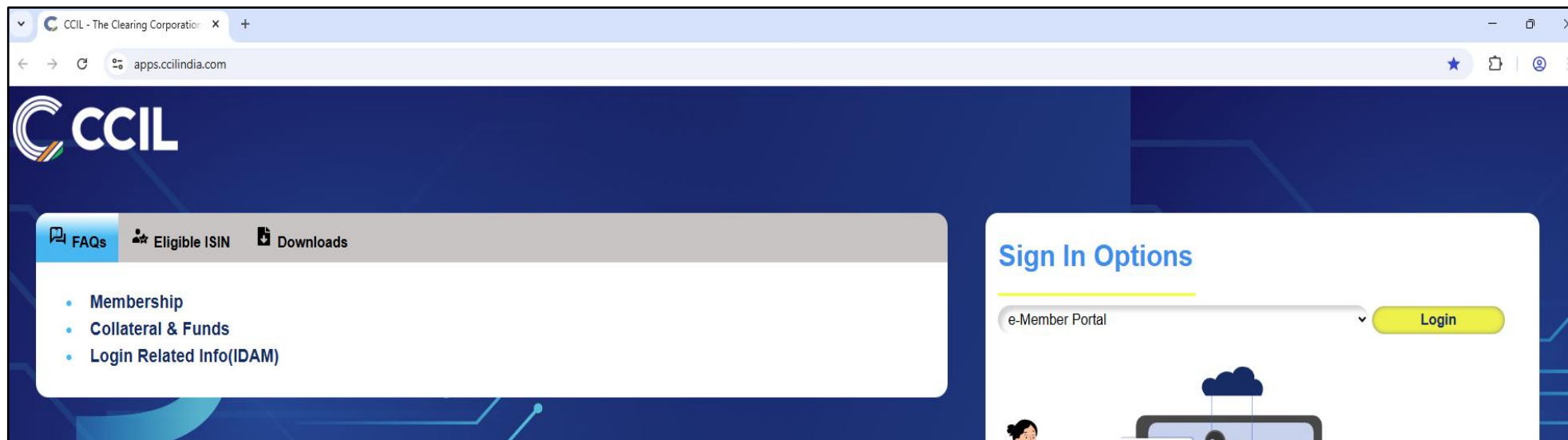
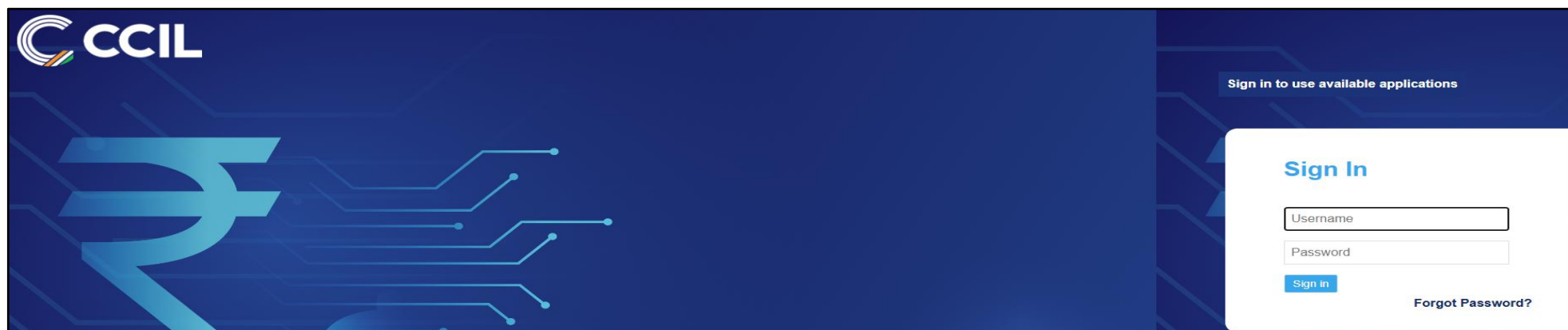


OPERATION MANUAL FOR **RUPEE DERIVATIVES SEGMENT** MARGIN CALCULATOR

I - ACCESS: User has to login into E-Member Portal to access the margin calculator tool

