

SETTLEMENTS RESIDUE AUCTION RULES – SECONDARY TRADING

CONSULTATION PAPER

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EXECUTIVE SUMMARY

The publication of this Consultation Paper commences the first 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).

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

AEMO has prepared this Consultation Paper to consult with industry on proposed changes and mechanisms to implement secondary trading in the Settlements Residue Auction (SRA). Implementation of secondary trading will allow participants to offer units that they have previously purchased in an auction for sale in a subsequent auction. The SRC provided guiding principles for the implementation of secondary trading to deliver the desired benefits, while limiting consequential changes for those currently participating in SRA.

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 at an auction.
- The ability for AEMO to cancel distribution payments to the seller for units sold in the auction.
- A requirement for AEMO to pay the seller the relevant portion of auction proceeds if the unit is sold (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 to sell 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 seller and buyer default.
- Changes to the auction expense fee structure to include a fee for trading a unit via the SRA secondary trading platform.

Implementation of secondary trading also necessitates changes to the SRA system. Implementation costs for the project are estimated to be \$690,000-790,000. As per the NER, costs of implementing secondary trading will be quarantined to SRA, and recovered via auction expense fees.

AEMO invites stakeholders to suggest alternative options where they do not agree that AEMO's proposals would achieve the objective of implementing secondary trading. AEMO also asks stakeholders to identify any unintended adverse consequences of the proposed changes.

Stakeholders are invited to submit written responses on the issues and questions identified in this paper by 5.00 pm (AEST) on 30 October 2018, in accordance with the Notice of First Stage of Consultation published with this paper.

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





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1. STAKEHOLDER CONSULTATION PROCESS

As required by the NER, AEMO is consulting on amendments to the Auction Rules in accordance with the Rules consultation process in rule 8.9.

Note that there is a glossary of terms used in this Consultation Paper 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.

AEMO's indicative timeline for this consultation is outlined below. Dates may be adjusted depending on the number and complexity of issues raised in submissions and any meetings with stakeholders.

Deliverable	Indicative date
Consultation Paper published	21 September 2018
NEM Wholesale Consultative Forum Presentation	26 September 2018
Submissions due on Consultation Paper	30 October 2018
Draft Report published	12 November 2018
Submissions due on Draft Report	27 November 2018
Final Report published	14 December 2018
Effective date of the Auction Rules	1 July 2019

The SRC² 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.

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

2.2.1. Existing SRA

The SRA gives eligible participants the ability to bid for the right to inter-regional settlements residue (IRSR or residue) that accrues on a directional interconnector ³. A 'Guide to the Settlements Residue Auction' describing the principles underlying IRSR and current operation of the SRA is published on AEMO's

² The SRC is an industry committee, formed under rule 3.18.5 and chaired by AEMO. The SRC is responsible for approving amendments to the Auction Rules, monitoring the auction, and approving costs and expenses incurred by AEMO for the SRA.

³ A directional interconnector is a conceptual grouping of all notional interconnectors between any two regions, where a notional interconnector represents some or all of the regulated interconnector between two adjacent regions. There are only ever two directional interconnectors between any two regions, one for each direction of flow.



website. ⁴ Please refer to this guide for further information regarding the existing SRA, including participation, allocation of units, payments, and associated calculations.

The Secondary Trading proposal will change key elements of the SRA design including the units available in an auction and their allocation. AEMO holds an SRA each quarter for units on each directional interconnector, relevant to each of the next 12 quarters. In general, 8.33% (or one twelfth) of the maximum number of units (based on the nominal capacity) on each directional interconnector are made available at each of the 12 auctions leading into a relevant quarter. The relevant quarter is the one in which the participant that holds the unit will receive IRSR. Put another way, the units available on a directional interconnector are split into 12 tranches to be sold in auctions each of the 12 quarters prior to the relevant quarter. Any units not sold at earlier auctions are rolled over and made available in subsequent auctions.

Participants can bid in an SRA to purchase units (for each directional interconnector and relevant quarter available in each set of auctions). The clearing price of the auction for each unit category and quarter is set as the price of the lowest bid that was allocated a unit. This is also the price paid by all successful participants for the units they are allocated in an auction, which will be settled in the relevant quarter. By bidding for a unit in an auction, participants legally commit to paying for the unit at settlement, and enter into a contract with AEMO for the unit allocated in the auction (an SRDA).

