

SETTLEMENTS RESIDUE AUCTION RULES – SECONDARY TRADING

DRAFT REPORT AND DETERMINATION

Published: **November 2018**





NOTICE OF SECOND STAGE CONSULTATION – SETTLEMENTS RESIDUE AUCTION RULES – SECONDARY TRADING

National Electricity Rules – Rule 8.9

Date of Notice: 29 November 2018

This notice informs all Electricity Market Registered Participants, Intending Participants and interested parties that AEMO is commencing the second stage of its consultation on amendments to the Settlement Residue Auction Rules (Auction Rules) to implement secondary trading. This includes amendments to the Auction Participant Agreement and Settlements Residue Distribution Agreement.

This consultation is being conducted under clause 3.18 of the National Electricity Rules (NER), in accordance with the Rules consultation requirements detailed in rule 8.9 of the NER.

Invitation to make Submissions

AEMO invites written submissions on this Draft Report and Determination (Draft Report).

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so.

Consulted Persons should note that material identified as confidential may be given less weight in the decision-making process than material that is published.

Closing Date and Time

Submissions in response to this Notice of Second Stage of Rules Consultation should be sent by email to nicole.dodd@aemo.com.au, to reach AEMO by 5.00pm AEST on 14 December 2018.

All submissions must be forwarded in electronic format (both pdf and Word). Please send any queries about this consultation to the same email address.

Submissions received after the closing date and time will not be valid, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Publication

All submissions will be published on AEMO's website, other than confidential content.

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EXECUTIVE SUMMARY

The publication of this Draft Report and Determination (Draft Report) commences the second stage of the Rules consultation process conducted by AEMO to consider proposed amendments to the Settlements Residue Auction Rules (Auction Rules) and associated agreements to implement secondary trading under the National Electricity Rules (NER).

AEMO published a Consultation Paper to commence the first stage of consultation on 21 September 2018. This followed the Australian Energy Market Commission's (AEMC) final determination to change the NER to enable AEMO to provide a platform for secondary trading of settlements residue distribution units (units). Implementation of secondary trading will allow participants to offer units that they have previously purchased in a subsequent auction. If the unit is cleared in that auction, AEMO would cancel the unit and pay the holder clearing price for cancellation. The Consultation Paper discussed the proposed changes and mechanisms to implement secondary trading in the Settlements Residue Auction (SRA), including:

- The mechanisms to facilitate secondary trading via the SRA;
- The collateral requirements for those making offers at a loss;
- The approach to close-out due to termination;
- Project cost expectations and the approach to fees; and
- Transitional matters.

AEMO received three submissions, which raised the following issues and proposals:

- An alternative approach to collateralising units by incorporating the margin requirements into the existing NEM framework;
- Concerns that the number of available units will not be known prior to the bidding close, and a proposed alternative for offers to be made public prior to the auction opening;
- Expectations for the project costs to remain within the estimate provided by AEMO, and for impacts to existing participant systems and processes to not be fundamentally modified; and
- Expectations regarding the fee determination (with support noted for the new fee approach).

AEMO has considered these issues and considers that the approaches proposed originally more effectively meet the National Electricity Objective (NEO) in that:

- The proposed implementation can occur as soon as possible to maximise the benefits of the change. Note, the AEMC considered in their final rule determination that implementation of SRA secondary trading will, or is likely to, better contribute to the NEO by:
 - Allowing more efficient hedging risk management across regions.
 - Reducing risk faced by generators or retailers operating in more than one region by increasing liquidity in the market for units.
- Transparency regarding the available units remains the same as current practice, both in this market and in other similar markets AEMO operates.
- The approach to collateralising units remains separate from that of the NEM as regulatory requirements restrict combining these, and this would be greater implementation effort.
- The proposed changes deliver the desired benefits, while limiting consequential changes for those currently participating in the SRA, as per the guidance of the Settlements Residue Committee (SRC).

Having considered the matters raised in submissions, AEMO's draft determination is to amend the Auction Rules in the form of Attachment 1, in accordance with clause 3.18 of the NER.



