AEMC

Australian Energy Market Commission

Rule Determination

National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006

Rule Proposal: Recovery of Negative Inter-Regional Settlements Residue

Proponent: NEMMCO

Date: 30 March 2006

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Contents

Summary 2
1. The proponent's Rule proposal 3
2. The Rule determination 5
3. Requirements under the NEL 5
3.1 The Rule making test 5
4. Consultation process 5
5. Matters raised in analysis and consultation 6
5.1 Issues related to operation of Rule change 7
5.2 Broader issues related to SRA and inter-regional financial trading more generally 16
5.3 Summary of differences between the draft Rule and the final Rule.... 21
6. Commission's reasons for draft determination in terms of the Rule making test 22
6.1 Assessment against Rule making test 22
Appendix 1 Timing between accumulating and recovering negative residues . 23
Appendix 2 Final Rule 24

Summary

The National Electricity Market Management Company (NEMMCO) proposed a change to the National Electricity Rules (Rules) regarding the recovery of negative inter-regional settlements residue as part of the Settlements Residue Auction (SRA) process. The proposed Rule would enable NEMMCO to recover outstanding negative inter-regional settlements residue (negative residues or negative IRSR) from future auction proceeds rather than future auction fees.

The principal aim of the proposed Rule change was to reduce the cost of funding negative residue debt. Requiring SRA unit holders to pay significant fees that were a consequence of market outcomes up to two years previous is likely to discourage future interest in the auction. Currently, the mechanism used can take up to three years to fully recover negative residues accrued today. This results in cross-subsidies between those participating in the auction today when the negative residues accrue, and those future participants who fund the debt. This Rule will help reduce the cost of cross-subsiding this debt.

The Commission notes that the proposed Rule change does not address the SRA process itself or the underlying causes of negative settlements residue. Its aim is to address one component of the process, not to evaluate inter-regional financial trading arrangements in the National Electricity Market (NEM).

A number of substantial issues concerning the broader nature of the settlements residue auction and inter-regional financial trading arrangements in general were raised in submissions to the initial consultation. The Commission considers that the Congestion Management Review is a more appropriate environment to raise such issues and included specific questions on these issues in the Review's Issues Paper.

The four submissions on the Commission's daft Rule determination, published 19 January 2006, gave support to the core thrust of the draft Rule. The Commission considered the views expressed regarding the recovery of existing accumulated debt and interest payments and has amended the Rule to enable more efficient recovery of those costs.

The Commission noted the views expressed in submissions concerning the draft Rule's three year sunset provision and intends to address concerns about the longer-term financing arrangements for negative settlements residue as part of the current Congestion Management Review.

The Review's terms of reference require the Commission to include in its report to the MCE draft Rules that would implement the enhanced constraint management arrangements proposed in the report. To the extent appropriate, the Commission will include in its recommendations and associated draft Rules a recommendation on whether the funding mechanism provided in this Rule should be continued, varied, or terminated. The Commission has decided therefore, to retain the three year sunset requirement as a signal that this is not a long-term solution.

Accordingly, the Commission has determined to make a Rule to address the issues relating to the Rule change proposal. This Rule determination sets out the Commission's reasoning in accordance with the requirements of the National Electricity Law (NEL).

1. The proponent's Rule proposal

NEMMCO lodged a proposal with NECA on 8 February 2005 to change the National Electricity Code (now Rules) to amend the process for recovering negative inter-regional settlements residue in the NEM settlement process.

Negative residues occur when power flows from a high priced region to a low priced region. This may happen due to a range of events including:

- The operation of some network constraints and network outage conditions;
- Rapid changes to power flows occurring within thirty minutes;
- Frequency Control Ancillary Service (FCAS) constraints; and
- Islanding events.

Clause 3.6.5(4)(i) of the Rules permits NEMMCO to recover negative residues from positive residues accrued within the same billing period (a week). If the value of negative residues accumulated within a billing week is greater than the available positive residues, then clause 3.6.5(4)(i) of the Rules currently allows NEMMO to treat the net negative residues as an auction expense, recoverable from future auction fees.

NEMMCO also incurs an interest cost on the financing required to cover the net negative residue debt. This interest is deemed an auction expense and is also recovered through auction fees. The longer the recovery period, the higher the interest cost to cover the borrowed amount.

Large negative residues have contributed to significant increases in auction fees to enable NEMMCO to recover the residues. In its proposal, NEMMCO lists recent years' auction fees: $624,000 in 2003/04; $908,000 in 2004/05; $2,602,000 in 2005/06. NEMMCO is currently carrying forward a liability in excess of $3M in 2004/05 including annual interest costs of around $140,000 due to negative residues.

NEMMCO is concerned about the impact the increasing accumulation of net negative residues is having on auction fees and believes that rising auction fees will discourage interest in the SRA. In its proposal, NEMMCO suggested that having a substantial number of parties participating in the SRA process enhances the auction's efficiency.

In preparing the proposal, NEMMCO considered a number of possible alternatives for recovering negative residues. Ten options were assessed ranging from continuing the status quo to recovery through a market levy to a complete overhaul of the SRA process. NEMMCO concluded that any market levy was relatively inefficient, the status quo by nature does not improve the current situation, and a radical change to the SRA process could not be justified at this time.

Because nearly every option considered resulted in the end-user significantly contributing to the cost of negative residues, NEMMCO considered the simplest of the options should be pursued. This is reflected in its proposal. NEMMCO believed this option did not require the SRA unit to be redefined; did not require changes to the settlement systems to account for inter-week processing and accounts; and addressed the inefficiencies inherent in the current process.

The proposal would provide NEMMCO with the option to recover net negative residues from future auction proceeds rather than future auction fees. This, NEMMCO believes, is the preferred option as it "has the advantage of efficiency because of its directness."

The figures below illustrate the current process (Figure 1) and NEMMCO's proposed process (Figure 2).

