other party is insolvent within the meaning of section 95A of the Corporations Act 2001 (Cth);

- c) the other party is required to be presumed insolvent by reason of section 459C(2) of the Corporations Act 2001 (Cth);
- d) the other party fails to comply with a statutory demand (within the meaning of section 459F(1) of the Corporations Act 2001 (Cth));
- e) an administrator is appointed over all or any of the assets or undertaking of the other party or any step preliminary to the appointment of such an administrator is taken;
- f) a controller within the meaning of section 9 of the Corporations Act 2001 (Cth), or similar officer is appointed to all or any of the assets or undertaking of the other party; or
- g) an application or order is made, proceedings are commenced, a resolution is passed or proposed in a notice of meeting or an application to a court or other steps are taken for the winding up or dissolution of the other party or for the other party to enter an arrangement, compromise or composition with or assignment for the benefit of its creditors, a class of them or any of them.

16.5. Settlements Residue Calculation

The Auction Participant may, by notice to AEMO, terminate an SRDA if there is a change in the way in which the *settlements residue* is calculated during the term of the SRDA that affects the calculation of *settlements residue* the subject of the SRDA Units. For the avoidance of doubt, this clause does not apply to changes that commence operation before the start of the term of the SRDA or changes that are made before or published publicly before the start of the term of the SRDA but only commence operation during the term of the SRDA.

16.6. Purchase Price Adjustment

If an SRDA is terminated under clause 16.1 or by the Auction Participant under clause 16.3(a) or clause 16.5, the Auction Participant is entitled to a refund of a proportion of the Purchase Price equal to the proportion of the number of *billing periods* for which Distribution Instalments have not been made to the total number of *billing periods* for the Relevant Quarter.

16.7. Adjustments to Settlements Residue

AEMO is not required to pass on an adjustment under clause 9.5 in respect of an SRDA that has been terminated under clause 16.2, 16.3 or 16.4.

16.8. Continuing Rights

The termination or expiration of this Agreement or an SRDA does not affect:

- a) subject to clause 17, the rights of a party to recover an amount, or the obligation of a party to pay an amount, that became payable prior to the date of termination or expiration;
- b) any rights of a party that otherwise relate to, or may arise in the future from, any breach or nonobservance of obligations under this Agreement or the SRDA; or
- c) the operation of clauses 9.5, 9.6, 9.7, 9.8, 10, 11, 12, 13, 14, 15, 16 or 17.

16.9. Consequences of termination

If AEMO gives a notice to terminate this Agreement and all SRDAs in respect of an Auction Participant where the event of default relates to a failure by the Auction Participant to pay the Purchase Price for a SRDA on the due date or failure to comply with a Margin Call in accordance with clause 7.4 of the *auction rules* by the appointed time on the due date, then AEMO may do any

or all of the following in any order and at such times as AEMO determines and without the need for any prior notice to or consent of the Auction Participant or any other person:

- a) publish a statement on its website that the notice has been given, and apply the close out and offset provisions under clause 17 to any Cancelled Units of the Auction Participant;
- b) withhold the payment of any amount otherwise due by AEMO to that Auction Participant under this Agreement or an SRDA until the relevant liabilities of that Auction Participant have been finally determined;
- c) terminate the Auction Participant's authority to participate in auctions effective from a time determined by AEMO in its absolute discretion;
- d) make available in the next auction any Allocated Units which that Auction Participant held immediately prior to the relevant agreement being terminated;
- e) in respect of any Allocated Units which that Auction Participant held immediately prior to the relevant agreement being terminated which are unable to be made available in another auction or which otherwise remain unallocated, subject to deduction of Allocation Fees and Cancellation Fees for all Transactions for the Auction Participant, distribute the settlements residue represented by those Units to the relevant *Network Service Provider* in accordance with the *Rules*.

17. CLOSE OUT AND OFFSET

17.1. General provisions for application of close out and offset

- a) In this clause 17, the Defaulting Participant is the Auction Participant in relation to which the Default Event occurred.
- b) At the time of giving a termination notice to a Defaulting Participant under clause 16, or as soon as reasonably practicable afterwards, AEMO must give a Close Out Notice to the Defaulting Participant that close out and offset will apply to that Defaulting Participant.
- c) The Close Out Notice must set out the calculations and amounts determined in accordance with clause 17.2.

