

Sydney

8 February 2005

Mr. John Eastham  
Director  
NECA  
PO Box 2575  
ADELAIDE SA 5000

Dear John,

**Proposed Change to Settlement Residue Auction Clause 3.6.5**

An ongoing significant issue associated with the Settlement Residue Auction (SRA) is the recovery of negative inter-regional settlement residues (negative residues).

Negative residues occur when power flows from a high priced region to a low priced region. This may be due to:

- The operation of some complex network constraints and network outage conditions,
- Rapid changes to power flows occurring within 30 minutes,
- FCAS constraints, and
- Islanding events.

Clause 3.6.5 enables recovery of negative residues from positive residues within the same billing period (week) or otherwise from future auction fees.

SRA fees are determined to meet a budget approved by the Settlement Residue Committee and must be set prior to the sale of the first tranche of any auctioned quarter. As these residues are auctioned up to one year in advance, this may create a lag of up to two years between when a large negative residue occurs and when recovery via auction fees is completed. During this period NEMMCO funds the residues via a loan from the Bank. An example of this timing is set out in attachment 2.

This process was designed shortly after NEM start and was based on an assumption that negative residues would not be significant. However experience, particularly after commissioning of the QNI Interconnector, has shown that this is not the case

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In recent years auction fees have increased significantly due to the need to recover large negative residues: -

- \$624,000 in 2003/2004;
- \$908,000 in 2004/2005; and
- \$2,602,000 in 2005/2006.

The annual level of accumulated negative residues can be greatly impacted by significant but rare events and thus is expected to vary significantly from year to year. However analysis undertaken by NEMMCO suggests that under current conditions this annual accumulation should average around \$800,000.

Due to negative residues NEMMCO is now carrying forward a liability in excess of \$3M in 2004/2005 including annual interest costs of around \$140,000.

NEMMCO believes that changes are required to the Clause 3.6.5. This is because, under the auction rules successful auction participants are entitled to their share of the residue (determined by the number and type of SRA units purchased by them) less the auction fees (expressed on a \$/unit basis). The SRA is the only Code mechanism available to manage the risk of interstate trade and as inferred from Clause 3.18.3(b)(4) the SRA is required to promote this trade. The efficiency of the SRA process will be enhanced by having a substantial number of parties participating. Requiring SRA unit holders to pay significant fees that were a consequence of market outcomes up to two years previous is likely to discourage interest in the SRA.

NEMMCO has examined a number of alternatives and has come to the conclusion that the long-term results in all cases not involving major changes to the SRA process will be similar. These alternatives are set out in Attachment 3 to this letter.

On the basis of the arguments set out in Attachment 3 NEMMCO believes that an option where accrued negative residues are recovered from future auction proceeds rather than future auction fees is preferred as it has the advantage of efficiency because of its directness. This preferred option was based on the conclusions of the final report of a SRA Working Group, which was convened by NEMMCO in 2002/2003. This proposal requires no change to the design or operation of the SRA and is largely consistent with the treatment of negative residues in the absence of the SRA. A summary of how this proposal would operate is set out in Attachment 4.

This issue was previously raised with NECA in September 2002 and March 2003. At that time the proposal was not pursued further due to the possibility of the current SRA system being replaced by a system of financial transmission rights. However in NEMMCO's opinion major changes to the SRA process are now not likely to occur in the immediate future. In the meantime, as indicated by the increasing SRA fees, this issue has increased in its significance.

Accordingly NEMMCO has revised its original Code change proposal to take into account other changes to Clause 3.6.5 which have taken place since the original change was proposed. However the intent of the Code change proposal remains unchanged. The new version of this Code change proposal is included as Attachment 1 to this letter.

NEMMCO is submitting this proposal for consideration by NECA in accordance with Code Clause 8.3.4.

For further details, please do not hesitate to contact Mr. Mark Miller on (02) 9239 9108.

I would be pleased if you could have these matters considered by the Code Change Panel.