Figure 1 – Current process for recovery of negative residues

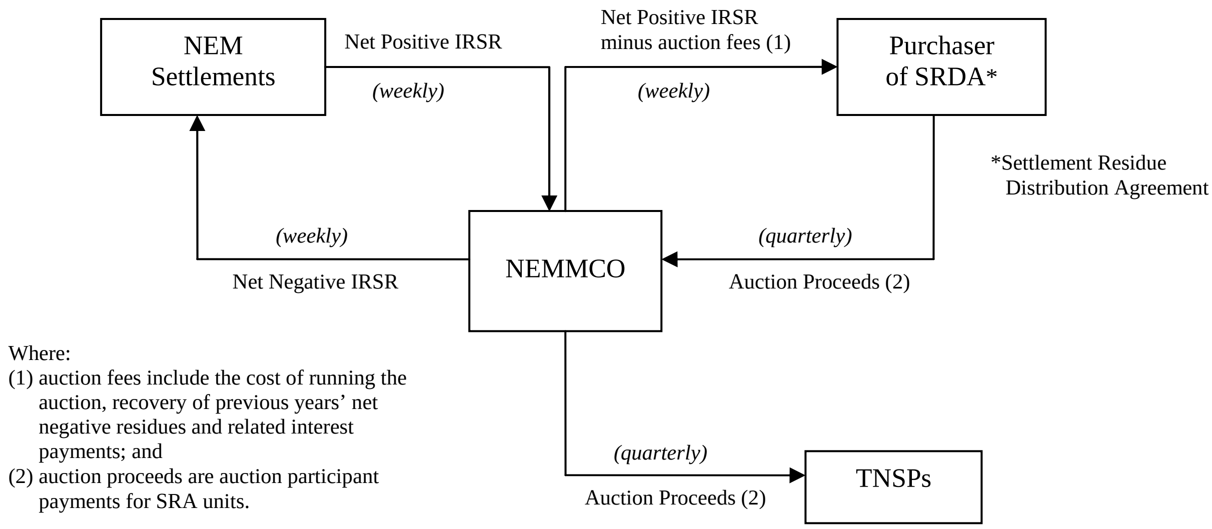
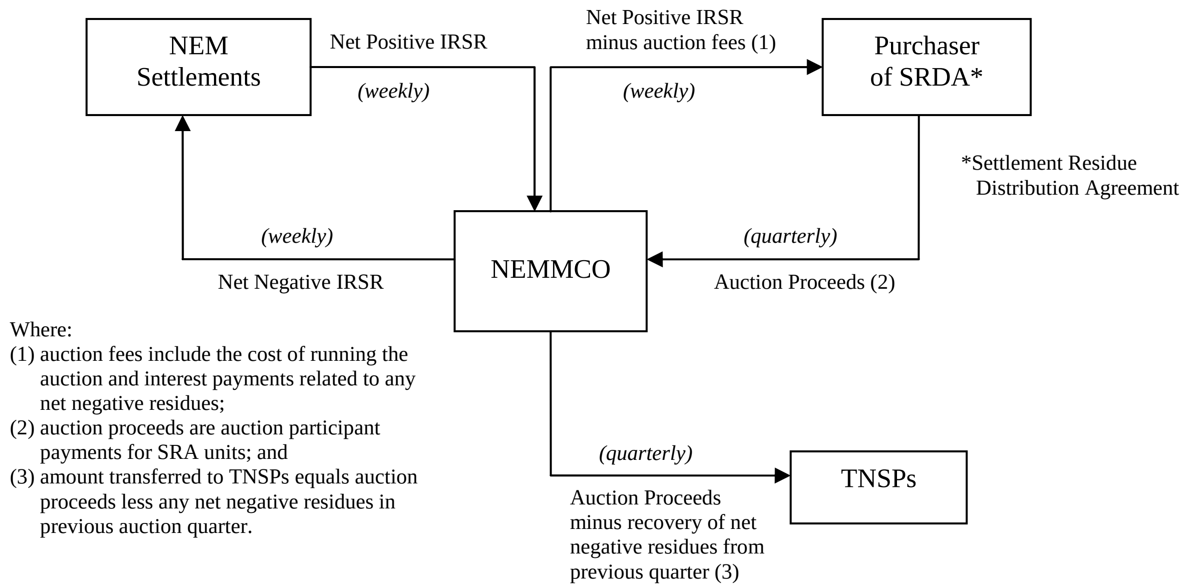


Figure 2 – NEMMCO's proposed process for recovery of negative residues



NEMMCO states that 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.

NEMMCO would continue to collect interest payments incurred to cover net negative residues between payments of auction proceeds through auction fees as NEMMCO views the cost as an ongoing expense of running the auction process.

2. The Rule determination

The Commission has determined, in accordance with section 102 of the NEL, to make the Rule set out in Appendix 2 of this Rule determination and under section 103, will commence on gazettal on 30 March 2006. The wording of the Rule amends aspects of the proposed Rule as put forward by NEMMCO, for the reasons set out at section 5 of this determination.

In coming to its decision, the Commission has considered:

- the Rule change proposal and proposed Rule put forward by NEMMCO (see section 1);
- submissions received; and
- requirements under the NEL (see section 3).

The Commission has applied the statutory Rule making test and for the reasons set out in section 6 of this Rule determination, is satisfied that the Rule is likely to contribute to the achievement of the NEM objective.

3. Requirements under the NEL

3.1 The Rule making test

Under s.88 of the NEL, the Commission is only able to make Rules if it is satisfied that the Rule contributes to achieving the NEM objective. The Commission must also consider any relevant MCE statements of policy principles and any regulatory regulations.

This Rule is likely to increase the efficiency of the SRA process and therefore meets the objective to promote efficient investment in and use of electricity services for the long term interests of consumers. Section 6 explains in more detail how the proposal meets the NEM objective.

There are currently no MCE statements of policy principle or regulatory requirements applicable to this Rule change proposal.

4. Consultation process

Following receipt of the (then) Code change proposal, NECA's Code Change Panel issued an invitation for submissions on 17 February 2005. The Panel received seven submissions commenting on the proposal from the Electricity Retailers Association of Australia (ERAA), Hydro Tasmania, Macquarie Generation, NRG Flinders, Snowy Hydro Limited (Snowy Hdyro), Tarong Energy Corporation Limited (Tarong Energy), and TransGrid.

These submissions were all generally supportive of the proposal in the context of addressing the specific problem of funding net negative residues. The submissions did raise, however, substantial issues in the broader context of the SRA and the contributing causes of negative residues. These issues are discussed in section 5.

Under the transitional powers in the NEL, as the Code change proposal was not finalised at the date of commencement of the Commission on 1 July 2005, the proposal moved to the Commission where it is now being treated as a Rule making request.

Part 3 (3) of Schedule 3 of the NEL enables the AEMC to:

> *dispense with a relevant Rule-making step if this step duplicates a relevant Code change step already undertaken under the National Electricity Code.*

The Commission considered the first round consultation undertaken by the Code Change Panel and decided to consider the submissions received as if the Commission had undergone the first round consultation process itself. Submitting parties confirmed with the Commission that these submissions still represented their views on this proposal.