<https://apps.ccilindia.com/> > E-Member Portal > Login



Once logged in, navigate to 'Iris' > 'Margin Calculator' > 'Rupee IRS'

II -RIGHTS/PERMISSION TO ACCESS CALCULATOR ON E MEMBER PORTAL

Margin Calculator is hosted under IRIS Tab of E-Member Portal. <https://apps.ccilindia.com/> > E-Member Portal > Login > Iris Tab > Margin Calculator

In case the normal user of any organization is not able to view the IRIS Tab under his login on E-Member Portal, the Organizations officer acting as ADMIN User for E-Member Portal has to assign the access rights to such normal user, as explain herein below

ADMIN USER: <https://apps.ccilindia.com/> > Select 'IDAM Login' in drop down > Login > Add

The screenshot shows a web interface for assigning rights. At the top, it asks "Do you want to ?:" with radio buttons for "Add" (selected) and "Remove". Below this is a "Search User:" text box. The "Select User :" dropdown menu is open, showing a list of users: "Admin-User0@abcbank.com", "User1@abcbank.com", "User2@abcbank.com", and "User3@abcbank.com". An arrow points from the text "Select User to be assigned rights to Calculator" to the "User2@abcbank.com" entry. Below the user list is a "Selected user is member of :" section with a dropdown showing "Bills of ASTROID : Billing", "Bills of FOREX : Billing", and "Bills of CLEAR : Billing". To the right of this section, an arrow points from the text "Select and move to Right Box and Click SUBMIT" to the right-hand box. Below the "Selected user is member of :" section is a "Search Group:" text box. The "Add groups to user:" dropdown menu is open, showing a list of groups: "IRS Margin Calculator : IRIS", "Maker Default Fund - Forex USDINR : Collateral", "Maker Default Fund - Forex forward : Collateral", "Maker Default Fund - Securities : Collateral", and "Maker Default Fund - TREPS : Collateral". An arrow points from the text "Select and move to Right Box and Click SUBMIT" to the "IRS Margin Calculator : IRIS" entry. To the right of the "Add groups to user:" section are two buttons: ">" and "<". At the bottom right is a large empty box. At the bottom center are "Submit" and "Cancel" buttons.

III – FUNCTIONALITY: The tool offers flexibility to estimate margin requirements in below two ways:

- **Portfolio Level Estimation:** Calculator assists portfolio level margin estimation wherein member can simulate notional change in margin requirement at total portfolio level (including underlying outstanding cleared trades). Members can assess change in total margin requirement on account of potential new trade/s or due to a Reversal/ Amendment/ Cancellation to existing cleared trade/s.

The total margin requirement at portfolio level as estimated using the Calculator would enable members to review their free margin balance available in Member Common Collateral and take decision on suitable additional margin deposit (if required to be made) to support actual trade reporting and its clearing at portfolio level.

- **Stand-alone Margin Estimation:** Member can calculate the notional margin requirements for uploaded/entered trade/s independent of underlying cleared portfolio.

Rupee IRS							Application Date: 31-10-2025 Member Code: CCBFABCD0001  			
Margin Details	Final Initial Margin	Volatility Margin	Concentration Margin	MTM Margin	CSO for Day	CSO for Other Day	Total Margin *	Collateral	Required Free Margin in MCC	Benchmark
1 Current Margin	9,29,24,28,837.10	0.00	1,64,18,69,519.76	1,38,67,79,744.73	0.00	-9,993.72	12,96,95,45,902.69	13,16,30,83,598.04	0.00	BM
2 What If Margin	9,29,28,95,482.88	0.00	1,64,19,39,516.62	1,38,67,79,744.73	0.00	-1,09,909.99	12,97,00,10,873.41	13,16,30,83,598.04	0.00	BM

* Total Margin at Rejection Level

Brief Description of various fields in screen above is as under:

1. **[Current Margin]:** The margin values populated in row 1. above are the current actual margin requirement (Initial Margin, Volatility Margin, MTM margin, Concentration margin) on cleared outstanding portfolio of member in Rupee Derivatives segment.

2. **[What if Margin]:** This is the notional margin estimated by the calculator basis the potential trade/s upload by member as part of simulation instance. The margin values populated here are either at *cumulative total portfolio level* or *standalone level* based on simulation option opted by member for the said simulation instance.

