



Agenda item 5d:

Wholesale Electricity Market Pre Rule Change Discussion Paper

Change Proposal No: PRC_2010_04

Received date: TBA

Change requested by

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Address:	Level 3, Governor Stirling Tower, 197 St Georges Terrace
Date submitted:	TBA
Urgency:	Standard Rule Change Process
Change Proposal title:	Settlement in Default Situations
Market Rule(s) affected:	9.24.3(b), 9.24.5 and 9.24.9

Introduction

Clause 2.5.1 of the Wholesale Electricity Market Rules (Market Rules) provides that any person (including the Independent Market Operator (IMO)) may make a Rule Change Proposal by submitting a completed Rule Change Proposal form to the IMO.

This Rule Change Proposal can be posted, faxed or emailed to:

Independent Market Operator

Attn: Manager Market Development and System Capacity
PO Box 7096
Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4339

Email: market.development@imowa.com.au

The IMO will assess the proposal and, within five Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the proposal must explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:



- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Details of the proposed Market Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

Background

One of the functions of the IMO is to settle wholesale market transactions under the Wholesale Electricity Market Rules (Market Rules). The IMO fulfils this function by collecting money from Market Participants that have incurred liabilities, and paying it on the same day to the Market Participants that are owed money. Settlement of the Short Term Energy Market (STEM) occurs on a weekly basis, while other transactions are settled monthly. Settlement adjustments can be made for up to a year, allowing for resolutions of disagreements and revisions to the meter data provided by the Metering Data Agent.

Settlement adjustments take place up to 70 days after liabilities are accrued, with the IMO standing as 'principal' between payers and those who are entitled to be paid. The IMO is exposed to risk if those who owe money do not pay, but has the benefit of protection afforded by the default provisions in the Market Rules. The ultimate risk under this arrangement is therefore borne by the Market Participants.

The amount of money transacted through the Wholesale Electricity Market is approximately \$250 million per annum. With such a large amount of money being transacted, it is essential that those who are exposed to the financial risk associated with trading are protected from the consequences of settlement default. To this regard, the Market Rules contain a prudential security regime designed to protect the IMO's creditors against any potential risks of underpayment, and to ensure the financial integrity the market.

The prudential security regime provides a means for the market (through the IMO) to ensure that it has sufficient funds to meet its obligations to suppliers of energy and services. The regime is an important protection both for traders in the market and for potential investors,



though it is noted that the provision of credit support also represents a financial liability to those who are required to provide it.

The features of the regime include:

- A Credit Limit for each Market Participant (Market Generator and Market Customer) which may be revised at any time and must be reviewed at least once each year;
- Acceptable Credit Criteria which applies both to Market Participants and to any bank or other organisation that provides prudential security for a Market Participant;
- Credit Support, provided by Market Participants and Network Operators, and held by the IMO for the benefit of the market;
- A Trading Margin for each Market Participant, which limits the amount by which they can trade;
- A detailed process and strict timetable for payments to be made to and by the IMO on settlement day; and
- Processes for calling on securities in the event of a default in payment, and for sanctions, including suspension from the market, for payers who default.

Where there is a default in payment the IMO may draw upon any Credit Support in relation to that Market Participant to the extent required to cover the amount outstanding. If a Market Participant fails to provide adequate Credit Support by the due date the IMO must issue a Cure Notice requiring that the default be remedied within 24 hours. If the default is not fixed then the IMO issues a Suspension Notice.

If a Market Participant defaults and its Credit Support is insufficient to cover outstanding monies owing, the IMO will have inadequate revenue to settle the market. In this case, the IMO pays the money it holds according to a specified list of priorities and may temporarily reduce payments to Market Participants to reflect the shortfall (i.e. the market will be short paid).

To cover any remaining shortfall to Market Participants in payments for invoiced amounts associated with either the energy or capacity markets, the IMO is required to raise a Default Levy to secure the funds required to meet the shortfall and allow for settlement of the market. The Default Levy is allocated across all Market Participants, excluding the Market Participant who committed the Payment Default, based on metered generation or consumption during the month. The Default Levy must be paid in full by Market Participants by 10am on the eighth Business Day following the date of the Payment Default.