Accordingly, the Commission published a draft Rule determination and accompanying notice under s.99 of the NEL on the 19 January 2006. The four submissions received during that consultation were from NEMMCO, CS Energy, the National Generators Forum (NGF), and the ERAA.

All submissions expressed their broad support for the Commission's approach in its draft Rule determination, but proposed further changes. Issues raised related to the use of a sunset clause, creation of a new Rules Chapter for savings and transitional Rules, and the recovery of existing accumulation debt and interest costs. Following consideration of those submissions, and the issues raised in them, the Commission has now made this final Rule determination.

5. Matters raised in analysis and consultation

All the submissions received broadly support NEMMCO's core proposal to amend the recovery mechanism for negative settlements residue. The Commission has therefore considered separately any issues relating to the core proposal from broader, more substantial issues. This discussion includes any issues raised in submissions or encountered in the Commission's analysis of the proposal.

The Commission considers issues relating directly to the operation of the Rule change in section (5.1), and considers broader substantial issues related to the SRA and inter-regional trading as a whole in section (5.2). Issues discussed in section (5.1) include:

- recovery of negative residue from auction proceeds (section 5.1.1);
- recovery of interest payments (section 5.1.2);
- recovery of existing accumulated debt (section 5.1.3);
- impact on end use customers (section 5.1.4);
- inclusion of a sunset clause (section 5.1.5); and
- creation of a savings and transitional Rules chapter (Chapter 11) (section 5.1.6).

Broader issues covered in (5.2) include:

- management of negative settlements residue accumulation (section 5.2.1)
- intra-billing week deduction of negative settlements residue (section 5.2.2); and
- discussion of the issue of negative residues (section 5.2.3).

5.1 Issues related to operation of Rule change

5.1.1 Recovery of negative residues from auction proceeds

Current Process

Inter-regional settlements residue is the difference between the value of energy in one region and the value of that energy once it has been transferred to another region. Positive residues arise if the energy is transferred from a low-priced region to a high-priced region. The amount paid for the energy in the high-priced region being transferred from the low-priced region will be more than what NEMMCO pays the generators in the low-priced region. This is the normal market outcome.

If energy is transferred from a high-priced region to a low-priced region, the value paid for the energy is less than what NEMMCO must pay the generators in the high-priced region. This is a less common event. Over a 12 month period (1 April 2004 to 31 March 2005) this occurred on average 3.7% of trading intervals and was around 0.12% of the magnitude of total inter-regional settlements residue.[1] During this period, NEMMCO could apply its intervention powers, under Chapter 8A Part 8 of the Rules, to contain the accumulation of negative residues. (This process is described in section 5.2.1).

To recovery negative residues, NEMMCO first nets off any negative residues from positive residues accrued within the same billing week. If the value of the negative residues accumulated within a billing week exceeds the available positive residues, then NEMMCO treats the net negative residues as an auction expense and recovers it from future auction fees.

What the proponent said

NEMMCO is concerned about the impact increasing net negative residues will have on both auction fees, and therefore SRA participation, and the liability of funding the associated debt. The proponent believes recovering net negative residue from auction proceeds rather than auction fees will help make the SRA more efficient by promoting participation, and will assist in controlling the related debt and associated interest costs.

1 *NEMMCO Settlement Residue Auction Information Memorandum*, NEMMCO, 1 July 2005, p.16.

What the submissions said

All submissions expressed broad support for the core proposal to recover negative inter-regional settlements residue from auction proceeds.

The Commission's considerations and reasoning

The main objective of the Rule is to reduce the cost of funding negative residue debt. This includes both reducing the cost associated with funding the loan, but also NEMMCO's liability that has developed with funding negative residue debt over a number of years.

There are cost saving benefits from moving to a funding regime that reduces the recovery period from years to months. One apparent saving is the reduction in interest costs associated with servicing the loan.

There are also economic benefits from the change. The existing recovery mechanism experiences a lag of up to three years between incurring the negative residue and fully recovering it from auction fees. This lag means future SRA unit holders are cross-subsiding those participating in the auction today. By reducing the time delay from years to months, there is a corresponding reduction in the cross-subsidies between current auction participants and future ones.

One consideration is the impact on auction proceeds, and the follow on impact on transmission customers. Auction proceeds are passed on to the relevant TNSP, who in turn passes the proceeds on to their customers through a reduction in transmission charges. However, as discussed in more detail in section 5.1.4, this is unlikely to have a material impact on customers.

The core proposal to change how NEMMCO recovers accumulated negative residue has the support of all the submissions received and provides incremental benefit to the auction process.

The Commission's finding in relation to this issue

Given the broad support for the Rule proposal and the analysis of the issues involved, the Commission supports the proposal subject to amendments summarised in section 5.3. The Rule specifies the terms of the Commission's decision. Clause 3.6.5(a)(4A) in the Rule sets out the substance of the proposal.

This clause outlines the three-tiered collection mechanism to enable NEMMCO to recover net negative residue. The first tier allows NEMMCO to continue its current practice of netting negative residue from positive residue within the same billing week. (See section 5.2.2 for discussion on this issue.) The next tier amends NEMMCO's existing practice to allow recovery of net negative residue from auction proceeds received in the next quarter. Should the auction proceeds from that quarter be insufficient to cover the net negative residue amount, the third tier allows collection of any outstanding amount from subsequent auction proceeds until fully recovered. The Rule also amends clause 3.18.4(a)(1) to clarify that any net negative residue amount have been considered prior to auction proceeds being passed to the relevant Network Service Provider.

5.1.2 Recovery of interest costs

Current Process

NEMMCO currently incorporates any interest costs associated with funding net negative residues into auction fees.

What the proponent said

In its proposal, NEMMCO outlined that interest costs arising from financing negative residues would continue to be funded from auction fees under this proposal. NEMMCO views these inherent costs as a normal cost of running the auction and would therefore continue to recover them through auction fees.

What the submissions said

NRG stated in its submission that:

> *These [interest costs] are costs auction participants are in no position to manage, provide no direct benefit to SRA holders, and are not incurred as a result of positive settlement residues, the right to which participants compete at auction.*

It argues interest costs should be recovered through auction proceeds.