☒ **Current Position**

CALCULATE MARGIN

☐ **Current Position**

CALCULATE MARGIN

Tick indicates Margin Simulation performed taking underlying Cleared Portfolio as base over the notional position being simulated. Accordingly, the estimated margin populated is at cumulative total cleared portfolio level including potential position being if actually reported for clearing.

If option is unticked, the margin requirement will be simulated on notional position only as independent position/standalone portfolio.

3. **[Collateral]:** The value populated in field 'Collateral' under Current Margin row, is the actual margin presently blocked from the Member Common Collateral (MCC) account toward Rupee Derivatives segment. It includes the margin blocked toward outstanding cleared trades plus additional margin (if any) prescribed & blocked for Rupee Derivatives segment toward potential trades to be reported and cleared.

Above Collateral balance as displayed in the Calculator **does not** include the unutilized/free margin available in MCC account of member at such time (i.e., the available MCC balance post utilization towards margin requirements of various segments accessing the common margin pool). Member can review this unutilized margin balance in MCC on '*Integrated Risk Information System*' (<https://iris.ccilindia.com/>).

4. **[Required free margin in MCC]:** This value will be populated if the estimated "What if Total margin" (at 2. above) is higher than "actual collateral value blocked for Rupee Derivatives Segment from MCC account of member (3. above)". The value displayed on the Calculator under field 'Required Free Margin' is the expected additional margin which would be auto-blocked from MCC balance towards Rupee Derivatives Segment, if the simulated trades are actually reported to CCIL for Clearing. User may please note that the actual reporting of trade is a separate and independent process, not connected or interfacing with the simulation carried out in the Calculator.

5. **[Member Code]:** It displays the Member ID associated with the member.

6. **[Benchmark]:** This section displays the breakdown of the Total portfolio margin values comprising Initial Margin, Volatility Margin, and Concentration Margin utilized towards different benchmarks within the Rupee Derivatives Segment. Benchmark wise Margin details can be viewed for both Current Margin and What-If Margin scenarios.

Current Benchmark			
Benchmark Group Name	Initial Margin	Volatility Margin	Concentration Margin
INBMK	0.00	0.00	0.00
MIBOR	4,33,34,49,284.97	0.00	65,00,17,392.75
MIFOR	4,96,01,03,883.85	0.00	99,20,20,776.77
Rows ... 20 1-3 of 3			
CLOSE			

7. **Crystallised settlement obligation (CSO):** CSO arises due to a reversal of trades. A negative value in the head “CSO for Day” or “CSO for Other Day” indicates a receivable amount, while a positive value indicates a payable amount.

IMPORTANT: Accordingly, before actual trade reporting to CCIL, member can verify the available/unutilized margin balance in its MCC account as reviewed via ‘*Integrated Risk Information System*’ (<https://iris.ccilindia.com/>) and can take necessary decision on deposit of additional collateral to its MCC margin account (if required) to get potential trades cleared once reported.

IV - HOW TO SIMULATE / ESTIMATE MARGIN

APPROACH 1 - MANUAL ENTRY OF TRADE/S FOR SIMULATION through “CURRENT PORTFOLIO” tab:

Step – 1: Select respective “Benchmark” & “Termination From & To” range, Click ‘**FETCH TRADE**’ button under tab <CURRENT PORTFOLIO>:

Action	Swap Type	Trade ID	Trade Date	Effective Date / Fixing Date	Termination Date	Notional Amount	Settlement Date	Swap Identification	Buy Fixed Rate	Buy Benchmark	Buy Designated Maturity
⋮	IRS		16-03-2022	17-03-2022	10-03-2032	2,00,00,00,000.00		FIXEDFLOAT	6.27		

Step – 2: On clicking ‘Fetch Trade’ button, System will display the member’s existing outstanding cleared trades portfolio for the selected benchmark, whose termination dates fall within the specified “Termination From <> To” range.

Step – 3: Click and select the **Action** to be performed on the existing trade, which include either of below actions

- **COPY:** Create an exact fresh trade by replicating an existing trade, which can be further modified before submission, if required.
- **MODIFY:** Amend the existing identified trade.
- **CANCEL:** Terminate the existing identified trade.
- **REVERSAL:** Reverse the existing identified trade.