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1. STAKEHOLDER CONSULTATION PROCESS

As required by clause 3.18 of the NER, AEMO is consulting on the implementation of secondary trading in the SRA in accordance with the Rules consultation process in rule 8.9.

AEMO's indicative timeline for this consultation is outlined below. Future dates may be adjusted depending on the number and complexity of issues raised in submissions.

Deliverable	Indicative date
Notice of first stage consultation and Consultation Paper published	21 September 2018
NEM Wholesale Consultative Forum Presentation	26 September 2018
First stage submissions closed	30 October 2018
Draft Report & Notice of second stage consultation published	29 November 2018
Submissions due on Draft Report	14 December 2018
Final Report published	21 December 2018
Effective date of the Auction Rules	1 July 2019

The SRC is ultimately responsible for approving the amendments to the proposed version of the Auction Rules to give effect to secondary trading. AEMO will continue to work with the SRC during the consultation to understand concerns and assess proposals raised by stakeholders.

The publication of this Draft Report marks the commencement of the second stage of consultation.

Note that there is a glossary of terms used in this Draft Report at Appendix A. References in this paper to 'rule x' is a reference to an NER rule; the word 'clause' has been used to refer to specific clauses in the amended Auction Rules or Auction Participation Agreement.

2. BACKGROUND

2.1. NER requirements

Under rule 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 the SRA. Rule 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. This consultation is conducted in accordance with rule 3.18.3(d)(1) which allows AEMO to amend the Auction Rules to implement secondary trading by setting out the requirements specified in rule 3.18.3(a1).

2.2. Context for this consultation

On 10 October 2017, in response to an NER Rule change proposal submitted by Westpac Banking Corporation (Westpac), the Australian Energy Market Commission (AEMC) made a final determination to change the NER to enable AEMO, with the approval of the Settlements Residue Committee (SRC), to provide a platform for secondary trading of settlements residue distribution units (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.¹

¹AEMC, 2017, "Secondary trading of settlement residue distribution units rule change". Available: <https://www.aemc.gov.au/rule-changes/secondary-trading-of-settlement-residue-distributi> Viewed: 19 September 2018



AEMO developed a high-level design in conjunction with the SRC, incorporating all necessary requirements of the final NER determination. In May 2018, based on this design, initial estimates and implementation timelines, the SRC endorsed secondary trading to be implemented in the SRA.

2.3. First stage consultation

AEMO issued a Notice of First Stage Consultation on 21 September 2018. AEMO prepared a Consultation Paper to consult with industry on proposed changes and mechanisms to implement secondary trading in the Settlements Residue Auction (SRA). This paper is available on AEMO’s website at: http://aemo.com.au/-/media/Files/Stakeholder_Consultation/Consultations/Electricity_Consultations/2018/SRA/ConsultationPaper_AuctionRules_SecondaryTrading_200918.pdf.

In summary, key amendments proposed to the Auction Rules, the Auction Participation Agreement (APA), and the Settlements Residue Distribution Agreement (SRDA) involve:

- Introduction of the ability for participants to offer units they currently hold in a future auction.
- The ability for AEMO to cancel distribution payments to the holder of units cleared in the future auction.
- A requirement for AEMO to pay the participant offering the unit the relevant portion of auction proceeds if the unit is cleared (a payment for cancelling distribution payments). The participant remains obliged to pay AEMO the original allocation price.
- Changes to the auction solver to include offers.
- A requirement for participants to provide cash security as margin if they are offering units at a loss compared to the initial allocation price of the units, and associated calculations.
- Amendments to the participant termination close out processes, to distinguish between units held by a participant and cancelled units on default.
- Changes to the auction expense fee structure to include a fee for trading a unit via the SRA secondary trading platform.

