

DRAFT CIRCULAR FOR PUBLIC COMMENTS

Revised Guidelines for Capacity Planning and Real Time Performance Monitoring framework of Market Infrastructure Institutions with Commodity Derivative Segment

1. OBJECTIVE:

- 1.1. To solicit comments/ views/ suggestions from the public on the draft circular titled “*Revised Guidelines for Capacity Planning and Real Time Performance Monitoring framework of Market Infrastructure Institutions with Commodity Derivative Segment*” placed at **Annexure - A**.

2. SUMMARY OF CHANGES SUGGESTED

- 2.1. The current provisions, proposed changes and rationale for the changes are briefly mentioned as under:

Current Provisions	Proposal	Rationale for change
SEBI vide circular dated December 10, 2024 issued the revised guidelines for Capacity Planning and Real Time Performance Monitoring framework of Market Infrastructure Institutions(MIIs) (except Commodity Derivative Segment). The said circular inter-alia, prescribes that the installed capacity of the	Based on the representation received from commodity stock exchanges and discussion in Technical Advisory Committee (TAC) of SEBI, it is proposed that initially for commodity stock exchanges, the installed capacity of the critical IT systems of MIIs may be kept as 2 times of projected peak load .	From the analysis of data submitted by Commodity Stock Exchanges, it was observed that capacity of IT systems of commodity stock exchanges remains underutilized. Hence, the proposal of having installed capacity as at least 2 times (2x) of the projected peak load and in order to bring uniformity between Stock Exchanges and Clearing

Current Provisions	Proposal	Rationale for change
<p>critical IT systems of MIs shall be at least 1.5 times of projected peak load.</p> <p>However, for commodity derivative segment, presently in terms of SEBI circular dated September 27, 2016 on 'Broad Guidelines on Algorithmic trading for Commodity Derivatives exchanges', the capacity of the trading system of Commodity exchanges is prescribed as at least 4 times the peak load.</p> <p>Further, there are no guidelines for capacity planning and real time performance monitoring for Clearing Corporations with Commodity Derivatives Segment</p>	<p>Further, guidelines prescribed for equity exchanges vide aforesaid SEBI circular dated December 10, 2024 for capacity planning and real time performance may also be extended to commodity derivative exchanges.</p> <p>Furthermore, in order to bring uniformity between Stock Exchanges and Clearing Corporations with Commodity Derivatives Segment, it is suggested that guidelines for capacity planning and real time performance may also be made applicable for Clearing Corporations with Commodity Derivatives Segment.</p>	<p>Corporations with Commodity Derivatives Segment, the revised guidelines are being specified</p>

3. PUBLIC COMMENTS

3.1. Public comments are invited on the draft circular annexed to this consultation paper. The comments/ suggestions should be submitted latest by **July 20, 2025**, through the online web-based form which can be accessed using the following link:

<https://www.sebi.gov.in/sebiweb/publiccommentv2/PublicCommentAction.do?doPublicComments=yes>

3.2. The instructions to submit comments on the consultation paper are as under:

- 3.2.1. *Before initiating the process, please read the instructions given on top left of the web form as “Instructions”.*
- 3.2.2. *Select the consultation paper you want to comment upon from the dropdown under the tab – “Consultation Paper” after entering the requisite information in the form.*
- 3.2.3. *All fields in the form are mandatory.*
- 3.2.4. *Email ID and phone number cannot be used more than once for providing comments on a particular consultation paper.*
- 3.2.5. *If you represent any organization other than the types mentioned under dropdown in “Organization Type”, please select “Others” and mention the type, which suits you best. Similarly, if you do not represent any organization, you may select “Others” and mention “Not Applicable” in the text box. vi. There will be a dropdown of Proposals in the form. Please select the proposals one- by-one and for each of the proposal, please record your level of agreement with the selected proposal. Please note that submission of agreement level is mandatory.*
- 3.2.6. *If you want to provide your comments for the selected proposal, please select*
- 3.2.7. *“Yes” from the dropdown under “**Do you want to comment on the proposal**” and use the text boxes provided for the same.*