Step – 4: On selection of any of the above action, the identified trade with proposed action will be moved to ‘**WHAT IF PORTFOLIO**’ section.

Step – 5: For a New trade to be simulated, user is required to enter following details and then click **CONFIRM**.

CURRENT PORTFOLIO

WHAT IF PORTFOLIO

Trade ID

New

NEW TRADE

File Upload

FRA

IRS Instrument

IRS Fixed-Float

IRS Float-Float

Buy/Sell *

Notional Amount *

Effective Date *

Termination Date *

Buy

500000000

DD-MM-YYYY

DD-MM-YYYY

Effective date is required

Termination date is required

Fixed

Cashflow

Fixed Rate *

Payment Frequency *

First Payment Date *

6M

DD-MM-YYYY

Fixed rate is required

First payment date is required

Float

Cashflow

Benchmark Index *

Benchmark Designated Maturity *

Benchmark Rate *

Spread

MMFOR

6M

0

Reference Rate

Reset Frequency *

Payment Frequency *

First Payment Date *

0.0000

6M

6M

DD-MM-YYYY

First Reset Date *

Designated Maturity Stub Begin

Designated Maturity Stub End

DD-MM-YYYY

First reset date is required

CONFIRM

Step – 6: User can submit multiple trades one~by~by in a single instance of simulation by repeating Step 3 to 5.

What If Portfolio												
										Current Portfolio	CALCULATE MARGIN	EXCLUDE
	Edit	Action	Swap Type	Instrument Code	Trade ID	Trade Date	Effective Date / Fixing Date	Termination Date	Notional Amount	Settlement Date	Swap Identification	Buy/Sell
	EDIT	Added	IRS	1004	202512098000003	03-11-2025	03-11-2025	04-05-2026	25,00,00,000.00		FIXEDFLOAT	Buy
	EDIT	Added	IRS	1007	202512098000004	03-11-2025	03-11-2025	03-11-2027	25,00,00,000.00		FIXEDFLOAT	Buy
	EDIT	Added	IRS		202512098000005	09-12-2025	09-12-2025	31-12-2025	25,00,00,000.00		FIXEDFLOAT	Buy

Step – 7: The submitted what-if trades will be displayed in Simulation area, user can take Export of the same for record. By default, the Check Box for Portfolio level margining for submitted trade/s would be 'ticked', however user may untick the box for computing standalone margin on submitted trade/s. Calculator will perform estimated margin computation on clicking '**CALCULATE MARGIN**' Button.

Step – 8: The estimated margin numbers will be populated in What-if Margin Row highlighted below. [This completes the simulation instance.](#)

Rupee IRS												Application Date: 31-10-2025 Member Code:			
Margin Details	Final Initial Margin	Volatility Margin	Concentration Margin	MTM Margin	Margin held back for default	CSO for Day	CSO for Other Day	Total Margin *	Collateral	Required Free Margin in MCC	Benchmark				
Current Margin	9,29,35,53,168.82	0.00	1,64,20,38,169.52	1,38,67,79,744.73	0.00	0.00	-64,959.18	12,97,08,51,970.37	13,16,30,83,598.04	0.00	BM				
What If Margin	9,29,55,60,095.48	0.00	1,64,23,39,208.51	1,38,67,79,744.73	0.00	0.00	-64,959.18	12,97,32,81,407.89	13,16,30,83,598.04	0.00	BM				
* Total Margin at Rejection Level															

* Total Margin at Rejection Level

If the total margin requirement as estimated is lower than collateral value, the value in field 'Required Free margin in MCC' will be shown zero. A non-zero positive value displayed in said field, denotes the amount that would be additional blocked from MCC balance when the simulated trade/s are actually reported to Rupee Derivatives Segment for Clearing (Please refer Para III (4) above).

Step-9: It is mandatory to click “FETCH TRADE” button before every subsequent simulation instance.

APPROACH 2 – MANUAL ENTRY OF TRADE’S through “WHAT IF PORTFOLIO”.

