MARGIN CALLS

Chapter 4

General Information

Margin calls are issued by firms to collect the required margin from account holders to ensure the performance of open futures and option contracts. A margin call is actually a formal request from an FCM to an account owner to deposit additional funds to meet margin requirements.

In computing margin calls under the SPAN margin system, the initial/maintenance margin requirement includes only the risk component. The equity component of the SPAN margin system requirement is included in margin equity.

In computing margin calls, option values of all options contracts are allowed to meet an account's total risk margin requirement.

Identically owned accounts should be combined for purposes of computing margin calls within the account classifications of customer segregated, customer secured, or nonsegregated. For further information on combining accounts for margin purposes refer to Chapter 9 - Combined Accounts.

Firms must keep documentation on file for any manual adjustments made to equity system reports to determine an account owner's margin status (e.g. adjustments to margin requirements, margin calls, undermargined charges, etc.).

Issuance of Margin Calls

FCMs are required to make a bona fide attempt to collect required margin.

Firms must issue calls for margin that would bring an account up to the minimum initial margin requirement (1) when margin equity in an account initially falls below the minimum maintenance margin requirement and (2) subsequently when margin equity plus existing margin calls in an account is less than the minimum maintenance margin requirement. Thus, outstanding margin calls are treated similar to margin equity in determining whether an incremental margin call is required.

Required margin calls shall be made within one business day after the occurrence of the event giving rise to the call.

FCMs are required to keep written records of all margin calls, whether made in writing or by telephone.

Firms may, but are not required to, collect or call for margin on day trades.

Computation of Margin Calls

In determining margin calls, accounts shall be reviewed as of the close of the trading day. Firms, at their discretion, may issue margin calls on a more frequent basis including the issuance of intra-day margin calls.

A margin call is issued whenever the margin equity (plus outstanding calls) falls below the maintenance margin. The amount of the call is the difference between the margin equity and the initial margin requirement less any previously issued margin calls.

The following formula represents the proper calculation when determining if a margin call should be issued:

Initial Margin Requirement
less (Margin Equity)
less (Outstanding Margin Calls)
A positive balance represents amount of margin call to be issued

Firms may calculate margin deficiency using two alternative methods called the Pure SPAN and Total Equity Methods. In most situations, the margin deficiency will be identical for either alternative. However, some circumstances involving long options could result in the Equity Method having a larger margin deficiency.

Pure SPAN Method

Under the Pure SPAN method, the SPAN margin requirement is compared to an account's Net Liquidating Value (plus any margin collateral). By using this method, firms compare an account's total assets to the risk in the account.

Total Equity Method

Alternatively, firms may compare the Total Equity in an account (defined as the ledger balance, open trade equity and margin collateral) to the SPAN margin requirement adjusted for the option value. Net long option value reduces the SPAN

margin requirement and net short option value increases it.

By using simple math, firms are transferring the net option value from the equity component to the margin component when they deploy the Total Equity Method. The two methods will yield identical margin excess or deficiency amounts unless an account has net long option value that exceeds the unadjusted SPAN margin requirement. When this occurs, firms should set the margin requirement under the Total Equity Method to zero (margin requirement could never be less than zero). If the net long option value exceeds the unadjusted SPAN margin requirement, any deficit amount in Total Equity would trigger a margin call. However, a Total Equity deficit may not necessarily indicate a margin deficiency.

Firms may call for additional margin at their discretion.

Aging of Margin Calls

In aging margin calls, days are defined as:

1 = business day position is put on/account becomes undermargined
2 = business day margin call is issued
3 = first business day margin call is outstanding
4 = second business day margin call is outstanding
5 = third business day margin call is outstanding
etc.

Individual margin calls shall be aged separately throughout their existence.

An account's total margin call is the sum of all individually aged margin calls.

An FCM's records should clearly indicate the age of all margin calls issued and outstanding.

Reduction and Deletion of Margin Calls

The reduction of a margin call partially decreases in amount an account's total margin call outstanding. In contrast, a margin call deletion eliminates an account's total margin call in its entirety.

A margin call shall only be reduced through the receipt of acceptable margin deposits.

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A margin call may be deleted through the receipt of acceptable margin deposits only if the deposits equal or exceed the amount of the total margin call.