- 3.2.8. *After recording your response to the proposal, click on “Submit” button. System will save your response to the selected proposal and prompt you to record your response for the next proposal. Please follow this procedure for all the proposals given in the dropdown.*
- 3.2.9. *If you do not want to react on any proposal, please select that proposal from the dropdown and click on “**Skip this proposal**” and move to the next proposal.*
- 3.2.10. *After recording your response to all the proposals, you may see your draft response to all of proposals by clicking on “**Check your response before submitting**” just before submitting response to the last proposal in the dropdown. A pdf copy of the response can also be downloaded from the link given in right bottom of the web page.*
- 3.2.11. *The final comments shall be submitted only after recording your response on all of the proposals in the consultation paper.*

3.3. In case of any technical issue in submitting your comment through the web based public comments form, you may contact the following through email with the subject: ***“Revised Guidelines for Capacity Planning and Real Time Performance Monitoring framework of Market Infrastructure Institutions with Commodity Derivative Segment”***

- a) Ansuman Dev Pradhan, GM (ansumanp@sebi.gov.in)
- b) Harshad Patil, AGM (harshadp@sebi.gov.in)

Encl.: Annexure A

Issued on: June 30, 2025

ANNEXURE-A

DRAFT CIRCULAR

SEBI/HO/MRD/TPD/CIR/P/2025/_____

____, 2025

To,

All Stock Exchanges,

All Clearing Corporations

(with Commodity Derivatives Segment)

Dear Sir/ Madam,

Subject: - Revised Guidelines for Capacity Planning and Real Time Performance Monitoring framework of Market Infrastructure Institutions with Commodity Derivative Segment

1. Clause 16.1.2 of Chapter 16 of SEBI Master Circular dated August 04, 2023 for stock exchanges with commodity derivatives segment stipulates the following with regard to capacity of the trading system of stock exchanges: -
 - 16.1.2 *The stock exchanges shall have arrangements, procedures and system capability to manage the load on their systems in such a manner so as to achieve consistent response time to all members. The capacity of the trading system of the stock exchange should be at least four times the peak order load encountered and the Exchange system should be upgraded on a regular basis. The stock exchange shall continuously study the performance of its systems and, if necessary, undertake system upgrade, including periodic upgrade of its surveillance system, in order to keep pace with the speed of trade and volume of data that may arise through algorithmic trading.*
2. Based on the representations received from Stock Exchanges (SEs) with commodity derivatives segment, the framework adopted by the SEs and Clearing Corporations (CCs) with commodity derivatives segment for their capacity planning has been reviewed by SEBI in consultation with Technical Advisory Committee (TAC) of SEBI. Based on the recommendations of TAC and in consultation with SEs and CCs, it has been decided to advise SEs and CCs with commodity derivatives segment to ensure the following requirements while formulating the framework of capacity planning and

real time performance monitoring of their Critical Information Technology (IT) systems and supporting infrastructure components:

- 2.1 Capacity planning methodology should be proactive, future ready and developed to help estimate/forecast future projected capacity requirements to support business activities and minimize the risk of service disruption (taking into account trend analysis of system utilization, historical volume, maximum allowed volume to all members/participants taken together such as number of orders/messages per second, projection of customer growth/transaction volume, system performance issues, implication of any new business initiatives, possible surge in transaction volume etc.) Details of the methodology adopted by SEs and CCs shall be submitted to SEBI within 3 months from the date of the issue of this Circular after taking approval of their Standing Committee on Technology (SCOT) and Governing Board.
- 2.2 SEs and CCs should ensure adequate system capacity in place to handle high volumes to ensure high level of service availability.
- 2.3 The installed capacity shall be at least 2 times (2x) of the projected peak load.
- 2.4 The projected peak load shall be calculated for the next 60 days based on the sustained peak load trend of the past 180 days and other relevant factors including futuristic factors as mentioned at Clause 2.1 above. However, stock exchanges and clearing corporations may also calculate the projected peak load for time duration shorter than 60 days. The exact duration of sustained peak load to be considered by stock exchanges and clearing corporations to calculate the projected peak load shall be decided based on the consultation with their SCOT. However, the outer limit for sustained peak load shall be 10 seconds for SEs and CCs.
- 2.5 SEs and CCs shall conduct comprehensive stress testing on quarterly basis to identify the impact on throughput/performance/latency metrics when compared to lean period by stressing the existing load scenarios to various multiples.
- 2.6 SEs and CCs shall ensure that application design should have horizontal and vertical scalability and the same shall be tested on periodic basis.
- 2.7 SEs and CCs shall have guidelines/Standing Operating Procedures (SOPs) to identify and understand the performance of each application/process, capacity,

utilization of each individual IT component, within the entire system/network architecture, used to support their IT services.