By 2pm on the eighth Business Day following the date of the Payment Default, the IMO will allocate the total Default Levy amounts received on a pro-rata basis to all Market Participants who suffered a reduction as a result of the Default Payment. At the end of the Financial Year the IMO will aggregate any shortfalls that have occurred during the Financial Year and recalculate the Default Levy based on metered consumption and generation. The end of year adjustment ensures that Market Participants do not avoid funding a default simply because they do not happen to be producing or consuming in the month that the default occurred.



Issue 1: Short Payment Calculation

If the IMO does not have sufficient cleared funds to make all payments required under the Market Rules when due, the IMO will pay the money it currently holds according to the list of priorities specified in clause 9.24.3(a). In particular, the IMO's allocation of the total amount of monies held in cleared funds will be made as follows:

- Payments to the IMO, System Management, and the Economic Regulation Authority (ERA);
- Payments required under a Supplementary Capacity Contract or to a provider of Ancillary Services holding a contract with System Management;
- Payments under a Network Control Services Contract; and
- Anything that the IMO is required to pay under the Corporations Act or other law relating to such things as the protection of creditors.

If there are insufficient funds to meet these obligations there is currently no guidance in the Market Rules as to how the IMO should apply the money that it holds.

Following this the IMO pays the remaining Market Participants a proportion of what is owed to them by using the formula in clause 9.24.3 (b):

$$AAP = (NAP/TNAP) * MAA$$

Where:

AAP is the reduced amount *actually* payable by the IMO to a Rule Participant (in respect of a trading week for STEM settlements and a trading Month for Non STEM settlements);

NAP is the net amount that *would have been* payable by the IMO to the Rule Participant (but for the application of Market Rule 9.24.3 (b));

TNAP is the total net amount payable by the IMO to all Rule Participants, calculated by summing all the values of NAP; and

MAA is the remainder of the money available for payment after the application of Market Rule 9.24.3 (a).

As currently drafted in the Market Rules it is unclear whether the net amount payable (NAP) (and therefore the total net amount payable) by the IMO to the Rule Participant includes or excludes monies already paid under clause 9.24.3(a). This ambiguity could potentially result in either:

- All available money not being paid out. This is as Rule Participants paid under clause 9.24.3(a) would be included in determining the total values used in the calculation under 9.24.3(b). However, if it was interpreted that participants should not be paid twice (a reasonable interpretation particularly given the limit imposed by the reference



to the monies owed in accordance with clause 9.22) they would have simply inflated the TNAP value; or

- Rule Participants being potentially paid twice – once under 9.24.3(a) and again through inclusion of the required payments in the calculation of the participant's NAP and therefore the TNAP values in 9.24.3(b) (a less reasonable interpretation given the intent of the payment).

Example

To demonstrate this issue consider the following simplified example. For this simple case, assume at the time of the shortfall there are three active Rule Participants and they are owed as follows:

- System Management: \$15,000;
- Market Generator A: \$100,000; and
- Market Generator B: \$150,000 (generation) and \$50,000 (Network Control Service Contract).

This means that the market currently owes a total of \$315,000.

If there were a default of \$40,000 the Total Amount available for distribution would be:

$$\text{Total Amount} = (\$315,000 - \$40,000) = \$275,000$$

In accordance with clause 9.24.3(a) payments would be made to those priority list entities as follows:

- System Management: \$15,000; and
- Market Generator B (NCS Contract): \$50,000

This would leave a total of $\$275,000 - \$15,000 - \$50,000 = \$210,000$ for payment to other parties (MMA).

