भारतीय प्रतिभूति और विनिमय बोर्ड
Securities and Exchange Board of India

CIRCULAR

CIR/CDMRD/DRMP/01/2015 October 01, 2015

To,

The Managing Directors / Chief Executive Officers
National Commodity Derivatives Exchanges

Sir / Madam,

Sub: Comprehensive Risk Management Framework for National Commodity Derivatives Exchanges

1. Pursuant to Section 131 of the Finance Act, 2015 and Central Government notification F.No. 1/9/SM/2015 dated August 28, 2015, all recognized associations under the Forward Contracts (Regulation) Act, 1952 are deemed to be recognized stock exchanges under the Securities Contracts (Regulation) Act, 1956 with effect from September 28, 2015. This circular applies to National Commodity Derivatives Exchanges as defined in the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) (Amendment) Regulations, 2015.

2. This circular is issued with an objective of aligning and streamlining the risk management framework across national commodity derivatives exchanges (hereinafter referred to as exchanges). The comprehensive risk management framework has been finalised after a due consultative process with the exchanges. The detailed risk management framework is placed at Annexure-I.

3. The provisions of this circular shall be implemented by national commodity derivatives exchanges latest by January 1, 2016 unless specified otherwise in any specific clause of this circular.

4. The norms specified by Forward Markets Commission shall continue to be in force to the extent not modified or repealed by this circular.

5. The exchanges are also advised to:
   i. ensure that their risk management framework is in line with the provisions contained in the annexure and take steps to make necessary amendments to the relevant bye-laws, rules and regulations for the implementation of the same.
   ii. bring the provisions of this circular to the notice of their members and also to disseminate the same on their website.
   iii. communicate to SEBI, the status of implementation of the provisions of this circular.

6. This circular is issued in exercise of the powers conferred under Section 11 (1) of the Securities and Exchange Board of India Act, 1992, to protect the interests of investors in securities and to promote the development of, and to regulate the securities market.

7. This circular is available on SEBI website at www.sebi.gov.in.

Yours faithfully,

Shashi Kumar
General Manager
Division of Risk Management and Products
Commodity Derivatives Market Regulation Department
shashikumarv@sebi.gov.in

Encl: as above

Annexure I

Comprehensive Risk Management Framework for National Commodity Derivatives Exchanges

1. Overview

The core of the risk management system of national commodity derivatives exchanges (Exchanges) shall comprise of the following:

a. **Liquid Assets:** Liquid assets shall be deposited by members with the Exchanges in compliance with the norms specified herewith to cover various margin and deposit requirements.
b. **Initial Margins (IM):** Value at risk (VaR) margins to cover potential losses for at least 99% of the days subject to minimum percentage floor value as prescribed by SEBI from time to time.
c. **Extreme Loss Margins (ELM):** Margins to cover the loss in situations that lie outside the coverage of the VaR based initial margins.
d. **Additional Margins:** Margins imposed on both long and short sides over and above the other margins, would be called additional margins.
e. **Tender Period Margin/Pre-expiry Margin:** Exchanges shall levy tender period/pre-expiry margin which may be increased gradually every day beginning from the pre-determined number of days before the expiry of the contract as applicable.
f. **Delivery Period Margin:** Appropriate delivery period margin shall be levied by Exchanges on the long and short positions marked for delivery till the pay-in is completed by the member. Once delivery period margin is levied, all other applicable margins may be released.
g. **Minimum Liquid Networth Requirement:** Initial margins, ELM, Additional margins or any other margins as may be specified by SEBI from time to time shall be deducted from the liquid assets of a clearing member. The clearing member's liquid assets after adjusting for applicable margins shall be referred to as 'Liquid Networth' of the clearing member. Clearing Members shall maintain 'Liquid Networth' as specified by SEBI from time to time.
h. **MTM (Mark to Market) Settlement:** Mark to market settlement on all open positions of clients/members shall be done on daily basis in cash.
i. **Base Minimum Capital:** Exposure free deposit required from all members (Trading members/Clearing members).
j. **Settlement Guarantee Fund (SGF):** Exchanges shall maintain SGF which shall be used by Exchanges only for the purpose of providing settlement guarantee.

2. Liquid Assets:

The types of liquid assets acceptable by Exchanges from their members and the applicable haircuts and concentration limits are listed below:

Item	Minimum Haircut (see Note 'a')	Limits
Cash Equivalents		
Cash	0	No limit
Bank fixed deposits	0	No limit
Bank guarantees	0	Limit on exchange's exposure to a single bank (see Note 'b')
Securities of the Central Government	10%	No limit
Units of liquid mutual funds or government securities mutual funds (by whatever name called which invest in government securities)	10%	No limit
Other Liquid Assets		
Liquid (Group-I) Equity Shares (see Note 'd')	Same as the VaR margin for the respective shares (see note 'd')	Limit on exchange's exposure to a single issuer (see Note 'e')
Mutual fund units other than those listed under cash equivalents	Same as the VaR margin for the units computed using the traded price on stock exchange, if available, or else, using the NAV of the unit treating it as a liquid security (as per methodology given in Para 5.1 of circular MRD/DoP/SE/Cir-07/2005 dated February 23, 2005).	

