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Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

By online submission

FROM THE OFFICE OF THE CHIEF EXECUTIVE OFFICER

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Dear Mr Pierce

National Electricity Rules – Recovery of Negative Intra-regional Settlements Residue

AEMO requests the AEMC consider making a non-controversial Rule change under sections 91 and 96 of the National Electricity Law. The proposed Rule would require AEMO to recover negative intra-regional settlements residue in the same way it recovers negative interregional settlements residue amounts under the National Electricity Rules (NER). The proposed Rule would also make minor amendments to the definition of settlements residue to clarify intra-regional and inter-regional settlements residue are included and remove rule 11.1 of the NER because it is no longer necessary.

AEMO requests the AEMC considers this as non-controversial because the proposed Rule is unlikely to have a significant effect on the national electricity market.

AEMO would be pleased if you could have these matters considered by the AEMC. For further details, please do not hesitate to contact Terry Grimwade, Executive General Manager - Market Performance, on 03 9609 8520.

Yours sincerely

Matt Zema

Managing Director and Chief Executive Officer

Attachments:

Rule Change Proposal





RULE CHANGE PROPOSAL RECOVERY OF NEGATIVE INTRA-REGIONAL SETTLEMENTS RESIDUE

PREPARED BY:

AEMO

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1 Summary

AEMO requests a Rule to require AEMO to recover negative intra-regional settlements residue in the same way it recovers negative inter-regional settlements residue amounts under the National Electricity Rules (NER). AEMO's proposed Rule would amend existing clause 3.6.5 of the NER to require AEMO to determine a payment methodology in consultation with transmission network service providers (TNSPs) for the recovery of negative intra-regional settlements residue that could require TNSPs to pay these amounts prior to the relevant settlement date.

AEMO requests the AEMC consider this as a non-controversial Rule because it is unlikely to have a significant effect on the national electricity market (NEM).

2 Background

2.1 How does intra-regional settlements residue occur?

Intra-regional losses are electrical energy losses that occur due to a transfer of electricity between a regional reference node (RRN) and transmission network connection points in the same region. Under clause 3.6.2 of the NER, AEMO is required to determine static intra-regional loss factors annually for each transmission network connection point and, in certain circumstances, two intra-regional loss factors, to describe the marginal electrical energy losses. The intra-regional loss factors adjust for the intra-regional losses of a transmission network connection point in central dispatch and in the settlement process. They are used in central dispatch to adjust the bid or offer price of a Scheduled Generator, Scheduled Load or Scheduled Network Service and in settlement of the market to adjust the price paid or owing to a Market Participant.

Generally, loss factors reduce the price paid for generation and increase the price for load. By using marginal instead of average loss factors, the amount paid by Market Customers generally exceeds the amount paid to Market Generators, resulting in a positive settlement residue. However, there are circumstances where the opposite occurs and the losses in a billing week can be sufficiently large², so that negative settlements residue accumulates.

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¹ Calculation of the static intra-regional loss factors is achieved by using power system analysis to model half hourly marginal loss factors over a year and averaging them. Further information on the methodology refer to: http://wwww.aemo.com.au/electricityops/0172-0004.pdf.

² See for example "Market Event Report: Negative Intra-regional Residues in New South Wales – Billing Week Commencing Sunday 30 January 2011". AEMO, April 2011. http://www.aemo.com.au/reports/0180-0008.html.



2.2 Arrangements for the recovery and distribution of settlements residue

2.2.1 Intra-regional settlements residue

Clause 3.6.5(a)(3) of the NER requires AEMO to distribute or recover intra-regional settlements residue from the appropriate TNSP.³ Unlike negative inter-regional settlements residue amounts, the NER do not allow AEMO to recover negative intra-regional settlements residue prior to the relevant settlement date.

TNSPs pay negative intra-regional settlements residue through Austraclear by 10:30 am (Sydney time) 20 business days after the end of the billing period in which the amounts were accrued.⁴ AEMO pays Market Participants on the same day. To achieve this, usually AEMO enters all payments into Austraclear by 1:00 pm on the same day and Market Participants are paid by 2:00 pm (Sydney time). Further information on the NEM settlement processes can be found on AEMO's website at http://www.aemo.com.au/electricityops/settlements.html.