17.2. Defaulting Participant Profit and Loss

The close out and offset arrangements in this clause apply to, and are to be determined for Cancelled Units in respect of each SRDA to which the Defaulting Participant is a party as at the date of the Default Event (each a "Relevant SRDA") as follows:

- a) Calculate the Defaulting Participant Profit for each Unit Category for each Relevant SRDA;
- b) Defaulting Participant Profit for a Unit Category for a Relevant SRDA is equal to the Trading Position for the Defaulting Participant in that Unit Category and for the Relevant Quarter of the Relevant SRDA where the Trading Position is positive, as calculated in clause 7.3 of the *auction rules*;
- c) Calculate the Defaulting Participant Loss for each Unit Category for each Relevant SRDA;
- d) Defaulting Participant Loss for a Unit Category for a Relevant SRDA is equal to the absolute value of the Trading Position for the Defaulting Participant in that Unit Category for the Relevant Quarter of the Relevant SRDA where the Trading Position is negative, as calculated in clause 7.3 of the *auction rules*;
- e) Add together the Defaulting Participant Loss for all Unit Categories for all Relevant SRDAs (Total Defaulting Participant Loss);

- f) At, or as soon as practicable after, the time of the Default Event apply or set off any Cash Security (if any) held in respect of the Auction Participant to the Total Defaulting Participant Loss;
- g) To the extent that Cash Security is not sufficient to set off all of the Total Defaulting Participant Loss, the balance of the Total Defaulting Participant Loss must be set off against the Defaulting Participant Profit for all Unit Categories under the Relevant SRDA with a Defaulting Participant Profit for the Relevant Quarter closest in time to the time of the Default Event;
- h) If the Defaulting Participant Profit for all Unit Categories under the Relevant SRDA for the Relevant Quarter closest in time to the time of the Default Event is not sufficient to set off the balance of the Total Defaulting Participant Loss, the remaining part of the Total Defaulting Participant Loss will be set off from the Defaulting Participant Profit for all Unit Categories under the next Relevant SRDA with a Defaulting Participant Profit and, if necessary, the Defaulting Participant Profit of the next succeeding Relevant SRDA with a Defaulting Participant Profit until the full amount of the Total Defaulting Participant Loss has been fully set off or all of the Relevant SRDA's with a Defaulting Participant Profit have been settled;
- i) To the extent that a Defaulting Participant Profit for a Unit Category for a Relevant SRDA remains after the full amount of the Total Defaulting Participant Loss has been set off under subclauses (f), (g) and (h), AEMO must pay the Defaulting Participant Profit to the Defaulting Participant at the time at which the Cancellation Price under the Relevant SRDA under which the Defaulting Participant Profit arises would have been payable had the Default Event not occurred; and
- j) For each Relevant SRDA:
 - i) the obligation of the Defaulting Participant to pay the Purchase Price is terminated; and
 - ii) the obligation of AEMO to pay the Cancellation Price is terminated and replaced by the obligation to pay the Defaulting Participant the remaining Defaulting Participant Profit (if any) for a Unit Category in accordance with clause 17.2(i).

18. GENERAL

18.1. Notices

Any notice, demand, consent or other communication (Notice) required by this Agreement:

- a) must be in writing and signed by a person duly authorised by the sender;
- b) must be delivered to the intended recipient by prepaid post (if posted to an address in another country, by registered airmail) or by hand or fax to the address or fax number specified in the Details;
- c) will be taken to be duly given or made:
 - i) in the case of delivery in person, when delivered;
 - ii) in the case of delivery by post, two *business days* after the date of posting (if posted to an address in the same country) or seven *business days* after the date of posting (if posted to an address in another country); and
 - iii) in the case of fax, on receipt by the sender of a transmission control report from the despatching machine showing the relevant number of pages and the correct destination fax machine number or name of recipient and indicating that the transmission has been made without error,

but if the result is that a Notice would be taken to be given or made on a day that is not a *business day* in the place to which the Notice is sent or is later than 4.00pm (local time) it will be

taken to have been duly given or made at the commencement of business on the next *business day* in that place.

18.2. Entire Agreement

This Agreement and each SRDA entered into in accordance with this Agreement contains the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements and understandings between the parties in connection with it.

18.3. Amendment

An amendment to this Agreement or an SRDA will be effective only if made in writing and executed by all parties.

18.4. Assignment

- a) AEMO may assign its rights and obligations under this Agreement and any SRDA to any person without the other parties' consent.
- b) Neither the Auction Participant, nor the Agent, is permitted to assign or otherwise transfer their respective rights and obligations under this Agreement and any SRDA without AEMO's consent.

18.5. No Waiver

No failure, or delay, in exercising any right, power or remedy by a party operates as a waiver. A single or partial exercise of any right, power or remedy does not preclude any other or further exercise of that or any other right, power or remedy. A waiver is not valid or binding on the party granting that waiver unless made in writing.

18.6. Further Assurances

Each party agrees to do all things and execute all deeds, instruments, transfers or other documents as may be necessary or desirable to give full effect to this Agreement and the transactions contemplated by it.

18.7. No Merger

The rights and obligations of the parties will not merge on the completion of any transaction contemplated by this Agreement. They will survive the execution and delivery of any assignment or other document entered into for the purpose of implementing a transaction.

