

THE CLEARING CORPORATION OF INDIA LIMITED

Risk Management Department

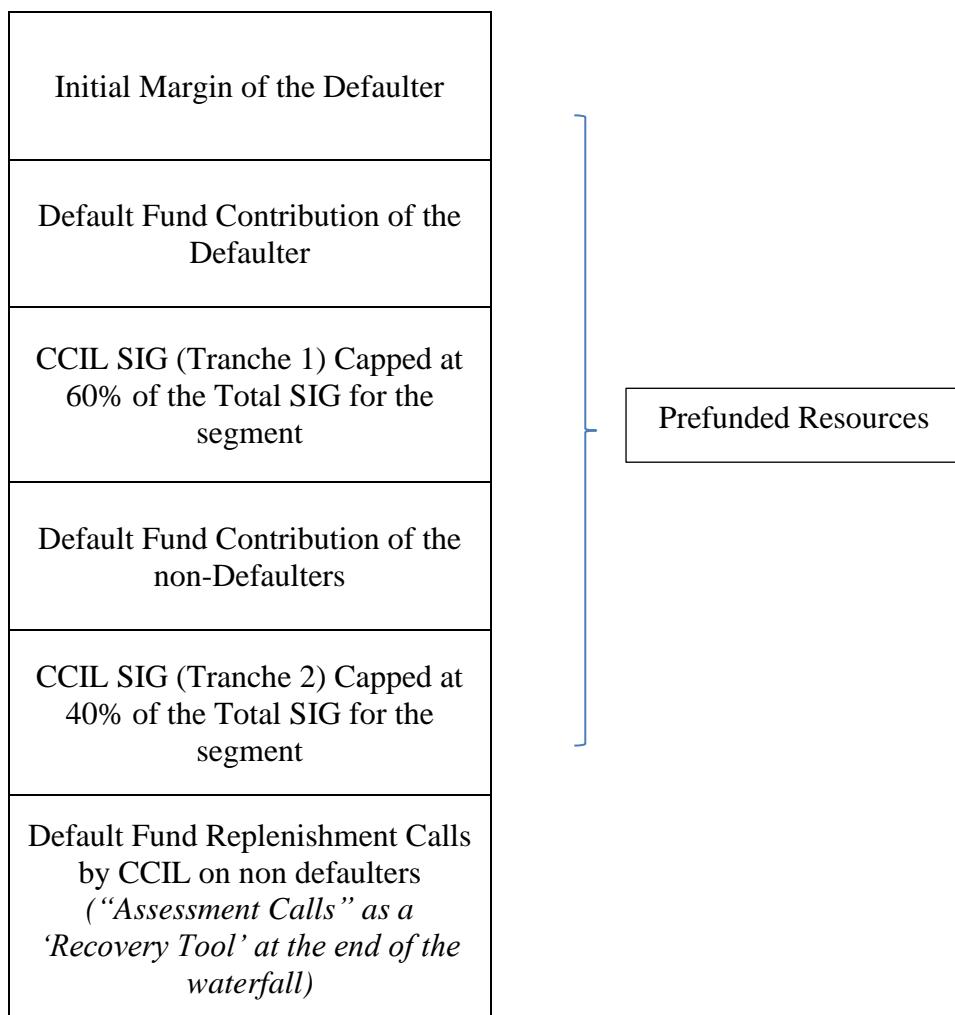
Consultation Paper

**Review of the Provisions for Capped Member liability on account of
Default Fund replenishment in Clearing Segments of CCIL**

1.0 Introduction

- 1.1. CCIL is a Qualified Central Counterparty (QCCP) regulated by the Reserve Bank of India and is thus compliant with CPMI IOSCO's Principles for Financial Market Infrastructures (PFMI). In terms of the PFMI, CCIL maintains prefunded resources to cover the potential losses arising from participant default. These comprise CCIL's own funds set aside for this purpose (known as its 'Skin in the Game') and a Default Fund contributed by members under the principle of loss mutualization. The size of the Default Fund is based on the hypothetical losses on member portfolios under stress conditions.

