Business Outlines Related to Introduction of New Margin Calculation Method (VaR Method) for Futures/Options Contracts

As of June 20, 2022

Revised on October 28, 2022

Japan Securities Clearing Corporation

I. Purpose

Currently JSCC calculates margin requirement for Future/Options relating to Securities and Similar Contracts Clearing Business (refers to Options on Securities Contracts, JGB Futures Contracts, Option Contracts on JGB Futures, Index Futures, Options on Index Contracts, Commodity Futures Contracts and Options on Commodity Futures) and Commodity Future Contracts related to Business of Assuming Commodity Transaction Debts, using SPAN (refers to the margin calculation method developed by Chicago Mercantile Exchange).

With respect to this margin calculation method, JSCC shall introduce the method to calculate the amount to cover a loss expected to occur with a certain probability depending on future price fluctuation, assuming holding of a certain position for a certain period (hereinafter referred to as "VaR Method") , which has been introduced by overseas key CCPs, to suppress abrupt rise/fall of margin level and to achieve sophistication risk management and hereby amend the framework, as necessary.

These Business Outlines revise the Business Outlines published on June 20, 2022 based on the comments received through public consultation. (Revisions are underlined.)

II. Summary

Item	Description	Remark
1. Introduction of new margin calculation method (VaR Method)		

Item	Description	Remark
(1) Revise margin calculation method	・ Calculation for margin requirement shall be revised to apply VaR Method and margin requirement shall be the expected loss amount calculated by VaR Method deducting total net option value (hereinafter referred to as “VaR Margin Amount") and adding Delivery Clearing Margin. ・ VaR Margin Amount shall be the absolute value of the amount to cover bottom 99% of total amount of the relevant fluctuation amounts (the expected loss amount) deducting total net option amount for the position balance as of the closing of each trading day. Fluctuation amounts shall be (1) the fluctuation amount of net present value of each instrument calculated according to market data applying scenarios, which JSCC generates daily, based on market data fluctuation in the number of days set by JSCC (MPOR) in past 1,250 days (reference period), and (2) the fluctuation amount of net present value generated under stressed scenario.	・ Currently, JSCC calculates the amount by SPAN method. Other calculation requirements shall be unchanged. ・ For Intraday Margin, Emergency Margin and Emergency Margin for Specified Party (including risk amount calculation for Holiday Clearing Participant Monitoring in consecutive Holiday Trading Days) and calculation for Preliminary Initial Margin Add-on related to Holiday Trading, the amount currently calculated by SPAN shall be calculated by VaR Method. ・ The number of days set by JSCC is 2 days in principle, but 1 day for Commodity Futures/Option (except for Electricity Futures and LNG Futures) for the time being. ・ As for fluctuation, to reflect recent market volatility level, market data in the reference period shall be adjusted using EWMA (Exponentially Weighted Moving Average). ・ The amount to cover bottom 99% of

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		aggregate fluctuation amount shall be the amount calculated by Expected Shortfall (ES) method. ・ However, as for the specified products specified by JSCC (Commodity Futures/Option, etc. except for Electricity Futures and LNG Futures), VaR Margin Amount shall be calculated according to the procedure separately prescribed by JSCC for the time being.
(2) Revision of trigger level, etc. under various margin scheme	・ Trigger level of market fluctuation related to Emergency Margin and intraday deposit of Initial Margin related to Cash contracts shall refer to the value dividing the average margin of short and long one unit position for leading contract month contract on the previous day by contract size. ・ Margin equivalent amount per one unit used to calculate add-on charge under margin requirement add-on scheme shall be the average margin of short and long one unit position for all contract month contracts for all covered instruments at calculation timing.	・ Current trigger level shall refer to Price Scan Range divided by contract size. ・ Current margin equivalent amount per one unit position shall refer to Price Scan Range.
2. Revise calculation method of add-on charge on margin requirement		・ This scheme aims to increase margin requirement for Futures/Options Contracts to cover the excess loss which may arise, upon default of a Clearing Participant holding extremely large positions, in light of liquidity or the level of position balance held

Item	Description	Remark
	・ Calculation method for add-on charge shall be revised so that it assumes the base quantity for judging add-on charger divided by MPOR shall be deducted from the position balance day by day, considering the position decrease associated with the occurrence of Clearing Participant's Default.	by other Clearing Participants, expecting the risk that the loss arising from the relevant default may not be covered by regular margin requirement. ・ Specifically, calculation method of risk amount used for judgment for margin requirement increase trigger and Liquidity Based Expected Excess Multiplier shall be revised (same applies to Concentration Threshold).
3. Implementation Timing	・ JSCC aims to implement the scheme in third quarter in the fiscal year 2023 (i.e. fourth quarter in 2023).	・ No parallel-run period with current margin calculation method shall be set.

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