AEMO received three written submissions in the first stage of consultation. Copies of all written submissions have been published on AEMO’s website at: <http://aemo.com.au/Stakeholder-Consultation/Consultations/SRA-Secondary-Trading-Consultation?Convenor=AEMO%20NEM>

AEMO also presented to the NEM Wholesale Consultative Forum on 26 September 2018 to discuss the proposed amendments. Minutes of that meeting have been published on AEMO’s website at: <http://www.aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/Wholesale-meetings/NEM-Wholesale-Consultative-Forum>

3. SUMMARY OF MATERIAL ISSUES

The key material issues arising from the proposal and raised by Consulted Persons are summarised in the following table:

No.	Issue	Raised by
1.	Publication of available units	AGL
2.	Collateralising units offered at a loss	AEMO, Origin and Snowy Hydro
3.	Alternative management of exposure through existing prudential framework	Origin
4.	Close-out due to termination	AEMO
5.	Project cost expectations	AEMO and Snowy Hydro



No.	Issue	Raised by
6.	Expected modifications to participant systems and processes	AEMO and Snowy Hydro
7.	SRA cancellation fee determination	AEMO, Origin and Snowy Hydro
8.	Transitional considerations	AEMO and AGL
9.	Change process	AEMO and Snowy Hydro

A detailed summary of issues raised by Consulted Persons in submissions together with AEMO’s responses, is contained in Appendix B.

4. DISCUSSION OF MATERIAL ISSUES

4.1. Publication of available units

4.1.1. Issue summary and submissions

The number of units available in an auction will not be published prior to the auction, as the proposal is such that offers can be made up until the same time as bids close. AGL raised a concern that this uncertainty could drive up the price on primary unit purchases, and participants may be less inclined to bid, when it is not known if units will be available. AGL proposed an alternative option, whereby the nomination of secondary units could be cut off prior to the opening of a quarterly auction.

4.1.2. AEMO’s assessment

Consistent with other similar markets it operates, AEMO did not propose the publication of the offer curve (price and quantity information) prior to the auction.

AEMO considers that encouraging participants to put forward their best bid or offer price and compete with other traders is likely to promote the efficient pricing of units. Providing the offer curve to bidders prior to bid submission cut-off may provide them with an advantage over participants offering units. Further, if the offer information were to be limited to just offer quantities then AEMO considers this would be of limited value to potential bidders.

All bids and offers, including both the primary allocation and secondary allocation of units, will be cleared in the same auction, at the same price, as per Rule 3.18.1(b)(1)(ii).

4.1.3. AEMO’s conclusion

AEMO considers that the most efficient approach is to not publish information about offers prior to the opening of the auction.

The number of units available in the primary allocation will continue to be published prior to the auction. AEMO will publish the total number of cleared units and the offer curve will be published following the auction, as per current practice for bids.

This information will allow participants to value the purchase of a unit, including an understanding of what has occurred in past auctions.

4.2. Collateralising units offered at a loss

4.2.1. Issue summary and submissions

The NER requires a participant to provide margin to AEMO at the same time as it offers a unit (3.18.4A(b)) and for the mechanism for calculating and determining the required margin to be set out in the Auction Rules (3.18.3(a)(5)). In the consultation paper, AEMO set out the proposed approach to determine the



required margin. Snowy Hydro commented in their submission that they support collateralisation of units offered at a loss. Origin also commented on this issue, proposing an alternative approach to collection of the margin (see Section 4.3), and indicated under this approach that the calculation would remain the same as that proposed.

4.2.2. AEMO's assessment

As set out in the Consultation Paper, AEMO's proposed approach to calculating the required margin allows for losses accrued in one unit type to be offset by profits accrued in another unit type. This approach allows for efficient allocation of collateral, only requiring collateral to cover the aggregate position of the participant across all unit types.

4.2.3. AEMO's conclusion

The margin calculation will remain as proposed in clause 7.3 of the Auction Rules.

4.3. Alternative management of exposure through existing prudential framework

4.3.1. Issue summary and submissions

AEMO proposes that the margin requirements are met by participants providing cash security. Origin raise an alternative proposal in their submission to manage a participant's exposure through the existing prudential framework.

4.3.2. AEMO's assessment

Regulatory restrictions prevent incorporation of the margin into the NEM framework at this time. The NEM framework has specific response and close-out provisions associated with the prudential arrangements, suited to the NEM framework and the risks to which that market is exposed. The NER keeps these separate to reduce the impact of secondary trading in the SRA on the NEM. If participants consider separate cash security is a barrier to participation in SRA secondary trading going forward, they may submit a NER Rule change request.