Non-payment of negative settlements residue by a TNSP is a default event under clause 3.15.21(a) of the NER. Irrespective of whether AEMO takes action in accordance with the default procedure specified in that clause, if the TNSP does not pay the total amount owing on time, AEMO would need to short-pay Market Participants on that settlement day because TNSPs do not provide AEMO with credit support to cover the prospect of any such short payment.⁵

2.2.2 Recovery arrangements for negative inter-regional settlements residue

Clause 3.6.5 of the NER specifies that AEMO must recover negative inter-regional settlements residue from the appropriate TNSP and develop a payment procedure in consultation with TNSPs. Consistent with the NER and to reduce the payment risks involved, the payment procedure requires TNSPs to pay negative inter-regional settlements residue 14 business days after the end of the billing period in which it was accrued.

If a TNSP does not make a payment in accordance with the payment procedure, AEMO could take action in accordance with the payment procedure and clause 3.15.21 of the NER. The TNSP and AEMO would have six business days to resolve the issue before a shortfall payment would be made to Market Participants on the relevant settlement date.⁷

⁶ NEM Transmission Network Service Provider Payment Procedure is available at: http://www.aemo.com.au/electricityops/0508-0002.html.

Refer to clause 3.15.22(c) of the NER.

³ Under clause 6A.23.3(c) of the NER, TNSPs' settlements residue is treated as an adjustment to transmission use of system prices (TUoS).

⁴ Clause 3.15.16 of the NER states that Market Participants must pay by the 20th business day or two business days after the final statement is received, whichever is the later date. This usually occurs on the 20th business day because final statements are issued on the 18th business day after the end of the billing period. Further information on the NEM settlement calendar can be found at: http://www.aemo.com.au/corporate/calendars.html.

⁵ Under clause 3.6.5(b) a TNSP is a Market Participant for the purposes of clause 3.3.1 and rule 3.15 (excludes 3.15.1(b)). Thus, TNSPs do not need to provide credit support (clause 3.3.2 of the NER) to AEMO.



3 Statement of Issues

Currently, the NER allows different payment methods for intra-regional and inter-regional settlements residue. AEMO considers that the treatment of negative settlements residue should be consistent for both intra-regional and inter-regional settlements residue and that TNSPs should pay these amounts prior to the relevant settlement date.

AEMO considers that early payment of negative intra-regional settlements residue is appropriate because, in recent years, there have been a number of material amounts occurring in New South Wales (NSW). This is demonstrated in Table 1. While historical information demonstrates that significant negative intra-regional settlements residue has occurred, AEMO acknowledges that it might not be indicative of future levels.⁸

Table 1: NSW negative intra-regional settlements residue

YEAR	BILLING PERIOD	NEGATIVE INTRA-REGIONAL SETTLEMENTS RESIDUE (\$M)
2008	26 October – 1 November	1.87
2009	15 – 21 November	4.46
2009	22 – 28 November	2.29
2009	6 – 12 December	3.17
2009	13 – 19 December	2.31
2011	30 January – 5 February	12.64

Nonetheless, given the materiality and the unpredictability of these amounts there is a risk that TNSPs could experience short-term cash-flow difficulties funding negative intra-regional settlements residue. Currently, if problems arise with payment, the the loss incurred would result in Market Participants' being shortpaid by the unpaid amount. Given the short amount of time allowed for AEMO to deal with any payment issues, AEMO considers that the early payment of these amounts is appropriate.

AEMO also considers that the definition of settlements residue should be amended to make it clearer that both intra-regional and inter-regional settlements residue are included. Further, AEMO considers that rule 11.1 of the NER and references to it should be removed. Negative settlements residue amounts that were incurred prior to the commencement of the National Electricity Amendment (Negative Inter-regional Residue Amounts) Rule 2009 have been recovered, therefore rule 11.1 of the NER is of no further use.

4 Proposed Solution

AEMO's proposed solution seeks to implement the same policy for the recovery of negative intra-regional settlements residue already included in the NER for inter-regional settlements residue. The payment procedure for inter-regional settlements residue has been successfully implemented and used on approximately 12 occasions.

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⁸ Recent rule changes to implement dual marginal loss factors at certain connection points will reduce likelihood and magnitude of these events.