In their submissions on the draft Rule determination, both the NGF and ERAA expressed the view that interest payments associated with funding negative residues should be recovered using the same method being used to recover negative residues. The ERAA stated that:

> *Interest cost has nothing to do with the operation of the auction process, but is purely a cost associated with funding the debt itself.*

The NGF stated that:

> *It would appear to be inconsistent to accept the principle of passing the accumulated debt through auction proceeds, but not the interest cost of funding it.*

This amendment, the NGF stated, would extend the "efficiency benefits of this Rule change".

The Commission's considerations and reasoning

The accumulation of both positive and negative settlements residue is a consequence of inter-regional trading in the NEM. The design of the Settlement Residue Auction provides a way to distribute and recover these residues.

Under the SRA process, only net positive residues are passed through to unit holders. The design assumed that negative residues would not be significant. This structure could suggest to auction participants that they were only bidding for access to positive residues. On the other hand, if the SRA is a way to better manage the risks of trading between regions, the Commission considers participants would recognise there are both up- and down-side risks, despite only being directly exposed to one side.

If negative residues were recovered from auction participants in the same manner that positive residues are currently distributed, i.e. have auction participants pay NEMMCO the proportion of negative residues associated with the quantity of units held on a weekly basis, then NEMMCO would not need to finance negative residues through debt. Since this is not the case, NEMMCO needs a mechanism to recover the interest accrued from financing negative residues through borrowing.

NEMMCO incurs costs and expenses to establish, administer, and conduct the auction process. These auction costs exist whether settlements residue is positive or negative. The Commission agrees that interest costs are not incurred as a result of positive residues. The auction rules state that interest costs are incurred as a result of running the auction process.[2] Without a way to finance negative residues, NEMMCO would not be able to run effectively the settlements auction.

That being said, there should be consistency between the methods of recovering negative settlements residue and the recovery of the associated funding costs. If interest costs continued to be recovered from auction fees, then two different parties, in different time periods, would assume the costs of recovering the negative residues and the cost of funding it. This could introduce potential inefficiencies and inconsistencies in recovery.

The Commission's finding in relation to this issue

For the reasons set out above, the Commission considers the same recovery mechanism should be used to recover both negative settlements residue and the associated costs of funding it. The interest costs of funding the outstanding negative residue debt should therefore be recovered from auction proceeds rather than auction fees.

5.1.3 Recovery of existing accumulated debt

Current Process

Clause 3.6.5(a)(4)(i) of the Rules permits NEMMCO to recover outstanding negative residues from auction expense fees. NEMMCO incorporates outstanding negative residues and the associated interest costs into the budget of the next financial year for recovery, and then determines the appropriate auction fees. A per unit auction fee is set each quarter for each directional interconnector based on historical clearing prices and the respective negative residue accumulated on that interconnector.

NEMMCO has a requirement under clause 3.18.4(d) of the Rules to publish the auction fees prior to auctioning the first tranche of a quarter's units. Since the first tranche is auctioned a year in advance, this means the minimum delay between incurring the negative residues and incorporating them into a budget for recovery is one year. Full recovery is over that financial year.

2 NEMMCO, *National Electricity Market Settlement Residue Auction Rules*, 1 September 2004, p.2.

For example, negative residues accrued in Q2 in 2005 will be incorporated for recovery into the budget, and therefore auction fees, for the 2006-07 financial year. Negative residues accrued in the next quarter, Q3 in 2005 are not able to be recovered during the 2006-07 financial year, but rather have to wait until the 2007-08 budget before being incorporated into the auction fees for recovery. Figure 3 in Appendix 1 graphically depicts this lag.

What the proponent said

NEMMCO does not explicitly discuss how it intends to recover existing debt associated with accrued negative residues should its Rule change progress forward. In discussions with the Commission, NEMMCO clarified it would anticipate using the existing and new recovery methods in tandem until the existing method had fully recovered all existing negative residue debt.

What the submissions said

NRG Flinders' submission notes that the proposal does not explain how NEMMCO plans to recover any existing shortfall due to accrued negative residues. NRG believes additional benefits may be available by clarifying the intended recovery mechanism for the existing debt.

In its submission to the draft determination, NEMMCO supported clarifying the process and that identifying this matter would remove any stakeholder doubt that the two recovery mechanisms would run in parallel until all accrued negative residues were fully recovered.

The NGF and CS Energy both stated in their draft determination submissions that the delay in recovering debt accumulated prior to this Rule's commencement would limit the benefits of the new recovery mechanism. They both argued that any "unallocated debt", at the time of the Rule's commencement, should be recovered from auction proceeds.

The Commission's consideration and reasoning

Negative residues accrued before 1 July 2005 (the end of Q2 2005) are budgeted for recovery from auction fees in the 2006-07 financial year. All the SRA units for Q3 2006 have been sold. Tranches of units for Q4 2006 and Q1 and Q2 2007 have also been auctioned. The auction fees published for those quarters incorporate the recovery of negative residues accrued between Q3 2004 (1 July 2004) and Q2 2005 (30 June 2005). Those fees cannot be amended without disrupting the SRA process. For this reason, the Commission recognises the need for transitional arrangements.

The Commission considers that an appropriate transitional provision allows for auction fees to recover negative residues accumulated prior to 1 July 2005 given auction fees have already been set to recover those negative residues.

The Commission acknowledges though that the outstanding negative residues accumulated on or after 1 July 2005 but before Rule commencement will not yet be incorporated for recovery through auction fees. These negative residues will not be fully recovered through auction fees until 2007-08 financial year (see Figure 3 in Appendix 1).

It would be possible to recover these negative residues using auction proceeds rather than promulgating the delayed recovery from auction fees that this Rule is trying to address.

The Commission considers that an additional transitional provision is required to account for the recovery of negative residues accrued on or after 1 July 2005 but before the Rule's commencement.

These transitional provisions will require the old recovery method from auction fees and the new recover method from auction proceeds to run for a short time in parallel.

However, an effect of running the two recovery mechanisms in parallel is a possible reduction in the auction proceeds passed on to the relevant TNSPs. Auction bids may not yet reflect the potential for higher settlements residue since auction fees would still be recovering existing negative residue debt. At the same time, NEMMCO would be recovering negative residues from the next quarter's auction proceeds. This would mean until all existing debt related to negative residues clears, TNSPs could receive a lower contribution to their network fees, resulting in higher costs for transmission customers, and ultimately, end users. This is particularly relevant for the first auction following Rule commencement as those proceeds will be recovering a full year of negative residues.

While this process results in having two parallel recovery mechanisms, it is a transitional measure. The Commission considers this process will minimise the disruptive impact to the auction process and participants.