Throughout this consultation paper we refer to share of the units made available at each auction that is based on the nominal capacity of the directional interconnector as the primary allocation. No changes are proposed to the number of units made available in the primary allocation each auction, nor the maximum number of units available on each directional interconnector.

What is proposed is the ability for participants to offer units they have previously purchased (in an earlier auction for a tranche of available units) back into the SRA (referred to as secondary trading). The proposed mechanisms to facilitate secondary trading through the SRA are the subject of this consultation.

2.2.2. History of the proposal

In early 2016, both Westpac and the South Australian Government presented proposals to the SRC to facilitate secondary trading of units through the SRA. The SRC selected Westpac's proposal for progression and throughout 2016 Westpac continued to work with the SRC on a NER Rule change proposal⁵ to allow for secondary trading to be incorporated into the Auction Rules.

Currently, secondary trading may occur bilaterally, through:

- financial contracts outside of the SRA that reflect the financial settlement associated with owning a unit (derivative contracts), but these do not form any part of the SRA operated by AEMO, or
- an assignment of AEMO-allocated units between themselves and their counterpart. The parties must seek AEMO's consent to the assignment of units in accordance with the terms of the SRDA. This process was developed to support secondary trading of units that have been purchased in the AEMO-operated SRA (but has had limited use since its implementation).

Westpac submitted the Rule change proposal to the AEMC on 16 December 2016, noting the bilateral secondary market has not achieved the liquidity and depth that exists in the primary auction. The key benefits of facilitating secondary trading through the SRA can be described (for both buyers and sellers) as:

 Secondary SRA trading would be valuable to industry providing a new mechanism for risk management associated with SRA units.

⁴ AEMO, 2018, Guide to the Settlements Residue Auction, Available at: https://www.aemo.com.au/-

[/]media/Files/Electricity/NEM/Settlements and Payments/Settlements/2018/Guide-to-the-Settlements-Residue-Auction.pdf

Westpac, 2016, "Rule Change Proposal: Facilitation of Secondary Trading of Settlement Residue Distribution Units through the Settlement Residue Auction" Available: https://www.aemc.gov.au/sites/default/files/content/dd3ccd24-6364-4e88-b531-4d600d77cdb3/Rule-change-request-Westpac.pdf Viewed 19 September 2018.



- There is a market preference for trade at auction, given the associated standardisation, ease of execution, and existing business and regulatory approvals for SRA.
- Delivery and settlement of trades through existing SRA provides anonymity for secondary selling.

The AEMC considered the rule change proposal in 2017, and made a preferred rule in October 2017, which largely reflected the original proposal, with the addition that any units being offered at a loss are to be collateralised. The AEMC's determination to make the new NER was based on a consideration that 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.

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.

The design and costs are further discussed in the following section, and AEMO invites all stakeholders to provide feedback. The intended timeframe for implementation is to allow for secondary trading to be facilitated through the SRA from the auction to be conducted in Quarter 3, 2019 onwards.

3. DISCUSSION

3.1. Structure of the documentation and approach to amendments

The Auction Rules consist of:

- The main body of the Auction Rules, setting out the requirements stipulated in rule 3.18.3(a), and any other requirements throughout rule 3.18, including
 - o criteria for participation and associated agreements,
 - o procedures and timing for conducting and settling the auction,
 - o mechanism and principles for calculating the auction clearing price, and
 - o mechanism for calculating fees.
- Schedule 1 standard form of the APA. The APA also includes the terms on which an unit is purchased and held by a participant (the SRDA). By signing an APA with AEMO, a participant agrees to be bound by the Auction Rules. The APA governs the interactions between the participant and AEMO, including participating in each auction and settlement matters.
- Schedule 2 the Linear Programming Problem that solves the auction (the guiding principles of which are stipulated in rule 3.18.3(b).

Amendments are proposed to each of these sections to implement secondary trading. These amendments have been developed consistent with the NER to implement the design of secondary trading as described originally in Westpac's Rule change proposal, and guided by the SRC.