Alternatively, the NER could require TNSPs to provide credit support to AEMO as security to cover future negative intra-regional settlements residue, however, this would be inconsistent with that already adopted for negative inter-regional settlements residue. Further, this solution does not appear to be a proportionate response because it would tie up capital for TNSPs for unpredictable, infrequent events that could potentially involve large amounts of money.

5 Request for a Non-controversial Rule

AEMO requests that the AEMC considers this Rule request under section 96 of the NEL. Section 96 applies if the AEMC considers that a request for a Rule is non-controversial, that is, the proposed Rule is unlikely to have a significant effect on the NEM.

AEMO considers that the proposed Rule would have an insignificant effect on the NEM because it only affects the settlement cycle for payment of TNSPs' negative intra-regional settlements residue, which occur infrequently. The impact on TNSPs is also lessened because AEMO intends to consult with TNSPs on the payment methodology, noting that effective arrangements are already in place for the recovery of negative inter-regional settlements residue. Further, the proposed changes to the definition of settlements residue and the removal of rule 11.1 of the NER are non-material.

6 Proposed Rule

6.1 Description of the proposed Rule

The proposed Rule would:

- Require AEMO to recover the negative intra-regional settlements residue at a payment interval and by a method determined by AEMO following consultation with TNSPs. The methodology may include a determination that the appropriate TNSP make a payment at a date prior to the settlement date.
- Require the appropriate TNSP to make the payment at the time and payment interval, and by the method determined by AEMO.
- If any interest costs are incurred by AEMO in the recovery of negative intra-regional settlements residue, require AEMO to recover the interest costs incurred by AEMO from the appropriate TNSP in accordance with the method developed by AEMO in consultation with TNSPs.
- Amend the definition of settlements residue to clarify that intra-regional and inter-regional settlements residue are included.
- Delete rule 11.1 and references to it in clauses 3.6.5(a)(4) and (a)(4A) of the NER.

6.2 Draft of the proposed Rule

AEMO's draft Rule is included in Appendix A.



7 How the Proposed Rule Contributes to the National Electricity Objective

Before the AEMC can make a Rule change it must apply the rule making test set out in the National Electricity Law (NEL), which requires it to assess whether the proposed Rule will or is likely to contribute to the NEO. Section 7 of the NEL states the NEO is:

- \dots to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to -
- (a) price, quality, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.

AEMO considers the proposed Rule promotes the efficient operation of electricity services because it would allow AEMO to manage TNSP payment risk associated with the settlement of negative intra-regional settlements residue more efficiently. The proposed Rule would achieve this by requiring AEMO to consult on a payment method to require TNSPs to pay negative intra-regional settlements residue prior to the relevant settlement date as is currently required by the NER. Further, the proposed Rule would increase consistency by aligning the payment methodology for TNSP payments of negative settlements residue.

Further, clarifying the definition of settlements residue and removing rule 11.1 improves the accuracy and consistency of the NER and contributes to the NEO by making the NER clearer to stakeholders.

8 Expected Benefits and Costs of the Proposed Rule

AEMO expects the proposed Rule would benefit AEMO, TNSPs and Market Participants because it reduces the payment and settlement risk associated with the payment of negative intra-regional settlements residue. Further, the proposed Rule improves the NER's consistency because AEMO and TNSPs would be able to use a consistent payment methodology and settlement cycle for the recovery of intra-regional and inter-regional settlements residue. This would also streamline the TNSP settlement process.

Clarifying the definition of settlements residue and removing rule 11.1 of the NER would make the NER clearer to stakeholders by informing them of their rights and obligations, AEMO considers this would result in minor benefits at no cost.

AEMO expects the costs of the proposed Rule to be minimal. To implement the proposed Rule, AEMO will need to consult with TNSPs, amend the existing payment procedure and electricity market management system to recover these amounts.