The Commission's finding in relation to this issue

The Commission's view is that a savings and transitional provision is necessary to ensure existing negative residue debt is recovered with minimal disruptive impact to the auction process and participants, and transmission customers. To run in parallel the current recovery method through auction fees and the recovery method through future auction proceeds appears to be the least disruptive transitional arrangement. The process is articulated in the Rule in clause 11.1.1(a). Figure 4 in Appendix 1 graphically depicts the recovery timing under the new regime.

5.1.4 Impact on end use customers

Current process

Clause 3.6.5(a)(6) of the Rules states that any portion of settlements residue distributed to a Network Service Provider will be used to offset network charges. This includes any adjustments resulting from routine or special revised statements or any received auction proceeds.[3]

What the proponent said

The proponent acknowledged that all of the options considered, including the status quo, would ultimately result in the end-user significantly contributing to the cost of negative

3 *NEMMCO SRA Information Memorandum*, p.23.

residues. The one option that did not, required a very radical change to the whole SRA process which NEMMCO believes can not be justified at this time.

What the submissions said

TransGrid pointed out in its submission that while NEMMCO's argument that the net effect between recovering negative residues through auction fees or auction proceeds is the same, experience to date might prove otherwise. This experience indicates that SRA proceeds are on average about half the value of the residues. TransGrid suggests recovering negative residues from auction proceeds will have a much greater effect on customers compared to recovery from positive residues or auction fees.

However, while TransGrid states that NEMMCO's proposal will increase uncertainty as to the value of auction proceeds passed through to customers each quarter, the uncertainty is unlikely to be material if NEMMCO's estimate that annual negative residues total about $800,000 is correct.

The Commission's consideration and reasoning

Recovering negative residues from auction proceeds will introduce a level of volatility for TNSPs, and therefore end use customers. Driving this volatility is the uncertainty of when counter-price flows might occur and the value of negative residues accrued during those periods. This uncertainty is not present in the current recovery mechanism as auction fees are set ahead of time and include a pre-determined negative residue recovery amount. TNSPs know, on average, what to expect from auction proceeds each quarter.

However, it is possible that the increase in expected IRSR to unit holders (due to lower auction fees) could result in higher auction proceeds (as demand for the higher residues would push up auction bids). If this is the case, then the net effect of moving negative residue recovery from auction fees to auction proceeds could be minimal. The trade-off to consider, then, is between the reduction in interest costs and the increase in auction proceeds volatility.

By reducing the lag between incurring and recovering negative residues, the interest will accumulate at a slower rate than it is currently. This leads to an efficiency improvement in the settlement residue auction process by reducing unnecessary costs. Since auction participants account for auction fees in their bids for units, a reduction in auction fees should lead to the auction process being more competitive, enabling higher auction proceeds to flow through to end users.

A potential rise in auction proceed volatility could negatively impact on future transmission fees. However, it has been suggested that while some uncertainty in the value may result from this Rule, this uncertainty is unlikely to be material. The Commission notes that while volatility could increase, the materiality is expected to be small.

The Commission's finding in relation to this issue

The Commission considers that, as quoted in submissions, the impact on end use customers is unlikely to be material.

5.1.5 Inclusion of a sunset clause

Current process

There is no sunset clause as part of the current arrangements.

The draft Rule included a time limited clause ("a sunset clause") on the proposed recovery mechanism. This sunset clause would result in the Rule expiring three years following its commencement. Should the Rule be left to expire, the recovery mechanism would revert back to the current settlements residue auction fee process for negative settlements residue recovery.

What the proponent said

This was not an issue NEMMCO addressed in its original proposal.

What the submissions said

In its draft determination submission, NEMMCO indicated that it did not believe the sunset was necessary to ensure the Congestion Management Review (CMR or Review) would:

> *Result in Rule changes that could address all relevant areas including the recovery of negative residues if a more appropriate scheme was determined via the CMR.*

NEMMCO also suggested it was unlikely that the CMR would result in a scheme that prevented the accumulation of all negative residues. For example, significant negative residues can result from cases surrounding power system security and physical separation that a CMR regime would be unlikely to manage. NEMMCO also commented if Rule changes resulting from the CMR are not complete one year before the sunset, there could be some uncertainty for SRA participants.

While the ERAA accepted that the proposed Rule is limited to the SRA process and the broader Review may make further changes, it did not support a sunset provision. It considered that this change is "discrete and not a trial or interim step" and that:

> *It therefore would persist in the absence of a wider review determining a better method and should only be changed by a positive proposal, which is part of a wider Rule change.*

CS Energy also expressed a lack of support for the sunset. It stated that introducing a sunset "decreases regulatory certainty" and "does nothing to improve the SRA in terms of providing a mechanism to manage risk". It stated that the Rule change should be considered separately from other consultations, including ones on issues like the causes of negative residues. CS Energy believes recommendations from other proposals and reviews could easily incorporate any revisions to the recovery mechanism.

The Commission's consideration and reasoning

The Commission recognises that this Rule proposal is limited to introducing an improved arrangement for funding negative settlements residue, rather than addressing their underlying causes. It notes, however, that its current Congestion Management

Review will examine the causes and consequences (including negative settlements residues) of network congestion and is required to recommend to the MCE, options for addressing them more effectively.

The terms of reference for the CMR require the Review to:

> *identify and develop improved arrangements for managing financial and physical trading risks associated with material network congestion.*[4]

They also require the Commission to provide, as part of its final report to the MCE, draft Rule changes that would enable implementation of the proposed arrangements.

The Commission considers that the CMR represents the most appropriate process for examining the underlying causes of negative settlements residue and managing them. It therefore intends to examine those issues as part of the CMR and, to the extent that is appropriate, include measures for addressing them in its recommendations and the accompanying draft Rules. In that context, the Commission will include in the CMR report to the MCE a recommendation as to whether the funding mechanism provided for by this Rule proposal should be continued, varied, or terminated.

The Commission has therefore decided to retain the three year sunset requirement for the current Rule change proposal to signal clearly its view that this is not considered to be a long-term solution to the negative settlement residue issue and its intention to examine the range of issues involved more thoroughly in the context of the CMR.

The Commission's finding in relation to this issue

The Commission has determined to maintain the time limit of three years in relation to this Rule.

5.1.6 Creation of a savings and transitional Rules Chapter (Chapter 11)

Current process

The current Rules co-locate savings and transitional clauses with the related clauses within the Rules.

What the proponent said

NEMMCO's proposal did not discuss this issue.