CURRENT PORTFOLIO WHAT IF PORTFOLIO

Trade ID

202512098000001 New

☒ ¹ FRA ☐ ² IRS Instrument ☐ ³ IRS Fixed-Float ☐ ⁴ IRS Float-Float

1. **[FRA]:** If a user wants to simulate a Forward Rate Agreement (FRA), below inputs will be required to be entered. Once the below Trade related details are entered, User can click on “CONFIRM”. The following trade will be added to the What if Portfolio Section (*as shown in Step 6 of Approach 1*). Then the User can initiate “Calculate Margin” after which the estimated margin numbers will be populated in What-if Margin Row:

CURRENT PORTFOLIO WHAT IF PORTFOLIO

Trade ID New

☒ FRA ☐ IRS Instrument ☐ IRS Fixed-Float ☐ IRS Float-Float

Buy/Sell * Notional Amount * Fixing Date * Termination Date *

Buy 250000000 DD-MM-YYYY DD-MM-YYYY

Settlement Date * Contract Period FRA Period Start Date FRA Period End Date

DD-MM-YYYY DD-MM-YYYY DD-MM-YYYY

Fixed

Fixed Rate *

Float

Benchmark Index * Benchmark Designated Maturity * Benchmark Rate * Spread

Reference Rate

0.0000

CONFIRM

2. **[IRS Instrument]:** If a user wants to simulate a Trading System Trade in a particular tenor wise instrument. User has to Select the respective “Instrument ID” and click on Fetch Instrument. By default, User will only be required to provide Buy/Sell, Notional Amount & Fixed Rate. User can click on “CONFIRM”. The trade will be added to the What if Portfolio Section. Then the User can initiate “Calculate Margin” after which the estimated margin numbers will be populated in What-if Margin Row:

Trade ID: New

☐ FRA ☒ **IRS Instrument** ☐ IRS Fixed-Float ☐ IRS Float-Float

Instrument ID *:

Buy/Sell *: Notional Amount *: Effective Date *: Termination Date *:

Fixed
Fixed Rate *:

Float
Benchmark Index *: Benchmark Designated Maturity *: Payment Frequency *:

☐ File Upload

Instrument ID	Tenor	Floating Rate Benchmark
1001	1M	MIBOR
1002	2M	MIBOR
1003	3M	MIBOR
1004	6M	MIBOR
1005	9M	MIBOR
1006	1Y	MIBOR
1007	2Y	MIBOR
1008	3Y	MIBOR
1009	4Y	MIBOR

Instrument ID	Tenor	Floating Rate Benchmark
1010	5Y	MIBOR
1011	7Y	MIBOR
1012	10Y	MIBOR
1013	2Y	MMFOR
1014	3Y	MMFOR
1015	4Y	MMFOR
1016	5Y	MMFOR
1017	7Y	MMFOR
1018	10Y	MMFOR

3. **[IRS Fixed-Float]:** If a user wants to simulate an IRS Fixed-Float OTC trade, below inputs will be required to be entered. Post which, User can click on “CONFIRM”. The trade will be added to the What if Portfolio Section. Then the User can initiate “Calculate Margin” after which the estimated margin numbers will be populated in What-if Margin Row.

The screenshot shows the 'WHAT IF PORTFOLIO' section of a software interface. The 'Trade ID' field is empty, and the 'NEW TRADE' button is visible. The 'IRS Fixed-Float' option is selected under the 'IRS Instrument' category. The 'Buy/Sell' dropdown is set to 'Buy'. The 'Notional Amount' is 250000000. The 'Effective Date' and 'Termination Date' are both set to 'DD-MM-YYYY'. The 'Fixed' section has a 'Fixed Rate' of 0.0000, a 'Payment Frequency' of 10M, and a 'First Payment Date' of 'DD-MM-YYYY'. The 'Float' section has a 'Benchmark Index' of 0.0000, a 'Benchmark Designated Maturity' of 10M, a 'Benchmark Rate' of 0, a 'Spread' of 0, a 'Reset Frequency' of 10M, a 'Payment Frequency' of 10M, and a 'First Payment Date' of 'DD-MM-YYYY'. The 'First Reset Date' is 'DD-MM-YYYY'. The 'Designated Maturity Stub Begin' and 'Designated Maturity Stub End' are both empty. A red arrow points to the 'CONFIRM' button at the bottom right.