Corporate Bonds having rating of AA or above(or with similar rating nomenclature) by recognised credit rating agencies	Fixed percentage based or VaR based Haircut. A higher haircut may be considered to cover the expected time frame for liquidation. To begin with the haircut shall be a minimum of 10%	Not to exceed 10% of the total liquid assets of the clearing member. (see Note 'e')
Bullion	20%	Total commodities collateral for any clearing member shall not exceed 15% of the total liquid assets of the clearing member. (see Note 'f')
Gold ETF	20%	
Steel	60%	
Agricultural Commodities	40%	

Notes:

a. The valuation of the liquid assets shall be done on a daily basis after applying applicable haircuts.

b. The exchanges shall lay down exposure limits either in rupee terms or as percentage of the total Liquid Assets that can be exposed to a single bank directly or indirectly. The total exposure towards any bank would include Bank Guarantees issued by the bank as well as debt or equity securities of the bank which have been deposited by members towards total liquid assets.

   Not more than 1% of the total liquid assets deposited with the exchange, shall be exposed to any single bank which has a net worth of less than INR 500 crores and is not rated P1 (or P1+) or equivalent, by a recognized credit rating agency or by a reputed foreign credit rating agency, and not more than 10% of the total liquid assets deposited with the exchanges shall be exposed to all such banks put together.

c. Cash equivalents shall be at least 50% of liquid assets. This would imply that Other Liquid Assets in excess of the total Cash Equivalents would not be regarded as part of member's liquid assets as well as total liquid assets.

d. For determination of which Equity shares are falling in Group-I and what would be the appropriate VaR margin for these securities, data disseminated by Stock Exchanges having equity platform shall be referred. Stock Exchanges are already required to compute the same on regular basis in accordance with SEBI Circular MRD/DoP/SE/Cir-07/2005 dated February 23, 2005.

e. Exchanges shall adequately diversify their collateral so as to avoid any concentration of exposure towards any single entity and the same shall be within the limits as may be prescribed by SEBI from time to time.

f. Agricultural commodities to be accepted as collateral should be of same quality specification which is deliverable under the contract specification of agricultural commodities derivatives being traded on the Exchange.

g. Exchanges shall accept liquid assets as collateral only as per the list of liquid assets specified in the table above. However, exchanges may decide not to accept certain types of liquid assets specified in the above list based on their risk perception, capability to hold and arrangements for timely liquidation. Exchanges may stipulate concentration limits at member level / across all members as may be necessary.

h. Exchanges shall make necessary arrangements to enable timely liquidation of collaterals accepted by them.

3. Initial Margins (IM)

Currently Exchanges are computing VaR based initial margins using Exponentially Weighted Moving Average (EWMA) method to obtain the volatility estimate and then calculating initial margin by multiplying the volatility estimate by scaling factor. In order to bring uniformity in calculation of IM across all Exchanges, following is prescribed:

a. **VaR Based:** The Initial Margin requirement shall be so as to cover a 99% VaR over one day horizon. In order to achieve this, the estimated EWMA volatility (standard deviation) shall be scaled up by a factor of 3.5.

b. **Minimum value for Initial Margin:** Minimum value of initial margin would be subject to commodity specific floor value as may be specified by SEBI from time to time. Currently floor value of IM applicable for Nickel shall be 5% and for all other commodities it shall be 4%.

c. **Margin Computation at client portfolio level:** Margins shall be computed at the level of portfolio of each individual client comprising his positions in futures contracts across different maturities. For Trading/Clearing Member level margins computation, margins would be grossed across various clients. The proprietary positions of the Trading Member would also be treated as that of a client for margin computation.

d. **Spread margin benefit:** –Spread margin benefit shall be permitted in the following cases:

   i. Different expiry date contracts of the same underlying
   ii. Two contracts variants having the same underlying commodity

Exchanges shall charge minimum 25% of the initial margin on each of the individual legs of the spread. In case of such spread positions additional margins shall not be levied. No benefit in ELM would be provided for spread positions i.e. ELM shall be charged on both individual legs. Exchanges are free to charge margins higher than the minimum specified depending upon their risk perceptions.

e. **Real Time Computation:** The margins should be computed on real time basis. The computation of portfolio initial margin would have two components. The first is the computation of initial margin (EWMA volatility scaled up by 3.5) for each individual contract. At the second stage, these contract initial margins would be applied to the actual portfolio positions to compute the portfolio initial margin. The exchanges are permitted to update EWMA volatility estimates for contracts at discrete time points each day (with a gap of not more than 2 hours between any two consecutive updates and at the end of the trading session) and the latest available scaled up WMA volatility estimates would be applied to member/client portfolios on a real time basis.