The SRC's guiding principle for the design has been to incorporate the ability for participants to sell units via the auction as simply as possible, while adhering to the NER and minimising impacts on existing participants. As such, the existing systems will be leveraged insofar as possible and any new functionality will have the minimum requirements to provide users confidence, without unnecessary additional features.⁶

The remainder of this paper outlines the proposed drafting amendments to the Auction Rules and APA to implement secondary trading. This paper has been written to support and provide further background to

⁶ For example, participants will have access to sufficient data to reconcile their position, but a full prudential dashboard (like that available in other AEMO-operated markets) is not intended to be implemented for sellers to monitor their collateral position.



the proposed amendments, which are also available for comment (see section 4). It is advised that these two documents are read in conjunction, as there are references throughout this paper to the new proposed clauses in the Auction Rules to implement secondary trading in the SRA.

3.2. Facilitating secondary trading via the SRA

3.2.1. Framework to offer and sell units via the SRA

In order to facilitate secondary trading through the SRA, participants require:

- a right to offer a unit that they hold (having purchased this in a previous auction) to be sold in an auction (as per rule 3.18.3(a1)(1)),
- the price of the offer to set a floor for the revenue that will be received if the unit is sold,
- to be paid the relevant clearing price if that unit is sold in an auction (as per rule 3.18.3(a1)(3)).

Amendments to the Auction Rules and APA have been proposed to provide for these elements.

Under the current framework, a participant bids to purchase a unit in the auction operated by AEMO. In doing so, if the unit is cleared through the auction, they commit to pay AEMO for that purchase at settlement for the relevant quarter, in return for receiving the associated residue distribution. The purchase price of the unit is set at the clearing price for the auction. Proceeds from auction purchases are passed through to the relevant Transmission Network Service Provider (TNSP). This is illustrated below.

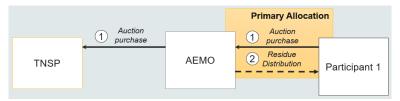


Figure 1 Current framework.

To facilitate secondary trading through the auction, a participant is required to have purchased a unit. If a participant then wishes to sell that unit in a subsequent auction, when they offer to do so, they are agreeing to AEMO cancelling their right to the residue distribution associated with that unit if the unit is sold. They will still be required to pay the original purchase price at the time of settlement. At that time, they will also receive payment for the cancellation of their unit, equal to the clearing price of the auction in which it was allocated. All purchases in the auction will be at a common clearing price, as described in section 3.2.4. Allocated units will not be distinguished as to whether they were from the primary allocation or secondary trading.

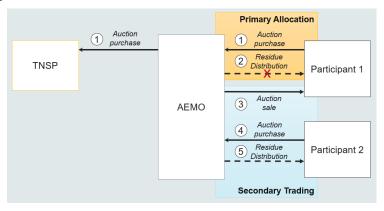


Figure 2 Framework facilitating secondary trading through the auction.



3.2.2. Process to offer a unit

In practice, the process to offer a unit has been designed to largely replicate the process for bidding for a unit (see clause 10 of the proposed amendments). Offers will be made in the same time frames as bids (as per the Auction timetable) and offers will be validated to have been accepted or not in real time (see further discussion in section 3.3.3). Note, offers and bids will be submitted separately and offers will not be able to be made on a linked basis. That is, functionality will not be provided to allow intertemporal nor cross-category offers to keep the implementation simple.

3.2.3. Price paid for selling a unit and settlement

AEMO will remain the counterparty to all agreements (as per rule 3.18.3(a1)(2)). As such, if a participant offers to sell a unit in an auction, they are in fact offering to have their right to the residue associated with that unit cancelled. The participant will set a price for their offer, which will set a floor for the revenue they will receive if the unit is cleared (just as a bid price sets a ceiling for the payment price if the unit is purchased). The price the participant who offers a unit that subsequently clears will be paid is known as the 'Cancellation Price'. The Cancellation Price will be set as the clearing price of the auction in which the unit is sold (clause 13.4).

Units sold through the auction will be settled in the relevant quarter (at the same time as purchases for those units are settled). As such, participants will receive payments for the cancellation of units at the same time as they are required to pay for those units. Payments due to and from a participant will be shown on a single invoice. The net amount will be payable by or to a participant (see clause 14.4).