4.3.3. AEMO's conclusion

For market start, AEMO will continue with implementing the cash security framework for the purposes of collateralising units offered at a loss. This will also reduce implementation effort compared to that of combining the two.

4.4. Close-out due to termination

4.4.1. Issue summary and submissions

In the consultation paper, AEMO described the new approach to close-out due to terminations, with the introduction of secondary trading. This approach distinguishes between units held by a participant and cancelled units on default. No submissions commented on this issue.

4.4.2. AEMO's assessment

AEMO considers the proposed approach protects TNSPs against the risk of a shortfall if a SRA participant who has had units cancelled defaults, while maintaining the existing arrangements for the default of a SRA participant who still holds units. This is consistent with the principles described in the AEMC's final determination.



4.4.3. AEMO's conclusion

AEMO will implement this approach.

4.5. Project cost expectations

4.5.1. Issue summary and submissions

In the consultation paper, AEMO set out the estimated implementation costs for the project as \$690,000-790,000. Snowy Hydro commented that they would like to see the project cost be contained within that range.

4.5.2. AEMO's assessment

AEMO has now progressed with the project and has completed detailed design and planning. The projected estimate for the project remains within the above range.

4.5.3. AEMO's conclusion

AEMO will continue to make every effort to contain the cost to within the above range.

4.6. Expected modifications to participant systems and processes

4.6.1. Issue summary and submissions

The approach for the implementation of secondary trading has been to ensure that existing processes and systems for participants are not fundamentally modified. Snowy Hydro commented on the importance of this approach in their submission to ensure that SRA participants did not also incur expenses to modify their own existing systems and processes.

4.6.2. AEMO's assessment

As described in the consultation paper, the SRC's guiding principle for the design has been to incorporate the ability for participants to offer units via the auction as possible, while adhering to the NER and minimising impacts on existing participants. AEMO considers the proposed approach to incorporating the features follows this guidance. There are no fundamental modifications expected to existing systems and processes.

4.6.3. AEMO's conclusion

AEMO will continue with the implementation project using an approach to minimise impacts on existing systems and processes.

4.7. SRA cancellation fee determination

4.7.1. Issue summary and submissions

In the consultation paper, AEMO set out a new approach to calculating fees, to be introduced with the implementation of secondary trading. This approach is to introduce a new fee for cancelling a unit, proposed to be calculated in a similar manner to the current fee.

Origin commented on this approach, noting that it should be fair and reasonable and used to offset the administration costs of the auction, with the level set by the SRC. Snowy Hydro also commented, advocating that the project costs should only be levied on SRA Participants that use the secondary trading facility, and sought clarification from AEMO.



4.7.2. AEMO's assessment

AEMO considers that the introduction of a new fee allows efficient allocation of the costs of operating and administering the auction, including implementing this change. Rule 3.18.4(c) requires the fees to be set by AEMO and approved by the SRC. As such, the SRC will retain responsibility for approving the level of the fee. AEMO sets the budget and the fees to ensure that costs can be recovered by the function.

Project costs are due to upgrading the technology for SRA, as well as implementing secondary trading. Further, all participants in the SRA are expected to benefit from implementation of secondary trading. AEMO will determine the appropriate split of project costs between the two fee types with the SRC.

4.7.3. AEMO's conclusion

AEMO will continue with implementation of the new fee approach, and will, as part of standard processes, discuss the fee determination with the SRC in 2019 prior to go live.

4.8. Transitional considerations

4.8.1. Issue summary and submissions

As per the consultation paper, following implementation, units that have previously been allocated will be able to be offered into subsequent auctions, provided the participant has signed a new auction participation agreement.

AGL raised a concern with this proposal in their submission, considering it to be problematic as the units would not have been purchased and valued with this ability attached. AGL suggested an alternative approach to introduce a lead-in time where by only units allocated after the commencement of the new auction rules could be offered by a participant.

4.8.2. AEMO's assessment

At the time of allocation, a participant's valuation of a specific unit is likely to be based on forecast IRSR or the value of a unit within a hedging or trading strategy. The introduction of secondary trading is voluntary and as such does not change a participant's ability to hold units through to the delivery quarter or to hold units as part of a hedging or trading strategy. On this basis, AEMO does not consider that the introduction of secondary trading will impact upon on the valuation of units already allocated to a participant.