Yours sincerely

**Brian Spalding**  
Chief Operating Officer

## Attachment 1

### 3.6.5 Settlements residue due to network losses and constraints

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- (a) *Settlement residue* will be allocated and distributed by NEMMCO in accordance with the following principles:
- (1) full effect is to be given to the jurisdictional derogations contained in Chapter 9 relating to *settlement residues*;
  - (2) the portion of the *settlement residue* attributable to *regulated interconnectors* (as adjusted to take into account the effect of any applicable jurisdictional derogations referred to in paragraph (1)) will be distributed or recovered in accordance with clause [3.18](#);
  - (3) the remaining *settlements residue*, including the portion of *settlements residue* due to *intra-regional loss factors*, will be distributed to or recovered from the appropriate *Transmission Network Service Providers* (which will not include *Market Network Service Providers*);
  - (4) if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount, then the amount may be recovered:
    - (i) to the extent to which the settlements residue would have been distributed in accordance with clause 3.6.5(a)(2):
      - a) from positive settlements residue amounts arising in the same billing period that may accrue to eligible persons participating in the auctions that are conducted under clause 3.18; and
      - b) if, after carrying out the netting off referred to in (a), there is a negative amount outstanding at the end of that particular billing period, then that negative amount may be recovered from the proceeds of any settlement residue auction, irrespective of when that auction is held, payable on a date that occurs after that billing period, being the proceeds that would have been distributed to the relevant Network Service Provider but for this provision. If the amount of the proceeds from a settlement residue auction, being proceeds that are payable on a date that occurs after the relevant billing period, is not sufficient to recover the negative settlement residue amount, then recovery may be from succeeding proceeds payable thereafter until the negative amount is recovered; and
    - (ii) from the *Network Service Provider* to which the settlements residue would have been distributed had it been a positive amount; and
  - (5) for the purposes of the distribution and allocation of settlements residue that is attributable to regulated interconnectors:
    - (i) all of the *settlements residue* relating to electricity that is transferred from one *region* (the "exporting region") to another *region* (the "importing region") must be allocated to *Network Service Providers* in respect of a *network* located in the importing region (or part of a *network* located in the importing region);

- (ii) the importing region must, in respect of the period from *market commencement* until 1 July 2006, pay a charge to the exporting region reflecting the extent of the use of a *network* located in the exporting region (or part of a *network* located in the exporting region) to transfer the electricity from the exporting region to the importing region;
  - (iii) the amount of the charge described in the preceding paragraphs (i) and (ii) must not exceed the amount of the *settlements residue* and must be agreed between the *participating jurisdictions* in which the importing region and the exporting region are located provided that, if the parties have not reached an agreement by 30 June 1999, either party may refer the matter for resolution through the dispute resolution procedures set out in clause 8.2; and
- (6) any portion of *settlements residue* distributed to a *Network Service Provider* or amount paid on that portion under clause [3.15.11A](#) (if any), or clause [3.18](#) to a *Network Service Provider*, including any such payments as adjusted by a *routine revised statement* or *special revised statement* issued under clause [3.15](#), net of any portion of *settlements residue* recovered from the *Network Service Provider* in accordance with clause 3.6.5(a)(4), will be used to offset *network service* charges.
- (b) A *Transmission Network Service Provider* or its jurisdictional delegate is a *Market Participant* for the purposes of clauses [3.3.1](#) and [3.15](#) (excluding clause [3.15.1\(b\)](#)) but not otherwise
- (c) [Deleted]
- (d) [Deleted]

## **Attachment 2 - An Example Regarding the Current Timing for Recovery of Negative Residues**

If a large negative residue event occurred in October 2004 , this amount is then included in the end of 2004/2005 financial year calculations for the SRA. The outcome of the financial year is then added to the next financial year for which auctions have not yet occurred. So the October 2004 event would be added to the 2006/2007 SRA budget. The first recovery of the negative residues accumulated in the October 2004 event would be in July 2006 with the final recovery in April 2007.

### Attachment 3 - Options to Fund Negative Residues

This Attachment lists ten options (including the current code provisions and the proposal by NEMMCO to recover negative residues. For each of these options the expected impact on end users, auction participants and NEMMCO has also been identified. The options also include the of netting-off over the term of the auction instrument.

