

JSE CLEAR INITIAL MARGIN POLICY

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Version Control

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Version History

Version	Date	Summary of changes	Author
1.0	March 2016	Creation of document	JSE Clear Risk team
2.0	September 2017	Minor wording updates	JSE Clear Risk team
3.0	October 2018		JSE Clear Risk team
4.0	October 2019	Regular review	JSE Clear Risk team
5.0	November 2020	Adjusted backtesting escalation rules Included intraday margin call thresholds Minor wording updates	JSE Clear Risk team
6.0	October 2021	Clarification of backtesting escalation criteria and minor updates	JSE Clear Risk team
7.0	June 2023	Abstracted methodology in section 3. IM Calculation and referenced JSEC IM Methodology and JSEC Risk Appetite Statement. Enhancement to back-testing escalation circumstances	JSE Clear Risk team
8.0	October 2023	Clarification of the considerations used to determine the confidence interval applied in risk models for new markets	JSE Clear Risk team

1. Introduction

Margin represents the primary prefunded line of defense for JSE Clear (JSEC) in managing the risks associated with clearing financial instruments. The aim of this document is to articulate JSEC's policy with regards to:

- The frequency of margin settlement cycles;
- Margin requirements and the initial margin methodology; and
- The control measures which are in place to ensure that JSEC's margin levels are, at all times, commensurate with the risks cleared by JSEC.

JSEC makes use of Initial Margin (IM), Variation Margin (VM) and Additional Margin paid to the Default Fund in order to manage its counterparty credit risk.

2. Mark-to-Market Settlement Cycles

VM refers to the settlement of profits and losses, while IM addresses the anticipated costs that JSEC would incur in hedging and portfolio liquidation in the event of a participant default. Additional Margin paid to the Default Fund is used to mutualise losses exceeding IM and is dealt with in the Default Fund Policy. Both IM and VM settlement obligations are processed as part of JSEC's Mark-to-Market (MtM) settlement cycles. JSEC must perform at least one MtM settlement cycle per business day for each product cleared under the JSEC risk waterfall. JSEC does, however, reserve the right to perform ad hoc MtM settlement cycles should market conditions warrant this action in accordance with the Intraday Margin Call policy.

The VM obligations associated with a particular MtM cycle are payable in cash only, in the currency of the product cleared. At an account level, VM obligations are netted across all positions, per currency cleared. The IM obligations associated with a particular MtM cycle can be covered by cash or securities, as per the JSEC Collateral Policy. Both VM and IM are calculated at an account level and netted at a clearing member level.

The IM posted against the exposures held in a particular account can only be used to satisfy the losses incurred in liquidating the positions held in the particular defaulting account.

3. IM Calculation

JSE Clear is responsible for establishing initial margin levels which are commensurate with the risks and particular attributes of each product, portfolio, and market operated by JSEC.

JSEC's policy with regards to initial margin requirements is to ensure that:

- IM requirements are reflective of a "defaulter pays" risk waterfall;
- As far as possible, IM requirements should avoid procyclicality by being stable during times of stress; and
- IM should mitigate the risk associated with large and concentrated positions.

To this end, the JSE Clear Chief Risk Officer (CRO) must ensure that the initial margin required in all of the derivative markets operated by JSEC, is calculated:

- In accordance with the JSE Clear Initial Margin Methodology;

- In support of the JSE Clear Risk Appetite Statement for prefunded resources; and
- Such that an overall 99.7% account-level back testing coverage ratio on a rolling 1-year basis, assuming a 2-day liquidation period, is maintained for existing markets being cleared.
- In determining the confidence interval applied in risk models for new markets – following relevant governance approval processes before formal adoption – JSE Clear shall consider:
 - The complexities and level of pricing uncertainties of the class of financial instruments which may limit the validation of the calculation of initial margin;
 - The risk characteristics of the class of financial instruments, which can include, but are not limited to volatility, duration, liquidity, non-linear price characteristics, jump-to-default risk and wrong-way risk;
 - The degree to which other risk controls do not adequately limit exposures;
 - The inherent leverage of the class of financial instruments, including whether the class of financial instrument is significantly volatile, is highly concentrated among a few market players, or may be difficult to close out.

3.1. Parameters and Offsets

Initial margin offsets between different contracts are governed by the JSE Clear Initial Margin Methodology. The JSE Clear CRO must ensure that daily account-level initial margin calculations are performed in accordance with this framework, and that the parameters which feed into the framework are calibrated as specified in the JSE Clear Initial Margin Methodology.

The JSE Clear Initial Margin Methodology is owned by the JSE Clear CRO, and any changes to this methodology must be approved by the JSE Clear Risk Committee.

4. Controls

4.1. Back-testing

JSEC is required to perform daily back-testing of IM requirements in order to assess whether IM coverage remains at the required confidence levels. Back-testing is conducted by taking end of day IM observations, and comparing these to the cumulative change in VM which has accrued by the clearing member, trading member and client accounts over the assumed liquidation period. Any negative changes in VM which exceed the associated IM are flagged as exceptions. Exceptions, both contract and account level, are reported daily to the CRO. Summaries are provided to the JSEC Risk Committee on at least a quarterly basis.

Back-testing results must be escalated to the CRO in circumstances where:

1. VM exceeds IM on any contract by 50% and aggregate amount by which VM exceeds IM in the contract is greater than ZAR 100 million; or where
2. VM exceeds IM at a clearing member level; or where
3. Any individual account-level VM exceeds IM by 50% and totals more than ZAR 10 million; or where
4. Any individual account-level VM exceeds IM by more than ZAR 50 million; or where
5. More than 50 account-level breaches are observed on a single day.

In circumstances 2-5 the CRO must escalate back-testing results to the JSE Clear CEO.

The abovementioned escalation must occur before 12h00 on the date of observation. Thereafter, the JSE Clear CEO will determine the appropriate course of action, which may include escalation to the JSE Clear Risk Committee and recommendation to effect:

- Adjustments to IM parameters; and/or
- Intra-day MtM settlement cycles; and/or
- Adjustment to the size of the JSEC Default Fund.

4.2. Data

Valid historic data is integral to the IM and MtM models that JSEC employs. Controls are in place to ensure that the capture of such data on a daily basis identifies any anomalies, errors or staleness.

Where reliable data is not available, proxies should be examined and applied, provided such proxies are deemed to be a suitable representation of the risk characteristics of the product. Use of such proxies will be subject to specific authorisation by the CRO. The CRO must maintain a repository of all instances where such proxies are used, and this repository should be reviewed by the CRO on at least an annual basis.

4.3. Model Testing

JSEC must annually review and validate its IM and MtM calculation methodologies in accordance with the JSE and JSE Clear Model Governance Framework. For any new products, the validity of the existing models must be assessed via the new products approval processes.

5. Policy Governance

This policy is owned by the JSE Clear Chief Risk Officer and will be reviewed annually or when there are any material changes to the JSEC's risk profile, methodologies or processes.

The JSEC Risk Committee will recommend the initial approval of this policy by the JSEC Board or when there are material changes. The regular annual review of this policy will be approved by the JSE Clear Risk Committee.

Appendix A – Governance Committee Actions

No.	Ref	Action Item	Frequency	Applicable Governance Forum
1.	5	The JSEC Risk Committee will recommend the initial approval of this policy by the JSEC Board or when there are material changes. The regular annual review of this policy will be approved by the JSE Clear Risk Committee.	Annual	<ul style="list-style-type: none"> • JSE Clear Risk Committee