3.2.4. Amendments to the auction solver

The linear programming problem as specified in Schedule 2 of the Auction Rules has been updated to include offers of units at prices specified by a participant, as well as the primary allocation of units. The primary allocation of units will be "offered" at zero dollars, with offers from participants required to be greater than zero. This ensures the primary units will be allocated prior to offers from participants. If there are primary units that remain unsold, the clearing price will be \$0, as per the current implementation (clause 13.2(a)(i)). The amount of units that will be cleared will be set as the intersection between the bid curve and the offer curve, as shown in the following figure.



Figure 3 Example distribution of offers, with the primary allocation of units "offered" at zero dollars.

The clearing price will be determined by maximising the revenue to AEMO (as the auctioneer) for the allocated units. The clause in the body of the Auction Rules, now clause 13.2, has not changed. As was described in section 3.2.3, when making an offer of a unit they hold, the participant is in fact offering for



AEMO to re-sell the units for a price, and AEMO will remain the counterparty to all agreements with participants.

It is worth noting the formulation in the draft amendments (Schedule 2) is not change marked but is instead replaced with the new formulation. This is due to necessary updates to comply with current Microsoft Word type set. Key amendments to the linear programming problem include incorporation of offers in the objective function and the dual linear program (as per rule 3.18.3(a1)(4)). Otherwise, terminology and equations have been updated to clarify the problem and tidy up the formulation.

3.3. Collateralising Offers made at a Loss

3.3.1. Calculating and determining the required margin

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(a1)(5)). This calculation must take into account the relevant prices at which the units are offered, as well as the clearing prices at which the participant received those units in previous auctions (the purchase price).

As per the NER, any margin provided by participants is to be applied by AEMO to any outstanding amounts that are owing to AEMO by a participant whose APA or SRDA is terminated, or that would have been owing to AEMO had their agreements not been terminated. In the final NER determination, the AEMC articulated that the margin was to cover losses made by a participant who was engaging in secondary trading, and the approach to managing buyer default was to remain as per current practice.

As such, to determine the required margin, AEMO proposes an approach which:

- First looks at the participant's trading position in each unit that is currently available for auction, in which the participant is engaging in secondary trading.
- Secondly looks at the participant's aggregate trading position across all of these units.

The relevant calculations are located in clause 7.3 of the Auction Rules, and described here.

The trading position in each unit will consider the profits or losses that have been made by a participant who has engaged (successfully sold units) or is intending to engage (offering units) in the SRA. To do so, the calculation:

- Compares the average volume-weighted clearing price of allocated units with the average volume-weighted clearing or offer price of cancelled or offered units.
- The average volume weighted clearing price of allocated units only considers units that were allocated in tranches prior or equal to the last tranche in which units were cancelled or offered. It does not consider bids yet to be auctioned.
- As margin is only required for units that are sold at a loss, the calculation of sales volume and average cancellation price also only includes offers that are less than the average volume-weighted clearing price. (All cancelled units are included).

Once the trading position in each unit is calculated, the aggregate trading position across all units will be determined. This allows for losses accrued in one unit type to be offset by profits accrued in another unit type. The aggregate trading position determines a participant's prudential exposure. Any remaining losses (the prudential exposure) will be required to be offset by cash security.

Note, the aggregate equation is defined such that any profits that are due to be settled in the next quarter are to be taken out when determining the participant's aggregate trading position. This is to avoid



situations where a payment is due to a participant but paying this will result in the participant having lodged insufficient cash security. Instead, these situations will be able to be dealt with well before the time of settlement. Application of the margin if a participant is terminated is described in further detail in section 3.4.

To demonstrate the trading position calculation, the following describes a simple example. Please refer to clause 7.3 of the Auction Rules draft amendments for the equations and variables.

Calculation of a trading position in a unit.

Consider a participant who currently owns three units of Unit A, which they purchased in the auction for the first tranche at a clearing price of \$50 (resulting in an average allocation price (AAP) of \$50. They offer each of those units in the following auction (second tranche of unit A) at the following offer prices:

- One unit at \$30
- One unit at \$40
- One unit at \$60

The average cancellation price takes into account units that are offered at a price less than the average allocation price of the units previously purchased (resulting in an average cancellation price (ACP) prior to the auction of \$35).

The trading position in this unit would be calculated as:

$$TP(A) = SV(ACP - AAP) = 2(35 - 50) = -30$$

If the participant was only engaging in secondary trading in these units, they would be required to provide a margin of \$30 to make this offer.