AEMO considers that the introduction of secondary trading and the reallocation of units to other retailers could impact upon the market strategy of a participant currently holding units. However, as per the AEMC final rule determination, implementation of SRA secondary trading will, or is likely to, better contribute to the NEO, by:

- Allowing more efficient hedging risk management across regions
- Reducing risk faced by generators or retailers operating in more than one region by increasing liquidity in the secondary market. Increased liquidity in the secondary market would reduce the overall risk faced by retailers as they will better be able to hedge their position as it changes over time

AEMO proposes that implementation should occur as soon as possible to maximise the benefits of the change.

4.8.3. AEMO's conclusion

AEMO proposes to continue with the approach that units allocated before the introduction of secondary trading will be able to be offered into subsequent auctions, provided the participant has signed a new auction participation agreement.



4.9. Change process

4.9.1. Issue summary and submissions

AEMO's consultation paper sets out that the targeted implementation date for the change is 1 July 2019. The implementation must be at the start of a quarter due to the changes associated with the fee calculation. Snowy Hydro commented on the change process, noting that if it is implemented poorly, this would place at risk participation in future auctions.

4.9.2. AEMO's assessment

AEMO will work with the SRC and industry to ensure changes are well communicated and thoroughly tested.

Note, as part of the implementation project there will be independent certification of the new mathematical formulation and the auction solver.

4.9.3. AEMO's conclusion

Following this second round of consultation, provided no further material issues are raised, AEMO will seek approval for the new Auction Rules from the SRC. The final Auction Rules will be published once approval has been received. It is intended that the new version of the Auction Rules will be made effective with a notice published no less than 15 days ahead of their effective date, with this well communicated to industry. AEMO will also notify industry of the approach for entering into new auction participation agreements to allow secondary trading of units effective from go live.

5. OTHER MATTERS

Minor amendments have been made to the Auction Rules and Auction Participation Agreement to clarify the equations associated with the prudentials and the close-out and termination clauses, including:

- Changing the term 'sales volume' to 'cancelled volume' and the corresponding variable from 'SV' to 'CV' consistent with terminology.
- Changing the term 'average allocation price' to 'average purchase price', and the corresponding variable from 'AAP' to 'APP' consistent with terminology.
- Changing the term 'PurchasedUnits' to 'AllocatedUnits'.
- Updating the definition of the term Average Cancellation Price (ACP) for clarity.
- Including the variable of a participant in the calculation of $\text{Max}(T_c, p)$ as it should be participant specific.
- Updated the calculation of Aggregate Trading Position (ATP) to correct a typo where the bracket was incorrectly placed.
- Including the definition of Trading Position in the Auction Rules and Auction Participation Agreement.
- Under clause 17.2 of the Auction Participation Agreement, the definitions of Defaulting Participant Profit and Defaulting Participant Loss have been updated to be with reference to the Trading Position of the participant in the Unit Category and for the Relevant Quarter. This has been changed to ensure the profit and loss are only calculated with respect to the Cancelled Units.

6. DRAFT DETERMINATION

Having considered the matters raised in submissions, AEMO's draft determination is to amend the Auction Rules in the form of Attachment 1, in accordance with clause 3.18 of the NER.

**APPENDIX A. GLOSSARY**

Term or acronym	Meaning
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
APA	Auction Participation Agreement. The template agreement is an appendix to the Auction Rules.
Auction Rules	Settlements Residue Auction Rules
IRSR	Inter-regional Settlements Residue. Also referred to as 'residue'
NER	National Electricity Rules
SRA	Settlements Residue Auction
SRC	Settlements Residue Committee
SRDA	Settlements Residue Distribution Agreement. The form of this agreement is stipulated in the APA.
TNSP	Transmission Network Service Provider
units	Settlements Residue Distribution units.

APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES

No.	Consulted person	Issue	AEMO response
1.	AGL	<p>Section 3.6.1 of the consultation paper deals with the ability to offer units previously purchased ahead of the anticipated commencement of the new auction rules on 1 July 2019. We consider this to be problematic, as the units offered for secondary trading in a Q3 2019 auction would not have been purchased and valued with this ability attached.</p> <p>AGL suggests that a preferred approach is to introduce a lead-in time, by "tagging" units purchased at future auctions as tradable, in anticipation of the new auction rules taking effect on 1 July 2019.</p>	<p>As per the AEMC final rule determination, implementation of SRA secondary trading will, or is likely to, better contribute to the NEO, by:</p> <ul style="list-style-type: none"> • Allowing more efficient hedging risk management across regions • Reducing risk faced by generators or retailers operating in more than one region by increasing liquidity in the market for units <p>AEMO proposes that implementation should occur as soon as possible to maximise the benefits of the change.</p>
2.	AGL	<p>If participants offer their units into the auction through the secondary trading mechanism, the number of units available for purchase for each interconnector tranche will be unknown. We anticipate that participants would be less inclined to bid, for fear of driving the unit price up on primary unit purchases, when it is not known if units will be available. This uncertainty would limit the efficiency of auctions. ...</p> <p>An alternate proposal would be to set a cut off for the nomination of secondary units prior to the opening of a quarterly auction.</p>	<p>AEMO considers that encouraging participants to put forward their best bid or offer price and compete with other traders is likely to promote the efficient pricing of units. Providing the offer curve to bidders prior to bid submission cut-off may provide them with an advantage over participants offering units. Further, if the offer information were to be limited to just offer quantities then AEMO considers this would be of limited value to potential bidders. All bids and offers, including both the primary allocation and secondary allocation of units, will be cleared in the same auction, at the same price, as per Rule 3.18.1(b)(1)(ii).</p> <p>The number of units available in the primary allocation will continue to be published prior to the auction. AEMO will publish the total number of cleared units and the offer curve will be published following the auction, as per current practice for bids.</p>
3.	Origin	<p>Generally, Origin supports the changes proposed in the consultation paper which will help facilitate SRA trading, increase unit liquidity and provide an overall benefit to the market.</p>	<p>Noted.</p>
4.	Origin	<p>Origin believes that a preferable alternative is to manage a participant's exposure through the existing prudential framework.</p>	<p>Regulatory restrictions prevent incorporation of the margin into the NEM framework at this time. If participants consider this is a barrier to participation in SRA secondary trading going forward, they may submit a NER Rule change request.</p>

5.	Origin	The SRA cancellation fee should be fair and reasonable and used to offset the administration costs of the auction. The level should be set by the Settlement Residue Committee.	The Settlement Residue Committee will continue to have responsibility for setting the fees of each unit, as per current practice.
6.	Snowy Hydro	As highlighted by AEMO, there already exist mechanisms which allow secondary SRDU to be traded amongst counterparties. Hence Snowy Hydro did not support the rationale for AEMO to develop this centralised secondary trading facility. From this context we would like to see the project cost be contained within the \$690,000 - \$790,000 estimate.	Noted.
7.	Snowy Hydro	It is important that the implementation of secondary trading is done in such a way that it doesn't fundamentally modify the existing SRA bidding systems and processes. This is because any significant changes to the existing systems would mean that SRA Participants must incur expenses to modify their own existing systems and processes.	AEMO is leveraging the existing functionality, while also taking the opportunity to upgrade the technology. No fundamental modifications are expected to existing systems and processes.
8.	Snowy Hydro	A poorly implemented change process would place at risk participation in future SRDU auctions resulting in a less competitive outcome which would be a detriment to end consumers	AEMO will work with the SRC and industry to ensure changes are well communicated and thoroughly tested. As part of the implementation project there will be independent certification of the new mathematical formulation and the auction solver.
9.	Snowy Hydro	Snowy Hydro advocates that the project costs should only be levied on SRA Participants that use the secondary trading facility. It is unclear that the "Cancellation Fee" described in section 3.5.2 is only applied in this manner. Clarification from AEMO is sought on this issue	Project costs are due to upgrading the technology for SRA, as well as implementing secondary trading. Further, all participants in the SRA are expected to benefit from implementation of secondary trading.
10.	Snowy Hydro	Snowy Hydro supports collateralising offers made at a loss	Noted.