18.8. Costs and Stamp Duty

Each party must bear its own costs arising out of the negotiation, preparation and execution of this Agreement. All stamp duty (including fines, penalties and interest) that may be payable on or in connection with this Agreement and any instrument executed under this Agreement must be borne by the Auction Participant.

18.9. Governing Law and Jurisdiction

This Agreement and each SRDA is governed by the laws of Victoria. Each party submits to the nonexclusive jurisdiction of courts exercising jurisdiction there in connection with matters concerning this Agreement and each SRDA.

18.10. Counterparts

This Agreement may consist of a number of copies, each signed by one or more parties to this Agreement. If so, the signed copies make up one document and the date of this Agreement will be the date on which the last counterpart was signed.

EXECUTED AS AN AGREEMENT

SIGNED for and on behalf of AEMO in the presence of:

Signature (Witness)

Signature

Print Name (Witness)

Print
Name

Date

Date

SIGNED for and on behalf of the AUCTION PARTICIPANT in the presence of:

Signature (Witness)

Signature

Print Name (Witness)

Print
Name

Date

Date

SIGNED for and on behalf of the AGENT in the presence of:¹³

Signature (Witness)

Signature

Print Name (Witness)

Print
Name

Date

Date

¹³ Delete this whole section if there is no Agent.

SCHEDULE 2

LINEAR PROGRAMMING PROBLEM

Let the following be defined as:

i	index for products ¹⁴
b	index for bids
o	index for offers
p_b	price of bid b
$q_{b,i}$	quantity of bid b for units on product i
q^{max}_b	max quantity bid on any product for bid b
r_o	offer price for offer o
u_o	quantity of offer o
l_o	product that offer o is for

The decision variables in the LP are defined as follows:

x_b	the quantity of bid b cleared in the SRA. This is the quantity on the product for which the highest quantity is sought in the bid. If it is a grouped ¹⁵ bid, all other products cleared can be imputed by applying the ratio of the quantity to the maximum quantity.
y_o	the unused, or uncleared quantity of offer o
$x_b, y_o \geq 0$.	

The LP is defined as:

$$\text{Maximise, Market Value} = \sum_b p_b x_b + \sum_o r_o y_o \quad (1)$$

Subject to,

$$\sum_b \frac{q_{b,i}}{q^{max}_b} x_b + \sum_{\substack{o \\ \text{where } l_o=i}} y_o \leq \sum_{\substack{o \\ \text{where } l_o=i}} u_o \quad \forall i \quad (2)$$

$$x_b \leq q^{max}_b \quad \forall b \quad (3)$$

$$y_o \leq u_o \quad \forall o \quad (4)$$

- The second term in objective function (1) represents the value of uncleared units at the offer price. The first term represents the value realised in the auction. The sum of the two terms is referred to as the market value;
- Constraint (2) ensures that the LP apportions units appropriately across the products for a grouped bid;

¹⁴ 'product' refers to units on a *directional interconnector* with respect to a *Quarter*

¹⁵ 'grouped bid' in the LP description is the term used to represent Linked Category Bids and Linked Quarter Bids (or any combination of Category Bids and Quarter Bids)

- Constraint (3) means that a bid cleared cannot exceed the max quantity bid on any product for bid b (bid block size);
- Constraint (4) means that an offer cleared cannot exceed the offer quantity;

Associated with each constraint is a shadow price (the dual or the marginal value of the constraint) which indicates the impact on the objective function of a unit change to the right hand side parameter of the constraint. For example, the bid block size constraint shadow price would indicate the increase in market value were the bid block to be increased. The shadow price is zero if the resource (bid volume in this case) has not reached its limit. Stated differently, the shadow price of a constraint is an imputed market “price” (an opportunity value) that could be realised were it possible to marginally relieve the constraint.

Interpretation of Market Clearing Prices: Dual of Linear Program

Duality theory allows an LP to be re-expressed in terms of constraint shadow prices in an equivalent form. In this case, there are two constraints on product and bid volume. The LP problem can be re-expressed in terms of the shadow prices (or “duals”, or marginal value) on the constraints:

ω_i the dual associated with the interconnector constraint (2)

λ_b the dual associated with the bid block size constraint for bid b (3)

α_o the dual associated with the offer size constraint for offer o (4)

$\omega_i, \lambda_b, \alpha_o \geq 0$.

The equivalent dual LP may be expressed as,

$$\text{Minimise } \sum_i \left(\sum_{\text{where } l_o=i}^o u_o \right) \omega_i + \sum_b q_b^{\max} \lambda_b + \sum_o u_o \alpha_o \quad (5)$$

$$\sum_b \frac{q_{b,i}}{q_b^{\max}} \omega_i + \lambda_b \geq p_b \quad \forall b \quad (6)$$

$$\sum_{\text{where } l_o=i}^i \omega_i + \alpha_o \geq r_o \quad \forall o \quad (7)$$

The dual LP states in general terms the total rents should be minimised subject to the prices being consistent with the bids that have been cleared.