- 1.2. The sequence in which the CCIL resorts to utilize the above prefunded resources (which also include the margins contributed by individual members) is known as the 'Default Waterfall'. This is pictorially shown below:



1.3. As shown above, in case CCIL were to invoke the Default Waterfall and prefunded non-defaulters' contributions to the Default Fund are exhausted, then as per its Regulations, CCIL is authorized to issue default fund replenishment calls on the non-defaulter members. CCIL's right to issue replenishment calls for default fund (also known as “Assessment Calls”) are considered as the recovery tools¹ at the end of the waterfall.

1.4. CPMI IOSCO's paper, “*Recovery of financial market infrastructures (July 2017)*” specifies that recovery tools of CCPs should possess the following characteristics:

¹ “Recovery” concerns the ability of an FMI to recover from a threat to its viability and financial strength so that it can continue to provide its critical services without requiring the use of resolution powers by authorities. Assessment / cash calls for default fund replenishments at the end of prefunded waterfall is a recovery tool for a CCP

- a) *Comprehensive*: The set of tools should comprehensively address how the FMI would continue to provide critical services in all relevant scenarios.
- b) *Effective*: Each tool should be reliable, timely, and have a strong legal basis.
- c) *Transparent, measurable, manageable and controllable*: Tools should be transparent and designed to allow those who would bear losses and liquidity shortfalls to measure, manage and control their potential losses and liquidity shortfalls.
- d) *Create appropriate incentives*: The tools should create appropriate incentives for the FMI's owners, direct and indirect participants, and other relevant stakeholders.
- e) *Minimize negative impact*: The tools should be designed to minimize the negative impact on direct and indirect participants and the financial system more broadly.

1.5 Regulations require Members to provide for capital on both the funded (current Default Fund contribution to the CCP) and unfunded (likely future call for default fund contribution). CCIL's Bye Laws, Rules and Regulations have provisions for limiting member's liability on account of their funded and unfunded default fund obligations. These provisions are mentioned below:

- a) The cap on the liability towards Default Fund applies only to a member with outstanding trades / positions that have been accepted for CCP clearing by CCIL and who has resigned after meeting cumulative replenishment calls to the Default Fund in excess of the pre-defined threshold amount.
- b) For a 30 days period from the date of resignation, the member's liability for additional contribution to the Default Fund of the segment is capped at 5 times of its default fund based on the last re-computation of default fund contribution subject to a monetary ceiling notified by CCIL².

² The Monetary ceiling is Rs 5,500 crore for Forex Forward and Forex segments and Rs 6,250 crores in Securities, Rupee IRS and FX Option segments.

1.6 Thus presently, for any member that has outstanding cleared positions in any segment, its liability to contribute to the default fund of that segment is capped only when the Member resigns from the segment. Moreover, to be eligible to resign, it has to have incurred a loss by way of replenishment of the default fund in excess of a “*Loss Threshold*”. The Loss threshold can be reached if *either one or both the conditions* mentioned below are met:

- Default Fund contributions of all non-defaulter members in a segment have been utilized in the past 12 months for meeting defaults of other members to the extent of twice the value of the total Default Fund for the segment as on the date of monthly re-computation.
- If a member has taken a loss through replenishment of its contribution to the Default Fund for the segment for meeting defaults of other members and the total amount of such loss in the past 12 months is in excess of 4 times its highest contribution to the fund during this period, then Loss threshold is deemed to have been reached for that member.

1.7 A few members have represented to CCIL that they appreciate that, in line with global best practices, CCIL has also capped the liability on account of the Default Fund. However, they have also highlighted that since this cap gets triggered only after a Member resigns, arriving at precise capital charge computations on the likely Default Fund liability becomes challenging.

1.8 In view of this feedback, we have reviewed the approaches followed in Global CCPs for limitation of liability on account of the Default Fund which is placed in *Annexure -1*. We have arrived at a revised model for capping the member liability to the Default Fund.