The options are essentially a series of variations on a number of features as follows

1. Type of Product: The options identified here are:

- the existing one-way instrument which only requires NEMMCO to pay out; or
- a new two- way instrument that would require unit holders to pay NEMMCO in the case of negative residues. This would represent a major change and might impact on the status of the instrument under the Financial Services Reform Act. The prices would auction participants would bid for such instruments are likely to be lower as the risk of having to make significant payouts would be factored into to such offers. In additional the issue of NEMMCO needing to seek prudential cover would arise. This might well create a significant barrier to entry for prospective auction participants.

2. Period of Netting Off The options identified were:

- either on the basis of the existing one week period or
- over the full three-month life of the SRA units. Such a longer period would mean that the income flowing to SRA unit holders would mostlikely be reduced and auction participants would take this into account in their offers. This is in turn expected to reduce the auction proceeds.

3. Method of Recovery The options identified were:

- from auction fees as currently in the code;
- from auction proceeds as proposed by NEMMCO;
- from future auction fees up to some \$ cap (say \$100k per week) and then from auction proceeds;
- from a market wide levy on the basis that it is a market wide problem; or
- from future auction fees up to some \$ cap (say \$100k per week) and then from a market wide levy.

The tables below summarise the ten options identified by NEMMCO and NEMMCO's conclusions regarding the impact upon relevant parties.

Method No.	Product	Nett-off	Recovery of Nett Negative Residue	Comment
1	1 way	Over Billing Period	Future Auction Fees	Status quo
2	1 way	Over Billing Period	Auction Proceeds	Proposed Code Change
3	1 way	Over Billing Period	Future Auction Fees to Cap then Auction Proceeds	If cap is say \$100k, then only negative residue arising from major events are likely to flow through to auction proceeds
4	1 way	Over Billing Period	Market Levy	Levy expected to be small – recognises that negative residue may not be not inconsistent with efficient dispatch. Levies are not popular with Market Participants.
5	1 way	Over Billing Period	Future Auction Fees to Cap then Market Levy	Combines benefits of no. 3 and no. 4
6	1 way	Over Term of Unit (3 mths)	Future Auction Fees (Reduced quantity compared with options 1 – 5)	Reduces size of expected residues – issue of compliance with FSR act – some re-design required
7	1 way	Over Term of Unit	Auction Proceeds	Refer no. 6
8	1 way	Over Term of Unit	Market Levy	Refer no. 6
9	2 way	Not Applicable	Not Applicable	Re-design of SRA
10	1 way - point to point SRA	Pool IRSR from all interconnectors.	Very unlikely to occur	Re-design of SRA. Similar to non-firm FTR. Residue distributed dependent on pool of residue and relevant RRP

### Alternative Approaches to Funding Negative Residues



Method No.	Impact on			
	Distributed Residues	Auction Participant and Proceeds	End User	NEMMCO
1	Status quo	Status quo – participation may be severely impacted if fees are excessive. Negative residues are largely an uncontrollable auction expense. Participants losses capped by their bids	Status quo – rebate received will be impacted by participants view of expected negative residues and current level of fees.	NEMMCO funds negative residue for up to two years until it can recover that amount from auction fees or unsold residues
2	Status quo	Participation impact from fees and proceeds will be less affected by negative residues	Rebate received reflects actual negative residues occurring rather than participants expectation	NEMMCO funding negative residue for shorter period (maybe 3 months)
3	Status quo	Limited impact on participation. Proceeds will still reflect risk of negative residues within billing period which is born by participants	Rebate would only be directly affected when larger negative residues occur	NEMMCO may fund smaller residues for both periods referred to in (1) and (2)
4	Status quo	Participation not impacted. Proceeds are likely to be unchanged	Levy is likely to be passed on to end use customers in their energy charge.	No impact
5	Status quo	Limited impact on participation and proceeds	Levy is likely to be passed on to end use customers in their energy charge.	Similar to (1) but smaller amount funded
6	Reduced as more negative residue is netted off against positive	Participants will reduce estimated value of unit and proceeds likely to be lower. Participants losses still capped	Rebate reduced by lower auction proceeds. There is a much smaller likely hood of recovery beyond the quarter.	SRA unit would require redefinition and settlement system changes to manage cross quarter recovery would be required.
7	Refer to (6)	Refer to (6)	Refer to (6)	Refer to (6)
8	Refer to (6)	Refer to (6)	Refer to (6)	Refer to (6)