A margin call may also be deleted through inter-day favorable market movements and/or the liquidation of positions only if margin equity in the account is equal to or greater than the initial margin requirement.

In order to protect the age of outstanding margin calls for re-established positions, margin calls may not be reduced by the liquidation of positions. Furthermore, the liquidation and re-establishment of positions to circumvent margin rules and regulations is not allowed.

The oldest individually aged outstanding margin call shall be reduced first.

Written records shall be maintained of all margin calls reduced or deleted.

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Examples of Calculating Margin Calls

Overall Assumptions:

1. **Account balances and margin requirements are as of the end of business on the date indicated.**
2. **The account's open positions were put on during the previous week and had been properly margined.**

Example #1 - Impact on Margin Calls due to Unfavorable Market Movements

Assume: → **No margin collateral was deposited during week.**
→ **Unfavorable market movements occurred on:**
Tuesday ($12,000)
Wednesday ($13,000)
Friday ($5,000)

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	20,000	20,000	20,000	20,000	20,000
Open Trade Equity	27,000	15,000	2,000	2,000	(3,000)
Net Option Value	2,000	2,000	2,000	2,000	2,000
Net Liquidating Equity	49,000	37,000	24,000	24,000	19,000
Outstanding Calls	-0-	11,000	23,000	36,000	36,000
SUBTOTAL	49,000	48,000	47,000	60,000	55,000
Initial Margin	60,000	60,000	60,000	60,000	60,000
Maintenance Margin	50,000	50,000	50,000	50,000	50,000
Amount Under Maint.	1,000	2,000	3,000	-0-	-0-
CALL/AGE	11,000(1)	11,000(2)	11,000(3)	11,000(4)	11,000(5)
		12,000(1)	12,000(2)	12,000(3)	12,000(4)
			13,000(1)	13,000(2)	13,000(3)

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Example #2 - Impact on Margin Calls due to Liquidation of Positions

Assume: → **No margin collateral was deposited during week.**
→ **Ledger balance and margin requirement changes are due to liquidations.**

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	45,000	46,000	46,000	47,500	47,500
Open Trade Equity	5,000	4,000	4,000	3,000	3,000
Net Option Value	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Net Liquidating Equity	45,000	45,000	45,000	45,500	45,500
Outstanding Calls	-0-	15,000	15,000	15,000	15,000
SUBTOTAL	45,000	60,000	60,000	60,500	60,500
Initial Margin	60,000	55,000	55,000	50,000	45,000
Maintenance Margin	55,000	53,000	53,000	48,000	43,000
Amount Under Maint.	10,000	-0-	-0-	-0-	-0-
CALL/AGE	15,000(1)	15,000(2)	15,000(3)	15,000(4)	-0-

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Example #3 - Impact on Margin Calls due to Receipt of Margin Collateral

Assume: → Cash deposits were made on:
→ Thursday $3,000
→ Friday $13,000

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	45,000	45,000	45,000	48,000	61,000
Open Trade Equity	10,000	5,000	4,000	4,000	(1,000)
Net Option Value	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Net Liquidating Equity	50,000	45,000	44,000	47,000	55,000
Outstanding Calls	-0-	10,000	10,000	13,000	-0-
SUBTOTAL	50,000	55,000	54,000	60,000	55,000
Initial Margin	60,000	60,000	60,000	60,000	60,000
Maintenance Margin	55,000	55,000	55,000	55,000	55,000
Amount Under Maint.	5,000	-0-	1,000	-0-	-0-
CALL/AGE	10,000(1)	10,000(2)	10,000(3)	7,000(4)	-0-
			6,000(1)	6,000(2)	

NOTE: A margin call may be deleted through the receipt of cash that equals or exceeds the amount of the total margin call. Thus, the margin call was properly deleted on Friday even though margin equity was not brought up to initial margin requirements.