1.9 The proposed Capped liability model seeks to delink the cap on default fund liability from the resignation of the member. Moreover, for any member, the revised approach would facilitate assessing its maximum likely contribution to default fund replenishments over a finite time window in the immediate future. Such replenishments could be on account of single or multiple defaults. This would then help members in their liquidity and capital planning over the afore-mentioned time window.

1.10 Currently, as per CCIL Regulations, one of the provisions of resignation from CCIL Membership in a clearing segment is that a “*Member can resign if it has taken loss through*

replenishment of its contribution to the segment Default Fund and the specified loss threshold as notified by Clearing Corporation from time to time has been reached”. As the proposed model seeks to delink the cap on default fund liability from the resignation of the member, the said Resignation clause in CCIL Regulations would be dropped on implementation of the revised model. The proposed Capped liability model is placed below for suggestions and feedback.

2.0. Proposal

2.1 The revised limit for a member’s liability on account of the Default Fund:

- a) Shall be independent of a member’s resignation.
- b) Shall be capped for all defaults (single and multiple) within a rolling 30-day period.
- c) The maximum liability shall be five times its default fund contribution that prevailed at the start of the 30-day period.

2.2 Where an event of default occurs, the amount of non-defaulting member’s default fund contribution that is available to meet default losses will be lower of (a) and (b) below:

- a) An amount equal to 5 times a member’s default fund contribution as at the start of the 30-day period that ends on the day of event of default less the aggregate amount of that member’s default fund contribution that has already been utilized to meet losses arising from events of default that had occurred in that 30-day period.
- b) Where a member’s default fund contribution was revised (month end or intra-month resizing³) during the aforementioned 30-day period, an amount (“Revised amount”) equal to five times of the consequently revised default fund contribution less the aggregate amount of member’s default fund contribution that has already been utilized to meet losses arising from events of default occurring after such revision and prior to the relevant event of default.

³ In CCIL, intra-month resizing of DF can result in an increase in DF only while end of the month resizing can result in an increase/ decrease in DF.

2.3 Where there are multiple such revisions of a default fund contribution of a member during the 30-day period, a separate “Revised amount” shall be calculated for each such revision and the lowest “Revised amount” shall apply in 2.2 (b).

2.4 In summary, the liability cap shall operate in a rolling 30-day window and shall consider Default fund contribution at the start of the window and any events of default within the window to determine maximum liability and remaining residual liability where applicable. This approach ensures that members obtain greater predictability in planning their liquidity resources.

2.5 The clauses mentioned in para 2.1 to 2.4 would ensure that there is a certainty on a member’s maximum contribution in terms of default fund replenishments over the next 30-day period. Under the proposed methodology, a member’s maximum potential liability for the next 30 days would never exceed five times its Default fund contribution as on that day. Further, for any day during the 30-day period, as the proposed methodology looks back to the Default fund contribution set at the beginning of the period, members are guaranteed that even if there have been subsequent increases in default fund requirements, a member’s maximum liability will not increase. This would then help members plan their funding requirements.

2.6 One of the approaches that appears to be prevalent among some CCPs (as seen in *Annexure -1*) is where a member’s liability for a period of time (typically 5/ 20/ 25/ 30 days) *begins upon an event of default* and is subject to an *extension on occurrence of a subsequent default* within the relevant period. This approach provides lower predictability on a member’s liabilities as compared to our proposed model enumerated in 2.1 to 2.4. This is because, the cap on liability is dependent on the subsequent default occurring before the relevant period expires. Moreover, it is possible that with multiple defaults happening over a period of time, the relevant period gets extended. This may reduce the availability of prefunded resources for the CCP as members’ liability will be capped over this extended period of time. In our proposed model, as the capped period is a rolling 30 days and not linked to default events, more resources will be available with CCIL for multiple defaults that occur over a period of time and members will have an absolute certainty of their maximum liability to CCIL over finite period of time.