9	Reduced and may require payment from auction participant	Participants will reduce estimated value of unit and proceeds will be lower. Participants losses will be uncapped	Rebate reduced significantly	Could not implement without ASIC approval. May require prudential criteria to be imposed on auction participants. Significant modification to Settlements software and processes
10	Volatility in residue payments reduced	May result in increased proceeds. Negative residues unlikely to impact fees and hence participation	May improve rebate	Could not implement without ASIC approval. Major redesign required. Need to consider in relation to COAG proposal

### Impacts of Alternative Approaches

#### Conclusion

As regards the type of instrument, a move to a two way instrument would require a major change to the SRA and as discussed above would have significant disadvantages. On this basis NEMMCO has rejected option 9.

As regards the choice of the netting-off period NEMMCO sees no benefit in changing to a longer netting-off period. NEMMCO believes that transferring the risk of negative residues from customers (via reduced auction proceeds) to auction participants (by netting across a full quarter) should have little impact as the SRA bidders would discount their bids to reflect this risk. This would reduce the amount of auction proceeds that would flow to customers by way of reduced TUOS charges. Thus end use customers are unlikely to benefit from such a change. Such a change would also require a redesign of the SRA product and settlement process. For this reason NEMMCO has rejected options 6, 7 and 8.

As regards the choice of the method of recovery NEMMCO's conclusions are:

- A market levy as in options 4 and 5 is a relatively inefficient process;
- Recovery from auction proceeds as in option 2 would seem to directly impact the end user. However NEMMCO would argue that the present approach equally affects the end user but in a less obvious manner. This is because negative residues ultimately lead to increased auction fees with such increases being taken into account by bidders in the auction. This is likely to result in reduced bids and thus the auction proceeds that flow to end-use customers.
- Recovery from future auction fees as in the option 1 the existing arrangement. As set out in this letter this process requires NEMMCO to fund such residues for a significant period of time before recovering these costs including interest costs from future auction fees. As argued above, this ultimately impacts upon end-users.

- Recovery from auction fees up to a Cap then recovery from auction proceeds as in option 3. Such a compromise introduces a further level of complication that is difficult to justify since as argued above the ultimate impact on the network user is likely to be similar whether the recovery is made from future fees or from auction proceeds. In addition the choice of a level for the Cap would be problematic. On this basis NEMMCO does not favour option 3.

The final option (option 10) would represent a very radical change to the whole SRA process which NEMMCO believes cannot be justified at this time.

NEMMCO's general conclusion is that all of the options 1 to 9 would ultimately result in the end-user significantly contributing to the cost of negative residues. NEMMCO is thus of the view that the simplest method (option 2) should then be used. This is for the recovery in excess of one week to be recovered from auction proceeds. This does not need the SRA unit to be redefined; it does not require changes to the settlement systems to account for inter-week processing and accounting and addresses the inefficiencies inherent in the current approach.

#### **Attachment 4 - Outline of NEMMCO's Proposal**

Under this proposed arrangement positive and negative residues for a given directional interconnector would continue to be netted-off over a billing period (ie one week). If the net amount is negative then this will be accrued by NEMMCO for future recovery. Any positive net amounts will be distributed to unit holders in the same manner as at present.

When the proceeds are received from auction participants for the purchase of units on a given directional interconnector any accrued negative residues (those held by NEMMCO) for that directional interconnector from previous quarters will be recovered from the proceeds to the extent possible. The remaining proceeds, if any, will then be distributed to the relevant TNSP.

In a case where there is a large accumulation of negative residues for a given directional interconnector relative to the auction proceeds for the same directional interconnector then the recovery of the negative residues may take a number of quarters to achieve.

Interest costs arising from the need for NEMMCO to finance these negative residues for some period will not be recovered from the auction proceeds. Such costs will be considered a normal cost of running the auction and will be recovered through auction fees.