If the clearing price of this auction was set at \$45, AEMO would cancel the units offered at less than this price (providing a cancellation price of \$45). Assuming the participant had purchased no further units, the trading position calculation in this unit would be updated as follows:

$$TP(A) = SV(ACP - AAP) = 2(45 - 50) = -10$$

Calculation of the aggregate trading position (prudential exposure).

If that participant had also had cancelled two units of Unit B (relative to a quarter one year in the future), that were originally bought at \$40, and then cancelled at \$60, the participant would not be required to provide any margin as the profits they had accrued in this unit would offset the losses in unit A. the aggregate trading position and therefore exposure would be positive

$$TP(B) = SV(ACP - AAP) = 2(60 - 40) = 40$$

 $ATP = -10 + 40 = 30$

3.3.2. Process for obtaining and managing margins

For margin requirements, it is proposed that participants provide cash security. AEMO will receive and store cash security via an electronic fund transfer mechanism (AustraClear), as per other markets AEMO operates, and cash security will be stored in a high interest account. Interest accrued on any cash security held by AEMO will be returned to the participant in line with quarterly settlement of units. The proposal to meet margin requirements via cash security only, and not bank guarantees, is to simplify implementation.

The trading position will be calculated daily and updated at the following triggers:

• Submission of offers (if the offer price is less than the average weighted price of units purchased in that unit category for that relevant quarter)



 On solving the auction (the calculation will take into account units that have been purchased and sold in the auction, and the relevant clearing prices)

AEMO proposes to automatically return any margin that is no longer required to the participant, also in line with the quarterly settlement process (and only in line with quarterly settlement). Note that the auction timeline is such that any margin that is lodged to cover a potential loss for an offer that is not realised will be returned the following month.

AEMO also proposes that cash security lodged with AEMO for the purposes of margining losses are to be submitted with an open-ended maturity date. This will prevent participants needing to provide AEMO with instructions for how margin that is still required is to be handled, and prevent participants inadvertently having cash security returned that is still required.

If, following settlement of profits, a participant is required to provide additional security to collateralise a future loss, they will have two business days to provide this security. If they do not provide the necessary cash, the participant will be issued a margin call by AEMO. If the participant fails to act on this margin call, the participant will have defaulted on a payment. The consequences for defaulting on a payment are described in more detail in section 3.4.

3.3.3. Validating offers

As described in section 3.2.2, offers will be validated in real time. To make an offer, a participant must:

- Be eligible to sell units (having signed an APA that facilitates secondary trading),
- Hold the units they are offering
- Have lodged sufficient margin with AEMO

As such, when a participant submits an offer, AEMO will calculate the aggregate trading position taking these offers into account, compare this to the margin that the participant has provided to AEMO, and validate or reject the offer.

It is proposed that participants will be easily able to view a summary of information that displays their aggregate trading position and margin, with access to supporting data to reconcile the summarised position.

Questions

- Do you have any concerns with the proposed calculations to determine a participant's margin requirements?
- Do you agree with the proposal for margin requirements to be met via AEMO accepting cash security?

3.4. Close-out due to termination

3.4.1. Participant defaults on payment

AEMO may terminate an APA and SRDAs for defaulting on a payment. A participant may default on a payment arising:

- On a purchase statement (associated with the quarterly settlement process for units).
- Due to a margin call.

If this is to occur, the defaulting participant may have accrued future profits or losses due to trading via the SRA, where the cancellation price they will receive is greater or less, respectively, than the allocation price



for the unit. This is to be paid in the relevant quarter for the unit. New clauses 16.9 and 17 have been included in the APA, and a new clause 16 has been added to the Auction Rules to manage the close out (payment) associated with a participant who defaults on a payment.

The consequential processing steps are described here:

- On defaulting on a payment, AEMO will calculate the total future losses for the defaulting participant (losses due to secondary trading).
- AEMO will then apply any cash security held in respect of that participant to the total defaulting loss
- AEMO will pay the relevant TNSP(s) (the TNSP(s) associated with directional interconnectors on which the participant has accrued a loss) at the time of the defaulting event.
- To the extent the cash security is not sufficient to set off the total defaulting participant loss, the balance will be paid to the TNSP via the defaulting participant future profits at the time these are settled, from the closest relevant guarters first.
- To the extent that a defaulting participant profit remains for a relevant unit, after the total losses have been off-set, the participant will pay the profit to the defaulting participant at the time at which the cancellation price arises.
- If the participant has been wound up and deregistered by that time, AEMO will pay this amount to the relevant TNSP.