What the submissions said

The NGF stated in its draft determination submission that the Commission may wish to consider whether the existing practice of co-locating related clauses within the Rules provided a more user-friendly approach compared to creating a savings and transitional Rules Chapter.

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4 Ministerial Council on Energy, *Terms of Reference: Congestion Management Review*, 5 October 2005, p.5, available: http://www.aemc.gov.au/pdfs/reviews/Congestion%20Management%20Review/congestionmanagementreview.pdf

In its submission, the ERAA expressed its concern that this new Chapter 11 could lead to confusion. The ERAA considers that all aspects of the Rules, including savings and transitional clauses, should be included within the main clauses of the Rules.

The Commission's consideration and reasoning

This Rule creates a new Chapter to the National Electricity Rules – Chapter 11. This is because this Rule will be the first made by the Commission with a savings and transitional issue. The new Chapter will contain savings and transitional clauses where they are required for all Rules made by the Commission.

The Rules now have the force of law so that savings and transitional Rules are necessary. Amending legal Rules creates savings and transitional issues to be managed, perhaps more significant than under the old Code. Having a Chapter that will track savings and transitional clauses, and reference them to the particular amending Rule to which they apply, is in line with best practice in legislative drafting. A specific Chapter for savings and transitional Rules (which may in some cases, be quite lengthy and detailed) enables the Commission to properly manage, monitor, and maintain these Rules.

To address more generally the concerns raised in submissions, the Commission will include a note in the body of the Rules that have a relevant savings or transitional Rule attached in Chapter 11, which identifies the relevant provision in Chapter 11. The Commission is also proposing that the electronic version of the Rules will be capable of "hyperlinking" these clauses to the relevant clause in Chapter 11.

The Commission's finding in relation to this issue

For the reasons explained above, the Commission has determined that it will establish a new Chapter 11 – Savings and Transitional Rules – with the creation of this Rule.

5.2 Broader issues related to SRA and inter-regional financial trading more generally

A number of broad-based and substantial issues were raised in submissions. These issues are discussed individually with the Commission's combined consideration of these issues presented in section 5.2.4.

5.2.1 Management of negative settlements residue accumulation

Current process

The derogation described under Part 8 Network Constraint Formulation of Chapter 8A Part 8 of the Rules places an obligation on NEMMCO to reduce the duration of significant counter-price flows, thereby slowing the accumulation of negative residues. This derogation enables NEMMCO, during times of significant counter-price flows, to:

…use reasonable endeavours to apply an alternative formulation for that network constraint for the expected duration of the significant counter price flow. The alternative form of the network constraint must apply for the expected period of the significant counter price flow if the original formulation of the network constraint were used.[5]

Following consultation, NEMMCO published its procedure for managing the accumulation of negative residues under the above Rules provision. The Dispatch Operating Procedure details how NEMMCO limits the relevant interconnector flow to restrict the accumulation of negative residues over $6,000 for each occurrence, and advises the Market via Market Notices of its actions.[6] The procedure is not specified in the Rules beyond the provisions in the Participant derogation in Chapter 8A Part 8.

This procedure was developed as part of NEMMCO's "Final Report: Management of network limitations within the Snowy Region and constraint formulation in the NEM – interim actions", published July 2003. NEMMCO's previous procedure allowed for counter-price flows to occur up to an accumulated negative residue of $10,000 for the directional inter-connector and billing period.

In response to concerns raised in submissions to its draft report, NEMMCO modified the existing $10,000 trigger level and accumulation principles. Changes included treating each occurrence individually and not using the billing period accumulation to offset the trigger. In addition, if the accumulation of negative residues over the period of counter-price flows is forecast to reach a value of $6,000, then NEMMCO would use reasonable endeavours to apply constraints to prevent the accumulation provided system security could be maintained.[7] NEMMCO incorporated this revised procedure into the "Operating Procedure: Dispatch" document on 11 November 2003.[8]

NEMMCO recently reviewed the "Procedures for Management of Negative Residues", in consultation with the market, and issued a final determination on 20 September 2005. No change to the mechanism was made.

What the proponent said

NEMMCO's proposal did not discuss reviewing its procedure for limiting the accumulation of gross negative residues.

What the submissions said

Tarong Energy noted in its submission that a review of the current arrangements for limiting the gross negative residue within a billing period to $10,000 should occur "if proposals for arrangements such as congestion support payments and contracts are progressed." Its view is such arrangements would render the limit unnecessary with "little or no benefit to the efficient operation of the market or NEMMCO".

NRG Flinders noted that the improved shortfall funding arrangements could largely eliminate the inefficiencies and distortions of the existing model. This, the submission

5 Chapter 8A Part 8 (c) of the National Electricity Rules.

6 NEMMCO, *Operating Procedure: Dispatch*, Document Number: SO_OP3705, Version 36, p.28.

7 *Final Report: Management of network limitations within the Snowy Region and constraint formulation in the NEM – interim actions*, NEMMCO, 3 July 2003, p.34.

8 *Operating Procedure: Dispatch*, p.2.

states, could enable NEMMCO to relax the $10,000 limit threshold under certain circumstances.

Macquarie Generation stated that if NEMMCO believed that the SRA process would be enhanced by having a substantial number of parties participating, then it followed that:

> *NEMMCO should provide a clear guarantee that it will continue to proactively manage counter-price flows to maximize SRA interest and participation.*

Macquarie Generation elaborated in discussions with the Commission that "proactively manage" meant they would want the Rules to mandate the negative residues trigger mechanism and value. In its view, this would ensure NEMMCO could not amend the procedure as it saw fit. In particular, this applies to adjusting the trigger value which could negatively impact the future value of settlements residue and therefore impact on inter-regional hedging.

5.2.2 Intra-billing week deduction of negative settlements residue

Current Process

Clause 3.6.5.4(i) of the Rules currently requires NEMMCO to deduct any accrued negative IRSR from positive IRSR values within the same billing period. The net amount is then distributed to SRA unit holders.

However, there is a zero floor on net IRSR that can be distributed for a SRA unit over a billing period. If the net residue is negative, there is no available IRSR to distribute. NEMMCO is unable to recover these net negative residues from current auction participants so currently recovers it from future auction participants through auction fees.

What the proponent said

NEMMCO's Rule change does not propose any change to the practice of netting off negative settlements residue accrued against positive inter-regional settlements residue within the same billing week.