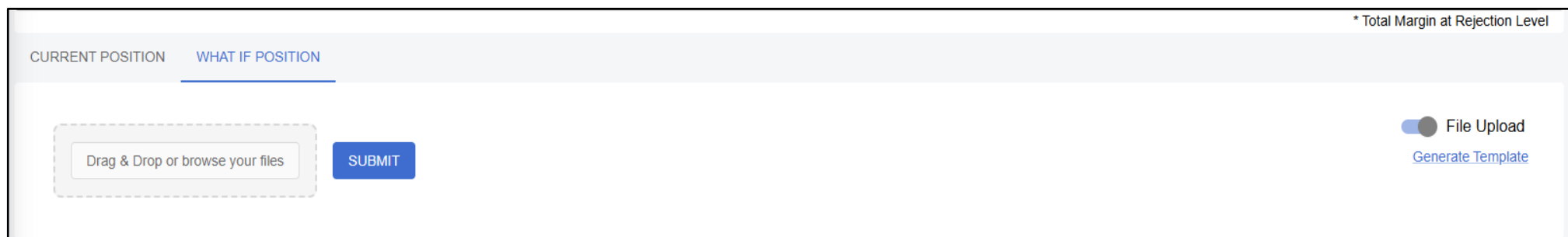
4. **[IRS Float-Float]:** If a user wants to simulate an IRS Float-Float, below inputs will be required to be entered. Once the below Trade related details are entered, User can click on “CONFIRM”. The following trade will be added to the What if Portfolio Section (as mentioned above). Then the User can initiate “Calculate Margin” after which the estimated margin numbers will be populated in What-if Margin Row.

The screenshot shows the 'WHAT IF PORTFOLIO' section of a software interface. The 'Trade ID' field is empty, and the 'NEW TRADE' button is visible. The 'IRS Float-Float' option is selected under the 'IRS Instrument' category. The 'Buy/Sell' dropdown is set to 'Buy'. The 'Notional Amount' is 250000000. The 'Effective Date' and 'Termination Date' are both set to 'DD-MM-YYYY'. The 'Float' section has a 'Benchmark Index' of 0.0000, a 'Benchmark Designated Maturity' of 10M, a 'Benchmark Rate' of 0, a 'Spread' of 0, a 'Reset Frequency' of 10M, a 'Payment Frequency' of 10M, and a 'First Payment Date' of 'DD-MM-YYYY'. The 'First Reset Date' is 'DD-MM-YYYY'. The 'Designated Maturity Stub Begin' and 'Designated Maturity Stub End' are both empty. A red arrow points to the 'CONFIRM' button at the bottom right.

Please note: For FRA, IRS Fixed-Float, and IRS Float-Float, the “Benchmark Rate” field is set as mandatory and is pre-set to 0 by default. If the user does not wish to specify a benchmark rate, they may leave the value as 0 and continue. If a benchmark rate is required, the user may enter any value appropriate for the trade.

APPROACH 3 - TRADE FILE UPLOAD FOR SIMULATION through “WHAT IF PORTFOLIO”

Step – 1: Switch to File Upload Option and click on ‘Generate Template’



* Total Margin at Rejection Level

CURRENT POSITION WHAT IF POSITION

Drag & Drop or browse your files SUBMIT

File Upload

[Generate Template](#)

Step – 2: Fill in the Trade Wise details along with required action viz. Added (Newt)/Modified (Amend)/Reversed/Cancelled) to be performed in the downloaded template file.

The Template workbook consist of 2 worksheets (IRS Trade & Cashflow). User has to provide the required trade details in the IRS Trade worksheet. The Cashflow details for the corresponding Trade will have to entered in the “Cashflow” worksheet.

Please note that the separate cashflow details are to be entered for buy and sell in a in vertical format.