There are no changes for a participant who defaults who has only purchased units (that is, who has not cancelled any units relevant to this or future quarters). Any units held by a defaulting participant will continue to be made available by AEMO in another auction, with proceeds payable to the relevant TNSP. Where this is not possible, AEMO will distributed the relevant residue to the TNSP, less any fees that were owed by the defaulting participant.

3.4.2. Payments to (and from) Network Service Providers

With the introduction of secondary trading, the Auction Rules are required to set out the mechanisms for calculating and distributing auction amounts, which include amounts distributed to TNSPs. An additional clause has been added to the Auction Rules (clause 16) to clarify amount that will be paid to TNSPs, particularly after a default event. These payments are described in the above section.

Note, in accordance with rule 3.18.4A(d), if the full amount payable by AEMO to secondary sellers via the cancellation price is less than the amount available, this will be recovered from TNSPs. Situations may arise where a TNSP has received additional payment at the time of a defaulting event, of which the equivalent amount will later be payable to AEMO to make up a shortfall under 3.18.4(d).

Simple example to demonstrate payments resulting from a defaulting participant.

Consider a participant who has engaged in secondary trading, and has the following profits and losses on units into the future:

- Loss on units sold for Q2 2020 of \$100 on directional interconnector A.
- Profit on units sold for Q3 2020 of \$50 on directional interconnector B.

The participant will have provided margin of \$50 to cover their prudential exposure to be in this position.

Consider they also purchased units in Q1 2020 and default on the payment associated with having purchased these units.

Upon defaulting on its payment in Q1 2020, AEMO will bring forward their future losses associated with secondary trading (\$100).



AEMO will apply margin to these future losses, and pay this to the relevant TNSP. In this example, AEMO will apply \$50 margin and pay this to the TNSP of directional interconnector A at the time of the default event.

In Q3 2020, AEMO will receive the profits associated with the defaulting participant's trading, and at this point will pay the TNSP of directional interconnector A the remaining \$50 of the loss the defaulting participant accrued associated with trading those units for Q2 2020.

Note, the original defaulting event is on purchasing of units, and treatment of this will not change from current practice. Any other participant who had engaged in secondary trading throughout this period will also be paid by AEMO the full amounts owed to them, with any shortfalls made up from the relevant TNSP(s).

Questions

• Do you have any concerns with the proposed default and close out provisions proposed in the Auction Rules and the APA?

3.5. Costs and Fees

3.5.1. Estimated costs

Implementing secondary trading necessitates changes to the SRA system to allow for participants to offer units to be sold via the SRA. Implementation costs for the project, including making amendments to the Auction Rules and system changes, are estimated to be \$690,000-790,000. This is an increase compared to the costs advised by AEMO in the Rule change process, due to:

- Incorporation of the additional feature for sellers to margin any offers that are at a loss, which was introduced by the AEMC as part of their Rule change consultation.
- Further refinement of the end-to-end market and system design and implementation approach.
- AEMO will also take the opportunity to upgrade the technology of the platform, as an efficient way
 to ensure the system is supportable into the future.

3.5.2. Fee structure

As per rule 3.18.4, AEMO must use auction expense fees (fees) to recover costs associated with the SRA, including implementation of secondary trading. The fees are to be set by AEMO and approved by the SRC (3.18.4(c)). The NER also require the mechanism for calculating the fees to be set out in the Auction Rules (3.18.3(a)(4)) and fees to be recovered from settlements residue (3.18.1(d)(2)).

AEMO considers that with the implementation of secondary trading, it is appropriate to introduce a fee for selling a unit through the auction, a 'Cancellation Fee'. The cancellation fee is proposed to be calculated in a similar manner to the current fee, with the fee calculation set out in the Auction Rules, clause 15.