What the submissions said

Snowy Hydro, Macquarie Generation, and NRG Flinders all commented on the existing practice of netting weekly positive and negative IRSR as part of recovering any negative settlements residue. Snowy Hydro stated in its submission that:

> *any netting of positive residues in the billing weeks (or in any other period) ultimately reduces the effectiveness of the SRAs as a hedging tool.*

Macquarie Generation believes there is:

> *no clear economic reason why settlement residue unit holders should effectively fund negative residues resulting from network constraints and high demand.*

NRG Flinders stated the removal of this practice would achieve a consistent negative residue funding approach across all timeframes and would enhance the Rule change proposal's benefits.

The submissions propose extending NEMMCO's Rule change proposal to enable all negative residues to be recovered from future auction proceeds rather than continuing the current practice of netting off accrued negative residues from positive ones within a billing week.

Submissions to the draft determination further raised this argument. The NGF stated in its submission that:

> *Given the accepted benefits of the new recovery method, there is a strong argument that this method should be extended to cover all timeframes, not just accumulated residues exceeding this somewhat arbitrary threshold.*

The NGF submission went on to state that recovering intra-week negative residues the same way as accumulated debt would "enhance the benefits of the new recovery mechanism". CS Energy supported this argument:

> *This [amendment] would improve the value of the SRA as a mechanism for inter-regional trade, removing the risk that positive residue events are nullified by significant negative residue events during a settlement week.*

5.2.3 Discussion of the issue of negative residues

Current Process

The intention of the IRSR auctions is to make the NEM more efficient and competitive by providing a means of reducing price difference risks in inter-regional trading. The process of recovering negative residues from auction fees was designed shortly after the NEM commenced and was based on the assumption that negative residues would not be significant. This has not necessarily been the case, particularly following the commissioning of the QNI interconnector.[9]

What the proponent said

The proponent stated that rare but significant events can greatly impact the annual level of accumulated negative residues. In its Rule change proposal, NEMMCO listed four possible causes of counter-price flows but provided no details on how these events produce negative settlements residue.

What the submissions said

Hydro Tasmania stated in its submission that NEMMCO did not adequately describe the issue of negative inter-regional settlements residue in its proposal.

In particular, Hydro Tasmania is concerned that the two major potential causes of negative residues are not explicitly mentioned in the proposal. Missing was any

9 NEMMCO Rule change proposal, p.1.

discussion on how settlement deficits can occur naturally as a result of efficient dispatch given:

- *the effect of the regional market settlement process in the case of a network limit that constrains both generators within a region and an interconnector flow; and*
- *the physical arrangement of the transmission network, if it includes a limiting flow within a loop.*

Hydro Tasmania explained in discussions with the Commission that NEMMCO's proposed change would not introduce a way to fund effectively these naturally occurring deficits.

Also missing from the proposal is the acknowledgement that:

> *NEMMCO will continue to make anti-competitive interventions in the market to limit such negative residues…after this proposed change.*

In its submission, Hydro Tasmania argued that while NEMMCO is driven to make "anti-competitive interventions" because of insufficient funding mechanisms for negative residues, these short term solutions do not address the larger underlying causes of negative residues and thus the need for intervention. Hydro Tasmania believes that NEMMCO in its application, and (then NECA), now the AEMC, in its consideration should explicitly consider the issue in a wider context, even if the larger issues cannot be immediately resolved.

5.2.4 The Commission's consideration, reasoning and findings in relation to significant broader issues

The Commission considers these broader issues to be substantial matters requiring further consideration.

The mixed and diverse positions on some of these issues, particularly the management of accumulating negative residues (section 5.2.1), indicates stakeholders hold diverse perspectives on how to best address the concerns raised.

The Commission considers that it is preferable to address these issues in a broader context than this Rule change proposal. The CMR is a more appropriate environment for their investigation. Accordingly, the Commission raised these broader issues in its Issues Paper. The Commission is seeking comments on:

- How should negative settlements residues be funded?; and
- Should the current process of offsetting negative residues with positive residues within the current billing week be continued or changed?[10]

Analysing the issues in that environment will enable stakeholders to consider their implications in a wider, more appropriate context, rather than seeking to consider them within the narrower scope of this Rule change proposal.

10 Question 27, *CMR Issues Paper*, p.42.

The Commission also acknowledges the view that while this Rule change will deliver an incremental improvement to the status quo, it does not address the more substantial issues highlighted in submissions. As discussed in section 5.1.5, the Commission is placing a sunset on this Rule to signal clearly its view that this is not considered a long-term solution to the negative settlement residue issue.

The Commission considers that this process will allow for the market to receive the incremental benefit from the Rule while also encouraging an environment that promotes consideration of the broader issues raised in submissions.

5.3 Summary of differences between the draft Rule and the final Rule

Following from the above discussions, the Commission has determined to amend NEMMCO's original Rule change proposal to: (i) clarify the transitional arrangements of how NEMMCO will recover already accrued negative residue debt and the associated interest payments, and (ii) implement a sunset clause on the Rule.

The Rule will commence on 1 July 2006. The delayed start is to provide time for NEMMCO to:

- develop, test, and implement the software changes necessary to allow for the funding of negative settlements residue from the auction proceeds paid to TNSPs;
- implement the change on a quarterly boundary, the minimum period of SRA accounting; and
- review the existing procedures for managing negative settlements residue accruals and communicate any changes to the market.

The Rule specifies that:

- After netting any negative residues from positive residues accumulated within a billing week, the new recovery regime will enable NEMMCO to recover any net negative residues and associated interest costs from auction proceeds (clause 3.6.5(a)(4A) and 3.6.5(a)(4B));
- The existing recovery regime will be suspended for three years while the new regime is in effect, then reinstated after the new regime expires (clause 3.6.5(c));
- NEMMCO will continue to recover all outstanding debt and associated interest costs accumulated prior to 1 July 2005 under the existing regime (clause 11.1.1(a) and 11.1.2 (a));
- NEMMCO will recover any outstanding negative residue debt accrued and associated interest costs on or after 1 July 2005 but before commencement of this Rule from auction proceeds (clause 11.1.1(b) and 11.1.2(b)); and
- Any residual negative residue debt and associated interests costs present when the new regime expires will be recovered using the recovery mechanism in place when the residue was incurred (clause 11.1.1(c) and 11.1.2(c)).

In addition to these changes, the Commission modified the wording in parts of the Rules to improve their effectiveness as Rules and for consistency in drafting.

6. Commission's reasons for draft determination in terms of the Rule making test

The Rule-making test requires the Commission to be satisfied that a Rule it proposes to make will contribute to the achievement of the NEM objective. The NEM objective is concerned with promoting the efficient use of and investment in electricity services in the NEM for the long term interests of consumers of electricity. For the purposes of this Rule, the relevant electricity services include transmission system services and the sale of electricity.