In accordance with clause 9.24.3(b) then the NAP of each Rule Participant would be as follows:

- System Management: \$15,000;
- Market Generator A: \$100,000; and
- Market Generator B: \$200,000 (generation and NCS)

$$\text{TNAP} = \$15,000 + \$100,000 + \$200,000 = \$315,000$$



The determination of AAP for each of the entities could be potentially interpreted as follows (if the payments made in subsection (a) to System Management and the NCS of Market Generator B are ignored):

- System Management = $15,000/315,000 * 210,000 = \$9,999.99$
- Market Generator A = $100,000/315,000 * 210,000 = \$66,666.66$
- Market Generator B = $200,000/315,000 * 210,000 = \$133,333.33$

These payments total \$209,999.99. However given that System Management and the Market Generator B (for the NCS) have already been paid under clause 9.24.3(a) and depending on the interpretation of clause 9.24.3(b) the following scenarios may arise:

- *Scenario 1: System Management and Market Generator B (for the NCS) are paid out money under clause 9.24.3(a) and additionally under clause 9.24.3(b).*

In this scenario System Management will be paid \$15,000 under clause 9.24.3(a) and an additional \$9,999.99 under clause 9.24.3(b), a total of \$24,999.99. Similarly, Market Generator B will be paid \$50,000 under 9.24.3(a) for the NCS and another \$33,333.33 under clause 9.24.3(b).

Overall, the Total Amount of \$275,000 ($\$209,999.99 + \$15,000 + \$50,000$) would be paid out by the market however the allocation rates to Rule Participants would be skewed highly towards those who are also on the priority list (under clause 9.24.3(a)). This would result in an inequitable allocation of funds amongst Rule Participants.

- *Scenario 2: System Management and Market Generator B (for the NCS) are paid out money under clause 9.24.3(a) but not under clause 9.24.3(b).*

In this scenario the values of their NAP would have inflated the total value to be paid to the market (TNAP) and result in \$43,333.31 of available funds ($\$9,999.99 + \$33,333.33$ ($50,000/315,000 * 210,000 = \$33,333.33$)) not having been paid out.

Overall, only \$231,666 would be paid out to the market compared to the Total Amount of \$275,000.

Proposal

The IMO proposes to further clarify the calculation of the NAP and TNAP variables in clause 9.24.3(b) so that Market Participants who have previously been paid in accordance with the priority list will have this value of payment excluded from the determination of their NAP and consequently the TNAP variable. This will ensure that Market Participants would not be overpaid and that the IMO will pay out all monies paid to it in the case of a Default Levy. The IMO considers that this clarification will ensure that the Market Rules can not be interpreted in a way that results in a nonsensical outcome.

This solution can be demonstrated below (using the same simple example as presented in the issue identification). However, in accordance with the proposed clause 9.24.3(b) the NAP of each Rule Participant would be as follows:



- System Management: \$0 (already paid under clause 9.24.3(a));
- Market Generator A: \$100,000; and
- Market Generator B: \$150,000 (generation only, NCS paid under clause 9.24.3(b))

Therefore TNAP = \$0 + \$100,000 + \$150,000 = \$250,000

The determination of AAP for each of the entities could be interpreted as follows:

- System Management = $0/250,000 * 210,000 = \$0$
- Market Generator A = $100,000/250,000 * 210,000 = \$84,000$
- Market Generator B = $150,000/250,000 * 210,000 = \$126,000$

These payments total \$210,000 and take into account that System Management and the Market Generator B (for the NCS) have already been paid under clause 9.24.3(a) resulting in a total of $\$210,000 + \$15,000 + \$50,000 = \$275,000$ having been paid out to the market which is consistent with the Total Amount determined.

Issue 2: Contradiction between use of Metered Schedules and meter data in the Default Levy clause

In the Market Rules there is a contradiction between clause 9.24.5 (which requires that Default Levy calculations are based on Metered Schedules from one month prior to the calculation of the levy) and the meter data that the Metered Schedules are based on, which is from two months prior.

Settlement for a trading month is carried out on the basis of meter data provided on the first business day of the second month in which trading took place. In other words, settlement occurs for trading two months in arrears for example, January trading is settled in March, and February trading is settled in April.