An element of the fees calculation takes into consideration the number of units available in a particular unit category for a relevant quarter. With the introduction of secondary trading, it is not possible to know when setting fees how many units will be cancelled and allocated via the auction. As such, it is proposed that AEMO, in consultation and approval from the SRC, will determine an estimate for the expected number. As the market matures, this will be able to converge to the turnover that is observed. Note: AEMO's auction expenses associated or attributed to each transaction type will also be determined by AEMO from time to time in accordance with the NER and approved by the settlement residue committee.



3.5.3. Cost recovery

Given auction expense fees are to be recovered from settlements residue (rule 3.18.1(d)), AEMO is proposing to adjust the calculation for residue distribution to take into account total residue owed to a participant in a weekly payment and offset this by the total fees accrued by a participant. This payment is also now described in clause 15 of the Auction Rules.

The total fees a participant owes determined to be equal to the fees accrued for cancellation transactions, allocation transactions for units in the Relevant Quarter, as well as any fees remaining from the previous quarter. If a participant did not accrue sufficient residue in a quarter to pay their fees, these would roll over into the next quarter, and so on. AEMO will continue to reconcile total recovery on an annual basis, and incorporate any under or over- recovery into the calculation of expenses for the following year.

The residue distributed to a participant that holds units for a billing period (the billing period payment) would then be calculated as the total residue accrued over that week over those units, minus the total fees due from that participant. If the total residue is insufficient to recover the fees due, the participant would receive no residue, with remaining fees to rollover into the following billing period.

If a participant defaults on a payment and is terminated, they will receive no further residue. If that participant did hold any units, and these are unable to be made available in another auction or otherwise remain unallocated, AEMO will deduct the total fees for that auction participant before distributing the settlements residue represented by those units to the relevant Network Service Provider (NSP). If the units are re-allocated, the purchasing participant will be responsible for paying the purchase fee associated with those units (but not any other fees owed by the defaulting participant).

Participants will remain entitled to a minimum \$10 payment for each unit for which they receive residue distribution.

Questions

- Do you agree with the proposal to introduce a 'Cancellation Fee'?
- Do you have any concerns with the residue calculation changing to take into account auction expense fees from a participant perspective, rather than on a strictly unit by unit basis?

3.6. Transitional Considerations

3.6.1. Ability to offer units previously purchased

It is intended the new Auction Rules will come into effect in time for the auction in Quarter 3, 2019. To be able to offer units into the SRA, and make use of the new secondary trading functionality, participants will be required to sign a new APA that includes these rights (new clause 6 in the APA). If a participant does sign a new APA, the terms on which they hold any previous units will be amended to the terms of the new agreement (clause 2 of the APA) and they will be able to sell these units via the auction.

3.6.2. Fee calculation

The auction expense fees are included in the Auction Rules. As such, all participants will be subject to the new auction fee calculation, from the effective date of the new Auction Rules, including in respect of units allocated prior to this date. As per current practice, auction expense fees will be approved by the SRC. It is worth noting that the last auction fees that were approved by the SRC included a portion of the costs associated with implementation of secondary trading, calculated under the existing fee structure. It can be expected that these will be updated prior to implementation to take into account the new fee structure.



4. DRAFTING FOR PROPOSED CHANGES

To help stakeholders and other interested parties respond to this Consultation Paper, AEMO has published a draft of the Auction Rules and Auction Participation Agreement incorporating the changes AEMO proposes for consultation. A change-marked version is available at: http://www.aemo.com.au/Stakeholder-Consultation/Consultations/SRA-Secondary-Trading-Consultation?Convenor=AEMO%20NEM.

5. SUMMARY OF MATTERS FOR CONSULTATION

In summary, AEMO seeks comment and feedback on the following matters:

- 1. Proposed amendments to facilitate secondary trading of units via the SRA as contemplated by the NER, including the process to make offers, incorporation of offers in the auction solver, and settlement of sold units.
- 2. Approach for participants to collateralise offers that are made at a price at less than the price at which units were bought, including associated calculations of the trading position, and management of the margin.
- 3. Proposed close out of a participant who has engaged in secondary trading and subsequently had their APA and SRDAs terminated (for example, due to defaulting on a payment).
- 4. Proposed changes to the structure of auction expense fees to include a 'cancellation transaction fee', including associated calculations.

Submissions on these and any other matter relating to the proposal discussed in this Consultation Paper must be made in accordance with the Notice of First Stage of Consultation published with this paper by 5.00 pm (AEST) on 30 October 2018.



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.