- 2.8 While devising the capacity planning and real time performance monitoring methodology, SEs and CCs should not consider each IT component/application/process in isolation and must consider inter-dependency of the IT components/applications/processes.
- 2.9 All IT systems shall be considered in this process which shall, inter-alia, include network, hardware, software, security devices, network devices, memory utilization, CPU utilization, disks, network links, third party vendor systems, supporting infrastructure etc., and shall be adequately sized to meet the capacity and real time performance requirements to support the business activities of the SEs and CCs.
- 2.10 SEs and CCs shall implement automated performance monitoring and alert system covering all their critical applications/activities/IT components to continuously monitor the real time performance of processes/applications and utilization of its system resources at each IT component level against a set of pre-defined thresholds. These thresholds should enable the SEs and CCs to do early detection of any possible performance issue, slowness etc. and should be set accordingly. A dedicated team should monitor such alerts and SOPs should be put in place to address such alerts in a timely manner to ensure performance of systems/applications/processes of SEs and CCs. The said performance monitoring and alert system shall be reviewed on quarterly basis.
- 2.11 Alerts generated from the monitoring and detection systems shall be dealt proactively including necessary actions such as infrastructure up-gradation, addition of IT resources etc. shall be taken immediately to address the issue effectively.
- 2.12 SEs and CCs shall maintain an asset register of all IT components and monitor their usage on a continuous basis. SEs and CCs shall examine and establish an appropriate threshold on utilization of each component. If actual utilization of any component exceeds the threshold over a period as defined by SEs and CCs, immediate action shall be taken to enhance the capacity. The threshold must be reviewed and approved by SCOT of the SEs and CCs.

- 2.13 In general, if actual capacity utilization of any component of SEs and CCs exceeds 75% of the installed capacity, immediate action shall be taken to enhance the capacity.
- 2.14 SEs and CCs shall assess impact of all changes to existing IT systems or introduction of new IT systems/applications/processes on capacity planning and real time system performances.
- 2.15 SEs and CCs shall also appropriately include the capacity planning and real time performance monitoring and alert resolution requirements in the Service Level Agreement (SLA) with the third party vendors, as applicable, to meet the current and future business requirements.
- 2.16 SEs and CCs should have clearly defined 'Capacity Planning and Real Time Performance Monitoring Policy' which shall be approved by their SCOT and Governing Board and would inter-alia cover various requirements of this Circular. Further, the policy would require to clearly set out, among others, appropriate system utilization thresholds to provide sufficient time to meet the lead time for procurement of additional resources or take corrective measures during real time. Such policy shall also be reviewed at least on annual basis by the SEs and CCs.
3. Considering the above, SEs and CCs are advised to submit their revised guidelines to SEBI on capacity planning and real time performance monitoring of all Critical IT systems after taking approval from their SCOT and Governing Board within 3 months from the date of this Circular.
4. The provisions of this circular shall come into effect 3 months from the date of this circular.
5. This Circular supersedes the Clause 16.1.2 of Chapter 16 of SEBI Master Circular dated August 04, 2023.
6. SEs and CCs are required to take necessary steps to put in place systems for implementation of this Circular, including necessary amendments to the relevant bye-laws, rules and regulations, if any.
7. This Circular is being issued in exercise of the powers conferred by Section 11(1) of Securities and Exchange Board of India Act, 1992 read with Regulation 51 of Securities

Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2018 to protect the interest of investors in securities market and to promote the development of, and to regulate the securities market.

8. This Circular is issued with the approval of Competent Authority.
9. This Circular is available on SEBI website at www.sebi.gov.in under the link “Legal Framework” → “Circulars”.

Yours faithfully,

Ansuman Dev Pradhan
General Manager
+91-22-26449622
Email: ansumanp@sebi.gov.in