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Example #4 - Impact on Margin Calls due to Receipt of Margin Collateral and Unfavorable Market Movements on Same Day

Assume: → Cash deposit of $5,000 received Wednesday
→ Favorable market movement of $5,000 occurred on Tuesday

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	38,000	38,000	43,000	43,000	43,000
Open Trade Equity	10,000	15,000	6,000	6,000	4,000
Net Option Value	2,000	2,000	2,000	2,000	2,000
Net Liquidating Equity	50,000	55,000	51,000	51,000	49,000
Outstanding Calls	-0-	10,000	5,000	9,000	9,000
SUBTOTAL	50,000	65,000	56,000	60,000	58,000
Initial Margin	60,000	60,000	60,000	60,000	60,000
Maintenance Margin	58,000	58,000	58,000	58,000	58,000
Amount Under Maint.	8,000	-0-	2,000	-0-	-0-
CALL/AGE	10,000(1)	10,000(2)	5,000(3)	5,000(4)	5,000(5)
			4,000(1)	4,000(2)	4,000(3)

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Example #5 - Impact on Margin Calls due to Favorable Market Movements less than Total Margin Call Outstanding

Assume: → **No margin collateral was deposited during week.**
→ **Favorable market movements occurred on:**
→ **Tuesday $3,000**
→ **Thursday $6,000**

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	38,000	38,000	38,000	38,000	38,000
Open Trade Equity	15,000	18,000	12,000	18,000	15,000
Net Option Value	2,000	2,000	2,000	2,000	2,000
Net Liquidating Value	55,000	58,000	52,000	58,000	55,000
Outstanding Calls	-0-	5,000	5,000	8,000	8,000
SUBTOTAL	55,000	63,000	57,000	66,000	63,000
Initial Margin	60,000	60,000	60,000	60,000	60,000
Maintenance Margin	58,000	58,000	58,000	58,000	58,000
Amount Under Maint.	3,000	-0-	1,000	-0-	-0-
CALL/AGE	5,000(1)	5,000(2)	5,000(3)	5,000(4)	5,000(5)
			3,000(1)	3,000(2)	3,000(3)

NOTE: Margin calls may only be deleted due to favorable market movements when margin equity in the account equals or exceeds the initial margin requirement. Thus, the increase in OTE on Thursday of $6,000 cannot delete the individually aged $5,000 margin call.

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Example #6 - Impact on Margin Calls when Favorable Market Movements plus Receipt of Margin Collateral exceeds Total Margin Call

Assume: → **Cash deposit of $9,000 was received on Thursday.**
→ **Favorable market movement of $2,000 occurred on Tuesday.**

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	38,000	38,000	38,000	47,000	47,000
Open Trade Equity	10,000	12,000	12,000	12,000	4,000
Net Option Value	2,000	2,000	2,000	2,000	2,000
Net Liquidating Equity	50,000	52,000	52,000	61,000	53,000
Outstanding Calls	-0-	10,000	10,000	-0-	-0-
SUBTOTAL	50,000	62,000	62,000	61,000	53,000
Initial Margin	60,000	60,000	60,000	60,000	60,000
Maintenance Margin	58,000	58,000	58,000	58,000	58,000
Amount Under Maint.	8,000	-0-	-0-	-0-	5,000
CALL/AGE	10,000(1)	10,000(2)	10,000(3)	-0-	7,000(1)

NOTE: As margin equity exceeded the initial margin requirement on Thursday, the margin call was properly deleted.

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Example #7 - Impact on Margin Calls when Favorable Market Movements Exceed Total Margin Call

Assume:
- → No margin collateral was deposited during week.
- → Favorable market movements occurred on:
  - → Wednesday $7,000
  - → Friday $8,000

	Monday	Tuesday	Wednesday	Thursday	Friday
Ledger Balance	30,000	30,000	30,000	30,000	30,000
Open Trade Equity	22,000	19,000	26,000	20,000	28,000
Net Option Value	2,000	2,000	2,000	2,000	2,000
Net Liquidating Equity	54,000	51,000	58,000	52,000	60,000
Outstanding Calls	-0-	6,000	6,000	6,000	-0-
SUBTOTAL	54,000	57,000	64,000	58,000	60,000
Initial Margin	60,000	60,000	60,000	60,000	60,000
Maintenance Margin	55,000	55,000	55,000	55,000	55,000
AMT Under Maint..	1,000	-0-	-0-	-0-	-0-
CALL/AGE	6,000(1)	6,000(2)	6,000(3)	6,000(4)	-0-

NOTE: As margin equity was less than the initial margin requirement on Wednesday, the margin call was not deleted. As margin equity was equal to the initial margin requirement on Friday, the margin call was properly deleted.