2.7 Illustrative scenarios explaining the proposed model are presented in *Annexure 2*.

3.0 Summary of the Proposal

3.1 The current cap on member liability for default fund replenishments is triggered on Member resignation and a member can tender his resignation only on “*Loss Threshold*” getting reached due to default fund replenishments.

3.2 It is now proposed that the capped limit to meet default fund replenishments for members for a single or multiple defaults be set independent of a member’s resignation. The capped limit within the next 30-day period will be set at five times a Member’s default fund contribution determined at the start of the 30-day period.

Members are requested to send their comments and feedback on the proposal to us latest by **23rd Jan 2026** at rmd@ccilindia.co.in for attention of Chief Risk Officer, CCIL with Subject line as: “***Consultation Paper: Review of the Provisions for Capped Member liability on account of Default Fund replenishment in Clearing Segments of CCIL***”. In case you need any clarifications, please feel free to contact Mr. Nandan Pradhan, VP, Risk Management Department on 6154 6422 or Mr. Kausick Saha, Chief Risk Officer, Risk Management Department on 6154 6441.

Annexure-1

Member Liability Cap (Default fund replenishment for single/ multiple defaults) in Global CCPs

Sr. No.	CCP	Extract	Source Link
1	EUREX (Germany)	<p>“Assessments are capped within a so-called capped period. The maximum of Assessments to be provided is two times each Clearing Member’s Default Fund contribution at the time the default was declared. As a result, a Clearing Member’s liability in case of another Clearing Member’s default is limited to a total of three times its currently applicable Default Fund contribution, at all times.”</p>	https://www.eurex.com/en/services/risk-management/default-waterfall/assessments-and-replenishment
2	CME Securities Clearing Inc. (USA)	<p>“The maximum Default Assessment for each Member with respect to each Cooling Off Period will equal two-hundred (200) percent of the Member’s Required Guaranty Fund Contribution then in effect at the commencement of the Cooling Off Period.”</p>	https://www.sec.gov/files/cmes_c-ca-1-exhibit-e-3-rulebook-12-13-24.pdf
3	LCH SA (France)	<p>“The value of Refill/Assessment contributions LCH SA may call from each service clearing member in respect of one default is capped at an amount equal to that clearing member’s funded contribution to the relevant default fund at the time of the default.”</p>	https://www.lseg.com/content/dam/post-trade/en_us/documents/lch/ccp-disclosures/lch-sa-comprehensive-disclosure-required-sec-rule-17ad-22-e-23-q1-2025.pdf