Appendix A: Draft Rule

3.6.5 Settlements residue due to network losses and constraints

- (a) Settlements residue will be allocated, and distributed or recovered by AEMO in accordance with the following principles:
 - (4) subject to rule 11.1, if the *inter-regional-settlements residue* arising in respect of a *trading interval*, after taking into account any <u>relevant</u> adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount then, in respect of the *billing period* in which the negative *inter-regional settlements residue* arises:
 - (i) AEMO must recover the amount from the appropriate Transmission Network Service Provider within the importing region, at a payment interval, and by a method, determined by AEMO following consultation with the appropriate Transmission Network Service Provider, and which may include a determination that an the appropriate Transmission Network Service Provider make payment at a date prior to the settlement date determined in respect of other Transmission Network Service Providers; and
 - (iii) despite clause 3.15.16, the appropriate *Transmission Network Service Provider* must make the payment at the time and payment interval, and by the method, determined by *AEMO* in accordance with this subparagraph;
 - (4A) subject to rule 11.1, if interest costs are incurred by AEMO in relation to any unrecovered negative *inter-regional settlements residue* amount referred to in clause 3.6.5(a)(4), then, in respect of the *billing period* in which the negative *inter-regional settlements residue* arises:
 - (i) AEMO must recover the interest costs from the appropriate Transmission Network Service Provider within the importing region, at a payment interval, and by a method, determined by AEMO following consultation with the appropriate Transmission Network Service Provider, and which may include a determination that an appropriate Transmission Network Service Provider make payment at a date prior to the settlement date determined in respect of other Transmission Network Service Providers; and
 - (ii) despite clause 3.15.16, the appropriate *Transmission Network Service Provider* must make the payment at the time and payment interval, and by the method, determined by *AEMO* in accordance with this subparagraph;
 - (4B) for the purposes of paragraphs (a)(3), (a)(4) and (a)(4A), the appropriate Transmission Network Service Provider is:
 - (i) in the case of inter-regional settlements residue, the Transmission Network Service Provider within the importing region; and
 - (ii) in the case of *intra-regional settlements residue*:
 - (iA) if there is more than one *Transmission Network Service Provider* in the *region*, the *Co-ordinating Network Service Provider*; or



(iiB) if there is no Co-ordinating Network Service Provider in the region, the region's Transmission Network Service Provider to which a transmission determination currently applies;

11.1 Rules consequent on making of the National Electricity Amendment (Negative Inter-regional Settlements Residue Amounts) Rule 2009

11.1.1 Definitions

For the purposes of this rule 11.1:

Amending Rule means the National Electricity Amendment (Negative Inter-regional Settlements Residue Amounts) Rule 2009.

commencement date means the date of commencement of the Amending Rule.

old clause 3.6.5(a)(4A) means clause 3.6.5(a)(4A) of the *Rules* as in force immediately before the commencement date.

old clause 3.6.5(a)(4B) means clause 3.6.5(a)(4B) of the *Rules* as in force immediately before the commencement date.

11.1.2 Recovery of accrued negative settlements residue

The old clause 3.6.5(a)(4A) continues to apply to any negative settlements residue amounts arising before the commencement date, and not recovered as at the commencement date, until all such amounts have been recovered.

11.1.3 Recovery of interest costs associated with accrued negative settlements residue

The old clause 3.6.5(a)(4B) continues to apply to any interest costs arising before the commencement date, and not recovered as at the commencement date, until all such costs have been recovered.

11.1.4 Actions taken by AEMO or a Transmission Network Service Provider

- (a) Any relevant action taken by AEMO on the timing and method of payment and to facilitate the billing and settlement of payments due in respect of negative interregional settlements residue amounts and related interest costs prior to the commencement date in anticipation of the commencement of the Amending Rule is deemed to have been taken for the purposes of the Amending Rule and continues to have effect for that purpose.
- (b) Any relevant action taken by a *Transmission Network Service Provider* in relation to any negative *inter-regional settlements residue* and for the purposes of clause 6A.23.3 of the *Rules* prior to the commencement date and in anticipation of the commencement of the Amending Rule is deemed to have been taken for the purposes of the Amending Rule and continues to have effect for that purpose.

Chapter 10 Definition

settlements residue

Any surplus or deficit of funds retained by *AEMO* upon completion of *settlements* to all *Market Participants* in respect of a *trading interval* and, for the avoidance of doubt, includes *inter-regional settlements residue* and *intra-regional settlements residue*.



Terms or Abbreviations

TERM OR ABBREVIATION	EXPLANATION
AEMO	Australian Energy Market Operator
NEL	National Electricity Law
NEM	National Electricity Market
NEO	The national electricity objective as stated in section 7 of the NEL
NER	National Electricity Rules
NSW	New South Wales
RRN	Regional reference node
TNSP	Transmission network service provider