APPENDIX C. DRAFT AUCTION RULES

A change-marked version of the Auction Rules and Auction Participation Agreement to facilitate secondary trading was published on AEMO’s website on with the first stage consultation pack. This remains on the consultation webpage at: <http://aemo.com.au/Stakeholder-Consultation/Consultations/SRA-Secondary-Trading-Consultation?Convenor=AEMO%20NEM>

The following minor amendments have been identified, as compared to the first-stage consultation version, with additions marked in blue, and removals marked in red:

Clause 2.1 in the Auction Rules:

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.

Clause 7.3(d) in the Auction Rules

- (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:

$$TP(p, q, u) = \text{SCV}(p, q, u) \times (\text{ACP}(p, q, u) - \text{AAPP}(p, q, u))$$

TP(p,q,u)	Trading Position Trading position of participant “p” for Unit Category “u” and Relevant Quarter “q”
SCV(p,q,u)	Cancelled volume Sum of the number of units cancelled for Unit Category “u” and Relevant Quarter “q” with the number of units that are offered for a price less than AAPP(p,q,u)
ACP(p,q,u)	Average cancellation price



	Average weighted price of those units included in SV(p,q,u) cancelled for Unit Category “u” and Relevant Quarter “q” with the number of units that are offered for a price less than APP(p,u,q).
AAPP(p,q,u)	Average purchase price Average weighted price of units that have been allocated to participant “p” for Unit Category “u” and Relevant Quarter “q” in or before the last quarter in which units were cancelled. successfully sold.

(ii) The ~~sales~~cancelled volume (~~SCV~~(p,q,u)) in the calculation of the trading position of an Auction Participant under subclause (d)(i) above is calculated as follows:

$$\text{SCV}(p, q, u) = \sum_{Tc} \text{CancelledUnits}(p, q, u, CP, Tc) + \sum_{\substack{To \\ \text{where } OP < AAPP}} \text{OfferedUnits}(p, q, u, OP, To)$$

CancelledUnits(p,q,u,CP,Tc)	Number of units of participant “p” that have been cancelled for Unit Category “u” and Relevant Quarter “q”, at a cancellation price “CP” and in tranche “Tc”
OfferedUnits(p,q,u,OP,To)	Number of units participant “p” is offering for Unit Category “u” and Relevant Quarter “q”, at an offer price “OP” and in tranche “To”

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

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

$$\text{AAPP}(p, q, u) = \frac{\sum_{Tp=1 \text{ to } \text{Max}(Tc)} (\text{PurchasedAllocatedUnits}(p, q, u, PP, Tp) \times PP)}{\sum_{Tp=1 \text{ to } \text{Max}(Tc)} (\text{PurchasedAllocatedUnits}(p, q, u, PP, Tp))}$$

Purchased AllocatedUnits(p,q,u,PP,Tp)	Number of units participant “p” has been allocated for Unit Category “u” and Relevant Quarter “q”, at a purchase price “PP” and in tranche “Tp”
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Max(Tc, p)	Maximum tranche “Tc” in which units have been cancelled for participant “p”
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- (iv) The Prudential Exposure of an Auction Participant is the aggregate of the trading positions of an Auction Participant under subclause (d)(i) above calculated as follows:

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

ATP(p)	Aggregate trading position of participant “p”
q = 1	is the next quarter to be settled
q = n	is the final quarter to be settled currently included in the auction (currently 12)

Clause 1.1 in the Auction Participation Agreement

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

Clause 17.2 in the Auction Participation Agreement

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 the amount by which the Cancellation Price payable by AEMO to the Defaulting Participant for a Unit Category under the Relevant SRDA exceeds the Purchase Price payable by the Defaulting Participant to AEMO for that Unit Category under that 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 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 the amount by which the Purchase Price payable by the Defaulting Participant to AEMO for a Unit Category under the Relevant SRDA exceeds the Cancellation Price payable by AEMO to the Defaulting Participant for that Unit Category under that 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 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**);