6.1 Assessment against Rule making test

An important component of an effective market is to promote efficiency in the costs of operating the market. The change to the settlements residue auction process will produce a cost savings by reducing the interest costs associated with funding negative residue debt. This will improve the efficiency of running the auction process.

The Rule enables a significant reduction in the time needed to recover negative residues. This change promotes lower settlements residue auction costs as the associated interest costs to funding negative residues will decline. This cost savings is an efficiency gain for all auction participants.

A more efficient auction process is likely to lead to additional participation in the auction, which in turn encourages inter-regional trading, and therefore promotes efficient use of the transmission and generating systems. The economic benefits associated with establishing a more efficient auction process are in the long term interests of electricity consumers.

In addition, the more efficient recovery of negative residues would reduce the degree of inter-temporal cross-subsidisation between auction participants. Under the current arrangement, future auction participants cover costs incurred in current auctions. These inter-temporal cross subsidies mean future participants have no control over these costs, or ability to manage them. In addition, such a long recovery period results in unnecessarily high costs, which are avoidable, at least in part.

The Rule change takes steps towards reducing these inter-temporal cross subsidies by reducing the recovery period of outstanding negative residues. These steps also assist in reducing the cost of running the SRA.

While the Rule should reduce SRA costs in one specific area only, this change does improve the running of the auction. The decreased costs of running the auction, together with the potential for increased use of the auction process, are both in the interests of end users. The Commission, therefore, believes that the Rule meets the NEM objective.

Appendix 1 Timing between accumulating and recovering negative residues

As indicated in section 5.1.3, the below figures depict the timing between accumulating negative residues and recovering them under the current regime and the new regime.

Under the current regime, any negative residues accruing after 1 July 2005 could not be incorporated for recovery in the 2006-07 financial year because by then, that year's budget and auction fees would already be set. Recovery of those residues would have to wait until the 2007-08 financial year.

Under the new regime, any residues accumulated after the Rule's commencement will be recovered from the following quarter's auction proceeds. Any outstanding negative residues accumulated between 1 July 2005 and the date of this Rule's commencement will be recovered from Q4 2006 auction proceeds. If there are insufficient funds to recover the full amount, proceeds from the subsequent quarters will cover the outstanding debt. This recovery mechanism will also apply to the associated interest costs NEMMCO incurs from financing the negative residue debt (see section 5.1.2).

Figure 3 – Recovery timing under the current regime

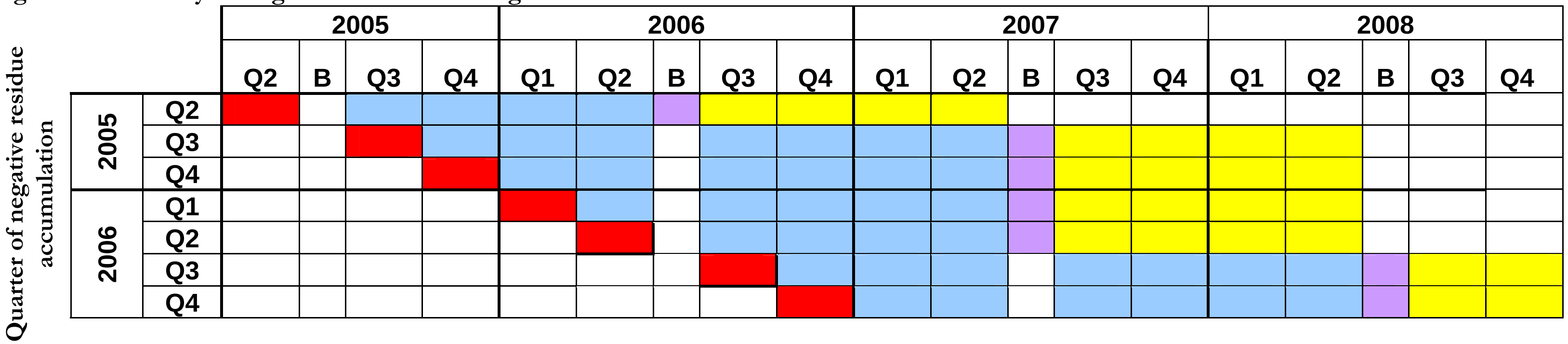
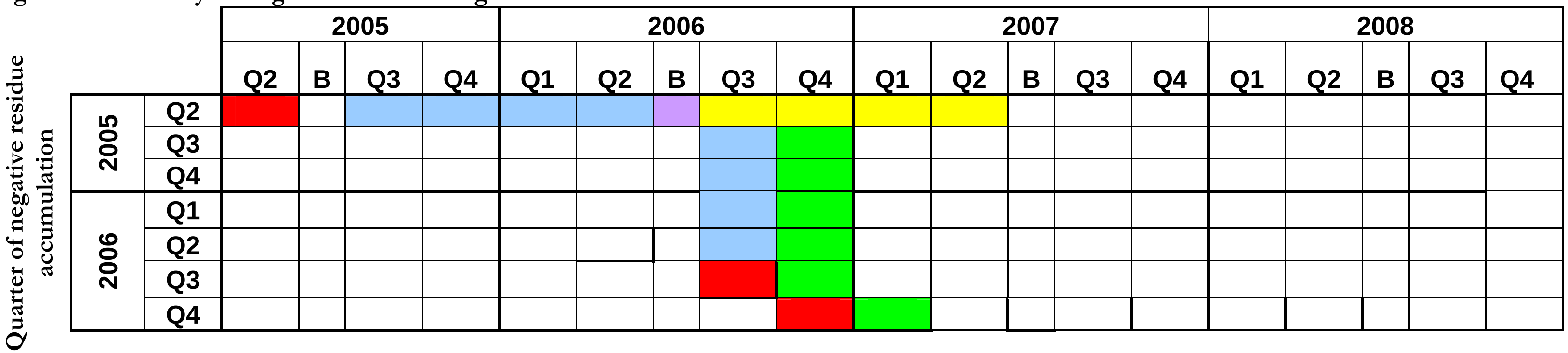


Figure 4 – Recovery timing under the new regime



Accumulation of negative residues
Incorporation into budget for following financial year
Interest accruing on outstanding negative residue amount
Recovery of negative residues through auction fees
Recovery of negative residues through following quarter auction proceeds

Appendix 2 Final Rule

See "Final Rule As Made" document on website.