If a Market Participant fails to pay what it owes, and as a result the IMO has to calculate a Default Levy, it must do so on the basis set out in clause 9.24.5. There is however a contradiction in the wording of clause 9.25.5 and the other rules it refers to. In particular:

- Clause 9.24.5 requires the IMO to determine the Default Levy amounts payable to the IMO in accordance with the Metered Schedules for the preceding month i.e. one month before.
- “Metered Schedule” has the meaning in clause 6.16.1.
- Clause 6.16.1 says the Metered Schedule is determined by the IMO under clause 9.3.3.
- Clause 9.3.3 says that the IMO determines the Metered Schedules. The basis for that determination is set out in clause 9.3.4.



- Clause 9.3.4 says that the Metered Schedule is the net quantity of energy generated or consumed and determined from meter data submissions received in accordance with clause 8.4.
- Clause 8.4.1 says the Metering Data Agent must provide the meter data to the IMO in accordance with the times specified in clause 9.16.2(a), and
- Clause 9.16.2(a) requires meter data to be provided by the first business day of the second month following the month in which the trading month occurred.

In other words, Metered Schedules are created two months after a trading month, as that is when the IMO gets the data from the Meter Data Agents. However, the Default Levy calculation requires the IMO to use data from the preceding month, data which is not available.

Proposal

In determining the Default Levy the IMO proposes amending clause 9.24.5 to refer to the Trading Month “to which the payment default relates” and not the “preceding” Trading Month. This will ensure that the IMO will be able to make use of all available data. The IMO considers that these proposed amendments will also ensure consistency with the Market Rules relating to the determination and definition of a Metered Schedule, as presented above.

Issue 3: Use of Financial Year versus Capacity Year

In accordance with clause 9.24.9, the IMO is required to aggregate any shortfalls that have occurred during the Financial Year and re-allocate any outstanding Default Levies at the end of the Financial Year. The end of year adjustment ensures that Market Participants do not avoid funding their share of a payment default simply because they do not happen to be producing or consuming in the month that the default occurred. This ensures that the distribution of costs associated with a Market Participants failure to meet its financial obligations is undertaken in a less volatile manner.

As noted previously, a Default Levy can result from a failure by a Rule Participant to pay an invoice amount associated with either the energy or capacity markets. As energy market transactions are conducted over a Trading Day, the IMO has 365 trading days during the Financial Year (starting 1 July of each year) to calculate the average market share for each affected Market Participant associated with any defaults arising. The Reserve Capacity Mechanism is however conducted over the entire Capacity Year - not 365 days (starting 1 October of each year), which does not align directly with a Financial Year and can result in difficulties in undertaking the annual adjustment as there will be two periods (i.e two half Capacity Years within a Financial Year) to assess.

The IMO considers that the Default Levy and annual reallocation should be determined for the Capacity Year as opposed to the Financial Year. The IMO considers that this would allow each Capacity Year’s costs, income and defaults to be contained in one reallocation period. The IMO notes that there will be no significant impact on the values calculated for energy market defaults as these simply need to be calculated for each Trading Day, whether during the Financial Year or Capacity Year is irrelevant as a 365 day average is simply required.



Proposal

The IMO proposes to amend clause 9.24.9 to replace Financial Year with Capacity Year and to amend the timing to be two months after the Capacity Year to ensure that Metered Schedules are available for the IMO to calculate the re-allocation of any default levies raised.

2. Explain the reason for the degree of urgency:

The IMO proposes that this Rule Change Proposal be progressed through the Standard Rule Change Process.

3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a ~~strike through~~ where words are deleted and underline words added)

9.24.3. Notwithstanding anything else in these Market Rules, if at any time the total amount received by the IMO from Rule Participants in cleared funds (“**Total Amount**”) is not sufficient to make the payments which the IMO is required to make under these Market Rules (for example, as a result of default by one or more Rule Participants), then the IMO’s liability to make those payments is limited to the Total Amount. The IMO must apply the Total Amount as follows:

- (a) first, the IMO must apply the Total Amount to satisfy:
 - i. payment of Revenue Requirement Settlement Amounts to the IMO, System Management and the Economic Regulation Authority (including as contemplated by clause 9.22.10);
 - ii. payments which the IMO is required to make under Supplementary Capacity Contracts or to a provider of Ancillary Services holding an Ancillary Service Contract with System Management; and
 - iii. payments which the IMO is required to make under Network Control Service Contracts; and
 - iv. funds required to be disgorged or repaid by the IMO as contemplated by clause 9.24.2; and
- (b) second, it must apply the remainder to pay the net amounts after the application of 9.24.3(a) which, but for this clause 9.24.3(b), it would owe to Rule Participants in accordance with clause 9.22, where those amounts are reduced by applying the following formula:

$$AAP = (NAP / TNAP) \times MAA$$

where:



AAP is the reduced amount actually payable by the IMO to a Rule Participant in respect of the relevant Trading Week, in the case of an Invoice relating to a STEM Settlement Statement, and the relevant Trading Month, in the case of an Invoice relating to a Non-STEM Settlement Statement;

NAP is the net amount that would have been payable by the IMO to the Rule Participant, ~~after the application of 9.24.3(a)~~ but for the application of this clause 9.24.3(b), in respect of the relevant Trading Week or Trading Month (as applicable);

TNAP is the total net amount payable by the IMO to all Rule Participants, ~~after the application of 9.24.3(a)~~ but for the application of this clause 9.24.3(b), in respect of the relevant Trading Week or Trading Month (as applicable), calculated by summing all values of NAP; and

MAA is the remainder of the Total Amount available for payment by the IMO after the application of paragraph (a).

9.24.5. If, five Business Days after a Payment Default, the IMO is yet to recover in full the overdue amount, then it must raise a Default Levy from all Market Participants (other than the Market Participant which committed the Payment Default) to cover the remaining shortfall (including interest calculated in accordance with clause 9.22.7). The amount to be paid by each Market Participant is to be determined by the IMO. In determining the amount to be paid by a Market Participant, the IMO must have regard to the absolute value of the MWh of generation or consumption, determined in accordance with the Metered Schedules, for each Market Participant for Trading Intervals during the ~~preceding~~ Trading Month to which the Payment Default relates, as a proportion of the total of those values for all Market Participants.

9.24.9. ~~By the end of the second month following the~~ Upon completion of the final Trading Month commencing during a Financial Capacity Year, the IMO must re-allocate any Default Levies raised during that ~~Financial~~ Capacity Year as follows:

- (a) the IMO will determine the aggregate of the shortfalls in respect of which it raised Default Levies during the ~~Financial~~ Capacity Year less any subsequent amounts recovered and refunded under clause 9.24.10;
- (b) the IMO will determine the aggregate Default Levy amount which should have been paid by each Market Participant, having regard to the absolute value of the MWh of generation or consumption, as determined in accordance with the Metered Schedules for each Market Participant for Trading Intervals during the ~~Financial~~ Capacity Year as a proportion of the total of those values for all Market Participants;



- (c) the IMO must compare the amount determined for the Market Participant under paragraph (b) with the total of the amounts which the Market Participant actually paid under clause 9.24.7;
 - (d) the IMO must determine an appropriate adjustment to put each Market Participant in the position it would have been in had it paid the amount determined under paragraph (b) instead of the amounts actually paid under clause 9.24.7; and
 - (e) include that adjustment in the Non-STEM Settlement Statement for the most recently completed Trading Month.
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4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

- (a) *to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system.*

The IMO considers that the proposed amendments to settlement in default situations will ensure the efficient, safe and reliable production and supply of electricity by having a correct formula when paying amounts owed to Market Participants and allowing for correct data to be used when a default levy applies.

- (b) *to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitor.;*

The IMO considers that the proposed amendments to the short pay calculation will provide greater clarity over the reallocation of funds in the situation that the IMO is shortpaid thereby increasing confidence in the markets provisions for situations in which a default levy is issued. Greater confidence that the market has the appropriate mechanisms for ensuring that Market Participants will be paid effectively and fairly in the case of a default will reduce perceived financial risks associated with operation in the WEM and thereby encourage competition and new entrants into the market.

5. Provide any identifiable costs and benefits of the change:

Costs:

No significant identifiable costs as the proposed amendments will clarify the process already adopted by the IMO.

Benefits:

The proposed changes will ensure the IMO effectively and equitably distributes amounts owed to Market Participants in a default situation.