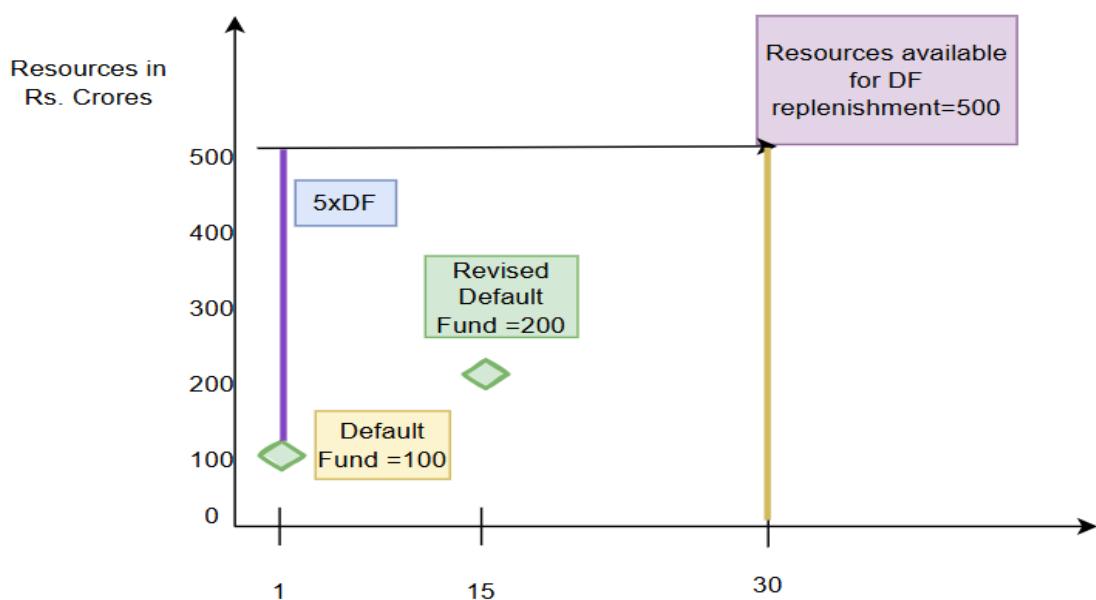
Sr. No.	CCP	Extract	Source Link
4	SGX-DC (Singapore)	<p>“Rule 7A.06.9.1 states that the aggregate amount of a non-defaulting Clearing Member’s Clearing Fund Deposit (“CFD”) and Further Assessment Amount (“FAA”) that can be applied to meet losses arising from or in connection with all events of default occurring within a period of thirty (30) calendar days shall not exceed an amount equal to three (3) times of that Clearing Member’s Prescribed Contributions as at the start of that 30-day period.”</p>	https://rulebook.sgx.com/rulebook/practice-note-7a069-limit-non-defaulting-clearing-members-liability-multiple-events

Annexure -2

Illustrative Scenarios for Proposed Capped Member Liability Model

The following scenarios illustrate the application of the proposed capped liability mechanism over a rolling 30-day period. These scenarios demonstrate how the liability cap is determined, how it is affected by revisions to the Default Fund (DF), and how the available liability is computed when defaults occur within overlapping 30-day windows.

Scenario 1 – Increase in Default Fund During the 30-Day Window



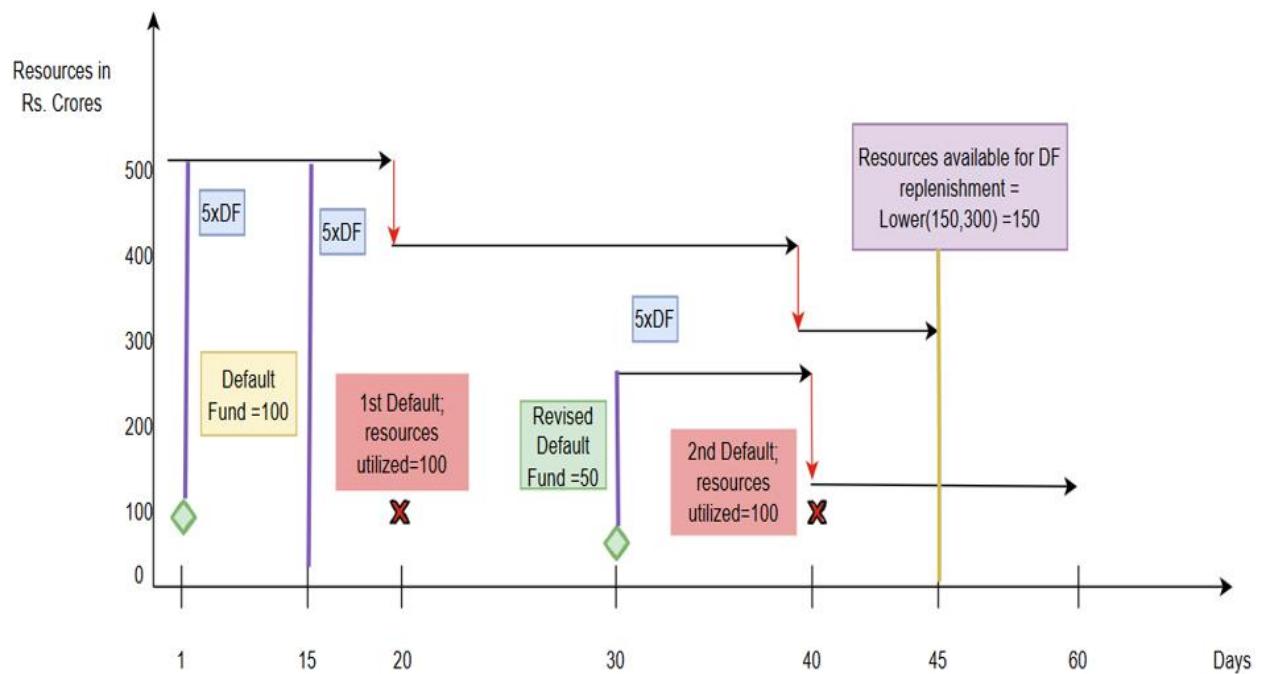
At the start of the 30-day window (Day 1), the member's Default Fund contribution is 100. Accordingly, the member's maximum liability for defaults occurring during this 30-day period is capped at:

$$5 \times 100 = 500$$

On Day 15, the member's Default Fund contribution is revised upward to 200. Under the proposed framework, revisions during an ongoing 30-day window do not alter the liability cap for that window. The cap remains anchored to the Default Fund contribution level on Day 1. This ensures that members have advance visibility of their maximum liability for the full 30-day period.

Because the capped liability operates on a rolling 30-day basis, the Default Fund contribution of 100 that remained in effect on Day 14 continues to determine the applicable cap until Day 44. Accordingly, although the Default Fund is increased to 200 on Day 15, the revised capped limit of **5 × 200 = 1000** becomes effective only from Day 45, when the 30-day period linked to the earlier contribution of 100 concludes. During this time, higher Default Fund contributions may be collected from the member; however, utilization of such resources shall remain governed by the cap applicable to the earlier 30-day window, and any additional utilization based on the revised contribution level can occur only from Day 45 onward. No defaults occur in this scenario, and the full cap of 500 remains available till Day 44.

Scenario 2 – Two Defaults Across Consecutive Windows with the New Lower Capped Limit Becoming Binding



On Day 1, the member's Default Fund contribution is 100, resulting in a Day-1 to Day-30 liability cap of:

$$5 \times 100 = 500$$

A default on Day 20 requires utilization of 100. The remaining available liability for the rest of this window becomes:

$$\mathbf{500 - 100 = 400}$$

On Day 30, the member's Default Fund contribution is revised downward to 50. For the next 30-day window (Day 30 to Day 60), the liability cap becomes:

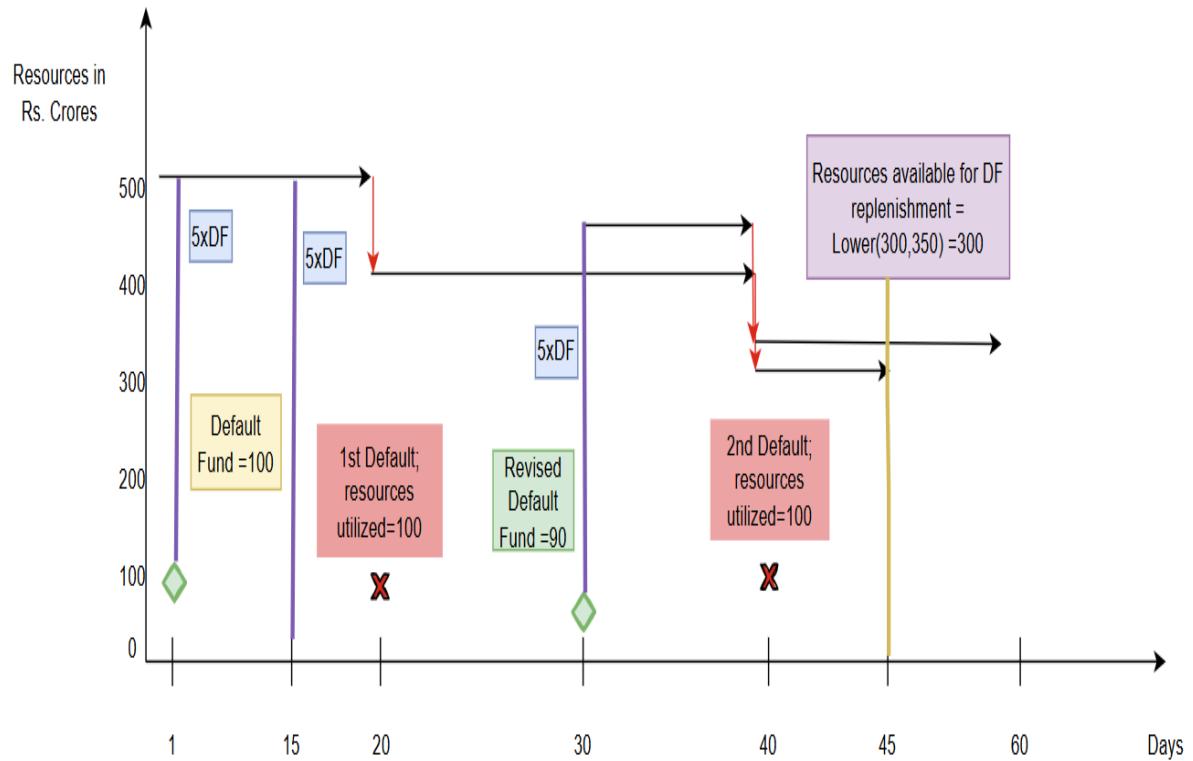
$$\mathbf{5 \times 50 = 250}$$

A second default occurs on Day 40 and requires utilization of 100. It is noteworthy to understand that Day 40 occurs in two 30 day rolling windows, one that is 30 days prior and the other that begins from the last default fund revision date and is 30 days hence, i.e. [Day 10-Day 40] and [Day 30- Day 60]. To determine the available liability at this point, the remaining liability under the first window and under the second window are compared. Liability is computed as:

$$\mathbf{Min (500 - 100 - 100, 250 - 100) = Min (300, 150) = 150}$$

The rationale for this approach is that each rolling 30-day window establishes its own liability cap based on the Default Fund at the start of that period. A member cannot be exposed to an amount higher than the lowest remaining cap applicable across the overlapping windows. Even though the revised second-window cap yields a remaining amount of 150, and the first window yields 300 after recognizing both defaults, the lower figure governs, thereby ensuring that the member's liability remains within the limits established at the start of each relevant 30-day period.

Scenario 3 – Two Defaults Across Consecutive Windows with the Earlier Lower Capped Limit Remaining Binding



At the start of the first window (Day 1), the member's Default Fund contribution is 100, resulting in a liability cap of:

$$5 \times 100 = 500$$

A default on Day 20 requires utilisation of 100, leaving:

$$500 - 100 = 400$$

On Day 30, the member's Default Fund contribution is revised downward to 90. For the next window (Day 30 to 60), the liability cap becomes:

$$5 \times 90 = 450$$

A second default on Day 40 requires utilization of 100, leaving:

$$450 - 100 = 350$$

To determine the remaining liability on Day 40 or thereafter (e.g., Day 45), the available amounts under both the windows are compared, and the lower value becomes applicable. This results in:

$$\text{Min} (500 - 100 - 100, 450 - 100) = \text{Min} (300, 350) = 300$$

The underlying rationale follows the same principles as the previous scenario. Each rolling 30-day window establishes its own maximum liability based on the Default Fund contribution at the start of that window. When defaults occur across overlapping windows, the remaining liability is determined by the lowest residual cap across the windows. Although the second window shows a remaining amount of 350, the adjusted amount under the first window is 300. The lower amount applies, ensuring the member's overall liability does not exceed the levels corresponding to the applicable 30-day period.