After entering all the details, user can now submit the updated file into the calculator and click ‘[SUBMIT](#)’

a) IRS Trade Worksheet:

Action(Added/Modified/Reversed/Cancelled)	Trade ID	Obligation amount	Obligation settlement date	Swap Type(FRA/IRS)	Instrument code	Buy/Sell	Trade Date	Effective date/Fixing date	Termination date	Notional Amount	Settlement date	Swap Identification(FixedFloat/FloatFloat)	Buyer fixed rate	Buyer benchmark index
Added	202510308000120			IRS		Buy	30-Oct-2025	31-Oct-2025	31-Dec-2025	148963255		FIXEDFLOAT	5.505	
Modified	202510308000121			IRS		Buy	30-Oct-2025	31-Oct-2025	31-Dec-2025	1450000000		FIXEDFLOAT	5.4933	
Reversed	202510308000122	-10000	DD-MM-YYYY	IRS		Sell	30-Oct-2025	31-Oct-2025	30-Jan-2026	1234567		FIXEDFLOAT	5.761	
Added	202510308000123			IRS		Buy	30-Oct-2025	31-Oct-2025	30-Apr-2026	987656789		FIXEDFLOAT	4.998	
Cancelled	202510308000124			IRS		Buy	30-Oct-2025	31-Oct-2025	31-Oct-2028	554300870		FIXEDFLOAT	5.5312	

b) Cashflow Worksheet:

A	B	C	D
Trade ID	Cashflow type(Buy/Sell)	Reset date	Payment date
202510308000120	Buy	01-Jan-1900	31-Dec-2025
202510308000120	Sell	31-Oct-2025	31-Dec-2025
202510308000121	Buy	01-Jan-1900	31-Dec-2025
202510308000121	Sell	31-Oct-2025	31-Dec-2025
202510308000122	Buy	01-Jan-1900	30-Jan-2026
202510308000122	Sell	31-Oct-2025	30-Jan-2026
202510308000123	Buy	01-Jan-1900	30-Apr-2026
202510308000123	Sell	31-Oct-2025	30-Apr-2026
202510308000124	Buy	01-Jan-1900	30-Apr-2026
202510308000124	Buy	01-Jan-1900	30-Oct-2026
202510308000124	Buy	01-Jan-1900	30-Apr-2027
202510308000124	Buy	01-Jan-1900	29-Oct-2027
202510308000124	Buy	01-Jan-1900	28-Apr-2028
202510308000124	Buy	01-Jan-1900	31-Oct-2028
202510308000124	Sell	31-Oct-2025	30-Oct-2026
202510308000124	Sell	30-Oct-2026	29-Oct-2027
202510308000124	Sell	29-Oct-2027	31-Oct-2028

Step – 3: The submitted what-if trades will be displayed in Simulation area. User can take Export of the same for record. By default, the Check Box for Portfolio level margining for submitted trades would be ticked, however user may untick the box for computing standalone margin on submitted trade/s. Calculator will perform estimated margin computation on clicking **‘CALCULATE MARGIN’** Button. This completes the current Simulation instance.

What If Portfolio									
		☒ Current Portfolio		CALCULATE MARGIN		EXCLUDE			
☒	Edit	Action	Swap Type	Instrument Code	Trade ID	Trade Date	Effective Date / Fixing Date	Termination Date	Notional Amount
☒	EDIT	Added	IRS		202510308000120	30-10-2025	31-10-2025	31-12-2025	14,89,63,255.00
☒	EDIT	Modified	IRS		202510308000121	30-10-2025	31-10-2025	31-12-2025	1,45,00,00,000.00
☒		Reversed	IRS		202510308000122	30-10-2025	31-10-2025	30-01-2026	12,34,567.00
☒	EDIT	Added	IRS		202510308000123	30-10-2025	31-10-2025	30-04-2026	98,76,56,789.00
☒		Cancelled	IRS		202510308000124	30-10-2025	31-10-2025	31-10-2028	55,43,00,870.00

Point to Note:

a) For FRA, IRS Fixed-Float, and IRS Float-Float, the “Benchmark Rate” field is mandatory and is pre-set to 0 by default. If the user does not wish to specify a benchmark rate, they may leave the value as 0 and continue. If a benchmark rate is required, the user may enter any value appropriate for the trade.

b) **For Reversal Trade:** User having Receivable/Gain position will enter CSO Obligation as Positive (+) amount, while the user having margin/payable will enter CSO Obligation as a negative (-) amount.

c) **For Trades with Stub Cashflow:** User has to provide inputs under “Designated Maturity Stub Begin” or/and “Designated Maturity Stub End”. For normal standard cashflows the following inputs can be left blank.