4. Extreme Loss Margin (ELM):

ELM of 1% on gross open positions shall be levied and shall be deducted from the liquid assets of the clearing member on an online, real time basis.

The ELM shall be implemented latest within six months of the date of this circular. Until the time any exchange starts charging ELM, the minimum value of initial margins shall be subject to following floor values:-

- Minimum IM For Nickel: 6%
- Minimum IM for other commodities:5%

5. Additional Margins:

Exchanges may levy Additional Margins based on their evaluation in specific situations as may be necessary.

6. Tender Period Margin:

Exchanges shall levy Tender period/Pre-expiry margin which shall be increased gradually every day beginning from the pre-determined number of days before the expiry of the contract as applicable. Exchanges shall determine the quantum of tender period margin as appropriate based on the risk characteristics of the particular commodity.

7. Delivery Period Margin:

Appropriate delivery period margin shall be levied by Exchanges on the long and short positions marked for delivery till the pay-in is completed by the member. Once delivery period margin is levied, all other applicable margins may be released.

8. Margin Collection and Enforcement:

All applicable margins shall be deducted by Exchanges from the Liquid Assets of the clearing members on an online, real time basis.

Margins applicable on client positions have to be compulsorily collected from the clients and reported to the Exchange by the members.

The members are required to collect Initial Margin and ELM upfront from their clients as applicable at the time of the trade. For other margins (MTM margin, Additional margin, delivery margin or any other margin as prescribed by the Exchange) members shall have time till 'T+2' working days to collect from their clients. The period of T+2 days has been allowed to members to collect margin from clients taking into account the practical difficulties often faced by them only for the purpose of levy of penalty and it should not be construed that clients have been allowed two days to pay margin due from them.

9. Mark to Market (MTM) Settlement:

All open positions of a futures contract would be settled daily, only in cash, based on the Daily Settlement Price (DSP). DSP shall be reckoned and disseminated by the Exchange at the end of every trading day. The mark to market gains and losses shall be settled in cash before the start of trading on T+1 day. If mark to market obligations are not collected before start of the next day's trading, the exchange shall collect correspondingly higher initial margin (scaling up by a factor of square root of two) to cover the potential losses over the time elapsed in the collection of margins.

10. Base Minimum Capital (BMC):

i. Exchanges shall have BMC requirements for their members (Trading members/Clearing members) as given below (to be complied within six months from the date of this circular coming into effect):
   a. Members without Algo trading – INR 10 Lacs
   b. Members doing Algo trading – INR 50 Lacs

ii. No exposure will be given by the Exchange on this BMC.

iii. 25% of the above deposit shall be in the form of cash and balance 75% can be in the form of Fixed Deposit/Bank Guarantee.

iv. These funds would be kept in a separate account by the Exchange.

v. BMC would be refunded to the members at the time of surrender of membership provided that there is no unsettled claim against member and no arbitration cases are pending against the member.

11. Risk Reduction Mode (RRM)

Exchanges shall ensure that the trading members/clearing members are mandatorily put in risk-reduction mode when 90% of the member's Liquid Assets available for adjustment against margins/deposits gets utilized for margins/deposits (to be complied within six months from the date of this circular coming into effect). Such risk reduction mode shall include the following:

a. All unexec*uted orders shall b*e cancelled once trading member himself or his clearing member breaches 90% collateral utilization level.

b. Only orders with *Immediate or Cancel* attribute shall be permitted in this mode.

c. All new orders shall be checked for sufficiency of margins and such potential margins shall be blocked while accepting the orders in the system.

d. The trading member shall be moved back to the normal risk management mode as and when the collateral utilization level of the trading member as well as his clearing member is lower than 90%.

12. Additional Ad-hoc Margins

Exchanges have the right to impose additional risk containment measures over and above the risk containment system mandated by SEBI. However, the Exchanges should keep the following three factors in mind while taking such action:

a. Additional risk management measures (like ad-hoc margins) would normally be required only to deal with circumstances that cannot be anticipated or were not anticipated while designing the risk management system. If ad-hoc margins are imposed with any degree of regularity, exchanges should examine whether the circumstances that give rise to such margins can be reasonably anticipated and can therefore be incorporated into the risk management system mandated by SEBI. Exchanges are encouraged to analyse these situations and bring the matter to the attention of SEBI for further action.

b. Any additional margins that the exchanges may impose shall be based on objective criteria and shall not discriminate between members on the basis of subjective criteria.

c. Transparency is an important regulatory goal and therefore every effort must be made to make the risk management systems fully transparent by disclosing their details to the public.